

NewsAlpha

News impacting performance

Stocks with Positive News outperformed in 2023

In 2023, stocks with Positive Significant News (+10.1%) outperformed the MSCI AC World Index (equal-weighted) by 3.4%. This closely matches the average annualized +3.3% outperformance over the last 20 years. Stocks with Negative Significant News have generally underperformed long-term but outperformed the Index by 9.7% last year. It is quite typically for Negative Significant News to outperform in periods of significant risk-on rotation. In December, Positive News outperformed the Index by 0.5% and Negative News outperformed by 3.5%.

The Global News Pulse moderated last month

In December, the Global News Pulse moderated slightly from 11% to 9% as news sentiment softened. News relating to Credit Events weighed on the global aggregate but the Earnings Estimate News Pulse improved the most last month, which is encouraging because news relating to earnings estimates has had the highest correlation with equity market performance over the last 20 years.

Alpha from combining News with other momentum signals

One of the most effective ways of using news to add to performance is to combine signals from news with earnings and price momentum. In 2023, among stocks with above average earnings and price momentum, Positive News outperformed Negative News by 8.2%. Currently, Triple Momentum (earnings, price, and news) is most positive on stocks in the Global Software, Insurance, and Banks sectors.

Chart 1: Global News Pulse and YoY Change in MSCI AC World Index

The Global News Pulse moderated last month from +11% to +9%



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

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05 January 2024

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Global

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

- [Global News Pulse](#)
- [Performance by Event Type](#)
- [Performance by Significant News](#)
- [Regional News Pulse](#)
- [Sector News Pulse](#)
- Event Type News Pulse – [Price Target](#), [Ratings Change](#), [Earnings Estimate](#), [Accidents](#)
- [Triple Momentum](#)
- Stock screens by Event Type – [Positive](#), [Negative](#)
- Stock screens - [Positive](#) & [Negative](#) Significant News

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

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Refer to important disclosures on page 130 to 132.

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Notice to Readers:

The various screens identified in this report are intended to be indicative metrics 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. These screens were not created to act as a benchmark.

The screens in this report are not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decisions.

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.

Overview

In this monthly NewsAlpha report, we quantify the impact of news on share prices. Many presume news is just noise or is only useful in the short-term. Our analysis of five billion news events over the last 15 years shows there is information in news which appears to provide alpha-generating opportunities over the short-term and long-term. According to back-testing, the news events most positively impacting share prices over the next 12 months include Positive Earnings Estimate events, Positive Price target events, Positive Reported events, and New Product events.

We use Ravenpack's big data set in this NewsAlpha analysis. The data set includes five billion news events, equivalent to approximately one million news events per day. Each news event in this alternative data set is time-stamped to the millisecond, and news is sourced globally from a combination of structured and unstructured data sources in multiple languages. Natural Language Processing techniques have been used to quantify and classify news events.

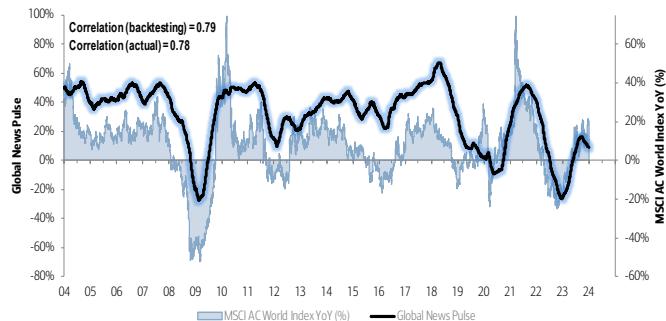
We have created a daily Global News Pulse to capture whether trends in news globally is positive or negative. Global News Pulse is based on the proportion of all stocks in the analysis with significant news events over the preceding 180 days that are net-positive (Count of stocks with Positive Significant News (a) minus Count of stocks with Negative Significant News (b) divided by Sum of (a) and (b)). We have also created an aggregate daily News Pulse for each global region, each global sector and each major news groups. We have also created a News Pulse for every stock. The Stock News Pulse is based on the proportion of significant news events over the preceding 90 days that are net-positive. For more details on the pulse, performance calculations and other disclaimers, please refer to the methodology section.



Executive Summary

Chart 2: Global News Pulse and YoY Change in MSCI AC World Index

News trend fell in the last 3m, however in aggregate it remains positive

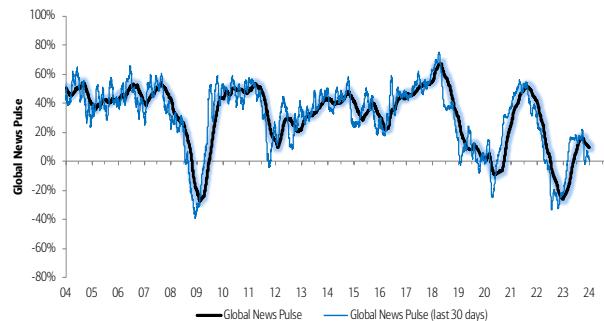


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 3: Global News Pulse and Global News Pulse (last 30 days)

Global News Pulse, based on the last 30 days, has moderated

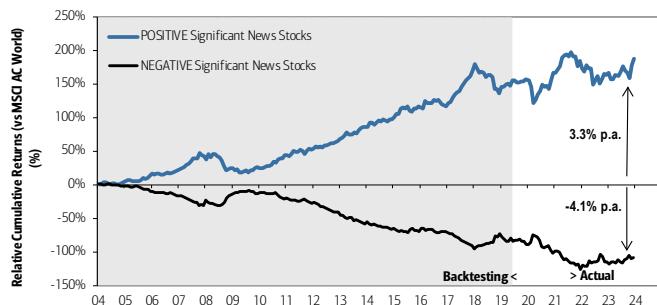


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 4: Relative cumulative returns of Global POSITIVE Significant & NEGATIVE Significant News Stocks

Positive Significant News outperformed ACWI by 3.3% p.a.



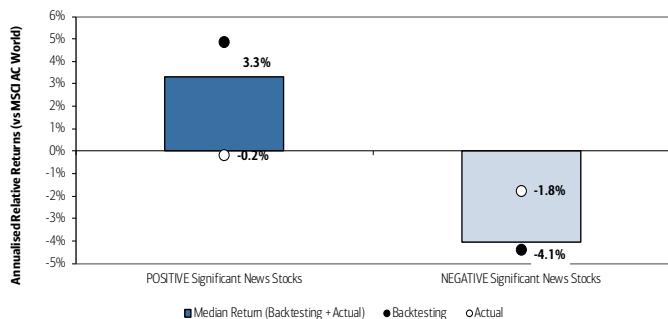
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 5: Annualised returns of Global POSITIVE Significant & NEGATIVE Significant News Stocks

Positive Significant News outperformed ACWI by 3.3% p.a.



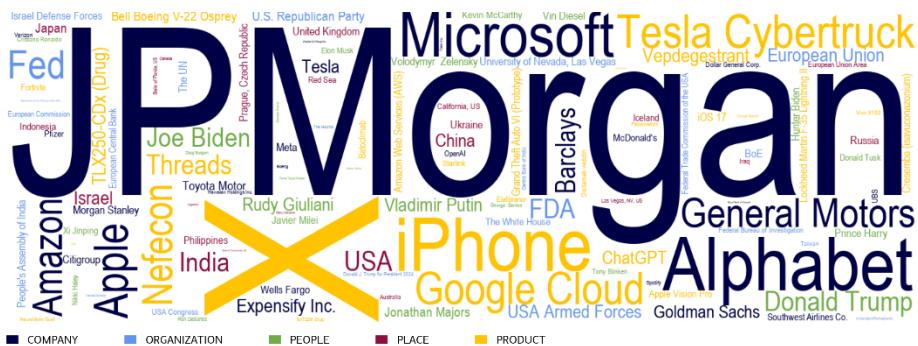
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 6: Top News Mentions (last 30 days)

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

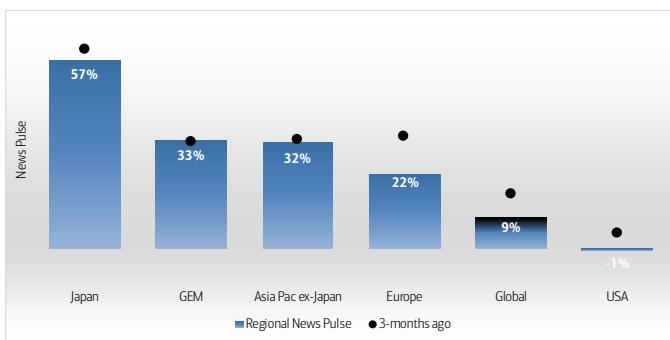


Source : BofA Global Quantitative Strategy, RavenPack

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Chart 7: Current News Pulse - Global Regions

The news aggregate is highest in Japan and GEM

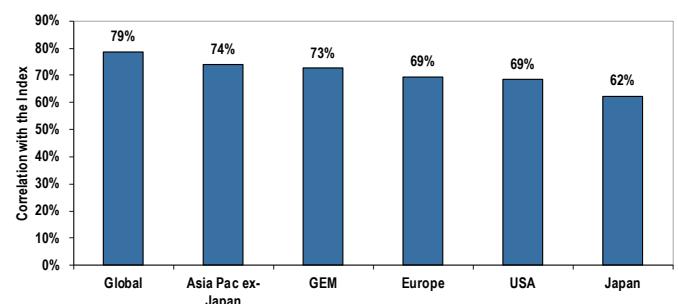


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 8: Correlation of News Pulse and YoY change in the Index - Global Regions (backtesting)

Correlation with the index is highest in Global and Asia Pac ex-Japan

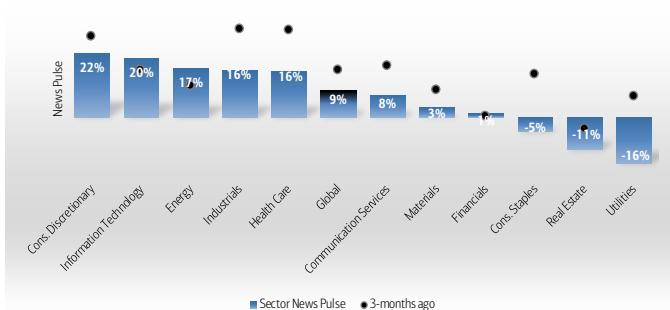


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 9: Current News Pulse - Global Sectors

The news aggregate is highest in Cons. Discretionary and Information Technology

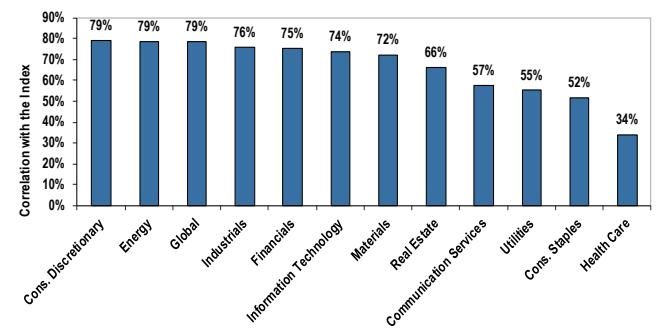


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 10: Correlation of News Pulse and YoY change in the Index - Global Sectors (backtesting)

Correlation with the index is highest in Cons. Discretionary and Energy

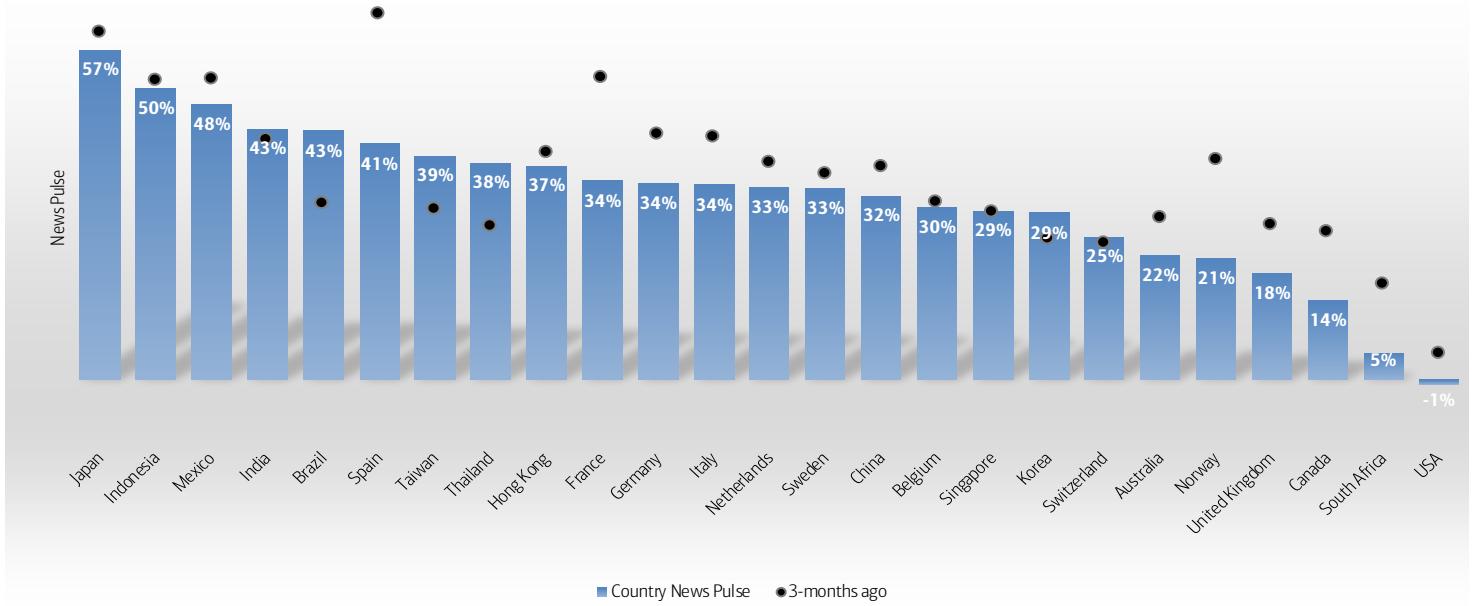


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 11: Current News Pulse by Global Countries

News aggregate is highest in Japan and Indonesia

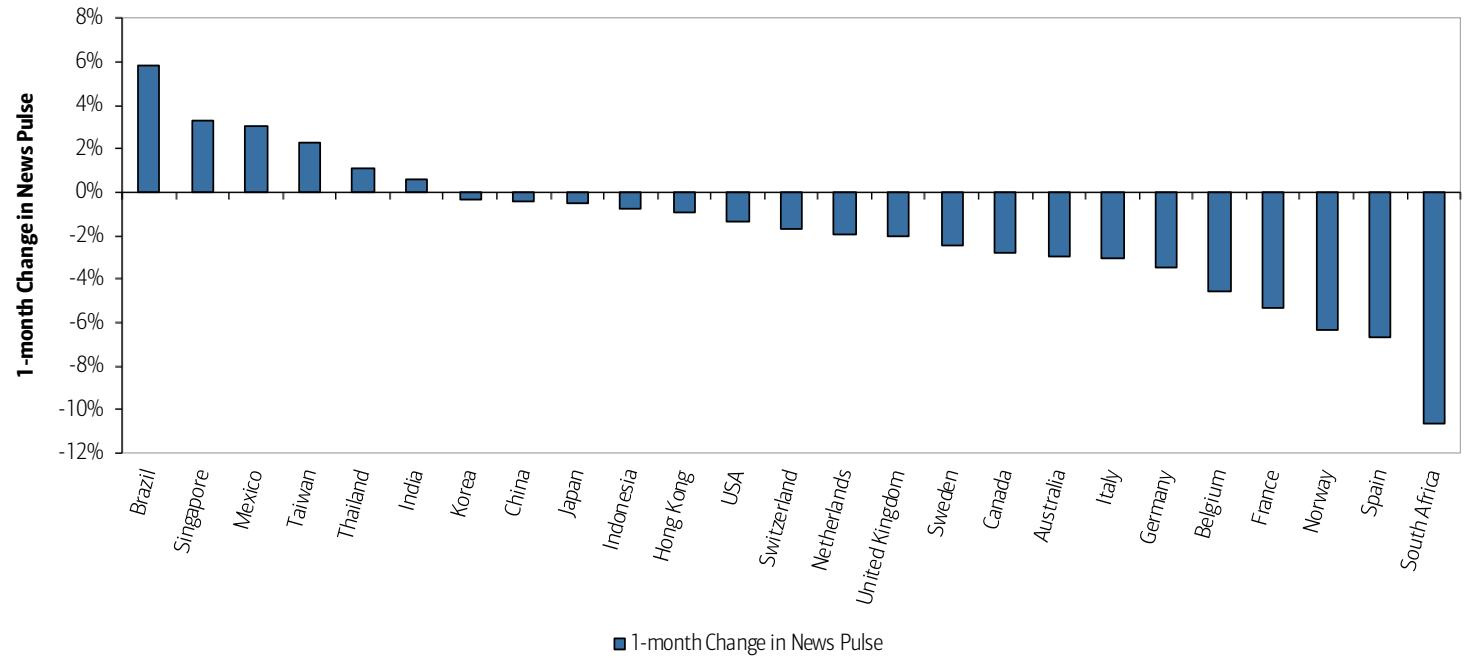


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 12: 1-month change in News Pulse by Global Countries

News aggregate improved the most in Brazil

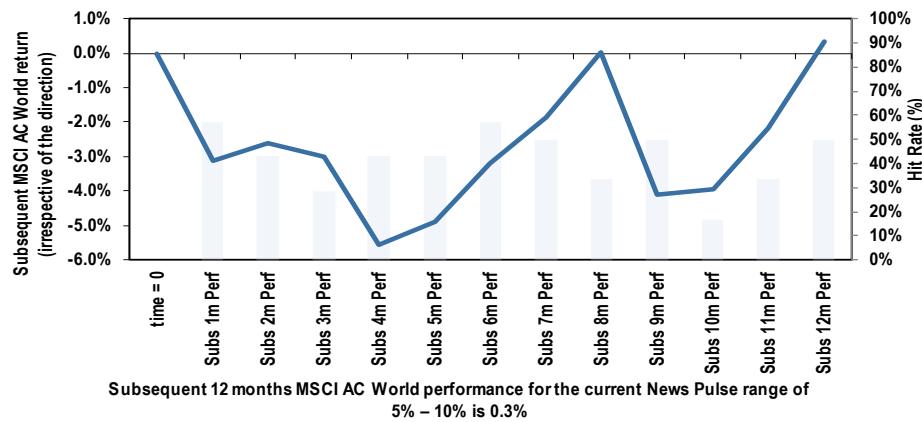


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 13: Subsequent 12m MSCI ACWI performance for current News Pulse range

Subsequent 12 months MSCI AC World performance for the current News Pulse range of 5% – 10% is 0.3%



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

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Table 1: Current News Pulse in Region-Sector News Pulse

Current news trend by region-sector

Current Pulse	Cons.			Cons.			Information		Comm.		Country	
	Energy	Materials	Industrials	Discretionary	Staples	Health Care	Financials	Technology	Services	Utilities	Real Estate	
Australia	15%	24%	2%	27%	20%	-6%	30%	34%	54%	43%	8%	22%
Belgium	0%	23%	0%	84%	21%	50%	38%	0%	0%	59%	-79%	30%
Brazil	41%	29%	47%	16%	39%	39%	41%	89%	88%	50%	0%	43%
Canada	23%	7%	35%	18%	29%	0%	6%	26%	-9%	-23%	47%	14%
China	57%	11%	49%	40%	17%	45%	14%	28%	18%	65%	5%	32%
France	50%	60%	44%	33%	-13%	35%	43%	33%	74%	70%	-8%	34%
Germany	-	34%	31%	34%	8%	28%	59%	69%	-6%	82%	19%	34%
Hong Kong	0%	0%	20%	93%	-24%	0%	43%	0%	59%	65%	16%	37%
India	59%	26%	50%	53%	45%	43%	43%	23%	52%	44%	47%	43%
Indonesia	-12%	41%	45%	3%	77%	-21%	75%	-	74%	0%	0%	50%
Italy	26%	0%	-48%	54%	19%	47%	63%	0%	25%	65%	-	34%
Japan	76%	33%	50%	45%	42%	71%	62%	47%	56%	84%	50%	57%
Korea	-10%	-22%	54%	43%	54%	50%	50%	6%	21%	52%	-	29%
Mexico	-	71%	27%	0%	79%	0%	78%	-	16%	0%	-23%	48%
Netherlands	0%	32%	55%	28%	5%	43%	35%	47%	54%	-	-	33%
Singapore	0%	-	38%	89%	-65%	0%	63%	-55%	3%	-	42%	29%
South Africa	68%	-16%	81%	35%	47%	57%	62%	0%	53%	-	49%	5%
Spain	69%	0%	61%	62%	0%	60%	76%	0%	-17%	26%	-	41%
Sweden	0%	9%	42%	34%	11%	28%	58%	-1%	33%	-	-17%	33%
Switzerland	-	37%	2%	17%	33%	40%	26%	23%	-20%	95%	17%	25%
Taiwan	22%	-17%	5%	23%	88%	92%	84%	38%	58%	-	-45%	39%
Thailand	49%	-24%	26%	70%	32%	91%	55%	89%	29%	49%	62%	38%
United Kingdom	16%	8%	46%	8%	14%	67%	14%	25%	8%	35%	-62%	18%
USA	21%	7%	11%	13%	-9%	6%	4%	22%	9%	-27%	-6%	-1%
Global Sector	17%	3%	16%	22%	-5%	16%	1%	20%	8%	-16%	-11%	9%
Europe Sector	31%	26%	27%	23%	9%	40%	33%	26%	24%	40%	-24%	22%
APxJ Sector	48%	18%	42%	43%	33%	41%	39%	38%	21%	54%	19%	32%
GEM Sector	53%	14%	39%	43%	36%	45%	44%	39%	28%	53%	31%	33%

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

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Table 2: 1-month change in Region-Sector News Pulse

1-month change in news trend

1-month change	Cons.			Cons.			Information		Comm.		Country	
	Energy	Materials	Industrials	Discretionary	Staples	Health Care	Financials	Technology	Services	Utilities	Real Estate	
Australia	-11%	-6%	-2%	-7%	2%	8%	6%	-9%	6%	-1%	-7%	-3%
Belgium	0%	-19%	0%	1%	8%	-22%	-8%	0%	0%	-21%	0%	-5%
Brazil	-4%	12%	2%	5%	6%	-1%	11%	0%	0%	-10%	0%	6%
Canada	3%	-7%	-6%	-4%	9%	0%	0%	-3%	-6%	-8%	-3%	-3%
China	-2%	-4%	-2%	1%	4%	-5%	3%	2%	-3%	1%	-1%	0%
France	-3%	3%	-5%	-8%	-10%	2%	-3%	-6%	-4%	-4%	-19%	-5%
Germany	-	-3%	-3%	-1%	-8%	-10%	1%	3%	-5%	0%	-2%	-4%
Hong Kong	0%	0%	-11%	0%	-5%	0%	5%	0%	0%	-7%	-2%	-1%
India	-1%	2%	0%	-1%	-2%	0%	1%	5%	2%	-1%	-2%	1%
Indonesia	-3%	2%	-9%	-5%	3%	0%	1%	-	0%	0%	0%	-1%
Italy	5%	0%	-8%	-4%	6%	12%	0%	-17%	-1%	-1%	-	-3%
Japan	8%	7%	5%	1%	-7%	3%	5%	-8%	5%	-4%	4%	-1%
Korea	2%	2%	0%	2%	6%	0%	3%	-9%	-5%	-6%	-	0%
Mexico	-	6%	6%	0%	5%	0%	3%	-	0%	0%	0%	3%
Netherlands	0%	1%	-10%	-1%	-2%	-3%	-3%	0%	18%	-	-	-2%
Singapore	0%	-	12%	-3%	-1%	0%	10%	1%	-6%	-	-1%	3%
South Africa	12%	-10%	1%	-3%	-10%	10%	-3%	0%	11%	-	14%	-11%
Spain	-8%	0%	1%	-20%	0%	-8%	-1%	-19%	-5%	-5%	-	-7%
Sweden	0%	-4%	-6%	2%	-18%	-11%	0%	4%	5%	-	-2%	-2%
Switzerland	-	-3%	0%	-12%	-7%	-2%	-3%	16%	-61%	75%	7%	-2%
Taiwan	-2%	18%	-7%	-1%	0%	0%	-1%	2%	5%	-	-29%	2%
Thailand	-3%	0%	-15%	-11%	16%	3%	-1%	62%	8%	1%	3%	1%
United Kingdom	-4%	2%	-4%	-8%	-7%	1%	3%	-6%	-9%	-3%	6%	-2%
USA	0%	2%	-1%	-3%	-3%	-1%	-2%	-1%	-1%	-4%	-2%	-1%
Global Sector	0%	-3%	-4%	-3%	-4%	-4%	1%	0%	-2%	-4%	-1%	-2%
Europe Sector	1%	2%	-3%	-6%	-3%	-5%	3%	-3%	4%	0%	7%	-4%
APxJ Sector	2%	3%	-3%	-2%	7%	1%	0%	8%	-2%	-1%	1%	0%
GEM Sector	6%	3%	-5%	-1%	6%	-1%	2%	8%	-2%	-5%	9%	0%

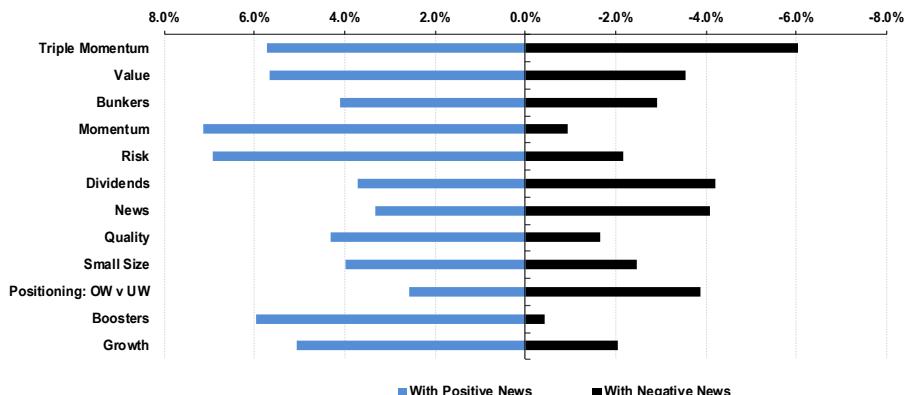
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 14: News + Other Factors: Annualised Relative Returns (sorted by largest diff in returns)

News enhances Alpha in all types of analysis

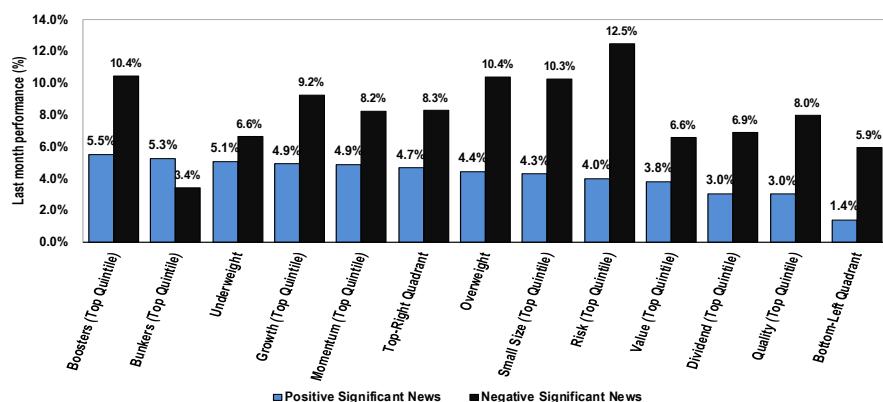


Source : Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 15: News + Other Factors: Last month Performance

Boosters (Top Quintile) + PSN combination had the best performance last month

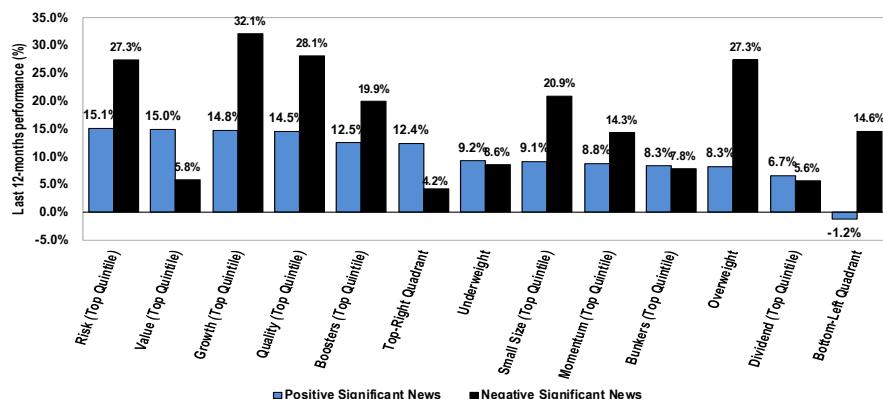


Source : BofA Global Quantitative Strategy, IBES, Factset

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Chart 16: News + Other Factors: Last 12-months Performance

Risk (Top Quintile) + PSN combination had the best performance during the last 12 months



Source : BofA Global Quantitative Strategy, IBES, Factset

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Table 3: News + Other Factors: Performance ending 31-Dec-23

News enhances Alpha in all types of analysis

Strategy	1mth	3mth	6mth	12mth	YTD	Annualised Relative Returns
PSN	4.8%	9.7%	6.2%	10.1%	10.1%	3.3%
NSN	8.3%	14.6%	8.8%	16.4%	16.4%	-4.1%
Value (Top Quintile)	3.7%	5.6%	6.2%	10.5%	10.5%	2.0%
Value (Top Quintile) + PSN	3.8%	8.9%	8.3%	15.0%	15.0%	5.7%
Value (Top Quintile) + NSN	6.6%	9.3%	6.9%	5.8%	5.8%	-3.5%
Growth (Top Quintile)	3.1%	6.1%	1.5%	3.0%	3.0%	2.3%
Growth (Top Quintile) + PSN	4.9%	11.6%	10.5%	14.8%	14.8%	5.1%
Growth (Top Quintile) + NSN	9.2%	27.6%	20.8%	32.1%	32.1%	-2.0%
Quality (Top Quintile)	4.7%	8.6%	5.8%	12.5%	12.5%	1.6%
Quality (Top Quintile) + PSN	3.0%	10.5%	10.0%	14.5%	14.5%	4.3%
Quality (Top Quintile) + NSN	8.0%	14.8%	12.4%	28.1%	28.1%	-1.6%
Risk (Top Quintile)	7.8%	12.2%	6.9%	16.5%	16.5%	3.1%
Risk (Top Quintile) + PSN	4.0%	14.7%	11.0%	15.1%	15.1%	6.9%
Risk (Top Quintile) + NSN	12.5%	20.1%	13.3%	27.3%	27.3%	-2.2%
Momentum (Top Quintile)	5.1%	10.3%	5.0%	6.5%	6.5%	2.9%
Momentum (Top Quintile) + PSN	4.9%	11.9%	7.5%	8.8%	8.8%	7.1%
Momentum (Top Quintile) + NSN	8.2%	19.6%	15.3%	14.3%	14.3%	-0.9%
Dividend (Top Quintile)	4.7%	5.3%	2.8%	5.1%	5.1%	-0.2%
Dividend (Top Quintile) + PSN	3.0%	7.7%	4.7%	6.7%	6.7%	3.7%
Dividend (Top Quintile) + NSN	6.9%	12.2%	10.0%	5.6%	5.6%	-4.2%
Small Size (Top Quintile)	2.7%	3.8%	-1.1%	-2.4%	-2.4%	-0.1%
Small Size (Top Quintile) + PSN	4.3%	11.0%	8.1%	9.1%	9.1%	4.0%
Small Size (Top Quintile) + NSN	10.3%	13.8%	6.3%	20.9%	20.9%	-2.5%
Top-Right Quadrant	3.7%	7.9%	5.4%	12.2%	12.2%	3.6%
Top-Right Quadrant + PSN	4.7%	10.4%	8.1%	12.4%	12.4%	5.7%
Top-Right Quadrant + NSN	8.3%	13.7%	7.9%	4.2%	4.2%	-0.2%
Bottom-Left Quadrant	6.7%	9.3%	6.1%	17.8%	17.8%	-0.4%
Bottom-Left Quadrant + PSN	1.4%	2.7%	-5.9%	-1.2%	-1.2%	-0.6%
Bottom-Left Quadrant + NSN	5.9%	10.2%	5.9%	14.6%	14.6%	-6.0%
Boosters (Top Quintile)	6.3%	11.2%	7.8%	14.6%	14.6%	3.3%
Boosters (Top Quintile) + PSN	5.5%	13.4%	11.4%	12.5%	12.5%	6.0%
Boosters (Top Quintile) + NSN	10.4%	17.5%	10.4%	19.9%	19.9%	-0.4%
Bunkers (Top Quintile)	4.7%	8.3%	6.8%	10.5%	10.5%	0.6%
Bunkers (Top Quintile) + PSN	5.3%	9.3%	5.2%	8.3%	8.3%	4.1%
Bunkers (Top Quintile) + NSN	3.4%	7.7%	4.2%	7.8%	7.8%	-2.9%
Overweight	6.7%	11.6%	6.2%	16.2%	16.2%	1.6%
Overweight + PSN	4.4%	8.6%	2.1%	8.3%	8.3%	2.6%
Overweight + NSN	10.4%	16.1%	8.7%	27.3%	27.3%	-2.2%
Underweight	5.7%	9.9%	5.8%	10.0%	10.0%	-0.2%
Underweight + PSN	5.1%	10.0%	8.1%	9.2%	9.2%	0.2%
Underweight + NSN	6.6%	12.5%	6.7%	8.6%	8.6%	-3.9%
MSCI AC World (EW)	4.3%	7.4%	2.9%	6.7%	6.7%	

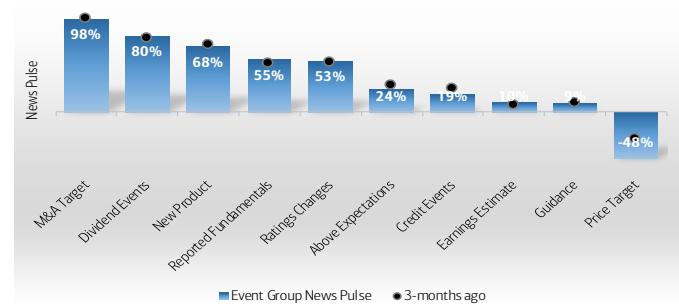
Source : BofA Global Quantitative Strategy, IBES, Factset

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News + Other Factors

Chart 17: Current News Pulse by Significant News Events

The news aggregate is highest in M&A Target and Dividend Events



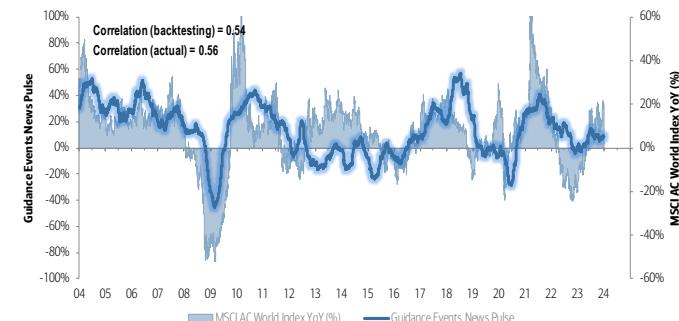
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

- By Major News Event Groups, the news aggregate is currently highest for M&A Target and Dividend Events, and the lowest for Price Target and Guidance events.

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Chart 18: Global Guidance News Pulse vs MSCI AC World Index YoY (%)

News has improved last month



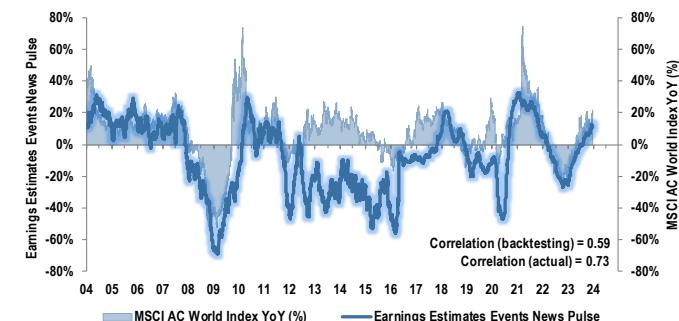
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

- [Individual regions charts](#)

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Chart 19: Global Earnings Estimate News Pulse vs MSCI AC World Index YoY (%)

Global Earnings Estimates News Pulse has improved last month

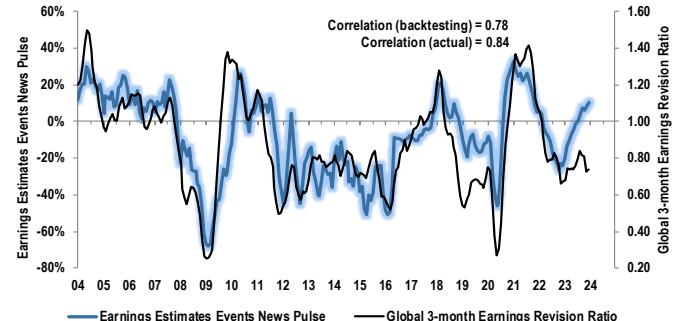


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

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Chart 20: Global Earnings Estimate News Pulse vs Global Earnings Revision Ratio

Global Earnings Estimates News Pulse has improved last month



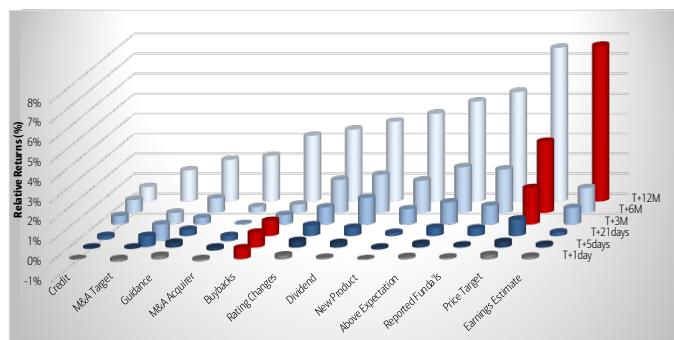
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

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Chart 21: Average Relative Returns of POSITIVE Significant News Events by different holding period (back-tested Jan 2000- May 2019)

News around fundamentals have performed best on a long-term horizon



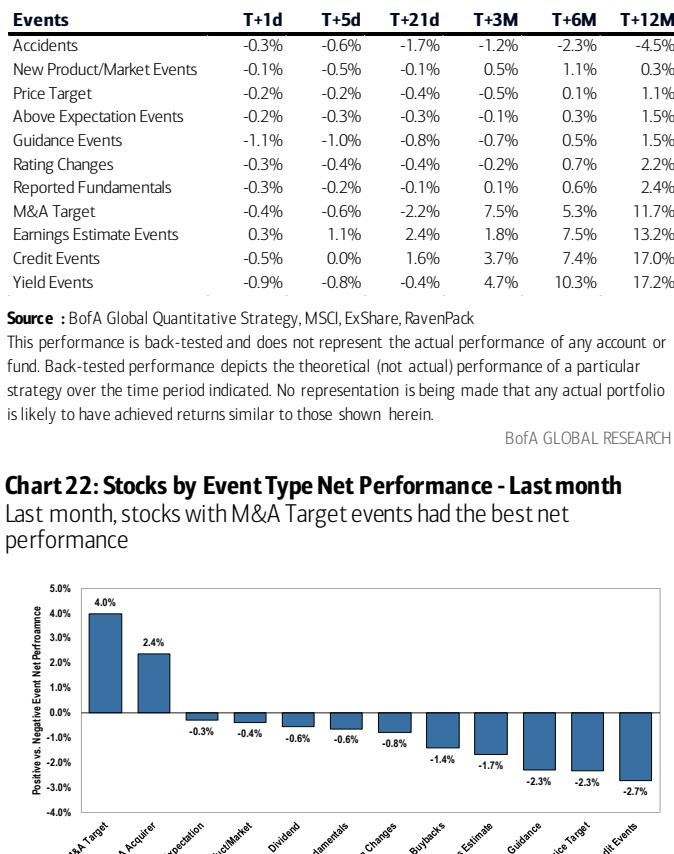
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 5: Average Relative Returns of NEGATIVE Significant News Events by different holding period (back-tested Jan 2000-May 2019)

Backtested results of Negative News by Events



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

This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 4: Average Relative Returns of POSITIVE Significant News Events by different holding period (Actual from June 2019)

Live results of Positive News by Events

Events	T+1d	T+5d	T+21d	T+3M	T+6M	T+12M
Rating Changes	0.1%	0.1%	0.1%	0.3%	0.5%	2.1%
Guidance Events	0.1%	0.1%	0.1%	1.1%	2.7%	
Reported Fundamentals	0.0%	0.0%	-0.1%	0.1%	-0.2%	1.2%
Above Expectation Events	0.1%	0.2%	0.3%	0.6%	0.8%	3.4%
Price Target	0.0%	0.0%	0.1%	0.7%	2.0%	5.6%
Credit Events	-0.1%	-0.1%	-0.2%	-0.9%	-2.5%	-3.8%
Yield Events	0.0%	0.0%	-0.2%	-0.4%	-1.2%	-1.6%
New Product/Market Events	0.0%	0.0%	0.1%	0.7%	1.8%	4.5%
M&A Target	0.0%	0.0%	0.1%	0.0%	-0.2%	1.4%
M&A Acquirer	0.0%	0.0%	-0.1%	-0.2%	0.0%	0.8%
Earnings Estimate Events	0.0%	0.0%	0.0%	0.1%	0.6%	2.6%
Buybacks	0.2%	0.2%	0.1%	0.1%	0.2%	0.6%

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

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Table 6: Average Relative Returns of NEGATIVE Significant News Events by different holding period (Actual from June 2019)

Live results of Negative News by Events

Events	T+1d	T+5d	T+21d	T+3M	T+6M	T+12M
Rating Changes	0.0%	0.0%	0.0%	-0.2%	-0.5%	2.9%
Guidance Events	-0.4%	-0.4%	-0.6%	-0.8%	-0.8%	3.6%
Reported Fundamentals	-0.1%	0.0%	0.1%	-0.3%	0.5%	5.1%
Above Expectation Events	-0.3%	-0.2%	-0.4%	-1.1%	-0.8%	2.9%
Price Target	0.0%	0.2%	0.4%	0.2%	-0.1%	5.2%
Credit Events	-0.5%	-0.6%	-0.7%	-0.7%	-2.0%	15.6%
Yield Events	-0.1%	-0.1%	-0.2%	-0.4%	-1.5%	5.7%
New Product/Market Events	0.0%	0.1%	-0.1%	0.5%	1.0%	3.3%
M&A Target	-0.5%	-0.9%	-1.4%	0.1%	-2.4%	-0.4%
Earnings Estimate Events	0.0%	0.0%	0.1%	-0.1%	0.2%	5.2%
Accidents	-0.1%	-0.2%	-1.7%	-12.0%	-29.0%	-52.0%

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

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

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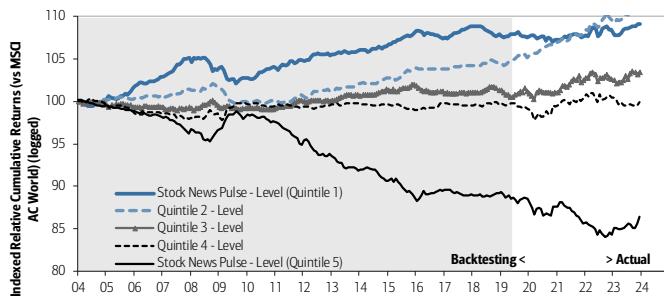
Stock News Pulse - Performance

Backtesting of Stock News Pulse

We performed back-testing based on the level of the Stock News Pulse (by quintile), change in the Stock News Pulse (by quintile), and a combination of level and change in the Stock News Pulse to test the impact on subsequent stock returns. The back-testing shows that combining the level and change in the Stock News Pulse added more relative performance than just the level or change in the Stock News Pulse individually. Based on these results, we screen for Positive Significant News (stocks with a high and improving Stock News Pulse), and Negative Significant News (stocks with a low and falling Stock News Pulse). For more details on back-testing and definitions, please refer to the Methodology section.

Chart 24: Relative returns of Stock News Pulse Level by Quintiles

Stocks with high News Pulse outperformed



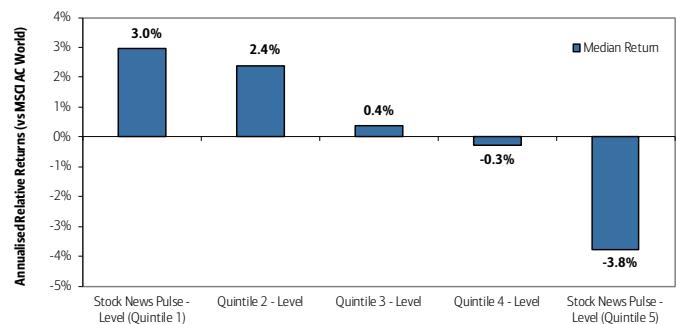
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 25: Annualized returns of Stock News Pulse Level Quintiles

Stocks with highest News Pulse (Quintile 1) outperformed by 3.2% p.a.



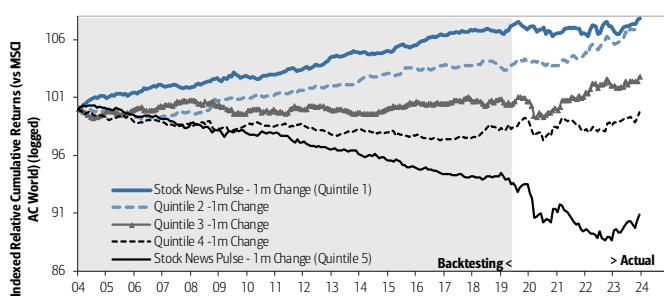
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 26: Relative returns of 1m change in Stock News Pulse by Quintiles

Stocks with positive News Pulse change outperformed



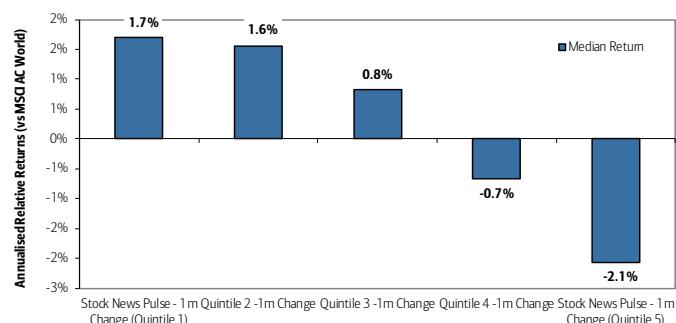
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 27: Annualized returns of 1-month change in Stock News Pulse Quintiles

Stocks with highest change in News Pulse (Quintile 1) outperformed by 3.2% p.a.



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

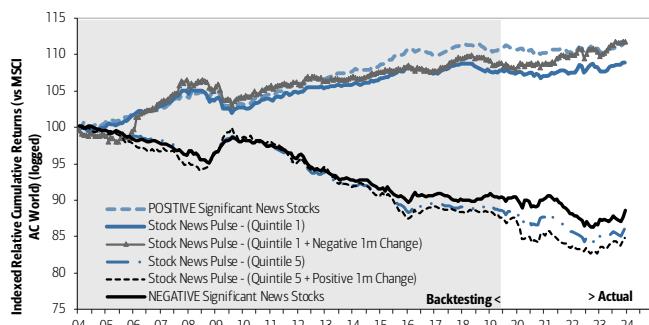
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 28: Relative returns of News Pulse Level & Change by Quintiles

Positive Significant News Stocks outperformed



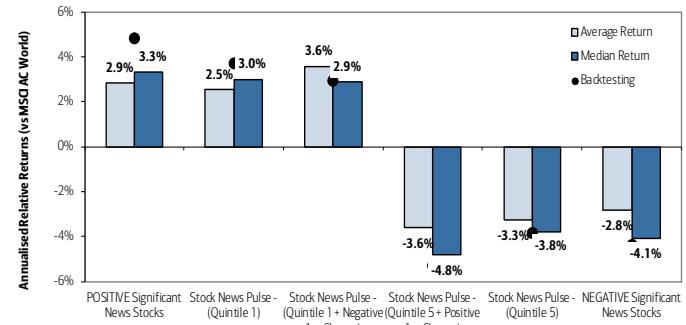
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 29: Annualized returns of Stock News Pulse Level & Change Quintiles

Positive Significant News Stocks outperformed 3.2% p.a. on average



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 7: Stocks News Pulse Level/Change/Level+Change Performance ending 31-Dec-23

Periodic performance matrix

Strategy	1mth	3mth	6mth	12mth	YTD	Last 5yr Relative Annualised
PSN	4.8%	9.7%	6.2%	10.1%	10.1%	31.1%
Stock News Pulse (Quintile 1)	4.5%	9.0%	5.6%	10.3%	10.3%	33.2%
Stock News Pulse (Quintile 1 + Negative 1m Change)	4.3%	8.7%	5.0%	14.0%	14.0%	42.5%
Stock News Pulse (Quintile 2)	5.1%	7.7%	4.0%	11.9%	11.9%	69.2%
Stock News Pulse (Quintile 3)	5.7%	7.1%	5.1%	10.6%	10.6%	39.9%
Stock News Pulse (Quintile 4)	6.1%	9.1%	4.8%	4.1%	4.1%	28.0%
Stock News Pulse (Quintile 5 + Positive 1m Change)	6.7%	11.9%	6.8%	18.3%	18.3%	8.0%
Stock News Pulse (Quintile 5)	7.6%	13.5%	8.0%	17.1%	17.1%	11.4%
NSN	8.3%	14.6%	8.8%	16.4%	16.4%	15.2%
ACWI (Equal Weighted)	4.3%	7.4%	2.9%	6.7%	6.7%	26.9%

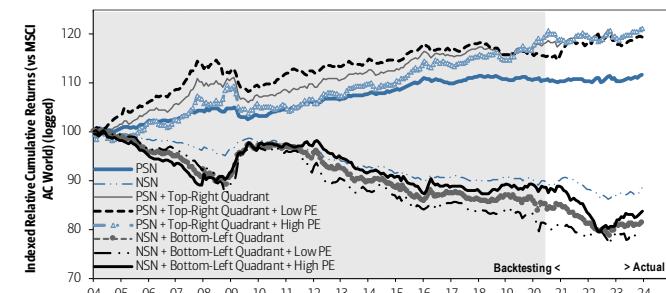
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 30: Performance: News Pulse + Earnings Momentum + Price Momentum + Valuation

News added performance with Contenders



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

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

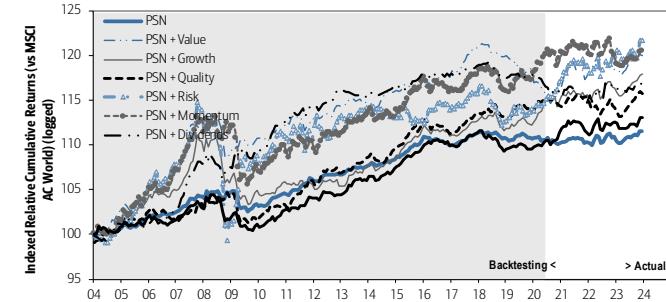
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- Back-testing since 2004 indicates the signals from the news would have added to the performance on both the long (Top-Right Quadrant + Positive Significant News (PSN)) and short side (Bottom-Left + Negative Significant News (NSN)). The back-testing including Value (PE) did not add any additional returns, on average, over the testing period.

[News Pulse with the Contenders](#)

Chart 31: Performance: Positive Significant News (PSN) + Quantessential Styles (Top Quintile)

News added performance with styles



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
 Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

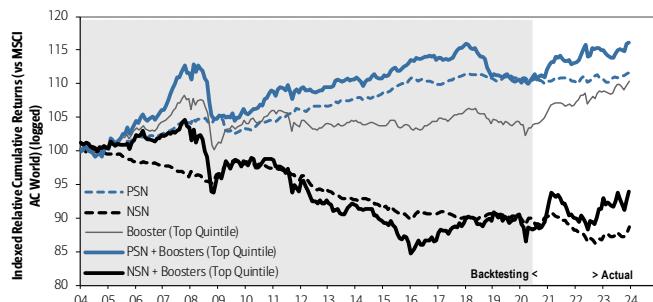
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- The combination of Style and Positive Significant News (PSN) stocks would have added to performance for every style, on average, over the back-testing period since 2004.

- [News Pulse with Style analysis](#)

Chart 32: Performance: News Pulse + BOOSTERS (Top Quintile)

News added performance with Boosters (cyclical stocks)



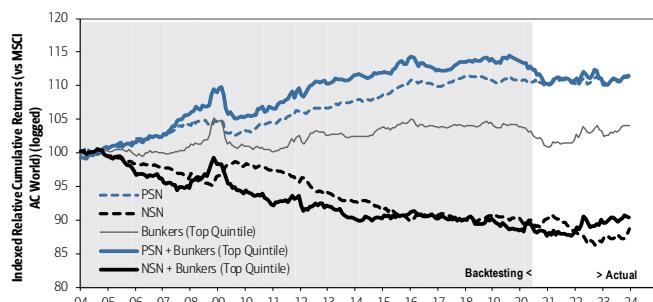
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

- Backtesting since 2004 indicates, Positive Significant News (PSN) would have added to performance of Boosters in an upturn (in the Global Wave).

- [News Pulse with Boosters](#)

Chart 33: Performance: News Pulse + BUNKERS (Top Quintile)

News added performance with Bunkers (defensive stocks)



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

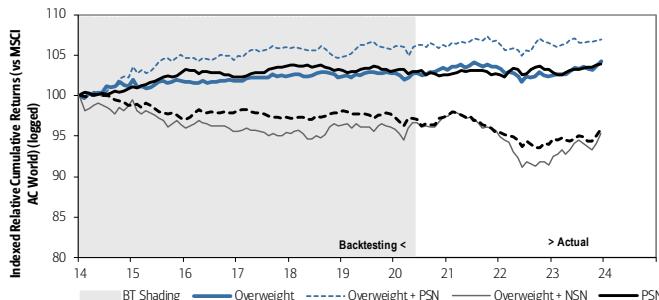
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- Back-testing since 2004 shows, Positive Significant News (PSN) would have added to performance of Bunkers in a downturn (in the Global Wave). Combining the Bunkers with Negative Significant News (NSN) detracts from performance in both upturns and downturns of the Global Wave.

- [News Pulse with Bunkers.](#)

Chart 34: Performance: News Pulse + Overweight Positioning (level)

News added performance with overweight positioning

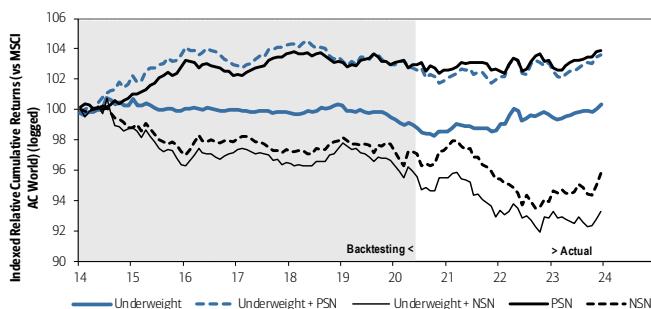


Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack
Back-tested results are from Jan-14 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 35: Performance: News Pulse + Underweight Positioning (level)

News added performance with underweight positioning



Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack
Back-tested results are from Jan-14 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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- Back-testing since 2014 indicates, overweight stocks with Positive Significant News (PSN) would have averaged better performance over the back-testing period than overweight stocks with Negative Significant News (NSN).

- [News Pulse with Overweight Positioning](#)

- Underweight stocks with Negative Significant News (NSN) averaged worse performance over the back-testing period than underweight stocks with Positive Significant News (PSN).

- [News Pulse with Underweight Positioning](#)

Stock Screens

Based on these backtesting results, we define Positive Significant News as stocks with a high Stock News Pulse (top quintile) and a positive one-month change in the Stock News Pulse. We define Negative Significant News as stocks with a low Stock News Pulse (bottom quintile) and a negative one-month change in the Stock News Pulse. All stock screens in this report are based on this measure of Positive Significant News or Negative Significant News. We list a maximum of 30 stocks in these screens, ranked by significance.



News Pulse by Region

USA News Pulse

Chart 36: USA News Pulse and YoY change in the MSCI USA Index

News trend has deteriorated in the last 3m

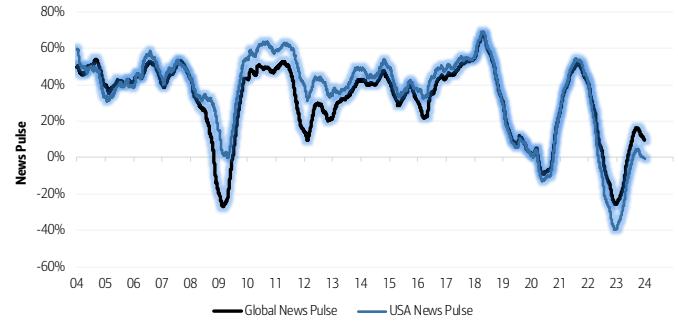


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 37: USA News Pulse vs Global News Pulse

News trend has deteriorated in the last 3m



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

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Table 8: USA: POSITIVE Significant News Screen

Stocks with positive significant news

BIGG Code	Name	Country	Sub Industry	MCAP
HII US	Huntington Ingalls	United States	Aerospace & Defense	10,351
SNPS US	Synopsys	United States	Application Software	78,309
ABBV US	AbbVie	United States	Biotechnology	273,529
AOS US	A.O. Smith	United States	Building Products	10,271
WAB US	Wabtec	United States	Construction Machinery & Heavy Transf.	22,732
MLM US	Martin Marietta	United States	Construction Materials	30,835
JPM US	JPMorgan Chase	United States	Diversified Banks	494,325
VLTO US	Veroalto	United States	Environmental & Facilities Services	20,260
PINS US	Pinterest- Class A	United States	Interactive Media & Services	21,553
EPAM US	Ebam Systems	United States	IT Consulting & Other Services	17,234
IBM US	IBM	United States	IT Consulting & Other Services	148,995
AIZ US	Assurant Inc	United States	Multi-line Insurance	8,934
HES US	Hess Corp	United States	Oil & Gas Exploration & Production	44,266
LLY US	Eli Lilly	United States	Pharmaceuticals	553,363
ACGL US	Arch Capital	United States	Property & Casualty Insurance	27,699
ERIE US	Erie Indemnity-CL A	United States	Property & Casualty Insurance	15,470
PGR US	Progressive	United States	Property & Casualty Insurance	93,232
REG US	Regency Centers	United States	Retail REITs	12,372
CRWD US	CrowdStrike	United States	Systems Software	57,717
CYBR US	CyberArk Software	United States	Systems Software	9,149
ZS US	Zscaler	United States	Systems Software	32,607
WSO US	Watsco	United States	Trading Companies & Distributors	14,379

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

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Table 9: USA: NEGATIVE Significant News Screen

Stocks with negative significant news

BIGG Code	Name	Country	Sub Industry	MCAP
TTD US	Trade Desk-A	United States	Advertising	32,106
TEAM US	Atlassian	United States	Application Software	36,908
DOCU US	Docusign	United States	Application Software	12,081
U US	Unity Software	United States	Application Software	15,680
TSLA US	Tesla	United States	Automobile Manufacturers	788,674
MAS US	Masco	United States	Building Products	15,066
LBRDK US	Liberty Broadband-C	United States	Cable & Satellite	10,151
EW US	Edwards Lifesciences	United States	Health Care Equipment	46,354
HOLX US	Hologic	United States	Health Care Equipment	17,501
ABNB US	Airbnb-Class A	United States	Hotels Resorts & Cruise Lines	58,044
KMB US	Kimberly-Clark	United States	Household Products	41,093
MTCH US	Match Group	United States	Interactive Media & Services	10,150
OKTA US	Okta	United States	Internet Services & Infrastructure	14,191
HAS US	Hasbro	United States	Leisure Products	7,084
AVTR US	Avantor	United States	Life Sciences Tools & Services	15,431
RGEN US	Repigen Corp	United States	Life Sciences Tools & Services	10,025
NLY US	Annaly Mortgage	United States	Mortgage REITs	9,567
ROKU US	Roku	United States	Movies & Entertainment	11,374
CPT US	Camden Property	United States	Multi-Family Residential REITs	10,601
WEC US	WEC Energy	United States	Multi-Utilities	26,550
APA US	APA Corp	United States	Oil & Gas Exploration & Production	11,025
TSCO US	Tractor Supply	United States	Other Specialty Retail	23,397
CAG US	Conagra Brands	United States	Packaged Foods & Meats	13,699
HSY US	Hershey	United States	Packaged Foods & Meats	27,939
K US	Kellanova	United States	Packaged Foods & Meats	19,141
LUV US	Southwest Airlines	United States	Passenger Airlines	17,202
HBAN US	Huntington Banc	United States	Regional Banks	18,417
MRVL US	Marvell Tech	United States	Semiconductors	52,035
ALB US	Albemarle	United States	Specialty Chemicals	16,954
TOST US	Toast-Class A	United States	Transaction & Payment Processing Ser	7,502

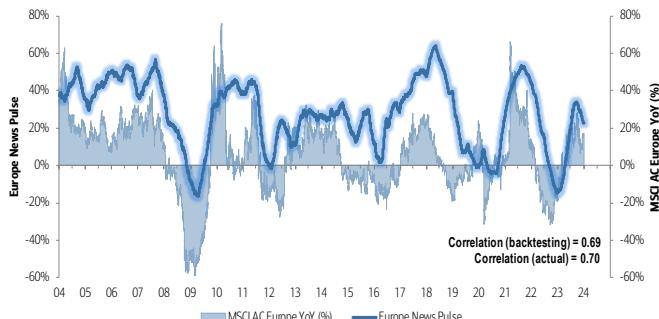
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Europe News Pulse

Chart 38: Europe News Pulse and YoY change in the MSCI AC Europe Index

News trend fell in the last 3m, however in aggregate it remains positive



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

BofA GLOBAL RESEARCH

Chart 39: Europe News Pulse vs Global News Pulse

News trend fell in the last 3m, however in aggregate it remains positive



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

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Table 10: Europe: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sub Industry	MCAP
DANSKE DC	Danske Bank	Denmark	Diversified Banks	23,048
NZYMB DC	Novozyymes	Denmark	Specialty Chemicals	12,497
DSY FP	Dassault Systemes	France	Application Software	65,305
FGR FP	Eiffage	France	Construction & Engineering	10,503
ACA FP	Credit Agricole	France	Diversified Banks	43,340
CS FP	Axa SA	France	Multi-line Insurance	73,460
IPN FP	Ipse	France	Pharmaceuticals	9,990
URW FP	Unibail-Rodamco-Westfield	France	Retail REITs	10,278
P911 GR	Dr Ing Hc F Porsche Ag	Germany	Automobile Manufacturers	40,203
CON GR	Continental Ag	Germany	Automotive Parts & Equipment	16,994
HEI GR	Heidelberg Materials	Germany	Construction Materials	16,647
CHKP US	Check Point	Israel	Systems Software	17,875
AIR FP	Airbus	Netherlands	Aerospace & Defense	122,043
AGN NA	Aegon	Netherlands	Life & Health Insurance	11,767
ASRNL NA	ASR Nederland	Netherlands	Multi-line Insurance	9,968
AENA SM	Aena SME	Spain	Airport Services	27,191
AMS SM	Amadeus IT	Spain	Hotels Resorts & Cruise Lines	32,287
SKAB SS	Skanska	Sweden	Construction & Engineering	7,243
SEBA SS	SEB	Sweden	Diversified Banks	29,141
SAND SS	Sandvik	Sweden	Industrial Machinery & Supplies & Com	27,147
TEMN SW	Temenos	Switzerland	Application Software	6,986
ZURN SW	Zurich Insurance	Switzerland	Multi-line Insurance	76,443
INF LN	Informa	United Kingdom	Advertising	13,780
MRO LN	Melrose Industries	United Kingdom	Aerospace & Defense	9,737
III LN	3i Group	United Kingdom	Asset Management & Custody Banks	30,040
WTB LN	Whitbread	United Kingdom	Hotels Resorts & Cruise Lines	9,007
GSK LN	GSK	United Kingdom	Pharmaceuticals	75,705
EXPN LN	Experian	United Kingdom	Research & Consulting Services	37,545
CPG LN	Compass Group	United Kingdom	Restaurants	46,890
WISE LN	Wise - A	United Kingdom	Transaction & Payment Processing Ser	11,418

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

BofA GLOBAL RESEARCH

Table 11: Europe: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sub Industry	MCAP
OMV AV	OMV AG	Austria	Integrated Oil & Gas	14,378
ARGX BB	Argenx	Belgium	Biotechnology	22,417
AGS BB	Ageas	Belgium	Multi-line Insurance	8,162
GBLB BB	GBL	Belgium	Multi-Sector Holdings	11,541
KERFP	Kering	France	Apparel Accessories & Luxury Goods	54,685
LRF P	Legrand	France	Electrical Components & Equipment	27,554
ML FP	Michelin	France	Tires & Rubber	25,606
DHL GR	DHL	Germany	Air Freight & Logistics	61,394
DHER GR	Delivery Hero	Germany	Restaurants	7,478
WCH GR	Wacker Chemie	Germany	Specialty Chemicals	6,585
BIRG ID	Bank of Ireland	Ireland	Diversified Banks	9,592
ELE SM	Endesa	Spain	Electric Utilities	21,590
BOL SS	Boliden	Sweden	Diversified Metals & Mining	8,535
HEXAB SS	Hexagon-B	Sweden	Electronic Equipment & Instruments	31,147
SCAB SS	SCA	Sweden	Forest Products	9,562
UHR SW	Swatch Group	Switzerland	Apparel Accessories & Luxury Goods	7,859
BAER SW	Julius Baer	Switzerland	Asset Management & Custody Banks	11,540
GEBN SW	Geberit	Switzerland	Building Products	22,535
ALC SW	Alcon	Switzerland	Health Care Supplies	38,971
ADEN SW	Adecco	Switzerland	Human Resource & Employment Servic	8,259
SCMN SW	Swisscom	Switzerland	Integrated Telecommunication Service	31,143
SLHN SW	Swiss Life	Switzerland	Life & Health Insurance	20,482
HELN SW	Helvetia	Switzerland	Multi-line Insurance	7,302
GIVN SW	Givaudan	Switzerland	Specialty Chemicals	38,222
WPP LN	WPP	United Kingdom	Advertising	10,318
HL LN	Hargreaves Lansd	United Kingdom	Asset Management & Custody Banks	4,438
BDEV LN	Barratt Dev	United Kingdom	Homebuilding	6,990
IHG LN	InterContinental Hotels	United Kingdom	Hotels Resorts & Cruise Lines	14,943
PHNX LN	Phoenix Group	United Kingdom	Life & Health Insurance	6,833
AHT LN	Ashtead Group	United Kingdom	Trading Companies & Distributors	30,490

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

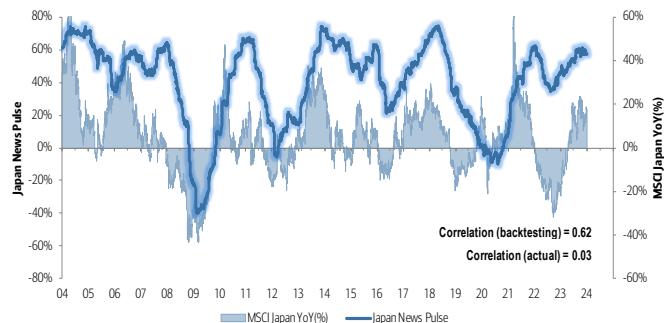
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Japan News Pulse

Chart 40: Japan News Pulse and YoY change in the MSCI Japan Index

57% of news is positive

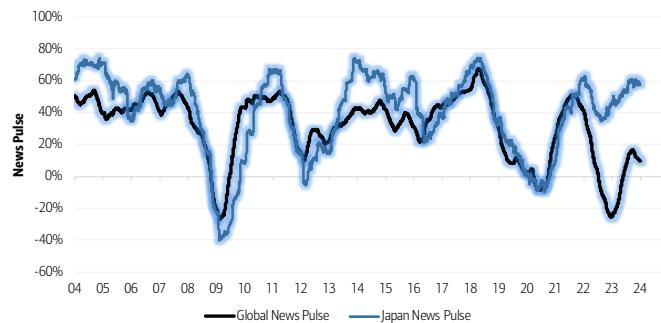


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 41: Japan News Pulse vs Global News Pulse

57% of news is positive



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

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Table 12: Japan: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sub Industry	MCAP
7259JP	Aisin	Japan	Automotive Parts & Equipment	10,311
7276JP	Koito Mfg	Japan	Automotive Parts & Equipment	5,013
4188JP	Mitsubishi Chemical	Japan	Diversified Chemicals	9,231
9532JP	Osaka Gas	Japan	Gas Utilities	8,704
4543JP	Terumo	Japan	Health Care Equipment	24,513
6501JP	Hitachi	Japan	Industrial Conglomerates	66,884
6701JP	NEC	Japan	IT Consulting & Other Services	16,160
8795JP	T&D	Japan	Life & Health Insurance	9,361
5019JP	Idemitsu	Japan	Oil & Gas Refining & Marketing	8,108
9202JP	ANA	Japan	Passenger Airlines	10,512
4151JP	Kyowa Kirin	Japan	Pharmaceuticals	9,078
4507JP	Shionogi	Japan	Pharmaceuticals	14,822
8630JP	Sompo	Japan	Property & Casualty Insurance	17,008
9007JP	Odakyu Elec. Railway	Japan	Rail Transportation	5,622
9021JP	West Japan Railway	Japan	Rail Transportation	10,179

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

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Table 13: Japan: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sub Industry	MCAP
9143JP	SG Holdings	Japan	Air Freight & Logistics	9,194
9064JP	Yamato Trans	Japan	Air Freight & Logistics	7,020
7267JP	Honda	Japan	Automobile Manufacturers	56,509
6861JP	Keyence	Japan	Electronic Equipment & Instruments	107,165
8697JP	Japan Exchange	Japan	Financial Exchanges & Data	11,184
9962JP	Misumi Group	Japan	Industrial Machinery & Supplies & Com	4,826
7951JP	Yamaha	Japan	Leisure Products	4,327
4922JP	KOSE	Japan	Personal Care Products	4,545
6988JP	Nitto Denko	Japan	Specialty Chemicals	10,742
9434JP	SoftBank	Japan	Wireless Telecommunication Services	59,806

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

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Asia Pac ex-Japan News Pulse

Chart 42: Asia Pac ex-Japan News Pulse and YoY change in the MSCI Asia Pac ex-Japan Index

32% of news is positive



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

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Chart 43: Asia Pac ex-Japan News Pulse vs Global News Pulse

32% of news is positive



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

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Table 14: Asia Pac ex-Japan: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sub Industry	MCAP
ORI AU	Orica	Australia	Commodity Chemicals	4,954
COH AU	Cochlear	Australia	Health Care Equipment	13,356
SUN AU	Suncorp Group	Australia	Property & Casualty Insurance	12,005
FMG AU	Fortescue	Australia	Steel	60,969
6690 HK	Haier Smart Home-H	China	Household Appliances	8,072
836 HK	China Resources Power	China	Independent Power Producers & Energ	9,635
857 HK	PetroChina-H	China	Integrated Oil & Gas	13,942
2689 HK	Nine Dragons	China	Paper Products	2,313
753 HK	Air China-H	China	Passenger Airlines	2,887
1044 HK	Hengan Int'l	China	Personal Care Products	4,323
3692 HK	Hansoh Pharma	China	Pharmaceuticals	11,975
1177 HK	Sino Biopharm.	China	Pharmaceuticals	8,355
1928 HK	Sands China	Hong Kong	Casinos & Gaming	23,683
16 HK	Sun Hung Kai	Hong Kong	Diversified Real Estate Activities	31,340
2 HK	CLP	Hong Kong	Electric Utilities	20,853
SRCM IN	Shree Cement	India	Construction Materials	12,424
SBILIFE IN	SBI Life Insurance	India	Life & Health Insurance	17,235
NEST IN	Nestle India	India	Packaged Foods & Meats	30,797
ASII JI	Astra Int'l	Indonesia	Industrial Conglomerates	14,856
GENM MK	Genting Malaysia	Malaysia	Casinos & Gaming	3,476
GAM MK	Gamuda	Malaysia	Construction & Engineering	2,694
QLG MK	QL Resources	Malaysia	Packaged Foods & Meats	3,024
SPK NZ	Spark New Zealand (NZ)	New Zealand	Integrated Telecommunication Service	6,030
BDO PM	BDO Unibank	Philippines	Diversified Banks	12,415
SGX SP	Sing Exchange	Singapore	Financial Exchanges & Data	7,986
267250 KS	HD Hyundai	South Korea	Oil & Gas Refining & Marketing	3,882
2801 TT	Chang Hwa Comm Bank	Taiwan	Diversified Banks	6,333
2882 TT	Cathay Financial	Taiwan	Life & Health Insurance	21,867
2357 TT	Asustek	Taiwan	Technology Hardware Storage & Periph	11,847
6669 TT	Wiwynn	Taiwan	Technology Hardware Storage & Periph	10,397

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

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Table 15: Asia Pac ex-Japan: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sub Industry	MCAP
IGO AU	IGO	Australia	Diversified Metals & Mining	4,676
PLSAU	Pilbara Minerals	Australia	Diversified Metals & Mining	8,111
GPT AU	Gen Prop. Trust	Australia	Diversified REITs	6,065
BXB AU	Brambles	Australia	Diversified Support Services	12,896
IEL AU	IDP Education	Australia	Education Services	3,804
9688 HK	Zai Lab	China	Biotechnology	2,709
998 HK	China Citic Bank-H	China	Diversified Banks	7,014
135 HK	Kunlun Energy	China	Gas Utilities	7,807
1066 HK	Shandong Weigao-H	China	Health Care Supplies	4,407
9626 HK	Bilibili-Class Z	China	Interactive Home Entertainment	3,924
6881 HK	China Galaxy-H	China	Investment Banking & Brokerage	1,952
2269 HK	WuXi Biologics	China	Life Sciences Tools & Services	16,116
2328 HK	PICC-H	China	Property & Casualty Insurance	8,199
123 HK	Yuexiu Property	China	Real Estate Development	3,279
6862 HK	Haidilao	China	Restaurants	10,379
11 HK	Hang Seng Bank	Hong Kong	Diversified Banks	22,293
1368 HK	Xtep International	Hong Kong	Footwear	1,490
3 HK	HK & China Gas	Hong Kong	Gas Utilities	14,290
1972 HK	Swire Prop	Hong Kong	Real Estate Operating Companies	11,837
TECHM IN	Tech Mahindra	India	IT Consulting & Other Services	14,919
CIPLA IN	Cipla	India	Pharmaceuticals	12,091
PCHEM MK	Petronas Chemicals	Malaysia	Commodity Chemicals	12,466
RHBANK MK	RHB Bank	Malaysia	Diversified Banks	5,084
AXIATA MK	Axiata Group	Malaysia	Wireless Telecommunication Services	4,754
009150 KS	SEMCO	South Korea	Electronic Components	8,885
1301 TT	Formosa Plastics	Taiwan	Commodity Chemicals	16,427
1102 TT	Asia Cement	Taiwan	Construction Materials	4,790
2892 TT	First Financial	Taiwan	Diversified Banks	12,160
2308 TT	Delta Electronics	Taiwan	Electronic Components	26,534
3443 TT	Global Unichip	Taiwan	Semiconductors	7,598

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

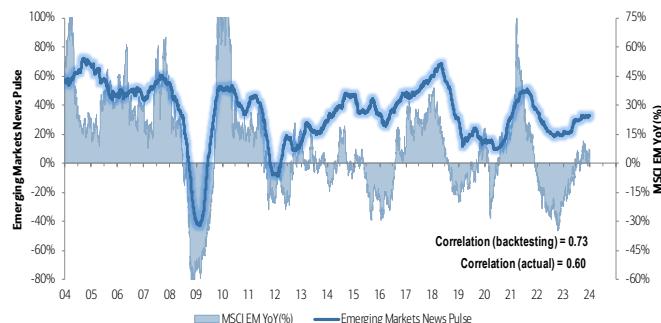
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Emerging Markets News Pulse

Chart 44: Emerging Markets News Pulse and YoY change in the MSCI Emerging Markets Index

News trend has improved in the last 3-months

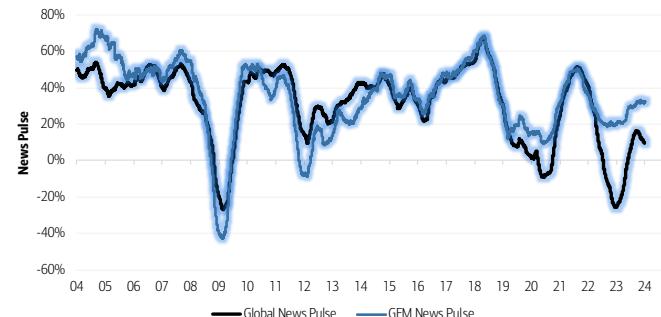


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 45: Emerging Markets News Pulse vs Global News Pulse

News trend has improved in the last 3-months



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

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Table 16: Emerging Markets: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sub Industry	MCAP
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
RADL3 BZ	Raia Drogasil	Brazil	Drug Retail	10,398
CSAN3 BZ	Cosan	Brazil	Oil & Gas Refining & Marketing	7,469
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
EUROB GA	Eurobank Ergasias	Greece	Diversified Banks	6,610
TPERGA GA	Piraeus Financial	Greece	Diversified Banks	4,420
BAP US	Credicorp	Peru	Diversified Banks	11,927
PGE PW	PGE	Poland	Electric Utilities	4,952
ACWA AB	Acwa Power Co	Saudi Arabia	Independent Power Producers & Energ	50,105
TAWUNIYA AB	Co For Coop Insurance	Saudi Arabia	Multi-line Insurance	5,216
SBK SJ	Standard Bank	South Africa	Diversified Banks	19,069
BVT SJ	Bidvest	South Africa	Industrial Conglomerates	4,694
VOD SJ	Vodacom	South Africa	Wireless Telecommunication Services	12,044
SAHOL TI	Sabanci	Turkiye	Diversified Banks	4,176
ADIB UH	Abu Dhabi Islamic Bank	United Arab Emirz	Diversified Banks	10,008
ALDAR UH	Aldar Prop	United Arab Emirz	Diversified Real Estate Activities	11,453
EAND UH	Emirates Telecom	United Arab Emirz	Integrated Telecommunication Service	46,506

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

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Table 17: Emerging Markets: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sub Industry	MCAP
SANB11 BZ	Banco Santander Brasil	Brazil	Diversified Banks	24,930
EGIE3 BZ	Engie Brasil Energia	Brazil	Renewable Electricity	7,614
SQM/B CI	SQM	Chile	Electrical Components & Equipment	8,610
SCCO US	Southern Copper	Peru	Copper	66,541
SABIC AB	SABIC	Saudi Arabia	Commodity Chemicals	66,640
CPI SJ	Capitec Bank	South Africa	Diversified Banks	12,865
HARSJ	Harmony	South Africa	Gold	4,049

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

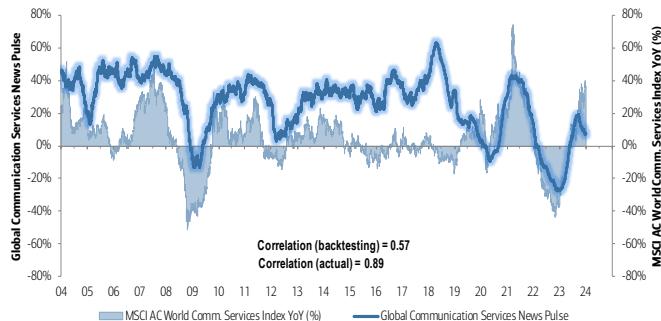
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Global Sector News Pulse

Global Communication Services News Pulse

Chart 46: Global Communication Services News Pulse vs MSCI AC World Communication Services Index

8% of news is positive

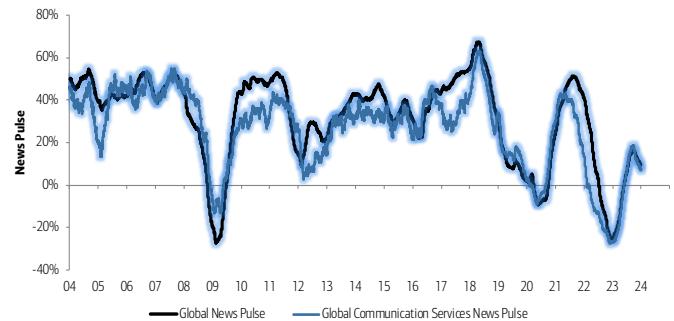


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 47: Global Communication Services News Pulse vs Global News Pulse

8% of news is positive



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

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Table 18: Global Communication Services : POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
1024 HK	Kuaishou Tech	China	Interactive Media & Services	24,347
ORA FP	Orange	France	Integrated Telecommunication Service	30,278
INFOE IN	Info Edge	India	Interactive Media & Services	7,969
CDB MK	CelcomDigi	Malaysia	Wireless Telecommunication Services	10,417
SPK NZ	Spark New Zealand (NZ)	New Zealand	Integrated Telecommunication Service	6,030
VOD SJ	Vodacom	South Africa	Wireless Telecommunication Services	12,044
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
TRUE TB	True	Thailand	Integrated Telecommunication Service	5,112
ADVANC TB	Adv Info Serv	Thailand	Wireless Telecommunication Services	18,909
EAND UH	Emirates Telecom	United Arab Emirates	Integrated Telecommunication Service	46,506
INF LN	Informa	United Kingdom	Advertising	13,780
PINS US	Pinterest- Class A	United States	Interactive Media & Services	21,553

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

BofA GLOBAL RESEARCH

Table 19: Global Communication Services : NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
T CN	TELUS	Canada	Integrated Telecommunication Service	26,001
9626 HK	Bilibili-Class Z	China	Interactive Home Entertainment	3,924
9434 JP	SoftBank	Japan	Wireless Telecommunication Services	59,806
AXIATA MK	Axiata Group	Malaysia	Wireless Telecommunication Services	4,754
SCMN SW	Swisscom	Switzerland	Integrated Telecommunication Service	31,143
WPP LN	WPP	United Kingdom	Advertising	10,318
IPG US	Interpublic	United States	Advertising	12,564
TTD US	Trade Desk-A	United States	Advertising	32,106
PARA US	Paramount Global	United States	Broadcasting	9,028
LBRDK US	Liberty Broadband-C	United States	Cable & Satellite	10,151
MTCH US	Match Group	United States	Interactive Media & Services	10,150
ROKU US	Roku	United States	Movies & Entertainment	11,374

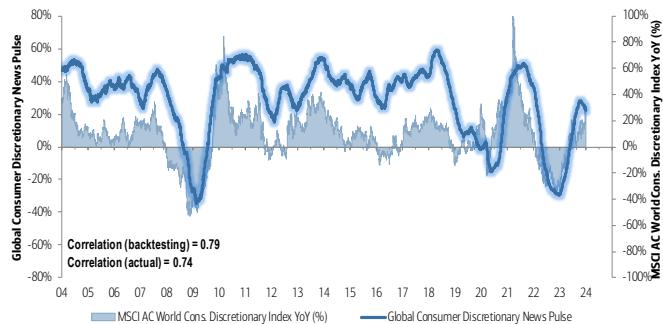
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Global Consumer Discretionary News Pulse

Chart 48: Global Consumer Discretionary News Pulse vs MSCI AC World Consumer Discretionary Index

News trend fell in the last 3m, however in aggregate it remains positive

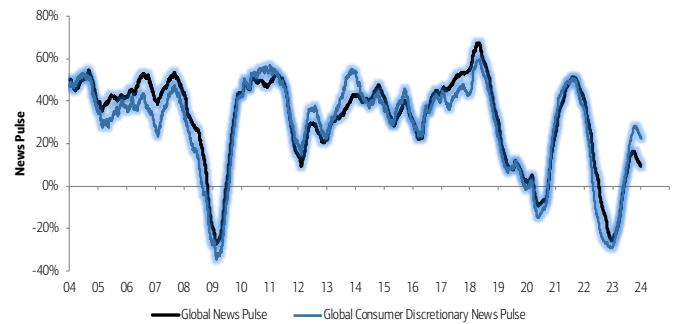


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 49: Global Consumer Discretionary News Pulse vs Global News Pulse

News trend fell in the last 3m, however in aggregate it remains positive



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

BofA GLOBAL RESEARCH

Table 20: Global Consumer Discretionary: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP (Total)
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
2333 HK	Great Wall Motor-H	China	Automobile Manufacturers	3,011
2015 HK	Li Auto	China	Automobile Manufacturers	33,272
9961 HK	Trip.com	China	Hotels Resorts & Cruise Lines	22,971
6690 HK	Haier Smart Home-H	China	Household Appliances	8,072
P911 GR	Dr Ing Hc F Porsche Ag	Germany	Automobile Manufacturers	40,203
CON GR	Continental Ag	Germany	Automotive Parts & Equipment	16,994
1928 HK	Sands China	Hong Kong	Casinos & Gaming	23,683
TRENT IN	Trent	India	Apparel Retail	13,051
SONACOMS IN	Sona Blw Precision Forgings	India	Automotive Parts & Equipment	4,534
7259 JP	Aisin	Japan	Automotive Parts & Equipment	10,311
7276 JP	Koito Mfg	Japan	Automotive Parts & Equipment	5,013
GENM MK	Genting Malaysia	Malaysia	Casinos & Gaming	3,476
021240 KS	Coway	South Korea	Household Appliances	3,278
AMS SM	Amadeus IT	Spain	Hotels Resorts & Cruise Lines	32,287
WTB LN	Whitbread	United Kingdom	Hotels Resorts & Cruise Lines	9,007
CPG LN	Compass Group	United Kingdom	Restaurants	46,890

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

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Table 21: Global Consumer Discretionary: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP (Total)
IEL AU	IDP Education	Australia	Education Services	3,804
CTC/A CN	Canadian Tire	Canada	Broadline Retail	5,602
D00 CN	Btp Inc/Ca-Sub V	Canada	Leisure Products	2,475
6862 HK	Haidilao	China	Restaurants	10,379
KERFP	Kering	France	Apparel Accessories & Luxury Goods	54,685
ML FP	Michelin	France	Tires & Rubber	25,606
DHER GR	Delivery Hero	Germany	Restaurants	7,478
1368 HK	Xtep International	Hong Kong	Footwear	1,490
GLBE US	Global-E Online	Israel	Broadline Retail	6,509
7267 JP	Honda	Japan	Automobile Manufacturers	56,509
7951 JP	Yamaha	Japan	Leisure Products	4,327
UHR SW	Swatch Group	Switzerland	Apparel Accessories & Luxury Goods	7,859
BRBY LN	Burberry	United Kingdom	Apparel Accessories & Luxury Goods	6,561
BDEV LN	Barratt Dev	United Kingdom	Homebuilding	6,990
IHG LN	InterContinental Hotels	United Kingdom	Hotels Resorts & Cruise Lines	14,943
GM US	GM	United States	Automobile Manufacturers	49,423
TSLA US	Tesla	United States	Automobile Manufacturers	788,674
ETSY US	Etsy Inc	United States	Broadline Retail	9,970
CZRUS	Caesars Entertain	United States	Casinos & Gaming	10,093
GPC US	Genuine Parts	United States	Distributors	19,451
ABNB US	Airbnb-Class A	United States	Hotels Resorts & Cruise Lines	58,044
HAS US	Hasbro	United States	Leisure Products	7,084
BBWI US	Bath & Body Works	United States	Other Specialty Retail	9,814
DKS US	Dick's Sporting	United States	Other Specialty Retail	9,030
TSCO US	Tractor Supply	United States	Other Specialty Retail	23,397

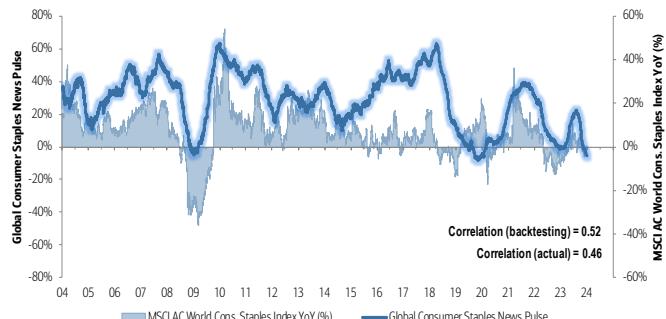
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Global Consumer Staples News Pulse

Chart 50: Global Consumer Staples News Pulse vs MSCI AC World Consumer Staples Index

News trend has deteriorated in the last 3m

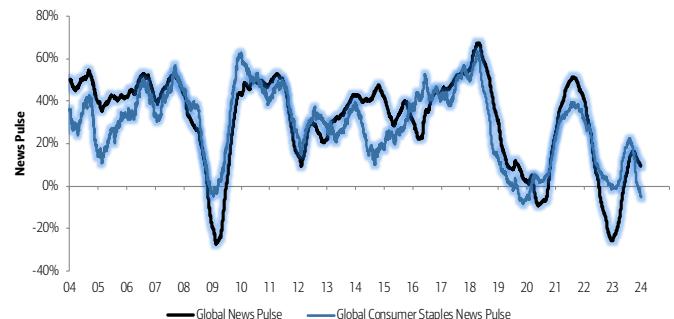


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 51: Global Consumer Staples News Pulse vs Global News Pulse

News trend has deteriorated in the last 3m



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

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Table 22: Global Consumer Staples: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
RADL3 BZ	Raia Drogasil	Brazil	Drug Retail	10,398
1044 HK	Hengan Int'l	China	Personal Care Products	4,323
241 HK	Alibaba Health	Hong Kong	Drug Retail	7,349
NEST IN	Nestle India	India	Packaged Foods & Meats	30,797
QLG MK	QL Resources	Malaysia	Packaged Foods & Meats	3,024
271560 KS	Orion Corp	South Korea	Packaged Foods & Meats	3,564

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

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Table 23: Global Consumer Staples: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
WOW AU	Woolworths	Australia	Food Retail	31,008
322 HK	Tingyi	China	Packaged Foods & Meats	6,869
HFG GR	Hellofresh	Germany	Food Retail	2,731
4922 JP	KOSE	Japan	Personal Care Products	4,545
DGE LN	Diageo	United Kingdom	Distillers & Vintners	81,844
OCDO LN	Ocado Group	United Kingdom	Food Retail	8,002
DAR US	Darling Ingredients	United States	Agricultural Products & Services	7,949
KMB US	Kimberly-Clark	United States	Household Products	41,093
CAG US	Conagra Brands	United States	Packaged Foods & Meats	13,699
HSY US	Hershey	United States	Packaged Foods & Meats	27,939
KUS	Kellanova	United States	Packaged Foods & Meats	19,141
EL US	Estee Lauder	United States	Personal Care Products	33,946
KVUE US	Kenvue	United States	Personal Care Products	41,228

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

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Global Energy News Pulse

Chart 52: Global Energy News Pulse vs MSCI AC World Energy Index

News trend has improved in the last 3-months

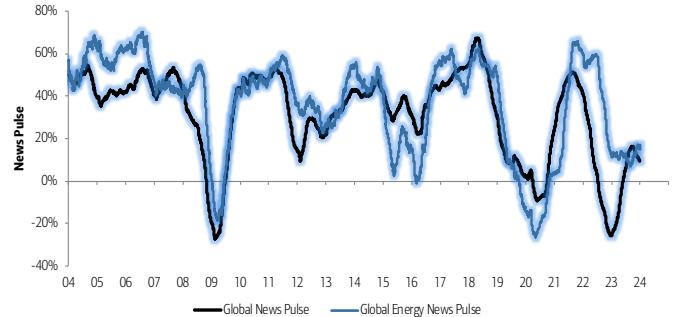


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 53: Global Energy News Pulse vs Global News Pulse

News trend has improved in the last 3-months



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

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Table 24: Global Energy: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
ALD AU	Ampol	Australia	Oil & Gas Refining & Marketing	5,878
CSAN3 BZ	Cosan	Brazil	Oil & Gas Refining & Marketing	7,469
CCO CN	Cameco	Canada	Coal & Consumable Fuels	18,774
PKI CN	Parkland Corp	Canada	Oil & Gas Refining & Marketing	5,700
857 HK	PetroChina-H	China	Integrated Oil & Gas	13,942
5019 JP	Idemitsu	Japan	Oil & Gas Refining & Marketing	8,108
267250 KS	HD Hyundai	South Korea	Oil & Gas Refining & Marketing	3,882
PTT TB	PTT	Thailand	Integrated Oil & Gas	29,917
TOP TB	Thai Oil	Thailand	Oil & Gas Refining & Marketing	3,518
HES US	Hess Corp	United States	Oil & Gas Exploration & Production	44,266

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

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Table 25: Global Energy: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
OMV AV	OMV AG	Austria	Integrated Oil & Gas	14,378
EQNR NO	Equinor	Norway	Integrated Oil & Gas	95,262
APA US	APA Corp	United States	Oil & Gas Exploration & Production	11,025

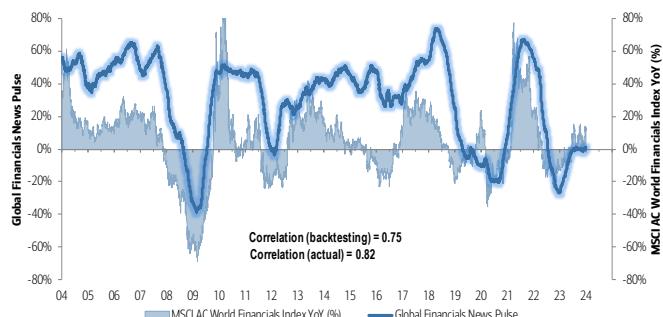
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Global Financials News Pulse

Chart 54: Global Financials News Pulse vs MSCI AC World Financials Index

1% of news is positive

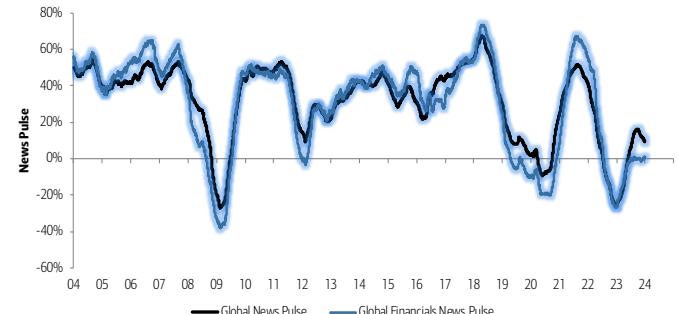


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 55: Global Financials News Pulse vs Global News Pulse

1% of news is positive



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

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Table 26: Global Financials: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
SUN AU	Suncorp Group	Australia	Property & Casualty Insurance	12,005
DANSKE DC	Danske Bank	Denmark	Diversified Banks	23,048
ACA FP	Credit Agricole	France	Diversified Banks	43,340
CS FP	Axa SA	France	Multi-line Insurance	73,460
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
EUROB GA	Eurobank Ergasias	Greece	Diversified Banks	6,610
TPEIR GA	Piraeus Financial	Greece	Diversified Banks	4,420
SBILIFE IN	SBI Life Insurance	India	Life & Health Insurance	17,235
8630 JP	Sompo	Japan	Property & Casualty Insurance	17,008
INGA NA	ING	Netherlands	Diversified Banks	54,081
AGN NA	Aegon	Netherlands	Life & Health Insurance	11,767
ASRNL NA	ASR Nederland	Netherlands	Multi-line Insurance	9,968
BAP US	Credicorp	Peru	Diversified Banks	11,927
BPI PM	Bank of Philippine	Philippines	Diversified Banks	9,270
BDO PM	BDO Unibank	Philippines	Diversified Banks	12,415
TAWUNIYA AB	Co For Coop Insurance	Saudi Arabia	Multi-line Insurance	5,216
OCBC SP	OCBC	Singapore	Diversified Banks	44,495
SGX SP	Sing Exchange	Singapore	Financial Exchanges & Data	7,986
SBK SJ	Standard Bank	South Africa	Diversified Banks	19,069
SEBA SS	SEB	Sweden	Diversified Banks	29,141
ZURN SW	Zurich Insurance	Switzerland	Multi-line Insurance	76,443
2801 TT	Chang Hwa Comm Bank	Taiwan	Diversified Banks	6,333
2882 TT	Cathay Financial	Taiwan	Life & Health Insurance	21,867
ADIB UH	Abu Dhabi Islamic Bank	United Arab Emirates	Diversified Banks	10,008
III LN	3i Group	United Kingdom	Asset Management & Custody Banks	30,040
WISE LN	Wise - A	United Kingdom	Transaction & Payment Processing Ser.	11,418
JPM US	JPMorgan Chase	United States	Diversified Banks	494,325
AIZ US	Assurant Inc	United States	Multi-line Insurance	8,934
ACGL US	Arch Capital	United States	Property & Casualty Insurance	27,699
PGR US	Progressive	United States	Property & Casualty Insurance	93,232

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

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Table 27: Global Financials: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
AGS BB	Ageas	Belgium	Multi-line Insurance	8,162
GBLB BB	GBL	Belgium	Multi-Sector Holdings	11,541
SANB11 BZ	Banco Santander Brasil	Brazil	Diversified Banks	24,930
IGM CN	IGM Financial	Canada	Asset Management & Custody Banks	6,322
998 HK	China Citic Bank-H	China	Diversified Banks	7,014
1398 HK	ICBC-H	China	Diversified Banks	42,460
6881 HK	China Galaxy-H	China	Investment Banking & Brokerage	1,952
2628 HK	China Life-H	China	Life & Health Insurance	9,644
1336 HK	New China Life-H	China	Life & Health Insurance	2,016
2328 HK	PICC-H	China	Property & Casualty Insurance	8,199
11 HK	Hang Seng Bank	Hong Kong	Diversified Banks	22,293
BIRG ID	Bank of Ireland	Ireland	Diversified Banks	9,592
PST IM	Poste Italiane	Italy	Life & Health Insurance	14,825
8697 JP	Japan Exchange	Japan	Financial Exchanges & Data	11,184
RHBANK MK	RHB Bank	Malaysia	Diversified Banks	5,084
CPI SJ	Capitec Bank	South Africa	Diversified Banks	12,865
BAER SW	Julius Baer	Switzerland	Asset Management & Custody Banks	11,540
SLHN SW	Swiss Life	Switzerland	Life & Health Insurance	20,482
HELN SW	Helvetia	Switzerland	Multi-line Insurance	7,302
2892 TT	First Financial	Taiwan	Diversified Banks	12,160
HL LN	Hargreaves Lansd	United Kingdom	Asset Management & Custody Banks	4,438
ST LN	St James's Place	United Kingdom	Asset Management & Custody Banks	4,781
PHNX LN	Phoenix Group	United Kingdom	Life & Health Insurance	6,833
ALLY US	Ally Financial	United States	Consumer Finance	10,533
FTB US	Fifth Third	United States	Diversified Banks	23,484
NLY US	Annaly Mortgage	United States	Mortgage REITs	9,567
CFG US	Citizens Fin	United States	Regional Banks	15,652
HBAN US	Huntington Banc	United States	Regional Banks	18,417
RF US	Regions Financial	United States	Regional Banks	18,186
TOST US	Toast-Class A	United States	Transaction & Payment Processing Ser.	7,502

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

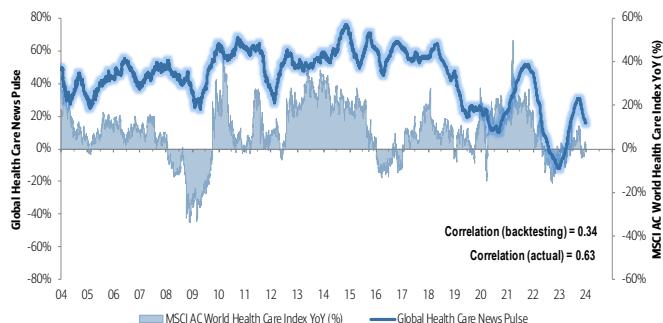
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Global Health Care News Pulse

Chart 56: Global Health Care News Pulse vs MSCI AC World Health Care Index

News trend fell in the last 3m, however in aggregate it remains positive

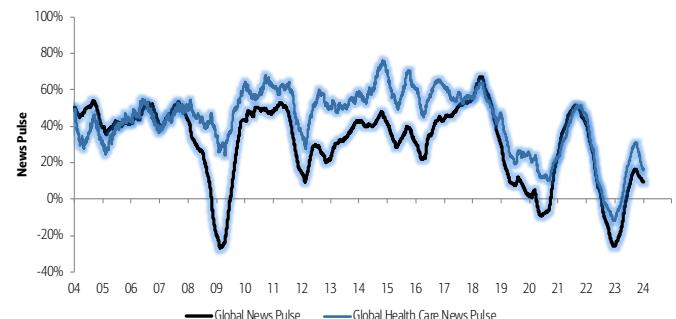


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 57: Global Health Care News Pulse vs Global News Pulse

News trend fell in the last 3m, however in aggregate it remains positive



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

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Table 28: Global Health Care: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
COH AU	Cochlear	Australia	Health Care Equipment	13,356
1548 HK	Genscript Biotech	China	Life Sciences Tools & Services	5,392
867 HK	China Medical System	China	Pharmaceuticals	4,346
3692 HK	Hansoh Pharma	China	Pharmaceuticals	11,975
1177 HK	Sino Biopharm.	China	Pharmaceuticals	8,355
IPN FP	Ipsen	France	Pharmaceuticals	9,990
TRP IN	Torrent Pharma	India	Pharmaceuticals	9,377
4543 JP	Terumo	Japan	Health Care Equipment	24,513
4151 JP	Kyowa Kirin	Japan	Pharmaceuticals	9,078
4507 JP	Shionogi	Japan	Pharmaceuticals	14,822
GSK LN	GSK	United Kingdom	Pharmaceuticals	75,705
ABBV US	AbbVie	United States	Biotechnology	273,529
LLY US	Eli Lilly	United States	Pharmaceuticals	553,363

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

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Table 29: Global Health Care: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
ARGX BB	Argenx	Belgium	Biotechnology	22,417
9688 HK	Zai Lab	China	Biotechnology	2,709
1066 HK	Shandong Weigao-H	China	Health Care Supplies	4,407
2269 HK	WuXi Biologics	China	Life Sciences Tools & Services	16,116
BAYN GR	Bayer	Germany	Pharmaceuticals	36,496
CIPLA IN	Cipla	India	Pharmaceuticals	12,091
ALCSW	Alcon	Switzerland	Health Care Supplies	38,971
EW US	Edwards Lifesciences	United States	Health Care Equipment	46,354
HOLX US	Hologic	United States	Health Care Equipment	17,501
ZBH US	Zimmer Biomet	United States	Health Care Equipment	25,431
HCA US	HCA	United States	Health Care Facilities	73,622
AVTR US	Avantor	United States	Life Sciences Tools & Services	15,431
DHR US	Danaher	United States	Life Sciences Tools & Services	170,810
MTD US	Mettler-Toledo	United States	Life Sciences Tools & Services	26,521
RGEN US	Repligen Corp	United States	Life Sciences Tools & Services	10,025
RVTY US	Rewity	United States	Life Sciences Tools & Services	13,569

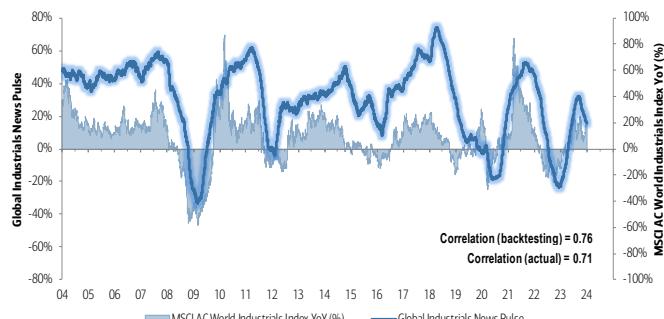
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Global Industrials News Pulse

Chart 58: Global Industrials News Pulse vs MSCI AC World Industrials Index

News trend fell in the last 3m, however in aggregate it remains positive

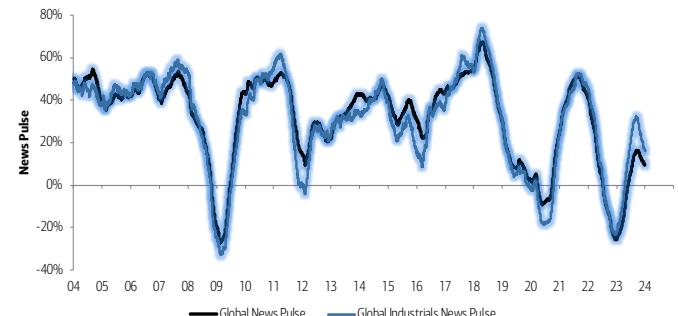


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 59: Global Industrials News Pulse vs Global News Pulse

News trend fell in the last 3m, however in aggregate it remains positive



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

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Table 30: Global Industrials: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
753 HK	Air China-H	China	Passenger Airlines	2,887
1055 HK	China Southern Air.-H	China	Passenger Airlines	1,969
EN FP	Bouygues	France	Construction & Engineering	14,379
FGR FP	Eiffage	France	Construction & Engineering	10,503
GET FP	Getlink	France	Highways & Railtracks	10,064
BHE IN	Bharat Elec	India	Aerospace & Defense	16,181
HNAL IN	Hindustan Aeronautics	India	Aerospace & Defense	22,535
ASII JI	Astra Int'l	Indonesia	Industrial Conglomerates	14,856
6501 JP	Hitachi	Japan	Industrial Conglomerates	66,884
9202 JP	ANA	Japan	Passenger Airlines	10,512
9007 JP	Odakyu Elec. Railway	Japan	Rail Transportation	5,622
9021 JP	West Japan Railway	Japan	Rail Transportation	10,179
MAHB MK	Malaysia Airports	Malaysia	Airport Services	2,673
GAM MK	Gamuda	Malaysia	Construction & Engineering	2,694
AIR FP	Airbus	Netherlands	Aerospace & Defense	122,043
SM PM	SM Investments	Philippines	Industrial Conglomerates	19,243
ICT PM	Int'l Container	Philippines	Marine Ports & Services	9,056
BVT SJ	Bidvest	South Africa	Industrial Conglomerates	4,694
028260 KS	Samsung C&T	South Korea	Industrial Conglomerates	18,661
AENA SM	Aena SME	Spain	Airport Services	27,191
SKAB SS	Skanska	Sweden	Construction & Engineering	7,243
VOLVB SS	Volvo	Sweden	Construction Machinery & Heavy Transf	41,249
SAND SS	Sandvik	Sweden	Industrial Machinery & Supplies & Com	27,147
MRO LN	Melrose Industries	United Kingdom	Aerospace & Defense	9,737
EXPN LN	Experian	United Kingdom	Research & Consulting Services	37,545
HII US	Huntington Ingalls	United States	Aerospace & Defense	10,351
AOS US	A.O. Smith	United States	Building Products	10,271
WAB US	Wabtec	United States	Construction Machinery & Heavy Transf	22,732
VLTO US	Veraltto	United States	Environmental & Facilities Services	20,260
WSO US	Watsco	United States	Trading Companies & Distributors	14,379

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

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Table 31: Global Industrials: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
BXB AU	Brambles	Australia	Diversified Support Services	12,896
AC CN	Air Canada	Canada	Passenger Airlines	5,081
SQM/B CI	SQM	Chile	Electrical Components & Equipment	8,610
MAERSKB DC	Moller-Maersk-B	Denmark	Marine Transportation	13,425
LR FP	Legrand	France	Electrical Components & Equipment	27,554
DHL GR	DHL	Germany	Air Freight & Logistics	61,394
KSP ID	Kingspan	Ireland	Building Products	15,762
9143 JP	SG Holdings	Japan	Air Freight & Logistics	9,194
9064 JP	Yamato Trans	Japan	Air Freight & Logistics	7,020
9962 JP	Misumi Group	Japan	Industrial Machinery & Supplies & Com	4,826
GEBN SW	Geberit	Switzerland	Building Products	22,535
ADEN SW	Adecco	Switzerland	Human Resource & Employment Servic	8,259
SGSN SW	SGS	Switzerland	Research & Consulting Services	16,150
2609 TT	Yang Ming	Taiwan	Marine Transportation	5,837
AHT LN	Ashtead Group	United Kingdom	Trading Companies & Distributors	30,490
CHRW US	C.H. Robinson	United States	Air Freight & Logistics	10,059
MAS US	Masco	United States	Building Products	15,066
PAYC US	Paycom Software	United States	Human Resource & Employment Servic	12,500
PCTY US	Paylocity	United States	Human Resource & Employment Servic	9,260
SWK US	Stanley Black & Decker	United States	Industrial Machinery & Supplies & Com	15,032
LUV US	Southwest Airlines	United States	Passenger Airlines	17,202
TRU US	Transunison	United States	Research & Consulting Services	13,282

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

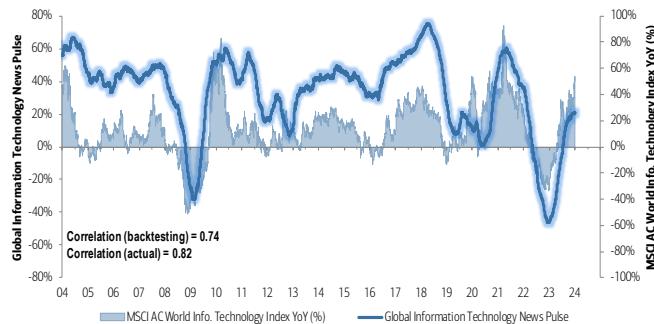
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Global Information Technology News Pulse

Chart 60: Global Information Technology Pulse vs MSCI AC World Information Technology Index

News trends fell last month, however in aggregate remains positive

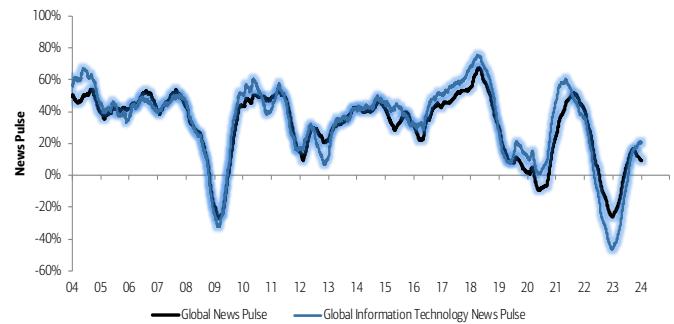


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 61: Global Information Technology News Pulse vs Global News Pulse

News trends fell last month, however in aggregate remains positive



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

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Table 32: Global Information Technology: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
CSU CN	Constellation Software	Canada	Application Software	52,798
GIB/A CN	CGI	Canada	IT Consulting & Other Services	22,491
1810 HK	Xiaomi Corp-B	China	Technology Hardware Storage & Periph	40,857
DSY FP	Dassault Systemes	France	Application Software	65,305
LTIM IN	LTIMindtree	India	IT Consulting & Other Services	22,385
CHKP US	Check Point	Israel	Systems Software	17,875
6701 JP	NEC	Japan	IT Consulting & Other Services	16,160
TEMN SW	Temenos	Switzerland	Application Software	6,986
3661 TT	Alchip Tech	Taiwan	Semiconductors	7,907
2353 TT	Acer	Taiwan	Technology Hardware Storage & Periph	5,343
2357 TT	Asustek	Taiwan	Technology Hardware Storage & Periph	11,847
2376 TT	Gigabyte Tech	Taiwan	Technology Hardware Storage & Periph	5,510
2382 TT	Quanta	Taiwan	Technology Hardware Storage & Periph	28,255
6669 TT	Wiwynn	Taiwan	Technology Hardware Storage & Periph	10,397
DELTA TB	Delta Electronics (Thai)	Thailand	Electronic Components	32,160
SNPS US	Synopsys	United States	Application Software	78,309
EPAM US	Epmn Systems	United States	IT Consulting & Other Services	17,234
IBM US	IBM	United States	IT Consulting & Other Services	148,995
CRWD US	CrowdStrike	United States	Systems Software	57,717
CYBR US	CyberArk Software	United States	Systems Software	9,149
ZS US	Zscaler	United States	Systems Software	32,607

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

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Table 33: Global Information Technology: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
OTEX CN	Open Text	Canada	Application Software	11,453
TECHM IN	Tech Mahindra	India	IT Consulting & Other Services	14,919
6861 JP	Keyence	Japan	Electronic Equipment & Instruments	107,165
009150 KS	SEMCO	South Korea	Electronic Components	8,885
HEXAB SS	Hexagon-B	Sweden	Electronic Equipment & Instruments	31,147
2308 TT	Delta Electronics	Taiwan	Electronic Components	26,534
3443 TT	Global Unichip	Taiwan	Semiconductors	7,598
TEAM US	Atlassian	United States	Application Software	36,908
DOCU US	Docusign	United States	Application Software	12,081
U US	Unity Software	United States	Application Software	15,680
JNPR US	Juniper Networks	United States	Communications Equipment	9,474
GLW US	Corning	United States	Electronic Components	25,973
OKTA US	Okta	United States	Internet Services & Infrastructure	14,191
MRVL US	Marvell Tech	United States	Semiconductors	52,035
ON US	ON Semiconductor	United States	Semiconductors	36,046
SWKS US	Skyworks Solutions	United States	Semiconductors	17,919
TXN US	Texas Instruments	United States	Semiconductors	154,772

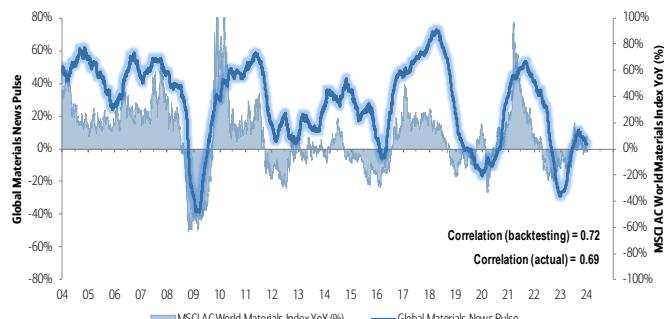
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Global Materials News PULSE

Chart 62: Global Materials News Pulse vs MSCI AC World Materials Index

News trends fell last month, however in aggregate remains positive

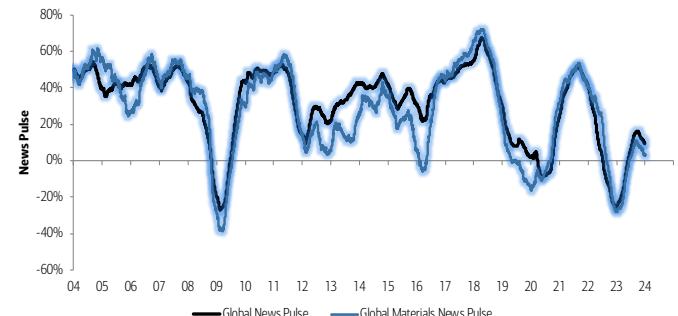


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 63: Global Materials News Pulse vs Global News Pulse

News trends fell last month, however in aggregate remains positive



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

BofA GLOBAL RESEARCH

Table 34: Global Materials: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
ORI AU	Orica	Australia	Commodity Chemicals	4,954
FMG AU	Fortescue	Australia	Steel	60,969
2600 HK	CHALCO-H	China	Aluminum	1,970
358 HK	Jiangxi Copper-H	China	Copper	1,962
2689 HK	Nine Dragons	China	Paper Products	2,313
NZYMB DC	Novozymes	Denmark	Specialty Chemicals	12,497
HEI GR	Heidelberg Materials	Germany	Construction Materials	16,647
SRCM IN	Shree Cement	India	Construction Materials	12,424
UTCEM IN	Ultratech Cement	India	Construction Materials	36,437
4188 JP	Mitsubishi Chemical	Japan	Diversified Chemicals	9,231
MLM US	Martin Marietta	United States	Construction Materials	30,835

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

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Table 35: Global Materials: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
IGO AU	IGO	Australia	Diversified Metals & Mining	4,676
PLS AU	Pilbara Minerals	Australia	Diversified Metals & Mining	8,111
FM CN	First Quantum	Canada	Copper	5,704
LUN CN	Lundin Mining	Canada	Copper	6,357
NTR CN	Nutrien	Canada	Fertilizers & Agricultural Chemicals	27,996
ABX CN	Barrick Gold	Canada	Gold	31,872
1772 HK	Ganfeng Lithium-H	China	Specialty Chemicals	1,525
TCOV GR	Coventro	Germany	Specialty Chemicals	11,256
WCH GR	Wacker Chemie	Germany	Specialty Chemicals	6,585
VEDL IN	Vedanta	India	Diversified Metals & Mining	11,550
TATA IN	Tata Steel	India	Steel	20,503
6988 JP	Nitto Denko	Japan	Specialty Chemicals	10,742
PCHEM MK	Petronas Chemicals	Malaysia	Commodity Chemicals	12,466
OCINA	OCI	Netherlands	Fertilizers & Agricultural Chemicals	6,116
SCCO US	Southern Copper	Peru	Copper	66,541
SABIC AB	SABIC	Saudi Arabia	Commodity Chemicals	66,640
HARSJ	Harmony	South Africa	Gold	4,049
BOL SS	Boliden	Sweden	Diversified Metals & Mining	8,535
SCAB SS	SCA	Sweden	Forest Products	9,562
GIVN SW	Givaudan	Switzerland	Specialty Chemicals	38,222
1301 TT	Formosa Plastics	Taiwan	Commodity Chemicals	16,427
1102 TT	Asia Cement	Taiwan	Construction Materials	4,790
MNDI LN	Mondi Plc (UK)	United Kingdom	Paper Products	9,517
CRDA LN	Croda Int'l	United Kingdom	Specialty Chemicals	8,989
WLK US	Westlake	United States	Commodity Chemicals	17,871
FMC US	FMC	United States	Fertilizers & Agricultural Chemicals	7,864
ALB US	Albemarle	United States	Specialty Chemicals	16,954
EMN US	Eastman Chemical	United States	Specialty Chemicals	10,649

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

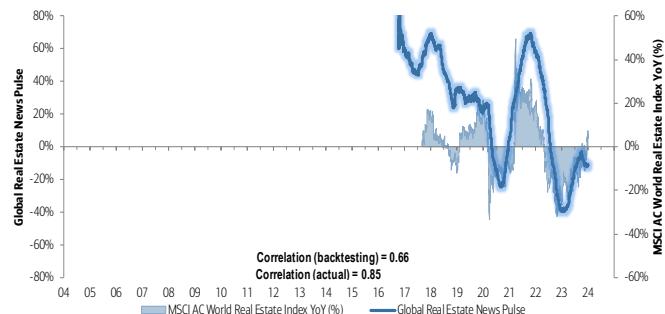
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Global Real Estate News Pulse

Chart 64: Global Real Estate News Pulse vs MSCI AC World Real Estate Index

News trend has deteriorated in the last 3m

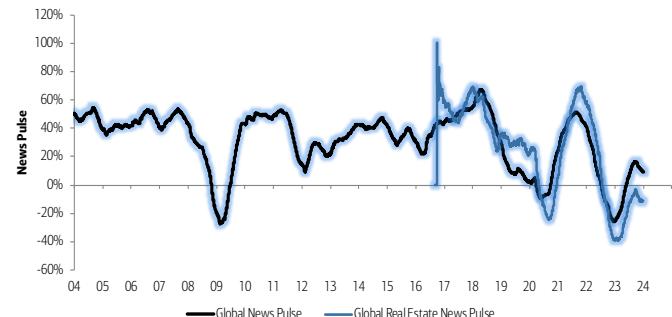


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 65: Global Real Estate News Pulse vs Global News Pulse

News trend has deteriorated in the last 3m



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

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Table 36: Global Real Estate: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
URW FP	Unibail-Rodamco-Westfield	France	Retail REITs	10,278
16 HK	Sun Hung Kai	Hong Kong	Diversified Real Estate Activities	31,340
19 HK	Swire Pacific	Hong Kong	Diversified Real Estate Activities	7,253
HKL SP	HK Land	Hong Kong	Real Estate Operating Companies	7,683
SMPH PM	SM Prime	Philippines	Real Estate Operating Companies	17,158
CPN TB	Central Pattana	Thailand	Real Estate Operating Companies	9,204
ALDAR UH	Aldar Prop	United Arab Emir	Diversified Real Estate Activities	11,453
REG US	Regency Centers	United States	Retail REITs	12,372

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

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Table 37: Global Real Estate: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
GPT AU	Gen Prop. Trust	Australia	Diversified REITs	6,065
REI-U CN	RioCan REIT	Canada	Retail REITs	4,235
2202 HK	China Vanke-H	China	Real Estate Development	2,040
123 HK	Yuexiu Property	China	Real Estate Development	3,279
6098 HK	Country Garden Serv	China	Real Estate Operating Companies	2,890
1972 HK	Swire Prop	Hong Kong	Real Estate Operating Companies	11,837
CPT US	Canfield Property	United States	Multi-Family Residential REITs	10,601
UDR US	UDR	United States	Multi-Family Residential REITs	12,616
CSPG US	CoStar	United States	Real Estate Services	35,685

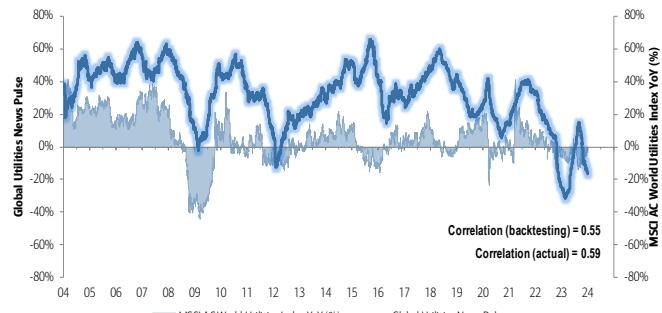
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Global Utilities News Pulse

Chart 66: Global Utilities News Pulse vs MSCI AC World Utilities Index

News has trended negatively last month

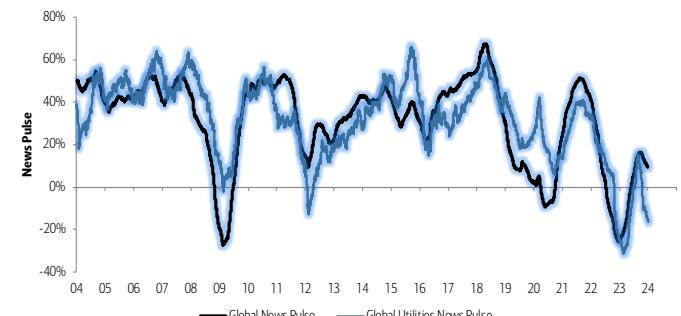


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 67: Global Utilities News Pulse vs Global News Pulse

News has trended negatively last month



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

BofA GLOBAL RESEARCH

Table 38: Global Utilities: POSITIVE Significant News Screen

Stocks with positive significant news

BBG Code	Name	Country	Sector	MCAP
836 HK	China Resources Power	China	Independent Power Producers & Energ	9,635
2 HK	CLP	Hong Kong	Electric Utilities	20,853
ADANI IN	Adani Power	India	Independent Power Producers & Energ	24,341
9532 JP	Osaka Gas	Japan	Gas Utilities	8,704
MER PM	Manila Electric	Philippines	Electric Utilities	8,121
PGE PW	PGE	Poland	Electric Utilities	4,952
EDPR PL	Edp Renovaveis S	Portugal	Renewable Electricity	20,954
ACWA AB	Acwa Power Co	Saudi Arabia	Independent Power Producers & Energ	50,105

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

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Table 39: Global Utilities: NEGATIVE Significant News Screen

Stocks with negative significant news

BBG Code	Name	Country	Sector	MCAP
EGIE3 BZ	Engie Brasil Energia	Brazil	Renewable Electricity	7,614
EMA CN	Emera	Canada	Electric Utilities	10,414
NPI CN	Northland Power	Canada	Renewable Electricity	4,620
135 HK	Kunlun Energy	China	Gas Utilities	7,807
3 HK	HK & China Gas	Hong Kong	Gas Utilities	14,290
ELE SM	Endesa	Spain	Electric Utilities	21,590
ES US	Eversource Energy	United States	Electric Utilities	21,546
DTE US	DTE Energy	United States	Multi-Utilities	22,733
WEC US	WEC Energy	United States	Multi-Utilities	26,550

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

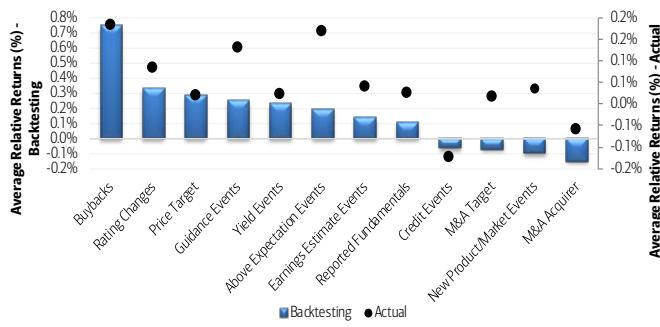
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Performance subsequent to Significant News Events

For all stocks in the MSCI AC World since 2004, the news data highlighted few recurring events at stock level. We grouped events by common characteristics. For example all company reported news events were grouped under Reported Fundamentals Event Group. We divided each of these major events group by Positively Significant News and Negatively Significant News. For each Major Event News Group we calculate the relative performance from the day of the news event over 1) the next 60 business days, and 2) the next 12 months. This subsequent performance analysis shows Buybacks adds the most value among positively significant news from a short-term perspective (up to a month). Positive Price Target event group returns the best outperformance for holding periods up to 6-months and Positive Earnings Estimates are the best in terms of a 12-months holding period.

Chart 68: Subsequent relative returns of Significant News Events by POSITIVE Significance - 1 week

News around Buybacks have performed the best for 1-week holding period



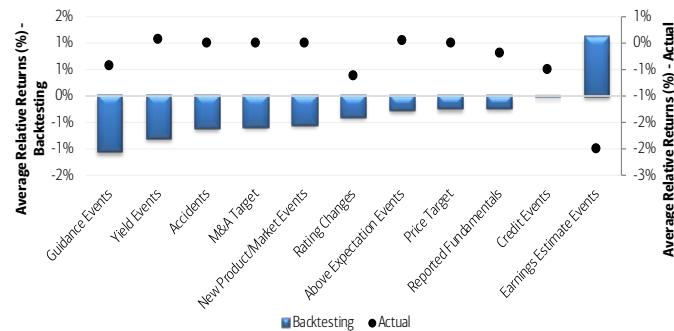
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 69: Subsequent relative returns of Significant News Events by NEGATIVE Significance - 1 week

Guidance Events related news have performed the worst on a 1-week basis



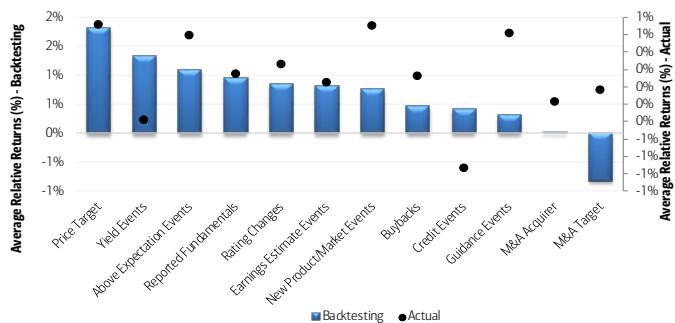
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 70: Subsequent relative returns of Significant News Events by POSITIVE Significance - 3 months

Price Target related news have performed the best on a 3-month basis



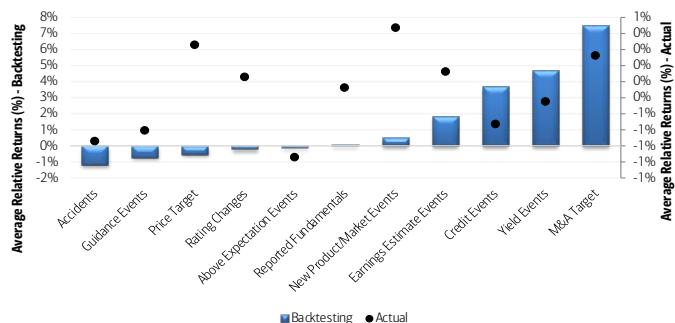
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 71: Subsequent relative returns of Significant News Events by NEGATIVE Significance - 3 months

Accident related news have performed the least on a 3-month basis



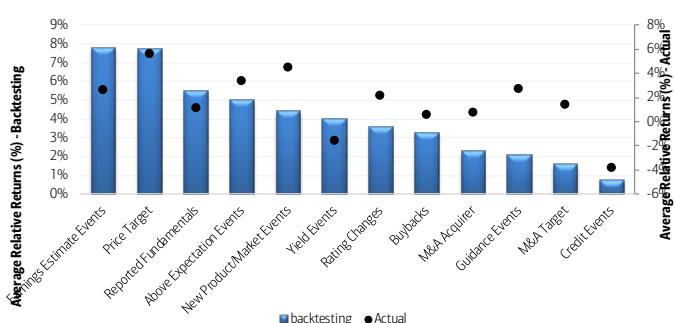
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 72: Subsequent relative returns of Significant News Events by POSITIVE Significance - 12 months

Earnings Estimate Events related news have performed the best on a 12-month basis



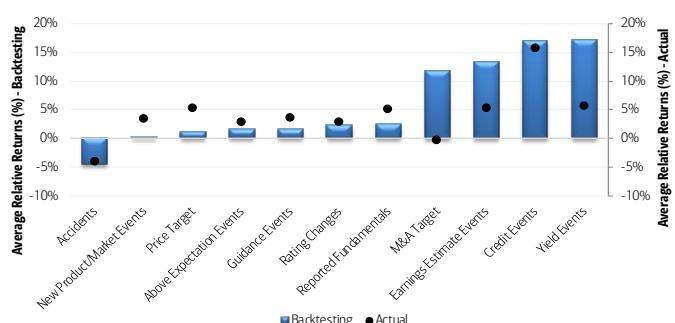
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 73: Subsequent relative returns of Significant News Events by NEGATIVE Significance - 12 months

Accident related news have performed the least on a 12-month basis



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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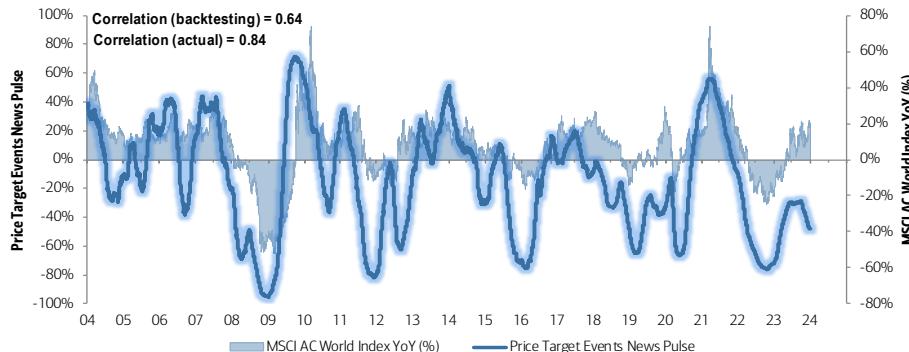


News Pulse by Significant News Events

Price Target News Pulse

Chart 74: Global Price Target News Pulse vs MSCI AC World Index YoY (%)

News in aggregate is negative

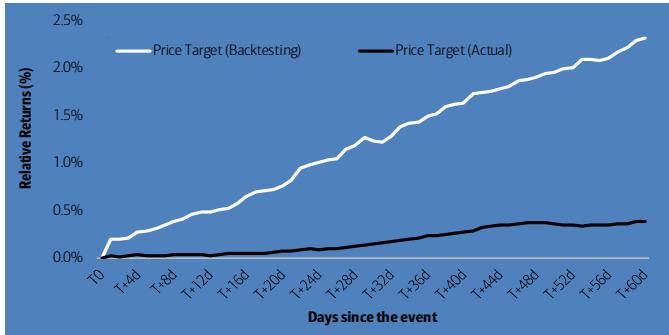


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

BofA GLOBAL RESEARCH

Chart 75: Subs 60d POSITIVE Price Target News Events

These events returned 0.39% up to 60 days after the event has occurred



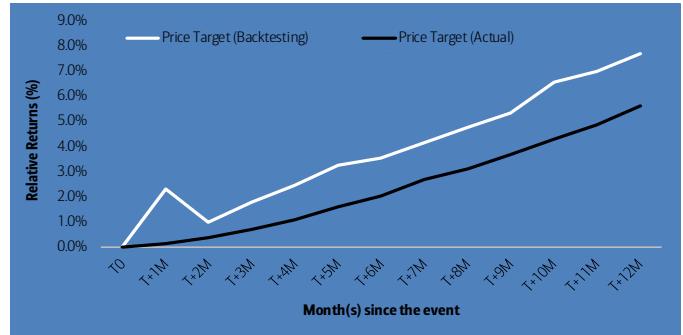
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 76: Subs 12m POSITIVE Price Target News Events

These events returned 5.62% up to 12m after the event has occurred



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 77: Subs 60d NEGATIVE Price Target News Events

These events returned 0.55% up to 60 days after the event has occurred



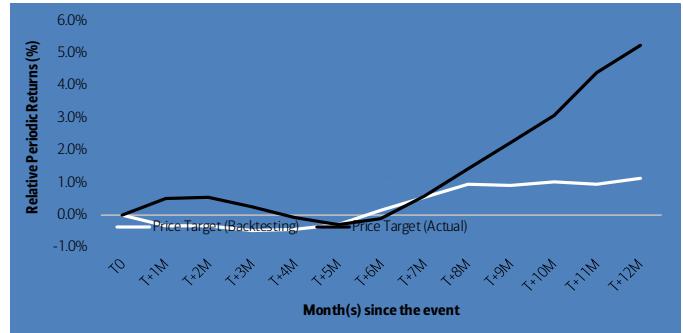
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 78: Subs 12m NEGATIVE Price Target News Events

These events returned 5.23% up to 12m after the event has occurred



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

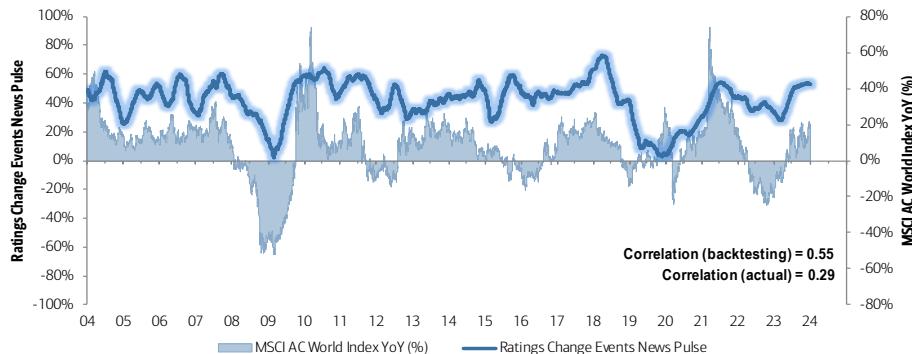
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Ratings Change News Pulse

Chart 79: Global Ratings Change News Pulse vs MSCI AC World Index YoY (%)

News trend has improved in the last 3-months

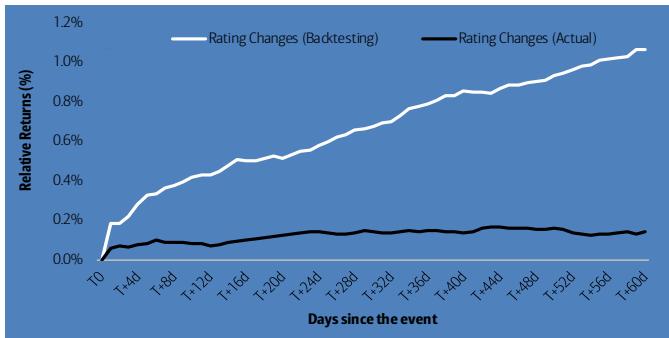


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

BofA GLOBAL RESEARCH

Chart 80: Subs 60d Rel Ret: Ratings Change News Events

Positive Rating Changes news have returned 0.15% for holdings period up to 60-days



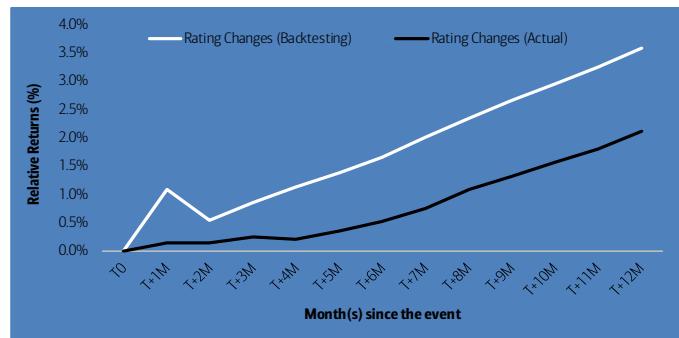
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 81: Subs 12m Rel Ret: Ratings Change News Events

These events returned 2.12% up to 12m after the event has occurred



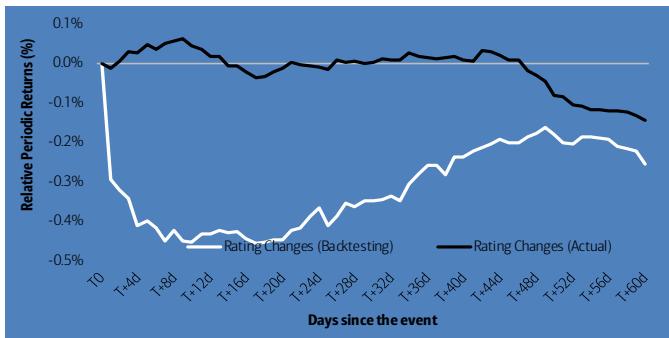
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 82: Subs 60d Rel Ret: Ratings Change News Events

Positive Rating Changes news have returned 0.15% for holdings period up to 60-days



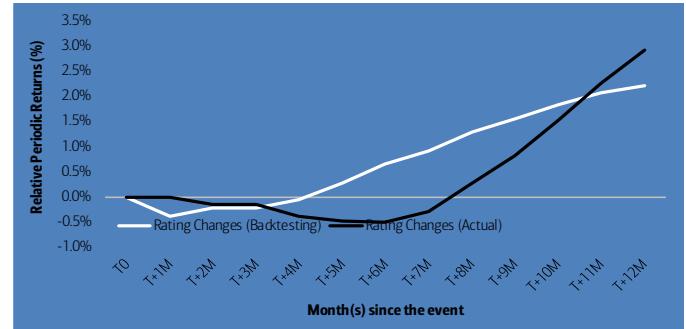
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 83: Subs 12m Rel Ret: Ratings Change News Events

These events returned 2.12% up to 12m after the event has occurred



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

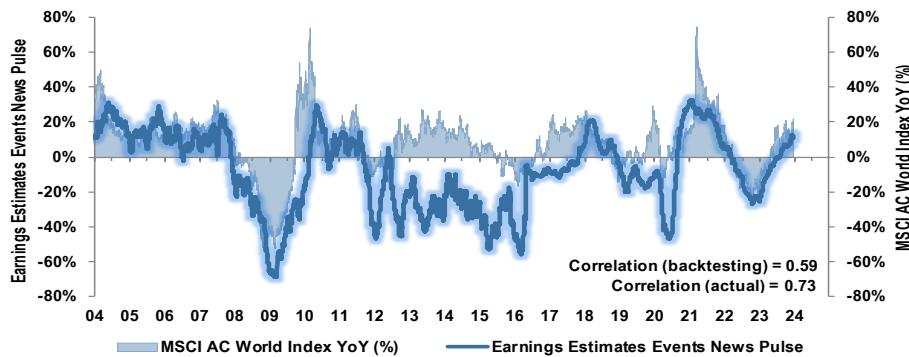
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Earnings Estimates News Pulse

Chart 84: Global Earnings Estimate News Pulse vs MSCI AC World Index YoY (%)

News has improved last month

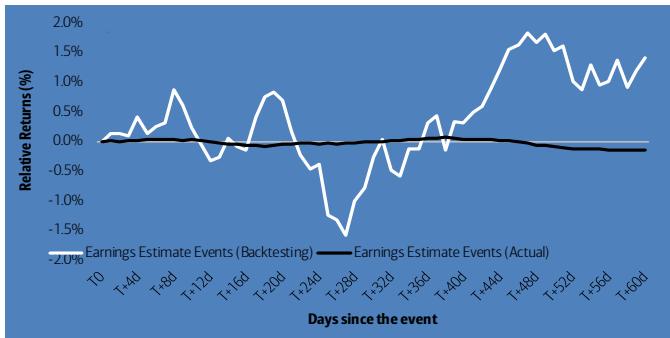


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

BofA GLOBAL RESEARCH

Chart 85: Subs 60d POSITIVE Earnings Estimate News Events

Positive Earnings Estimate Events news have returned -0.16% for holdings period up to 60-days



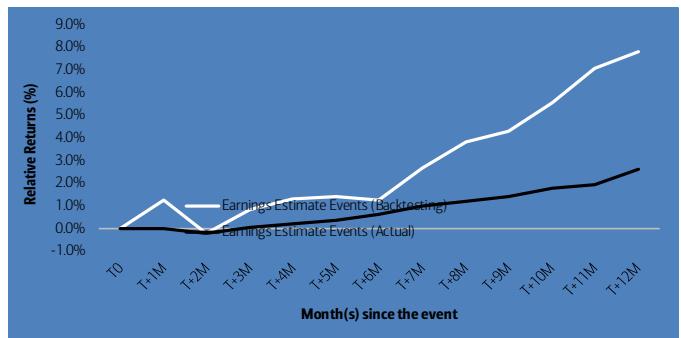
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 86: Subs 12m POSITIVE Earnings Estimate News Events

These events returned 2.63% up to 12m after the event has occurred



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 87: Subs 60d NEGATIVE Earnings Estimate News Events

These events returned -0.11% up to 60 days after the event has occurred



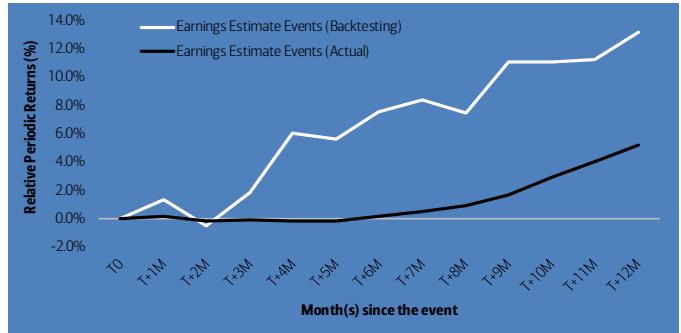
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 88: Subs 12m NEGATIVE Earnings Estimate News Events

These events returned 5.23% up to 12m after the event has occurred



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

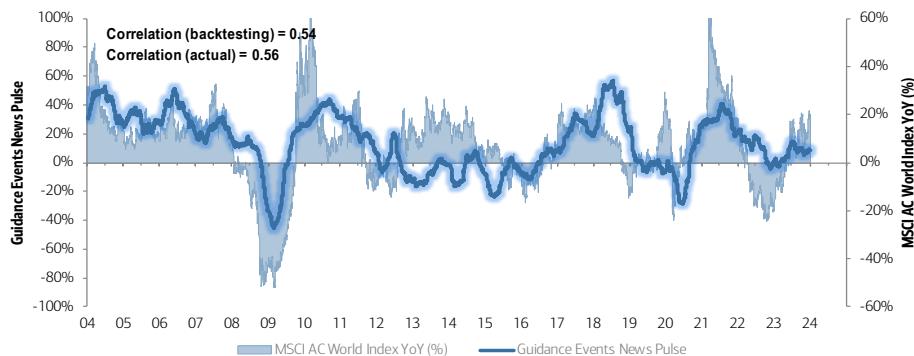
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Guidance News Pulse

Chart 89: Global Guidance News Pulse vs MSCI AC World Index YoY (%)

News has improved last month

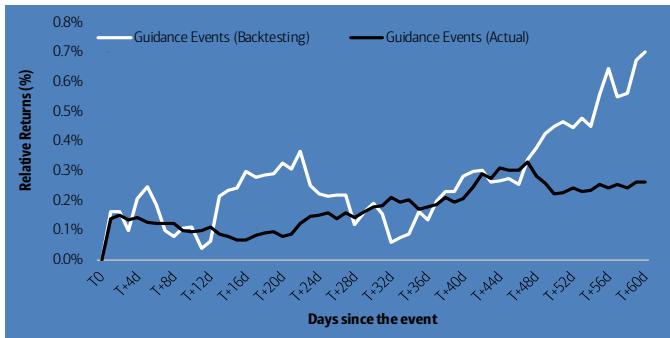


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

BofA GLOBAL RESEARCH

Chart 90: Subs 60d POSITIVE Guidance News Events

Positive Guidance Events news have returned 0.26% for holdings period up to 60-days



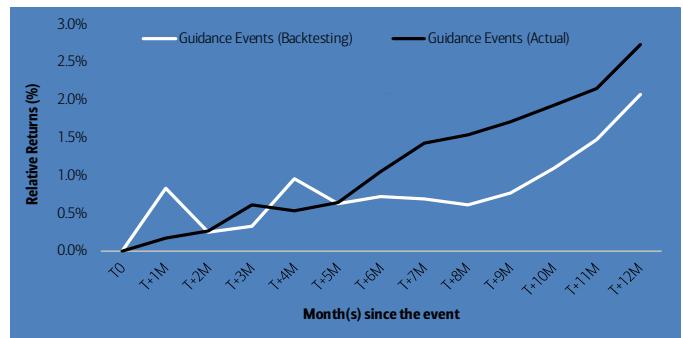
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 91: Subs 12m POSITIVE Guidance News Events

These events returned 2.74% up to 12m after the event has occurred



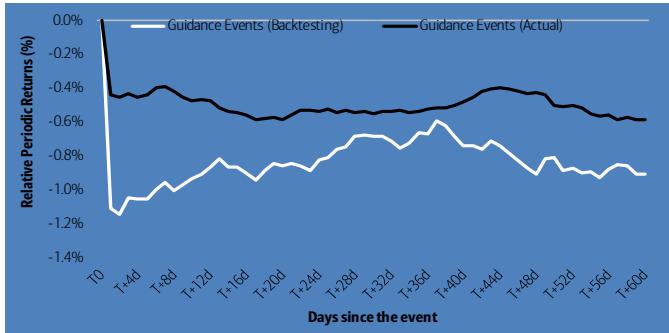
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 92: Subs 60d NEGATIVE Guidance News Events

These events returned -0.58% up to 60 days after the event has occurred



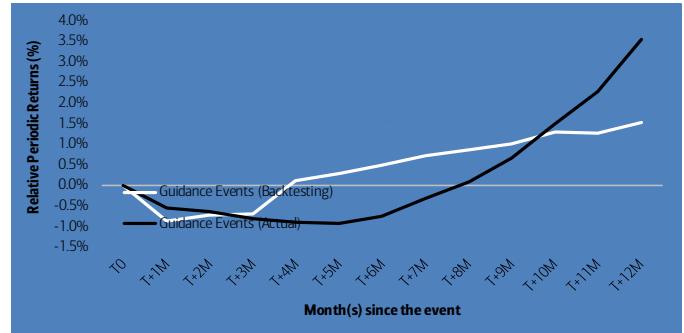
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 93: Subs 12m NEGATIVE Guidance News Events

These events returned 3.56% up to 12m after the event has occurred



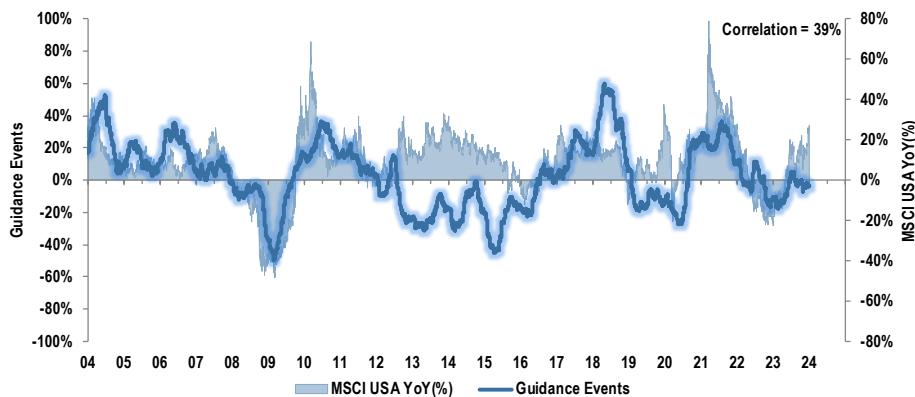
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 94: USA Guidance News Pulse vs MSCI USA Index YoY (%)

News trend has deteriorated in the last 3m

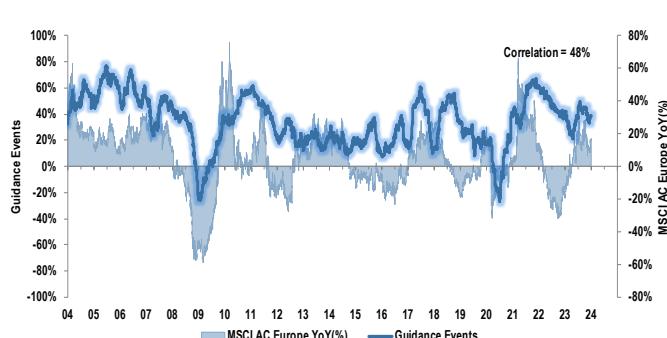


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 95: Europe Guidance News Pulse vs MSCI Europe Index YoY (%)

News trends fell last month, however in aggregate remains positive

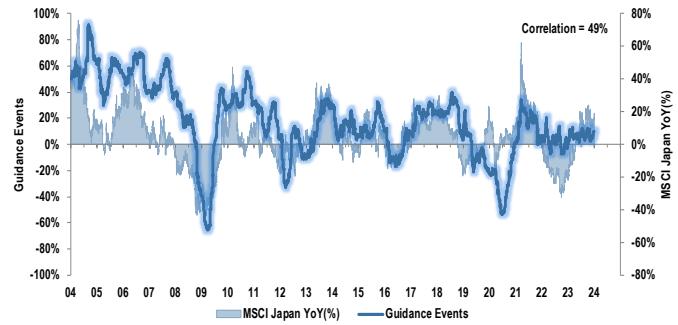


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 96: Japan Guidance News Pulse vs MSCI Japan Index YoY (%)

News trend fell in the last 3m, however in aggregate it remains positive

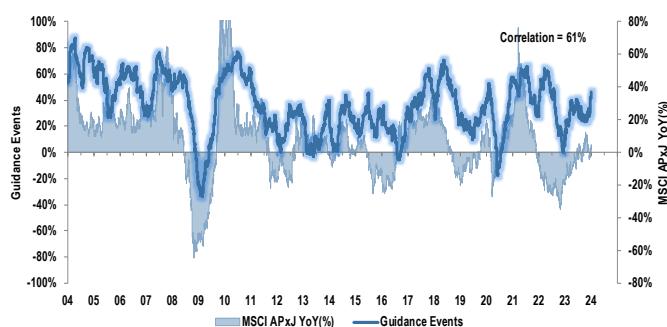


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 97: Asia Pac ex-Japan Guidance News Pulse vs MSCI APxJ Index YoY (%)

News has improved last month

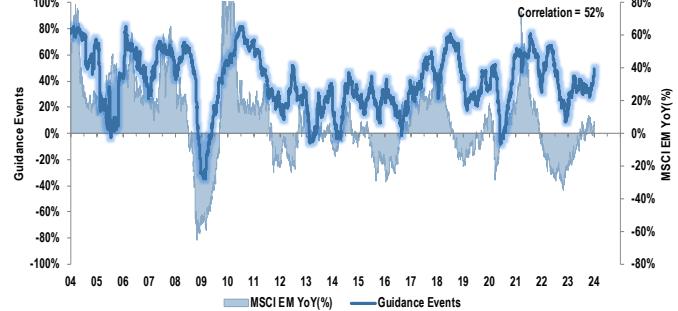


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 98: GEM Guidance News Pulse vs MSCI GEM Index YoY (%)

News trend has improved in the last 3-months



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

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Table 40: Global stocks list with Guidance event and strong News Pulse (ADTV > \$20m)

Stocks with Positive Guidance and News Pulse

BBG Code	Short Name	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)	News Pulse
16 HK	Sun Hung Kai	Hong Kong	Real Estate	31,340	38.9	98%
WIX US	Wix.Com	Israel	Software	7,032	56.4	98%
SBK SJ	Standard Bank	South Africa	Banks	19,069	30.6	97%
INF LN	Informa	United Kingdom	Media & Ent.	13,780	20.7	97%
1810 HK	Xiaomi Corp-B	China	Tech Hardware	40,857	165.6	96%
FUTU US	Futu-ADR	China	Div Financials	5,029	111.1	96%
HII US	Huntington Ingalls	United States	Industrials	10,351	60.0	95%
5019 JP	Idemitsu	Japan	Energy	8,108	36.2	95%
7011 JP	MHI	Japan	Industrials	19,721	204.6	95%
GEN US	Gen Digital	United States	Software	14,592	73.9	94%
VIPS US	Vipshop-ADR	China	Cons. Discretionary	8,240	50.1	94%
2015 HK	Li Auto	China	Cons. Discretionary	33,272	134.2	93%
CRWD US	CrowdStrike	United States	Software	57,717	594.4	93%
8411 JP	Mizuho	Japan	Banks	43,453	197.7	93%
GSK LN	GSK	United Kingdom	Health Care	75,705	77.4	93%
CPG LN	Compass Group	United Kingdom	Cons. Discretionary	46,890	52.5	91%
CCO CN	Cameco	Canada	Energy	18,774	76.1	91%
NEST IN	Nestle India	India	Cons. Staples	30,797	20.5	91%
MRO LN	Melrose Industries	United Kingdom	Industrials	9,737	23.4	91%
SNPS US	Synopsys	United States	Software	78,309	412.8	91%
AZN LN	AstraZeneca	United Kingdom	Health Care	209,437	165.3	90%
ABBV US	AbbVie	United States	Health Care	273,529	727.4	90%
ADVANC TB	Adv Info Serv	Thailand	Telecom	18,909	28.5	90%
CYBR US	CyberArk Software	United States	Software	9,149	76.2	89%
GRMN US	Garmin	United States	Cons. Discretionary	24,609	83.2	89%
RACE IM	Ferrari	Italy	Cons. Discretionary	65,379	103.7	89%
MRK US	Merck	United States	Health Care	276,641	789.1	89%
ZS US	Zscaler	United States	Software	32,607	351.1	89%
ACGL US	Arch Capital	United States	Insurance	27,699	153.8	87%
EPAM US	Epam Systems	United States	Software	17,234	110.0	87%
IFX GR	Infineon	Germany	Semiconductors	54,530	143.5	85%
ARX CN	ARC Resources	Canada	Energy	9,040	61.6	85%
IOCL IN	Indian Oil	India	Energy	22,035	27.5	84%
WDAY US	Workday	United States	Software	57,144	424.9	83%
SN/ LN	Smith & Nephew	United Kingdom	Health Care	12,008	24.0	82%
7974 JP	Nintendo	Japan	Media & Ent.	67,790	166.5	82%
000270 KS	Kia	South Korea	Cons. Discretionary	31,217	68.2	82%

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

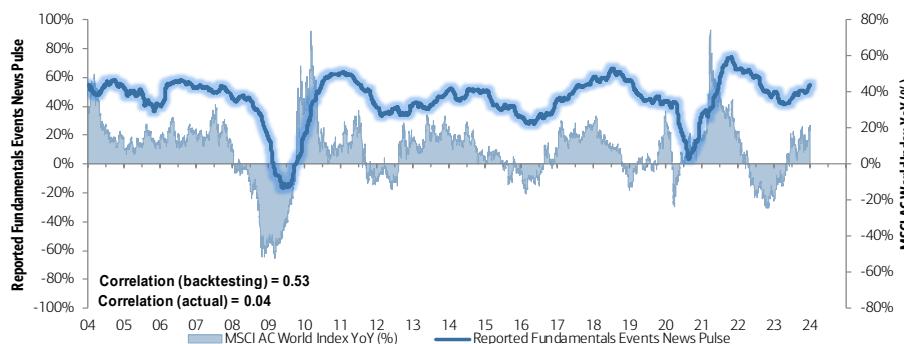
BofA GLOBAL RESEARCH



Reported Fundamentals News Pulse

Chart 99: Global Reported Fundamentals News Pulse vs MSCI AC World Index YoY (%)

55% of news is positive

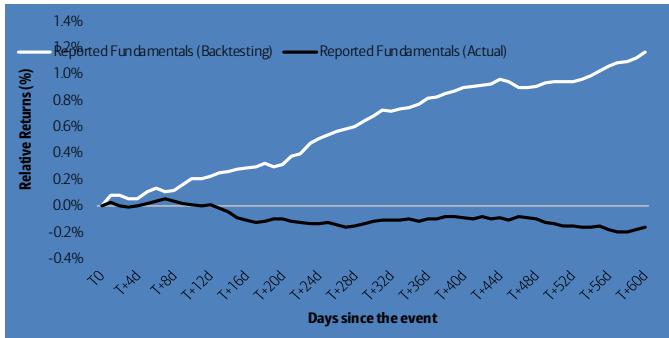


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

BofA GLOBAL RESEARCH

Chart 100: Subs 60d POSITIVE Reported Fundamentals News Events

Positive Reported Fundamentals news have returned -0.16% for holdings period up to 60-days



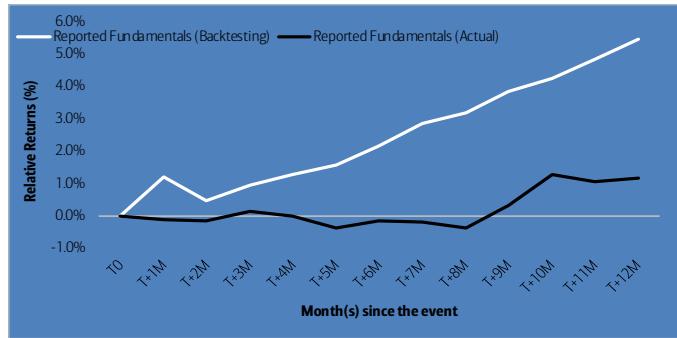
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 101: Subs 12m POSITIVE Reported Fundamentals News Events

Positive Reported Fundamentals news have returned 1.16% for holdings period up to 12m



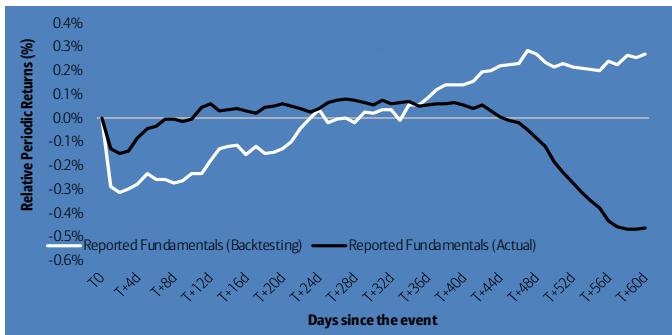
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 102: Subs 60d NEGATIVE Reported Fundamentals News Events

Negative Reported Fundamentals news have returned -0.46% for holdings period up to 60-days



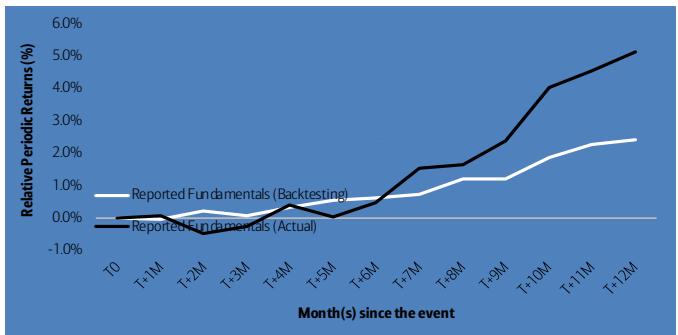
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 103: Subs 12m NEGATIVE Reported Fundamentals News Events

Negative Reported Fundamentals news have returned 5.14% for holdings period up to 12m



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

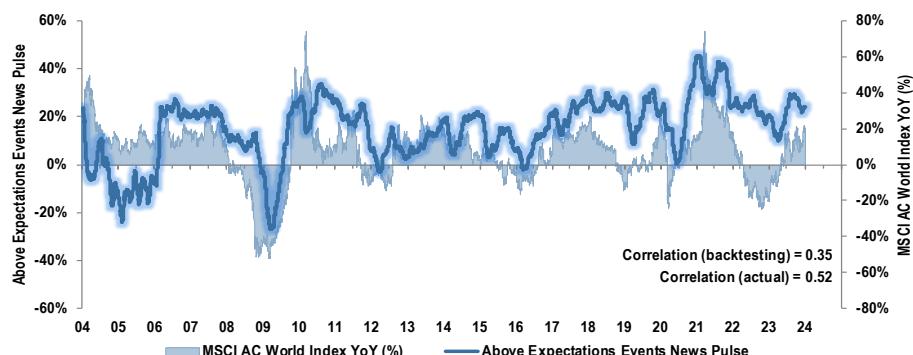
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Above Expectations News Pulse

Chart 104: Global Above Expectations News Pulse vs MSCI AC World Index YoY (%)

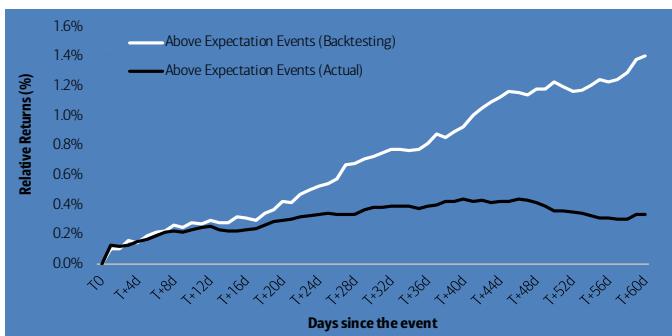
News trend fell in the last 3m, however in aggregate it remains positive



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

Chart 105: Subs 60d POSITIVE Above Expectations News Events

These events returned 0.33% up to 60 days after the event has occurred



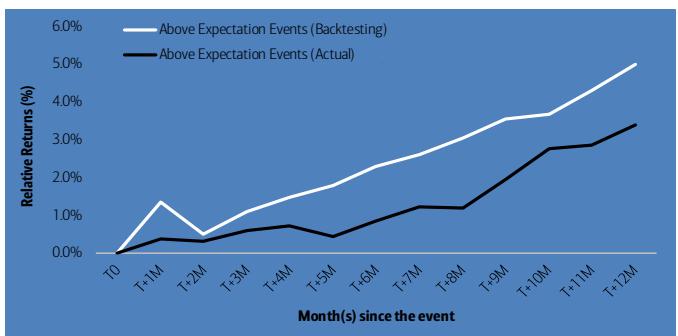
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 106: Subs 12m POSITIVE Above Expectations News Events

These events returned 3.39% up to 12m after the event has occurred



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

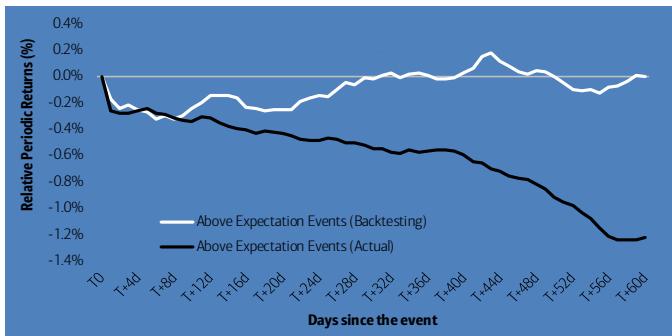
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 107: Subs 60d NEGATIVE Above Expectations News Events

Negative Above Expectation Events news have returned -1.22% for holdings period up to 60-days



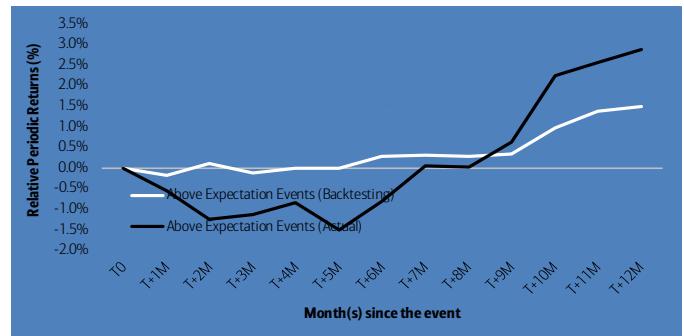
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 108: Subs 12m NEGATIVE Above Expectations News Events

Negative Above Expectation Events news have returned 2.86% for holdings period up to 12m



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

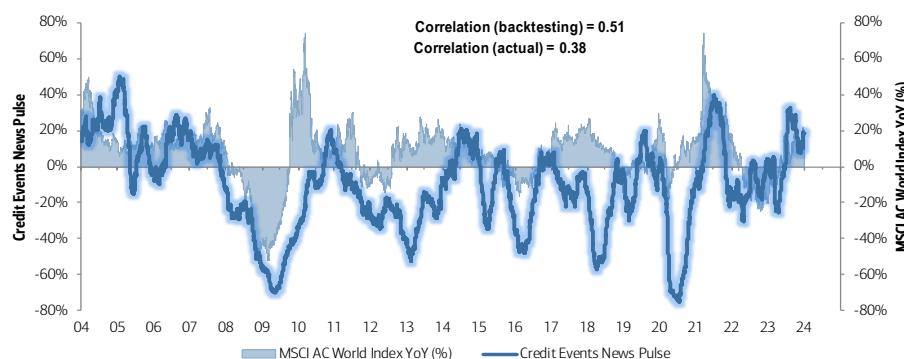
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Credit Events News Pulse

Chart 109: Global Credit Events News Pulse vs MSCI AC World Index YoY (%)

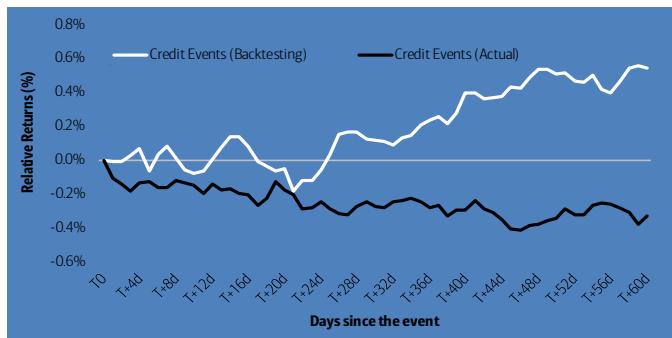
19% of news is positive



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

Chart 110: Subs 60d POSITIVE Credit Events News Events

These events returned -0.33% up to 60 days after the event has occurred



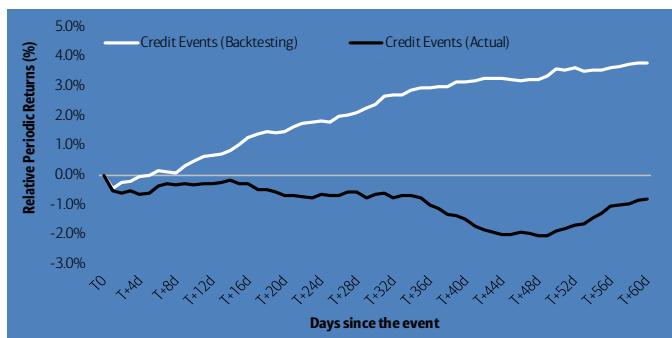
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 112: Subs 60d NEGATIVE Credit Events News Events

These events returned -0.81% up to 60 days after the event has occurred



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

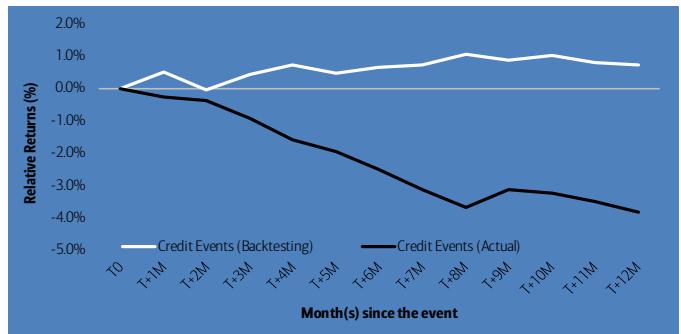
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 111: Subs 12m POSITIVE Credit Events News Events

Positive Credit Events news have returned -3.83% for holdings period up to 12m



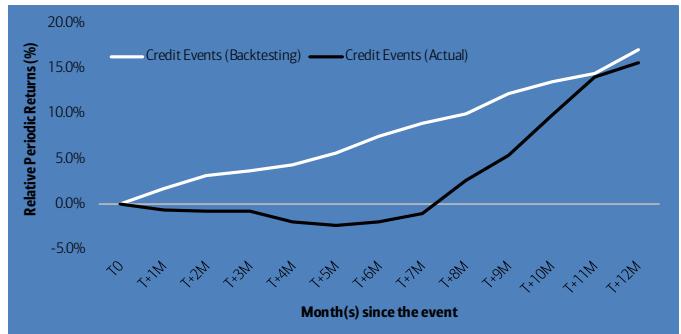
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 113: Subs 12m NEGATIVE Credit Events News Events

Negative Credit Events news have returned 15.63% for holdings period up to 12m



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

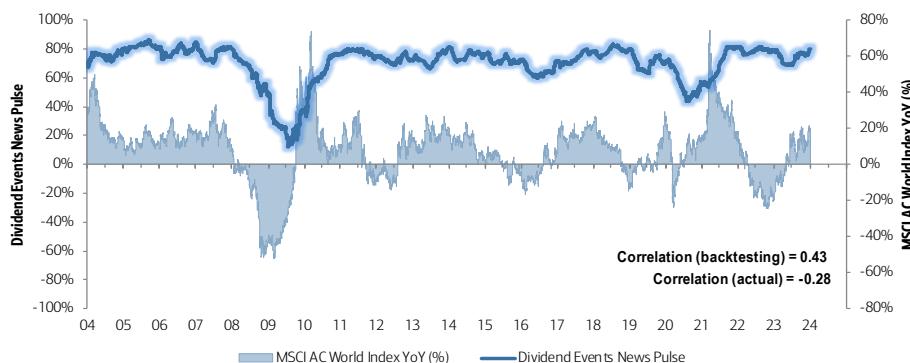
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Dividend News Pulse

Chart 114: Global Dividend News Pulse vs MSCI AC World Index YoY (%)

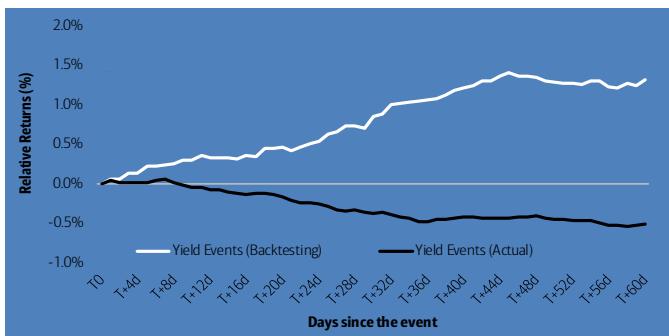
News has improved last month



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

Chart 115: Subs 60d POSITIVE Dividend News Events

Positive Yield Events news have returned -0.50% for holdings period up to 60-days



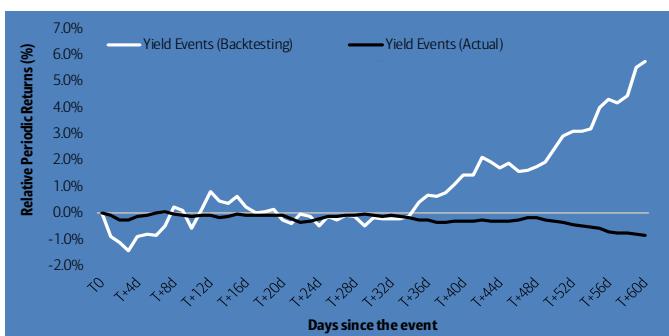
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 117: Subs 60d NEGATIVE Dividend News Events

These events returned -0.82% up to 60 days after the event has occurred



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

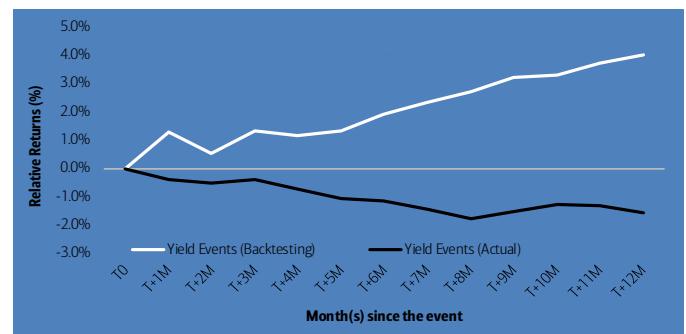
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 116: Subs 12m POSITIVE Dividend News Events

These events returned -1.59% up to 12m after the event has occurred



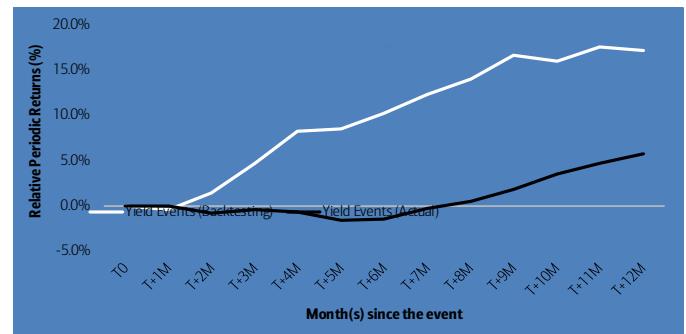
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 118: Subs 12m NEGATIVE Dividend News Events

Negative Yield Events news have returned 5.70% for holdings period up to 12m



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

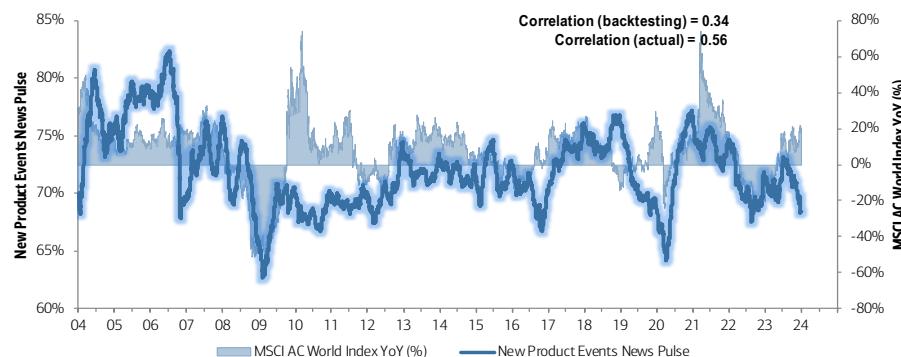
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

New Product News Pulse

Chart 119: Global New Product News Pulse vs MSCI AC World Index YoY (%)

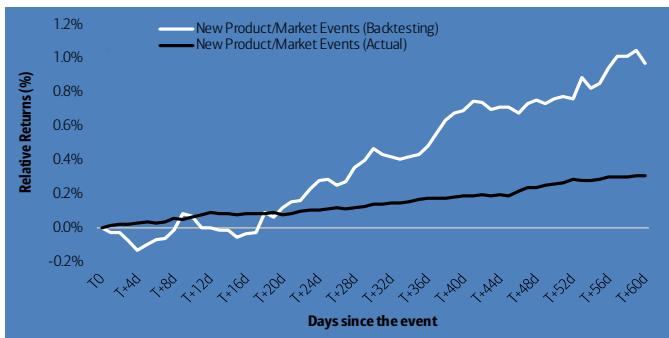
News trends fell last month, however in aggregate remains positive



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

Chart 120: Subs 60d POSITIVE New Product News Events

These events returned 0.31% up to 60 days after the event has occurred



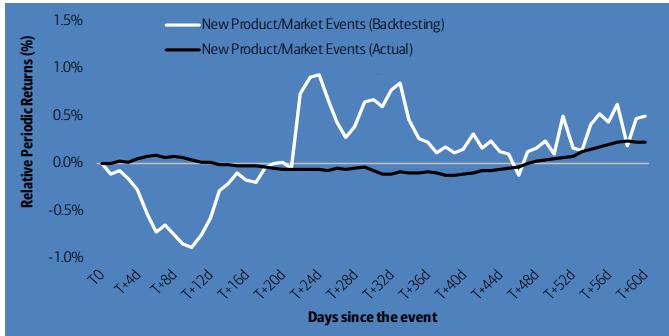
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 122: Subs 60d NEGATIVE New Product News Events

Negative New Product/Market Events news have returned 0.21% for holdings period up to 60-days



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

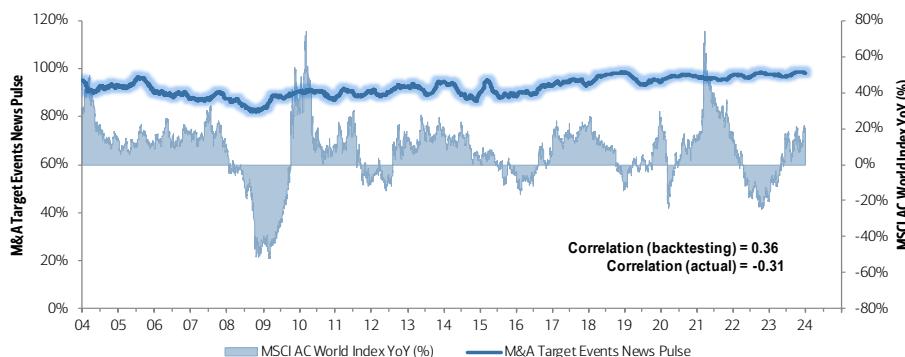
BofA GLOBAL RESEARCH



M&A Target News Pulse

Chart 124: Global M&A Target News Pulse vs MSCI AC World Index YoY (%)

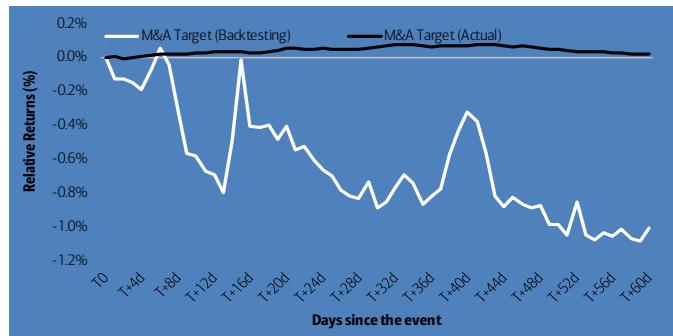
News trend fell in the last 3m, however in aggregate it remains positive



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

Chart 125: Subs 60d POSITIVE M&A Target News Events

Positive M&A Target news have returned 0.02% for holdings period up to 60-days



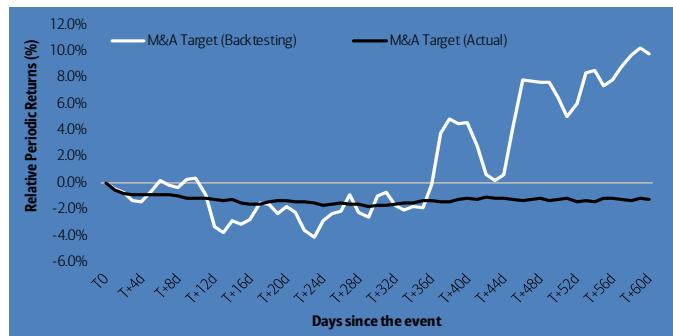
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 127: Subs 60d NEGATIVE M&A Target News Events

Negative M&A Target news have returned -1.25% for holdings period up to 60-days



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

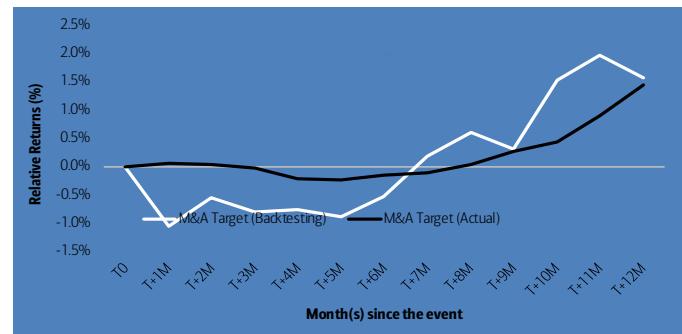
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 126: Subs 12m POSITIVE M&A Target News Events

These events returned 1.44% up to 12m after the event has occurred



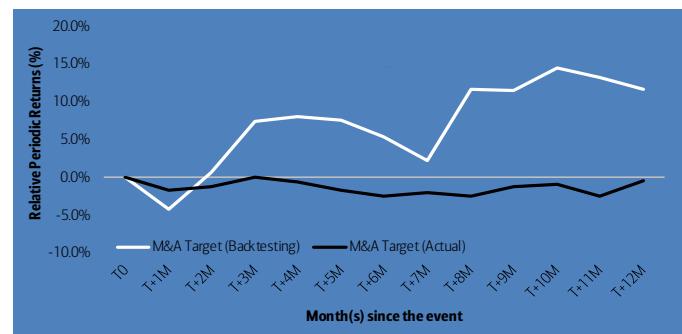
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 128: Subs 12m NEGATIVE M&A Target News Events

These events returned -0.38% up to 12m after the event has occurred



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

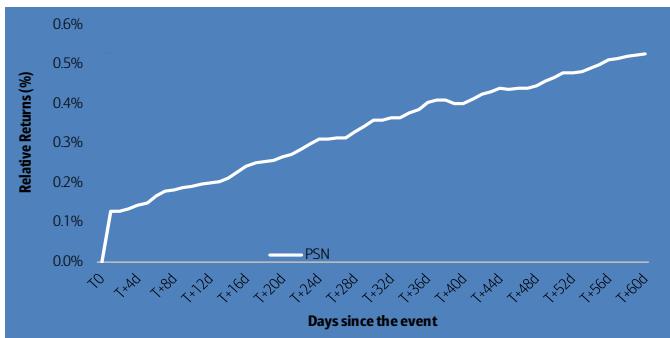
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Other Events

Chart 129: Subs 60d POSITIVE Buy-Backs News Events

Positive Buybacks news have returned -0.09% for holdings period up to 60-days



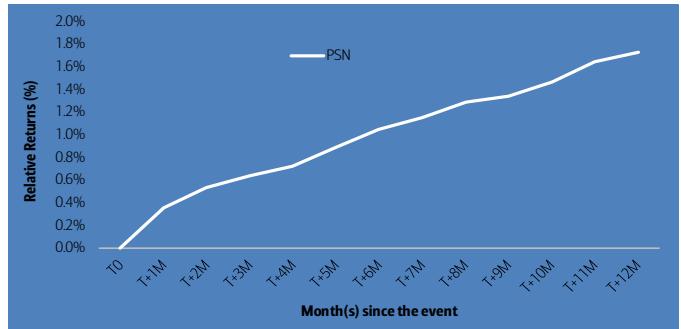
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 130: Subs 12m POSITIVE Buy-Backs News Events

These events returned 0.56% up to 12m after the event has occurred



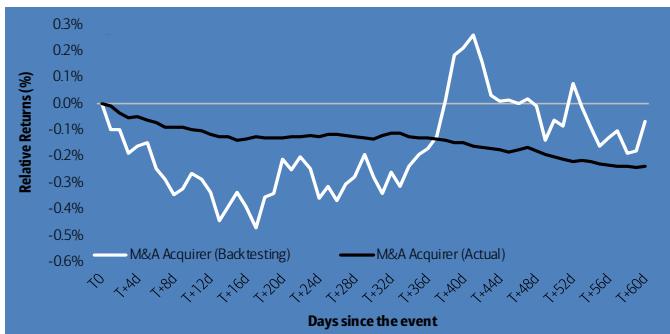
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 131: Subs 60d POSITIVE M&A Acquirer News Events

Positive M&A Target news have returned 0.02% for holdings period up to 60-days



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

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 132: Subs 12m POSITIVE M&A Acquirer News Events

These events returned 1.44% up to 12m after the event has occurred



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

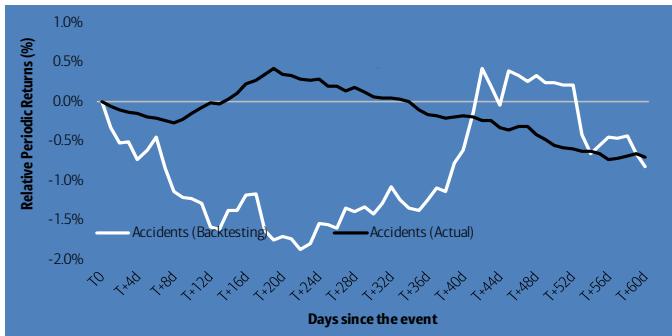
Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 133: Subs 60d NEGATIVE Accidents News Events

These events returned -0.69% up to 60 days after the event has occurred



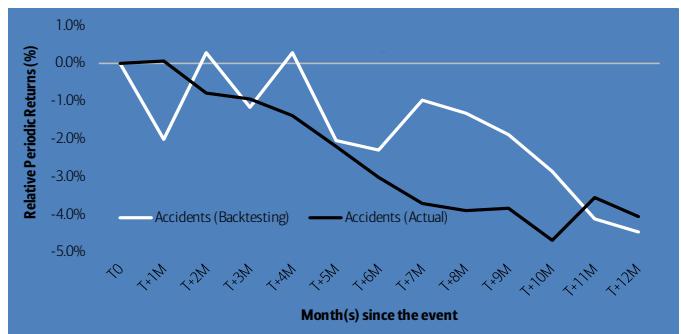
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 134: Subs 12m NEGATIVE Accidents News Events

Negative Accidents news have returned -4.07% for holdings period up to 12m



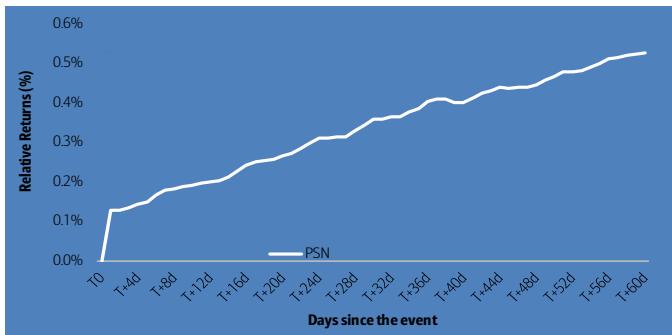
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

Back-tested results are from Jan-04 to May-19. Actual performance is from Jun-19. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 135: Subs 60d POSITIVE Significant News Stocks

Positive news events have returned 0.5% for holdings period up to 60-days



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

BofA GLOBAL RESEARCH

Chart 136: Subs 12m POSITIVE Significant News Stocks

Positive news events have returned 1.7% for holdings period up to 12-months

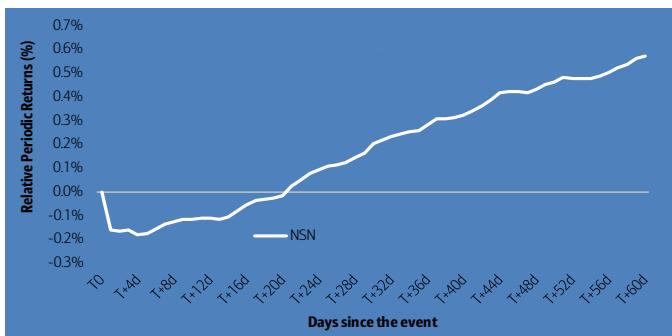


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 137: Subs 60d NEGATIVE Significant News Stocks

Negative news events returned 0.6% up to 60 days after the event has occurred

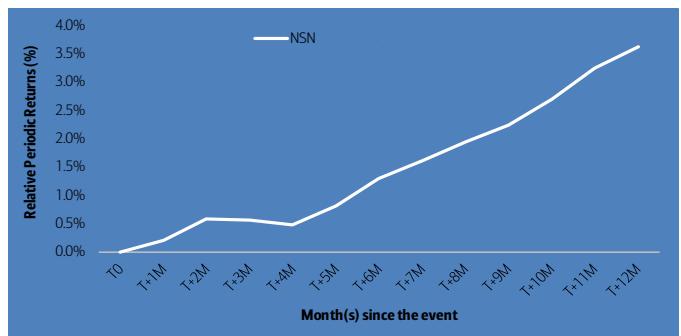


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 138: Subs 12m NEGATIVE Significant News Stocks

Negative news events returned 3.5% up to 12m after the event has occurred



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

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Stock Screens - Positive Significant News Events

Table 41: POSITIVE Significant News Stocks by Significant News Events

Stocks with positive significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
206595	Above Expectations	AutoZone	AZO US	USA	United States	46,171	356.8
270127	Above Expectations	Costco	COST US	USA	United States	292,244	1074.6
BF2FJ9	Above Expectations	MongoDB	MDB US	USA	United States	29,169	550.4
451957	Buybacks	Kerry Group	KYGA ID	Europe	Ireland	15,391	26.2
BYZF9J	Buybacks	Nordea Bank	NDA SS	Europe	Sweden	43,665	51.7
B033F2	Buybacks	Centrica	CNA LN	Europe	United Kingdom	9,824	30.6
BMJ6DW	Buybacks	Informa	INF LN	Europe	United Kingdom	13,780	20.7
BNGDN8	Buybacks	Melrose Industries	MRO LN	Europe	United Kingdom	9,737	23.4
BM8PJY	Buybacks	Natwest	NWG LN	Europe	United Kingdom	24,787	38.1
B1KJJ4	Buybacks	Whitbread	WTB LN	Europe	United Kingdom	9,007	22.6
BRJL17	M&A Acquirer	UBS	UBSG SW	Europe	Switzerland	107,361	173.6
098952	M&A Acquirer	AstraZeneca	AZN LN	Europe	United Kingdom	209,437	165.3
200001	M&A Acquirer	Amazon	AMZN US	USA	United States	1,567,679	7177.6
212633	M&A Acquirer	Bristol-Myers	BMY US	USA	United States	107,192	703.0
BDZ78H	M&A Acquirer	Broadcom	AVGO US	USA	United States	521,446	2585.5
BHJ077	M&A Acquirer	Cigna	CI US	USA	United States	88,631	474.0
261399	M&A Acquirer	Illumina	ILMN US	USA	United States	22,042	278.9
249740	M&A Acquirer	Kroger	KR US	USA	United States	32,880	213.3
BKTNTR	M&A Acquirer	Paramount Global	PARA US	USA	United States	9,028	192.1
BYWD7L	M&A Target	Sea-ADR	SE US	Asia Pac ex-Japan	Singapore	21,191	351.8
688910	M&A Target	TSMC	2330 TT	Asia Pac ex-Japan	Taiwan	501,058	443.7
471279	M&A Target	Renault	RNO FP	Europe	France	12,056	36.5
B929F4	M&A Target	ASML Holding	ASML NA	Europe	Netherlands	303,579	367.2
710306	M&A Target	Novartis	NOVN SW	Europe	Switzerland	229,655	264.4
B545MG	M&A Target	Swiss Re	SREN SW	Europe	Switzerland	35,671	78.2
BRJL17	M&A Target	UBS	UBSG SW	Europe	Switzerland	107,361	173.6
098952	M&A Target	AstraZeneca	AZN LN	Europe	United Kingdom	209,437	165.3
BN7SWP	M&A Target	GSK	GSK LN	Europe	United Kingdom	75,705	77.4
BNZHB8	M&A Target	Linde	LIN US	Europe	United Kingdom	200,404	569.0
BMBQRO	M&A Target	CP Railway	CP CN	North America	Canada	74,059	155.2
206530	M&A Target	ADP	ADP US	USA	United States	95,977	383.3
204685	M&A Target	Albemarle	ALB US	USA	United States	16,954	392.2
200921	M&A Target	Alexandria Real Est.	ARE US	USA	United States	21,935	127.7
BYVY8G	M&A Target	Alphabet-A	GOOGL US	USA	United States	828,781	3785.8
269263	M&A Target	Altria Group	MO US	USA	United States	71,588	352.7
200001	M&A Target	Amazon	AMZN US	USA	United States	1,567,679	7177.6
200784	M&A Target	AMD	AMD US	USA	United States	238,166	6622.1
202624	M&A Target	American Electric	AEP US	USA	United States	41,843	267.2
202608	M&A Target	American Express	AXP US	USA	United States	137,968	479.8
B7FBFL	M&A Target	American Tower	AMT US	USA	United States	100,634	403.1
B2R3PV	M&A Target	American Water	AWK US	USA	United States	25,694	140.4
208921	M&A Target	Ametek	AME US	USA	United States	38,042	145.8
BPMQ7X	M&A Target	Annaly Mortgage	NLY US	USA	United States	9,567	82.6
BNNF1C	M&A Target	APA Corp	APA US	USA	United States	11,025	159.3
204655	M&A Target	Applied Materials	AMAT US	USA	United States	135,577	812.6
BN33VM	M&A Target	Arista Networks	ANET US	USA	United States	72,909	434.8
206515	M&A Target	Autodesk	ADSK US	USA	United States	52,047	292.5
206595	M&A Target	AutoZone	AZO US	USA	United States	46,171	356.8
B1Z77F	M&A Target	Bank New York	BKUS	USA	United States	40,536	204.2
208780	M&A Target	Becton Dickinson	BDX US	USA	United States	70,737	356.9

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

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Stock Screens - Positive Significant News Events (Continued)

Table 42: POSITIVE Significant News Stocks by Significant News Events (continued)

Stocks with positive significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BYNZGK	M&A Target	Block	SQ US	USA	United States	42,499	664.0
210860	M&A Target	Boeing	BA US	USA	United States	157,231	1193.1
211195	M&A Target	Borgwarner	BWA US	USA	United States	8,427	87.3
212633	M&A Target	Bristol-Myers	BMY US	USA	United States	107,192	703.0
BDZ78H	M&A Target	Broadcom	AVGO US	USA	United States	521,446	2585.5
269268	M&A Target	Brown & Brown	BRO US	USA	United States	20,168	85.7
230223	M&A Target	Cadence	CDNS US	USA	United States	74,027	343.5
298356	M&A Target	CarMax	KMX US	USA	United States	12,176	138.4
252304	M&A Target	Carnival Corp	CCL US	USA	United States	20,755	464.4
BP96PQ	M&A Target	Catalent	CTLT US	USA	United States	8,100	97.8
B5834C	M&A Target	CBOE	CBOE US	USA	United States	18,841	119.8
277939	M&A Target	Charles Schwab	SCHW US	USA	United States	121,791	600.4
BZ6VT8	M&A Target	Charter Comm-A	CHTR US	USA	United States	58,174	463.1
265436	M&A Target	Cheniere Energy	LNG US	USA	United States	41,077	230.9
B3BQMF	M&A Target	Chubb	CB US	USA	United States	92,826	383.3
BHJ077	M&A Target	Cigna	CI US	USA	United States	88,631	474.0
219688	M&A Target	Cincinnati Financial	CINF US	USA	United States	16,228	69.0
219713	M&A Target	Cintas	CTAS US	USA	United States	61,383	206.2
BJJC5M	M&A Target	Cloudflare - Class A	NET US	USA	United States	24,360	245.1
220665	M&A Target	Coca-Cola	KO US	USA	United States	254,834	805.6
225701	M&A Target	Cognizant	CTSH US	USA	United States	38,146	234.1
220910	M&A Target	Colgate	CL US	USA	United States	65,896	328.9
204454	M&A Target	Comcast Corp	CMCSA US	USA	United States	180,473	803.7
220807	M&A Target	Copart	CPRT US	USA	United States	46,910	188.4
226286	M&A Target	CoStar	CSGP US	USA	United States	35,685	159.6
270127	M&A Target	Costco	COST US	USA	United States	292,244	1074.6
216234	M&A Target	Coterra Energy	CTRA US	USA	United States	19,269	167.1
BJJP13	M&A Target	CrowdStrike	CRWD US	USA	United States	57,717	594.4
216075	M&A Target	CSX Corp	CSX US	USA	United States	69,559	414.6
226727	M&A Target	Deckers Outdoor	DECK US	USA	United States	17,469	212.1
226120	M&A Target	Deere	DE US	USA	United States	115,163	610.3
B7Y8YR	M&A Target	Diamondback Energy	FANG US	USA	United States	27,731	293.9
B1YLC4	M&A Target	Discover Financial	DFS US	USA	United States	28,094	223.7
227247	M&A Target	Dollar Tree	DLTR US	USA	United States	31,252	277.5
254204	M&A Target	Dominion Energy	D US	USA	United States	39,328	248.9
BKOVN4	M&A Target	DuPont	DD US	USA	United States	35,316	197.3
229838	M&A Target	Eastman Chemical	EMN US	USA	United States	10,649	72.9
B8KQN8	M&A Target	Eaton	ETN US	USA	United States	96,087	426.9
231019	M&A Target	Electronic Arts	EA US	USA	United States	37,063	264.3
BSPHGL	M&A Target	Elevance Health	ELV US	USA	United States	111,122	516.1
B65SQW	M&A Target	Enphase Energy	ENPH US	USA	United States	18,018	561.6
231708	M&A Target	Entergy	ETR US	USA	United States	21,397	151.9
231802	M&A Target	EOG Resources	EOG US	USA	United States	70,424	373.4
BVLZX1	M&A Target	Equinix	EQIX US	USA	United States	75,356	286.8
231915	M&A Target	Equity Residential	EQR US	USA	United States	23,182	114.7
BVWN4Q	M&A Target	Eversource Energy	ES US	USA	United States	21,546	154.4
232661	M&A Target	Exxon Mobil	XOM US	USA	United States	400,533	2024.6
233029	M&A Target	Fair Isaac	FICO US	USA	United States	28,934	170.1
234203	M&A Target	Fiserv	FI US	USA	United States	80,981	322.0
235068	M&A Target	Franklin Re	BEN US	USA	United States	14,865	82.1

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

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Stock Screens - Positive Significant News Events (Continued)

Table 43: POSITIVE Significant News Stocks by Significant News Events (continued)

Stocks with positive significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
235211	M&A Target	Freeport-McMoRan	FCX US	USA	United States	61,030	415.9
B3Z5T1	M&A Target	Garmin	GRMN US	USA	United States	24,609	83.2
237276	M&A Target	Gartner	IT US	USA	United States	35,559	173.8
BL6JPG	M&A Target	Ge Healthcare Tech	GEHC US	USA	United States	35,168	199.3
B6197Q	M&A Target	Generac	GNRC US	USA	United States	8,044	153.9
236516	M&A Target	General Dynamics	GD US	USA	United States	70,901	266.0
236748	M&A Target	Genuine Parts	GPC US	USA	United States	19,451	140.3
240530	M&A Target	Halliburton	HAL US	USA	United States	32,482	278.5
B4MGGB	M&A Target	HCA	HCA US	USA	United States	73,622	342.8
BJBLRK	M&A Target	Healthpeak Prop	PEAK US	USA	United States	10,832	87.4
202374	M&A Target	Hess Corp	HES US	USA	United States	44,266	415.9
BYVMW0	M&A Target	Hilton	HLT US	USA	United States	47,619	262.6
243353	M&A Target	Hologic	HOLX US	USA	United States	17,501	132.4
202045	M&A Target	Honeywell	HON US	USA	United States	139,239	540.2
B40SSC	M&A Target	Huntington Ingalls	HII US	USA	United States	10,351	60.0
200597	M&A Target	IBM	IBM US	USA	United States	148,995	604.5
245661	M&A Target	IDEX	IEX US	USA	United States	16,414	107.9
245920	M&A Target	IDEXX Labs	IDXX US	USA	United States	46,076	236.7
261399	M&A Target	Illumina	ILMN US	USA	United States	22,042	278.9
246416	M&A Target	Intl Flavors & Fragrances	IFF US	USA	United States	20,668	156.0
245902	M&A Target	Intuit	INTU US	USA	United States	175,171	743.1
BDR73G	M&A Target	IQVIA	IQV US	USA	United States	42,371	235.9
BVFTF0	M&A Target	Iron Mountain	IRM US	USA	United States	20,424	91.2
247178	M&A Target	Jabil	JBL US	USA	United States	16,674	215.8
219038	M&A Target	JPMorgan Chase	JPM US	USA	United States	494,325	1393.4
BQ84ZQ	M&A Target	Kenvue	KVUE US	USA	United States	41,228	687.4
249183	M&A Target	Kimberly-Clark	KMB US	USA	United States	41,093	217.3
B3NQ4P	M&A Target	Kinder Morgan	KMI US	USA	United States	39,305	227.0
BYRY49	M&A Target	Kraft Heinz	KHC US	USA	United States	45,422	270.7
249740	M&A Target	Kroger	KR US	USA	United States	32,880	213.3
BK9DTN	M&A Target	L3Harris Tech	LHX US	USA	United States	39,835	230.9
258612	M&A Target	Laboratory Corp	LH US	USA	United States	20,115	164.3
BDQZFJ	M&A Target	Lamb Weston	LW US	USA	United States	15,665	178.1
B3SPXZ	M&A Target	LyondellBasell	LYB US	USA	United States	30,825	181.2
234016	M&A Target	M&T Bank	MTB US	USA	United States	22,748	126.4
221061	M&A Target	Marriott	MAR US	USA	United States	67,256	363.1
257207	M&A Target	Martin Marietta	MLM US	USA	United States	30,835	166.6
277884	M&A Target	Merck	MRK US	USA	United States	276,641	789.1
257320	M&A Target	MetLife	MET US	USA	United States	49,731	231.2
BGSXTS	M&A Target	Moderna	MRNA US	USA	United States	37,850	413.5
221270	M&A Target	Molina Health	MOH US	USA	United States	21,064	132.2
B067BM	M&A Target	Molson Coors Beverage	TAP US	USA	United States	12,911	104.4
B8CKK0	M&A Target	Mondelez	MDLZ US	USA	United States	98,535	452.4
BF2FJ9	M&A Target	MongoDB	MDB US	USA	United States	29,169	550.4
BZ07BW	M&A Target	Monster Beverage	MNST US	USA	United States	60,348	285.6
B5BKPQ	M&A Target	Motorola	MSI US	USA	United States	52,292	199.6
285781	M&A Target	Netflix	NFLX US	USA	United States	215,759	2343.2
264183	M&A Target	Nordson	NDSN US	USA	United States	15,061	49.3
264189	M&A Target	Norfolk Southern	NSC US	USA	United States	53,662	253.3
264880	M&A Target	Northrop	NOC US	USA	United States	70,829	351.5

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

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Stock Screens - Positive Significant News Events (Continued)

Table 44: POSITIVE Significant News Stocks by Significant News Events (continued)

Stocks with positive significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
237950	M&A Target	NVIDIA	NVDA US	USA	United States	1,223,193	20971.5
BKTNTR	M&A Target	Paramount Global	PARA US	USA	United States	9,028	192.1
BYW36M	M&A Target	PayPal	PYPL US	USA	United States	67,430	945.1
268151	M&A Target	PepsiCo	PEP US	USA	United States	233,507	902.2
B78C4Y	M&A Target	Phillips 66	PSX US	USA	United States	59,286	364.0
BJZ20H	M&A Target	Pinterest- Class A	PINS US	USA	United States	21,553	306.0
269847	M&A Target	PPG Industries	PPG US	USA	United States	35,221	213.1
268090	M&A Target	PPL	PPL US	USA	United States	19,975	149.1
270440	M&A Target	Procter & Gamble	PG US	USA	United States	345,379	914.2
281911	M&A Target	Prudential Fin.	PRU US	USA	United States	37,647	147.9
270767	M&A Target	Public Service Ent	PEG US	USA	United States	30,521	164.1
271899	M&A Target	Raymond James	RJF US	USA	United States	23,286	90.7
273019	M&A Target	Regeneron Pharma	REGN US	USA	United States	93,749	418.6
B01R31	M&A Target	Regions Financial	RF US	USA	United States	18,186	148.6
272906	M&A Target	Reliance Steel	RS US	USA	United States	16,377	76.1
226253	M&A Target	Republic Services	RSG US	USA	United States	52,165	170.6
275406	M&A Target	Rockwell	ROK US	USA	United States	35,662	239.3
274960	M&A Target	Roper Tech	ROP US	USA	United States	58,176	252.4
274671	M&A Target	Ross Stores	ROST US	USA	United States	46,863	272.4
277920	M&A Target	Schlumberger	SLB US	USA	United States	73,959	498.6
213815	M&A Target	Sempra	SRE US	USA	United States	47,028	207.0
280421	M&A Target	Sherwin-Williams	SHW US	USA	United States	80,205	383.5
296105	M&A Target	Skyworks Solutions	SWKS US	USA	United States	17,919	168.2
281874	M&A Target	Snap-on	SNA US	USA	United States	15,284	63.6
286816	M&A Target	Sysco	SYY US	USA	United States	36,874	188.5
270233	M&A Target	T.Rowe Price	TROW US	USA	United States	24,154	154.4
B55PZY	M&A Target	Targa Resources	TRGP US	USA	United States	19,434	134.4
225910	M&A Target	Target	TGT US	USA	United States	65,742	592.4
BDT5S3	M&A Target	Taser Intl	AXON US	USA	United States	19,313	110.5
BM99VY	M&A Target	Texas Pacific Land	TPL US	USA	United States	12,071	60.2
B94Q9V	M&A Target	T-Mobile	TMUS US	USA	United States	188,621	647.3
290033	M&A Target	Tractor Supply	TSCO US	USA	United States	23,397	257.4
BD8FDD	M&A Target	Trade Desk-A	TTD US	USA	United States	32,106	360.3
BKP728	M&A Target	Truist Financial	TFC US	USA	United States	49,177	311.9
290964	M&A Target	Tyler Tech	TYL US	USA	United States	17,594	83.8
290973	M&A Target	Tyson Foods	TSN US	USA	United States	15,348	142.9
291473	M&A Target	Union Pacific	UNP US	USA	United States	149,695	562.5
213478	M&A Target	United Rentals	URI US	USA	United States	39,155	332.0
243041	M&A Target	United Therapeutics	UTHR US	USA	United States	10,320	73.4
291776	M&A Target	UnitedHealth	UNH US	USA	United States	487,672	1544.7
BLFDXH	M&A Target	Unity Software	U US	USA	United States	15,680	387.6
273603	M&A Target	US Bancorp	USB US	USA	United States	66,347	428.2
B4P9W9	M&A Target	Verisk Analytics	VRSK US	USA	United States	34,641	218.2
293120	M&A Target	Vulcan Materials	VMC US	USA	United States	30,162	168.8
209364	M&A Target	W.R.Berkley	WRB US	USA	United States	18,212	79.1
238086	M&A Target	W.W. Grainger	GWW US	USA	United States	41,435	195.4
293766	M&A Target	Waste Mgt	WM US	USA	United States	72,546	244.3
264910	M&A Target	Wells Fargo	WFC US	USA	United States	180,085	695.6
295048	M&A Target	West Pharma	WST US	USA	United States	26,008	137.8
295893	M&A Target	Weyerhaeuser	WY US	USA	United States	25,408	112.7

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

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Stock Screens - Positive Significant News Events (Continued)

Table 45: POSITIVE Significant News Stocks by Significant News Events (continued)

Stocks with positive significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B8K6ZD	M&A Target	Workday	WDAY US	USA	United States	57,144	424.9
BZ00V3	M&A Target	Zscaler	ZS US	USA	United States	32,607	351.1
710306	New Product	Novartis	NOVN SW	Europe	Switzerland	229,655	264.4
711038	New Product	Roche	ROG SW	Europe	Switzerland	204,095	287.6
098952	New Product	AstraZeneca	AZN LN	Europe	United Kingdom	209,437	165.3
BN7SWP	New Product	GSK	GSK LN	Europe	United Kingdom	75,705	77.4
BYVY8G	New Product	Alphabet-A	GOOGL US	USA	United States	828,781	3785.8
210860	New Product	Boeing	BA US	USA	United States	157,231	1193.1
212633	New Product	Bristol-Myers	BMY US	USA	United States	107,192	703.0
277884	New Product	Merck	MRK US	USA	United States	276,641	789.1
217157	Price Target	Canadian Natural	CNQ CN	North America	Canada	71,798	599.1
BMFNHJ	Price Target	Nuvei-Subordinate Vtg	NVEI CN	North America	Canada	1,663	16.7
200001	Price Target	Amazon	AMZN US	USA	United States	1,567,679	7177.6
BQ1PC7	Price Target	Atlassian	TEAM US	USA	United States	36,908	292.0
BDZ78H	Price Target	Broadcom	AVGO US	USA	United States	521,446	2585.5
BMC9P6	Price Target	Coinbase Global -Class A	COIN US	USA	United States	33,036	1133.0
270127	Price Target	Costco	COST US	USA	United States	292,244	1074.6
216234	Price Target	Coterra Energy	CTRA US	USA	United States	19,269	167.1
BJJP13	Price Target	CrowdStrike	CRWD US	USA	United States	57,717	594.4
226727	Price Target	Deckers Outdoor	DECK US	USA	United States	17,469	212.1
240530	Price Target	Halliburton	HAL US	USA	United States	32,482	278.5
BF2FJ9	Price Target	MongoDB	MDB US	USA	United States	29,169	550.4
B78C4Y	Price Target	Phillips 66	PSX US	USA	United States	59,286	364.0
270279	Price Target	Quest Diag.	DGX US	USA	United States	15,475	112.8
273603	Price Target	US Bancorp	USB US	USA	United States	66,347	428.2
264910	Price Target	Wells Fargo	WFC US	USA	United States	180,085	695.6
BZ00V3	Price Target	Zscaler	ZS US	USA	United States	32,607	351.1
210860	Ratings Changes	Boeing	BA US	USA	United States	157,231	1193.1
B1YLC4	Ratings Changes	Discover Financial	DFS US	USA	United States	28,094	223.7
261399	Ratings Changes	Illumina	ILMN US	USA	United States	22,042	278.9
B8CKK0	Ratings Changes	Mondelez	MDLZ US	USA	United States	98,535	452.4
B78C4Y	Ratings Changes	Phillips 66	PSX US	USA	United States	59,286	364.0
BJ2ZOH	Ratings Changes	Pinterest- Class A	PINS US	USA	United States	21,553	306.0
270279	Ratings Changes	Quest Diag.	DGX US	USA	United States	15,475	112.8
291776	Ratings Changes	UnitedHealth	UNH US	USA	United States	487,672	1544.7
BZ00V3	Ratings Changes	Zscaler	ZS US	USA	United States	32,607	351.1
643514	Reported Fundamentals	Honda	7267 JP	Japan	Japan	56,509	178.6
BYVY8G	Reported Fundamentals	Alphabet-A	GOOGL US	USA	United States	828,781	3785.8
200001	Reported Fundamentals	Amazon	AMZN US	USA	United States	1,567,679	7177.6
252304	Reported Fundamentals	Carnival Corp	CCL US	USA	United States	20,755	464.4
BF2FJ9	Reported Fundamentals	MongoDB	MDB US	USA	United States	29,169	550.4
237950	Reported Fundamentals	NVIDIA	NVDA US	USA	United States	1,223,193	20971.5

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

BofA GLOBAL RESEARCH



Stock Screens - Negative Significant News Events

Table 46: NEGATIVE Significant News Stocks by Significant News Events

Stocks with negative significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
210860	Accidents	Boeing	BA US	USA	United States	157,231	1193.1
BYWD7L	Buybacks	Sea-ADR	SE US	Asia Pac ex-Japan	Singapore	21,191	351.8
688910	Buybacks	TSMC	2330 TT	Asia Pac ex-Japan	Taiwan	501,058	443.7
B929F4	Buybacks	ASML Holding	ASML NA	Europe	Netherlands	303,579	367.2
710306	Buybacks	Novartis	NOWN SW	Europe	Switzerland	229,655	264.4
098952	Buybacks	AstraZeneca	AZN LN	Europe	United Kingdom	209,437	165.3
BN7SWP	Buybacks	GSK	GSK LN	Europe	United Kingdom	75,705	77.4
BNZHB8	Buybacks	Linde	LIN US	Europe	United Kingdom	200,404	569.0
218063	Buybacks	Canadian National	CNR CN	North America	Canada	82,808	200.3
217157	Buybacks	Canadian Natural	CNQ CN	North America	Canada	71,798	599.1
BMBQR0	Buybacks	CP Railway	CP CN	North America	Canada	74,059	155.2
287932	Buybacks	Teck Resources	TECK/B CN	North America	Canada	21,748	70.2
206530	Buybacks	ADP	ADP US	USA	United States	95,977	383.3
204685	Buybacks	Albemarle	ALB US	USA	United States	16,954	392.2
200921	Buybacks	Alexandria Real Est.	ARE US	USA	United States	21,935	127.7
B72XK0	Buybacks	Ally Financial	ALLY US	USA	United States	10,533	126.9
BYVY8G	Buybacks	Alphabet-A	GOOGL US	USA	United States	828,781	3785.8
269263	Buybacks	Altria Group	MO US	USA	United States	71,588	352.7
200001	Buybacks	Amazon	AMZN US	USA	United States	1,567,679	7177.6
200784	Buybacks	AMD	AMD US	USA	United States	238,166	6622.1
202624	Buybacks	American Electric	AEP US	USA	United States	41,843	267.2
202608	Buybacks	American Express	AXP US	USA	United States	137,968	479.8
B7FBFL	Buybacks	American Tower	AMT US	USA	United States	100,634	403.1
B2R3PV	Buybacks	American Water	AWK US	USA	United States	25,694	140.4
208921	Buybacks	Ametek	AME US	USA	United States	38,042	145.8
BPMQ7X	Buybacks	Annaly Mortgage	NLY US	USA	United States	9,567	82.6
BNNF1C	Buybacks	APA Corp	APA US	USA	United States	11,025	159.3
204655	Buybacks	Applied Materials	AMAT US	USA	United States	135,577	812.6
BN33VM	Buybacks	Arista Networks	ANET US	USA	United States	72,909	434.8
BQ1PC7	Buybacks	Atlassian	TEAM US	USA	United States	36,908	292.0
231535	Buybacks	Atmos Energy	ATO US	USA	United States	17,207	108.2
206515	Buybacks	Autodesk	ADSK US	USA	United States	52,047	292.5
206595	Buybacks	AutoZone	AZO US	USA	United States	46,171	356.8
B1Z77F	Buybacks	Bank New York	BK US	USA	United States	40,536	204.2
208780	Buybacks	Becton Dickinson	BDX US	USA	United States	70,737	356.9
BYNZGK	Buybacks	Block	SQ US	USA	United States	42,499	664.0
210860	Buybacks	Boeing	BA US	USA	United States	157,231	1193.1
211195	Buybacks	Borgwarner	BWA US	USA	United States	8,427	87.3
212633	Buybacks	Bristol-Myers	BMY US	USA	United States	107,192	703.0
BDZ78H	Buybacks	Broadcom	AVGO US	USA	United States	521,446	2585.5
269268	Buybacks	Brown & Brown	BRO US	USA	United States	20,168	85.7
211622	Buybacks	C.H. Robinson	CHRW US	USA	United States	10,059	92.2
230223	Buybacks	Cadence	CDNS US	USA	United States	74,027	343.5
298356	Buybacks	CarMax	KMX US	USA	United States	12,176	138.4
BP96PQ	Buybacks	Catalent	CTLT US	USA	United States	8,100	97.8
B5834C	Buybacks	CBOE	CBOE US	USA	United States	18,841	119.8
277939	Buybacks	Charles Schwab	SCHW US	USA	United States	121,791	600.4
BZ6VT8	Buybacks	Charter Comm-A	CHTR US	USA	United States	58,174	463.1
265436	Buybacks	Cheniere Energy	LNG US	USA	United States	41,077	230.9
B3BQMF	Buybacks	Chubb	CB US	USA	United States	92,826	383.3

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

BofA GLOBAL RESEARCH



Stock Screens - Negative Significant News Events (Continued)

Table 47: NEGATIVE Significant News Stocks by Significant News Events (continued)

Stocks with negative significant news grouped by event type

Sedol	Event Group	Short Name	BIGG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BHJ077	Buybacks	Cigna	CI US	USA	United States	88,631	474.0
219688	Buybacks	Cincinnati Financial	CINF US	USA	United States	16,228	69.0
219713	Buybacks	Cintas	CTAS US	USA	United States	61,383	206.2
BJXC5M	Buybacks	Cloudflare - Class A	NET US	USA	United States	24,360	245.1
220665	Buybacks	Coca-Cola	KO US	USA	United States	254,834	805.6
225701	Buybacks	Cognizant	CTSH US	USA	United States	38,146	234.1
BMC9P6	Buybacks	Coinbase Global -Class A	COIN US	USA	United States	33,036	1133.0
220910	Buybacks	Colgate	CL US	USA	United States	65,896	328.9
204454	Buybacks	Comcast Corp	CMCSA US	USA	United States	180,473	803.7
220807	Buybacks	Copart	CPRT US	USA	United States	46,910	188.4
226286	Buybacks	CoStar	CSGP US	USA	United States	35,685	159.6
270127	Buybacks	Costco	COST US	USA	United States	292,244	1074.6
216234	Buybacks	Coterra Energy	CTRA US	USA	United States	19,269	167.1
BJJP13	Buybacks	CrowdStrike	CRWD US	USA	United States	57,717	594.4
216075	Buybacks	CSX Corp	CSX US	USA	United States	69,559	414.6
226727	Buybacks	Deckers Outdoor	DECK US	USA	United States	17,469	212.1
226120	Buybacks	Deere	DE US	USA	United States	115,163	610.3
B7Y8YR	Buybacks	Diamondback Energy	FANG US	USA	United States	27,731	293.9
B1YLC4	Buybacks	Discover Financial	DFS US	USA	United States	28,094	223.7
227247	Buybacks	Dollar Tree	DLTR US	USA	United States	31,252	277.5
254204	Buybacks	Dominion Energy	D US	USA	United States	39,328	248.9
B01SD7	Buybacks	Domino's Pizza	DPZ US	USA	United States	14,379	232.4
BN13P0	Buybacks	DoorDash	DASH US	USA	United States	36,177	337.7
228022	Buybacks	DTE Energy	DTE US	USA	United States	22,733	137.4
BK0VN4	Buybacks	DuPont	DD US	USA	United States	35,316	197.3
229838	Buybacks	Eastman Chemical	EMN US	USA	United States	10,649	72.9
B8KQN8	Buybacks	Eaton	ETN US	USA	United States	96,087	426.9
231019	Buybacks	Electronic Arts	EA US	USA	United States	37,063	264.3
BSPHGL	Buybacks	Elevance Health	ELV US	USA	United States	111,122	516.1
B65SQW	Buybacks	Enphase Energy	ENPH US	USA	United States	18,018	561.6
231708	Buybacks	Entergy	ETR US	USA	United States	21,397	151.9
231802	Buybacks	EOG Resources	EOG US	USA	United States	70,424	373.4
BVLZX1	Buybacks	Equinix	EQIX US	USA	United States	75,356	286.8
256312	Buybacks	Equity Lifestyle	ELS US	USA	United States	13,140	105.4
231915	Buybacks	Equity Residential	EQR US	USA	United States	23,182	114.7
BWN4Q	Buybacks	Eversource Energy	ES US	USA	United States	21,546	154.4
232550	Buybacks	Expeditors Intl	EXPD US	USA	United States	18,813	137.1
232661	Buybacks	Exxon Mobil	XOM US	USA	United States	400,533	2024.6
233029	Buybacks	Fair Isaac	FICO US	USA	United States	28,934	170.1
234203	Buybacks	Fiserv	FI US	USA	United States	80,981	322.0
232860	Buybacks	FMC	FMC US	USA	United States	7,864	126.7
235068	Buybacks	Franklin Re	BEN US	USA	United States	14,865	82.1
235211	Buybacks	Freeport-McMoRan	FCX US	USA	United States	61,030	415.9
B3Z5T1	Buybacks	Garmin	GRMN US	USA	United States	24,609	83.2
237276	Buybacks	Gartner	IT US	USA	United States	35,559	173.8
BL6JPG	Buybacks	Ge Healthcare Tech	GEHC US	USA	United States	35,168	199.3
B6197Q	Buybacks	Generac	GNRC US	USA	United States	8,044	153.9
236516	Buybacks	General Dynamics	GD US	USA	United States	70,901	266.0
236748	Buybacks	Genuine Parts	GPC US	USA	United States	19,451	140.3
240530	Buybacks	Halliburton	HAL US	USA	United States	32,482	278.5

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

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Stock Screens - Negative Significant News Events (Continued)

Table 48: NEGATIVE Significant News Stocks by Significant News Events (continued)

Stocks with negative significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B4MGGB	Buybacks	HCA	HCA US	USA	United States	73,622	342.8
BJBLRK	Buybacks	Healthpeak Prop	PEAK US	USA	United States	10,832	87.4
202374	Buybacks	Hess Corp	HES US	USA	United States	44,266	415.9
BYVMW0	Buybacks	Hilton	HLT US	USA	United States	47,619	262.6
243353	Buybacks	Hologic	HOLX US	USA	United States	17,501	132.4
202045	Buybacks	Honeywell	HON US	USA	United States	139,239	540.2
BR4T3B	Buybacks	Hubspot	HUBS US	USA	United States	29,036	270.2
244596	Buybacks	Huntington Banc	HBAN US	USA	United States	18,417	157.6
B40SSC	Buybacks	Huntington Ingalls	HII US	USA	United States	10,351	60.0
200597	Buybacks	IBM	IBM US	USA	United States	148,995	604.5
245661	Buybacks	IDEX	IEX US	USA	United States	16,414	107.9
245920	Buybacks	IDEXX Labs	IDXX US	USA	United States	46,076	236.7
261399	Buybacks	Illumina	ILMN US	USA	United States	22,042	278.9
246632	Buybacks	Interpublic	IPG US	USA	United States	12,564	129.2
246416	Buybacks	Intl Flavors & Fragrances	IFF US	USA	United States	20,668	156.0
245902	Buybacks	Intuit	INTU US	USA	United States	175,171	743.1
BDR73G	Buy backs	IQVIA	IQV US	USA	United States	42,371	235.9
BVFTF0	Buy backs	Iron Mountain	IRM US	USA	United States	20,424	91.2
247178	Buy backs	Jabil	JBL US	USA	United States	16,674	215.8
B4Q5ZN	Buy backs	Jazz Pharma	JAZZ US	USA	United States	7,766	77.1
219038	Buy backs	JPMorgan Chase	JPM US	USA	United States	494,325	1393.4
249183	Buy backs	Kimberly-Clark	KMB US	USA	United States	41,093	217.3
249159	Buy backs	Kimco Realty	KIM US	USA	United States	14,314	97.6
B3NQ4P	Buy backs	Kinder Morgan	KMI US	USA	United States	39,305	227.0
BYRY49	Buy backs	Kraft Heinz	KHC US	USA	United States	45,422	270.7
249740	Buy backs	Kroger	KR US	USA	United States	32,880	213.3
BK9DTN	Buy backs	L3Harris Tech	LHX US	USA	United States	39,835	230.9
258612	Buy backs	Laboratory Corp	LH US	USA	United States	20,115	164.3
BDQZFJ	Buy backs	Lamb Weston	LW US	USA	United States	15,665	178.1
B3SPXZ	Buy backs	LyondellBasell	LYB US	USA	United States	30,825	181.2
234016	Buy backs	M&T Bank	MTB US	USA	United States	22,748	126.4
221061	Buy backs	Marriott	MAR US	USA	United States	67,256	363.1
257207	Buy backs	Martin Marietta	MLM US	USA	United States	30,835	166.6
277884	Buy backs	Merck	MRK US	USA	United States	276,641	789.1
257320	Buy backs	MetLife	MET US	USA	United States	49,731	231.2
BGSXTS	Buy backs	Moderna	MRNA US	USA	United States	37,850	413.5
221270	Buy backs	Molina Health	MOH US	USA	United States	21,064	132.2
B067BM	Buy backs	Molson Coors Beverage	TAP US	USA	United States	12,911	104.4
B8CKK0	Buy backs	Mondelez	MDLZ US	USA	United States	98,535	452.4
BF2FJ9	Buy backs	MongoDB	MDB US	USA	United States	29,169	550.4
B01Z7J	Buy backs	Monolithic Power	MPWR US	USA	United States	30,137	270.2
BZ07BW	Buy backs	Monster Beverage	MNST US	USA	United States	60,348	285.6
B5BKPKQ	Buy backs	Motorola	MSI US	USA	United States	52,292	199.6
296510	Buy backs	Nasdaq	NDAQ US	USA	United States	28,565	136.5
285781	Buy backs	Netflix	NFLX US	USA	United States	215,759	2343.2
232891	Buy backs	Nexera Energy	NEE US	USA	United States	124,581	737.9
264183	Buy backs	Nordson	NDSN US	USA	United States	15,061	49.3
264189	Buy backs	Norfolk Southern	NSC US	USA	United States	53,662	253.3
264880	Buy backs	Northrop	NOC US	USA	United States	70,829	351.5
237950	Buy backs	NVIDIA	NVDA US	USA	United States	1,223,193	20971.5

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

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Stock Screens - Negative Significant News Events (Continued)

Table 49: NEGATIVE Significant News Stocks by Significant News Events (continued)

Stocks with negative significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BKTNTR	Buybacks	Paramount Global	PARA US	USA	United States	9,028	192.1
BYW36M	Buybacks	PayPal	PYPL US	USA	United States	67,430	945.1
268151	Buybacks	PepsiCo	PEP US	USA	United States	233,507	902.2
B78C4Y	Buybacks	Phillips 66	PSX US	USA	United States	59,286	364.0
BJZ2OH	Buybacks	Pinterest- Class A	PINS US	USA	United States	21,553	306.0
269847	Buybacks	PPG Industries	PPG US	USA	United States	35,221	213.1
268090	Buybacks	PPL	PPL US	USA	United States	19,975	149.1
270440	Buybacks	Procter & Gamble	PG US	USA	United States	345,379	914.2
281911	Buybacks	Prudential Fin.	PRU US	USA	United States	37,647	147.9
270767	Buybacks	Public Service Ent	PEG US	USA	United States	30,521	164.1
270279	Buybacks	Quest Diag.	DGX US	USA	United States	15,475	112.8
271899	Buybacks	Raymond James	RJF US	USA	United States	23,286	90.7
273019	Buy backs	Regeneron Pharma	REGN US	USA	United States	93,749	418.6
B01R31	Buy backs	Regions Financial	RF US	USA	United States	18,186	148.6
272906	Buy backs	Reliance Steel	RS US	USA	United States	16,377	76.1
226253	Buy backs	Republic Services	RSG US	USA	United States	52,165	170.6
275406	Buy backs	Rockwell	ROK US	USA	United States	35,662	239.3
274960	Buy backs	Roper Tech	ROP US	USA	United States	58,176	252.4
274671	Buy backs	Ross Stores	ROST US	USA	United States	46,863	272.4
277920	Buy backs	Schlumberger	SLB US	USA	United States	73,959	498.6
213815	Buy backs	Sempra	SRE US	USA	United States	47,028	207.0
BFMBMT	Buy backs	Sensata Tech	ST US	USA	United States	5,727	70.7
280421	Buy backs	Sherwin-Williams	SHW US	USA	United States	80,205	383.5
296105	Buy backs	Skyworks Solutions	SWKS US	USA	United States	17,919	168.2
281874	Buy backs	Snap-on	SNA US	USA	United States	15,284	63.6
286816	Buy backs	Sysco	SYY US	USA	United States	36,874	188.5
270233	Buy backs	T. Rowe Price	TROW US	USA	United States	24,154	154.4
B55PZY	Buy backs	Targa Resources	TRGP US	USA	United States	19,434	134.4
225910	Buy backs	Target	TGT US	USA	United States	65,742	592.4
BDT5S3	Buy backs	Taser Intl	AXON US	USA	United States	19,313	110.5
BM99VY	Buy backs	Texas Pacific Land	TPL US	USA	United States	12,071	60.2
288593	Buy backs	Textron	TXT US	USA	United States	15,929	98.3
B94Q9V	Buy backs	T-Mobile	TMUS US	USA	United States	188,621	647.3
290033	Buy backs	Tractor Supply	TSCO US	USA	United States	23,397	257.4
BD8FDD	Buy backs	Trade Desk-A	TTD US	USA	United States	32,106	360.3
BKP728	Buy backs	Truist Financial	TFC US	USA	United States	49,177	311.9
290964	Buy backs	Tyler Tech	TYL US	USA	United States	17,594	83.8
290973	Buy backs	Tyson Foods	TSN US	USA	United States	15,348	142.9
291473	Buy backs	Union Pacific	UNP US	USA	United States	149,695	562.5
213478	Buy backs	United Rentals	URI US	USA	United States	39,155	332.0
291776	Buy backs	UnitedHealth	UNH US	USA	United States	487,672	1544.7
273603	Buy backs	US Bancorp	USB US	USA	United States	66,347	428.2
214292	Buy backs	VeriSign	VRSN US	USA	United States	21,241	107.1
B4P9W9	Buy backs	Verisk Analytics	VRSK US	USA	United States	34,641	218.2
293120	Buy backs	Vulcan Materials	VMC US	USA	United States	30,162	168.8
209364	Buy backs	W.R. Berkley	WRB US	USA	United States	18,212	79.1
238086	Buy backs	W.W. Grainger	GWW US	USA	United States	41,435	195.4
293766	Buy backs	Waste Mgt	WM US	USA	United States	72,546	244.3
264910	Buy backs	Wells Fargo	WFC US	USA	United States	180,085	695.6
295048	Buy backs	West Pharma	WST US	USA	United States	26,008	137.8

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

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Stock Screens - Negative Significant News Events (Continued)

Table 50: NEGATIVE Significant News Stocks by Significant News Events (continued)

Stocks with negative significant news grouped by event type

Sedol	Event Group	Short Name	BBG Code	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B01ZP2	Buybacks	Westlake	WLK US	USA	United States	17,871	54.4
295893	Buybacks	Weyerhaeuser	WY US	USA	United States	25,408	112.7
B8K6ZD	Buybacks	Workday	WDAY US	USA	United States	57,144	424.9
BZ00V3	Buybacks	Zscaler	ZS US	USA	United States	32,607	351.1
643514	New Product	Honda	7267 JP	Japan	Japan	56,509	178.6
200001	New Product	Amazon	AMZN US	USA	United States	1,567,679	7177.6
268151	New Product	PepsiCo	PEP US	USA	United States	233,507	902.2
BNHKYX	Price Target	Argenix	ARGX BB	Europe	Belgium	22,417	31.2
590294	Price Target	Nokia	NOKIA FH	Europe	Finland	19,189	49.7
BMFNHJ	Price Target	Nuvei-Subordinate Vtg	NVEI CN	North America	Canada	1,663	16.7
287932	Price Target	Teck Resources	TECK/B CN	North America	Canada	21,748	70.2
204685	Price Target	Albemarle	ALB US	USA	United States	16,954	392.2
200921	Price Target	Alexandria Real Est.	ARE US	USA	United States	21,935	127.7
200784	Price Target	AMD	AMD US	USA	United States	238,166	6622.1
BPMQ7X	Price Target	Annaly Mortgage	NLY US	USA	United States	9,567	82.6
BNNF1C	Price Target	APA Corp	APA US	USA	United States	11,025	159.3
BQ1PC7	Price Target	Atlassian	TEAM US	USA	United States	36,908	292.0
BYNZGK	Price Target	Block	SQ US	USA	United States	42,499	664.0
BJLFWH	Price Target	Chewy	CHWY US	USA	United States	2,815	168.8
226286	Price Target	CoStar	CSGP US	USA	United States	35,685	159.6
254204	Price Target	Dominion Energy	D US	USA	United States	39,328	248.9
B65SQW	Price Target	Enphase Energy	ENPH US	USA	United States	18,018	561.6
B4MGBG	Price Target	HCA	HCA US	USA	United States	73,622	342.8
243353	Price Target	Hologic	HOLX US	USA	United States	17,501	132.4
244596	Price Target	Huntington Banc	HBAN US	USA	United States	18,417	157.6
261399	Price Target	Illumina	ILMN US	USA	United States	22,042	278.9
BGSXTS	Price Target	Moderna	MRNA US	USA	United States	37,850	413.5
232891	Price Target	Nextera Energy	NEE US	USA	United States	124,581	737.9
BKTNTR	Price Target	Paramount Global	PARA US	USA	United States	9,028	192.1
BYW36M	Price Target	PayPal	PYPL US	USA	United States	67,430	945.1
B01R31	Price Target	Regions Financial	RF US	USA	United States	18,186	148.6
230584	Price Target	Rewvity	RVTY US	USA	United States	13,569	83.2
BYMWL8	Price Target	Transunion	TRU US	USA	United States	13,282	117.5
BLFDXH	Price Target	Unity Software	U US	USA	United States	15,680	387.6
273603	Price Target	US Bancorp	USB US	USA	United States	66,347	428.2
BYXJF6	Price Target	Zillow-C	Z US	USA	United States	9,832	152.2
590294	Ratings Changes	Nokia	NOKIA FH	Europe	Finland	19,189	49.7
B3MBS7	Ratings Changes	Ocado Group	OCDO LN	Europe	United Kingdom	8,002	16.0
204685	Ratings Changes	Albemarle	ALB US	USA	United States	16,954	392.2
BJLFWH	Ratings Changes	Chewy	CHWY US	USA	United States	2,815	168.8
270127	Ratings Changes	Costco	COST US	USA	United States	292,244	1074.6
226727	Ratings Changes	Deckers Outdoor	DECK US	USA	United States	17,469	212.1
231802	Ratings Changes	EOG Resources	EOG US	USA	United States	70,424	373.4
261399	Ratings Changes	Illumina	ILMN US	USA	United States	22,042	278.9
234016	Ratings Changes	M&T Bank	MTB US	USA	United States	22,748	126.4
264880	Ratings Changes	Northrop	NOC US	USA	United States	70,829	351.5
BKTNTR	Ratings Changes	Paramount Global	PARA US	USA	United States	9,028	192.1
280421	Ratings Changes	Sherwin-Williams	SHW US	USA	United States	80,205	383.5
BYMWL8	Ratings Changes	Transunion	TRU US	USA	United States	13,282	117.5
213478	Ratings Changes	United Rentals	URI US	USA	United States	39,155	332.0

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

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Methodology

Source of News Data

In this NewsAlpha analysis, we analyse quantified news data provided by RavenPack. This data-set captures news from approximately 20,000 sources, including regulatory filings, premium news providers, online publications and social media. The data captures news events both in unstructured and structured format across multiple languages. More than 7000 event types (e.g. earnings estimates upgrade, price target downgrade, accident-earthquake) are captured by this data-set including events related to business, geopolitical events and macro-economic data driven events. Data is captured across 192,000 different global entities, including companies, products, people, currencies, commodities, and private organizations. Powered by cloud computing, it takes 300-millisecond for a news event to be captured and quantified. The history includes millisecond-time stamped data since the year 2000. This Big Data set used in the analysis for this report includes more than 5 billion records, or approximately 1 million news events every day.

Events detected in the data set are primarily categorised using Part-of-Speech tagging. Part-of-Speech tagging involves marking up the words in a text body as corresponding to a particular part of speech, based on both its definition, as well as its context. Some classification of news is source-independent and will work on most structured news stories, while others are trained and configured for sources with unstructured news data. Ravenpack deploys multiple Natural Language Processing techniques to detect events and relevant entities. The algorithms not only measure the severity of an event on an entity but also quantify the depth of the severity (e.g. differentiating between Buy-rating vs a Strong Buy-rating, or differentiating between an earthquake of 5 on the Richter scale and 6 on the Richter scale).

Universe of stocks in the analysis

Constituents of the MSCI All Country World Index.

Significant News Events

We have classified a subset of all events as Significant News Events based on the relevance of the news event to the stock and a measure of the positive or negative tone of the news.

Event News Pulse

We have created a daily News Pulse to capture whether trends in news are becoming increasingly positive or negative. We have grouped news events into Major News Event Groups, including Ratings Changes, Guidance, Reported Fundamentals, Above Expectations, Price Target, Credit, Dividend, New Product, M&A Target, M&A Acquirer, Earnings Estimate, and Buybacks. Not every stock in the MSCI AC World index have news item on a daily basis. Aggregating stocks with positively significant events and negatively significant news events over the preceding 180 days provided a good breadth of stocks across the world. For each Major News Event Group, we calculate a daily News Pulse as the proportion of stocks with Significant News Events over the preceding 180 days that are net-positive (stocks with positive news – stocks with negative news/total number of stocks with positive and negative news). If all Significant News Events are positive then the News Pulse would be 100%. For each Major New Event Group, we list the stocks with the most significant news events during the preceding month.



Global, Region and Sector News Pulses

Similarly, we calculate a daily Global News Pulse based on the proportion of all stocks in the analysis with significant news events over the preceding 180 days that are net-positive. In a similar manner, a New Pulse is created for each region including US, Europe, Japan, Asia Pac ex-Japan, and Emerging Markets. We also create a News Pulse for each global sector.

Stock News Pulse

For each stock, we calculate a Stock News Pulse based on the proportion of significant news events over the preceding 90 days that are net-positive. Not every stock has news events on each day of a given month. We found an aggregate of news over the last 90 days provided optimal number of events to help create a “pulse” at the stock level. This Stock News Pulse is used to back-test the impact of news events on subsequent relative stock returns.

Back-testing the Stock News Pulse

The back-testing aims to determine whether the level of the Stock News Pulse (by quintile) impacts the subsequent relative performance of a stock, on average. Similarly, we calculate the change in the Stock News Pulse and test the impact on subsequent stock returns. Thirdly, we test a combination of the level and change in the Stock News Pulse. The period of the back-testing includes data from Jan-04 to Apr-19. For each stock, we use the Stock News Pulse at the end of each month, and calculate performance over the subsequent month. Performance calculations are detailed in the Performance Calculation Methodology section below.

The results of the back-testing of the Stock News Pulse by quintile indicate stocks with the strongest Stock News Pulse (top quintile) performed best, on average, while stocks with the lowest Stock News Pulse (bottom quintile) performed worst. Secondly, back-testing of the change in the Stock News Pulse by quintile indicates the stocks with largest positive change in the Stock News Pulse performed best, while the stocks with the largest negative change in the Stock News Pulse performed worst, on average. Finally, testing shows combining the level and change in the Stock News Pulse added more relative performance than just the level or change in the Stock News Pulse individually.

We define Positive Significant News based on the stocks with a high Stock News Pulse (top quintile) and a positive one-month change in the Stock News Pulse. We define Negative Significant News based on the stocks with a low Stock News Pulse (bottom quintile) and a negative one-month change in the Stock News Pulse. This report includes screens of stocks with Positive Significant News and Negative Significant News.

Performance subsequent to Significant News Events

For each stock in each Major News Event Group we calculated the relative performance from the day of the news event over 1) the next 60 business days, and 2) the next 12 months. For each Major News Event Group, we calculated relative performance from the day of the Significant News Event (“Time Zero”) and calculated an average of relative performance from each Time Zero using data over the whole testing period from Jan-04 to Apr-19. This determined which Significant News Events had a short-term impact on share prices and which had a longer-lasting impact, on average, over the testing period. The results show Buyback events provided the best returns for short-term holding period (less than one month). Positive Price Target events provided the best performance for a medium-term holding period (up to 6 months). Positive Earnings Estimate Events provided the best performance for longer-term periods (up to 12-months).

Performance Calculation Methodology

For the News Pulse, rebalancing and performance calculations are conducted each month-end using data and closing prices corresponding to the market's close on the last business day of each month. Performance is computed on the basis of price return. The average equal-weighted performance of screens is presented relative to the equal-weighted MSCI All Country World Index.

This analysis is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the hypothetical back-tested performance of a particular strategy over the time period indicated. In future periods, market and economic conditions will differ and the same strategy will not necessarily produce the same results. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. In fact, there are frequently sharp differences between back-tested returns and the actual results realized in the actual management of a portfolio. Back-tested performance results are created by applying an investment strategy or methodology to historical data and attempts to give an indication as to how a strategy might have performed during a certain period in the past if the product had been in existence during such time. Back-tested results have inherent limitations including the fact that they are calculated with the full benefit of hindsight, which allows the security selection methodology to be adjusted to maximize the returns. Further, the results shown do not reflect actual trading or the impact that material economic and market factors might have had on a portfolio manager's decision-making under actual circumstances. Back-tested returns do not reflect advisory fees, trading costs, or other fees or expenses.

This report includes factors for informational or descriptive purposes, and inclusion here is not equivalent to a recommendation of the factor or portfolio.

Past performance is no guarantee of future results.

A complete performance record is available upon request.



News Pulse and other factors

The question many investors might have regarding this alternative data (as opposed to Fundamental/Forecast/Macro data) is how orthogonal is the information embedded in news? To answer this question, we combined News Pulse with our existing fundamental factor-based published analysis to ascertain whether news adds to performance of the Contenders, individual styles, the Bunkers, the Boosters, and our Positioning analysis.

Methodology

Universe of stocks in this analysis

Constituents of MSCI AC World Index

News Pulse and Contenders & Defenders Methodology

In this analysis, we combine the output from our momentum-based model, the Contenders & Defenders, with signals from the News Alpha report.

The Contenders are inexpensive stocks with rising earnings and price momentum and the Defenders are expensive stocks with falling earnings and price momentum. In the Contenders & Defenders model we divide stocks along a quadrant based on earnings momentum (y-axis) and price momentum (x-axis) – such that the top-right quadrant include stocks with above average earnings momentum and price momentum and the bottom-left quadrant includes stocks with below average earnings and price momentum. For more detailed methodology please refer to the Global Contenders & Defenders report.

Stocks with rising earnings and price momentum were combined with the News Pulse to test whether signals from news can add to the performance generated from just earnings and price momentum factors. Consistent with the Quadrant Analysis published in the Global Contenders & Defenders report, we screen for stocks with above average Earnings Momentum Rank (> rank of 50) AND above average Price Momentum Rank (>rank of 50) We then divide these stocks with **Positive Significant News (PSN)** and **Negative Significant News (NSN)** and back-tested their performance since 2004. We also compared the performance of the Bottom-Left Quadrant (below average earnings and price momentum) divided into PSN and NSN stocks. Further, we back-tested a strategy, combining Valuation (PE Rank), earnings momentum, and price momentum and dividing this into PSN and NSN characteristics.

In summary, the signals from the news added to the performance on both the long (Top-Right Quadrant + PSN) and short side (Bottom-Left + NSN) in the period of our back-testing. The back-testing including Value did not add any additional returns, on average, over the testing period.

News Pulse and Quantessential Style

Is news just capturing momentum? We tried to answer this frequent question from investors by analysing the style characteristics of the stocks with PSN and NSN. The style definitions used in this analysis are based on the Global Quantessential Styles report, published on a monthly basis. They are briefly summarised below.

Table 51: Global Style Tilts

Style recommendations based on the direction of the Global Wave

Style	Style definition (factors are equal-weighted)	Tilt when Global Wave is rising	Tilt when Global Wave is falling
Value	EV/EBITDA, Price-to-Sales (trailing), PE (forecast)	OVERWEIGHT	OVERWEIGHT
Growth	EPS Revisions, 2-year EPS Growth Forecast, 7-year EPS Growth	OVERWEIGHT	Neutral
Quality	S&P Quality Rank, Free-cash-flow-to-Equity	UNDERWEIGHT	OVERWEIGHT
Risk	Beta, Price Volatility	OVERWEIGHT	UNDERWEIGHT
Momentum	12-month Trend Price	OVERWEIGHT	OVERWEIGHT
Dividend	Reported Div Yield, 5-year Div Growth, Low Payout Ratio	Neutral	OVERWEIGHT
Small Size	Low MCap (total), high Average Daily Turnover / MCap	OVERWEIGHT	UNDERWEIGHT

Source : BofA Global Quantitative Strategy

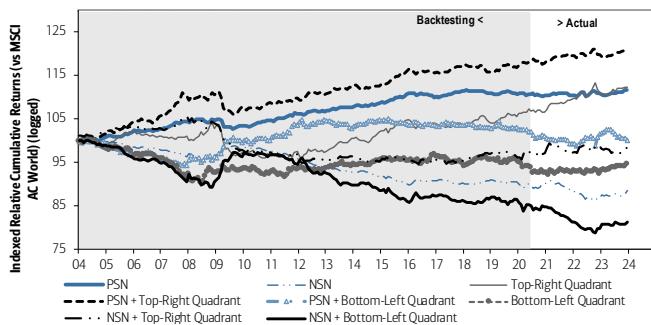
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News Pulse + The Contenders & Defenders

Chart 139: Performance: News Pulse + Earnings Momentum & Price Momentum

Combining news with strong earnings and price momentum added performance



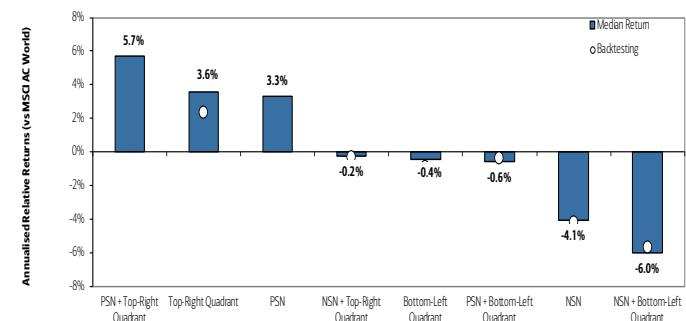
Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 140: Annualized Relative Returns: News Pulse + Earnings Momentum + Price Momentum

PSN+Top-Right Quadrant outperformed by 5.7%p.a.



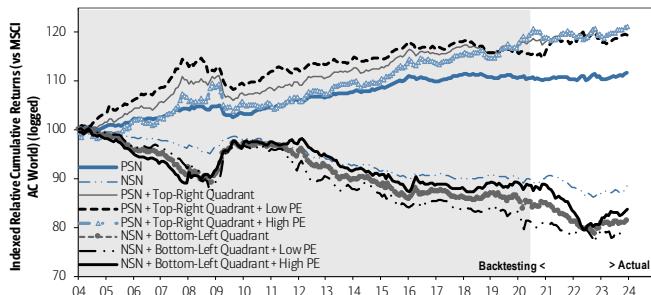
Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 141: Performance: News Pulse + Earnings Momentum + Price Momentum + Valuation

Combining news with strong earnings and price momentum & value added performance



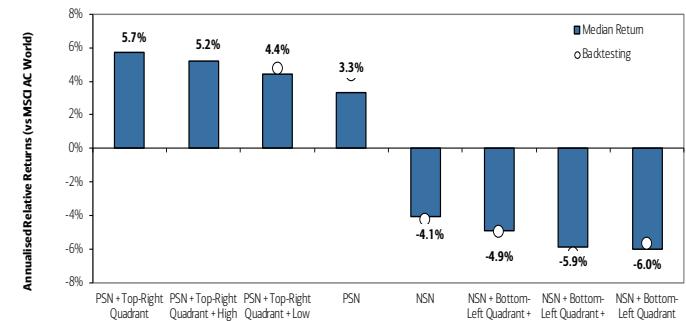
Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 142: Annualized Relative Returns: News Pulse + Earnings Momentum + Price Momentum + Valuation

PSN + Top-Right Quadrant outperformed by 5.7% p.a.



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

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

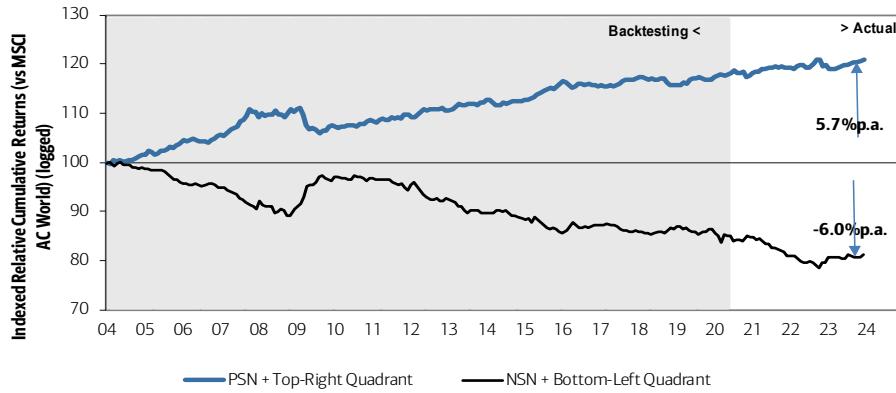
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News Pulse + Earnings Momentum + Price Momentum (Triple Momentum)

Chart 143: Performance News Pulse + Earnings Momentum + Price Momentum (Triple Momentum)

Just combining news with strong earnings and price momentum provides best results



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

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 52: Global Region-Sectors - Triple Momentum

Triple Momentum highest for Emerging ex-Asia - Real Estate and lowest for USA - Banks

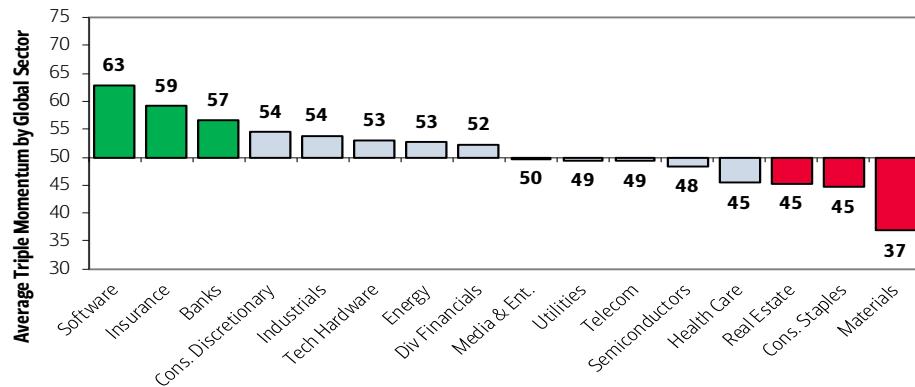
Average Triple Momentum Rank	Banks	Cons. Discretionary	Cons. Staples	Div Financials	Energy	Health Care	Industrials	Insurance	Materials	Media & Ent.	Real Estate	Semiconductors	Software	Tech Hardware	Telecom	Utilities	Region
Asia Pac ex-Japan	56	59	51	61	56	60	53	50	40	49	42	50	52	59	50	52	53
Emerging ex-Asia	69	64	56	52	63	65	56	73	34	27	90			58	71	60	
Europe	54	46	43	51	29	37	52	48	28	59	44	50	69	39	47	49	46
Japan	73	67	47	61	97	54	62	81	53	45	64	62	68	48	52	78	60
United States	24	49	36	48	51	39	52	67	35	51	39	44	64	47	34	35	46
Global	57	54	45	52	53	45	54	59	37	50	45	48	63	53	49	49	

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

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Chart 144: Global Sectors - Average Triple Momentum Rank

Triple Momentum is currently strongest for Software, Insurance, and Banks



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

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Table 53: Asia Pac ex-Japan Country-Sectors - Triple Momentum

Triple Momentum highest for India - Energy and lowest for China - Insurance

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	56	20	29	40	34	62	18	57	51	62	48	11		10	17	41	
China	37	53	43	53	68	58	50	12	35	41	39	30	21	66		42	47
Hong Kong	9	42	71	15		82	33	38			43	12	100			40	42
India	66	69	59	68	66	62	67	77	50	80	74		47		48	76	63
Indonesia	66	71	43		15		57		10					91			50
Malaysia	67	79	40		10	56	96		19			49			47	15	51
New Zealand						55	40						36		86	36	51
Philippines	61	74	44				86				67			33	95	68	
Singapore	36	76	15	78			57			15	35			9	82	43	
South Korea	61	67	66	64	59	57	40		27	43			65	29	39	86	48
Taiwan	53	60	50	50	44		45	67	29				58		55	61	53
Thailand	51	24	29	93	53		13		30		55			52	47	46	43
Asia Pac ex-Japan	54	56	48	58	54	60	49	45	38	45	46	52	47	53	48	51	

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

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Table 54: 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)
Cosan	CSAN3 BZ	Brazil	Energy	7,469	26.4
Ultrapar Participacoes	JGPA3 BZ	Brazil	Energy	6,086	23.9
Parkland Corp	PKI CN	Canada	Energy	5,700	19.0
Li Auto	2015 HK	China	Cons. Discretionary	33,272	125.5
Pop Mart International Group	9992 HK	China	Cons. Discretionary	3,505	14.6
PetroChina-H	357 HK	China	Energy	13,942	75.8
Danske Bank	DANSKE DC	Denmark	Banks	23,048	30.4
Wartsila	WRT1V FH	Finland	Industrials	8,579	11.3
Credit Agricole	ACA FP	France	Banks	43,340	59.2
Adidas	ADS GR	Germany	Cons. Discretionary	36,618	89.8
MunichRe	MUV2 GR	Germany	Insurance	56,546	101.4
Alpha Services	ALPHA GA	Greece	Banks	3,998	13.9
Eurobank Ergasias	EUROB GA	Greece	Banks	6,610	8.7
Piraeus Financial	TPEIR GA	Greece	Banks	4,420	13.5
Mytilineos	MYTIL GA	Greece	Industrials	5,793	8.1
REC	RECL IN	India	Div Financials	13,064	54.6
Shriram Finance	SHFL IN	India	Div Financials	9,262	34.6
Bharat Elec	3HE IN	India	Industrials	16,181	24.5
Bank Rakyat	3BRI IJ	Indonesia	Banks	56,354	39.3
Aisin	7259 JP	Japan	Cons. Discretionary	10,311	32.2
McDonald's (JP)	2702 JP	Japan	Cons. Discretionary	5,762	17.5
INPEX	1605 JP	Japan	Energy	18,732	131.1
Hitachi	5501 JP	Japan	Industrials	66,884	150.8
Tobu Railway	3001 JP	Japan	Industrials	5,639	12.9
Toppan	7911 JP	Japan	Industrials	9,175	19.2
Sompo	3630 JP	Japan	Insurance	17,008	66.1
Mitsubishi Chemical	4188 JP	Japan	Materials	9,231	31.4
Powszechny Zaklad	PZU PW	Poland	Insurance	10,381	17.6
Dallah Health	DALLAH AB	Saudi Arabia	Health Care	4,470	4.9
Co For Coop Insurance	TAWUNIYA AB	Saudi Arabia	Insurance	5,216	12.6
Etihad Etisalat	EEC AB	Saudi Arabia	Telecom	10,143	11.5
Hankook Tire & Tech	161390 KS	South Korea	Cons. Discretionary	4,367	7.3
HD Hyundai	267250 KS	South Korea	Energy	3,882	10.3
Alchip Tech	3661 TT	Taiwan	Semiconductors	7,907	195.0
Acer	2353 TT	Taiwan	Tech Hardware	5,343	30.7
Asustek	2357 TT	Taiwan	Tech Hardware	11,847	72.8
Quanta	2382 TT	Taiwan	Tech Hardware	28,255	482.5
Wiwynn	5669 TT	Taiwan	Tech Hardware	10,397	172.9
3i Group	II LN	United Kingdom	Div Financials	30,040	31.5
Wise - A	WISE LN	United Kingdom	Div Financials	11,418	9.7
Melrose Industries	MRO LN	United Kingdom	Industrials	9,737	23.9
Booking	3KNG US	United States	Cons. Discretionary	126,608	818.8
Progressive	PGR US	United States	Insurance	93,232	349.9
Martin Marietta	MLM US	United States	Materials	30,835	170.2
Micron Tech	MU US	United States	Semiconductors	93,706	943.6

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

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Table 55: 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	GO AU	Australia	Materials	4,676	36.2
Pilbara Minerals	PLS AU	Australia	Materials	8,111	98.7
Brp Inc/Ca-Sub V	DOO CN	Canada	Cons. Discretionary	2,475	22.2
First Quantum	FM CN	Canada	Materials	5,704	75.5
SQM	SQM/B CI	Chile	Industrials	8,610	24.9
PSBC-H	1658 HK	China	Banks	9,485	23.6
WuXi Biologics	2269 HK	China	Health Care	16,116	110.8
COSCO Shipping-H	1919 HK	China	Industrials	3,373	17.8
China Taiping Insurance	366 HK	China	Insurance	3,093	4.3
New China Life-H	1336 HK	China	Insurance	2,016	10.5
China Nat'l Building-H	3323 HK	China	Materials	1,950	8.2
Ganfeng Lithium-H	1772 HK	China	Materials	1,525	16.3
China Vanke-H	2202 HK	China	Real Estate	2,040	22.8
ENN Energy	2688 HK	China	Utilities	8,330	30.0
Moller-Maersk-B	MAERSKB DC	Denmark	Industrials	13,425	43.2
Sartorius Stedim	DIM FP	France	Health Care	24,388	14.8
Bayer	3AYN GR	Germany	Health Care	36,496	129.3
Wacker Chemie	WCH GR	Germany	Materials	6,585	14.2
Swire Prop	1972 HK	Hong Kong	Real Estate	11,837	4.4
Aneka Tambang	ANTM IJ	Indonesia	Materials	2,661	4.3
Yamaha	7951 JP	Japan	Cons. Discretionary	4,327	25.7
Misumi Group	3962 JP	Japan	Industrials	4,826	19.6
PPB Group	PEP MK	Malaysia	Cons. Staples	4,483	2.1
Boliden	3OL SS	Sweden	Materials	8,535	32.9
Swatch Group	JHR SW	Switzerland	Cons. Discretionary	7,859	29.5
Julius Baer	3AER SW	Switzerland	Div Financials	11,540	28.7
Voltronic Power	5409 TT	Taiwan	Industrials	4,888	9.0
Asia Cement	1102 TT	Taiwan	Materials	4,790	7.6
Banpu Public	3ANPU TB	Thailand	Energy	1,996	24.0
Burberry	3RBY LN	United Kingdom	Cons. Discretionary	6,561	24.1
Hargreaves Lansd	HL LN	United Kingdom	Div Financials	4,438	10.2
St James's Place	STJ LN	United Kingdom	Div Financials	4,781	12.5
Phoenix Group	PHNX LN	United Kingdom	Insurance	6,833	11.2
Anglo American (UK)	AAL LN	United Kingdom	Materials	33,602	64.3
WPP	WPP LN	United Kingdom	Media & Ent.	10,318	19.3
Hasbro	HAS US	United States	Cons. Discretionary	7,084	102.7
Estee Lauder	EL US	United States	Cons. Staples	33,946	400.9
Mettler-Toledo	MTD US	United States	Health Care	26,521	191.7
Moderna	MRNA US	United States	Health Care	37,850	391.0
Pfizer	PFE US	United States	Health Care	162,547	911.2
Rewity	RVTY US	United States	Health Care	13,569	84.3
Paycom Software	PAYC US	United States	Industrials	12,500	179.5
Southwest Airlines	LUV US	United States	Industrials	17,202	225.9
Albemarle	ALB US	United States	Materials	16,954	382.4
FMC	FMC US	United States	Materials	7,864	127.7

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

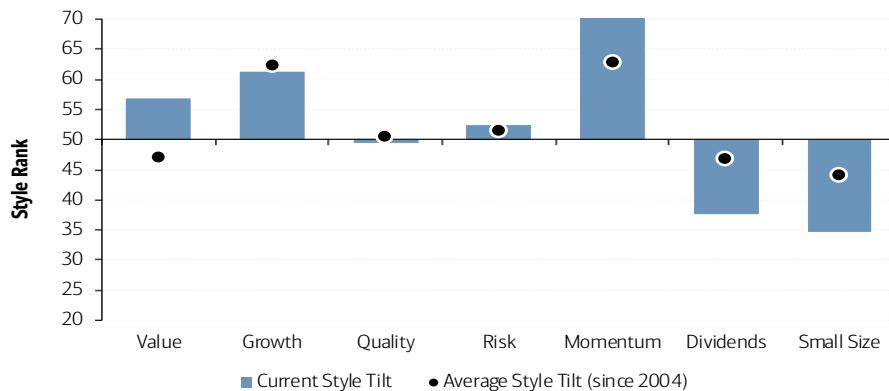
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News Pulse + Style Characteristics

Chart 145: Style tilt of Positive Significant News (PSN) stocks

PSN overweight Momentum style

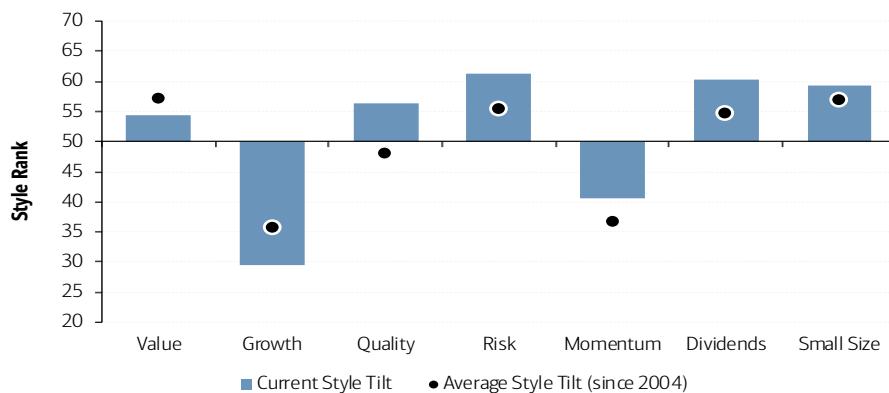


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

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Chart 146: Style tilt of Negative Significant News (NSN) stocks

NSN overweight Risk style

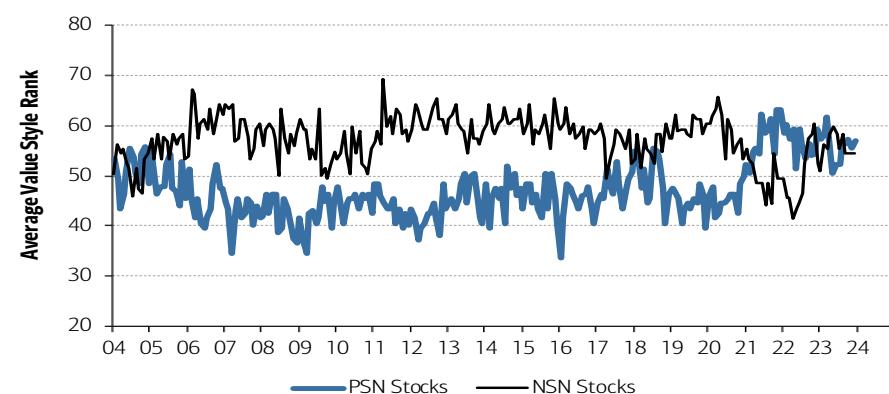


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

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Chart 147: Historical VALUE tilt of Positive/Negative Significant News (PSN/NSN) Stocks

Combining news with Value style

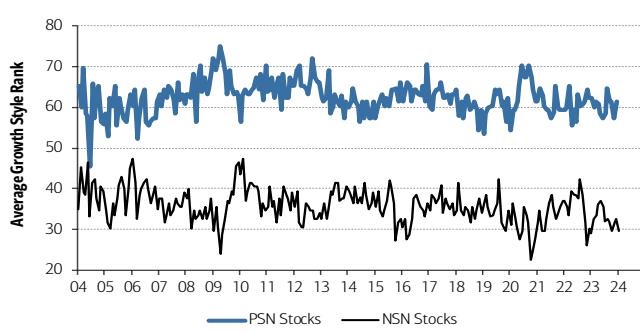


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

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Chart 148: Historical GROWTH tilt of Positive/Negative Significant News (PSN/NSN) Stocks

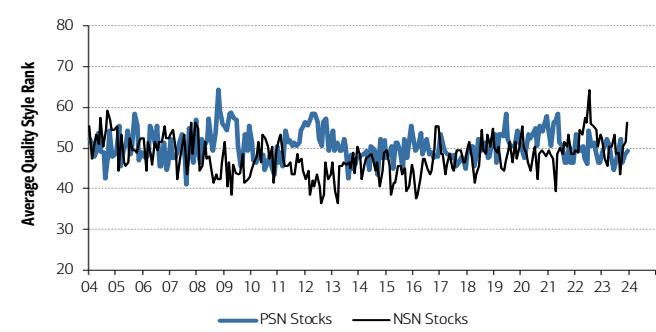
Combining news with Growth style



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

Chart 149: Historical QUALITY tilt of Positive/Negative Significant News (PSN/NSN) Stocks

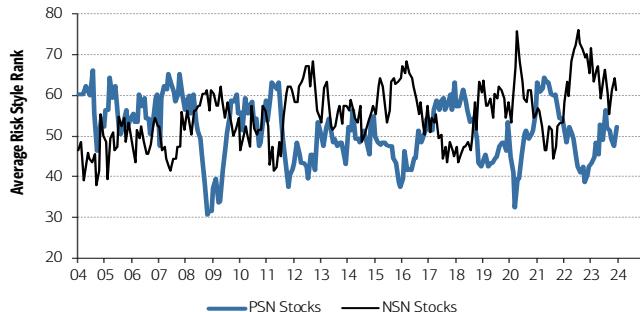
Combining news with Quality style



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

Chart 150: Historical RISK tilt of Positive/Negative Significant News (PSN/NSN) Stocks

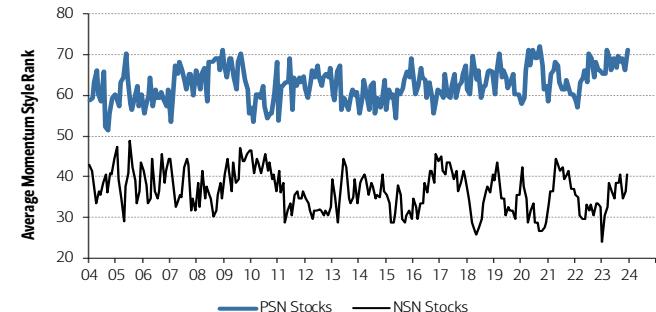
Combining news with Risk style



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

Chart 151: Historical MOMENTUM tilt of Positive/Negative Significant News (PSN/NSN) Stocks

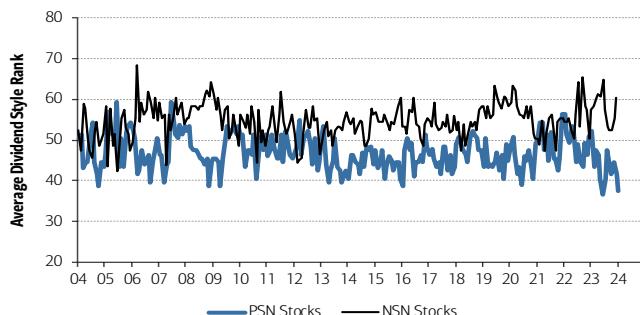
Combining news with Momentum style



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

Chart 152: Historical DIVIDEND tilt of Positive/Negative Significant News(PSN/NSN) Stocks

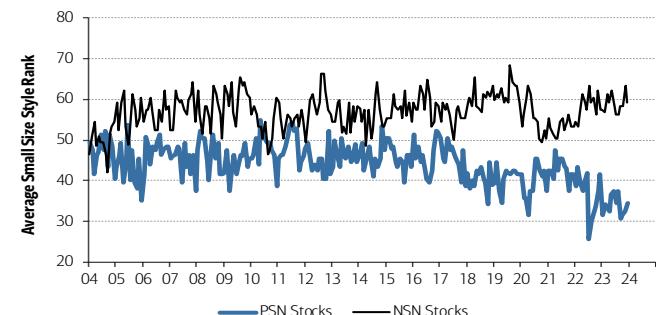
Combining news with Dividend style



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

Chart 153: Historical SMALL SIZE tilt of Positive/Negative Significant News (PSN/NSN) Stocks

Combining news with Small size style

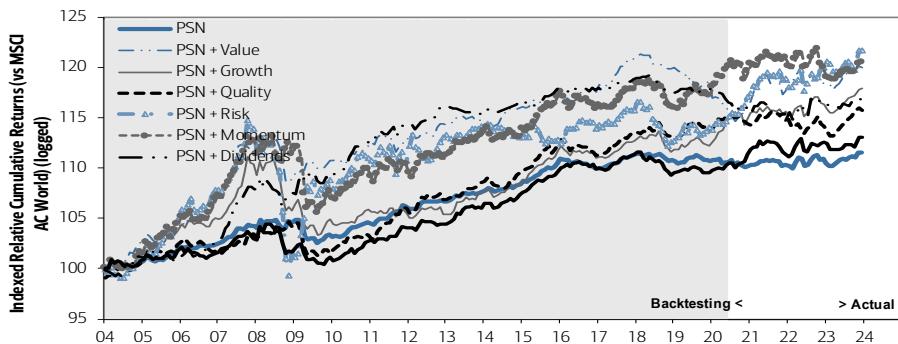


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
BofA GLOBAL RESEARCH

News Pulse + Style Performance Summary

Chart 154: Performance: Positive Significant News (PSN) + Quantessential Styles (Top Quintile)

Combining positive news with styles added performance



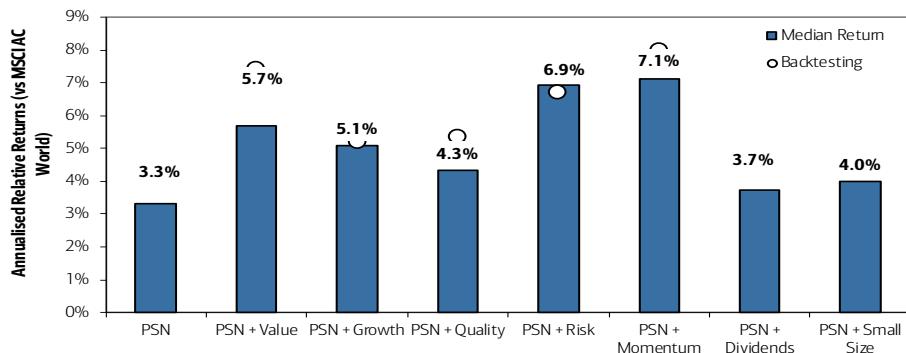
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 155: Annualized Relative Returns: Positive Significant News (PSN) + Quantessential Styles (top quintile)

Combining positive news with styles added performance



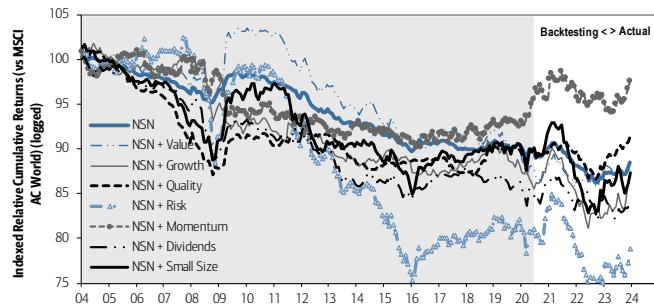
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

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Chart 156: Performance: Negative Significant News (NSN) + Quantessential Styles (Top Quintile)

Combining negative news with styles added performance

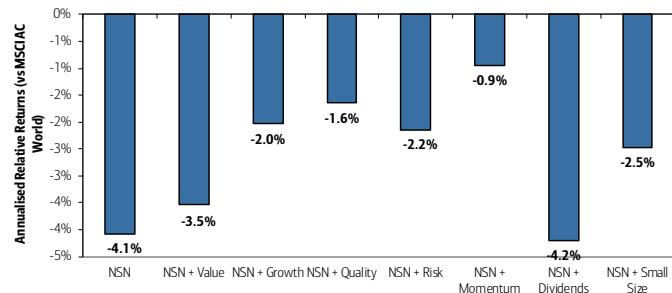


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 157: Annualized Relative Returns: Negative Significant News (NSN) + Quantessential Styles (top quintile)

Combining negative news with styles added performance



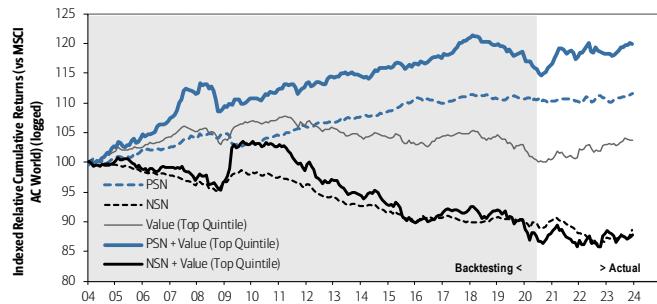
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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News Pulse + Quantessential Value

Chart 158: Performance: News Pulse + VALUE (top quintile)

Combining news with Value style added performance

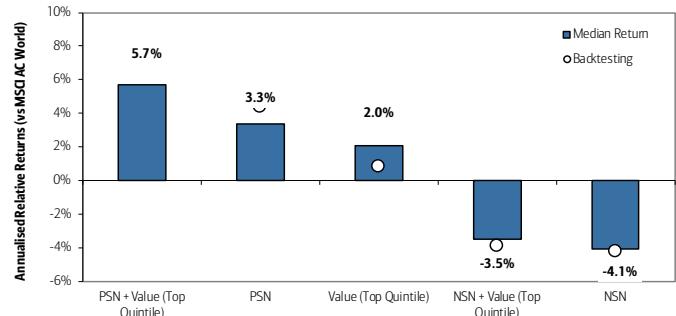


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 159: Annualized Relative Returns: News Pulse + Value (top quintile)

PSN + Value (Top Quintile) outperformed by 5.7% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 56: PSN Stocks with high Quantessential Value ranks

Combining positive news with Value style

BBG Code	Short Name	Country	Sub-Industry	MCAP
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
PKI CN	Parkland Corp	Canada	Oil & Gas Refining & Marketing	5,700
857 HK	PetroChina-H	China	Integrated Oil & Gas	13,942
2600 HK	CHALCO-H	China	Aluminum	1,970
358 HK	Jiangxi Copper-H	China	Copper	1,962
836 HK	China Resources Power	China	Independent Power Producers & Energy Traders	9,635
ACA FP	Credit Agricole	France	Diversified Banks	43,340
EN FP	Bouygues	France	Construction & Engineering	14,379
FGR FP	Eiffage	France	Construction & Engineering	10,503
CS FP	Axa SA	France	Multi-line Insurance	73,460
ORA FP	Orange	France	Integrated Telecommunication Services	30,278
CON GR	Continental Ag	Germany	Automotive Parts & Equipment	16,994
HEI GR	Heidelberg Materials	Germany	Construction Materials	16,647
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
TPERI GA	Piraeus Financial	Greece	Diversified Banks	4,420
ASII JI	Astra Int'l	Indonesia	Industrial Conglomerates	14,856
7259 JP	Aisin	Japan	Automotive Parts & Equipment	10,311
5019 JP	Idemitsu	Japan	Oil & Gas Refining & Marketing	8,108
8630 JP	Sompo	Japan	Property & Casualty Insurance	17,008
4188 JP	Mitsubishi Chemical	Japan	Diversified Chemicals	9,231
9532 JP	Osaka Gas	Japan	Gas Utilities	8,704
AGN NA	Aegon	Netherlands	Life & Health Insurance	11,767
PGE PW	PGE	Poland	Electric Utilities	4,952
021240 KS	Coway	South Korea	Household Appliances	3,278
267250 KS	HD Hyundai	South Korea	Oil & Gas Refining & Marketing	3,882
028260 KS	Samsung C&T	South Korea	Industrial Conglomerates	18,661
SAN SM	Banco Santander	Spain	Diversified Banks	67,569
SREN SW	Swiss Re	Switzerland	Reinsurance	35,671
PTT TB	PTT	Thailand	Integrated Oil & Gas	29,917
TOP TB	Thai Oil	Thailand	Oil & Gas Refining & Marketing	3,518

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

News Pulse + Quantessential Growth

Chart 160: Performance News Pulse + GROWTH (top quintile)

Combining news with Growth style added performance

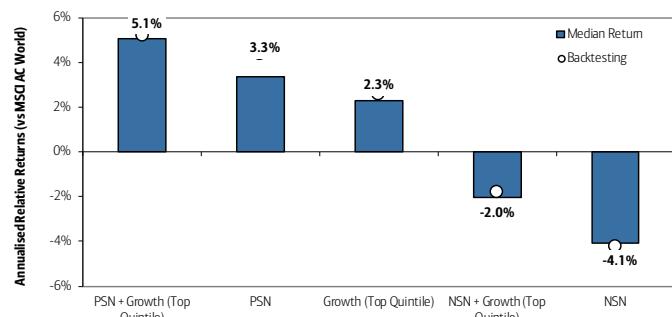


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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BofA GLOBAL RESEARCH

Chart 161: Annualized Relative Returns: News Pulse + Growth (top quintile)

PSN + Growth (Top Quintile) outperformed by 5.1% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Table 57: PSN Stocks with high Quantessential Growth ranks

Combining positive news with Growth style

BBG Code	Short Name	Country	Sub-Industry	MCAP
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
CCO CN	Cameco	Canada	Coal & Consumable Fuels	18,774
PKL CN	Parkland Corp	Canada	Oil & Gas Refining & Marketing	5,700
CSU CN	Constellation Software	Canada	Application Software	52,798
2015 HK	Li Auto	China	Automobile Manufacturers	33,272
9961 HK	Trip.com	China	Hotels Resorts & Cruise Lines	22,971
FUTU US	Futu-ADR	China	Investment Banking & Brokerage	5,029
2600 HK	CHALCO-H	China	Aluminum	1,970
1024 HK	Kuaishou Tech	China	Interactive Media & Services	24,347
1810 HK	Xiaomi Corp-B	China	Technology Hardware Storage & Peripherals	40,857
EUROB GA	Eurobank Ergasias	Greece	Diversified Banks	6,610
241 HK	Alibaba Health	Hong Kong	Drug Retail	7,349
SONACOMS IN	SonaBlw Precision Forgings	India	Automotive Parts & Equipment	4,534
TRENT IN	Trent	India	Apparel Retail	13,051
UTCEM IN	Ultratech Cement	India	Construction Materials	36,437
6701 JP	NEC	Japan	IT Consulting & Other Services	16,160
9532 JP	Osaka Gas	Japan	Gas Utilities	8,704
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
2382 TT	Quanta	Taiwan	Technology Hardware Storage & Peripherals	28,255
DELTA TB	Delta Electronics (Thai)	Thailand	Electronic Components	32,160
SAHOL TI	Sabanci	Turkiye	Diversified Banks	4,176
WISE LN	Wise - A	United Kingdom	Transaction & Payment Processing Services	11,418
HES US	Hess Corp	United States	Oil & Gas Exploration & Production	44,266
ERIE US	Erie Indemnity-Cl A	United States	Property & Casualty Insurance	15,470
PGR US	Progressive	United States	Property & Casualty Insurance	93,232
MLM US	Martin Marietta	United States	Construction Materials	30,835
PINS US	Pinterest- Class A	United States	Interactive Media & Services	21,553
CRWD US	CrowdStrike	United States	Systems Software	57,717
SNPS US	Synopsys	United States	Application Software	78,309
ZS US	Zscaler	United States	Systems Software	32,607

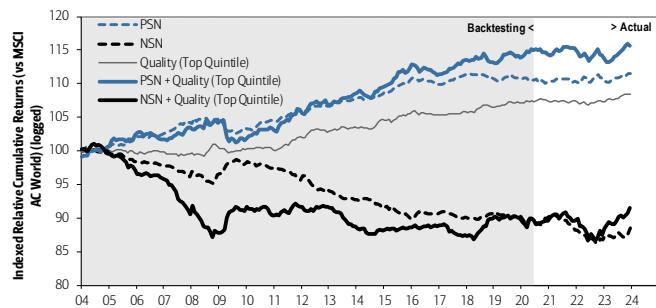
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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News Pulse + Quantessential Quality

Chart 162: Performance: News Pulse + QUALITY (top quintile)

Combining news with Quality style added performance

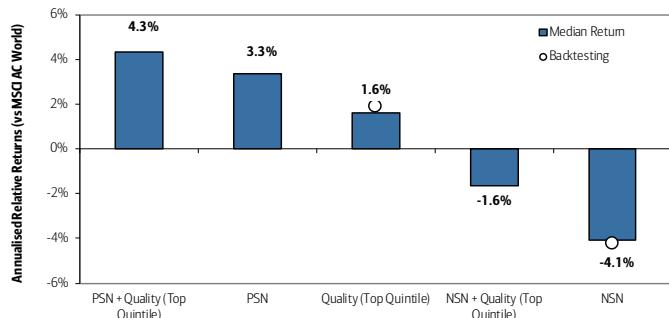


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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Chart 163: Annualized Relative Returns: News Pulse + Quality (top quintile)

PSN + Quality (Top Quintile) outperformed by 4.3% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 58: PSN Stocks with high Quantessential Quality ranks

Combining positive news with Quality style

BBG Code	Short Name	Country	Sub-Industry	MCAP
CSU CN	Constellation Software	Canada	Application Software	52,798
FUTU US	Futu-ADR	China	Investment Banking & Brokerage	5,029
867 HK	China Medical System	China	Pharmaceuticals	4,346
IPN FP	Ipsen	France	Pharmaceuticals	9,990
FGR FP	Eiffage	France	Construction & Engineering	10,503
P911 GR	Dr Ing Hc F Porsche Ag	Germany	Automobile Manufacturers	40,203
NEST IN	Nestle India	India	Packaged Foods & Meats	30,797
HNAL IN	Hindustan Aeronautics	India	Aerospace & Defense	22,535
SBLIFE IN	SBI Life Insurance	India	Life & Health Insurance	17,235
CHKP US	Check Point	Israel	Systems Software	17,875
TAWUNIYA AB	Co For Coop Insurance	Saudi Arabia	Multi-line Insurance	5,216
VOD SJ	Vodacom	South Africa	Wireless Telecommunication Services	12,044
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
6669 TT	Wiwynn	Taiwan	Technology Hardware Storage & Peripherals	10,397
SAHOL TI	Sabanci	Turkye	Diversified Banks	4,176
ADB UH	Abu Dhabi Islamic Bank	United Arab Emir	Diversified Banks	10,008
EAND LH	Emirates Telecom	United Arab Emir	Integrated Telecommunication Services	46,506
WISE LN	Wise - A	United Kingdom	Transaction & Payment Processing Services	11,418
GSK LN	GSK	United Kingdom	Pharmaceuticals	75,705
JPM US	JPMorgan Chase	United States	Diversified Banks	494,325
ABBV US	AbbVie	United States	Biotechnology	273,529
LLY US	Eli Lilly	United States	Pharmaceuticals	553,363
AOS US	A.O. Smith	United States	Building Products	10,271
VLTQ US	Verato	United States	Environmental & Facilities Services	20,260
WSO US	Watsco	United States	Trading Companies & Distributors	14,379
ERIE US	Erie Indemnity-Cl A	United States	Property & Casualty Insurance	15,470
PGR US	Progressive	United States	Property & Casualty Insurance	93,232
CRWD US	CrowdStrike	United States	Systems Software	57,717
IBM US	IBM	United States	IT Consulting & Other Services	148,995
ZS US	Zscaler	United States	Systems Software	32,607

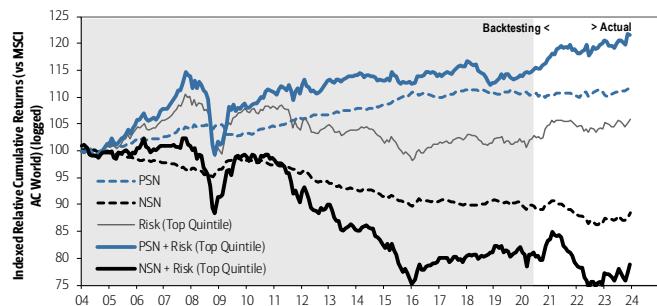
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

BofA GLOBAL RESEARCH

News Pulse + Quantessential Risk

Chart 164: Performance News Pulse + RISK (top quintile)

Combining news with Risk style added performance

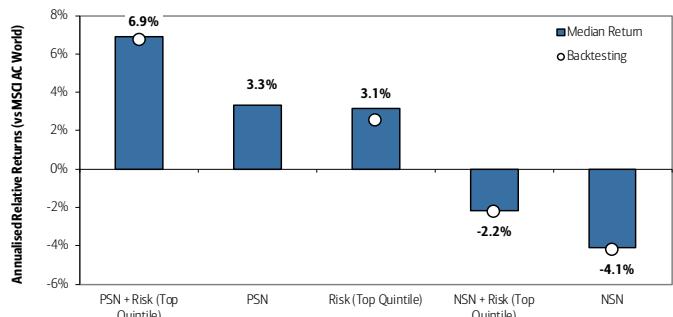


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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Chart 165: Annualized Relative Returns: News Pulse + Risk (top quintile)

PSN + Risk (Top Quintile) outperformed by 6.9% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 59: PSN Stocks with high Quantessential Risk ranks

Combining positive news with Risk style

BBG Code	Short Name	Country	Sub-Industry	MCAP
FMG AU	Fortescue	Australia	Steel	60,969
VBRB3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
CSAN3 BZ	Cosan	Brazil	Oil & Gas Refining & Marketing	7,469
CCO CN	Cameco	Canada	Coal & Consumable Fuels	18,774
PKI CN	Parkland Corp	Canada	Oil & Gas Refining & Marketing	5,700
FUTU US	Futu-ADR	China	Investment Banking & Brokerage	5,029
1810 HK	Xiaomi Corp-B	China	Technology Hardware Storage & Peripherals	40,857
URW FP	Unibail-Rodamco-Westfield	France	Retail REIT's	10,278
PS11 GR	Dr Ing Hc F Porsche Ag	Germany	Automobile Manufacturers	40,203
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
EUROB GA	Eurobank Ergasias	Greece	Diversified Banks	6,610
TPERIR GA	Piraeus Financial	Greece	Diversified Banks	4,420
RECL IN	REC	India	Specialized Finance	13,064
COPOWER IN	CG Power	India	Electrical Components & Equipment	8,340
PGE PW	PGE	Poland	Electric Utilities	4,952
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
SKAB SS	Skanska	Sweden	Construction & Engineering	7,243
3661 TT	Alchip Tech	Taiwan	Semiconductors	7,907
2353 TT	Acer	Taiwan	Technology Hardware Storage & Peripherals	5,343
2376 TT	Gigabyte Tech	Taiwan	Technology Hardware Storage & Peripherals	5,510
TOP TB	Thai Oil	Thailand	Oil & Gas Refining & Marketing	3,518
DELTA TB	Delta Electronics (Thai)	Thailand	Electronic Components	32,160
III LN	3i Group	United Kingdom	Asset Management & Custody Banks	30,040
WISE LN	Wise - A	United Kingdom	Transaction & Payment Processing Services	11,418
MRO LN	Melrose Industries	United Kingdom	Aerospace & Defense	9,737
VLTO US	Veritec	United States	Environmental & Facilities Services	20,260
PINS US	Pinterest- Class A	United States	Interactive Media & Services	21,553
CRWD US	CrowdStrike	United States	Systems Software	57,717
CYBR US	CyberArk Software	United States	Systems Software	9,149
EPAM US	Epmn Systems	United States	IT Consulting & Other Services	17,234

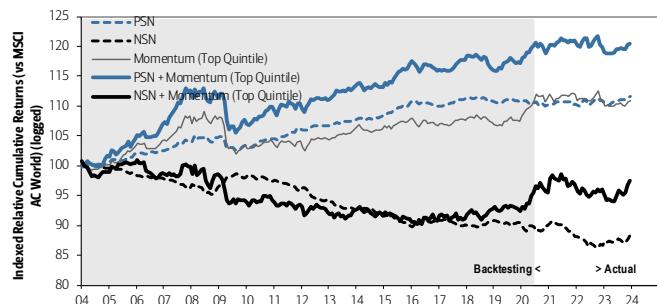
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
BofA GLOBAL RESEARCH



News Pulse + Quantessential Momentum

Chart 166: Performance: News Pulse + MOMENTUM (top quintile)

Combining news with Momentum style added performance

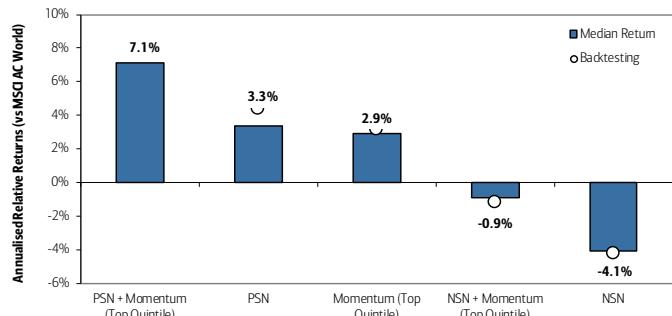


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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Chart 167: Annualized Relative Returns: News Pulse + Momentum (top quintile)

PSN + Momentum (Top Quintile) outperformed by 7.1% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 60: PSN Stocks with high Quantessential Momentum ranks

Combining positive news with Momentum style

BBG Code	Short Name	Country	Sub-Industry	MCAP
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
CSAN3 BZ	Cosan	Brazil	Oil & Gas Refining & Marketing	7,469
CCO CN	Cameco	Canada	Coal & Consumable Fuels	18,774
PKC CN	Parkland Corp	Canada	Oil & Gas Refining & Marketing	5,700
FUTU US	Futu-ADR	China	Investment Banking & Brokerage	5,029
1810 HK	Xiaomi Corp-B	China	Technology Hardware Storage & Peripherals	40,857
URW FP	Unibail-Rodamco-Westfield	France	Retail REITs	10,278
P911 GR	Dr Ing H C F Porsche Ag	Germany	Automobile Manufacturers	40,203
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
EUROB GA	Eurobank Ergasias	Greece	Diversified Banks	6,610
TPEIRGA	Piraeus Financial	Greece	Diversified Banks	4,420
RECL IN	REC	India	Specialized Finance	13,064
COPOWER IN	CG Power	India	Electrical Components & Equipment	8,340
PGE PW	PGE	Poland	Electric Utilities	4,952
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
SKAB SS	Skanska	Sweden	Construction & Engineering	7,243
3661 TT	Alchip Tech	Taiwan	Semiconductors	7,907
2353 TT	Acer	Taiwan	Technology Hardware Storage & Peripherals	5,343
2376 TT	Gigabyte Tech	Taiwan	Technology Hardware Storage & Peripherals	5,510
TOP TB	Thai Oil	Thailand	Oil & Gas Refining & Marketing	3,518
DELTA TB	Delta Electronics (Thailand)	Thailand	Electronic Components	32,160
III LN	3i Group	United Kingdom	Asset Management & Custody Banks	30,040
WISE LN	Wise - A	United Kingdom	Transaction & Payment Processing Services	11,418
MIRO LN	Melrose Industries	United Kingdom	Aerospace & Defense	9,737
VLTO US	Verilox	United States	Environmental & Facilities Services	20,260
PINS US	Pinterest- Class A	United States	Interactive Media & Services	21,553
CRWD US	CrowdStrike	United States	Systems Software	57,717
CYBR US	CyberArk Software	United States	Systems Software	9,149
EPAM US	Ebam Systems	United States	IT Consulting & Other Services	17,234

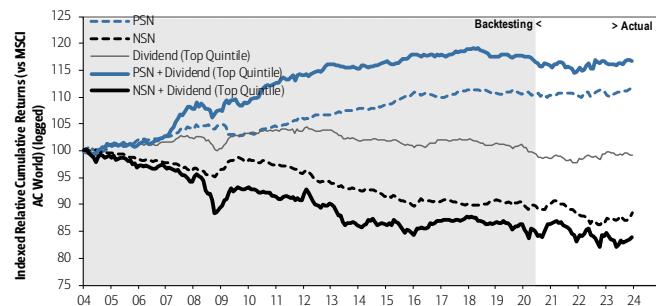
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack

BofA GLOBAL RESEARCH

News Pulse + Quantessential Dividend

Chart 168: Performance News Pulse + DIVIDENDS (top quintile)

Combining news with Dividend style added performance

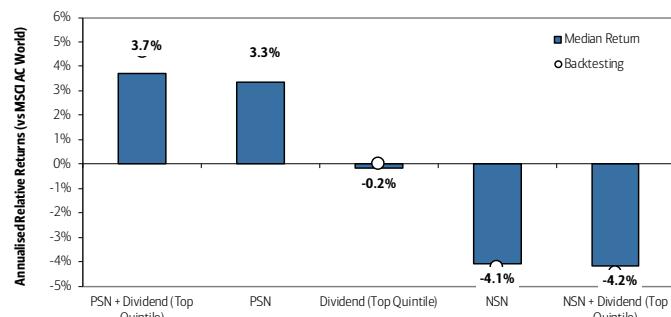


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BofA GLOBAL RESEARCH

Chart 169: Annualized Relative Returns: News Pulse + Dividends (top quintile)

PSN + Dividend (Top Quintile) outperformed by 3.7% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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Table 61: PSN Stocks with high Quantessential Dividend ranks

Combining positive news with Dividend style

BBG Code	Short Name	Country	Sub-Industry	MCAP
ALD AU	Ampol	Australia	Oil & Gas Refining & Marketing	5,878
FMG AU	Fortescue	Australia	Steel	60,969
857 HK	PetroChina-H	China	Integrated Oil & Gas	13,942
867 HK	China Medical System	China	Pharmaceuticals	4,346
1177 HK	Sino Biopharm.	China	Pharmaceuticals	8,355
358 HK	Jiangxi Copper-H	China	Copper	1,962
DANSKE DC	Danske Bank	Denmark	Diversified Banks	23,048
ACA FP	Credit Agricole	France	Diversified Banks	43,340
GET FP	Getlink	France	Highways & Railtracks	10,064
19 HK	Swire Pacific	Hong Kong	Diversified Real Estate Activities	7,253
SONACOMS IN	SonaBlw Precision Forgings	India	Automotive Parts & Equipment	4,534
RECL IN	REC	India	Specialized Finance	13,064
INFOE IN	Info Edge	India	Interactive Media & Services	7,969
ASII IJ	Astra Int'l	Indonesia	Industrial Conglomerates	14,856
5019 JP	Idemitsu	Japan	Oil & Gas Refining & Marketing	8,108
GAM MK	Gamuda	Malaysia	Construction & Engineering	2,694
INGA NA	ING	Netherlands	Diversified Banks	54,081
ASRNL NA	ASR Nederland	Netherlands	Multi-line Insurance	9,968
BAP US	Credicorp	Peru	Diversified Banks	11,927
BDO PM	BDO Unibank	Philippines	Diversified Banks	12,415
EDPR PL	Edp Renovaveis S	Portugal	Renewable Electricity	20,954
OCBC SP	OCBC	Singapore	Diversified Banks	44,495
SAN SM	Banco Santander	Spain	Diversified Banks	67,569
SKAB SS	Skanska	Sweden	Construction & Engineering	7,243
6669 TT	Wiwynn	Taiwan	Technology Hardware Storage & Peripherals	10,397
TOP TB	Thai Oil	Thailand	Oil & Gas Refining & Marketing	3,518
SAHOL TI	Sabanci	Turkiye	Diversified Banks	4,176
ADIB UH	Abu Dhabi Islamic Bank	United Arab Emir:	Diversified Banks	10,008
WTB LN	Whitbread	United Kingdom	Hotels Resorts & Cruise Lines	9,007
III LN	3i Group	United Kingdom	Asset Management & Custody Banks	30,040

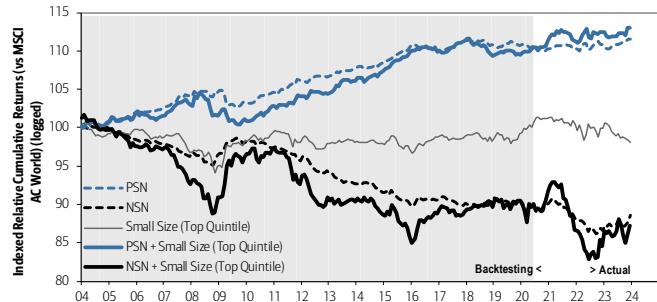
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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News Pulse + Quantessential Small Size

Chart 170: Performance: News Pulse + SMALL SIZE (top quintile)

Combining news with Small Size style added performance

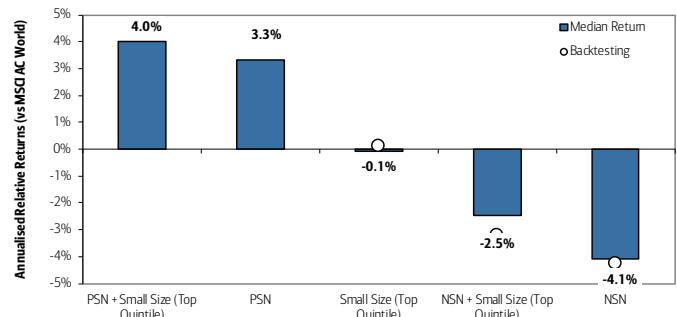


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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Chart 171: Annualized Relative Returns: News Pulse + Small Size (top quintile)

PSN + Small Size (Top Quintile) outperformed by 4.0% p.a.



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 62: PSN Stocks with high Quantessential Small Size ranks

Combining positive news with Small Size style

BBG Code	Short Name	Country	Sub-Industry	MCAP
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
2333 HK	Great Wall Motor-H	China	Automobile Manufacturers	3,011
FUTUUS	Futu-ADR	China	Investment Banking & Brokerage	5,029
1548 HK	Genscript Biotech	China	Life Sciences Tools & Services	5,392
753 HK	Air China-H	China	Passenger Airlines	2,887
1055 HK	China Southern Air.-H	China	Passenger Airlines	1,969
2600 HK	CHALCO-H	China	Aluminum	1,970
358 HK	Jiangxi Copper-H	China	Copper	1,962
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
TPERI GA	Piraeus Financial	Greece	Diversified Banks	4,420
7276 JP	Koito Mfg	Japan	Automotive Parts & Equipment	5,013
9202 JP	ANA	Japan	Passenger Airlines	10,512
GAM MK	Gamuda	Malaysia	Construction & Engineering	2,694
BVT SJ	Bidvest	South Africa	Industrial Conglomerates	4,694
021240 KS	Coway	South Korea	Household Appliances	3,278
271560 KS	Orion Corp	South Korea	Packaged Foods & Meats	3,564
267250 KS	HD Hyundai	South Korea	Oil & Gas Refining & Marketing	3,882
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
3661 TT	Alchip Tech	Taiwan	Semiconductors	7,907
2353 TT	Acer	Taiwan	Technology Hardware Storage & Peripherals	5,343
2376 TT	Gigabyte Tech	Taiwan	Technology Hardware Storage & Peripherals	5,510
6669 TT	Wiwynn	Taiwan	Technology Hardware Storage & Peripherals	10,397
TOP TB	Thai Oil	Thailand	Oil & Gas Refining & Marketing	3,518
SAHOL TI	Sabanci	Turkiye	Diversified Banks	4,176
AOS US	A.O. Smith	United States	Building Products	10,271
HIL US	Huntington Ingalls	United States	Aerospace & Defense	10,351
WSO US	Watco	United States	Trading Companies & Distributors	14,379
AIZ US	Assurant Inc	United States	Multi-line Insurance	8,934
PINS US	Pinterest- Class A	United States	Interactive Media & Services	21,553
CYBR US	CyberArk Software	United States	Systems Software	9,149

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

News Pulse + Boosters

Chart 172: Performance News Pulse + BOOSTERS (Top Quintile)

Combining news with Boosters (cyclical stocks) added performance

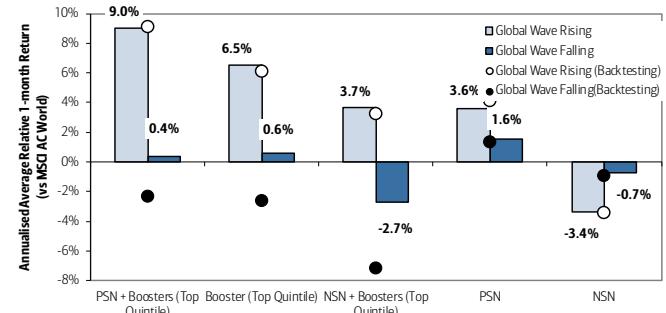


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Chart 173: Annualized Relative Returns: News Pulse + BOOSTERS in Rising/Falling Global Wave

Stocks with strong Boosters characteristics and positive news have returned 9.0% p.a



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 63: PSN Stocks with high Boosters ranks

Combining positive news with Boosters (cyclical stocks)

BBG Code	Short Name	Country	Sub-Industry	MCAP
VBBR3 BZ	Vibra Energia	Brazil	Automotive Retail	5,459
CSAN3 BZ	Cosan	Brazil	Oil & Gas Refining & Marketing	7,469
PRLCN	Parkland Corp	Canada	Oil & Gas Refining & Marketing	5,700
2333 HK	Great Wall Motor-H	China	Automobile Manufacturers	3,011
FUTU US	Futu-ADR	China	Investment Banking & Brokerage	5,029
857 HK	PetroChina-H	China	Integrated Oil & Gas	13,942
1055 HK	China Southern Air.-H	China	Passenger Airlines	1,969
2600 HK	CHALCO-H	China	Aluminum	1,970
1810 HK	Xiaomi Corp-B	China	Technology Hardware Storage & Peripherals	40,857
HEI GR	Heidelberg Materials	Germany	Construction Materials	16,647
ALPHA GA	Alpha Services	Greece	Diversified Banks	3,998
EUROB GA	Eurobank Ergasias	Greece	Diversified Banks	6,610
TPEIRGA	Piraeus Financial	Greece	Diversified Banks	4,420
RECL IN	REC	India	Specialized Finance	13,064
7259 JP	Aisin	Japan	Automotive Parts & Equipment	10,311
8795 JP	T&D	Japan	Life & Health Insurance	9,361
6701 JP	NEC	Japan	IT Consulting & Other Services	16,160
9532 JP	Osaka Gas	Japan	Gas Utilities	8,704
AGN NA	Aegon	Netherlands	Life & Health Insurance	11,767
PGE PW	PGE	Poland	Electric Utilities	4,952
021240 KS	Coway	South Korea	Household Appliances	3,278
035900 KS	JYP Entertainment	South Korea	Movies & Entertainment	2,792
3661 TT	Alchip Tech	Taiwan	Semiconductors	7,907
2353 TT	Acer	Taiwan	Technology Hardware Storage & Peripherals	5,343
2357 TT	Asustek	Taiwan	Technology Hardware Storage & Peripherals	11,847
2376 TT	Gigabyte Tech	Taiwan	Technology Hardware Storage & Peripherals	5,510
2382 TT	Quanta	Taiwan	Technology Hardware Storage & Peripherals	28,255
6669 TT	Wiwynn	Taiwan	Technology Hardware Storage & Peripherals	10,397
MRO LN	Melrose Industries	United Kingdom	Aerospace & Defense	9,737
CYBR US	CyberArk Software	United States	Systems Software	9,149

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

Table 64: NSN Stocks with high Boosters ranks

Combining negative news with Boosters (cyclical stocks)

BBG Code	Short Name	Country	Sub-Industry	MCAP
SANB11 BZ	Banco Santander Brasil	Brazil	Diversified Banks	24,930
DOO CN	Btp Inc/Ca/Sub V	Canada	Leisure Products	2,475
AC CN	Air Canada	Canada	Passenger Airlines	5,081
LUN CN	Lundin Mining	Canada	Copper	6,357
9688 HK	Zai Lab	China	Biotechnology	2,709
9626 HK	Bilibili-Class Z	China	Interactive Home Entertainment	3,924
6098 HK	Country Garden Serv	China	Real Estate Operating Companies	2,890
DHER GR	Delivery Hero	Germany	Restaurants	7,478
1COV GR	Covestro	Germany	Specialty Chemicals	11,256
1368 HK	Xtep International	Hong Kong	Footwear	1,490
GLBE US	Global-E Online	Israel	Broadline Retail	6,509
7267 JP	Honda	Japan	Automobile Manufacturers	56,509
HARSJ	Harmony	South Africa	Gold	4,049
ADEN SW	Adeco	Switzerland	Human Resource & Employment Services	8,259
3443 TT	Global Unichip	Taiwan	Semiconductors	7,598
IHG LN	InterContinental Hotels	United Kingdom	Hotels Resorts & Cruise Lines	14,943
OODO LN	Ocado Group	United Kingdom	Food Retail	8,002
CZR US	Caesars Entertain	United States	Casinos & Gaming	10,093
DKS US	Dick's Sporting	United States	Other Specialty Retail	9,030
ETSY US	Etsy Inc	United States	Broadline Retail	9,970
GM US	GM	United States	Automobile Manufacturers	49,423
ALLY US	Ally Financial	United States	Consumer Finance	10,533
TOST US	Toast-Class A	United States	Transaction & Payment Processing Services	7,502
APA US	APA Corp	United States	Oil & Gas Exploration & Production	11,025
MAS US	Masco	United States	Building Products	15,066
TRU US	Transuniron	United States	Research & Consulting Services	13,282
LBRDK US	Liberty Broadband-C	United States	Cable & Satellite	10,151
MTCH US	Match Group	United States	Interactive Media & Services	10,150
ROKU US	Roku	United States	Movies & Entertainment	11,374
OKTA US	Okta	United States	Internet Services & Infrastructure	14,191

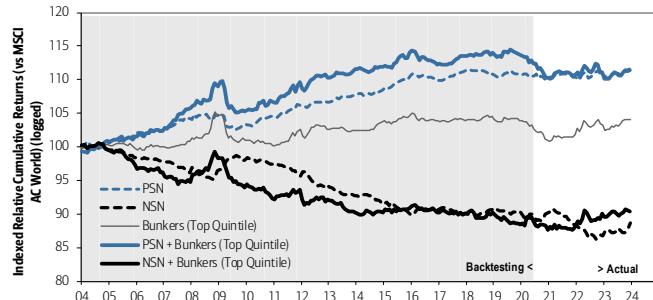
Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
BofA GLOBAL RESEARCH



News Pulse + Bunkers

Chart 174: Performance: News Pulse + BUNKERS (Top Quintile)

Combining news with Bunkers (defensive stocks) added performance

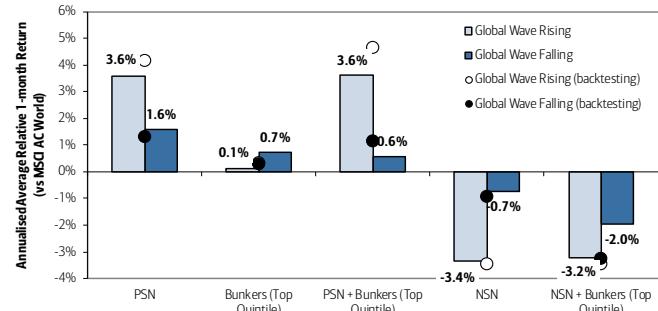


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
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Chart 175: Annualized Relative Returns: News Pulse + BUNKERS in Rising/Falling Global Wave

Stocks with Bunkers characteristics and positive news have returned 3.6% p.a



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack
Back-tested results are from Jan-04 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Table 65: PSN Stocks with high Bunkers ranks

Combining positive news with Bunkers (defensive stocks)

BBG Code	Short Name	Country	Sub-Industry	MCAP
GBA/CN	CGI	Canada	IT Consulting & Other Services	22,491
857 HK	PetroChina-H	China	Integrated Oil & Gas	13,942
867 HK	China Medical System	China	Pharmaceuticals	4,346
DANSKE DC	Danske Bank	Denmark	Diversified Banks	23,048
ACA FP	Credit Agricole	France	Diversified Banks	43,340
IPN FP	Ipsen	France	Pharmaceuticals	9,990
GET FP	Getlink	France	Highways & Railtracks	10,064
CS FP	Axa SA	France	Multi-line Insurance	73,460
ORA FP	Orange	France	Integrated Telecommunication Services	30,278
SBLIFE IN	SBI Life Insurance	India	Life & Health Insurance	17,235
ASII JI	Astra Int'l	Indonesia	Industrial Conglomerates	14,856
8630 JP	Sompo	Japan	Property & Casualty Insurance	17,008
INGA NA	ING	Netherlands	Diversified Banks	54,081
BPI PM	Bank of Philippine	Philippines	Diversified Banks	9,270
BDO PM	BDO Unibank	Philippines	Diversified Banks	12,415
MER PM	Manila Electric	Philippines	Electric Utilities	8,121
OBCB SP	OCBC	Singapore	Diversified Banks	44,495
SBK SJ	Standard Bank	South Africa	Diversified Banks	19,069
SAN SM	Banco Santander	Spain	Diversified Banks	67,569
SEBA SS	SEB	Sweden	Diversified Banks	29,141
VOLVB SS	Volvo	Sweden	Construction Machinery & Heavy Transportation Eq	41,249
SREN SW	Swiss Re	Switzerland	Reinsurance	35,671
6669 TT	Wynn	Taiwan	Technology Hardware Storage & Peripherals	10,397
ADIB UH	Abu Dhabi Islamic Bank	United Arab Emir	Diversified Banks	10,008
CPG LN	Compass Group	United Kingdom	Restaurants	46,890
GSK LN	GSK	United Kingdom	Pharmaceuticals	75,705
JPM US	JPMorgan Chase	United States	Diversified Banks	494,325
ABBV US	AbbVie	United States	Biotechnology	273,529
ACGL US	Arch Capital	United States	Property & Casualty Insurance	27,699
PGR US	Progressive	United States	Property & Casualty Insurance	93,232

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

BofA GLOBAL RESEARCH

Table 66: NSN Stocks with high Bunkers ranks

Combining negative positive news with Bunkers (defensive stocks)

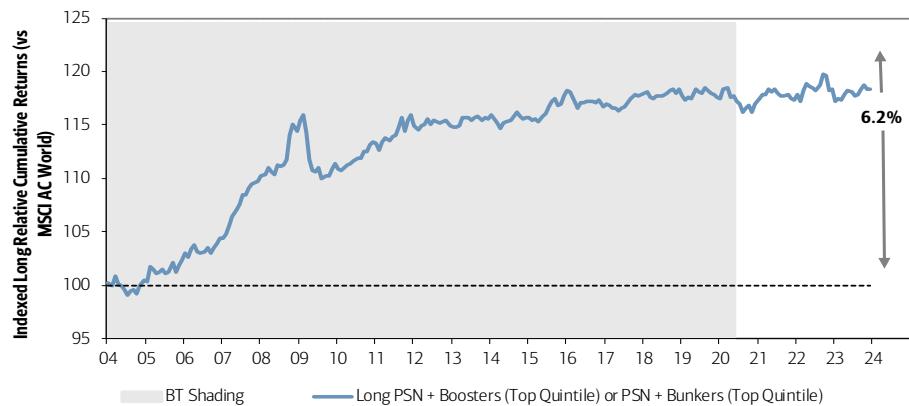
BBG Code	Short Name	Country	Sub-Industry	MCAP
WOWAU	Woolworths	Australia	Food Retail	31,008
BXB AU	Brambles	Australia	Diversified Support Services	12,896
OMV AV	OMV AG	Austria	Integrated Oil & Gas	14,378
AGS BB	Ageas	Belgium	Multi-line Insurance	8,162
SANB11 BZ	Banco Santander Brasil	Brazil	Diversified Banks	24,930
998 HK	China Citic Bank-H	China	Diversified Banks	7,014
1398 HK	ICBC-H	China	Diversified Banks	42,460
322 HK	Tingyi	China	Packaged Foods & Meats	6,869
2328 HK	PICC-H	China	Property & Casualty Insurance	8,199
135 HK	Kunlun Energy	China	Gas Utilities	7,807
ML FP	Michelin	France	Tires & Rubber	25,606
LR FP	Legrand	France	Electrical Components & Equipment	27,554
DHL GR	DHL	Germany	Air Freight & Logistics	61,394
CPLA IN	Cipla	India	Pharmaceuticals	12,091
TATA IN	Tata Steel	India	Steel	20,503
TECHM IN	Tech Mahindra	India	IT Consulting & Other Services	14,919
BIRG ID	Bank of Ireland	Ireland	Diversified Banks	9,592
KSPID	Kingspan	Ireland	Building Products	15,762
LUMI IT	Bank Leumi	Israel	Diversified Banks	12,321
PST IM	Poste Italiane	Italy	Life & Health Insurance	14,825
7267 JP	Honda	Japan	Automobile Manufacturers	56,509
9143 JP	SG Holdings	Japan	Air Freight & Logistics	9,194
9434 JP	SoftBank	Japan	Wireless Telecommunication Services	59,806
RHBANK MK	RHB Bank	Malaysia	Diversified Banks	5,084
EQNR NO	Equinor	Norway	Integrated Oil & Gas	95,262
ELE SM	Endesa	Spain	Electric Utilities	21,590
SLHN SW	Swiss Life	Switzerland	Life & Health Insurance	20,482
SCMN SW	Swisscom	Switzerland	Integrated Telecommunication Services	31,143
2892 TT	First Financial	Taiwan	Diversified Banks	12,160
WLK US	Westlake	United States	Commodity Chemicals	17,871

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

BofA GLOBAL RESEARCH

Chart 176: Long BOOSTERS or BUNKERS + Positive Significant News (PSN) based on Global Wave signal

Combining news with Boosters and Bunkers added 6.2% p.a.



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

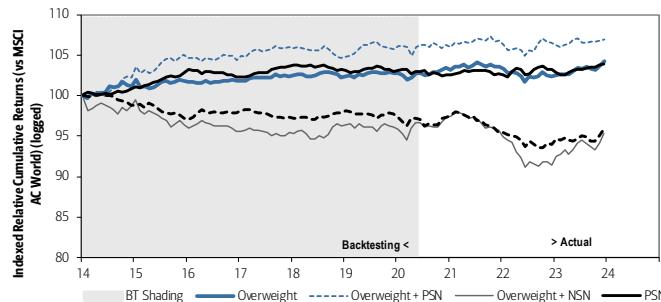
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BofA GLOBAL RESEARCH

News Pulse + Overweight Positioning

Chart 177: Performance: News Pulse + Overweight Positioning (level)

Combining news with overweight positioning added performance

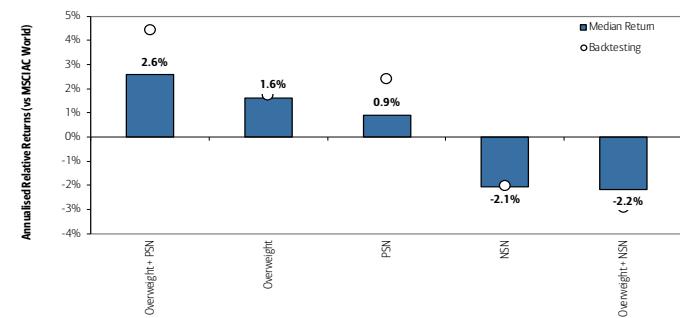


Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack
Back-tested results are from Jan-14 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 178: Annualized Relative Returns: News Pulse + Positioning (level)

News enhances alpha when combined with overweight stocks



Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack
Back-tested results are from Jan-14 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Table 67: PSN Stocks with Overweight Positioning

Combining positive news with overweight positioning

BBG Code	Short Name	Country	Sub-Industry	MCAP
RADL3 BZ	Raia Drogasil	Brazil	Drug Retail	10,398
NZYMB DC	Novozymes	Denmark	Specialty Chemicals	12,497
DSY FP	Dassault Systemes	France	Application Software	65,305
CON GR	Continental Ag	Germany	Automotive Parts & Equipment	16,994
HEI GR	Heidelberg Materials	Germany	Construction Materials	16,647
1928 HK	Sands China	Hong Kong	Casinos & Gaming	23,683
BHE IN	Bharat Elec	India	Aerospace & Defense	16,181
SBILIFE IN	SBI Life Insurance	India	Life & Health Insurance	17,235
INFOE IN	Info Edge	India	Interactive Media & Services	7,969
CHKP US	Check Point	Israel	Systems Software	17,875
6501 JP	Hitachi	Japan	Industrial Conglomerates	66,884
8795 JP	T&D	Japan	Life & Health Insurance	9,361
INGA NA	ING	Netherlands	Diversified Banks	54,081
ASRNL NA	ASR Nederland	Netherlands	Multi-line Insurance	9,968
BAP US	Credicorp	Peru	Diversified Banks	11,927
BDO PM	BDO Unibank	Philippines	Diversified Banks	12,415
SGX SP	Sing Exchange	Singapore	Financial Exchanges & Data	7,986
AMS SM	Amadeus IT	Spain	Hotels Resorts & Cruise Lines	32,287
3661 TT	Alchip Tech	Taiwan	Semiconductors	7,907
CPG LN	Compass Group	United Kingdom	Restaurants	46,890
III LN	3i Group	United Kingdom	Asset Management & Custody Banks	30,040
EXP LN	Experian	United Kingdom	Research & Consulting Services	37,545
INF LN	Informa	United Kingdom	Advertising	13,780
WAB US	Wabtec	United States	Construction Machinery & Heavy Transportation Eq	22,732
ACGL US	Arch Capital	United States	Property & Casualty Insurance	27,699
AIZ US	Assurant Inc	United States	Multi-line Insurance	8,934
PGR US	Progressive	United States	Property & Casualty Insurance	93,232
MLM US	Martin Marietta	United States	Construction Materials	30,835
CYBR US	CyberArk Software	United States	Systems Software	9,149

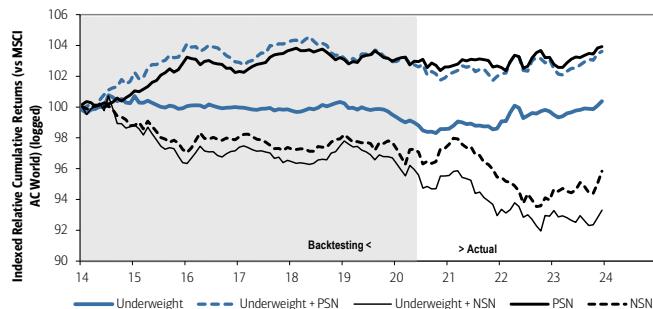
Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack

BofA GLOBAL RESEARCH

News Pulse + Underweight Positioning

Chart 179: Performance News Pulse + Underweight Positioning (level)

Combining news with underweight positioning added performance

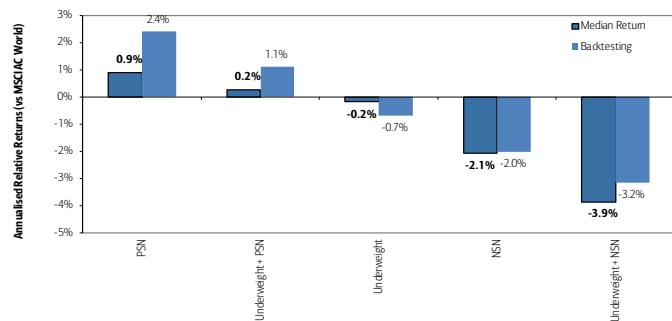


Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack
Back-tested results are from Jan-14 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 180: Annualized Relative Returns: News Pulse + Positioning (level)

News enhances alpha when combined with underweight stocks



Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack
Back-tested results are from Jan-14 to May-20. Actual performance is from Jun-20. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Table 68: NSN Stocks with Underweight Positioning

Combining negative news with underweight positioning

BBG Code	Short Name	Country	Sub-Industry	MCAP
WOW AU	Woolworths	Australia	Food Retail	31,008
PLS AU	Pilbara Minerals	Australia	Diversified Metals & Mining	8,111
SANB11 BZ	Banco Santander Brasil	Brazil	Diversified Banks	24,930
ABX CN	Barrick Gold	Canada	Gold	31,872
SQM/B CI	SQM	Chile	Electrical Components & Equipment	8,610
998 HK	China Citic Bank-H	China	Diversified Banks	7,014
1398 HK	ICBC-H	China	Diversified Banks	42,460
6881 HK	China Galaxy-H	China	Investment Banking & Brokerage	1,952
2628 HK	China Life-e-H	China	Life & Health Insurance	9,644
1336 HK	New China Life-H	China	Life & Health Insurance	2,016
DHL GR	DHL	Germany	Air Freight & Logistics	61,394
11 HK	Hang Seng Bank	Hong Kong	Diversified Banks	22,293
3 HK	HK & China Gas	Hong Kong	Gas Utilities	14,290
CIPLA IN	Cipla	India	Pharmaceuticals	12,091
TATA IN	Tata Steel	India	Steel	20,503
TECHM IN	Tech Mahindra	India	IT Consulting & Other Services	14,919
7267 JP	Honda	Japan	Automobile Manufacturers	56,509
9434 JP	SoftBank	Japan	Wireless Telecommunication Services	59,806
PCHEM MK	Petronas Chemicals	Malaysia	Commodity Chemicals	12,466
EQNR NO	Equinor	Norway	Integrated Oil & Gas	95,262
SABIC AB	SABIC	Saudi Arabia	Commodity Chemicals	66,640
GEBN SW	Geberit	Switzerland	Building Products	22,535
SLHN SW	Swiss Life	Switzerland	Life & Health Insurance	20,482
GIVN SW	Givaudan	Switzerland	Specialty Chemicals	38,222
2892 TT	First Financial	Taiwan	Diversified Banks	12,160
1102 TT	Asia Cement	Taiwan	Construction Materials	4,790
1301 TT	Formosa Plastics	Taiwan	Commodity Chemicals	16,427
TSLA US	Tesla	United States	Automobile Manufacturers	788,674
ES US	Eversource Energy	United States	Electric Utilities	21,546
WEC US	WEC Energy	United States	Multi-Utilities	26,550

Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack

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Appendix: Performance Summary

Table 69: News Pulse + Quadrants: back-testing results: Jan-04 to May-20

Combining news with Quadrants

Strategy	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
PSN	8.0%	-16%	-14%	-14%	-18%	0%	233%	3.3%
NSN	15.5%	-15%	-14%	-16%	-19%	-14%	30%	-4.1%
Top-Right Quadrant	10.0%	-13%	-9%	-5%	-13%	16%	177%	3.6%
Top-Right Quadrant + PSN	8.2%	-13%	-9%	-7%	-14%	15%	364%	5.7%
Top-Right Quadrant + NSN	9.0%	-11%	-11%	-14%	-14%	-1%	78%	-0.2%
Bottom-Left Quadrant	11.2%	-19%	-18%	-21%	-22%	-13%	56%	-0.4%
Bottom-Left Quadrant + PSN	10.5%	-15%	-13%	-21%	-18%	-16%	132%	-0.6%
Bottom-Left Quadrant + NSN	18.4%	-16%	-14%	-19%	-21%	-20%	5%	-6.0%
MSCI AC World (EW)	10.5%	-15%	-12%	-14%	-17%	-6%	107%	7.7%

Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 70: News Pulse + Contenders: back-testing results: Jan-04 to May-20

Combining news with Contenders

Strategy	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
PSN	8.0%	-16%	-14%	-14%	-18%	0%	233%	3.3%
NSN	15.5%	-15%	-14%	-16%	-19%	-14%	30%	-4.1%
PSN + Top-Right Quadrant	8.2%	-13%	-9%	-7%	-14%	15%	364%	5.7%
PSN + Top-Right Quadrant + Low PE	8.3%	-15%	-14%	-15%	-19%	-4%	321%	4.4%
PSN + Top-Right Quadrant + High PE	8.2%	-12%	-4%	0%	-10%	34%	385%	5.2%
NSN + Bottom-Left Quadrant	18.4%	-16%	-14%	-19%	-21%	-20%	5%	-6.0%
NSN + Bottom-Left Quadrant + Low PE	20.7%	-17%	-18%	-24%	-24%	-27%	-12%	-5.9%
NSN + Bottom-Left Quadrant + High PE	16.2%	-16%	-11%	-14%	-19%	-14%	23%	-4.9%
MSCI AC World (EW)	10.5%	-15%	-12%	-14%	-17%	-6%	107%	7.7%

Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 71: News Pulse + Style back-testing results: Jan-04 to May-20

Combining news with Style

Strategy	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
PSN	8.0%	-16%	-14%	-14%	-18%	0%	233%	3.3%
NSN	15.5%	-15%	-14%	-16%	-19%	-14%	30%	-4.1%
Value (Top Quintile)	10.7%	-18%	-19%	-24%	-24%	-21%	117%	2.0%
Value (Top Quintile) + PSN	7.3%	-17%	-20%	-25%	-25%	-7%	338%	5.7%
Value (Top Quintile) + NSN	17.1%	-17%	-20%	-27%	-24%	-26%	19%	-3.5%
Growth (Top Quintile)	11.4%	-7%	-3%	-2%	-9%	16%	207%	2.3%
Growth (Top Quintile) + PSN	11.6%	-10%	-7%	-7%	-11%	14%	289%	5.1%
Growth (Top Quintile) + NSN	5.2%	-18%	-18%	-26%	-23%	-17%	11%	-2.0%
Quality (Top Quintile)	10.1%	-14%	-11%	-12%	-16%	8%	189%	1.6%
Quality (Top Quintile) + PSN	9.5%	-12%	-9%	-9%	-13%	16%	306%	4.3%
Quality (Top Quintile) + NSN	16.7%	-13%	-14%	-15%	-17%	0%	29%	-1.6%
Risk (Top Quintile)	17.5%	-13%	-10%	-16%	-17%	-9%	127%	3.1%
Risk (Top Quintile) + PSN	9.7%	-12%	-8%	-13%	-15%	-7%	302%	6.9%
Risk (Top Quintile) + NSN	23.2%	-16%	-13%	-20%	-22%	-14%	-15%	-2.2%
Momentum (Top Quintile)	12.4%	-9%	-2%	0%	-7%	11%	225%	2.9%
Momentum (Top Quintile) + PSN	10.1%	-11%	-5%	-2%	-9%	19%	396%	7.1%
Momentum (Top Quintile) + NSN	10.0%	-12%	-9%	-10%	-12%	2%	54%	-0.9%
Dividend (Top Quintile)	11.2%	-17%	-16%	-19%	-22%	-15%	106%	-0.2%
Dividend (Top Quintile) + PSN	9.9%	-15%	-13%	-15%	-18%	0%	360%	3.7%
Dividend (Top Quintile) + NSN	20.2%	-14%	-14%	-20%	-20%	-13%	6%	-4.2%
Small Size (Top Quintile)	13.9%	-10%	-3%	-8%	-12%	1%	110%	-0.1%
Small Size (Top Quintile) + PSN	10.3%	-14%	-11%	-14%	-15%	1%	226%	4.0%
Small Size (Top Quintile) + NSN	23.8%	-14%	-12%	-16%	-19%	-5%	31%	-2.5%
MSCI AC World (EW)	10.5%	-15%	-12%	-14%	-17%	-6%	107%	4.5%

Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 72: News Pulse + Boosters & Bunkers back-testing results: Jan-04 to May-20

Combining news with Boosters & Bunkers

Strategy	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
PSN	8.0%	-16%	-14%	-14%	-18%	0%	233%	3.3%
NSN	15.5%	-15%	-14%	-16%	-19%	-14%	30%	-4.1%
Boosters (Top Quintile)	15.8%	-17%	-15%	-17%	-21%	-11%	141%	3.3%
Boosters (Top Quintile) + PSN	8.9%	-15%	-13%	-18%	-19%	-14%	227%	6.0%
Boosters (Top Quintile) + NSN	22.2%	-16%	-16%	-21%	-24%	-10%	22%	-0.4%
Bunkers (Top Quintile)	7.2%	-18%	-16%	-16%	-20%	-7%	139%	0.6%
Bunkers (Top Quintile) + PSN	7.1%	-18%	-18%	-17%	-21%	-2%	269%	4.1%
Bunkers (Top Quintile) + NSN	9.2%	-11%	-9%	-13%	-13%	-9%	27%	-2.9%
MSCI AC World (EW)	10.5%	-15%	-12%	-14%	-17%	-6%	107%	4.5%

Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 73: News Pulse + Positioning back-testing results: Jan-04 to May-20

Combining news with Positioning

Strategy	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
PSN	8.0%	-16%	-14%	-14%	-18%	0%	14%	1.1%
NSN	15.5%	-15%	-14%	-16%	-19%	-14%	-11%	-2.1%
Overweight	12.0%	-17%	-15%	-15%	-19%	0%	12%	1.7%
Overweight + PSN	5.1%	-19%	-16%	-17%	-20%	4%	27%	3.4%
Overweight + NSN	17.7%	-14%	-14%	-16%	-18%	-15%	-16%	-1.9%
Underweight	11.2%	-15%	-15%	-16%	-18%	-11%	-3%	-0.8%
Underweight + PSN	8.5%	-15%	-14%	-14%	-17%	-5%	15%	0.2%
Underweight + NSN	14.1%	-15%	-14%	-18%	-19%	-16%	-15%	-3.9%
MSCI AC World (EW)	10.5%	-15%	-12%	-14%	-17%	-6%	1%	0.1%

Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 74: News Pulse + Quadrants: Actual Performance ending Dec-23

Combining news with Quadrants

Strategy	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
PSN	4.8%	10%	6%	10%	10%	36%	9%
NSN	8.3%	15%	9%	16%	16%	21%	5%
Top-Right Quadrant	3.7%	8%	5%	12%	12%	68%	15%
Top-Right Quadrant + PSN	4.7%	10%	8%	12%	12%	50%	12%
Top-Right Quadrant + NSN	8.3%	14%	8%	4%	4%	38%	9%
Bottom-Left Quadrant	6.7%	9%	6%	18%	18%	31%	8%
Bottom-Left Quadrant + PSN	1.4%	3%	-6%	-1%	-1%	14%	4%
Bottom-Left Quadrant + NSN	5.9%	10%	6%	15%	15%	7%	2%
MSCI AC World (EW)	4.3%	7%	3%	7%	7%	29%	7%

Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 75: News Pulse + Contenders: Actual Performance ending Dec-23

Combining news with Contenders

Strategy	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
PSN	4.8%	10%	6%	10%	10%	36%	9%
NSN	8.3%	15%	9%	16%	16%	21%	5%
PSN + Top-Right Quadrant	4.7%	10%	8%	12%	12%	50%	12%
PSN + Top-Right Quadrant + Low PE	3.6%	9%	7%	10%	10%	54%	13%
PSN + Top-Right Quadrant + High PE	5.9%	12%	9%	15%	15%	46%	11%
NSN + Bottom-Left Quadrant	5.9%	10%	6%	15%	15%	7%	2%
NSN + Bottom-Left Quadrant + Low PE	4.8%	7%	5%	6%	6%	13%	3%
NSN + Bottom-Left Quadrant + High PE	7.1%	14%	7%	24%	24%	2%	1%
MSCI AC World (EW)	4.3%	7%	3%	7%	7%	29%	7%

Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 76: News Pulse + Style: Actual Performance ending Dec-23

Combining news with Style

Strategy	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
PSN	4.8%	9.7%	6.2%	10.1%	10.1%	36.3%	8.8%
NSN	8.3%	14.6%	8.8%	16.4%	16.4%	21.0%	5.3%
Value (Top Quintile)	3.7%	5.6%	6.2%	10.5%	10.5%	45.7%	10.8%
Value (Top Quintile) + PSN	3.8%	8.9%	8.3%	15.0%	15.0%	53.0%	12.3%
Value (Top Quintile) + NSN	6.6%	9.3%	6.9%	5.8%	5.8%	27.3%	6.8%
Growth (Top Quintile)	3.1%	6.1%	1.5%	3.0%	3.0%	30.1%	7.4%
Growth (Top Quintile) + PSN	4.9%	11.6%	10.5%	14.8%	14.8%	56.3%	12.9%
Growth (Top Quintile) + NSN	9.2%	27.6%	20.8%	32.1%	32.1%	31.9%	7.8%
Quality (Top Quintile)	4.7%	8.6%	5.8%	12.5%	12.5%	35.9%	8.7%
Quality (Top Quintile) + PSN	3.0%	10.5%	10.0%	14.5%	14.5%	35.2%	8.6%
Quality (Top Quintile) + NSN	8.0%	14.8%	12.4%	28.1%	28.1%	39.5%	9.5%
Risk (Top Quintile)	7.8%	12.2%	6.9%	16.5%	16.5%	54.7%	12.6%
Risk (Top Quintile) + PSN	4.0%	14.7%	11.0%	15.1%	15.1%	79.7%	17.3%
Risk (Top Quintile) + NSN	12.5%	20.1%	13.3%	27.3%	27.3%	18.6%	4.8%
Momentum (Top Quintile)	5.1%	10.3%	5.0%	6.5%	6.5%	34.8%	8.5%
Momentum (Top Quintile) + PSN	4.9%	11.9%	7.5%	8.8%	8.8%	37.7%	9.1%
Momentum (Top Quintile) + NSN	8.2%	19.6%	15.3%	14.3%	14.3%	54.3%	12.6%
Dividend (Top Quintile)	4.7%	5.3%	2.8%	5.1%	5.1%	24.7%	6.2%
Dividend (Top Quintile) + PSN	3.0%	7.7%	4.7%	6.7%	6.7%	25.0%	6.3%
Dividend (Top Quintile) + NSN	6.9%	12.2%	10.0%	5.6%	5.6%	20.5%	5.2%
Small Size (Top Quintile)	2.7%	3.8%	-1.1%	-2.4%	-2.4%	15.7%	4.1%
Small Size (Top Quintile) + PSN	4.3%	11.0%	8.1%	9.1%	9.1%	48.7%	11.4%
Small Size (Top Quintile) + NSN	10.3%	13.8%	6.3%	20.9%	20.9%	13.6%	3.5%
MSCI AC World (EW)	4.3%	7.4%	2.9%	6.7%	6.7%	29.0%	7.2%

Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 77: News Pulse + Boosters & Bunkers: Actual Performance ending Dec-23

Combining news with Boosters & Bunkers

Strategy	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
PSN	4.8%	10%	6%	10%	10%	37%	9%
NSN	8.3%	15%	9%	16%	16%	21%	5%
Boosters (Top Quintile)	6.3%	11%	8%	15%	15%	78%	17%
Boosters (Top Quintile) + PSN	5.5%	13%	11%	12%	12%	72%	16%
Boosters (Top Quintile) + NSN	10.4%	17%	10%	20%	20%	64%	15%
Bunkers (Top Quintile)	4.7%	8%	7%	10%	10%	35%	8%
Bunkers (Top Quintile) + PSN	5.3%	9%	5%	8%	8%	23%	6%
Bunkers (Top Quintile) + NSN	3.4%	8%	4%	8%	8%	35%	8%
MSCI AC World (EW)	4.3%	7%	3%	7%	7%	29%	7%

Source : BofA Global Quantitative Strategy, MSCI, IBES, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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Table 78: News Pulse + Positioning: Actual Performance ending Dec-23

Combining news with Positioning

Strategy	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
PSN	4.8%	10%	6%	10%	10%	36%	9%
NSN	8.3%	15%	9%	16%	16%	21%	5%
Overweight	6.7%	12%	6%	16%	16%	41%	10%
Overweight + PSN	4.4%	9%	2%	8%	8%	41%	10%
Overweight + NSN	10.4%	16%	9%	27%	27%	25%	6%
Underweight	5.7%	10%	6%	10%	10%	37%	9%
Underweight + PSN	5.1%	10%	8%	9%	9%	34%	8%
Underweight + NSN	6.6%	12%	7%	9%	9%	13%	3%
MSCI AC World (EW)	4.3%	7%	3%	7%	7%	29%	7%

Source : BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges, RavenPack **Note:** No transaction costs are included in the return figures. Past performance is no guarantee of future results. A complete performance record is available on request. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future returns

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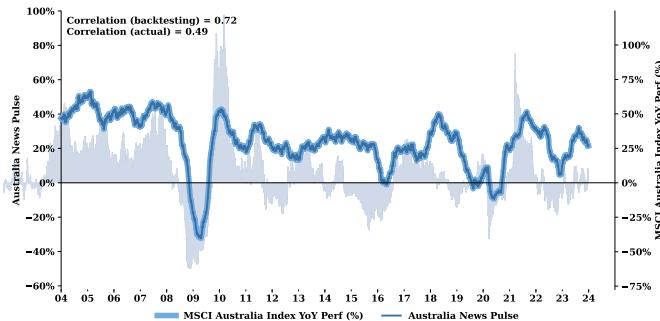


Appendices

Appendix 1: Global Countries News Pulse

Chart 181: Australia News Pulse and MSCI Australia Index YoY change

News trends fell last month, however in aggregate remains positive

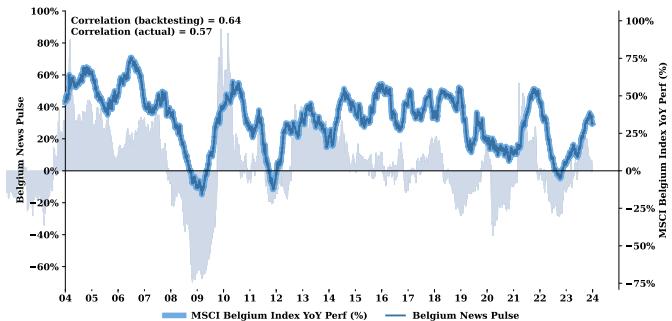


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 182: Belgium News Pulse and MSCI Belgium Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive

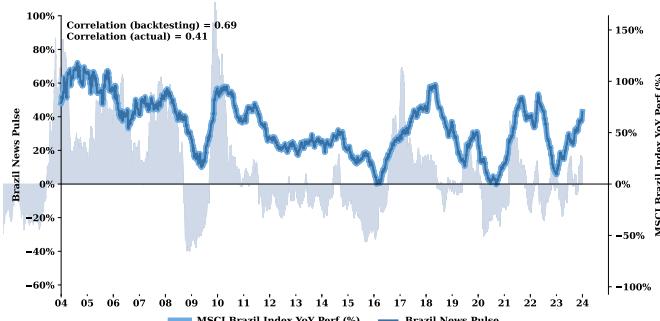


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 183: Brazil News Pulse and MSCI Brazil Index YoY change

43% of news is positive



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

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Chart 184: Canada News Pulse and MSCI Canada Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive

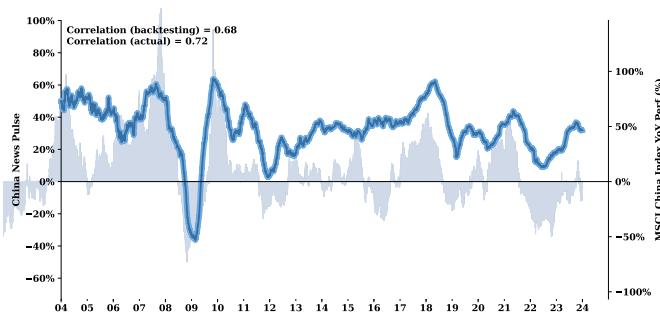


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 185: China News Pulse and MSCI China Index YoY change

News trends fell last month, however in aggregate remains positive

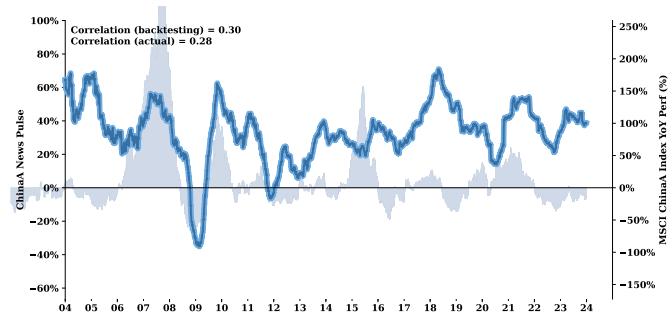


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 186: China-A News Pulse and MSCI China Index YoY change

News has improved last month

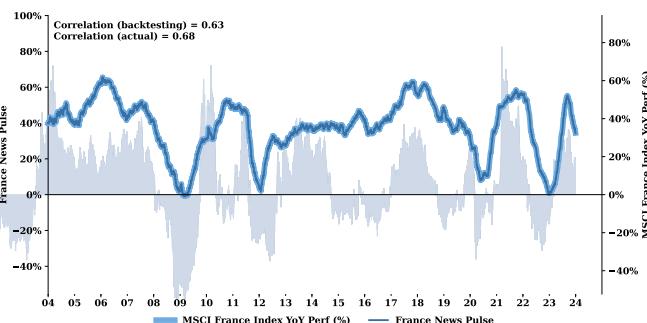


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 187: France News Pulse and MSCI France Index YoY change

34% of news is positive

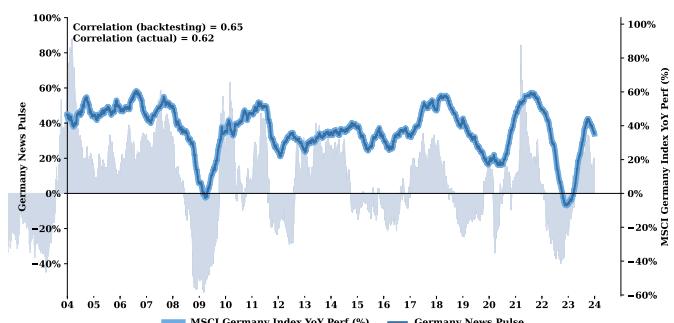


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 188: Germany News Pulse and MSCI Germany Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive

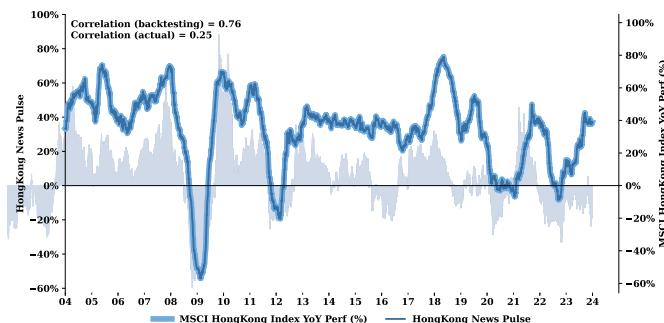


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 189: Hong Kong News Pulse and MSCI Hong Kong Index YoY change

News trends fell last month, however in aggregate remains positive

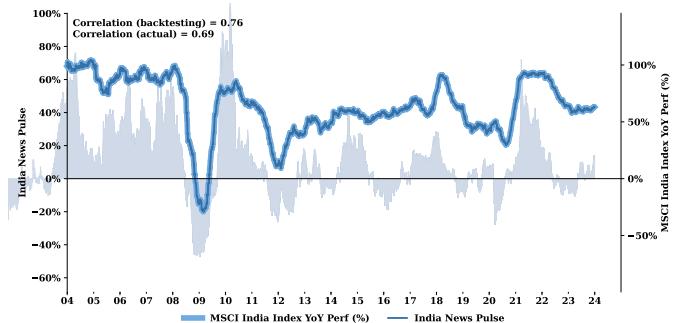


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 190: India News Pulse and MSCI India Index YoY change

News has improved last month

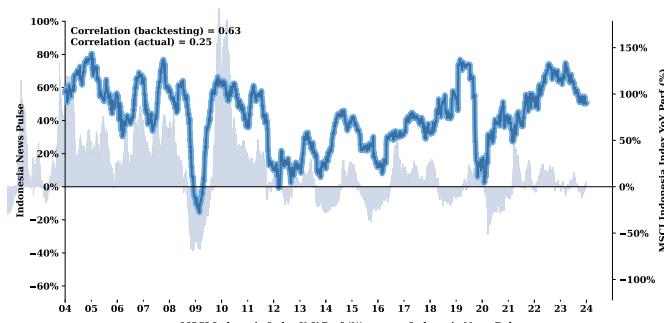


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 191: Indonesia News Pulse and MSCI Indonesia Index YoY change

50% of news is positive

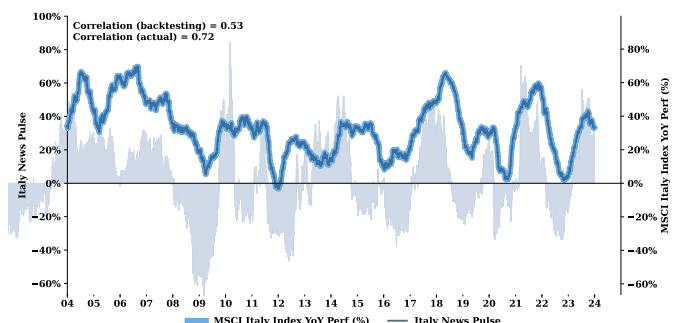


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 192: Italy News Pulse and MSCI Italy Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive



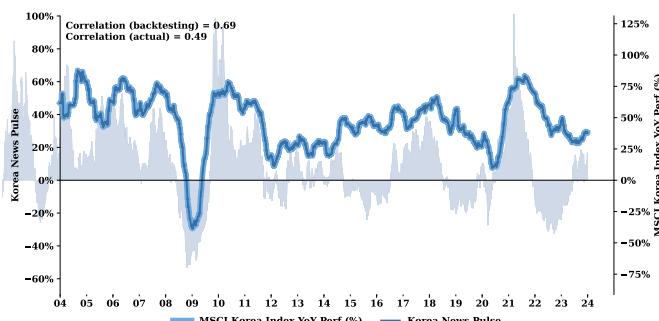
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 193: Korea News Pulse and MSCI Korea Index YoY change

News trends fell last month, however in aggregate remains positive

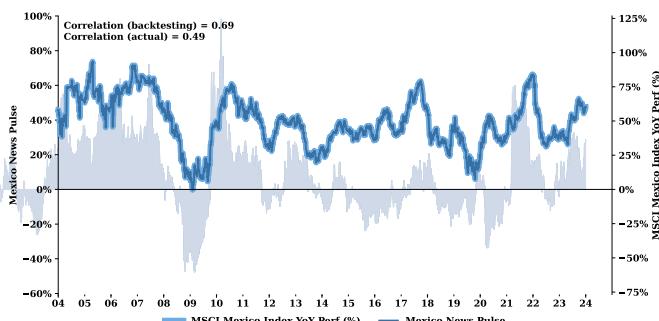


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 194: Mexico News Pulse and MSCI Mexico Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive

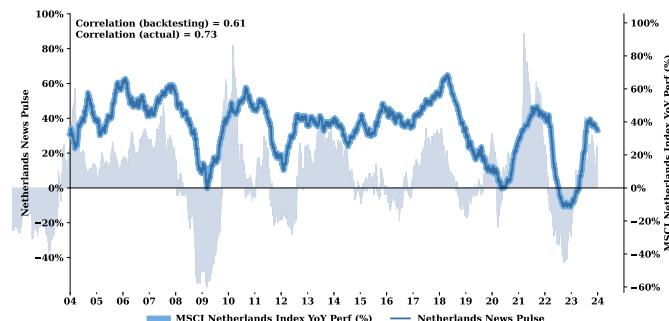


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 195: Netherlands News Pulse and MSCI Netherlands Index YoY change

33% of news is positive

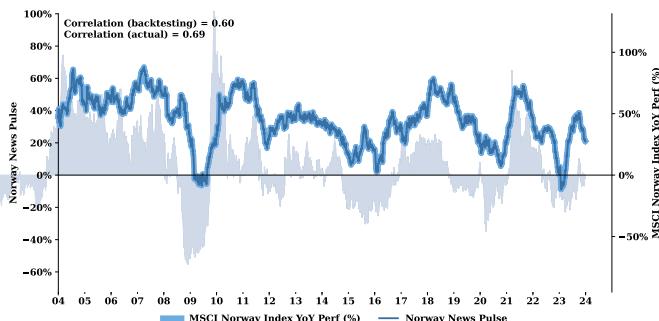


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 196: Norway News Pulse and MSCI Norway Index YoY change

News trends fell last month, however in aggregate remains positive

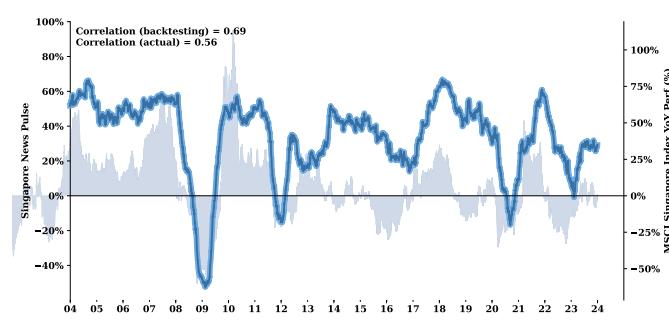


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 197: Singapore News Pulse and MSCI Singapore Index YoY change

News has improved last month

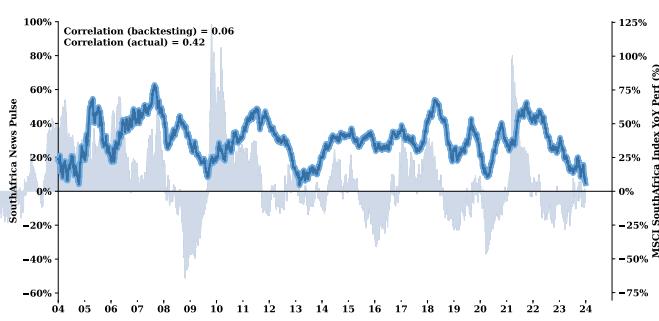


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 198: South Africa News Pulse and MSCI South Africa Index YoY change

News trends fell last month, however in aggregate remains positive

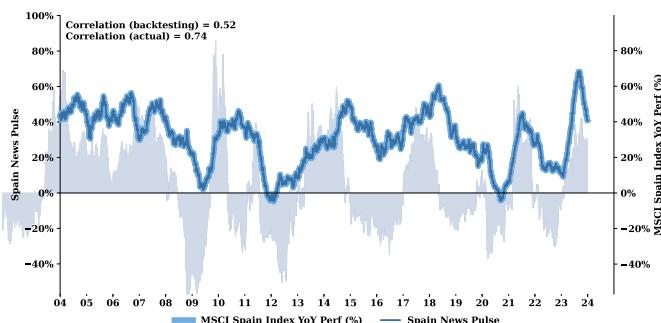


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 199: Spain News Pulse and MSCI Spain Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive

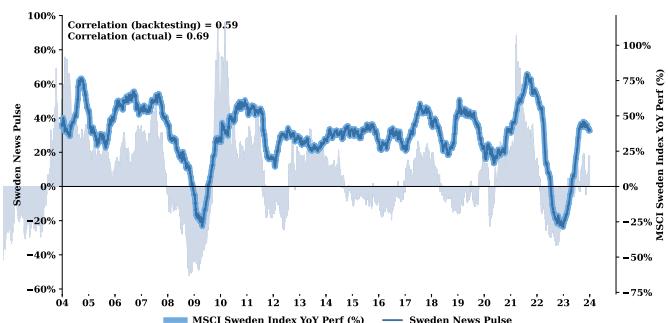


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 200: Sweden News Pulse and MSCI Sweden Index YoY change

News trends fell last month, however in aggregate remains positive

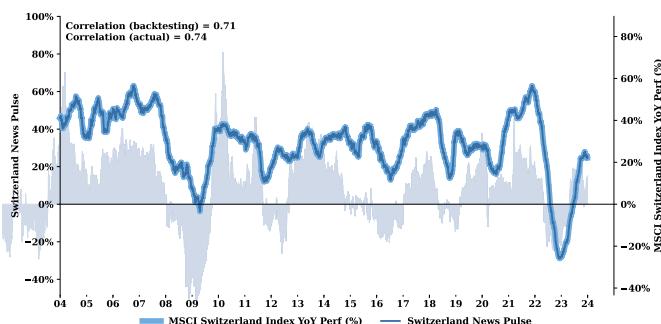


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 201: Switzerland News Pulse and MSCI Switzerland Index YoY change

25% of news is positive

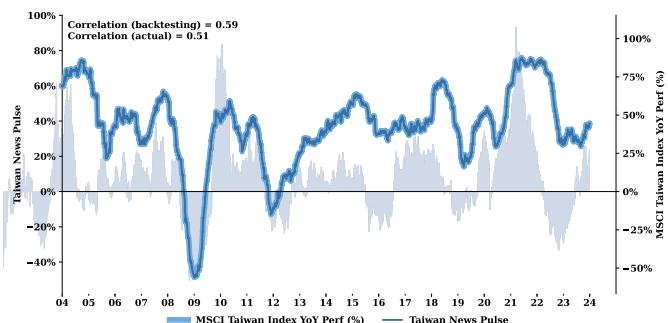


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 202: Taiwan News Pulse and MSCI Taiwan Index YoY change

News has improved last month

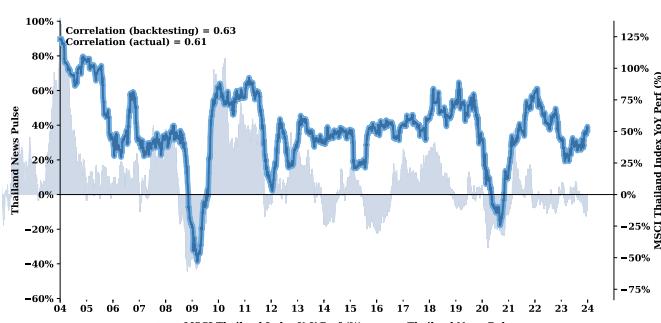


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 203: Thailand News Pulse and MSCI Thailand Index YoY change

38% of news is positive

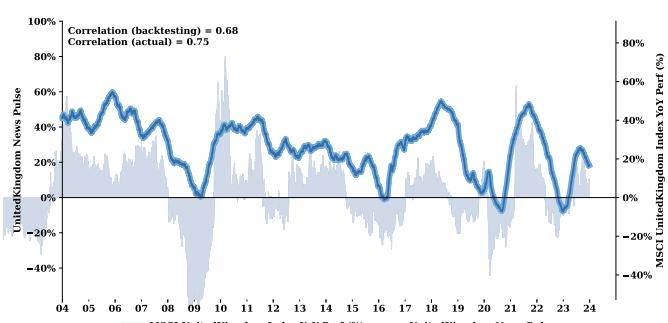


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 204: United Kingdom News Pulse and MSCI United Kingdom Index YoY change

News trend fell in the last 3m, however in aggregate it remains positive



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

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Table 79: Country Level News Pulse

Country news trend vs index returns

Country	Current News Pulse	One Month Change	Three Months Change
Australia	21.6%	-3.0%	-6.5%
Belgium	29.8%	-4.6%	-1.0%
Brazil	42.9%	5.8%	12.4%
Canada	13.7%	-2.8%	-12.0%
China	31.8%	-0.5%	-4.9%
France	34.4%	-5.3%	-17.8%
Germany	33.9%	-3.5%	-8.5%
Hong Kong	37.1%	-0.9%	-2.2%
Japan	57.1%	-0.5%	-3.1%
India	43.4%	0.6%	1.9%
Indonesia	50.4%	-0.8%	-1.3%
Italy	33.7%	-3.0%	-8.3%
Korea	28.9%	-0.3%	4.5%
Mexico	47.7%	3.0%	-4.3%
Netherlands	33.2%	-2.0%	-4.3%
Norway	21.0%	-6.4%	-16.9%
Singapore	29.2%	3.3%	0.2%
South Africa	4.7%	-10.7%	-11.8%
Spain	40.8%	-6.7%	-22.4%
Sweden	33.1%	-2.5%	-2.6%
Switzerland	24.7%	-1.7%	1.2%
Taiwan	38.8%	2.3%	9.2%
Thailand	37.6%	1.1%	11.0%

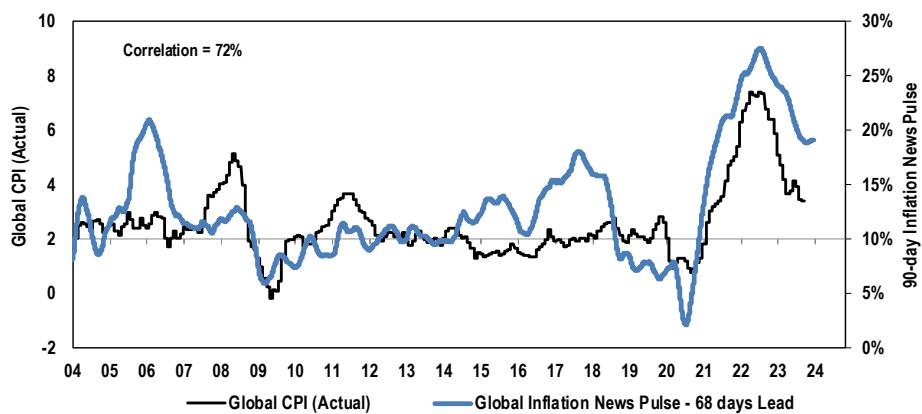
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Appendix 2: Inflation News Pulse

Chart 205: Inflation News Pulse vs. Global CPI

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

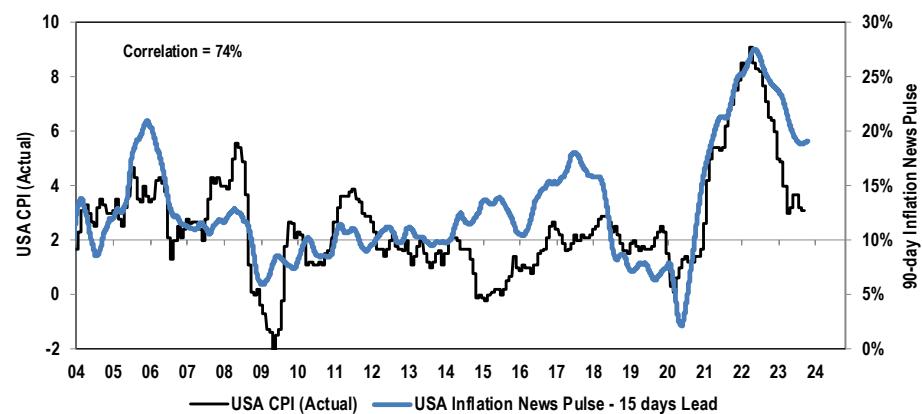


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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Chart 206: 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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Appendix 3: Positive Significant News stocks - Sorted by Region, Country and Sector

Table 80: POSITIVE Significant News Stocks

Stocks with positive significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BM9120	Ampol	ALD AU	Asia Pac ex-Japan	Australia	Energy	5,878	19.0
621179	Cochlear	COH AU	Asia Pac ex-Japan	Australia	Health Care	13,356	26.6
658508	Suncorp Group	SUN AU	Asia Pac ex-Japan	Australia	Insurance	12,005	31.6
608625	Fortescue	FMG AU	Asia Pac ex-Japan	Australia	Materials	60,969	97.3
645800	Orica	ORI AU	Asia Pac ex-Japan	Australia	Materials	4,954	12.0
671825	Great Wall Motor-H	2333 HK	Asia Pac ex-Japan	China	Cons. Discretionary	3,011	34.0
BLD4QD	Haier Smart Home-H	6690 HK	Asia Pac ex-Japan	China	Cons. Discretionary	8,072	25.0
BMW5M0	Li Auto	2015 HK	Asia Pac ex-Japan	China	Cons. Discretionary	33,272	134.2
BNYK8H	Trip.com	9961 HK	Asia Pac ex-Japan	China	Cons. Discretionary	22,971	44.9
613623	Hengan Int'l	1044 HK	Asia Pac ex-Japan	China	Cons. Staples	4,323	5.3
BGK4T3	Futu-ADR	FUTU US	Asia Pac ex-Japan	China	Div Financials	5,029	111.1
622657	PetroChina-H	857 HK	Asia Pac ex-Japan	China	Energy	13,942	71.1
B6WY99	China Medical System	867 HK	Asia Pac ex-Japan	China	Health Care	4,346	5.2
BD9Q2J	Genscript Biotech	1548 HK	Asia Pac ex-Japan	China	Health Care	5,392	22.4
BJYKB7	Hansoh Pharma	3692 HK	Asia Pac ex-Japan	China	Health Care	11,975	10.4
B00XSF	Sino Biopharm.	1177 HK	Asia Pac ex-Japan	China	Health Care	8,355	24.0
B04KNF	Air China-H	753 HK	Asia Pac ex-Japan	China	Industrials	2,887	6.0
601369	China Southern Air.-H	1055 HK	Asia Pac ex-Japan	China	Industrials	1,969	3.5
642539	CHALCO-H	2600 HK	Asia Pac ex-Japan	China	Materials	1,970	10.0
600030	Jiangxi Copper-H	358 HK	Asia Pac ex-Japan	China	Materials	1,962	4.9
B0WC2B	Nine Dragons	2689 HK	Asia Pac ex-Japan	China	Materials	2,313	3.4
BLC90T	Kuaishou Tech	1024 HK	Asia Pac ex-Japan	China	Media & Ent.	24,347	151.0
BG0ZMJ	Xiaomi Corp-B	1810 HK	Asia Pac ex-Japan	China	Tech Hardware	40,857	165.6
671156	China Resources Power	836 HK	Asia Pac ex-Japan	China	Utilities	9,635	19.4
B5B23W	Sands China	1928 HK	Asia Pac ex-Japan	Hong Kong	Cons. Discretionary	23,683	39.8
BRXVS6	Alibaba Health	241 HK	Asia Pac ex-Japan	Hong Kong	Cons. Staples	7,349	19.4
643491	HK Land	HKL SP	Asia Pac ex-Japan	Hong Kong	Real Estate	7,683	6.6
685992	Sun Hung Kai	16 HK	Asia Pac ex-Japan	Hong Kong	Real Estate	31,340	38.9
686774	Swire Pacific	19 HK	Asia Pac ex-Japan	Hong Kong	Real Estate	7,253	9.2
609701	CLP	2 HK	Asia Pac ex-Japan	Hong Kong	Utilities	20,853	17.0
BNR5NG	Sona Blw Precision Forgings	SONACOMS IN	Asia Pac ex-Japan	India	Cons. Discretionary	4,534	11.0
BDDRN3	Trent	TRENT IN	Asia Pac ex-Japan	India	Cons. Discretionary	13,051	18.9
612860	Nestle India	NEST IN	Asia Pac ex-Japan	India	Cons. Staples	30,797	20.5
B2Q7WL	REC	RECL IN	Asia Pac ex-Japan	India	Div Financials	13,064	66.6
B0XPSB	Torrent Pharma	TRP IN	Asia Pac ex-Japan	India	Health Care	9,377	9.0
BF1THH	Bharat Elec	BHE IN	Asia Pac ex-Japan	India	Industrials	16,181	29.5
B1B90H	CG Power	CGPOWER IN	Asia Pac ex-Japan	India	Industrials	8,340	11.9
BR56KD	Hindustan Aeronautics	HNAL IN	Asia Pac ex-Japan	India	Industrials	22,535	48.9
BZ60N3	SBI Life Insurance	SBILIFE IN	Asia Pac ex-Japan	India	Insurance	17,235	18.2
610035	Shree Cement	SRCM IN	Asia Pac ex-Japan	India	Materials	12,424	8.8
B01GZF	Ultratech Cement	UTCEN IN	Asia Pac ex-Japan	India	Materials	36,437	36.2
B1685L	Info Edge	INFOE IN	Asia Pac ex-Japan	India	Media & Ent.	7,969	16.3
BD6F8V	LTMindtree	LTIM IN	Asia Pac ex-Japan	India	Software	22,385	29.3
B3WQH4	Adani Power	ADANI IN	Asia Pac ex-Japan	India	Utilities	24,341	74.7
B800MQ	Astra Int'l	ASII J	Asia Pac ex-Japan	Indonesia	Industrials	14,856	16.9
604702	AMMB	AMM MK	Asia Pac ex-Japan	Malaysia	Banks	2,892	2.5
B1VXKN	Genting Malaysia	GENM MK	Asia Pac ex-Japan	Malaysia	Cons. Discretionary	3,476	3.7
B00G23	QL Resources	QLG MK	Asia Pac ex-Japan	Malaysia	Cons. Staples	3,024	2.2
635988	Gamuda	GAM MK	Asia Pac ex-Japan	Malaysia	Industrials	2,694	5.4
618819	Malaysia Airports	MAHB MK	Asia Pac ex-Japan	Malaysia	Industrials	2,673	4.7

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



Positive Significant News stocks - Sorted by Region, Country and Sector (Continued)

Table 81: POSITIVE Significant News Stocks (continued)

Stocks with positive significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
608624	CelcomDigi	CDB MK	Asia Pac ex-Japan	Malaysia	Telecom	10,417	2.3
688143	Spark New Zealand (NZ)	SPK NZ	Asia Pac ex-Japan	New Zealand	Telecom	6,030	5.5
607496	Bank of Philippine	BPI PM	Asia Pac ex-Japan	Philippines	Banks	9,270	3.9
B5VJH7	BDO Unibank	BDO PM	Asia Pac ex-Japan	Philippines	Banks	12,415	6.9
645581	Int'l Container	ICT PM	Asia Pac ex-Japan	Philippines	Industrials	9,056	4.2
B068DB	SM Investments	SM PM	Asia Pac ex-Japan	Philippines	Industrials	19,243	7.2
681884	SM Prime	SMPH PM	Asia Pac ex-Japan	Philippines	Real Estate	17,158	4.3
B247XZ	Manila Electric	MER PM	Asia Pac ex-Japan	Philippines	Utilities	8,121	1.3
B0F9V2	OCBC	OCBC SP	Asia Pac ex-Japan	Singapore	Banks	44,495	44.4
630386	Sing Exchange	SGX SP	Asia Pac ex-Japan	Singapore	Div Financials	7,986	11.9
617340	Coway	021240 KS	Asia Pac ex-Japan	South Korea	Cons. Discretionary	3,278	6.1
BDVLJ7	Orion Corp	271560 KS	Asia Pac ex-Japan	South Korea	Cons. Staples	3,564	7.2
BD4HFT	HD Hyundai	267250 KS	Asia Pac ex-Japan	South Korea	Energy	3,882	10.6
BSXN8K	Samsung C&T	028260 KS	Asia Pac ex-Japan	South Korea	Industrials	18,661	19.7
B16TC3	JYP Entertainment	035900 KS	Asia Pac ex-Japan	South Korea	Media & Ent.	2,792	45.4
618785	Chang Hwa Comm Bank	2801 TT	Asia Pac ex-Japan	Taiwan	Banks	6,333	6.2
642566	Cathay Financial	2882 TT	Asia Pac ex-Japan	Taiwan	Insurance	21,867	23.1
B4TPSL	Alchip Tech	3661 TT	Asia Pac ex-Japan	Taiwan	Semiconductors	7,907	201.3
600585	Acer	2353 TT	Asia Pac ex-Japan	Taiwan	Tech Hardware	5,343	44.8
605104	Asustek	2357 TT	Asia Pac ex-Japan	Taiwan	Tech Hardware	11,847	82.7
612918	Gigabyte Tech	2376 TT	Asia Pac ex-Japan	Taiwan	Tech Hardware	5,510	250.2
614101	Quanta	2382 TT	Asia Pac ex-Japan	Taiwan	Tech Hardware	28,255	471.4
BF4QXG	Wiwynn	6669 TT	Asia Pac ex-Japan	Taiwan	Tech Hardware	10,397	175.4
BD0BDH	PTT	PTT TB	Asia Pac ex-Japan	Thailand	Energy	29,917	49.5
B0300P	Thai Oil	TOP TB	Asia Pac ex-Japan	Thailand	Energy	3,518	17.5
B6SR7L	Central Pattana	CPN TB	Asia Pac ex-Japan	Thailand	Real Estate	9,204	12.6
BRJS8F	Delta Electronics (Thai)	DELTA TB	Asia Pac ex-Japan	Thailand	Tech Hardware	32,160	39.6
641256	Adv Info Serv	ADVANC TB	Asia Pac ex-Japan	Thailand	Telecom	18,909	28.5
BQMMPZ	True	TRUE TB	Asia Pac ex-Japan	Thailand	Telecom	5,112	12.8
BPBLV8	Vibra Energia	VBBR3 BZ	Emerging ex-Asia	Brazil	Cons. Discretionary	5,459	42.7
B7FQV6	Raia Drogasil	RADL3 BZ	Emerging ex-Asia	Brazil	Cons. Staples	10,398	29.1
B0P72G	Cosan	CSAN3 BZ	Emerging ex-Asia	Brazil	Energy	7,469	24.5
BZ1MXR	Alpha Services	ALPHA GA	Emerging ex-Asia	Greece	Banks	3,998	11.8
BYZ43T	Eurobank Ergasias	EUROB GA	Emerging ex-Asia	Greece	Banks	6,610	8.1
BNC0DB	Piraeus Financial	TPEIR GA	Emerging ex-Asia	Greece	Banks	4,420	12.3
223287	Credicorp	BAP US	Emerging ex-Asia	Peru	Banks	11,927	35.6
B544PW	PGE	PGE PW	Emerging ex-Asia	Poland	Utilities	4,952	5.0
B128FN	Co For Coop Insurance	TAWUNIYA AB	Emerging ex-Asia	Saudi Arabia	Insurance	5,216	12.6
BM8SKZ	Acwa Power Co	ACWA AB	Emerging ex-Asia	Saudi Arabia	Utilities	50,105	18.5
B030GJ	Standard Bank	SBK SJ	Emerging ex-Asia	South Africa	Banks	19,069	30.6
610008	Bidvest	BVT SJ	Emerging ex-Asia	South Africa	Industrials	4,694	13.1
B65B4D	Vodacom	VOD SJ	Emerging ex-Asia	South Africa	Telecom	12,044	7.3
B03NOC	Sabanci	SAHOL TI	Emerging ex-Asia	Turkiye	Banks	4,176	81.3
600172	Abu Dhabi Islamic Bank	ADIB UH	Emerging ex-Asia	United Arab Emirate	Banks	10,008	5.6
B0LX3Y	Aldar Prop	ALDAR UH	Emerging ex-Asia	United Arab Emirate	Real Estate	11,453	11.8
632217	Emirates Telecom	EAND UH	Emerging ex-Asia	United Arab Emirate	Telecom	46,506	10.2
458882	Danske Bank	DANSKE DC	Europe	Denmark	Banks	23,048	29.0
B798FW	Novozymes	NZYMB DC	Europe	Denmark	Materials	12,497	22.6
726261	Credit Agricole	ACA FP	Europe	France	Banks	43,340	61.0
B0R7JF	Ipsen	IPN FP	Europe	France	Health Care	9,990	8.7

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

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Positive Significant News stocks - Sorted by Region, Country and Sector (Continued)

Table 82: POSITIVE Significant News Stocks (continued)

Stocks with positive significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
400212	Bouygues	EN FP	Europe	France	Industrials	14,379	26.8
B13X01	Eiffage	FGR FP	Europe	France	Industrials	10,503	18.7
B29JQ	Getlink	GET FP	Europe	France	Industrials	10,064	13.9
708842	Axa SA	CS FP	Europe	France	Insurance	73,460	90.5
BF2PQ0	Unibail-Rodamco-Westfield	URW FP	Europe	France	Real Estate	10,278	25.0
BM8H5Y	Dassault Systemes	DSY FP	Europe	France	Software	65,305	45.0
517617	Orange	ORA FP	Europe	France	Telecom	30,278	54.6
459858	Continental Ag	CON GR	Europe	Germany	Cons. Discretionary	16,994	25.9
BJN59B	Dr Ing Hc F Porsche Ag	P911 GR	Europe	Germany	Cons. Discretionary	40,203	40.1
523148	Allianz	ALV GR	Europe	Germany	Insurance	107,794	196.7
512067	Heidelberg Materials	HEI GR	Europe	Germany	Materials	16,647	34.3
218133	Check Point	CHKP US	Europe	Israel	Software	17,875	110.2
BZ5739	ING	INGA NA	Europe	Netherlands	Banks	54,081	156.9
401225	Airbus	AIR FP	Europe	Netherlands	Industrials	122,043	126.3
BPH0Y2	Aegon	AGN NA	Europe	Netherlands	Insurance	11,767	33.8
BD9PNF	ASR Nederland	ASRNL NA	Europe	Netherlands	Insurance	9,968	29.9
B39GNW	Edp Renovaveis S	EDPR PL	Europe	Portugal	Utilities	20,954	14.6
570594	Banco Santander	SAN SM	Europe	Spain	Banks	67,569	137.9
B3MSM2	Amadeus IT	AMS SM	Europe	Spain	Cons. Discretionary	32,287	44.1
BVRZ8L	Aena SME	AENA SM	Europe	Spain	Industrials	27,191	22.1
481334	SEB	SEBA SS	Europe	Sweden	Banks	29,141	35.5
B1VQ25	Sandvik	SAND SS	Europe	Sweden	Industrials	27,147	35.4
714209	Skanska	SKAB SS	Europe	Sweden	Industrials	7,243	11.6
B1QH83	Volvo	VOLVB SS	Europe	Sweden	Industrials	41,249	62.6
B545MG	Swiss Re	SREN SW	Europe	Switzerland	Insurance	35,671	78.2
598381	Zurich Insurance	ZURN SW	Europe	Switzerland	Insurance	76,443	114.6
714789	Temenos	TEMN SW	Europe	Switzerland	Software	6,986	13.1
BD6K45	Compass Group	CPG LN	Europe	United Kingdom	Cons. Discretionary	46,890	52.5
B1KJJ4	Whitbread	WTB LN	Europe	United Kingdom	Cons. Discretionary	9,007	22.6
B1YW44	3i Group	III LN	Europe	United Kingdom	Div Financials	30,040	32.4
BL9YR7	Wise - A	WISE LN	Europe	United Kingdom	Div Financials	11,418	9.8
BN7SWP	GSK	GSK LN	Europe	United Kingdom	Health Care	75,705	77.4
B19NLV	Experian	EXPN LN	Europe	United Kingdom	Industrials	37,545	39.3
BNGDN8	Melrose Industries	MRO LN	Europe	United Kingdom	Industrials	9,737	23.4
BMj6DW	Informa	INF LN	Europe	United Kingdom	Media & Ent.	13,780	20.7
601070	Aisin	7259 JP	Japan	Japan	Cons. Discretionary	10,311	32.6
649632	Koito Mfg	7276 JP	Japan	Japan	Cons. Discretionary	5,013	19.5
B1FF8P	Idemitsu	5019 JP	Japan	Japan	Energy	8,108	36.2
649955	Kyowa Kirin	4151 JP	Japan	Japan	Health Care	9,078	16.2
680468	Shionogi	4507 JP	Japan	Japan	Health Care	14,822	54.4
688507	Terumo	4543 JP	Japan	Japan	Health Care	24,513	62.7
601490	ANA	9202 JP	Japan	Japan	Industrials	10,512	54.4
642910	Hitachi	6501 JP	Japan	Japan	Industrials	66,884	145.5
665610	Odakyu Elec. Railway	9007 JP	Japan	Japan	Industrials	5,622	15.7
695799	West Japan Railway	9021 JP	Japan	Japan	Industrials	10,179	50.8
B62G7K	Sompo	8630 JP	Japan	Japan	Insurance	17,008	66.4
674429	T&D	8795 JP	Japan	Japan	Insurance	9,361	40.0
B0JQTJ	Mitsubishi Chemical	4188 JP	Japan	Japan	Materials	9,231	31.4
664040	NEC	6701 JP	Japan	Japan	Software	16,160	61.2
666176	Osaka Gas	9532 JP	Japan	Japan	Utilities	8,704	23.7

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

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**Positive Significant News stocks - Sorted by Region, Country and Sector
(Continued)**

Table 83: POSITIVE Significant News Stocks (continued)

Stocks with positive significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
216616	Cameco	CCO CN	North America	Canada	Energy	18,774	76.1
BLFHPV	Parkland Corp	PKI CN	North America	Canada	Energy	5,700	20.4
BJ2L57	CGI	GIB/A CN	North America	Canada	Software	22,491	55.7
B15C4L	Constellation Software	CSU CN	North America	Canada	Software	52,798	105.6
219038	JPMorgan Chase	JPM US	North America	United States	Banks	494,325	1393.4
202374	Hess Corp	HES US	North America	United States	Energy	44,266	415.9
B92SR7	AbbVie	ABBV US	North America	United States	Health Care	273,529	727.4
251615	Eli Lilly	LLY US	North America	United States	Health Care	553,363	1686.2
281602	A.O. Smith	AOS US	North America	United States	Industrials	10,271	70.0
B40SSC	Huntington Ingalls	HII US	North America	United States	Industrials	10,351	60.0
BPGMZQ	Veralto	VLTO US	North America	United States	Industrials	20,260	262.1
295573	Wabtec	WAB US	North America	United States	Industrials	22,732	95.0
294303	Watsco	WSO US	North America	United States	Industrials	14,379	111.4
274054	Arch Capital	ACGL US	North America	United States	Insurance	27,699	153.8
233143	Assurant Inc	AIZ US	North America	United States	Insurance	8,934	55.1
231171	Erie Indemnity-CI A	ERIE US	North America	United States	Insurance	15,470	45.2
270502	Progressive	PGR US	North America	United States	Insurance	93,232	367.2
257207	Martin Marietta	MLM US	North America	United States	Materials	30,835	166.6
B1JZOH	Pinterest- Class A	PINS US	North America	United States	Media & Ent.	21,553	306.0
272617	Regency Centers	REG US	North America	United States	Real Estate	12,372	63.7
BJJP13	CrowdStrike	CRWD US	North America	United States	Software	57,717	594.4
BQT3XY	CyberArk Software	CYBR US	North America	United States	Software	9,149	76.2
B44Z3T	Epam Systems	EPAM US	North America	United States	Software	17,234	110.0
200597	IBM	IBM US	North America	United States	Software	148,995	604.5
286771	Synopsys	SNPS US	North America	United States	Software	78,309	412.8
BZ00V3	Zscaler	ZS US	North America	United States	Software	32,607	351.1

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

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Appendix 4: Negative Significant News stocks - Sorted by Region, Country and Sector

Table 84: NEGATIVE Significant News Stocks

Stocks with negative significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BDB6DD	IDP Education	IEL AU	Asia Pac ex-Japan	Australia	Cons. Discretionary	3,804	21.0
698123	Woolworths	WOW AU	Asia Pac ex-Japan	Australia	Cons. Staples	31,008	50.5
B1FJ0C	Brambles	BXB AU	Asia Pac ex-Japan	Australia	Industrials	12,896	36.1
643956	IGO	IGO AU	Asia Pac ex-Japan	Australia	Materials	4,676	39.0
B2368L	Pilbara Minerals	PLS AU	Asia Pac ex-Japan	Australia	Materials	8,111	102.0
636586	Gen Prop. Trust	GPT AU	Asia Pac ex-Japan	Australia	Real Estate	6,065	17.0
B1W0JF	China Citic Bank-H	998 HK	Asia Pac ex-Japan	China	Banks	7,014	10.1
B1G1QD	ICBC-H	1398 HK	Asia Pac ex-Japan	China	Banks	42,460	107.9
BGN971	Haidilao	6862 HK	Asia Pac ex-Japan	China	Cons. Discretionary	10,379	34.3
690355	Tingyi	322 HK	Asia Pac ex-Japan	China	Cons. Staples	6,869	5.6
B92NYF	China Galaxy-H	6881 HK	Asia Pac ex-Japan	China	Div Financials	1,952	10.2
674234	Shandong Weigao-H	1066 HK	Asia Pac ex-Japan	China	Health Care	4,407	7.1
BL6B9P	WuXi Biologics	2269 HK	Asia Pac ex-Japan	China	Health Care	16,116	120.5
BP8L26	Zai Lab	9688 HK	Asia Pac ex-Japan	China	Health Care	2,709	7.3
671897	China Life-H	2628 HK	Asia Pac ex-Japan	China	Insurance	9,644	44.5
B5730Z	New China Life-H	1336 HK	Asia Pac ex-Japan	China	Insurance	2,016	10.2
670625	PICC-H	2328 HK	Asia Pac ex-Japan	China	Insurance	8,199	30.3
BZ9NS1	Ganfeng Lithium-H	1772 HK	Asia Pac ex-Japan	China	Materials	1,525	16.4
BLF853	Bilibili-Class Z	9626 HK	Asia Pac ex-Japan	China	Media & Ent.	3,924	43.5
BN320P	China Vanke-H	2202 HK	Asia Pac ex-Japan	China	Real Estate	2,040	23.3
BDQZP4	Country Garden Serv	6098 HK	Asia Pac ex-Japan	China	Real Estate	2,890	47.2
BNR5PB	Yuexiu Property	123 HK	Asia Pac ex-Japan	China	Real Estate	3,279	10.3
634007	Kunlun Energy	135 HK	Asia Pac ex-Japan	China	Utilities	7,807	10.1
640837	Hang Seng Bank	11 HK	Asia Pac ex-Japan	Hong Kong	Banks	22,293	16.0
B2RJYH	Xtep International	1368 HK	Asia Pac ex-Japan	Hong Kong	Cons. Discretionary	1,490	6.5
B67C2G	Swire Prop	1972 HK	Asia Pac ex-Japan	Hong Kong	Real Estate	11,837	4.7
643655	HK & China Gas	3 HK	Asia Pac ex-Japan	Hong Kong	Utilities	14,290	10.6
B01110	Cipla	CIPLA IN	Asia Pac ex-Japan	India	Health Care	12,091	27.2
BPQWCZ	Tata Steel	TATA IN	Asia Pac ex-Japan	India	Materials	20,503	53.7
613604	Vedanta	VEDL IN	Asia Pac ex-Japan	India	Materials	11,550	36.3
BWFGD6	Tech Mahindra	TECHM IN	Asia Pac ex-Japan	India	Software	14,919	36.6
624467	RHB Bank	RHBBANK MK	Asia Pac ex-Japan	Malaysia	Banks	5,084	5.5
B5KQGT	Petronas Chemicals	PCHEM MK	Asia Pac ex-Japan	Malaysia	Materials	12,466	4.8
B2QZGV	Axiata Group	AXIATA MK	Asia Pac ex-Japan	Malaysia	Telecom	4,754	2.1
677168	SEMCO	009150 KS	Asia Pac ex-Japan	South Korea	Tech Hardware	8,885	43.9
658011	First Financial	2892 TT	Asia Pac ex-Japan	Taiwan	Banks	12,160	11.7
698758	Yang Ming	2609 TT	Asia Pac ex-Japan	Taiwan	Industrials	5,837	55.8
605633	Asia Cement	1102 TT	Asia Pac ex-Japan	Taiwan	Materials	4,790	8.5
634854	Formosa Plastics	1301 TT	Asia Pac ex-Japan	Taiwan	Materials	16,427	16.3
B05638	Global Unichip	3443 TT	Asia Pac ex-Japan	Taiwan	Semiconductors	7,598	201.8
626073	Delta Electronics	2308 TT	Asia Pac ex-Japan	Taiwan	Tech Hardware	26,534	72.3
B4V5RY	Banco Santander Brasil	SANB11 BZ	Emerging ex-Asia	Brazil	Banks	24,930	11.3
BD1WX8	Engie Brasil Energia	EGIE3 BZ	Emerging ex-Asia	Brazil	Utilities	7,614	13.1
271830	SQM	SQM/B CI	Emerging ex-Asia	Chile	Industrials	8,610	26.7
282377	Southern Copper	SCCO US	Emerging ex-Asia	Peru	Materials	66,541	78.0
B1324D	SABIC	SABIC AB	Emerging ex-Asia	Saudi Arabia	Materials	66,640	33.3
644085	Capitec Bank	CPI SJ	Emerging ex-Asia	South Africa	Banks	12,865	27.7
641056	Harmony	HAR SJ	Emerging ex-Asia	South Africa	Materials	4,049	10.6
465145	OMV AG	OMV AV	Europe	Austria	Energy	14,378	14.5
709732	GBL	GBLB BB	Europe	Belgium	Div Financials	11,541	13.8

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



Negative Significant News stocks - Sorted by Region, Country and Sector (Continued)

Table 85: NEGATIVE Significant News Stocks (continued)

Stocks with negative significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BNHKYX	Argenx	ARGX BB	Europe	Belgium	Health Care	22,417	31.2
B8652N	Ageas	AGS BB	Europe	Belgium	Insurance	8,162	13.4
425304	Moller-Maersk-B	MAERSKB DC	Europe	Denmark	Industrials	13,425	45.5
550507	Kering	KER FP	Europe	France	Cons. Discretionary	54,685	90.7
BPPBPO	Michelin	ML FP	Europe	France	Cons. Discretionary	25,606	39.1
B11ZRK	Legrand	LR FP	Europe	France	Industrials	27,554	39.5
BZCNB4	Delivery Hero	DHER GR	Europe	Germany	Cons. Discretionary	7,478	21.4
BYWH8S	Hellofresh	HFG GR	Europe	Germany	Cons. Staples	2,731	19.6
506921	Bayer	BAYN GR	Europe	Germany	Health Care	36,496	136.4
461785	DHL	DHL GR	Europe	Germany	Industrials	61,394	100.3
BYTBWY	Covestro	1COV GR	Europe	Germany	Materials	11,256	43.5
B11Y56	Wacker Chemie	WCH GR	Europe	Germany	Materials	6,585	12.4
BD1RP6	Bank of Ireland	BIRG ID	Europe	Ireland	Banks	9,592	15.5
449123	Kingspan	KSP ID	Europe	Ireland	Industrials	15,762	23.3
607642	Bank Leumi	LUMI IT	Europe	Israel	Banks	12,321	28.2
BN770J	Global-E Online	GLBE US	Europe	Israel	Cons. Discretionary	6,509	54.8
BYYN70	Poste Italiane	PST IM	Europe	Italy	Insurance	14,825	20.3
BD4TZK	OCI	OCI NA	Europe	Netherlands	Materials	6,116	13.4
713360	Equinor	EQNR NO	Europe	Norway	Energy	95,262	86.1
527178	Endesa	ELE SM	Europe	Spain	Utilities	21,590	24.3
BPYTZ5	Boliden	BOL SS	Europe	Sweden	Materials	8,535	32.4
B1VGZ	SCA	SCAB SS	Europe	Sweden	Materials	9,562	18.6
BNZFHG	Hexagon-B	HEXAB SS	Europe	Sweden	Tech Hardware	31,147	46.6
718472	Swatch Group	UHR SW	Europe	Switzerland	Cons. Discretionary	7,859	28.9
B4R2R5	Julius Baer	BAER SW	Europe	Switzerland	Div Financials	11,540	30.8
BJT1GR	Alcon	ALC SW	Europe	Switzerland	Health Care	38,971	56.6
711072	Adecco	ADEN SW	Europe	Switzerland	Industrials	8,259	22.8
B1WGG9	Geberit	GEBN SW	Europe	Switzerland	Industrials	22,535	47.4
BMBQHZ	SGS	SGSN SW	Europe	Switzerland	Industrials	16,150	24.2
BK6QWF	Helvetia	HELN SW	Europe	Switzerland	Insurance	7,302	9.7
743780	Swiss Life	SLHN SW	Europe	Switzerland	Insurance	20,482	46.7
598061	Givaudan	GIVN SW	Europe	Switzerland	Materials	38,222	56.3
553397	Swisscom	SCMN SW	Europe	Switzerland	Telecom	31,143	38.5
008118	Barratt Dev	BDEV LN	Europe	United Kingdom	Cons. Discretionary	6,990	16.2
317430	Burberry	BRBY LN	Europe	United Kingdom	Cons. Discretionary	6,561	24.6
BHJYCO	InterContinental Hotels	IHG LN	Europe	United Kingdom	Cons. Discretionary	14,943	30.0
023740	Diageo	DGE LN	Europe	United Kingdom	Cons. Staples	81,844	91.9
B3MBS7	Ocado Group	OCDO LN	Europe	United Kingdom	Cons. Staples	8,002	16.0
B1VZOM	Hargreaves Lansd	HL/ LN	Europe	United Kingdom	Div Financials	4,438	11.1
076693	St James's Place	STJ LN	Europe	United Kingdom	Div Financials	4,781	12.5
005367	Ashtead Group	AHT LN	Europe	United Kingdom	Industrials	30,490	35.8
BGXQNP	Phoenix Group	PHNX LN	Europe	United Kingdom	Insurance	6,833	11.7
BJFFLV	Croda Intl	CRDA LN	Europe	United Kingdom	Materials	8,989	18.0
B1CRLC	Mondi Plc (UK)	MNDI LN	Europe	United Kingdom	Materials	9,517	16.7
B8KF9B	WPP	WPP LN	Europe	United Kingdom	Media & Ent.	10,318	18.8
643514	Honda	7267 JP	Japan	Japan	Cons. Discretionary	56,509	178.6
664238	Yamaha	7951 JP	Japan	Japan	Cons. Discretionary	4,327	26.0
619446	KOSE	4922 JP	Japan	Japan	Cons. Staples	4,545	24.7
674388	Japan Exchange	8697 JP	Japan	Japan	Div Financials	11,184	33.9
659517	Misumi Group	9962 JP	Japan	Japan	Industrials	4,826	18.4

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

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Negative Significant News stocks - Sorted by Region, Country and Sector (Continued)

Table 86: NEGATIVE Significant News Stocks (continued)

Stocks with negative significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
BFFY88	SG Holdings	9143 JP	Japan	Japan	Industrials	9,194	17.3
698556	Yamato Trans	9064 JP	Japan	Japan	Industrials	7,020	21.3
664180	Nitto Denko	6988 JP	Japan	Japan	Materials	10,742	41.6
649099	Keyence	6861 JP	Japan	Japan	Tech Hardware	107,165	253.4
BF5M0K	SoftBank	9434 JP	Japan	Japan	Telecom	59,806	92.1
B9B3FG	Brp Inc/Ca-Sub V	DOO CN	North America	Canada	Cons. Discretionary	2,475	24.2
217228	Canadian Tire	CTC/A CN	North America	Canada	Cons. Discretionary	5,602	35.0
246937	IGM Financial	IGM CN	North America	Canada	Div Financials	6,322	7.1
BSDHYK	Air Canada	AC CN	North America	Canada	Industrials	5,081	52.7
202464	Barrick Gold	ABX CN	North America	Canada	Materials	31,872	79.5
234760	First Quantum	FM CN	North America	Canada	Materials	5,704	70.1
286685	Lundin Mining	LUN CN	North America	Canada	Materials	6,357	27.9
BDRJLN	Nutrien	NTR CN	North America	Canada	Materials	27,996	103.5
222961	RioCan REIT	REI-U CN	North America	Canada	Real Estate	4,235	14.1
226082	Open Text	OTEX CN	North America	Canada	Software	11,453	32.0
238109	TELUS	T CN	North America	Canada	Telecom	26,001	104.5
265005	Emera	EMA CN	North America	Canada	Utilities	10,414	64.3
B68XHC	Northland Power	NPI CN	North America	Canada	Utilities	4,620	28.3
BQRX1X	Citizens Fin	CFG US	North America	United States	Banks	15,652	158.8
233674	Fifth Third	FITB US	North America	United States	Banks	23,484	147.0
244596	Huntington Banc	HBAN US	North America	United States	Banks	18,417	157.6
B01R31	Regions Financial	RF US	North America	United States	Banks	18,186	148.6
BMGYYH	Airbnb-Class A	ABNB US	North America	United States	Cons. Discretionary	58,044	817.1
BNNTGJ	Bath & Body Works	BBWI US	North America	United States	Cons. Discretionary	9,814	123.8
BMWWGB	Caesars Entertain	CZR US	North America	United States	Cons. Discretionary	10,093	139.1
296963	Dick's Sporting	DKS US	North America	United States	Cons. Discretionary	9,030	192.2
BWTON5N	Etsy Inc	ETSY US	North America	United States	Cons. Discretionary	9,970	282.7
236748	Genuine Parts	GPC US	North America	United States	Cons. Discretionary	19,451	140.3
B665KZ	GM	GM US	North America	United States	Cons. Discretionary	49,423	540.6
241458	Hasbro	HAS US	North America	United States	Cons. Discretionary	7,084	104.6
B616C7	Tesla	TSLA US	North America	United States	Cons. Discretionary	788,674	29007.0
290033	Tractor Supply	TSCO US	North America	United States	Cons. Discretionary	23,397	257.4
221546	Conagra Brands	CAG US	North America	United States	Cons. Staples	13,699	123.7
225028	Darling Ingredients	DAR US	North America	United States	Cons. Staples	7,949	90.4
232052	Estee Lauder	EL US	North America	United States	Cons. Staples	33,946	391.9
242280	Hershey	HSY US	North America	United States	Cons. Staples	27,939	285.6
248681	Kellanova	K US	North America	United States	Cons. Staples	19,141	148.7
BQ84ZQ	Kenvue	KVUE US	North America	United States	Cons. Staples	41,228	687.4
249183	Kimberly-Clark	KMB US	North America	United States	Cons. Staples	41,093	217.3
B72XK0	Ally Financial	ALLY US	North America	United States	Div Financials	10,533	126.9
BPMQ7X	Annaly Mortgage	NLY US	North America	United States	Div Financials	9,567	82.6
BP6D7B	Toast-Class A	TOST US	North America	United States	Div Financials	7,502	156.0
BNNF1C	APA Corp	APA US	North America	United States	Energy	11,025	159.3
BJLT38	Avantor	AVTR US	North America	United States	Health Care	15,431	143.7
225087	Danaher	DHR US	North America	United States	Health Care	170,810	668.0
256711	Edwards Lifesciences	EW US	North America	United States	Health Care	46,354	298.4
B4MGBG	HCA	HCA US	North America	United States	Health Care	73,622	342.8
243353	Hologic	HOLX US	North America	United States	Health Care	17,501	132.4
212624	Mettler-Toledo	MTD US	North America	United States	Health Care	26,521	188.7
273165	Repligen Corp	RGEN US	North America	United States	Health Care	10,025	95.0

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

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Negative Significant News stocks - Sorted by Region, Country and Sector (Continued)

Table 87: NEGATIVE Significant News Stocks (continued)

Stocks with negative significant news

Sedol	Short Name	BBG Code	Region	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
230584	Revvity	RVTY US	North America	United States	Health Care	13,569	83.2
278381	Zimmer Biomet	ZBH US	North America	United States	Health Care	25,431	197.7
211622	C.H. Robinson	CHRW US	North America	United States	Industrials	10,059	92.2
257020	Masco	MAS US	North America	United States	Industrials	15,066	99.6
BL95MY	Paycom Software	PAYC US	North America	United States	Industrials	12,500	181.9
BKM4N8	Paylocity	PCTY US	North America	United States	Industrials	9,260	78.9
283154	Southwest Airlines	LUV US	North America	United States	Industrials	17,202	229.7
B3Q2FJ	Stanley Black & Decker	SWK US	North America	United States	Industrials	15,032	128.1
BYMWL8	Transunion	TRU US	North America	United States	Industrials	13,282	117.5
204685	Albemarle	ALB US	North America	United States	Materials	16,954	392.2
229838	Eastman Chemical	EMN US	North America	United States	Materials	10,649	72.9
232860	FMC	FMC US	North America	United States	Materials	7,864	126.7
B01ZP2	Westlake	WLK US	North America	United States	Materials	17,871	54.4
246632	Interpublic	IPG US	North America	United States	Media & Ent.	12,564	129.2
BRTLC0	Liberty Broadband-C	LBRDK US	North America	United States	Media & Ent.	10,151	68.3
BK80XH	Match Group	MTCH US	North America	United States	Media & Ent.	10,150	190.2
BKTNTR	Paramount Global	PARA US	North America	United States	Media & Ent.	9,028	192.1
BZ1LFG	Roku	ROKU US	North America	United States	Media & Ent.	11,374	641.8
BD8FDD	Trade Desk-A	TTD US	North America	United States	Media & Ent.	32,106	360.3
216632	Camden Property	CPT US	North America	United States	Real Estate	10,601	84.3
226286	CoStar	CSGP US	North America	United States	Real Estate	35,685	159.6
272791	UDR	UDR US	North America	United States	Real Estate	12,616	91.7
BNKJSM	Marvell Tech	MRVL US	North America	United States	Semiconductors	52,035	548.1
258357	ON Semiconductor	ON US	North America	United States	Semiconductors	36,046	531.2
296105	Skyworks Solutions	SWKS US	North America	United States	Semiconductors	17,919	168.2
288540	Texas Instruments	TXN US	North America	United States	Semiconductors	154,772	845.0
BQ1PC7	Atlassian	TEAM US	North America	United States	Software	36,908	292.0
BFYT7B	Docusign	DOCU US	North America	United States	Software	12,081	185.0
BDFZSP	Okta	OKTA US	North America	United States	Software	14,191	198.3
BLFDXH	Unity Software	U US	North America	United States	Software	15,680	387.6
222470	Corning	GLW US	North America	United States	Tech Hardware	25,973	116.9
243184	Juniper Networks	JNPR US	North America	United States	Tech Hardware	9,474	98.7
228022	DTE Energy	DTE US	North America	United States	Utilities	22,733	137.4
BWN4Q	Eversource Energy	ES US	North America	United States	Utilities	21,546	154.4
BYY8KK	WEC Energy	WEC US	North America	United States	Utilities	26,550	141.1

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

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Appendix 5: Positive Significant News stocks - Sorted by Sector, Region and Country

Table 88: POSITIVE Significant News Stocks

Stocks with positive significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
604702	AMMB	AMM MK	Banks	Asia Pac ex-Japan	Malaysia	2,892	2.5
607496	Bank of Philippine	BPI PM	Banks	Asia Pac ex-Japan	Philippines	9,270	3.9
B5VJH7	BDO Unibank	BDO PM	Banks	Asia Pac ex-Japan	Philippines	12,415	6.9
B0F9V2	OCBC	OCBC SP	Banks	Asia Pac ex-Japan	Singapore	44,495	44.4
618785	Chang Hwa Comm Bank	2801 TT	Banks	Asia Pac ex-Japan	Taiwan	6,333	6.2
BZ1MXR	Alpha Services	ALPHA GA	Banks	Emerging ex-Asia	Greece	3,998	11.8
BYZ43T	Eurobank Ergasias	EUROB GA	Banks	Emerging ex-Asia	Greece	6,610	8.1
BNC0DB	Piraeus Financial	TPEIR GA	Banks	Emerging ex-Asia	Greece	4,420	12.3
223287	Credicorp	BAP US	Banks	Emerging ex-Asia	Peru	11,927	35.6
B030GJ	Standard Bank	SBKSJ	Banks	Emerging ex-Asia	South Africa	19,069	30.6
B03NOC	Sabanci	SAHOL TI	Banks	Emerging ex-Asia	Turkiye	4,176	81.3
600172	Abu Dhabi Islamic Bank	ADIB UH	Banks	Emerging ex-Asia	United Arab Emirate	10,008	5.6
458882	Danske Bank	DANSKE DC	Banks	Europe	Denmark	23,048	29.0
726261	Credit Agricole	ACA FP	Banks	Europe	France	43,340	61.0
BZ5739	ING	INGA NA	Banks	Europe	Netherlands	54,081	156.9
570594	Banco Santander	SAN SM	Banks	Europe	Spain	67,569	137.9
481334	SEB	SEBA SS	Banks	Europe	Sweden	29,141	35.5
219038	JPMorgan Chase	JPM US	Banks	North America	United States	494,325	1393.4
671825	Great Wall Motor-H	2333 HK	Cons. Discretionary	Asia Pac ex-Japan	China	3,011	34.0
BLD4QD	Haier Smart Home-H	6690 HK	Cons. Discretionary	Asia Pac ex-Japan	China	8,072	25.0
BMW5M0	Li Auto	2015 HK	Cons. Discretionary	Asia Pac ex-Japan	China	33,272	134.2
BNYK8H	Trip.com	9961 HK	Cons. Discretionary	Asia Pac ex-Japan	China	22,971	44.9
B5B23W	Sands China	1928 HK	Cons. Discretionary	Asia Pac ex-Japan	Hong Kong	23,683	39.8
BNR5NG	Sona Blw Precision Forgings	SONACOMS IN	Cons. Discretionary	Asia Pac ex-Japan	India	4,534	11.0
BDDRN3	Trent	TRENT IN	Cons. Discretionary	Asia Pac ex-Japan	India	13,051	18.9
B1VXKN	Genting Malaysia	GENM MK	Cons. Discretionary	Asia Pac ex-Japan	Malaysia	3,476	3.7
617340	Coway	021240 KS	Cons. Discretionary	Asia Pac ex-Japan	South Korea	3,278	6.1
BPBLV8	Vibra Energia	VBBR3 BZ	Cons. Discretionary	Emerging ex-Asia	Brazil	5,459	42.7
459858	Continental Ag	CON GR	Cons. Discretionary	Europe	Germany	16,994	25.9
BJN59B	Dr Ing Hc F Porsche Ag	P911 GR	Cons. Discretionary	Europe	Germany	40,203	40.1
B3MSM2	Amadeus IT	AMS SM	Cons. Discretionary	Europe	Spain	32,287	44.1
BD6K45	Compass Group	CPG LN	Cons. Discretionary	Europe	United Kingdom	46,890	52.5
B1KJJ4	Whitbread	WTB LN	Cons. Discretionary	Europe	United Kingdom	9,007	22.6
601070	Aisin	7259 JP	Cons. Discretionary	Japan	Japan	10,311	32.6
649632	Koito Mfg	7276 JP	Cons. Discretionary	Japan	Japan	5,013	19.5
613623	Hengan Int'l	1044 HK	Cons. Staples	Asia Pac ex-Japan	China	4,323	5.3
BRXVS6	Alibaba Health	241 HK	Cons. Staples	Asia Pac ex-Japan	Hong Kong	7,349	19.4
612860	Nestle India	NEST IN	Cons. Staples	Asia Pac ex-Japan	India	30,797	20.5
B00G23	QL Resources	QLG MK	Cons. Staples	Asia Pac ex-Japan	Malaysia	3,024	2.2
BDVLJ7	Orion Corp	271560 KS	Cons. Staples	Asia Pac ex-Japan	South Korea	3,564	7.2
B7FQV6	Raia Drogasil	RADL3 BZ	Cons. Staples	Emerging ex-Asia	Brazil	10,398	29.1
BGK4T3	Futu-ADR	FUTU US	Div Financials	Asia Pac ex-Japan	China	5,029	111.1
B2Q7WL	REC	RECL IN	Div Financials	Asia Pac ex-Japan	India	13,064	66.6
630386	Sing Exchange	SGX SP	Div Financials	Asia Pac ex-Japan	Singapore	7,986	11.9
B1YW44	3i Group	III LN	Div Financials	Europe	United Kingdom	30,040	32.4
BL9YR7	Wise - A	WISE LN	Div Financials	Europe	United Kingdom	11,418	9.8
BM9120	Ampol	ALD AU	Energy	Asia Pac ex-Japan	Australia	5,878	19.0
622657	PetroChina-H	857 HK	Energy	Asia Pac ex-Japan	China	13,942	71.1
BD4HFT	HD Hyundai	267250 KS	Energy	Asia Pac ex-Japan	South Korea	3,882	10.6
BD0BDH	PTT	PTT TB	Energy	Asia Pac ex-Japan	Thailand	29,917	49.5

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

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Positive Significant News stocks - Sorted by Sector, Region and Country (Continued)

Table 89: POSITIVE Significant News Stocks (continued)

Stocks with positive significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B0300P	Thai Oil	TOP TB	Energy	Asia Pac ex-Japan	Thailand	3,518	17.5
B0P72G	Cosan	CSAN3 BZ	Energy	Emerging ex-Asia	Brazil	7,469	24.5
B1FF8P	Idemitsu	5019 JP	Energy	Japan	Japan	8,108	36.2
216616	Cameco	CCO CN	Energy	North America	Canada	18,774	76.1
BLFHPV	Parkland Corp	PKI CN	Energy	North America	Canada	5,700	20.4
202374	Hess Corp	HES US	Energy	North America	United States	44,266	415.9
621179	Cochlear	COH AU	Health Care	Asia Pac ex-Japan	Australia	13,356	26.6
B6WY99	China Medical System	867 HK	Health Care	Asia Pac ex-Japan	China	4,346	5.2
BD9Q2J	Genscript Biotech	1548 HK	Health Care	Asia Pac ex-Japan	China	5,392	22.4
BJYKB7	Hansoh Pharma	3692 HK	Health Care	Asia Pac ex-Japan	China	11,975	10.4
B00XSF	Sino Biopharm.	1177 HK	Health Care	Asia Pac ex-Japan	China	8,355	24.0
BOXPSPB	Torrent Pharma	TRP IN	Health Care	Asia Pac ex-Japan	India	9,377	9.0
B0R7JF	Ipsen	IPN FP	Health Care	Europe	France	9,990	8.7
BN7SWP	GSK	GSK LN	Health Care	Europe	United Kingdom	75,705	77.4
649955	Kyowa Kirin	4151 JP	Health Care	Japan	Japan	9,078	16.2
680468	Shionogi	4507 JP	Health Care	Japan	Japan	14,822	54.4
688507	Terumo	4543 JP	Health Care	Japan	Japan	24,513	62.7
B92SR7	AbbVie	ABBV US	Health Care	North America	United States	273,529	727.4
251615	Eli Lilly	LLY US	Health Care	North America	United States	553,363	1686.2
B04KNF	Air China-H	753 HK	Industrials	Asia Pac ex-Japan	China	2,887	6.0
601369	China Southern Air.-H	1055 HK	Industrials	Asia Pac ex-Japan	China	1,969	3.5
BF1THH	Bharat Elec	BHE IN	Industrials	Asia Pac ex-Japan	India	16,181	29.5
B1B90H	CG Power	CGPOWER IN	Industrials	Asia Pac ex-Japan	India	8,340	11.9
BR56KD	Hindustan Aeronautics	HNAL IN	Industrials	Asia Pac ex-Japan	India	22,535	48.9
B800MQ	Astra Int'l	ASII J	Industrials	Asia Pac ex-Japan	Indonesia	14,856	16.9
635988	Gamuda	GAM MK	Industrials	Asia Pac ex-Japan	Malaysia	2,694	5.4
618819	Malaysia Airports	MAHB MK	Industrials	Asia Pac ex-Japan	Malaysia	2,673	4.7
645581	Int'l Container	ICT PM	Industrials	Asia Pac ex-Japan	Philippines	9,056	4.2
B068DB	SM Investments	SM PM	Industrials	Asia Pac ex-Japan	Philippines	19,243	7.2
BSXN8K	Samsung C&T	028260 KS	Industrials	Asia Pac ex-Japan	South Korea	18,661	19.7
610008	Bidvest	BVT SJ	Industrials	Emerging ex-Asia	South Africa	4,694	13.1
400212	Bouygues	EN FP	Industrials	Europe	France	14,379	26.8
B13X01	Eiffage	FGR FP	Industrials	Europe	France	10,503	18.7
B292JQ	Getlink	GET FP	Industrials	Europe	France	10,064	13.9
401225	Airbus	AIR FP	Industrials	Europe	Netherlands	122,043	126.3
BVRZ8L	Aena SME	AENA SM	Industrials	Europe	Spain	27,191	22.1
B1VQ25	Sandvik	SAND SS	Industrials	Europe	Sweden	27,147	35.4
714209	Skanska	SKAB SS	Industrials	Europe	Sweden	7,243	11.6
B1QH83	Volvo	VOLVB SS	Industrials	Europe	Sweden	41,249	62.6
B19NLV	Experian	EXPN LN	Industrials	Europe	United Kingdom	37,545	39.3
BNGDN8	Melrose Industries	MRO LN	Industrials	Europe	United Kingdom	9,737	23.4
601490	ANA	9202 JP	Industrials	Japan	Japan	10,512	54.4
642910	Hitachi	6501 JP	Industrials	Japan	Japan	66,884	145.5
665610	Odakyu Elec. Railway	9007 JP	Industrials	Japan	Japan	5,622	15.7
695799	West Japan Railway	9021 JP	Industrials	Japan	Japan	10,179	50.8
281602	A.O. Smith	AOS US	Industrials	North America	United States	10,271	70.0
B40SSC	Huntington Ingalls	HII US	Industrials	North America	United States	10,351	60.0
BPGMZQ	Veralto	VLTO US	Industrials	North America	United States	20,260	262.1
295573	Wabtec	WAB US	Industrials	North America	United States	22,732	95.0
294303	Watsco	WSO US	Industrials	North America	United States	14,379	111.4

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

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Positive Significant News stocks - Sorted by Sector, Region and Country (Continued)

Table 90: POSITIVE Significant News Stocks (continued)

Stocks with positive significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
658508	Suncorp Group	SUN AU	Insurance	Asia Pac ex-Japan	Australia	12,005	31.6
BZ60N3	SBI Life Insurance	SBILIFE IN	Insurance	Asia Pac ex-Japan	India	17,235	18.2
642566	Cathay Financial	2882 TT	Insurance	Asia Pac ex-Japan	Taiwan	21,867	23.1
B128FN	Co For Coop Insurance	TAWUNIYA AB	Insurance	Emerging ex-Asia	Saudi Arabia	5,216	12.6
708842	Axa SA	CS FP	Insurance	Europe	France	73,460	90.5
523148	Allianz	ALV GR	Insurance	Europe	Germany	107,794	196.7
BPH0Y2	Aegon	AGN NA	Insurance	Europe	Netherlands	11,767	33.8
BD9PNF	ASR Nederland	ASRNL NA	Insurance	Europe	Netherlands	9,968	29.9
B545MG	Swiss Re	SREN SW	Insurance	Europe	Switzerland	35,671	78.2
598381	Zurich Insurance	ZURN SW	Insurance	Europe	Switzerland	76,443	114.6
B62G7K	Sompo	8630 JP	Insurance	Japan	Japan	17,008	66.4
674429	T&D	8795 JP	Insurance	Japan	Japan	9,361	40.0
274054	Arch Capital	ACGL US	Insurance	North America	United States	27,699	153.8
233143	Assurant Inc	AIZ US	Insurance	North America	United States	8,934	55.1
231171	Erie Indemnity-Cl A	ERIE US	Insurance	North America	United States	15,470	45.2
270502	Progressive	PGR US	Insurance	North America	United States	93,232	367.2
608625	Fortescue	FMG AU	Materials	Asia Pac ex-Japan	Australia	60,969	97.3
645800	Orica	ORI AU	Materials	Asia Pac ex-Japan	Australia	4,954	12.0
642539	CHALCO-H	2600 HK	Materials	Asia Pac ex-Japan	China	1,970	10.0
600030	Jiangxi Copper-H	358 HK	Materials	Asia Pac ex-Japan	China	1,962	4.9
B0WC2B	Nine Dragons	2689 HK	Materials	Asia Pac ex-Japan	China	2,313	3.4
610035	Shree Cement	SRCM IN	Materials	Asia Pac ex-Japan	India	12,424	8.8
B01GZF	Ultratech Cement	UTCEM IN	Materials	Asia Pac ex-Japan	India	36,437	36.2
B798FW	Novozymes	NZYMB DC	Materials	Europe	Denmark	12,497	22.6
512067	Heidelberg Materials	HEI GR	Materials	Europe	Germany	16,647	34.3
B0JQTJ	Mitsubishi Chemical	4188 JP	Materials	Japan	Japan	9,231	31.4
257207	Martin Marietta	MLM US	Materials	North America	United States	30,835	166.6
BLC90T	Kuaishou Tech	1024 HK	Media & Ent.	Asia Pac ex-Japan	China	24,347	151.0
B1685L	Info Edge	INFOE IN	Media & Ent.	Asia Pac ex-Japan	India	7,969	16.3
B16TC3	JYP Entertainment	035900 KS	Media & Ent.	Asia Pac ex-Japan	South Korea	2,792	45.4
BMJ6DW	Informa	INF LN	Media & Ent.	Europe	United Kingdom	13,780	20.7
BJ2Z0H	Pinterest- Class A	PINS US	Media & Ent.	North America	United States	21,553	306.0
643491	HK Land	HKL SP	Real Estate	Asia Pac ex-Japan	Hong Kong	7,683	6.6
685992	Sun Hung Kai	16 HK	Real Estate	Asia Pac ex-Japan	Hong Kong	31,340	38.9
686774	Swire Pacific	19 HK	Real Estate	Asia Pac ex-Japan	Hong Kong	7,253	9.2
681884	SM Prime	SMPH PM	Real Estate	Asia Pac ex-Japan	Philippines	17,158	4.3
B6SR7L	Central Pattana	CPN TB	Real Estate	Asia Pac ex-Japan	Thailand	9,204	12.6
BOLX3Y	Aldar Prop	ALDAR UH	Real Estate	Emerging ex-Asia	United Arab Emirates	11,453	11.8
BF2PQ0	Unibail-Rodamco-Westfield	URW FP	Real Estate	Europe	France	10,278	25.0
272617	Regency Centers	REG US	Real Estate	North America	United States	12,372	63.7
B4TPSL	Alchip Tech	3661 TT	Semiconductors	Asia Pac ex-Japan	Taiwan	7,907	201.3
BD6F8V	LTIMindtree	LTIM IN	Software	Asia Pac ex-Japan	India	22,385	29.3
BM8H5Y	Dassault Systems	DSY FP	Software	Europe	France	65,305	45.0
218133	Check Point	CHKP US	Software	Europe	Israel	17,875	110.2
714789	Temenos	TEMN SW	Software	Europe	Switzerland	6,986	13.1
664040	NEC	6701 JP	Software	Japan	Japan	16,160	61.2
BJ2L57	CGI	GIB/A CN	Software	North America	Canada	22,491	55.7
B15C4L	Constellation Software	CSU CN	Software	North America	Canada	52,798	105.6
BJJP13	CrowdStrike	CRWD US	Software	North America	United States	57,717	594.4
BQT3XY	CyberArk Software	CYBR US	Software	North America	United States	9,149	76.2

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

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Positive Significant News stocks - Sorted by Sector, Region and Country (Continued)

Table 91: POSITIVE Significant News Stocks (continued)

Stocks with positive significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B44Z3T	Epam Systems	EPAM US	Software	North America	United States	17,234	110.0
200597	IBM	IBM US	Software	North America	United States	148,995	604.5
286771	Synopsys	SNPS US	Software	North America	United States	78,309	412.8
BZ00V3	Zscaler	ZS US	Software	North America	United States	32,607	351.1
BG0ZMJ	Xiaomi Corp-B	1810 HK	Tech Hardware	Asia Pac ex-Japan	China	40,857	165.6
600585	Acer	2353 TT	Tech Hardware	Asia Pac ex-Japan	Taiwan	5,343	44.8
605104	Asustek	2357 TT	Tech Hardware	Asia Pac ex-Japan	Taiwan	11,847	82.7
612918	Gigabyte Tech	2376 TT	Tech Hardware	Asia Pac ex-Japan	Taiwan	5,510	250.2
614101	Quanta	2382 TT	Tech Hardware	Asia Pac ex-Japan	Taiwan	28,255	471.4
BF4QXG	Wiwynn	6669 TT	Tech Hardware	Asia Pac ex-Japan	Taiwan	10,397	175.4
BRJS8F	Delta Electronics (Thai)	DELTA TB	Tech Hardware	Asia Pac ex-Japan	Thailand	32,160	39.6
608624	CelcomDigi	CDB MK	Telecom	Asia Pac ex-Japan	Malaysia	10,417	2.3
688143	Spark New Zealand (NZ)	SPK NZ	Telecom	Asia Pac ex-Japan	New Zealand	6,030	5.5
641256	Adv Info Serv	ADVANC TB	Telecom	Asia Pac ex-Japan	Thailand	18,909	28.5
BQMMPZ	True	TRUE TB	Telecom	Asia Pac ex-Japan	Thailand	5,112	12.8
B65B4D	Vodacom	VOD SJ	Telecom	Emerging ex-Asia	South Africa	12,044	7.3
632217	Emirates Telecom	EAND UH	Telecom	Emerging ex-Asia	United Arab Emirates	46,506	10.2
517617	Orange	ORA FP	Telecom	Europe	France	30,278	54.6
671156	China Resources Power	836 HK	Utilities	Asia Pac ex-Japan	China	9,635	19.4
609701	CLP	2 HK	Utilities	Asia Pac ex-Japan	Hong Kong	20,853	17.0
B3WQH4	Adani Power	ADANI IN	Utilities	Asia Pac ex-Japan	India	24,341	74.7
B247XZ	Manila Electric	MER PM	Utilities	Asia Pac ex-Japan	Philippines	8,121	1.3
B544PW	PGE	PGE PW	Utilities	Emerging ex-Asia	Poland	4,952	5.0
BM8SKZ	Acwa Power Co	ACWA AB	Utilities	Emerging ex-Asia	Saudi Arabia	50,105	18.5
B39GNW	Edp Renovaveis S	EDPR PL	Utilities	Europe	Portugal	20,954	14.6
666176	Osaka Gas	9532 JP	Utilities	Japan	Japan	8,704	23.7

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

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Appendix 6: Negative Significant News stocks - Sorted by Sector, Region and Country

Table 92: NEGATIVE Significant News Stocks

Stocks with negative significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B1W0JF	China Citic Bank-H	998 HK	Banks	Asia Pac ex-Japan	China	7,014	10.1
B1G1QD	ICBC-H	1398 HK	Banks	Asia Pac ex-Japan	China	42,460	107.9
640837	Hang Seng Bank	11 HK	Banks	Asia Pac ex-Japan	Hong Kong	22,293	16.0
624467	RHB Bank	RHBBANK MK	Banks	Asia Pac ex-Japan	Malaysia	5,084	5.5
658011	First Financial	2892 TT	Banks	Asia Pac ex-Japan	Taiwan	12,160	11.7
B4V5RY	Banco Santander Brasil	SANB11 BZ	Banks	Emerging ex-Asia	Brazil	24,930	11.3
644085	Capitec Bank	CPI SJ	Banks	Emerging ex-Asia	South Africa	12,865	27.7
BD1RP6	Bank of Ireland	BIRG ID	Banks	Europe	Ireland	9,592	15.5
607642	Bank Leumi	LUMI IT	Banks	Europe	Israel	12,321	28.2
BQRX1X	Citizens Fin	CFG US	Banks	North America	United States	15,652	158.8
233674	Fifth Third	FITB US	Banks	North America	United States	23,484	147.0
244596	Huntington Banc	HBAN US	Banks	North America	United States	18,417	157.6
B01R31	Regions Financial	RF US	Banks	North America	United States	18,186	148.6
BDB6DD	IDP Education	IEL AU	Cons. Discretionary	Asia Pac ex-Japan	Australia	3,804	21.0
BGN971	Haidilao	6862 HK	Cons. Discretionary	Asia Pac ex-Japan	China	10,379	34.3
B2RJYH	Xtep International	1368 HK	Cons. Discretionary	Asia Pac ex-Japan	Hong Kong	1,490	6.5
550507	Kering	KER FP	Cons. Discretionary	Europe	France	54,685	90.7
BPBPJO	Michelin	ML FP	Cons. Discretionary	Europe	France	25,606	39.1
BZCNB4	Delivery Hero	DHER GR	Cons. Discretionary	Europe	Germany	7,478	21.4
BN770J	Global-E Online	GLBE US	Cons. Discretionary	Europe	Israel	6,509	54.8
718472	Swatch Group	UHR SW	Cons. Discretionary	Europe	Switzerland	7,859	28.9
008118	Barratt Dev	BDEV LN	Cons. Discretionary	Europe	United Kingdom	6,990	16.2
317430	Burberry	BRBY LN	Cons. Discretionary	Europe	United Kingdom	6,561	24.6
BHJYCO	InterContinental Hotels	IHG LN	Cons. Discretionary	Europe	United Kingdom	14,943	30.0
643514	Honda	7267 JP	Cons. Discretionary	Japan	Japan	56,509	178.6
664238	Yamaha	7951 JP	Cons. Discretionary	Japan	Japan	4,327	26.0
B9B3FG	Brp Inc/Ca-Sub V	DOO CN	Cons. Discretionary	North America	Canada	2,475	24.2
217228	Canadian Tire	CTC/A CN	Cons. Discretionary	North America	Canada	5,602	35.0
BMGYYH	Airbnb-Class A	ABNB US	Cons. Discretionary	North America	United States	58,044	817.1
BNNTGJ	Bath & Body Works	BBWI US	Cons. Discretionary	North America	United States	9,814	123.8
BMWGB	Caesars Entertain	CZR US	Cons. Discretionary	North America	United States	10,093	139.1
296963	Dick's Sporting	DKS US	Cons. Discretionary	North America	United States	9,030	192.2
BWTN5N	Etsy Inc	ETSY US	Cons. Discretionary	North America	United States	9,970	282.7
236748	Genuine Parts	GPC US	Cons. Discretionary	North America	United States	19,451	140.3
B665KZ	GM	GM US	Cons. Discretionary	North America	United States	49,423	540.6
241458	Hasbro	HAS US	Cons. Discretionary	North America	United States	7,084	104.6
B616C7	Tesla	TSLA US	Cons. Discretionary	North America	United States	788,674	29007.0
290033	Tractor Supply	TSCO US	Cons. Discretionary	North America	United States	23,397	257.4
698123	Woolworths	WOW AU	Cons. Staples	Asia Pac ex-Japan	Australia	31,008	50.5
690355	Tingyi	322 HK	Cons. Staples	Asia Pac ex-Japan	China	6,869	5.6
BYWH8S	Hellofresh	HFG GR	Cons. Staples	Europe	Germany	2,731	19.6
023740	Diageo	DGE LN	Cons. Staples	Europe	United Kingdom	81,844	91.9
B3MBS7	Ocado Group	OCDO LN	Cons. Staples	Europe	United Kingdom	8,002	16.0
619446	KOSE	4922 JP	Cons. Staples	Japan	Japan	4,545	24.7
221546	Conagra Brands	CAG US	Cons. Staples	North America	United States	13,699	123.7
225028	Darling Ingredients	DAR US	Cons. Staples	North America	United States	7,949	90.4
232052	Estee Lauder	EL US	Cons. Staples	North America	United States	33,946	391.9
242280	Hershey	HSY US	Cons. Staples	North America	United States	27,939	285.6
248681	Kellanova	K US	Cons. Staples	North America	United States	19,141	148.7
BQ84ZQ	Kenvue	KVUE US	Cons. Staples	North America	United States	41,228	687.4

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

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Negative Significant News stocks - Sorted by Sector, Region and Country (Continued)

Table 93: NEGATIVE Significant News Stocks (continued)

Stocks with negative significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
249183	Kimberly-Clark	KMB US	Cons. Staples	North America	United States	41,093	217.3
B92NYF	China Galaxy-H	6881 HK	Div Financials	Asia Pac ex-Japan	China	1,952	10.2
709732	GBL	GBLB BB	Div Financials	Europe	Belgium	11,541	13.8
B4R2R5	Julius Baer	BAER SW	Div Financials	Europe	Switzerland	11,540	30.8
B1VZOM	Hargreaves Lansd	HL/LN	Div Financials	Europe	United Kingdom	4,438	11.1
076693	St.James's Place	STJ LN	Div Financials	Europe	United Kingdom	4,781	12.5
674388	Japan Exchange	8697 JP	Div Financials	Japan	Japan	11,184	33.9
246937	IGM Financial	IGM CN	Div Financials	North America	Canada	6,322	7.1
B72XK0	Ally Financial	ALLY US	Div Financials	North America	United States	10,533	126.9
BPMQ7X	Annaly Mortgage	NLY US	Div Financials	North America	United States	9,567	82.6
BP6D7B	Toast-Class A	TOST US	Div Financials	North America	United States	7,502	156.0
465145	OMV AG	OMV AV	Energy	Europe	Austria	14,378	14.5
713360	Equinor	EQNR NO	Energy	Europe	Norway	95,262	86.1
BNNF1C	APA Corp	APA US	Energy	North America	United States	11,025	159.3
674234	Shandong Weigao-H	1066 HK	Health Care	Asia Pac ex-Japan	China	4,407	7.1
BL6B9P	WuXi Biologics	2269 HK	Health Care	Asia Pac ex-Japan	China	16,116	120.5
BP8L26	Zai Lab	9688 HK	Health Care	Asia Pac ex-Japan	China	2,709	7.3
B01110	Cipla	CIPLA IN	Health Care	Asia Pac ex-Japan	India	12,091	27.2
BNHKYX	Argenx	ARGX BB	Health Care	Europe	Belgium	22,417	31.2
506921	Bayer	BAYN GR	Health Care	Europe	Germany	36,496	136.4
BJT1GR	Alcon	ALC SW	Health Care	Europe	Switzerland	38,971	56.6
BJLT38	Avantor	AVTR US	Health Care	North America	United States	15,431	143.7
225087	Danaher	DHR US	Health Care	North America	United States	170,810	668.0
256711	Edwards Lifesciences	EW US	Health Care	North America	United States	46,354	298.4
B4MGBG	HCA	HCA US	Health Care	North America	United States	73,622	342.8
243353	Hologic	HOLX US	Health Care	North America	United States	17,501	132.4
212624	Mettler-Toledo	MTD US	Health Care	North America	United States	26,521	188.7
273165	Repligen Corp	RGEN US	Health Care	North America	United States	10,025	95.0
230584	Rewvity	RVTY US	Health Care	North America	United States	13,569	83.2
278381	Zimmer Biomet	ZBH US	Health Care	North America	United States	25,431	197.7
B1FJ0C	Brambles	BXB AU	Industrials	Asia Pac ex-Japan	Australia	12,896	36.1
698758	Yang Ming	2609 TT	Industrials	Asia Pac ex-Japan	Taiwan	5,837	55.8
271830	SQM	SQM/B CI	Industrials	Emerging ex-Asia	Chile	8,610	26.7
425304	Moller-Maersk-B	MAERSKB DC	Industrials	Europe	Denmark	13,425	45.5
B11ZRK	Legrand	LR FP	Industrials	Europe	France	27,554	39.5
461785	DHL	DHL GR	Industrials	Europe	Germany	61,394	100.3
449123	Kingspan	KSP ID	Industrials	Europe	Ireland	15,762	23.3
711072	Adecco	ADEN SW	Industrials	Europe	Switzerland	8,259	22.8
B1WGG9	Geberit	GEBN SW	Industrials	Europe	Switzerland	22,535	47.4
BMBQHZ	SGS	SGSN SW	Industrials	Europe	Switzerland	16,150	24.2
005367	Ashtead Group	AHT LN	Industrials	Europe	United Kingdom	30,490	35.8
659517	Misumi Group	9962 JP	Industrials	Japan	Japan	4,826	18.4
BFFY88	SG Holdings	9143 JP	Industrials	Japan	Japan	9,194	17.3
698556	Yamato Trans	9064 JP	Industrials	Japan	Japan	7,020	21.3
BSDHYK	Air Canada	AC CN	Industrials	North America	Canada	5,081	52.7
211622	C.H. Robinson	CHRW US	Industrials	North America	United States	10,059	92.2
257020	Masco	MAS US	Industrials	North America	United States	15,066	99.6
BL95MY	Paycom Software	PAYC US	Industrials	North America	United States	12,500	181.9
BKM4N8	Paylocity	PCTY US	Industrials	North America	United States	9,260	78.9
283154	Southwest Airlines	LUV US	Industrials	North America	United States	17,202	229.7

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

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Negative Significant News stocks - Sorted by Sector, Region and Country (Continued)

Table 94: NEGATIVE Significant News Stocks (continued)

Stocks with negative significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B3Q2FJ	Stanley Black & Decker	SWK US	Industrials	North America	United States	15,032	128.1
BYMWL8	Transunion	TRU US	Industrials	North America	United States	13,282	117.5
671897	China Life-H	2628 HK	Insurance	Asia Pac ex-Japan	China	9,644	44.5
B5730Z	New China Life-H	1336 HK	Insurance	Asia Pac ex-Japan	China	2,016	10.2
670625	PICC-H	2328 HK	Insurance	Asia Pac ex-Japan	China	8,199	30.3
B86S2N	Ageas	AGS BB	Insurance	Europe	Belgium	8,162	13.4
BYYN70	Poste Italiane	PST IM	Insurance	Europe	Italy	14,825	20.3
BK6QWF	Helvetia	HELN SW	Insurance	Europe	Switzerland	7,302	9.7
743780	Swiss Life	SLHN SW	Insurance	Europe	Switzerland	20,482	46.7
BGXQNP	Phoenix Group	PHNX LN	Insurance	Europe	United Kingdom	6,833	11.7
643956	IGO	IGO AU	Materials	Asia Pac ex-Japan	Australia	4,676	39.0
B2368L	Pilbara Minerals	PLS AU	Materials	Asia Pac ex-Japan	Australia	8,111	102.0
BZ9NS1	Ganfeng Lithium-H	1772 HK	Materials	Asia Pac ex-Japan	China	1,525	16.4
BPQWCZ	Tata Steel	TATA IN	Materials	Asia Pac ex-Japan	India	20,503	53.7
613604	Vedanta	VEDL IN	Materials	Asia Pac ex-Japan	India	11,550	36.3
B5KQGT	Petronas Chemicals	PCHEM MK	Materials	Asia Pac ex-Japan	Malaysia	12,466	4.8
605633	Asia Cement	1102 TT	Materials	Asia Pac ex-Japan	Taiwan	4,790	8.5
634854	Formosa Plastics	1301 TT	Materials	Asia Pac ex-Japan	Taiwan	16,427	16.3
282377	Southern Copper	SCCO US	Materials	Emerging ex-Asia	Peru	66,541	78.0
B1324D	SABIC	SABIC AB	Materials	Emerging ex-Asia	Saudi Arabia	66,640	33.3
641056	Harmony	HARSJ	Materials	Emerging ex-Asia	South Africa	4,049	10.6
BYTBWY	Covestro	1COV GR	Materials	Europe	Germany	11,256	43.5
B11Y56	Wacker Chemie	WCH GR	Materials	Europe	Germany	6,585	12.4
BD4TZK	OCI	OCI NA	Materials	Europe	Netherlands	6,116	13.4
BPYTZ5	Boliden	BOL SS	Materials	Europe	Sweden	8,535	32.4
B1WVGZ	SCA	SCAB SS	Materials	Europe	Sweden	9,562	18.6
598061	Givaudan	GIVN SW	Materials	Europe	Switzerland	38,222	56.3
BJFFLV	Croda Intl	CRDA LN	Materials	Europe	United Kingdom	8,989	18.0
B1CRLC	Mondi Plc (UK)	MNDI LN	Materials	Europe	United Kingdom	9,517	16.7
664180	Nitto Denko	6988 JP	Materials	Japan	Japan	10,742	41.6
202464	Barrick Gold	ABX CN	Materials	North America	Canada	31,872	79.5
234760	First Quantum	FM CN	Materials	North America	Canada	5,704	70.1
286685	Lundin Mining	LUN CN	Materials	North America	Canada	6,357	27.9
BDRJLN	Nutrien	NTR CN	Materials	North America	Canada	27,996	103.5
204685	Albemarle	ALB US	Materials	North America	United States	16,954	392.2
229838	Eastman Chemical	EMN US	Materials	North America	United States	10,649	72.9
232860	FMC	FMC US	Materials	North America	United States	7,864	126.7
B01ZP2	Westlake	WLK US	Materials	North America	United States	17,871	54.4
BLF853	Bilibili-Class Z	9626 HK	Media & Ent.	Asia Pac ex-Japan	China	3,924	43.5
B8KF9B	WPP	WPP LN	Media & Ent.	Europe	United Kingdom	10,318	18.8
246632	Interpublic	IPG US	Media & Ent.	North America	United States	12,564	129.2
BRTLCO	Liberty Broadband-C	LBRDK US	Media & Ent.	North America	United States	10,151	68.3
BK80XH	Match Group	MTCH US	Media & Ent.	North America	United States	10,150	190.2
BKTNTR	Paramount Global	PARA US	Media & Ent.	North America	United States	9,028	192.1
BZ1LFG	Roku	ROKU US	Media & Ent.	North America	United States	11,374	641.8
BD8FDD	Trade Desk-A	TTD US	Media & Ent.	North America	United States	32,106	360.3
636586	Gen Prop. Trust	GPT AU	Real Estate	Asia Pac ex-Japan	Australia	6,065	17.0
BN320P	China Vanke-H	2202 HK	Real Estate	Asia Pac ex-Japan	China	2,040	23.3
BDQZP4	Country Garden Serv	6098 HK	Real Estate	Asia Pac ex-Japan	China	2,890	47.2
BNR5PB	Yuexiu Property	123 HK	Real Estate	Asia Pac ex-Japan	China	3,279	10.3

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

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Negative Significant News stocks - Sorted by Sector, Region and Country (Continued)

Table 95: NEGATIVE Significant News Stocks (continued)

Stocks with negative significant news

Sedol	Short Name	BBG Code	Sector	Region	Country	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
B67C2G	Swire Prop	1972 HK	Real Estate	Asia Pac ex-Japan	Hong Kong	11,837	4.7
222961	RioCan REIT	REI-U CN	Real Estate	North America	Canada	4,235	14.1
216632	Camden Property	CPT US	Real Estate	North America	United States	10,601	84.3
226286	CoStar	CSGP US	Real Estate	North America	United States	35,685	159.6
272791	UDR	UDR US	Real Estate	North America	United States	12,616	91.7
B05638	Global Unichip	3443 TT	Semiconductors	Asia Pac ex-Japan	Taiwan	7,598	201.8
BNKJSM	Marvell Tech	MRVL US	Semiconductors	North America	United States	52,035	548.1
258357	ON Semiconductor	ON US	Semiconductors	North America	United States	36,046	531.2
296105	Skyworks Solutions	SWKS US	Semiconductors	North America	United States	17,919	168.2
288540	Texas Instruments	TXN US	Semiconductors	North America	United States	154,772	845.0
BWFGD6	Tech Mahindra	TECHM IN	Software	Asia Pac ex-Japan	India	14,919	36.6
226082	Open Text	OTEX CN	Software	North America	Canada	11,453	32.0
BQ1PC7	Atlassian	TEAM US	Software	North America	United States	36,908	292.0
BFYT7B	Docusign	DOCU US	Software	North America	United States	12,081	185.0
BDFZSP	Okta	OKTA US	Software	North America	United States	14,191	198.3
BLFDXH	Unity Software	U US	Software	North America	United States	15,680	387.6
677168	SEMCO	009150 KS	Tech Hardware	Asia Pac ex-Japan	South Korea	8,885	43.9
626073	Delta Electronics	2308 TT	Tech Hardware	Asia Pac ex-Japan	Taiwan	26,534	72.3
BNZFHG	Hexagon-B	HEXAB SS	Tech Hardware	Europe	Sweden	31,147	46.6
649099	Keyence	6861 JP	Tech Hardware	Japan	Japan	107,165	253.4
222470	Corning	GLW US	Tech Hardware	North America	United States	25,973	116.9
243184	Juniper Networks	JNPR US	Tech Hardware	North America	United States	9,474	98.7
B2QZGV	Axiata Group	AXIATA MK	Telecom	Asia Pac ex-Japan	Malaysia	4,754	2.1
553397	Swisscom	SCMN SW	Telecom	Europe	Switzerland	31,143	38.5
BF5M0K	SoftBank	9434 JP	Telecom	Japan	Japan	59,806	92.1
238109	TELUS	T CN	Telecom	North America	Canada	26,001	104.5
634007	Kunlun Energy	135 HK	Utilities	Asia Pac ex-Japan	China	7,807	10.1
643655	HK & China Gas	3 HK	Utilities	Asia Pac ex-Japan	Hong Kong	14,290	10.6
BD1WX8	Engie Brasil Energia	EGIE3 BZ	Utilities	Emerging ex-Asia	Brazil	7,614	13.1
527178	Endesa	ELE SM	Utilities	Europe	Spain	21,590	24.3
265005	Emera	EMA CN	Utilities	North America	Canada	10,414	64.3
B68XHC	Northland Power	NPI CN	Utilities	North America	Canada	4,620	28.3
228022	DTE Energy	DTE US	Utilities	North America	United States	22,733	137.4
BVWN4Q	Eversource Energy	ES US	Utilities	North America	United States	21,546	154.4
BYY8KK	WEC Energy	WEC US	Utilities	North America	United States	26,550	141.1

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

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Appendix 7: Global Regions Triple Momentum

Table 96: Positive Triple Momentum - USA stocks

USA - PSN Stocks with above average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
MercadoLibre	MELI US	Argentina	Cons. Discretionary	78,723	614.4
Booking	BKNG US	United States	Cons. Discretionary	126,608	818.8
Tradeweb Markets-Class A	TW US	United States	Div Financials	10,419	66.1
Hess Corp	HES US	United States	Energy	44,266	357.0
Eli Lilly	LLY US	United States	Health Care	553,363	1601.8
Howmet Aerospace	HWM US	United States	Industrials	22,309	119.2
Ingersoll Rand	IR US	United States	Industrials	31,276	163.8
Lennox Int'l	LII US	United States	Industrials	15,893	108.2
Parker-Hannifin	PH US	United States	Industrials	59,168	277.5
Wabtec	WAB US	United States	Industrials	22,732	95.7
Arch Capital	ACGL US	United States	Insurance	27,699	150.4
Assurant Inc	AIZ US	United States	Insurance	8,934	52.2
Brown & Brown	BRO US	United States	Insurance	20,168	84.1
Erie Indemnity-Cl A	ERIE US	United States	Insurance	15,470	46.9
Everest Group	EG US	United States	Insurance	15,347	117.9
Progressive	PGR US	United States	Insurance	93,232	349.9
Martin Marietta	MLM US	United States	Materials	30,835	170.2
Pinterest- Class A	PINS US	United States	Media & Ent.	21,553	296.2
NVIDIA	NVDA US	United States	Semiconductors	1,223,193	21255.2
CrowdStrike	CRWD US	United States	Software	57,717	555.4
Godaddy	GDDY US	United States	Software	15,586	126.2
Palantir Technologies-A	PLTR US	United States	Software	35,210	1103.5
Servicenow	NOW US	United States	Software	144,336	674.1
Synopsys	SNPS US	United States	Software	78,309	385.2
Zscaler	ZS US	United States	Software	32,607	338.5

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

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Table 97: Negative Triple Momentum - USA stocks

USA - NSN Stocks with below average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Citizens Fin	CFG US	United States	Banks	15,652	160.2
Regions Financial	RF US	United States	Banks	18,186	146.4
Bath & Body Works	BBWI US	United States	Cons. Discretionary	9,814	126.0
Caesars Entertain	CZR US	United States	Cons. Discretionary	10,093	131.8
Hasbro	HAS US	United States	Cons. Discretionary	7,084	102.7
Estee Lauder	EL US	United States	Cons. Staples	33,946	400.9
Hershey	HSY US	United States	Cons. Staples	27,939	289.7
Kellanova	K US	United States	Cons. Staples	19,141	155.8
Annaly Mortgage	NLY US	United States	Div Financials	9,567	80.8
Avantor	AVTR US	United States	Health Care	15,431	139.1
Mettler-Toledo	MTD US	United States	Health Care	26,521	191.7
Repligen Corp	RGEN US	United States	Health Care	10,025	93.2
Revvity	RVTY US	United States	Health Care	13,569	84.3
C.H. Robinson	CHRW US	United States	Industrials	10,059	90.8
Paycom Software	PAYC US	United States	Industrials	12,500	179.5
Southwest Airlines	LUV US	United States	Industrials	17,202	225.9
Transunion	TRU US	United States	Industrials	13,282	119.1
Albemarle	ALB US	United States	Materials	16,954	382.4
Interpublic	IPG US	United States	Media & Ent.	12,564	138.8
Camden Property	CPT US	United States	Real Estate	10,601	81.1
UDR	UDR US	United States	Real Estate	12,616	88.1
Skyworks Solutions	SWKS US	United States	Semiconductors	17,919	165.4
Texas Instruments	TXN US	United States	Semiconductors	154,772	829.0
Corning	GLW US	United States	Tech Hardware	25,973	124.4
Eversource Energy	ES US	United States	Utilities	21,546	154.1

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

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Table 98: Positive Triple Momentum - Europe stocks

Europe - PSN Stocks with above average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Danske Bank	DANSKE DC	Denmark	Banks	23,048	30.4
Credit Agricole	ACA FP	France	Banks	43,340	59.2
Ipsen	IPN FP	France	Health Care	9,990	8.5
Bouygues	EN FP	France	Industrials	14,379	26.8
Axa SA	CS FP	France	Insurance	73,460	94.6
Dassault Systemes	DSY FP	France	Software	65,305	43.9
Orange	ORA FP	France	Telecom	30,278	53.9
Continental Ag	CONGR	Germany	Cons. Discretionary	16,994	25.5
Deutsche Bank	DBK GR	Germany	Div Financials	27,865	104.8
MunichRe	MUV2 GR	Germany	Insurance	56,546	101.4
Heidelberg Materials	HEI GR	Germany	Materials	16,647	33.8
Prysmian	PRY IM	Italy	Industrials	12,572	31.5
ING	INGA NA	Netherlands	Banks	54,081	148.8
Airbus	AIR FP	Netherlands	Industrials	122,043	121.4
Aegon	AGN NA	Netherlands	Insurance	11,767	33.5
Banco Santander	SAN SM	Spain	Banks	67,569	132.9
Amadeus IT	AMS SM	Spain	Cons. Discretionary	32,287	45.9
AenaSME	AENA SM	Spain	Industrials	27,191	23.0
SEB	SEBA SS	Sweden	Banks	29,141	34.6
Whitbread	WTB LN	United Kingdom	Cons. Discretionary	9,007	21.4
3i Group	III LN	United Kingdom	Div Financials	30,040	31.5
Wise - A	WISE LN	United Kingdom	Div Financials	11,418	9.7
GSK	GSK LN	United Kingdom	Health Care	75,705	79.3

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

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Table 99: Negative Triple Momentum - Europe stocks

Europe - NSN Stocks with below average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Moller-Maersk-B	MAERSKB DC	Denmark	Industrials	13,425	43.2
Kering	KER FP	France	Cons. Discretionary	54,685	91.1
Sartorius Stedim	DIM FP	France	Health Care	24,388	14.8
Hellofresh	HFG GR	Germany	Cons. Staples	2,731	19.6
Bayer	BAYN GR	Germany	Health Care	36,496	129.3
Wacker Chemie	WCH GR	Germany	Materials	6,585	14.2
Boliden	BOL SS	Sweden	Materials	8,535	32.9
Hexagon-B	HEXAB SS	Sweden	Tech Hardware	31,147	47.0
Swatch Group	UHR SW	Switzerland	Cons. Discretionary	7,859	29.5
Julius Baer	BAER SW	Switzerland	Div Financials	11,540	28.7
Geberit	GEBN SW	Switzerland	Industrials	22,535	45.1
SGS	SGSN SW	Switzerland	Industrials	16,150	24.7
EMS-Chemie	EMSN SW	Switzerland	Materials	18,925	9.1
Swisscom	SCMN SW	Switzerland	Telecom	31,143	38.6
Burberry	BRBY LN	United Kingdom	Cons. Discretionary	6,561	24.1
Diageo	DGE LN	United Kingdom	Cons. Staples	81,844	91.1
Hargreaves Lansd	HL / LN	United Kingdom	Div Financials	4,438	10.2
St James's Place	STJ LN	United Kingdom	Div Financials	4,781	12.5
Phoenix Group	PHNX LN	United Kingdom	Insurance	6,833	11.2
Croda Intl	CRDA LN	United Kingdom	Materials	8,989	19.6
WPP	WPP LN	United Kingdom	Media & Ent.	10,318	19.3

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

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Table 100: Positive Triple Momentum - Japan stocks

Japan - PSN Stocks with above average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Aisin	7259JP	Japan	Cons. Discretionary	10,311	32.2
Idemitsu	5019JP	Japan	Energy	8,108	35.5
Hitachi	6501JP	Japan	Industrials	66,884	150.8
Tobu Railway	9001JP	Japan	Industrials	5,639	12.9
Sompo	8630JP	Japan	Insurance	17,008	66.1
T&D	8795JP	Japan	Insurance	9,361	39.2
Mitsubishi Chemical	4188JP	Japan	Materials	9,231	31.4
NEC	6701JP	Japan	Software	16,160	62.3
Osaka Gas	9532JP	Japan	Utilities	8,704	22.6

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

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Table 101: Negative Triple Momentum - Japan stocks

Japan - NSN Stocks with below average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Yamaha	7951JP	Japan	Cons. Discretionary	4,327	25.7
KOSE	4922JP	Japan	Cons. Staples	4,545	25.9
Misumi Group	9962JP	Japan	Industrials	4,826	19.6
SG Holdings	9143JP	Japan	Industrials	9,194	18.0
Yamato Trans	9064JP	Japan	Industrials	7,020	21.8
Nissan Chemical	4021JP	Japan	Materials	5,460	22.0
Oji	3861JP	Japan	Materials	3,907	17.3
Keyence	6861JP	Japan	Tech Hardware	107,165	274.9
SoftBank	9434JP	Japan	Telecom	59,806	89.9

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

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Table 102: Positive Triple Momentum - Asia Pac ex-Japan stocks

Asia Pac ex-Japan - PSN Stocks with above average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Great Wall Motor-H	2333 HK	China	Cons. Discretionary	3,011	34.4
Futu-ADR	FUTU US	China	Div Financials	5,029	107.4
Genscript Biotech	1548 HK	China	Health Care	5,392	22.0
Hansoh Pharma	3692 HK	China	Health Care	11,975	8.6
Xiaomi Corp-B	1810 HK	China	Tech Hardware	40,857	142.5
Chinasoft Int'l	354 HK	Hong Kong	Software	2,263	11.4
MRF	MRF IN	India	Cons. Discretionary	6,604	8.4
Trent	TRENT IN	India	Cons. Discretionary	13,051	16.3
REC	RECL IN	India	Div Financials	13,064	54.6
Shree Cement	SRCM IN	India	Materials	12,424	10.8
Ultratech Cement	UTCEM IN	India	Materials	36,437	30.6
Bank Rakyat	BBRI IJ	Indonesia	Banks	56,354	39.3
CIMB Group	CIMB MK	Malaysia	Banks	13,578	14.7
QL Resources	QLG MK	Malaysia	Cons. Staples	3,024	1.7
Malaysia Airports	MAHB MK	Malaysia	Industrials	2,673	4.1
Coway	021240 KS	South Korea	Cons. Discretionary	3,278	6.0
Hankook Tire & Tech	161390 KS	South Korea	Cons. Discretionary	4,367	7.3
HD Hyundai	267250 KS	South Korea	Energy	3,882	103
Samsung C&T	028260 KS	South Korea	Industrials	18,661	17.8
China Development	2883 TT	Taiwan	Insurance	6,886	15.8
Alchip Tech	3661 TT	Taiwan	Semiconductors	7,907	195.0
Powerchip Semi Manu	6770 TT	Taiwan	Semiconductors	3,905	11.1
Acer	2353 TT	Taiwan	Tech Hardware	5,343	30.7
Asustek	2357 TT	Taiwan	Tech Hardware	11,847	72.8
Wiwynn	6669 TT	Taiwan	Tech Hardware	10,397	172.9

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

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Table 103: Negative Triple Momentum - Asia Pac ex-Japan stocks

Asia Pac ex-Japan - NSN Stocks with below average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Brambles	BXB AU	Australia	Industrials	12,896	37.0
IGO	IGO AU	Australia	Materials	4,676	36.2
Pilbara Minerals	PLS AU	Australia	Materials	8,111	98.7
APA	APA AU	Australia	Utilities	7,476	18.7
PSBC-H	1658 HK	China	Banks	9,485	23.6
WuXi Biologics	2269 HK	China	Health Care	16,116	110.8
COSCO Shipping-H	1919 HK	China	Industrials	3,373	17.8
China Taiping Insurance	966 HK	China	Insurance	3,093	4.3
New China Life-H	1336 HK	China	Insurance	2,016	10.5
PICC-H	2328 HK	China	Insurance	8,199	29.7
China Nat'l Building-H	3323 HK	China	Materials	1,950	8.2
Ganfeng Lithium-H	1772 HK	China	Materials	1,525	16.3
China Vanke-H	2202 HK	China	Real Estate	2,040	22.8
Guangdong Invest.	270 HK	China	Utilities	4,756	6.3
Hang Seng Bank	11 HK	Hong Kong	Banks	22,293	16.0
HK & China Gas	3 HK	Hong Kong	Utilities	14,290	10.0
Aneka Tambang	ANTM IJ	Indonesia	Materials	2,661	4.3
PPB Group	PEP MK	Malaysia	Cons. Staples	4,483	2.1
Axiata Group	AXIATA MK	Malaysia	Telecom	4,754	2.3
L&F	066970 KS	South Korea	Industrials	5,742	140.9
POSCO Future M	003670 KS	South Korea	Industrials	21,593	289.6
Pearl Abyss	263750 KS	South Korea	Media & Ent.	1,933	13.0
Voltronic Power	6409 TT	Taiwan	Industrials	4,888	9.0
E Ink	8069 TT	Taiwan	Tech Hardware	7,320	46.3
Banpu Public	BANPU TB	Thailand	Energy	1,996	24.0

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

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Table 104: Positive Triple Momentum - GEM stocks

GEM - PSN Stocks with above average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
Vibra Energia	VBBR3 BZ	Brazil	Cons. Discretionary	5,459	39.0
Great Wall Motor-H	2333 HK	China	Cons. Discretionary	3,011	34.4
Hansoh Pharma	3692 HK	China	Health Care	11,975	8.6
Xiaomi Corp-B	1810 HK	China	Tech Hardware	40,857	142.5
Alpha Services	ALPHA GA	Greece	Banks	3,998	13.9
Eurobank Ergasias	EUROB GA	Greece	Banks	6,610	8.7
Piraeus Financial	TPEIR GA	Greece	Banks	4,420	13.5
Chinasoft Int'l	354 HK	Hong Kong	Software	2,263	11.4
MRF	MRF IN	India	Cons. Discretionary	6,604	8.4
Trent	TRENT IN	India	Cons. Discretionary	13,051	16.3
REC	RECL IN	India	Div Financials	13,064	54.6
CIMB Group	CIMB MK	Malaysia	Banks	13,578	14.7
Malaysia Airports	MAHB MK	Malaysia	Industrials	2,673	4.1
Powszechny Zaklad	PZU PW	Poland	Insurance	10,381	17.6
Dallah Health	DALLAH AB	Saudi Arabia	Health Care	4,470	4.9
Co For Coop Insurance	TAWUNIYA AB	Saudi Arabia	Insurance	5,216	12.6
Standard Bank	SBK SJ	South Africa	Banks	19,069	32.9
NEPI Rockcastle	NRP SJ	South Africa	Real Estate	4,567	9.4
Coway	021240 KS	South Korea	Cons. Discretionary	3,278	6.0
Hankook Tire & Tech	161390 KS	South Korea	Cons. Discretionary	4,367	7.3
Alchip Tech	3661 TT	Taiwan	Semiconductors	7,907	195.0
Acer	2353 TT	Taiwan	Tech Hardware	5,343	30.7
Asustek	2357 TT	Taiwan	Tech Hardware	11,847	72.8
Wiwynn	6669 TT	Taiwan	Tech Hardware	10,397	172.9
Sabanci	SAHOL TI	Turkiye	Banks	4,176	85.6

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

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Table 105: Negative Triple Momentum - GEM stocks

GEM - NSN Stocks with below average Earnings and Price Momentum

Company Name	BBG Code	Country	Sector	MCAP	Avg Daily
SQM	SQM/B CI	Chile	Industrials	8,610	24.9
PSBC-H	1658 HK	China	Banks	9,485	23.6
WuXi Biologics	2269 HK	China	Health Care	16,116	110.8
COSCO Shipping-H	1919 HK	China	Industrials	3,373	17.8
China Taiping Insurance	966 HK	China	Insurance	3,093	4.3
New China Life-H	1336 HK	China	Insurance	2,016	10.5
PICC-H	2328 HK	China	Insurance	8,199	29.7
China Nat'l Building-H	3323 HK	China	Materials	1,950	8.2
Ganfeng Lithium-H	1772 HK	China	Materials	1,525	16.3
China Vanke-H	2202 HK	China	Real Estate	2,040	22.8
ENN Energy	2688 HK	China	Utilities	8,330	30.0
Guangdong Invest.	270 HK	China	Utilities	4,756	6.3
Aneka Tambang	ANTM IJ	Indonesia	Materials	2,661	4.3
Nestle (Malaysia)	NESZ MK	Malaysia	Cons. Staples	6,002	2.4
PPB Group	PEP MK	Malaysia	Cons. Staples	4,483	2.1
Axiata Group	AXIATA MK	Malaysia	Telecom	4,754	2.3
SABIC	SABIC AB	Saudi Arabia	Materials	66,640	32.9
L&F	066970 KS	South Korea	Industrials	5,742	140.9
POSCO Future M	003670 KS	South Korea	Industrials	21,593	289.6
Pearl Abyss	263750 KS	South Korea	Media & Ent.	1,933	13.0
Voltronic Power	6409 TT	Taiwan	Industrials	4,888	9.0
Delta Electronics	2308 TT	Taiwan	Tech Hardware	26,534	89.0
E Ink	8069 TT	Taiwan	Tech Hardware	7,320	46.3
Banpu Public	BANPU TB	Thailand	Energy	1,996	24.0
BTS	BTS TB	Thailand	Industrials	2,797	5.0

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

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Appendix 8: Global Region-Sector News Pulse Matrix

Table 106: Current News Pulse in Region-Sector News Pulse

Current news trend

Current Pulse	Cons.			Cons.			Information		Comm.				Country
	Energy	Materials	Industrials	Discretionary	Staples	Health Care	Financials	Technology	Services	Utilities	Real Estate		
Australia	15%	24%	2%	27%	20%	-6%	30%	34%	54%	43%	8%		22%
Belgium	0%	23%	0%	84%	21%	50%	38%	0%	0%	59%	-79%		30%
Brazil	41%	29%	47%	16%	39%	39%	41%	89%	88%	50%	0%		43%
Canada	23%	7%	35%	18%	29%	0%	6%	26%	-9%	-23%	47%		14%
China	57%	11%	49%	40%	17%	45%	14%	28%	18%	65%	5%		32%
France	50%	60%	44%	33%	-13%	35%	43%	33%	74%	70%	-8%		34%
Germany	-	34%	31%	34%	8%	28%	59%	69%	-6%	82%	19%		34%
Hong Kong	0%	0%	20%	93%	-24%	0%	43%	0%	59%	65%	16%		37%
India	59%	26%	50%	53%	45%	43%	43%	23%	52%	44%	47%		43%
Indonesia	-12%	41%	45%	3%	77%	-21%	75%	-	74%	0%	0%		50%
Italy	26%	0%	-48%	54%	19%	47%	63%	0%	25%	65%	-		34%
Japan	76%	33%	50%	45%	42%	71%	62%	47%	56%	84%	50%		57%
Korea	-10%	-22%	54%	43%	54%	50%	50%	6%	21%	52%	-		29%
Mexico	-	71%	27%	0%	79%	0%	78%	-	16%	0%	-23%		48%
Netherlands	0%	32%	55%	28%	5%	43%	35%	47%	54%	-	-		33%
Singapore	0%	-	38%	89%	-65%	0%	63%	-55%	3%	-	42%		29%
South Africa	68%	-16%	81%	35%	47%	57%	62%	0%	53%	-	49%		5%
Spain	69%	0%	61%	62%	0%	60%	76%	0%	-17%	26%	-		41%
Sweden	0%	9%	42%	34%	11%	28%	58%	-1%	33%	-	-17%		33%
Switzerland	-	37%	2%	17%	33%	40%	26%	23%	-20%	95%	17%		25%
Taiwan	22%	-17%	5%	23%	88%	92%	84%	38%	58%	-	-45%		39%
Thailand	49%	-24%	26%	70%	32%	91%	55%	89%	29%	49%	62%		38%
United Kingdom	16%	8%	46%	8%	14%	67%	14%	25%	8%	35%	-62%		18%
USA	21%	7%	11%	13%	-9%	6%	4%	22%	9%	-27%	-6%	-1%	
Global Sector	17%	3%	16%	22%	-5%	16%	1%	20%	8%	-16%	-11%		9%
Europe Sector	31%	26%	27%	23%	9%	40%	33%	26%	24%	40%	-24%		22%
APxJ Sector	48%	18%	42%	43%	33%	41%	39%	38%	21%	54%	19%		32%
GEM Sector	53%	14%	39%	43%	36%	45%	44%	39%	28%	53%	31%		33%

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

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Table 107: 1-month change in Region-Sector News Pulse

1-month change in news trend

1-month change	Energy	Materials	Industrials	Cons.	Cons.	Health Care	Financials	Information	Comm.	Utilities	Real Estate	Country
				Discretionary	Staples			Technology	Services			
Australia	-11%	-6%	-2%	-7%	2%	8%	6%	-9%	6%	-1%	-7%	-3%
Belgium	0%	-19%	0%	1%	8%	-22%	-8%	0%	0%	-21%	0%	-5%
Brazil	-4%	12%	2%	5%	6%	-1%	11%	0%	0%	-10%	0%	6%
Canada	3%	-7%	-6%	-4%	9%	0%	0%	-3%	-6%	-8%	-3%	-3%
China	-2%	-4%	-2%	1%	4%	-5%	3%	2%	-3%	1%	-1%	0%
France	-3%	3%	-5%	-8%	-10%	2%	-3%	-6%	-4%	-4%	-19%	-5%
Germany	-	-3%	-3%	-1%	-8%	-10%	1%	3%	-5%	0%	-2%	-4%
Hong Kong	0%	0%	-11%	0%	-5%	0%	5%	0%	0%	-7%	-2%	-1%
India	-1%	2%	0%	1%	-2%	0%	1%	5%	2%	-1%	-2%	1%
Indonesia	-3%	2%	-9%	-5%	3%	0%	1%	-	0%	0%	0%	-1%
Italy	5%	0%	-8%	-4%	6%	12%	0%	-17%	-1%	-1%	-	-3%
Japan	8%	7%	5%	1%	-7%	3%	5%	-8%	5%	-4%	4%	-1%
Korea	2%	2%	0%	2%	6%	0%	3%	-9%	-5%	-6%	-	0%
Mexico	-	6%	6%	0%	5%	0%	3%	-	0%	0%	0%	3%
Netherlands	0%	1%	-10%	-1%	-2%	-3%	-3%	0%	18%	-	-	-2%
Singapore	0%	-	12%	-3%	-1%	0%	10%	1%	-6%	-	-1%	3%
South Africa	12%	-10%	1%	-3%	-10%	10%	-3%	0%	11%	-	14%	-11%
Spain	-8%	0%	1%	-20%	0%	-8%	-1%	-19%	-5%	-5%	-	-7%
Sweden	0%	-4%	-6%	2%	-18%	-11%	0%	4%	5%	-	-2%	-2%
Switzerland	-	-3%	0%	-12%	-7%	-2%	-3%	16%	-61%	75%	7%	-2%
Taiwan	-2%	18%	-7%	-1%	0%	0%	-1%	2%	5%	-	-29%	2%
Thailand	-3%	0%	-15%	-11%	16%	3%	-1%	62%	8%	1%	3%	1%
United Kingdom	-4%	2%	-4%	-8%	-7%	1%	3%	-6%	-9%	-3%	6%	-2%
USA	0%	2%	-1%	-3%	-3%	-1%	-2%	-1%	-1%	-4%	-2%	-1%
Global Sector	0%	-3%	-4%	-3%	-4%	-4%	1%	0%	-2%	-4%	-1%	-2%
Europe Sector	1%	2%	-3%	-6%	-3%	-5%	3%	-3%	4%	0%	7%	-4%
APxJ Sector	2%	3%	-3%	-2%	7%	1%	0%	8%	-2%	-1%	1%	0%
GEM Sector	6%	3%	-5%	-1%	6%	-1%	2%	8%	-2%	-5%	9%	0%

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

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Table 108: 3-months change in Region-Sector News Pulse

3-months change in news trend

3-month change	Energy	Materials	Industrials	Cons.	Cons.	Health Care	Financials	Information	Comm.	Utilities	Real Estate	Country
				Discretionary	Staples			Technology	Services			
Australia	-13%	-3%	-13%	-11%	-1%	14%	0%	-7%	5%	-11%	-39%	-6%
Belgium	0%	-16%	0%	3%	27%	-31%	-42%	0%	0%	-3%	-5%	-1%
Brazil	1%	29%	-3%	25%	7%	17%	30%	19%	-3%	-5%	0%	12%
Canada	13%	-17%	-12%	-17%	6%	0%	-10%	-18%	-41%	-39%	-25%	-12%
China	-11%	9%	-10%	4%	-17%	-7%	-8%	3%	-19%	2%	-23%	-5%
France	-13%	-11%	-16%	-29%	-31%	6%	-11%	-14%	-2%	-18%	-52%	-18%
Germany	-	-9%	-9%	-6%	-33%	-18%	10%	4%	-8%	0%	-7%	-9%
Hong Kong	0%	0%	-9%	0%	-22%	0%	10%	0%	-21%	-11%	-12%	-2%
India	11%	-1%	3%	-1%	-3%	-10%	-9%	26%	10%	0%	-9%	2%
Indonesia	14%	-20%	5%	-50%	16%	-71%	23%	-	9%	0%	0%	-1%
Italy	9%	0%	-91%	-6%	25%	31%	4%	-59%	-8%	-5%	-	-8%
Japan	16%	-2%	-8%	1%	6%	-5%	0%	-14%	-12%	-6%	-9%	-3%
Korea	28%	-17%	-5%	-1%	38%	0%	24%	0%	12%	40%	-	5%
Mexico	-	4%	-4%	0%	-2%	0%	7%	-	6%	0%	-65%	-4%
Netherlands	0%	-2%	-11%	19%	-30%	15%	-13%	-7%	55%	-	-	-4%
Singapore	0%	-	10%	-1%	-26%	0%	33%	12%	-28%	-	1%	0%
South Africa	15%	-17%	22%	-20%	54%	4%	7%	0%	23%	-	12%	-12%
Spain	20%	0%	6%	-23%	0%	-14%	-3%	-69%	-53%	-24%	-	-22%
Sweden	0%	-19%	-6%	6%	-14%	-20%	0%	11%	10%	-	-1%	-3%
Switzerland	-	-13%	4%	-22%	-6%	-2%	0%	39%	-103%	75%	-11%	1%
Taiwan	-1%	34%	-3%	-4%	-6%	-1%	8%	9%	2%	-	21%	9%
Thailand	30%	-3%	-47%	0%	41%	2%	12%	105%	37%	0%	32%	11%
United Kingdom	-16%	-3%	-14%	-26%	-7%	4%	1%	-18%	-26%	-3%	-11%	-8%
USA	10%	1%	-12%	-11%	-19%	-16%	2%	-2%	-5%	-19%	-9%	-5%
Global Sector	6%	-6%	-15%	-6%	-20%	-14%	1%	4%	-10%	-23%	-7%	-7%
Europe Sector	3%	2%	-17%	-16%	-10%	-14%	-2%	8%	5%	-7%	3%	-11%
APxJ Sector	10%	5%	-7%	0%	6%	5%	2%	15%	-7%	-4%	-6%	-1%
GEM Sector	11%	9%	-16%	2%	0%	0%	2%	16%	-5%	-7%	7%	0%

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

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Appendix 9: Events Region-Sector News Pulse Matrix

Table 109: Current Events News Pulse

Latest Events News Pulse by region-sector

Current Pulse	Above		Earnings		Guidance		New		Rating		Reported	
	Expectation	Credit Events	Estimate	Events	M&A Target	Product/Mark	Price Target	Changes	Fundamental	Yield Events		
USA	33%	1%	16%	-3%	99%	65%	-47%	59%	55%	85%		
Europe	20%	57%	-16%	38%	97%	67%	-55%	37%	54%	74%		
Japan	25%	50%	-78%	10%	92%	72%	-6%	56%	59%	69%		
APxJ	2%	-9%	20%	46%	97%	75%	-37%	54%	54%	62%		
GEM	9%	-6%	20%	49%	98%	78%	-40%	51%	54%	60%		
Global	24%	18%	11%	9%	98%	68%	-47%	53%	55%	79%		

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

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Table 110: 1-month change Events News Pulse

1-month change in Events News Pulse by region-sector

1-month change	Above		Earnings		Guidance		New		Rating		Reported	
	Expectation	Credit Events	Estimate	Events	M&A Target	Product/Mark	Price Target	Changes	Fundamental	Yield Events		
USA	1%	9%	2%	0%	0%	-2%	-6%	0%	3%	1%		
Europe	2%	6%	0%	4%	0%	-4%	-1%	-3%	3%	1%		
Japan	-2%	-25%	22%	4%	-2%	-1%	-14%	7%	7%	-3%		
APxJ	-4%	-3%	8%	15%	0%	2%	-9%	2%	5%	3%		
GEM	-2%	2%	10%	12%	1%	2%	-8%	1%	5%	1%		
Global	1%	7%	3%	2%	0%	-2%	-6%	0%	4%	3%		

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

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Table 111: 3-months change Events News Pulse

3-months change in Events News Pulse by region-sector

3-month change	Above		Earnings		Guidance		New		Rating		Reported	
	Expectation	Credit Events	Estimate	Events	M&A Target	Product/Mark	Price Target	Changes	Fundamental	Yield Events		
USA	-5%	1%	5%	-2%	0%	-1%	-19%	2%	0%	1%		
Europe	-6%	-7%	-29%	-6%	0%	-9%	-11%	-7%	-2%	-3%		
Japan	-17%	86%	2%	-3%	-3%	-2%	-75%	10%	1%	-21%		
APxJ	-8%	-19%	4%	22%	-1%	0%	-19%	10%	10%	1%		
GEM	-2%	-24%	10%	17%	0%	2%	-23%	10%	10%	1%		
Global	-5%	-7%	4%	-1%	0%	-3%	-19%	1%	3%	2%		

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

BofA GLOBAL RESEARCH



Global Quant Publications

Monthly reports schedule

Day 1: Contenders & Defenders

A popular visual stock selection model. For each stock, this report graphically shows how consensus earnings expectations have changed over the long term versus the market, and whether recent earnings revisions appear to have been reflected in relative share price performance. Popular ways of using this analysis include 1) reviewing the Contenders (buys) and Defenders (Sells) lists, 2) perusing individual stock charts, 3) monitoring region, country and sector themes using the “quadrant charts”, and 4) reviewing stock rankings. Regional versions are published monthly in these linked reports for [Global Contenders & Defenders](#) and Asia Pac ex-Japan Contenders & Defenders.

Day 1: [Global Performance Monitor](#)

The above linked monthly report analysing the performance of global regions, countries, sectors and identifying the major stock contributors to global equity market performance.

Day 2/3: Quantessential Style

Style rotation. Different investment styles outperform at various stages of the cycle. This investment style analysis relates performance of seven Quantessential Styles (Value, Growth, Quality, Risk, Momentum, Dividend and Size) to trends in global macro data. Popular uses include 1) when to buy “Deep Value”, “Growthiest of Growth”, and other styles, 2) identifying stocks with various style characteristics, 3) monitoring style performance, and 4) explaining out/under-performance due to style tilts. Regional versions are published in these linked monthly reports for [Global Quantessential Style](#) and [Asia Pac ex-Japan Quantessential Style](#).

Week 1: [Global Fund Performance Monitor](#)

The above linked monthly report analysing the relative returns of large long-only equity funds in order to help fund managers understand how returns have been affected by fund characteristics. Funds are grouped by Region, Investment Style, Active/Passive, Active Share Ratio, Funds Under Management, Stock Size, Number of Stocks, and Portfolio Turnover.

Week 2: [Global Wave](#)

The Global Wave (report link above) quantifies turning points and multi-year trends in global economic activity. The direction of the global cycle influences equity market performance, regional allocation, country allocation, style allocation, and stock selection. The Bunkers are stocks for a downturn and the Boosters are stocks for an upturn.

Week 2: [NewsAlpha](#)

The above linked monthly report: 1) quantifies alpha opportunities using news for both short-term and long-term investors, 2) Leverages big data – a) to identify the most significant news events, b) to highlight which stocks are driven by news and c) to create an indicator- The Global News Pulse - to monitor trends in news sentiment globally.

Week 2: Positioning in Stocks

Quantifies how large investors are positioned in terms of stocks, regions, countries and sectors. Popular uses include 1) identifying extreme positioning for contrarian trade ideas, and 2) identifying developing trends in investor positioning. Regional versions are published in these linked monthly reports for [Global Positioning in Stocks](#) and [Pacific Positioning](#).

Week 3: Quant Panorama

Summary report. In this monthly report, we present all our views and recent research on regional allocation, country and sector allocation, style allocation, and stock selection. One-stop shopping. Regional versions are published in these linked monthly reports for [Global Quant Panorama](#) and Asia Pac ex-Japan Quant Panorama.

Week 4: Earnings Revision Ratio

Shows trends in earnings expectations at the regional, country and sector level. Regional versions are published in these linked monthly reports for [Global Earnings Revision Ratio](#) and [Asia Pac ex-Japan Earnings Revision Ratio](#).

Weekly: [High Frequency Monitor](#)

In this above linked weekly report, we monitor high frequency data to help equity investors track short-term changes in market-moving data in order to swiftly identify hot topics and turning points.

Occasional: [Focus Point](#)

The report above contains brief comments on topical issues and new research.



Disclosures

Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

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%

^{R1}Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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