

# Global Performance Monitor

## Bond yields vs seasonality

### Global equities fell last month as bond yields jumped

The MSCI All Country World Index fell -4.3% in September as the US Fed signaled it may keep rates near current levels through 2024. The US 10-year reached 4.7% which has been a meteoric rise from 0.51% just three years ago. Equity markets fell in all major regions last month, with the US down the most (-4.8%). The global Tech sector performed worst while the only sector to rally was Energy as oil jumped 9.4%. Strong economic data and stubborn inflation in Developed Markets continue to imply rates may remain higher for longer. On the other hand, two-thirds of calendar year global equity market returns usually occur in the last 10 weeks of the year, on average (since 1988). Q4 is shaping up as a battle between seasonality and the impact of higher bond yields.

### Japan and Emerging Markets fell the least

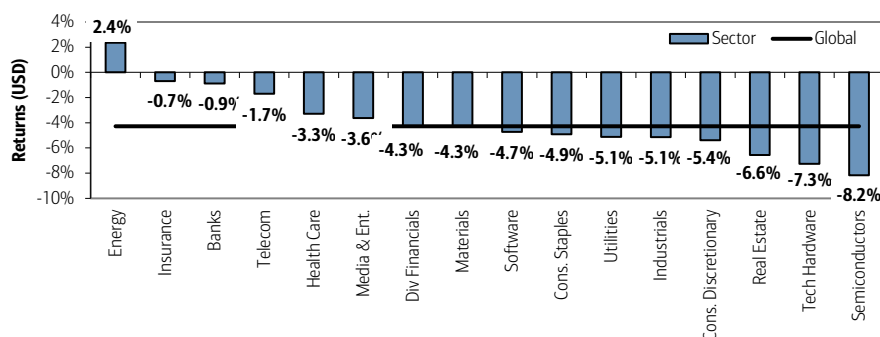
As global equities retreated in September, Japan (-2.8%), Emerging Markets (-2.8%), and Asia Pac ex-Japan (-3.0%) fell the least. The US fell the most while Europe fell -4.1%. The MSCI AC World Index has fallen -7.1% in 2 months but is still up 18.7% YoY.

### Short Equity Duration global sectors performed best

As bond yields jumped in September, the three sectors with the shortest Equity Duration performed best, including Energy, Insurance (-0.7%), and Banks (-0.9%). In contrast, Long Equity Duration underperformed, including Semis (-8.2%) and Tech Hardware (-7.3%). Investors should check the Equity Duration of portfolios as bond yields continue to rise.

**Chart 1: Global Sector Performance: Last Month**

Energy rallied in September while all other global sectors fell



Source: BofA Global Quantitative Strategy, MSCI

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Refer to important disclosures on page 18 to 20.

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

**Table 1: MSCI Index price returns US\$**

The USA underperformed the most in Sep

Global Regions	1M	YTD
World (All Country)	-4.3%	8.5%
USA	-4.8%	12.2%
Europe	-4.0%	5.4%
Japan	-2.8%	9.1%
Asia Pacific ex Japan	-3.0%	-2.7%
Emerging Markets	-2.8%	-0.4%

Source: BofA Global Quantitative Strategy, MSCI  
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This report includes analysis of:

- Most significant stock contribution to index performance
- Most significant country-sector contribution to index performance
- Monthly performance of 16 sectors in each of the largest 25 countries globally
- Regional and country performance.

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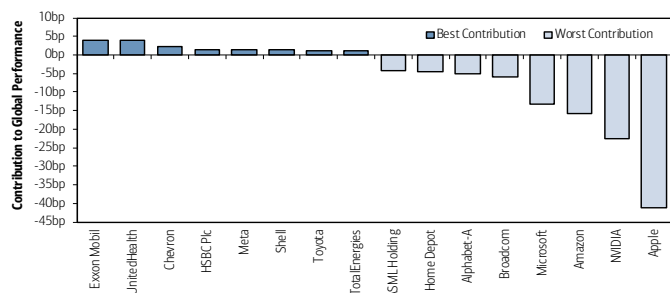
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# Contribution to Performance

**Chart 2: Stock Contribution\* to MSCI All Country World Index performance – last month**

Exxon Mobil was the best contributor to ACWI performance



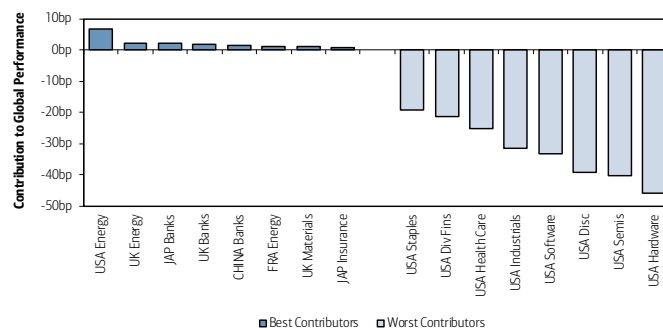
Source : BofA Global Quantitative Strategy, MSCI

\* Contribution calculated as 'stock performance' x 'stock weight'

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**Chart 3: Sector Contribution\* to MSCI All Country World Index performance – last month**

USA Energy contributed the best, and USA Hardware the worst



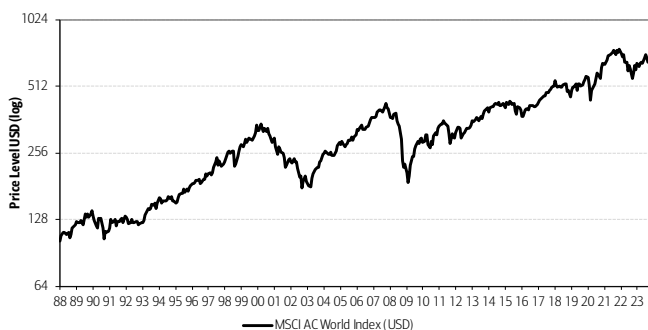
Source : BofA Global Quantitative Strategy, MSCI

\* Contribution calculated as 'sector performance' x 'sector weight'

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**Chart 4: MSCI AC World Index (USD)**

MSCI AC World fell -4.3% in September

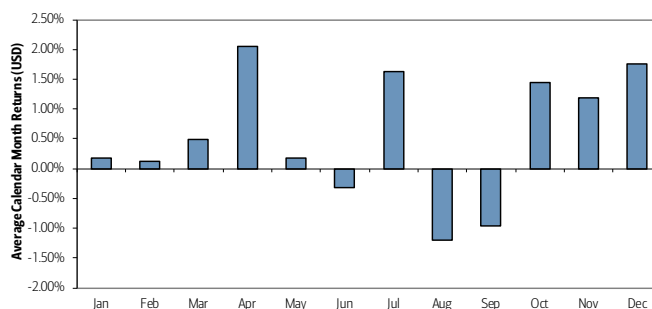


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 5: MSCI AC World Seasonality of Market Performance (USD)**

Fourth quarter has the best returns for equities, on average



Source : BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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# Regional and Country Performance

## Local exchange and MSCI Index performance

In this report we publish the performance of local exchange indices and the MSCI world, regions, countries, and sectors. In addition, we show the stocks that have made the best and worst contribution to the performance of the MSCI All Country World Index (Chart 2).

Table below contains the performance of developed market local indices in local currencies. The following table contains the performance of the MSCI world, regions and countries in US dollars.

**Table 2: Local exchange index price returns in local currency**

Global Countries and Regions performance in local currency across periods (1M, 3M, 6M, 12M, YTD)

	Index	Price Index	1M	3M	6M	12M	YTD
USA	S&P 500	4,288	-4.9%	-3.6%	4.3%	19.6%	11.7%
	Russell 2000	1,785	-6.0%	-5.5%	-1.0%	7.2%	1.4%
	NASDAQ Composite	13,219	-5.8%	-4.1%	8.2%	25.0%	26.3%
	NASDAQ 100	14,715	-5.1%	-3.1%	11.6%	34.1%	34.5%
	S&P/TSX Composite	19,541	-3.7%	-3.0%	-2.8%	5.9%	0.8%
	S&P/TSX 60 Index	1,173	-3.6%	-3.4%	-2.8%	5.0%	0.3%
Europe	DJ Stoxx	450	-1.7%	-2.5%	-1.7%	16.1%	6.0%
	DJ Stoxx 50	3,920	-1.1%	-2.1%	-0.5%	17.6%	7.3%
	DJ Euro Stoxx	441	-3.2%	-4.4%	-3.6%	20.9%	7.5%
	DJ Euro Stoxx 50	4,175	-2.8%	-5.1%	-3.3%	25.8%	10.0%
	Austria (ATX)	3,168	0.4%	0.4%	-1.3%	17.7%	1.3%
	Belgium (BSE General)	12,578	-0.5%	3.5%	-0.2%	17.8%	2.0%
	Denmark (Copenhagen All Share)	1,531	-0.7%	1.4%	2.9%	29.5%	10.0%
	Finland (HEX General)	9,576	-2.6%	-3.8%	-10.7%	-3.6%	-11.4%
	France (CAC 40)	7,135	-2.5%	-3.6%	-2.6%	23.8%	10.2%
	Germany (DAX)	15,387	-3.5%	-4.7%	-1.6%	27.0%	10.5%
	Ireland (ISEQ Overall)	8,417	-5.9%	-3.5%	0.9%	33.4%	18.4%
	Italy FTSE MIB	28,243	-2.0%	0.0%	4.2%	36.8%	19.1%
	Luxembourg (LuxX Index)	1,412	-2.9%	-1.9%	-10.3%	14.2%	-3.4%
	Netherlands (AEX All Shares)	986	-2.2%	-5.2%	-4.6%	12.9%	4.4%
	Norway OSE All Share	1,497	3.6%	8.1%	10.7%	17.5%	9.9%
	Portugal (Lisbon BVL General)	4,341	-3.8%	-4.4%	-5.3%	4.4%	-1.8%
	Spain (IGBM)	937	-0.7%	-1.3%	2.2%	28.0%	14.3%
	Sweden (OMX)	2,155	-1.3%	-6.7%	-3.1%	17.9%	5.5%
	Switzerland (SMI)	10,964	-1.5%	-2.8%	-1.3%	6.8%	2.2%
	FTSE All Share	4,127	1.7%	0.8%	-0.7%	9.7%	1.3%
	FTSE 100	7,608	2.3%	1.0%	-0.3%	10.4%	2.1%
	FTSE 250	18,279	-1.8%	-0.7%	-3.4%	6.5%	-3.0%
	FTSE - Small Cap	6,098	0.2%	0.1%	-0.4%	3.7%	-2.3%
Asia Pacific	TOPIX Index (TSE)	2,323	-0.4%	1.5%	16.0%	26.6%	22.8%
	Nikkei 225	31,858	-2.3%	-4.0%	13.6%	22.8%	22.1%
	TOPIX Small Index (TSE)	2,717	-0.7%	3.3%	11.8%	21.3%	18.0%
	Hong Kong (Hang Seng)	17,810	-3.1%	-5.9%	-12.7%	3.4%	-10.0%
	Singapore (Straits Times)	3,217	-0.5%	0.4%	-1.3%	2.8%	-1.0%
	Australia (All Ordinaries Index)	7,250	-3.6%	-2.1%	-1.7%	8.5%	0.4%
	New Zealand (All Ordinaries Index)	1,712	-3.5%	-6.6%	-6.6%	-1.5%	-4.3%

Source : BofA Global Quantitative Strategy, Exshare

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**Table 3: MSCI index price returns in US dollars**

Global Countries and Regions performance in USD across periods (1M, 3M, 6M, YTD)

	Region / Country	Price Index	1M	3M	6M	12M	YTD
Global Regions	World (All Country)	656.82	-4.3%	-3.8%	1.6%	18.7%	8.5%
	EAFE	2,031	-3.7%	-4.7%	-2.9%	22.3%	4.5%
	EAFE ex-Japan	1,606	-4.0%	-5.4%	-4.8%	21.9%	3.2%
	USA	4,083	-4.8%	-3.4%	4.6%	19.6%	12.2%
	Canada	1,981	-3.2%	-4.7%	-1.8%	8.7%	1.8%
	Japan	3,423	-2.8%	-2.4%	3.8%	23.3%	9.1%
	Europe	1,825	-4.0%	-5.4%	-4.1%	25.4%	5.4%
	Europe (ex-UK)	2,244	-4.9%	-6.1%	-4.8%	27.1%	6.1%
	EMU	211	-5.6%	-7.4%	-6.1%	31.1%	7.0%
	Asia Pacific ex-Japan	492	-3.0%	-4.3%	-6.1%	8.7%	-2.7%
	Emerging Markets	953	-2.8%	-3.7%	-3.8%	8.8%	-0.4%
	Emerging Asia	510	-2.8%	-3.6%	-5.1%	9.6%	-0.8%
	Latin America	2,301	-2.5%	-5.7%	4.9%	12.0%	8.1%
	Emerging EMEA	186	-3.4%	-2.7%	-1.0%	2.2%	-3.2%
Europe	Austria	1,151	-1.4%	-0.6%	0.3%	34.9%	2.9%
	Belgium	1,179	-4.2%	-0.2%	-7.6%	20.0%	-1.9%
	Denmark	19,469	-2.9%	2.0%	3.7%	52.0%	15.6%
	Finland	464	-5.1%	-6.0%	-14.7%	-1.9%	-15.6%
	France	2,243	-5.4%	-7.1%	-5.7%	31.4%	7.8%
	Germany	1,926	-5.9%	-7.7%	-7.3%	32.3%	6.1%
	Ireland	217	-10.5%	-7.7%	-4.1%	40.5%	15.8%
	Italy	306	-4.1%	-2.4%	3.1%	47.8%	17.6%
	Israel	185	-0.2%	4.5%	-0.2%	0.1%	0.2%
	Netherlands	3,972	-8.0%	-14.1%	-11.2%	24.8%	3.4%
	Norway	2,397	4.8%	10.7%	5.9%	12.9%	-2.5%
	Portugal	70	-6.4%	-8.9%	-11.6%	7.1%	-8.6%
	Spain	426	-3.0%	-4.1%	-0.3%	40.4%	15.2%
	Sweden	7,952	-0.2%	-5.7%	-7.8%	17.9%	0.1%
	Switzerland	6,689	-5.4%	-5.5%	-2.7%	13.6%	2.9%
	United Kingdom	1,109	-1.0%	-2.7%	-1.6%	20.0%	3.2%
Asia Pacific ex-Japan	Australia	810	-3.6%	-4.7%	-5.1%	10.4%	-4.0%
	China	58	-2.9%	-3.0%	-13.3%	2.9%	-9.2%
	Hong Kong	8,356	-5.9%	-12.1%	-17.9%	-6.1%	-20.2%
	India	826	1.7%	2.5%	14.6%	9.0%	7.1%
	Indonesia	796	-3.3%	-3.4%	-2.2%	-2.3%	1.6%
	Korea	446	-5.3%	-6.8%	-3.0%	24.0%	6.1%
	Malaysia	240	-3.2%	2.8%	-6.2%	0.9%	-11.0%
	New Zealand	133	-3.1%	-10.0%	-15.7%	12.2%	-9.7%
	Pakistan	16	5.9%	2.4%	-4.8%	-30.3%	-29.4%
	Philippines	401	2.8%	-4.0%	-5.8%	15.9%	-4.2%
	Singapore	2,985	-0.4%	-2.1%	-9.4%	6.2%	-3.3%
	Taiwan	545	-4.0%	-8.4%	-5.4%	18.5%	8.3%
	Thailand	334	-9.3%	-5.1%	-13.5%	-2.1%	-15.6%
Latin America	Argentina	3,416	-16.3%	-14.7%	14.5%	58.5%	19.7%
	Brazil	1,555	0.0%	-4.9%	11.3%	6.3%	6.6%
	Chile	1,034	-5.9%	-9.9%	-10.6%	-2.9%	-7.0%
	Colombia	357	2.6%	-1.7%	6.7%	6.5%	-9.3%
	Mexico	6,035	-6.4%	-6.8%	-2.9%	29.5%	16.6%
	Peru	1,332	-7.5%	-4.4%	-1.6%	24.1%	6.0%
Emerging Europe	Czech Republic	379	-1.7%	1.0%	-12.0%	23.1%	17.0%
	Egypt	460	5.8%	15.3%	18.9%	45.4%	14.6%
	Greece	24	-10.4%	-8.3%	12.1%	65.8%	29.1%
	Hungary	679	-7.1%	-0.7%	20.9%	69.6%	24.4%
	Poland	440	-11.6%	-14.6%	6.3%	55.6%	5.3%
	Qatar	734	-0.7%	0.1%	-2.3%	-21.4%	-7.3%
	South Africa	370	-4.4%	-5.6%	-11.1%	3.3%	-12.2%
	Türkiye	305	2.9%	32.0%	17.0%	69.2%	4.1%
	United Arab Emirates	413	4.5%	5.7%	10.7%	-1.4%	0.3%

Source : BofA Global Quantitative Strategy, Exshare

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# Global Sector Performance

The following tables show the performance of 16 sectors for each of the largest 25 countries and regions. Table below shows the sector performance last month by country and highlights the most notable performance in a colour coded matrix. Sectors that outperform the MSCI All Country World Index by at least 4% during the month are shaded dark blue while sectors that underperform the world by at least 4% are shaded light blue. Table 7 shows sector performance in the last 12-months and highlight the sectors with performance 25% greater than or 25% less than the index.

## Global Sector Performance - Last Month

**Table 4: Global sector performance (USD) – last month**

Last month performance (USD) of largest 25 countries and regions across 16 sectors

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	0.0%	-5.5%	-3.6%	-2.4%	-1.1%	n/a	-2.2%	-6.6%	0.0%	-10.0%	n/a	n/a	-6.0%	n/a	-6.5%	-4.8%	-3.2%
USA	2.4%	-5.0%	-5.7%	-5.8%	-4.8%	-3.1%	-2.4%	-4.7%	0.6%	-4.6%	-8.0%	-8.6%	-2.2%	-3.4%	-5.7%	-7.9%	-4.8%
Belgium	n/a	-6.7%	n/a	3.4%	-2.1%	-4.9%	-4.7%	-8.2%	3.8%	n/a	n/a	n/a	n/a	n/a	-15.1%	n/a	-4.2%
Denmark	n/a	-6.7%	-3.3%	-0.1%	-12.7%	-2.1%	3.6%	n/a	-3.9%	n/a	n/a	n/a	n/a	n/a	-15.1%	n/a	-2.9%
Finland	-7.2%	-0.3%	-8.3%	n/a	-8.1%	-3.9%	n/a	n/a	-1.4%	n/a	-5.6%	n/a	-5.4%	n/a	-13.5%	n/a	-5.1%
France	4.7%	-6.4%	-4.8%	-10.2%	-7.9%	-2.9%	-4.0%	-5.3%	-1.0%	-6.1%	n/a	-8.4%	2.3%	-4.0%	-5.8%	-6.9%	-5.4%
Germany	n/a	-7.3%	-7.5%	-8.0%	-5.4%	-9.3%	3.7%	-1.0%	-0.8%	-7.0%	n/a	-7.4%	-1.9%	0.7%	-6.9%	-0.5%	-5.9%
Italy	3.3%	n/a	-7.4%	-3.5%	-9.8%	-8.5%	-3.1%	-14.9%	-2.1%	n/a	n/a	n/a	-1.8%	n/a	-8.6%	n/a	-4.1%
Netherlands	n/a	-7.9%	-1.1%	-6.9%	-6.9%	-11.1%	-6.2%	-7.1%	-12.2%	n/a	n/a	-10.6%	-5.7%	5.4%	n/a	n/a	-8.0%
Spain	6.8%	n/a	-2.3%	-6.5%	n/a	-5.2%	0.2%	n/a	n/a	n/a	n/a	n/a	-5.1%	n/a	-5.5%	n/a	-3.0%
Sweden	n/a	5.5%	-0.5%	-5.2%	-7.0%	4.2%	3.1%	0.5%	n/a	n/a	-4.2%	n/a	5.6%	n/a	n/a	n/a	-0.2%
Switzerland	n/a	-5.7%	-6.3%	-13.3%	-6.0%	-4.9%	-3.2%	-4.7%	-0.7%	-11.5%	-0.3%	n/a	-2.3%	n/a	2.6%	-4.5%	-5.4%
UK	4.4%	3.5%	-3.7%	-5.1%	-5.4%	0.6%	4.6%	-2.5%	-7.0%	-1.9%	-12.9%	n/a	-0.1%	-3.6%	-4.3%	-5.9%	-1.0%
Australia	-0.9%	-3.3%	-4.1%	-3.0%	-2.5%	-7.8%	-1.6%	-4.8%	0.5%	-9.0%	n/a	n/a	-4.3%	-5.9%	-3.2%	-8.9%	-3.6%
Hong Kong	n/a	n/a	-3.4%	-9.2%	-3.2%	n/a	-1.9%	-3.6%	-10.2%	n/a	n/a	n/a	-2.0%	n/a	-4.8%	-3.8%	-5.9%
Japan	7.1%	-5.0%	-5.3%	-0.4%	-5.0%	-5.5%	5.5%	1.7%	4.7%	-4.8%	-5.4%	-7.5%	-0.5%	-6.5%	-1.2%	-1.9%	-2.8%
Singapore	n/a	n/a	-4.9%	-4.4%	-2.4%	n/a	0.1%	0.2%	n/a	n/a	n/a	n/a	0.6%	16.8%	n/a	-3.5%	-0.4%
China	4.7%	-2.0%	-3.6%	-5.1%	-2.6%	0.2%	4.6%	-2.7%	0.0%	-8.7%	-4.2%	-5.3%	-2.3%	-4.9%	1.4%	-6.7%	-2.9%
India	-0.3%	0.2%	3.2%	2.4%	0.2%	1.7%	0.2%	5.7%	-0.4%	1.7%	n/a	n/a	7.8%	-4.1%	9.0%	n/a	1.7%
Korea	-8.7%	-15.3%	-11.0%	-0.3%	-4.1%	-5.0%	-0.2%	-2.9%	3.8%	-6.7%	-2.0%	-8.0%	-2.3%	-8.3%	-0.9%	n/a	-5.3%
Taiwan	0.3%	-3.0%	1.6%	-1.8%	-2.5%	-7.3%	-0.2%	0.9%	-2.3%	n/a	-5.4%	-5.0%	-0.5%	n/a	n/a	-12.6%	-4.0%
Brazil	6.2%	2.2%	-2.6%	-9.7%	-3.8%	-1.5%	-3.1%	-5.8%	1.6%	-3.7%	n/a	n/a	2.8%	n/a	1.4%	n/a	0.0%
Mexico	n/a	-9.6%	-9.6%	n/a	-4.9%	n/a	-3.0%	n/a	n/a	n/a	n/a	n/a	-9.1%	-32.2%	n/a	13.3%	-6.4%
Poland	-12.1%	-7.4%	n/a	-14.4%	-11.5%	n/a	-11.5%	n/a	-5.5%	n/a	n/a	n/a	n/a	-18.8%	-16.6%	n/a	-11.6%
South Africa	3.2%	-3.4%	-3.8%	-5.2%	-4.4%	0.3%	-1.6%	-9.7%	-3.0%	n/a	n/a	n/a	-4.7%	n/a	n/a	-8.8%	-4.4%
Global Sector	2.4%	-4.3%	-5.1%	-5.4%	-4.9%	-3.3%	-0.9%	-4.3%	-0.7%	-4.7%	-7.3%	-8.2%	-1.7%	-3.6%	-5.1%	-6.6%	-4.3%
Europe Sector	4.3%	-3.2%	-4.5%	-8.2%	-6.1%	-3.5%	0.4%	-3.5%	-2.3%	-6.6%	-5.2%	-10.0%	-1.6%	-0.3%	-6.5%	-5.0%	-4.0%
APJ Sector	0.1%	-4.4%	-4.0%	-3.8%	-2.2%	-3.3%	-0.2%	-0.9%	-3.7%	-0.7%	-3.8%	-5.3%	0.5%	-4.7%	0.0%	-5.6%	-3.0%
GEM Sector	1.5%	-4.3%	-3.9%	-4.0%	-2.9%	-1.0%	-1.3%	-0.9%	-0.5%	-0.1%	-3.8%	-5.3%	-1.1%	-5.5%	0.9%	-2.1%	-2.8%

Key :  
  = underperform MSCI AC World by 4% or more  
  = outperform MSCI AC World by 4% or more

Source : BofA Global Quantitative Strategy, MSCI

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## Global Sector Performance - Last 3-Months

**Table 5: Global sector performance (USD) – last 3 months**

Last 3-months performance (USD) of largest 25 countries and regions across 16 sectors

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	5.3%	-4.9%	-6.1%	-8.3%	-3.8%	n/a	-6.9%	-5.8%	-3.0%	-9.7%	n/a	n/a	-15.6%	n/a	-13.9%	-8.0%	-4.7%
USA	11.5%	-5.0%	-4.8%	-4.5%	-6.5%	-2.9%	-2.5%	-2.2%	3.3%	-4.0%	-9.7%	-2.9%	-7.2%	3.7%	-9.8%	-9.8%	-3.4%
Belgium	n/a	-6.5%	n/a	-4.2%	-1.3%	14.5%	-10.2%	-4.2%	2.1%	n/a	n/a	n/a	n/a	n/a	22.7%	n/a	-0.2%
Denmark	n/a	-12.5%	-11.0%	16.4%	-20.8%	10.4%	-4.1%	n/a	-15.1%	n/a	n/a	n/a	n/a	n/a	42.1%	n/a	2.0%
Finland	-11.6%	13.5%	-13.9%	n/a	-4.5%	-5.0%	n/a	n/a	-3.3%	n/a	-9.7%	n/a	-13.0%	n/a	-13.0%	n/a	-6.0%
France	15.1%	-5.2%	-6.1%	-16.6%	-13.5%	-2.3%	0.5%	-10.1%	1.2%	-11.4%	n/a	-12.7%	-1.5%	-6.4%	-7.7%	-3.8%	-7.1%
Germany	n/a	-4.8%	-14.0%	-14.9%	-4.2%	-7.2%	3.2%	-1.8%	3.5%	-4.6%	n/a	-19.5%	-4.6%	9.7%	-10.6%	23.0%	-7.7%
Italy	11.2%	n/a	-10.1%	-2.4%	-14.6%	-9.8%	1.0%	-21.8%	0.2%	n/a	n/a	n/a	-1.4%	n/a	-9.1%	n/a	-2.4%
Netherlands	n/a	-14.5%	-3.8%	-12.1%	-11.0%	-7.1%	-2.1%	-45.2%	-9.4%	n/a	n/a	-17.2%	-7.4%	17.9%	n/a	n/a	-14.1%
Spain	13.4%	n/a	-1.9%	-11.0%	n/a	1.6%	3.8%	n/a	n/a	n/a	n/a	n/a	-6.5%	n/a	-11.6%	n/a	-4.1%
Sweden	n/a	5.2%	-6.3%	-17.1%	-18.3%	5.6%	5.8%	-3.1%	n/a	n/a	-22.1%	n/a	-5.8%	n/a	n/a	n/a	-5.7%
Switzerland	n/a	-6.1%	-7.5%	25.5%	-6.3%	-6.8%	-0.6%	19.4%	-0.2%	-11.4%	16.2%	n/a	-4.6%	n/a	0.0%	5.7%	-5.5%
UK	8.3%	-0.6%	-1.9%	-7.0%	-6.4%	-4.1%	-0.5%	-6.6%	-13.4%	2.7%	-18.3%	n/a	-3.0%	-6.2%	-8.4%	-2.4%	-2.7%
Australia	3.0%	-6.5%	-8.3%	1.2%	-11.1%	-11.1%	0.2%	-8.3%	-2.4%	-13.9%	n/a	n/a	-13.2%	1.6%	-6.9%	-4.5%	-4.7%
Hong Kong	n/a	n/a	-11.5%	-6.9%	-12.2%	n/a	-11.4%	1.3%	-19.2%	n/a	n/a	n/a	-10.2%	n/a	-10.2%	-12.6%	-12.1%
Japan	24.7%	-5.2%	-4.8%	0.1%	-5.2%	-8.5%	14.3%	5.1%	5.0%	-2.7%	-11.1%	-6.2%	-1.7%	-7.5%	9.7%	4.1%	-2.4%
Singapore	n/a	n/a	-0.9%	-10.9%	-2.7%	n/a	3.8%	0.6%	n/a	n/a	n/a	n/a	-4.0%	-24.3%	n/a	-3.2%	-2.1%
China	3.6%	-1.6%	-9.6%	3.2%	-4.9%	0.8%	-9.0%	1.7%	-4.5%	-11.7%	-2.8%	-20.7%	-10.5%	-4.5%	-13.1%	-8.2%	-3.0%
India	1.4%	0.0%	7.9%	6.5%	-3.6%	7.2%	-1.9%	1.4%	-2.6%	5.2%	n/a	n/a	4.1%	-8.2%	15.5%	n/a	2.5%
Korea	0.2%	-4.5%	-8.5%	-8.4%	2.2%	-7.2%	6.1%	6.8%	9.1%	7.4%	-9.9%	-3.0%	0.9%	-6.9%	-14.6%	n/a	-6.8%
Taiwan	-7.8%	-13.2%	-15.1%	-13.2%	-11.1%	-4.5%	-5.9%	-4.6%	-1.0%	n/a	0.1%	-11.2%	-5.2%	n/a	n/a	-12.4%	-8.4%
Brazil	10.7%	2.6%	-10.3%	21.1%	-14.4%	-13.4%	-11.0%	-14.6%	-2.2%	-13.2%	n/a	n/a	-3.0%	n/a	-6.9%	n/a	-4.9%
Mexico	n/a	-4.8%	-6.1%	n/a	-4.2%	n/a	-0.9%	n/a	n/a	n/a	n/a	n/a	-19.7%	-40.7%	n/a	14.7%	-6.8%
Poland	-15.2%	-7.3%	n/a	-16.6%	-30.4%	n/a	-12.4%	n/a	-2.3%	n/a	n/a	n/a	n/a	-26.8%	-3.9%	n/a	-14.6%
South Africa	5.2%	-12.4%	4.5%	-9.1%	3.3%	-6.2%	2.7%	-4.5%	6.0%	n/a	n/a	n/a	-16.1%	n/a	n/a	-7.1%	-5.6%
Global Sector	9.7%	-4.6%	-5.5%	-5.1%	-6.7%	-3.0%	-1.4%	-2.4%	-0.3%	-4.1%	-9.4%	-5.8%	-6.1%	2.0%	-9.2%	-7.3%	-3.8%
Europe Sector	10.3%	-3.5%	-7.1%	-14.1%	-7.9%	-1.9%	1.0%	-4.1%	-1.8%	-6.2%	-13.9%	-17.1%	-4.3%	0.9%	-11.1%	4.8%	-5.4%
APJ Sector	2.5%	-5.0%	-6.9%	1.3%	-5.5%	-3.8%	-2.3%	-1.0%	-8.6%	1.3%	-6.2%	-11.2%	-4.0%	-5.6%	-4.6%	-7.5%	-4.3%
GEM Sector	4.5%	-3.8%	-5.3%	0.5%	-4.7%	-1.1%	-3.9%	-1.8%	-1.2%	3.7%	-6.2%	-11.2%	-7.8%	-5.2%	-3.5%	-1.5%	-3.7%

Key:

 = underperform MSCI AC World by 7% or more

 = outperform MSCI AC World by 7% or more

Source: BofA Global Quantitative Strategy, MSCI

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## Global Sector Performance - Last 6-Months


**Table 6: Global sector performance (USD) – last 6 months**

Last 6-months performance (USD) of largest 25 countries and regions across 16 sectors

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	6.5%	-9.6%	-2.4%	0.8%	-4.0%	n/a	-5.5%	-1.4%	4.8%	7.8%	n/a	n/a	-16.5%	n/a	-15.1%	-1.6%	-1.8%
USA	9.4%	-2.6%	1.5%	7.9%	-6.0%	-0.7%	1.5%	3.5%	7.3%	7.7%	3.2%	19.9%	-15.4%	20.0%	-12.9%	-9.4%	4.6%
Belgium	n/a	-15.3%	n/a	-12.9%	-16.3%	17.5%	-9.0%	-11.6%	-4.6%	n/a	n/a	n/a	n/a	n/a	-25.8%	n/a	-7.6%
Denmark	n/a	-20.2%	-10.7%	8.7%	-18.4%	12.0%	15.9%	n/a	-16.0%	n/a	n/a	n/a	n/a	n/a	-35.7%	n/a	3.7%
Finland	-31.1%	0.5%	-9.1%	n/a	-16.5%	-11.9%	n/a	n/a	-8.2%	n/a	-23.0%	n/a	-23.0%	n/a	-24.1%	n/a	-14.7%
France	11.7%	-1.6%	-2.1%	-15.6%	-12.9%	-3.0%	7.3%	-17.1%	-2.5%	-6.7%	n/a	-18.4%	-3.4%	-6.8%	-4.1%	-4.2%	-5.7%
Germany	n/a	-6.3%	-12.7%	-11.6%	-3.3%	-15.4%	8.4%	-4.0%	6.7%	2.6%	n/a	-18.9%	-14.5%	17.0%	-9.3%	25.4%	-7.3%
Italy	14.7%	n/a	-13.5%	3.8%	-3.3%	-3.7%	10.6%	n/a	2.7%	n/a	n/a	n/a	-7.6%	n/a	-2.5%	n/a	3.1%
Netherlands	n/a	-19.7%	-4.8%	-18.3%	-11.8%	14.9%	9.0%	-41.4%	-1.5%	n/a	n/a	-11.9%	-6.6%	3.4%	n/a	n/a	-11.2%
Spain	7.0%	n/a	3.1%	-1.3%	n/a	31.5%	7.0%	n/a	n/a	n/a	n/a	n/a	-7.6%	n/a	-10.1%	n/a	-0.3%
Sweden	n/a	-10.7%	-7.1%	-15.7%	-24.0%	-19.0%	6.5%	-4.0%	n/a	n/a	-21.4%	n/a	-20.3%	n/a	n/a	n/a	-7.8%
Switzerland	n/a	-4.1%	-1.0%	23.2%	-7.4%	0.2%	11.1%	14.9%	-2.5%	1.7%	19.0%	n/a	-6.8%	n/a	12.2%	10.2%	-2.7%
UK	8.3%	-7.7%	2.7%	-5.2%	-8.0%	-1.1%	9.3%	2.1%	-12.2%	26.0%	-14.2%	n/a	-17.4%	-7.4%	-9.0%	-9.6%	-1.6%
Australia	6.9%	-9.4%	-5.4%	-0.7%	-10.8%	-15.2%	-0.4%	-8.7%	7.5%	4.8%	n/a	n/a	-12.1%	-2.1%	-8.6%	-2.4%	-5.1%
Hong Kong	n/a	n/a	-13.3%	-10.6%	-24.0%	n/a	-12.3%	-14.4%	-22.6%	n/a	n/a	n/a	-21.3%	n/a	-9.0%	-21.8%	-17.9%
Japan	24.6%	-5.5%	5.4%	8.2%	-6.7%	-8.9%	24.3%	12.6%	14.8%	1.4%	-8.4%	12.7%	2.0%	-3.7%	22.9%	6.3%	3.8%
Singapore	n/a	n/a	11.5%	26.5%	-13.7%	n/a	-1.8%	1.0%	n/a	n/a	n/a	n/a	-4.2%	-49.2%	n/a	-10.9%	-9.4%
China	3.2%	-16.9%	-18.0%	-10.8%	-18.6%	-13.1%	-9.7%	-7.8%	-4.9%	-25.4%	-9.1%	-31.9%	-19.5%	-16.0%	-17.5%	-22.2%	-13.3%
India	10.9%	9.4%	30.2%	31.3%	8.3%	24.7%	6.6%	17.6%	22.4%	5.6%	n/a	n/a	22.1%	10.7%	22.8%	n/a	14.6%
Korea	-11.4%	-6.4%	-5.4%	-2.9%	-13.7%	-6.4%	3.3%	10.3%	15.7%	12.7%	-2.9%	24.1%	-1.8%	-16.4%	-3.5%	n/a	-3.0%
Taiwan	-10.6%	-18.2%	-20.3%	-6.8%	-8.1%	-26.0%	-1.0%	-10.2%	0.9%	n/a	12.1%	-8.9%	-9.2%	n/a	n/a	-12.9%	-5.4%
Brazil	45.1%	-8.4%	2.1%	-2.0%	-2.9%	33.7%	11.7%	31.3%	-2.8%	-2.9%	n/a	n/a	15.5%	n/a	14.7%	n/a	11.3%
Mexico	n/a	3.5%	-5.8%	n/a	2.6%	n/a	-2.4%	n/a	n/a	n/a	n/a	n/a	-17.2%	-42.3%	n/a	19.9%	-2.9%
Poland	-0.5%	-9.6%	n/a	3.6%	-10.4%	n/a	20.0%	n/a	16.4%	n/a	n/a	n/a	n/a	-3.6%	17.9%	n/a	6.3%
South Africa	-13.0%	-23.2%	1.4%	-11.8%	-0.6%	-11.7%	-5.1%	1.2%	2.4%	n/a	n/a	n/a	-17.1%	n/a	n/a	-14.2%	-11.1%
Global Sector	9.4%	-6.0%	-0.1%	2.3%	-7.0%	-1.1%	2.5%	2.4%	2.7%	7.1%	1.7%	10.6%	-10.1%	12.5%	-10.2%	-8.2%	1.6%
Europe Sector	8.8%	-6.4%	-4.5%	-12.0%	-9.4%	0.7%	8.1%	-3.9%	-1.5%	1.1%	-16.6%	-13.5%	-11.9%	-3.4%	-9.7%	1.6%	-4.1%
APxJ Sector	5.5%	-8.3%	-6.4%	-5.9%	-9.1%	-9.1%	-1.8%	-0.6%	-7.4%	2.4%	-0.1%	-8.4%	-4.6%	-17.5%	-6.1%	-14.5%	-6.1%
GEM Sector	12.9%	-8.5%	-5.0%	-6.2%	-5.3%	-4.0%	-0.2%	8.2%	2.2%	3.2%	0.1%	-8.4%	-5.8%	-16.0%	-1.0%	-7.9%	-3.8%

Key :

 = underperform MSCI AC World by 12% or more

 = outperform MSCI AC World by 12% or more

Source : BofA Global Quantitative Strategy, MSCI

BofA GLOBAL RESEARCH



## Global Sector Performance - Last 12-Months


**Table 7: Global sector performance (USD) – last 12 months**

Last 12-months performance (USD) of largest 25 countries and regions across 16 sectors

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	11.9%	3.5%	12.3%	16.2%	13.3%	n/a	-3.6%	-0.5%	21.3%	60.2%	n/a	n/a	-7.6%	n/a	-14.7%	13.5%	8.7%
USA	24.3%	16.2%	23.1%	12.7%	5.5%	6.8%	-2.0%	15.8%	17.7%	29.4%	24.2%	80.1%	-7.0%	42.5%	-9.9%	-5.8%	19.6%
Belgium	n/a	10.4%	n/a	18.9%	21.8%	29.9%	31.4%	9.0%	12.7%	n/a	n/a	n/a	n/a	n/a	-16.8%	n/a	20.0%
Denmark	n/a	-5.1%	33.3%	119.5%	7.5%	69.8%	86.7%	n/a	-11.2%	n/a	n/a	n/a	n/a	n/a	-31.7%	n/a	52.0%
Finland	-22.5%	4.7%	25.0%	n/a	-4.2%	-6.6%	n/a	n/a	1.2%	n/a	-12.8%	n/a	2.3%	n/a	-13.7%	n/a	-1.9%
France	39.5%	43.0%	40.7%	28.8%	15.5%	30.1%	43.8%	10.5%	35.5%	8.7%	n/a	37.4%	26.9%	30.8%	35.0%	22.5%	31.4%
Germany	n/a	26.2%	39.7%	27.4%	24.1%	8.7%	58.8%	19.1%	53.8%	55.9%	n/a	49.2%	20.3%	37.2%	22.8%	7.0%	32.3%
Italy	45.8%	n/a	11.3%	56.3%	32.4%	10.0%	74.9%	n/a	46.9%	n/a	n/a	n/a	48.2%	n/a	39.2%	n/a	47.8%
Netherlands	n/a	-10.2%	25.1%	19.3%	13.7%	34.1%	53.5%	-24.7%	-3.1%	n/a	n/a	41.8%	21.6%	38.3%	n/a	n/a	24.8%
Spain	42.5%	n/a	43.7%	59.0%	n/a	49.6%	62.3%	n/a	n/a	n/a	n/a	n/a	17.9%	n/a	18.3%	n/a	40.4%
Sweden	n/a	0.4%	27.4%	28.5%	2.2%	6.5%	26.1%	23.2%	n/a	n/a	-13.1%	n/a	-21.3%	n/a	n/a	n/a	17.9%
Switzerland	n/a	24.7%	32.1%	26.1%	4.3%	5.1%	n/a	40.2%	23.0%	2.8%	48.2%	n/a	26.3%	n/a	n/a	14.3%	13.6%
UK	29.3%	6.1%	35.5%	27.7%	3.7%	22.6%	38.2%	33.9%	11.0%	51.8%	3.6%	n/a	-12.2%	30.6%	19.4%	7.7%	20.0%
Australia	15.7%	17.6%	13.9%	20.7%	0.8%	-7.6%	7.4%	4.7%	27.6%	17.4%	n/a	n/a	0.4%	25.0%	23.7%	12.1%	10.4%
Hong Kong	n/a	n/a	-5.3%	6.6%	-20.4%	n/a	-17.9%	10.9%	-2.2%	n/a	n/a	n/a	-10.9%	n/a	-9.2%	-16.2%	-6.1%
Japan	35.1%	29.3%	25.9%	30.0%	6.4%	-0.4%	68.6%	30.3%	29.3%	12.3%	13.5%	76.1%	13.0%	2.6%	38.5%	5.7%	23.3%
Singapore	n/a	n/a	32.2%	13.2%	2.1%	n/a	10.3%	8.4%	n/a	n/a	n/a	n/a	-4.4%	-21.6%	n/a	0.9%	6.2%
China	19.2%	-4.2%	-7.5%	-0.4%	-13.2%	2.0%	1.5%	10.1%	19.6%	2.8%	22.5%	-29.2%	-2.1%	21.0%	-10.2%	-18.5%	2.9%
India	10.1%	7.0%	15.1%	22.2%	5.3%	16.6%	8.6%	15.0%	9.4%	7.8%	n/a	n/a	11.3%	5.7%	-23.9%	n/a	9.0%
Korea	14.2%	43.2%	22.6%	18.8%	-1.9%	-2.2%	24.1%	43.5%	47.9%	23.5%	30.3%	45.7%	8.8%	-3.8%	-4.9%	n/a	24.0%
Taiwan	-4.4%	-6.5%	-5.6%	12.5%	-1.2%	n/a	6.6%	11.5%	13.9%	n/a	34.3%	23.3%	-0.8%	n/a	n/a	-6.3%	18.5%
Brazil	28.5%	6.3%	16.2%	-36.7%	-11.2%	-20.4%	-1.7%	11.1%	26.9%	-0.6%	n/a	n/a	21.2%	n/a	10.6%	n/a	6.3%
Mexico	n/a	49.8%	35.0%	n/a	36.1%	n/a	28.6%	n/a	n/a	n/a	n/a	n/a	4.2%	-43.8%	n/a	62.1%	29.5%
Poland	24.7%	44.5%	n/a	49.7%	33.0%	n/a	90.1%	n/a	102.1%	n/a	n/a	n/a	n/a	19.8%	35.2%	n/a	55.6%
South Africa	-18.8%	-12.5%	32.4%	16.7%	12.7%	22.1%	6.7%	6.0%	23.4%	n/a	n/a	n/a	-12.2%	n/a	n/a	6.0%	3.3%
Global Sector	22.6%	13.7%	24.3%	15.4%	5.9%	9.2%	10.5%	15.7%	20.6%	29.2%	23.6%	63.7%	1.3%	37.0%	-2.7%	-3.6%	18.7%
Europe Sector	29.2%	17.9%	34.9%	31.8%	7.8%	22.9%	46.8%	21.3%	28.4%	34.9%	-4.8%	42.3%	12.2%	29.4%	19.2%	11.0%	25.4%
APxJ Sector	11.6%	11.7%	6.3%	4.9%	-3.5%	0.0%	6.6%	11.3%	12.0%	9.1%	30.3%	20.8%	-0.4%	15.8%	-11.2%	-6.5%	8.7%
GEM Sector	14.3%	3.6%	8.1%	4.1%	2.4%	3.1%	2.8%	11.9%	21.7%	9.7%	30.7%	20.8%	-0.3%	16.9%	-8.1%	-1.9%	8.8%

Key :

 = underperform MSCI AC World by 25% or more

 = outperform MSCI AC World by 25% or more

Source : BofA Global Quantitative Strategy, MSCI

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## Global Sector Performance - Year-to-Date

**Table 8: Global sector performance (USD) – YTD**

Year-to-Date performance (USD) of largest 25 countries and regions across 16 sectors

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	3.3%	-3.8%	2.5%	5.3%	3.4%	n/a	-6.2%	2.7%	9.1%	37.5%	n/a	n/a	-16.1%	n/a	-9.5%	7.9%	1.8%
USA	3.0%	1.0%	5.0%	25.4%	-5.8%	-5.0%	-11.3%	3.5%	1.3%	23.3%	27.2%	62.1%	-14.3%	48.3%	-16.5%	-8.5%	12.2%
Belgium	n/a	-12.8%	n/a	-11.5%	-7.1%	22.6%	-2.3%	-6.6%	-6.5%	n/a	n/a	n/a	n/a	n/a	30.8%	n/a	-1.9%
Denmark	n/a	-17.6%	-3.7%	48.3%	-4.5%	28.2%	18.4%	n/a	-22.6%	n/a	n/a	n/a	n/a	n/a	-39.7%	n/a	15.6%
Finland	-25.9%	-8.6%	-5.6%	n/a	-18.4%	-27.9%	n/a	n/a	-16.7%	n/a	-18.2%	n/a	-12.0%	n/a	-29.8%	n/a	-15.6%
France	5.4%	15.7%	12.7%	5.9%	5.5%	4.1%	10.1%	-9.4%	7.3%	4.4%	n/a	23.2%	16.1%	5.2%	8.8%	-3.2%	7.8%
Germany	n/a	0.8%	4.4%	3.0%	9.2%	-5.9%	21.1%	-0.6%	14.4%	26.4%	n/a	9.4%	3.7%	38.8%	-0.6%	-0.7%	6.1%
Italy	9.7%	n/a	-11.5%	33.0%	16.8%	-4.8%	30.7%	n/a	14.0%	n/a	n/a	n/a	25.6%	n/a	10.1%	n/a	17.6%
Netherlands	n/a	-17.1%	7.4%	-8.5%	1.7%	40.6%	8.6%	-33.7%	-14.0%	n/a	n/a	12.9%	7.1%	9.0%	n/a	n/a	3.4%
Spain	4.0%	n/a	22.1%	25.0%	n/a	13.3%	26.6%	n/a	n/a	n/a	n/a	n/a	9.6%	n/a	-2.0%	n/a	15.2%
Sweden	n/a	-7.9%	4.7%	7.9%	-17.2%	-6.6%	2.0%	3.6%	n/a	n/a	-17.3%	n/a	-13.5%	n/a	n/a	n/a	0.1%
Switzerland	n/a	11.2%	13.5%	-5.6%	-1.8%	-0.3%	9.5%	19.6%	2.4%	28.4%	12.2%	n/a	8.6%	n/a	29.1%	5.9%	2.9%
UK	13.6%	-15.4%	18.0%	6.9%	-6.4%	1.7%	15.9%	17.7%	-13.9%	33.8%	-0.4%	n/a	-4.6%	9.9%	1.3%	-7.2%	3.2%
Australia	1.8%	-4.9%	1.5%	9.9%	-4.3%	-13.9%	-6.9%	-6.7%	11.6%	10.7%	n/a	n/a	-8.2%	14.9%	-8.9%	-2.0%	-4.0%
Hong Kong	n/a	n/a	-15.3%	-8.5%	-24.3%	n/a	-22.4%	-11.2%	-26.7%	n/a	n/a	n/a	-14.8%	n/a	-11.6%	-24.2%	-20.2%
Japan	24.1%	11.3%	11.9%	18.2%	-3.7%	-7.8%	19.0%	16.5%	2.5%	3.0%	4.1%	41.7%	1.0%	-4.5%	22.2%	1.8%	9.1%
Singapore	n/a	n/a	18.1%	-13.1%	-12.1%	n/a	-2.5%	7.0%	n/a	n/a	n/a	n/a	-7.5%	-15.5%	n/a	-9.1%	-3.3%
China	19.5%	-11.7%	-15.8%	-10.7%	-17.5%	-18.6%	-8.1%	-3.3%	-4.6%	-22.4%	3.1%	-27.1%	-8.0%	-0.6%	-17.1%	-23.5%	-9.2%
India	4.0%	2.5%	11.4%	26.7%	9.1%	19.6%	1.0%	12.2%	9.9%	3.9%	n/a	n/a	12.7%	5.5%	-19.0%	n/a	7.1%
Korea	-4.6%	11.4%	5.6%	12.9%	-22.5%	-12.3%	-0.8%	8.7%	12.1%	2.0%	9.8%	42.4%	-6.5%	-12.2%	-22.5%	n/a	6.1%
Taiwan	-4.4%	-13.2%	-16.6%	-2.6%	-2.5%	-32.9%	2.9%	-6.6%	3.0%	n/a	25.9%	10.7%	-1.8%	n/a	n/a	-28.1%	8.3%
Brazil	42.1%	-13.9%	11.1%	-15.7%	-4.5%	-6.2%	11.6%	8.5%	-2.3%	3.1%	n/a	n/a	21.5%	n/a	6.7%	n/a	6.6%
Mexico	n/a	37.2%	18.7%	n/a	20.2%	n/a	15.6%	n/a	n/a	n/a	n/a	n/a	-5.0%	-33.0%	n/a	41.9%	16.6%
Poland	-8.2%	-11.2%	n/a	8.3%	-4.9%	n/a	21.3%	n/a	17.4%	n/a	n/a	n/a	n/a	-12.7%	9.4%	n/a	5.3%
South Africa	-28.4%	-28.2%	14.9%	-5.9%	2.5%	13.8%	-11.3%	-3.6%	12.6%	n/a	n/a	n/a	-20.5%	n/a	n/a	-19.8%	-12.2%
Global Sector	5.0%	-1.9%	6.1%	16.5%	-4.3%	-3.3%	-1.6%	3.4%	0.4%	22.3%	22.8%	45.2%	-5.7%	36.5%	-11.4%	-8.4%	8.5%
Europe Sector	7.9%	-2.3%	9.4%	6.9%	-2.3%	6.0%	15.2%	3.4%	1.8%	19.8%	-12.2%	13.2%	4.7%	9.2%	-1.1%	-4.1%	5.4%
APxJ Sector	4.3%	-4.2%	-4.7%	-4.2%	-8.3%	-11.3%	-4.0%	-0.4%	-9.4%	2.1%	13.1%	10.0%	-2.4%	-2.1%	-16.6%	-15.9%	-2.7%
GEM Sector	12.0%	-7.0%	-3.2%	-4.9%	-3.1%	-8.8%	-1.7%	4.1%	2.4%	2.7%	13.4%	10.0%	-2.1%	-2.3%	-11.9%	-9.7%	-0.4%

Key :

 = underperform MSCI AC World by 20% or more

 = outperform MSCI AC World by 20% or more

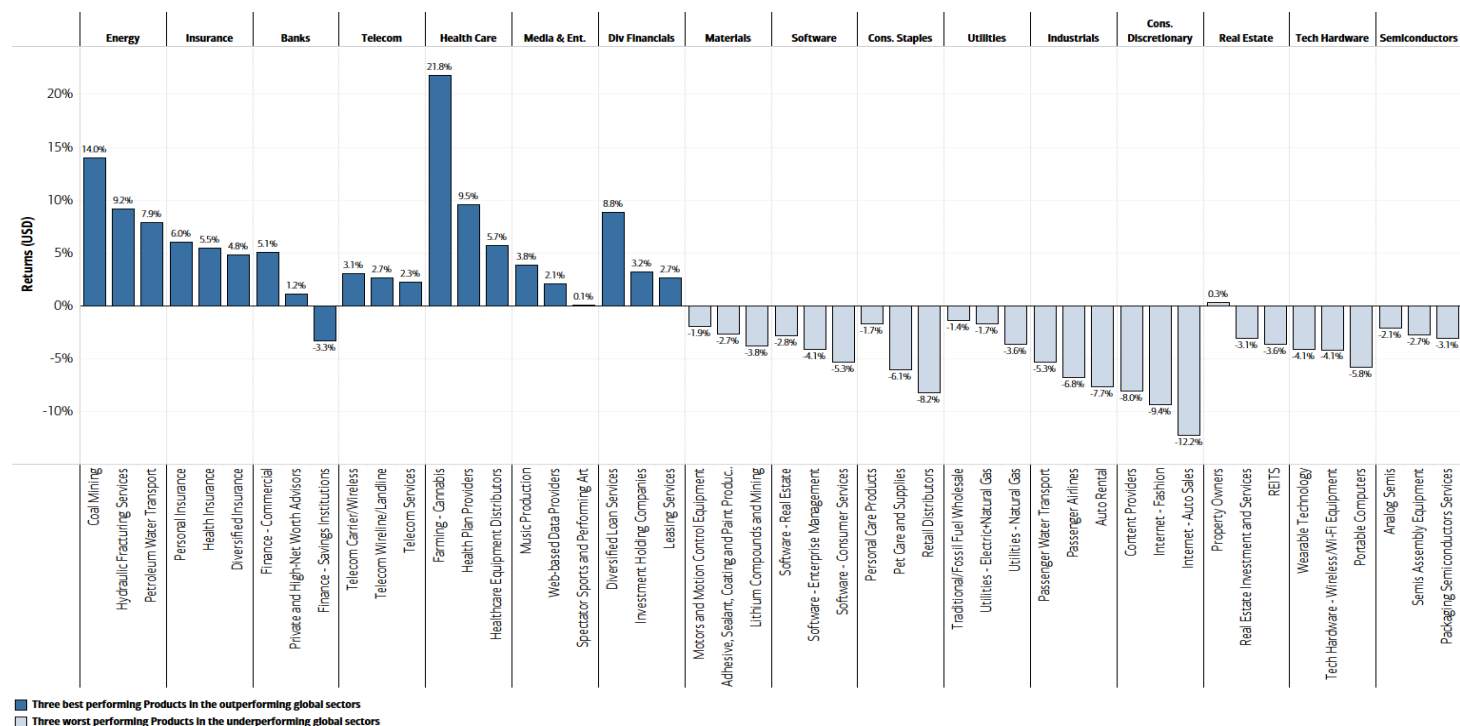
Source : BofA Global Quantitative Strategy, MSCI

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# Products Performance

**Chart 6: Best Performing Products: Last Month**

Coal Mining was the best performing Product within Energy in September

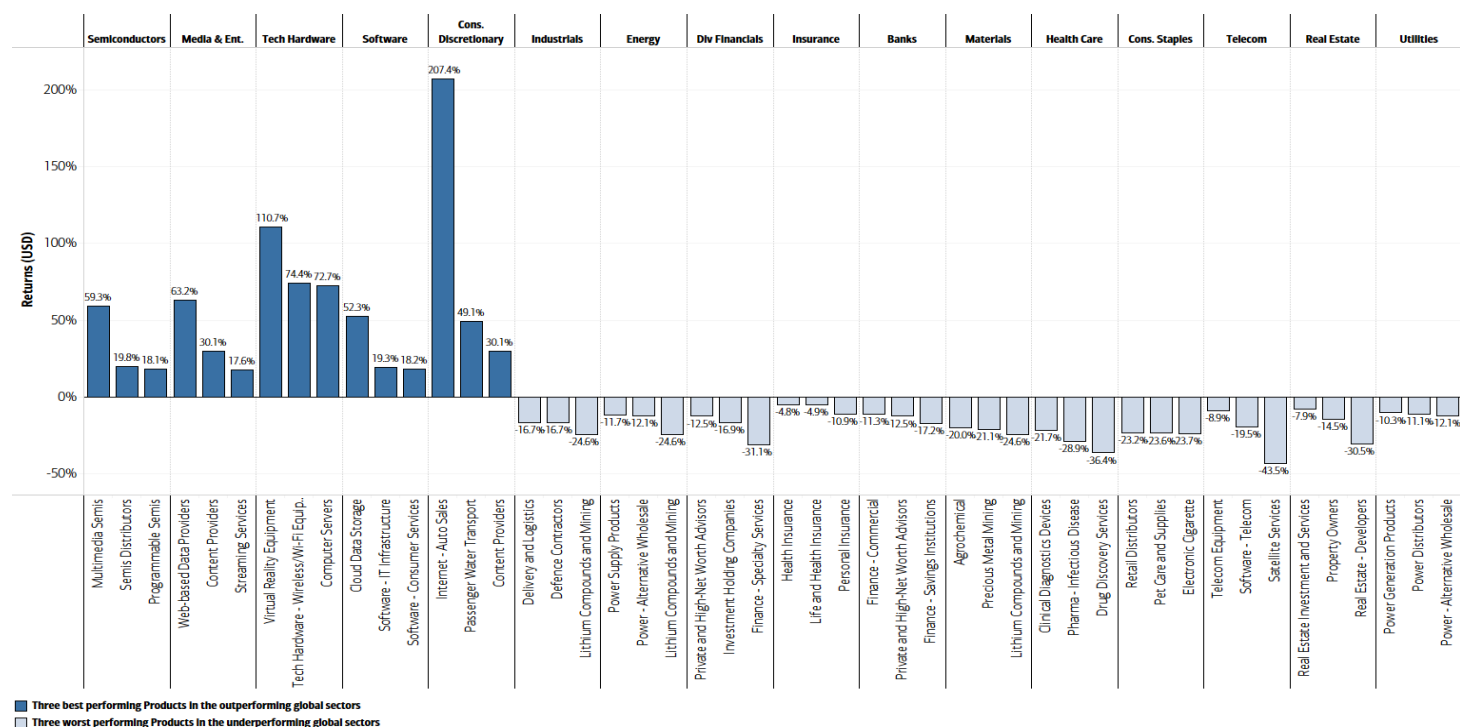


Source : BofA Global Quantitative Strategy, IBES, Factset

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**Chart 7: Best Performing Products: Year-to-Date**

Internet – Auto Sales and Virtual Reality Equipment had the best YTD returns



Source : BofA Global Quantitative Strategy, IBES, Factset

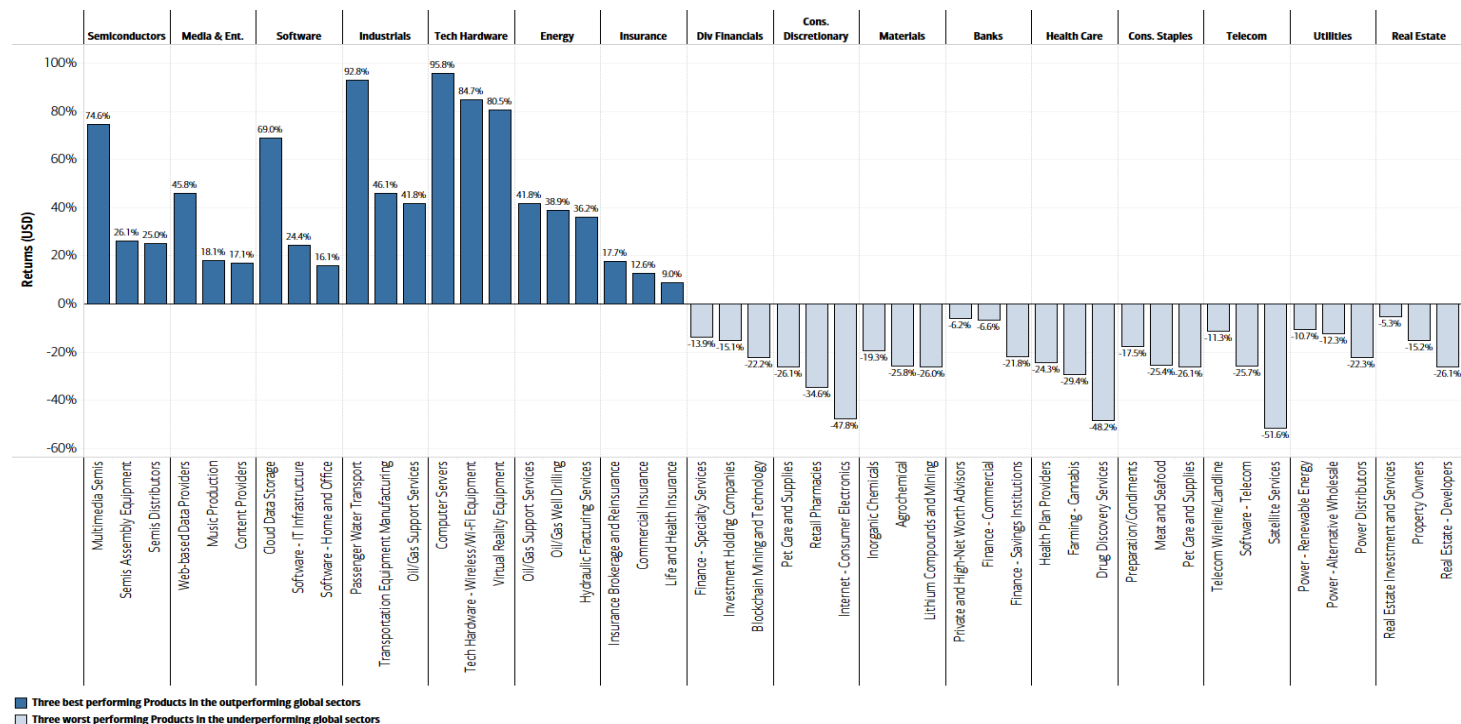
**Chart 7: Best Performing Products: Year-to-Date**

Internet – Auto Sales and Virtual Reality Equipment had the best YTD returns

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**Chart 8: Best Performing Products: Last 12-Months**

Computer Servers and Wireless Wi-Fi Equipment had the best 12-month returns within Tech Hardware



■ Three best performing Products in the outperforming global sectors  
 ■ Three worst performing Products in the underperforming global sectors

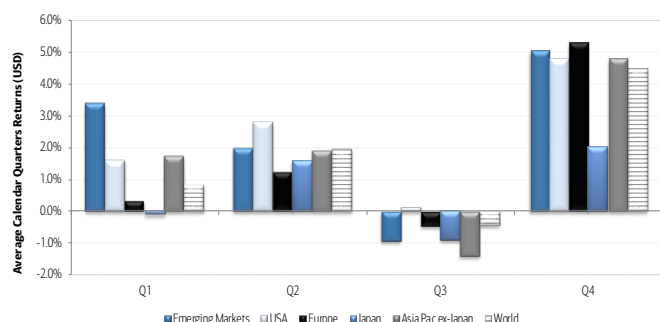
Source : BofA Global Quantitative Strategy, IBES, Factset

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# Seasonality

## Seasonality by Global Regions

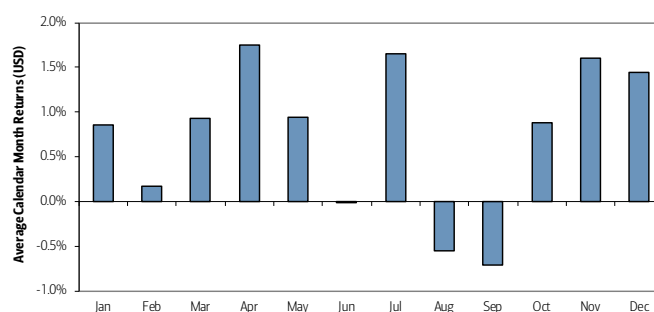
**Chart 9: Seasonality of Market Performance (USD) - Global Regions**  
Emerging Markets has the best returns in first quarter



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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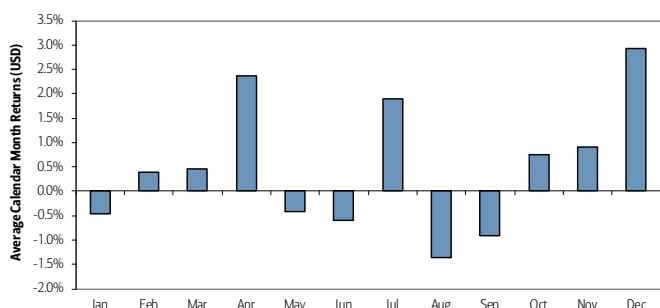
**Chart 10: Seasonality of Market Performance (USD) - MSCI USA**  
Fourth quarter has the best returns for equities, on average



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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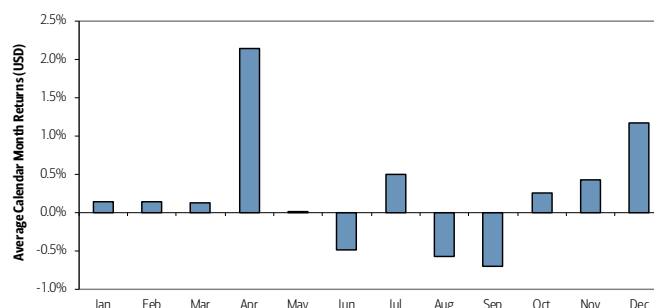
**Chart 11: Seasonality of Market Performance (USD) - MSCI Europe**  
Best returns for Europe markets is in December



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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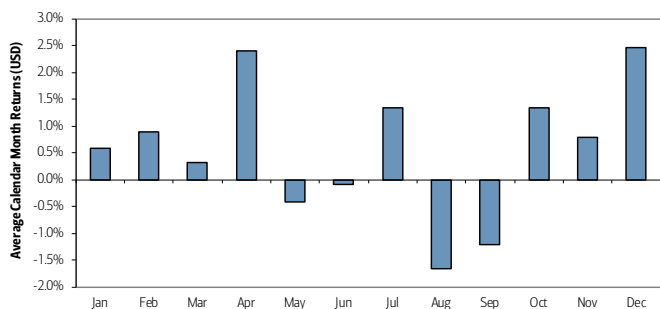
**Chart 12: Seasonality of Market Performance (USD) - MSCI Japan**  
Fourth quarter has the best returns for equities, on average



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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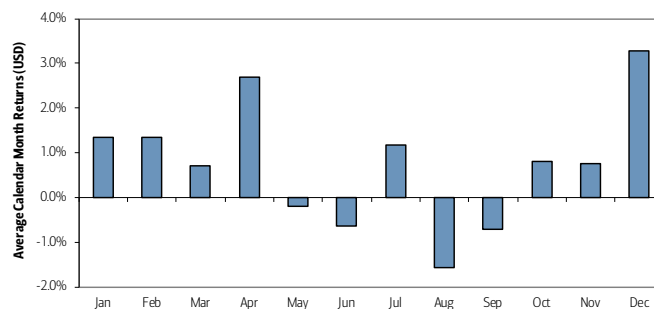
**Chart 13: Seasonality of Market Performance (USD) - MSCI Asia Pac ex-Japan**  
The best month for Asia Pac ex-Japan equities is December



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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**Chart 14: Seasonality of Market Performance (USD) - MSCI Emerging Markets**  
Fourth quarter has the best returns for equities, on average



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

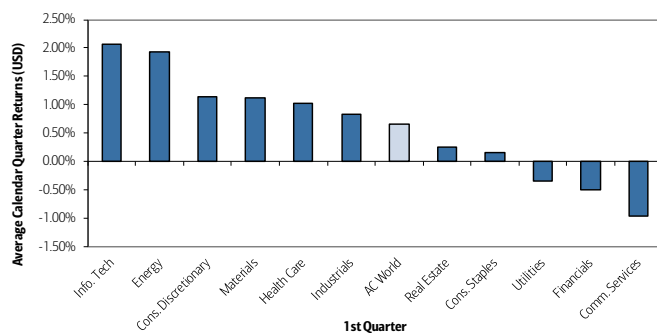
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## Seasonality by Global Sectors

**Chart 15: Seasonality of Sector Performance (USD) - 1st Quarter**

Info. Tech performed the best, on average during 1st Quarter

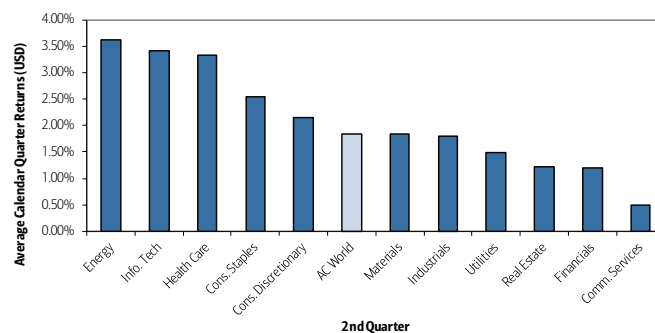


Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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**Chart 16: Seasonality of Sector Performance (USD) - 2nd Quarter**

Energy performed the best, on average during 2nd Quarter

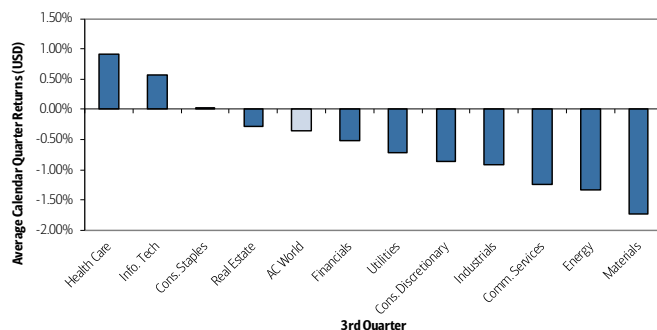


Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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**Chart 17: Seasonality of Sector Performance (USD) - 3rd Quarter**

Health Care performed the best, on average during 3rd Quarter

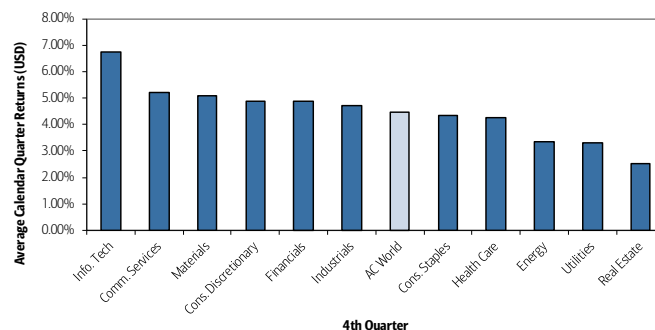


Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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**Chart 18: Seasonality of Sector Performance (USD) - 4th Quarter**

The best performing sector in 4th Quarter is Info. Tech



Source : BofA Global Quantitative Strategy, MSCI  
Performance is based on official MSCI Index level since 1987.

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## Performance calculation methodology

Countries are based on MSCI definitions, and sectors are based broadly on the Global Industry Classification Standard (GICS). We split the largest three sectors by market cap into eight sectors, thereby converting the eleven GICS sectors into sixteen. All performance calculations use month-end prices, are market-cap weighted, and are in USD. As such, the performance results do not reflect actual transactions.

The performance tables show the price returns of the published indices for the period specified (1M = 1-Month, 3M = 3-Months, YTD = Year-to-Date, etc) in the currency specified (local currency for local exchange indices and US dollars for all MSCI indices).

The performance is calculated by the BofA Global Quantitative Strategy group and may differ from the official MSCI performance calculations. Performance does not reflect dividends, transactions costs, tax withholdings or any investment advisory fees. In addition, no assurances can be given about the future performance of the strategies.



# 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: Global ProductPaedia**

In the above linked monthly report, we identify investment trends based on products as an alternative approach to analysing equity markets by sector, industry, country, region, or style. We have categorized 50,000 stocks globally into 350 Product Groups based on product revenue exposure. We have also mapped 510,000 relationships between companies, customers, and suppliers, which would help monitor significant changes in supply chain dynamics.

**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.

**Quarterly: ProxiMate**

In this quarterly report, we use Genetic Algorithm to solve a complex problem in finance, namely, to approximate the performance of one group of stocks using a different group of stocks. We have used Genetic Algorithm to calculate stock screens which approximate the performance of regions, sectors, styles and countries.

**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 <sup>R1</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R1</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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