

Global Quant Panorama

No sell signal

An all-time high is a not a sell signal

The MSCI AC World Index reached an all-time high in February so contrarian investors may turn cautious on equities, but it's worth remembering equity markets efficiently reflect earnings growth through time. Stock prices don't have memories. Over the last 35 years, the MSCI AC World Index has reached a new [all-time high every 16-days](#), on average, as earnings have grown. Currently, the [median EPS growth](#) estimate of stocks globally is 16% so, barring a major de-rating, 2024 could be a strong year for equities.

The Global Wave inflection and subsequent performance

The recent inflection in the [Global Wave](#) suggests investors should now position for a sustained upturn. Global [earnings growth](#) typically moves with the Global Wave (77% correlation) which explains why equities and cyclicals tend to rally when the Global Wave is rising. Since we first published the Global Wave in 2008, in the year after [trough signals](#), global equities rallied 16.1%, the best performing [countries](#) were Korea and the Netherlands, outperforming [sectors](#) included Media, Tech, and Diversified Financials, and the best performing [styles](#) were Risk, Momentum, and Value.

Triple Momentum hot spots across the world

Globally, [Triple Momentum](#) is currently positive for Tech and negative for defensive sectors. In the [US](#), Triple Momentum is most positive for Insurance and Software and negative for Telecom. In Europe, this signal is positive for Software and negative for Energy and Telecom. In Asia, Triple Momentum is positive for India and Tech Hardware.

Chart 1: GLOBAL Prospective EPS and the MSCI AC World Index

Equity markets tend to follow the contours of global earnings growth



Source: BofA Global Quantitative Strategy, MSCI, IBES

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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 247 to 248.

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

Executive Summary

- Top-down: [Global Wave Earnings Policy Fed](#)
- Stock: [Contenders & Defenders](#)
- Style: [Performance Risk vs Quality Bunkers & Boosters Speculation](#)
- [Global Steady Compounders and By Region](#)
- [Boosters By Investor Type](#)
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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.

Table 1: Acronyms and Definitions

Acronyms used in this report and its definitions (full form)

Acronym	Definition (full form)
MSCI	Morgan Stanley Capital International
ACWI	All Country World Index
GEM	Global Emerging Markets
APxJ	Asia Pac ex-Japan
DM	Developed Markets
ex or Ex	Excluding
YoY	Year-on-year
YTD	Year-to-date
1m	1-month
3m	3-months
6m	6-months
12m	12-months
QE	Quantessential
EM	Earnings Momentum
PM	Price Momentum
PE	Price-to-Earnings (Forecast)
PB	Price-to-Book (Trailing)
OW	Overweight
UW	Underweight
Style Indices	Quantessential Value, Small Size and Growth are based on our monthly report on Styles. For more details on how these style indices are calculated please refer to Global Quantessential Style report
TE	Tracking Error = Tracking error (or active risk) quantifies how closely a screen tracks the index to which it is benchmarked. It is measured by the standard deviation of relative returns. The lower the tracking error (standard deviation) the better the screen tracks the returns of the index. Tracking error in this research is based on the monthly returns of the screens and the underlying index.
Name with *	Name with * represents non-benchmark stocks

Source: BofA Global Quantitative Strategy

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Executive Summary

Key message

The Global Wave has signaled a trough in Jan-24. Following a trough signal, cyclical styles, regions and sectors tend to outperform, on average.

- The [Global Wave](#) has signaled a trough in the global cycle, suggesting investors could now position for a sustained upturn
- The [earnings expectations](#) have a strong relationship with the Global Wave and tends to move in tandem
- [Valuations](#) show a positive return in subsequent 12-months at current levels
- [Funds](#) in our positioning analysis are underweight in Financials, Materials and Energy, but could increase cyclical stocks exposure in 2024
- [Market leadership](#) has rotated towards cyclical sectors globally
- [Global Boosters](#) are stocks with style characteristics that tend to outperform when the Global Wave is rising

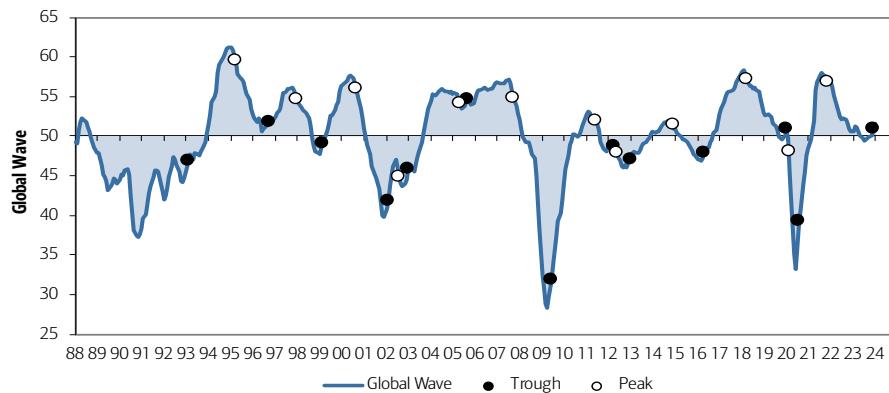
The most interesting charts

- The trough in the Global Wave suggests rotating into [cyclical regions](#), [cyclical sectors](#) and [cyclical styles](#).
- Our [momentum](#) analysis highlights that the combined earnings and price momentum is currently strongest in Japan, India, Software and Industrials.
- [Earnings Revisions Ratio](#) improved marginally from 0.73 to 0.75 in February driven by Developed Markets.
- Our [Positioning](#) analysis suggests long-only funds globally added +\$18.3bn to active equity market exposure relative to benchmark in January.
- After a difficult 2023, 56% of [Active funds](#) outperformed their benchmark in January by a median 0.17%. Value funds performed the best.
- Stock-to-stock [correlations](#) have remained low suggesting an opportunity to add value from stock selection.
- [Buy-Backs](#) are near record highs, while [Capex spending](#) is trending down.
- [Top-line growth](#) forecasts have improved the most in the USA in last 12-months.
- Global Domestic Plays have underperformed [Global Exporters](#) by -14.0% year-to-date.
- [Positive Oil Price Sensitivity](#) stocks have underperformed Negative Oil Price Sensitive stocks by -12.5% in the last twelve months.
- [Broker Optimism](#) continues to remain elevated as analysts are buoyed by earnings resilience in Developed Markets.
- [Steady Compounds](#) are stocks which appear immune to the cycle
- [The Global Fifty](#) incorporates all aspects of our analysis with the aim of outperforming the MSCI All Country World Index.

Global Wave

Chart 2: Global Wave

The Global Wave troughed in January and has improved again this month



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database
The sentiment indicator identified as the Global Wave above 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 sentiment indicator was not created to act as a benchmark.

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Table 2: Components of the Global Wave

The Global Wave is an amalgamation of seven components representing various aspects of the global economy

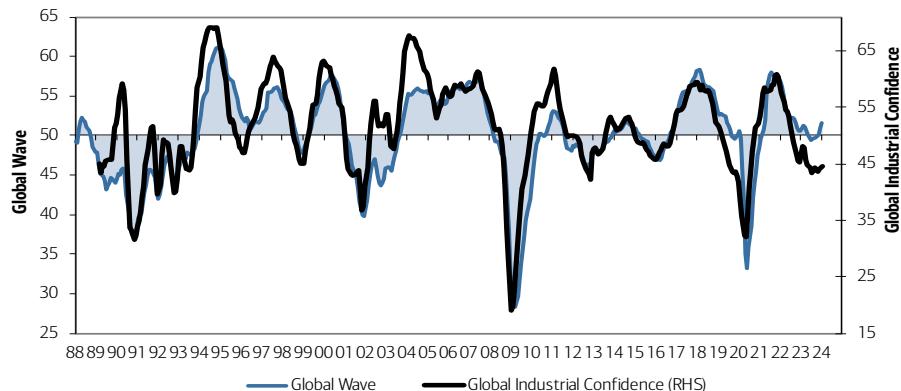
Components	Type
Global Industrial Confidence	Output
Global Consumer Confidence	Demand
Global Capacity Utilisation	Investment
Global Unemployment	Labour Market
Global Producer Prices	Prices
Global Credit Spreads	Bond Market
Global Earnings Revision Ratio	Equity Market

Source: BofA Global Quantitative Strategy

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Chart 3: Global Industrial Confidence

Global Industrial Confidence component improved last month



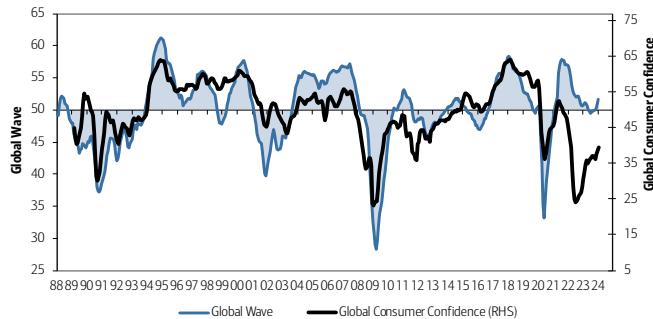
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 4: Global Consumer Confidence

Global Consumer Confidence indicator contributed positively last month

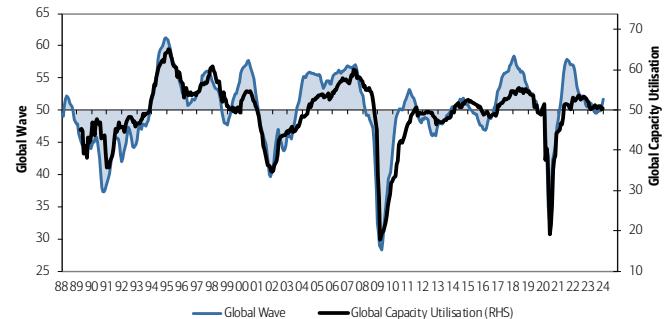


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 5: Global Capacity Utilisation

Global Capacity Utilisation component improved last month

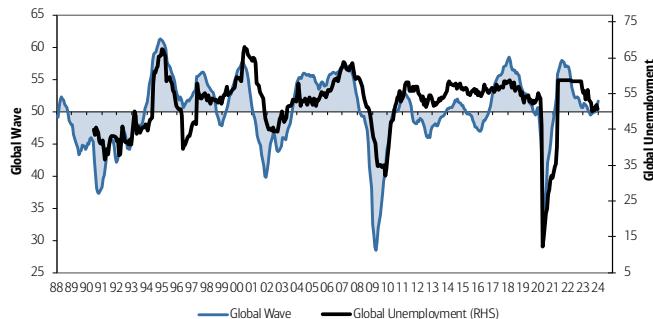


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 6: Global Unemployment

Global Unemployment indicator contributed negatively last month

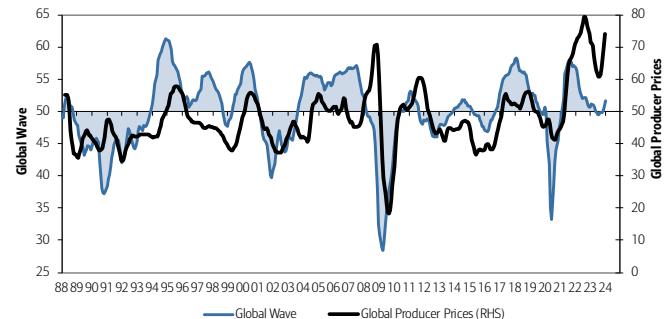


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 7: Global Producer Prices

Global Producer Prices indicator contributed positively last month

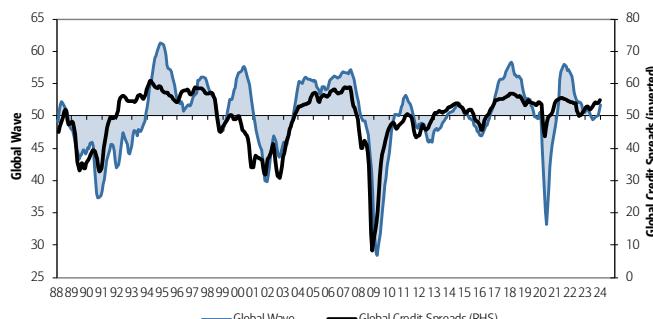


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 8: Global Credit Spreads

Global Credit Spreads indicator contributed positively last month

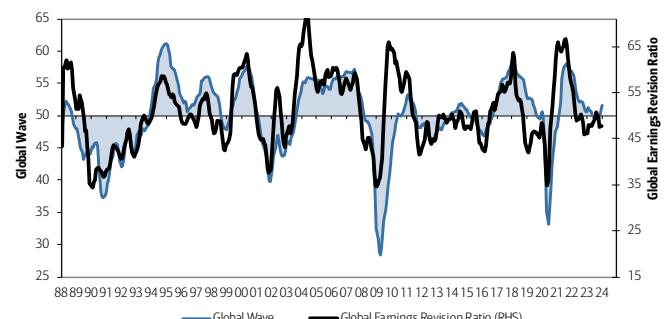


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 9: Global Earnings Revision Ratio

The 3M Ratio improved from 0.73 to 0.74 which contributed positively



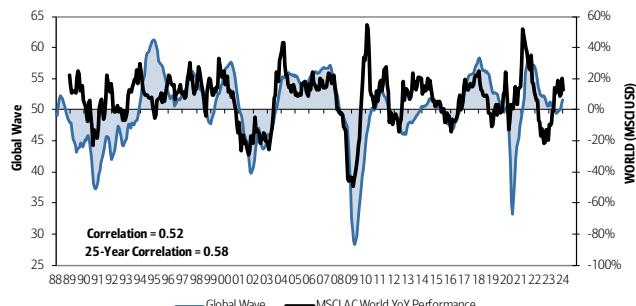
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Performance post Global Wave peaks and troughs

Chart 10: YoY Global Equity Market Performance versus the Global Wave

Global equities have a positive correlation with the Global Wave

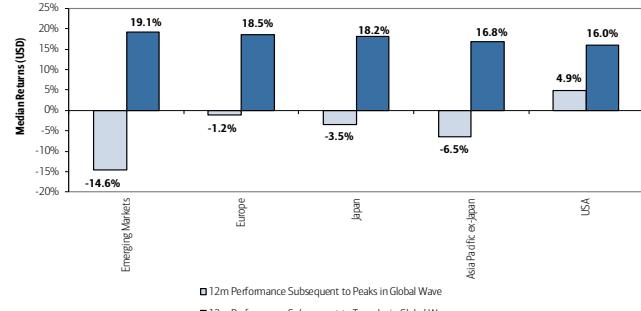


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 12: Regional performance (USD) post peaks and troughs in the Global Wave

Emerging Markets performs the best in subsequent 12m during rising Global Wave

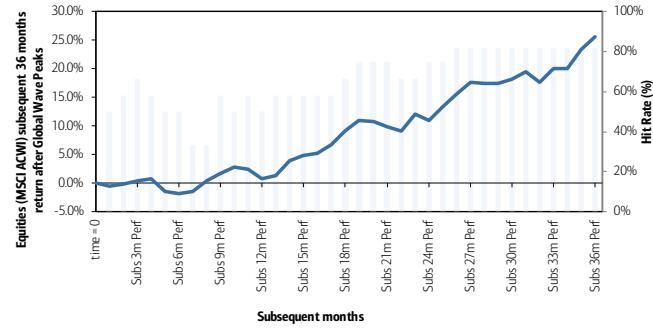


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 14: MSCI ACWI subsequent returns (USD) post peaks in the Global Wave

ACWI averages 0.8% returns with a hit rate of 50% in subsequent 12m following peaks

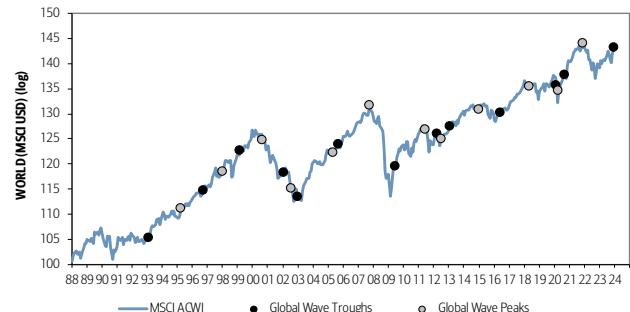


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 11: MSCI ACWI and Troughs and Peaks in Global Wave

MSCI AC World Index Level and troughs and peaks in the Global Wave

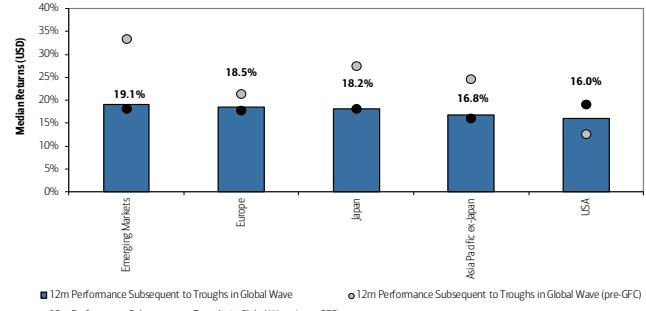


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 13: Regional performance (USD) post troughs in the Global Wave (pre and post GFC)

Pre-GFC, EM had the best returns in 12m following troughs in the Global Wave, however post-GFC, the USA has the best returns



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 15: MSCI ACWI subsequent returns (USD) post troughs in the Global Wave

Global equities averaged 16.1% returns in 12m post troughs in the Global Wave



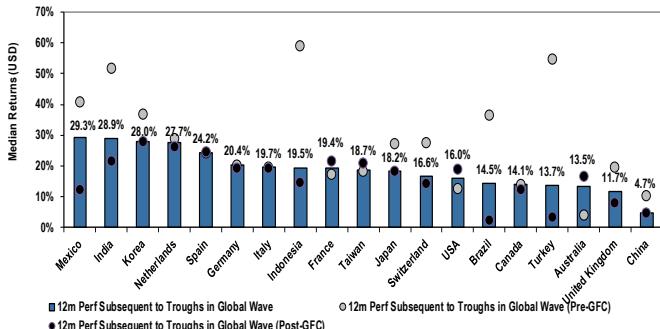
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 16: Country performance (USD) post troughs in the Global Wave

India and Korea have the best returns in 12m post troughs in the Global Wave, China has the worst returns

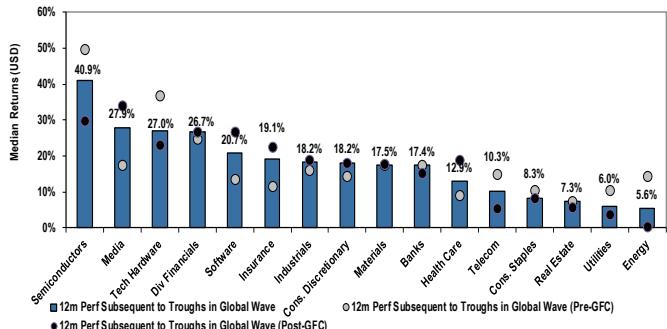


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 17: Sector performance (USD) post troughs in the Global Wave

Semiconductors has the best returns in 12m post troughs in the Global Wave, Energy has the worst returns

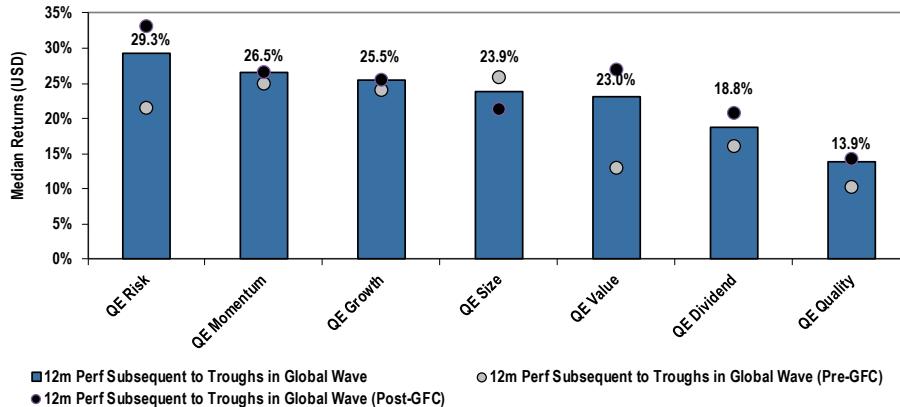


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 18: Style performance (USD) post troughs in the Global Wave

Risk has the best returns in 12m post troughs in the Global Wave



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Table 3: MSCI AC World Subsequent Performance and Global Wave Trough Signals

Global equities averaged 16.5% returns in 12m post troughs in the Global Wave

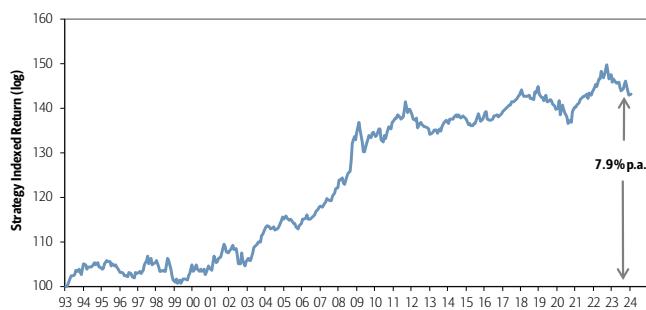
Global Wave Trough Dates	Subs 1-month MSCI AC World Index returns	Subs 3-months MSCI AC World Index returns	Subs 6-months MSCI AC World Index returns	Subs 1-year MSCI AC World Index returns
Feb-93	6%	12%	19%	25%
Oct-96	5%	5%	7%	14%
Mar-99	4%	5%	3%	22%
Feb-02	5%	1%	-14%	-22%
Jan-03	-2%	6%	16%	38%
Sep-05	-3%	3%	10%	13%
Jun-09	9%	17%	22%	10%
Apr-12	-9%	-4%	0%	12%
Feb-13	2%	4%	3%	16%
Jun-16	4%	5%	6%	16%
Feb-20	-14%	-1%	14%	28%
Sep-20	-3%	14%	19%	26%
Median	2.9%	4.9%	8.4%	16.1%
Hit Rate	58%	83%	92%	92%
Pre-GFC	4.3%	5.2%	8.4%	17.8%
Post-GFC	-0.5%	4.2%	9.9%	16.1%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 19: Cumulative Perf (logged) of Market Strategy vs Global Wave

This strategy averages 7.9% p.a. with a hit rate of 58%

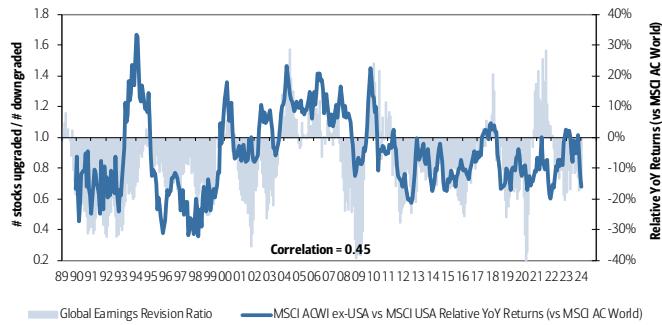


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 20: YoY Perf of Non-USA vs USA and Trends in Global Profit Expectations

MSCI ACWI ex-USA vs MSCI USA has a 45% correlation with trends in earnings cycle



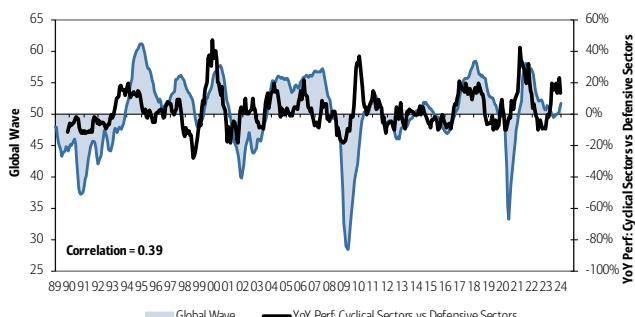
Source: BofA Global Quantitative Strategy, MSCI

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Chart 21: Global Wave and YoY Perf of Sector Rotation Strategy

Cyclical Sectors versus Defensive Sectors has a 39% correlation with the Global Wave

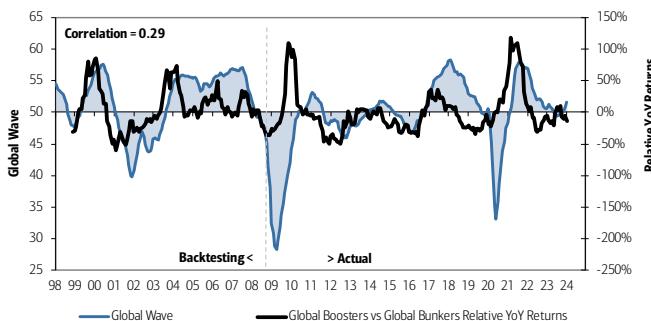


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 23: Global Boosters and Bunkers: YoY Returns vs Global Wave

Global Boosters versus Bunkers has a 29% correlation with the Global Wave



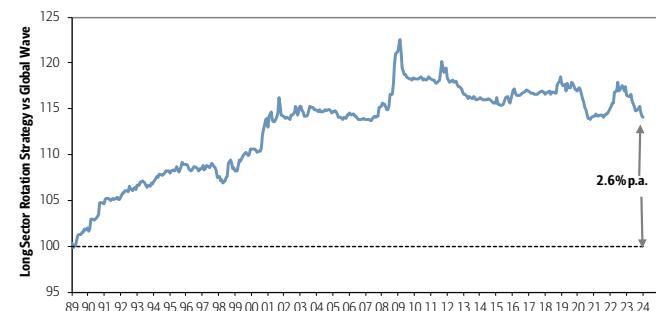
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

Back-tested results are from Jan-89 to Feb-12. Actual performance is from Mar-12. 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 22: Relative Cumulative Perf of Sector Rotation Strategy (Long-only)

Rotating into Cyclical or Defensive Sectors based on Global Wave direction averages 2.6% p.a.

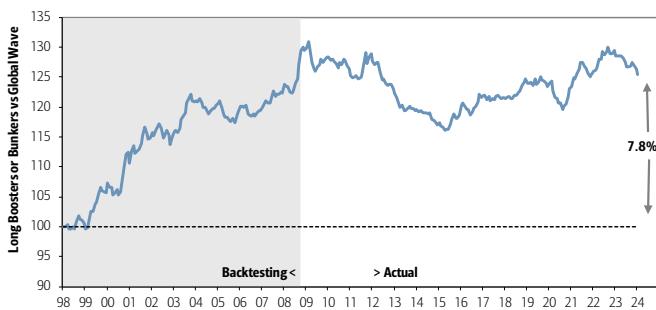


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg

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Chart 24: Relative Cumulative Perf of Style Rotation Strategy (Long-only)

Strategy to rotate into Boosters or Bunkers with Global Wave direction outperforms long-term



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

The shaded area shows back-tested results during the period from Jan-89 to Feb-12. The unshaded portion represents actual performance since Mar-12. 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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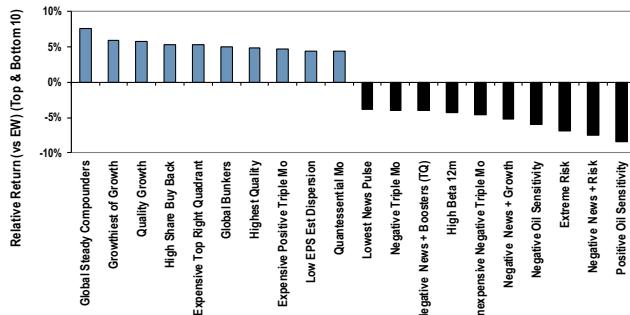


Performance lessons from three decades

Last 15 Years

Chart 25: Annualized Relative Returns of strategies in the last 15 years (Top & Bottom 10)

The best factor in the last 15 years is Global Steady Compounders



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

Back-tested results are from the start date of a particular strategy to date of inception as indicated in Tables 12-17. Actual performance is from date of inception of a particular strategy. 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.

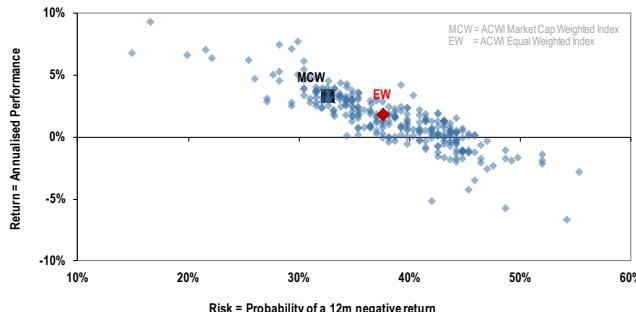
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For the last 15 years, we have data on 289 global investment strategies. This period includes market downturns, bull markets, and an extended period of low growth.

- The best performing strategies in the last 15 years would have been tilted towards Growth and Quality
- The best performing single factor would have been “High Share Buy Back”
- Many of the worst performing strategies would have included a “Negative News” component.

Chart 26: Risk-Return of all strategies in the last 15 years

All factors with risk and return metrics in the last 15 years



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

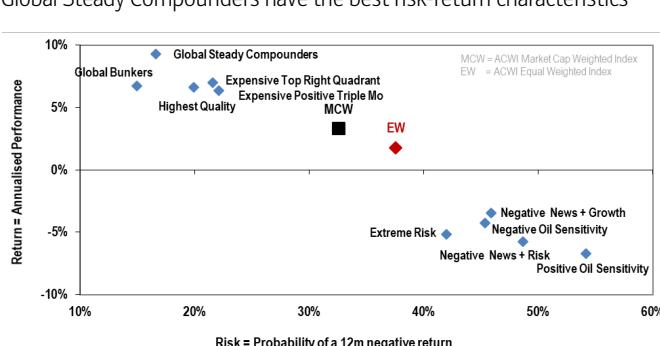
Back-tested results are from the start date of a particular strategy to date of inception as indicated in Tables 12-17. Actual performance is from date of inception of a particular strategy. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time 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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- There is a huge spread of risk-returns metrics for strategies over this time period, with a few standout strategies.
- Over this period, the Mcap Weighted Index outperformed the Equal Weighted Index as large cap stocks contributed significantly.

Chart 27: Risk-Return of strategies in the last 15 years (Top & Bottom 5)

Global Steady Compounders have the best risk-return characteristics



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

Back-tested results are from the start date of a particular strategy to date of inception as indicated in Tables 12-17. Actual performance is from date of inception of a particular strategy. 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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This chart shows the Top 5 and Bottom 5 strategies based on Risk-Return metrics over the last 15 years.

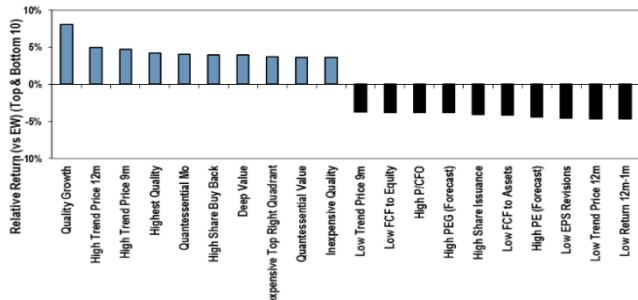
- The high-return and low-risk strategies would have included Global Steady Compounders and Highest Quality. Interestingly, a number of high-return and low-risk strategies include expensive stocks, including “Expensive Triple Momentum” and “Expensive Top-Right Quadrant”.
- The low-return, high-risk strategies include factors relating to the oil price, negative news, and Risk.



Last 32 Years

Chart 28: Annualized Relative Returns of strategies in the last 32 years (Top & Bottom 10)

The best factor in the last 32 years would have been Quality Growth



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

Back-tested results are from the start date of a particular strategy to date of inception as indicated in Tables 12-17. Actual performance is from date of inception of a particular strategy. 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.

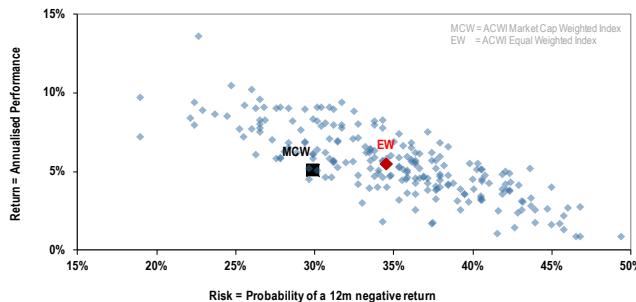
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The longest time span in our analysis is 32 years, for which we have data on 220 global investment strategies. This period includes a number of global recessions, bull markets, extended periods of strong growth, and periods of low growth.

- The best performing strategies over the full 32-years would have been tilted towards Growth and Momentum. “Quality Growth” would have been the best performer (and is also in the Top 5 over the last 30, 25, 20, 15, 10, and 5-year periods).
- The top-10 would also have included “High Share Buy Back”, Deep Value, and The Global Contenders (Inexpensive stocks in the Top-Right Quadrant - above earnings and price momentum)
- The worst performing strategies would have been tilted towards weak momentum and expensive valuations. High Share Issuance also makes the list.

Chart 29: Risk-Return of all strategies in the last 32 years

All factors with risk and return metrics in the last 32 years



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

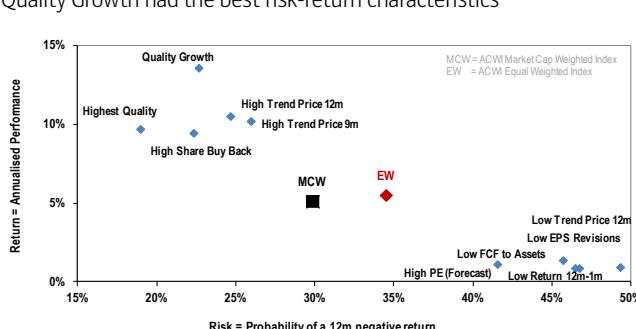
Back-tested results are from the start date of a particular strategy to date of inception as indicated in Tables 12-17. Actual performance is from date of inception of a particular strategy. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time 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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- There is a large spread of risk-returns metrics for strategies over this time period, with one strategy appearing considerably more consistent than others.
- Over this period, the Mcap Weighted Index and Equal Weighted Index would have performed reasonably similarly.

Chart 30: Risk-Return of strategies in the last 32 years (Top & Bottom 5)

Quality Growth had the best risk-return characteristics



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

Back-tested results are from the start date of a particular strategy to date of inception as indicated in Tables 12-17. Actual performance is from date of inception of a particular strategy. 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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This chart shows the Top 5 and Bottom 5 strategies based on Risk-Return metrics over the last 32 years.

- The high-return, low-risk strategies would have included positive price momentum factors (High Trend Price 12m, High Trend Price 9m, Quantessential Momentum), and also quality factors (Quality Growth, Highest Quality).
- The low-return, high-risk strategies would have included factors relating to expensive valuations, weak price momentum, and negative earnings revisions to consensus estimates.



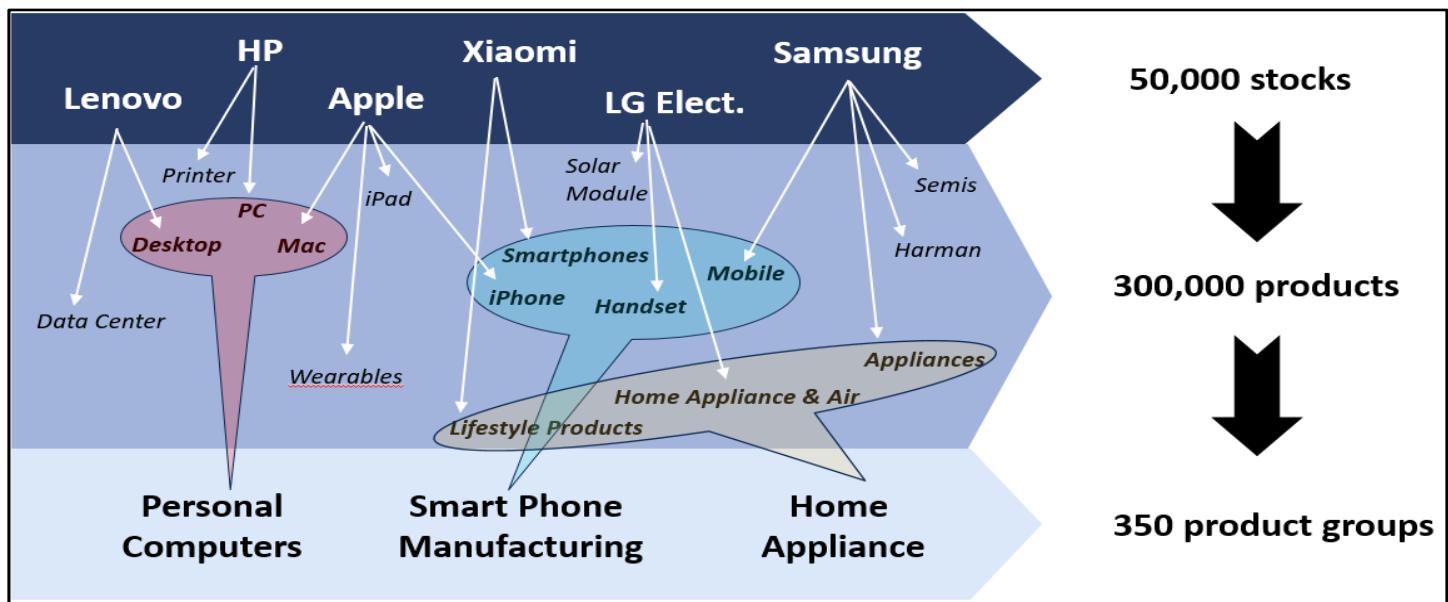
Global ProductPaedia

In this new monthly “Global ProductPaedia” report, we identify investment trends based on products as an alternative approach to analysing equity markets by sector, industry, country, region, or style. The popular and widely used GICS classification divides stocks into 11 major sectors, 24 industry groups, 69 industries, and 158 sub-industries, but even the most granular level isn’t detailed enough to pinpoint revenue by product. Using data since 2012, we have categorized 50,000 stocks globally into 298 Product Groups based on product revenue exposure.

We calculate the performance of each product group and identify associated stocks in order to help investors identify opportunities. Using our analysis, we screen for investment ideas including Emerging Products, Market Share Gainers, and Pure Product Exposure. For each product group, we monitor historical trends in earnings expectations, calculate style characteristics, determine the News Pulse hotspots, calculate fund manager positioning, map supply chains dynamics, and determine whether stock exposure would have been best gained through the product, customers or suppliers. In addition, an analysis of suppliers and customers facilitates a deeper understanding of supply-chain dynamics.

Chart 31: Traditional Segmentation vs Global ProductPaedia

Global ProductPaedia associates stocks with every product from which the company derives revenue



Source: BofA Global Quantitative Strategy

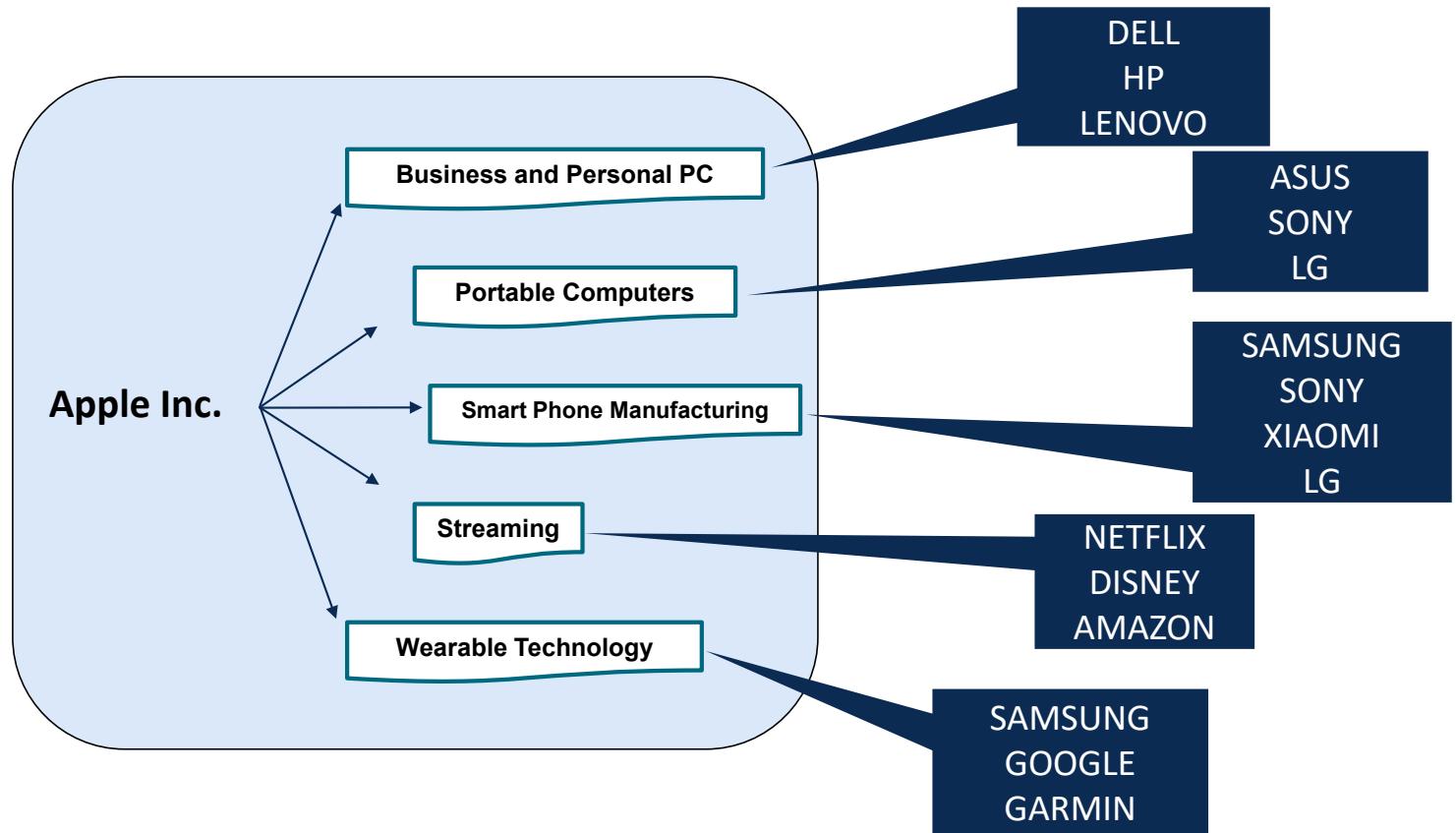
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In addition to being more granular, this Product analysis associates each stock to all Products from which it generates revenue (rather than just one GICS sector).

For example, Apple generates revenue from multiple Products including Smart Phone Manufacturing, Streaming, and Wearable Technology, Portable Computers and Business and Personal PC's. In Global ProductPaedia, we identify all market players associated with the same products as Apple. For e.g. Dell and HP in Business and Personal PC, Samsung and Xiaomi in Smart Phone Manufacturing, or Samsung and Garmin in Wearable Technology.

Chart 32: Practical use of ProductPaedia

Identify all market players by Products



Source: BofA Global Quantitative Strategy

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Table 4: Products and GICS Classification Summary

Count of Products and GICS Sub-Industry across each Sector

Sector	Sub-Industry Count	ProductPaedia Products
Communication Services	11	17
Consumer Discretionary	27	63
Consumer Staples	12	20
Energy	7	23
Financials	18	24
Health Care	10	33
Industrials	27	63
Information Technology	12	55
Materials	17	32
Real Estate	18	4
Utilities	6	11

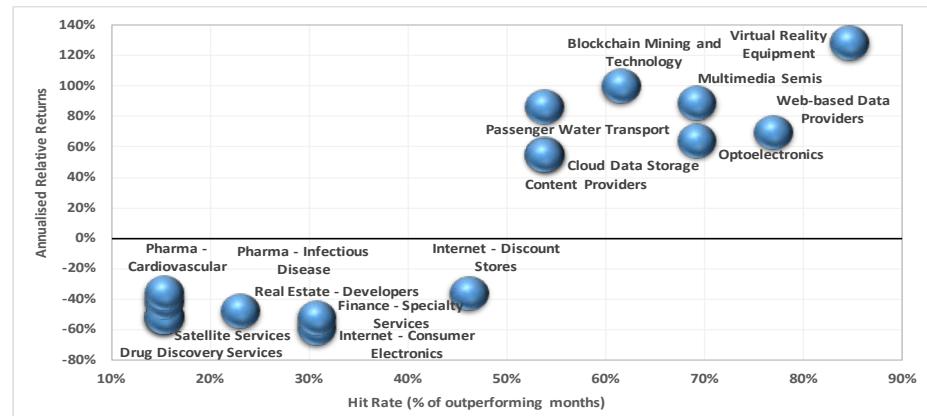
Source: BofA Global Quantitative Strategy, MSCI, IBES, Factset

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- The GICS classification divides stocks into 11 major sectors, 24 industry groups, 69 industries, and 158 sub-industries.
- By comparison, Global ProductPaedia categorizes 50,000 stocks globally into 298 Product Groups based on product revenue exposure.

Products Performance**Chart 33: Performance and Consistency: Best & Worst Performing Products - Last 12-Months**

Virtual Reality Equipment and Blockchain Mining and Technology have consistently outperformed in the last 12m



Source: BofA Global Quantitative Strategy, Factset

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Preeminent Plays

Table 5: Global Preeminent Plays

Top ranked products globally by Four Pillars Rank and top three stocks by market share in each region (stock Four Pillars Rank in brackets)

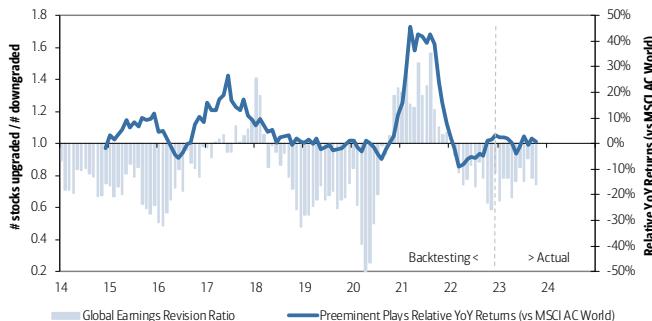
	North America	Europe	Japan	Asia Pac ex-Japan	Emerging Ex-Asia
Petroleum Water Transport	International Seaway (81) Cheniere Energy (52) Dorian Lpg (96)	Torm (80) Euronav Nv (75)	Mitsui OSK (90) Air Water (87)	COSCO Shipping Energy-H (81) Hafnia (95) China Merchants Energy-A (78)	National Shipping (94) Scorpio Tankers (84) Frontline (95)
Transportation Equipment Manufacturer	Winnebago (93) - -	Continental Ag (92) - -	Mitsubishi Corp (90) MHI (73) -	Anhui Jianghuai Auto-A (27) Yantai Yatong Precision (-) Jiangyin Haida Rubber-A (17)	Koc Holding (98) Sabanci (92) Tofas-Turk Otomo (97)
Semis Distributors	Arrow Electronics (87) Avnet (94) -	- - -	Macnica (86) Tokyo Electron (80) Hakuto Co (59)	WPG (74) WT Microelectronics (82) Supreme Electronics (52)	- - -
Manufactured Building Makers	Lennar (100) D.R. Horton (100) PulteGroup (96)	Barratt Dev (76) Taylor Wimpey (78) Persimmon (65)	Sumitomo Forest (99) Iida Group (91) Daiwa House (98)	Shenzhen New Nanshan-A (46) Der Future Science-A (71) Shenzhen Ridge Engg-A (47)	- - -
Oil/Gas Refineries	Exxon Mobil (81) Chevron (77) Valero Energy (88)	BP (75) Equinor (93) TotalEnergies (95)	Idemitsu (88) Cosmo Energy (92) -	China Sinopec-H (90) Indian Oil (98) Reliance Industries (70)	Saudi Arabian Oil (75) ORLEN (92) Petrobras (98)
Health Insurance	AFLAC (90) UnumProvident (86) Cigna (96)	Axa SA (96) Aegon (74) Direct Line Insurance (48)	Sompo (92) Secom (80) H.I.S Co (33)	PICC-H (85) People's Insurance-H (92) Medibank (80)	BUPA Arabia (92) Co For Coop Insurance (88) Porto Seguro (95)
Commercial Insurance	Travelers Cos (83) Berkshire Hathaway (62) -	Allianz (94) Axa SA (96) Zurich Insurance (64)	Tokio Marine (86) MS&AD Insurance (93) Sompo (92)	Ping An Insurance-H (72) China Pacific Insurance-H (68) DB Insurance (99)	Arch Capital (98) Axis Capital (94) Everest Group (97)
Retail - Petrol Stations	Alimentation Couche-Tard (9) Parkland Corp (96) Kroger (86)	TotalEnergies (95) Neste (63) Sainsbury (77)	- - -	PetroChina-H (94) Ampol (93) Hunan Petroleum-A (-)	Raizen (98) Ultrapar Participacoes (74) Vibra Energia (91)
Autos - Recreational Vehicle	Thor Industries (83) BRP Inc (96) Polaris (76)	- - -	Yamaha Motor (92) Honda (94) Kawasaki Heavy (81)	Zhejiang Cfmoto Power-A (87) Guangdong New Energ-A (-) Zhejiang Taotao Vehicles-A (-)	- - -
Personal Insurance	Berkshire Hathaway (62) Allstate (86) Progressive (85)	MunichRe (94) Hannover Rueck (91) Talanx (95)	MS&AD Insurance (93) Sompo (92) Zenkoku Hosho (81)	People's Insurance-H (92) PICC-H (85) IAG (54)	Everest Group (97) RenaissanceRe (97) Arch Capital (98)

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

BofA GLOBAL RESEARCH

Chart 34: Global Preeminent Plays: YoY relative returns and Trends in Earnings Expectations

Global Preeminent Plays have a strong correlation with trends in earnings



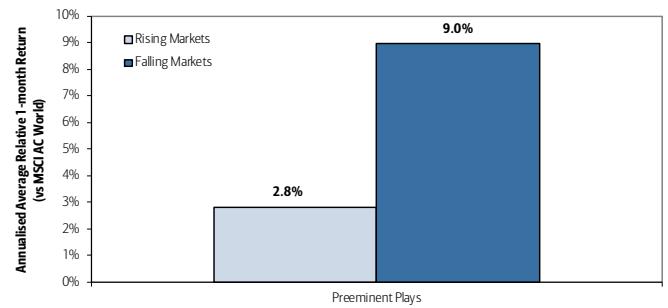
Source: BofA Global Quantitative Strategy, Factset

The back-tested performance is for the period from Jan-14 to Feb-22. The actual performance is from Mar-22. 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: Global Preeminent Plays: Relative Performance in Rising and Falling Markets

Global Preeminent Plays outperform in rising and falling markets



Source: BofA Global Quantitative Strategy, Factset

The back-tested performance is for the period from Jan-14 to Feb-22. The actual performance is from Mar-22. 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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Steady Compounder Products

Table 6: Steady Compounder Products: Top Market Share Stocks Screen

Top 3 market share stocks within Steady Compounder Products

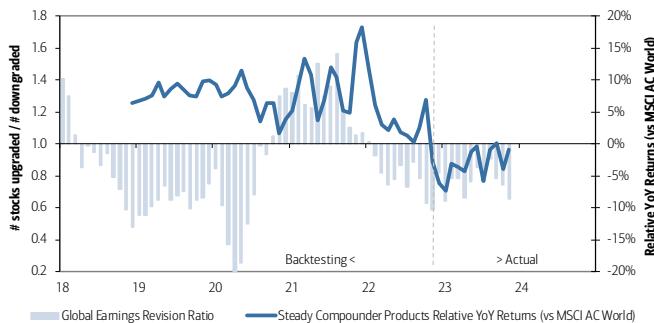
	North America	Europe	Japan	Asia Pac ex-Japan	Emerging Ex-Asia
Diversified Electronic Components	-	STMicroelectronics (80)	-	China Zhenhua Sci & Tech-A (-)	
	-	-	-	Yageo Corp (70)	-
	-	-	-	LG Innotek (63)	-
Environmental Control Equipment	Carrier Global (94)	Johnson Controls (47)	Daikin (55)	Gree Electric-A (93)	Dubai Electricity & Water (72)
	Lennox Int'l (83)	Trane Tech (78)	Aisin (93)	Haier Smart Home-H (94)	Saudi Ceramic (32)
	A.O. Smith (77)	Nibe Industries (35)	Fujitsu General (32)	Sichuan Changhong-A (56)	-
Finance - Brokerage Services	StoneX (94)	BNP Paribas (92)	Nomura (71)	Meritz Financial (98)	Piraeus Financial (91)
	JPMorgan Chase (95)	Deutsche Boerse (59)	Daiwa Securities (83)	Citic Securities-H (65)	Itau Unibanco (87)
	Charles Schwab (29)	IG Group (68)	Mebuki Fin (75)	KIWOOM Securities (89)	Saudi Tadawul (30)
Grain-based Products	General Mills (58)	-	Yamazaki Baking (78)	Toly Bread-A (32)	Bimbo (58)
	Kellanova (47)	-	Nisshin Seifun (80)	Jiangsu Provinci (48)	Gruma, S.A.B. (89)
	Flowers Foods (43)	-	Calbee Inc (61)	Adani Wilmar (11)	Ulusoy Un Sanayi (71)
Health Plan Providers	UnitedHealth (81)	EssilorLuxottica (54)	-	-	-
	Centene Corp (86)	-	-	-	-
	Elevance Health (86)	-	-	-	-

Source: BofA Global Quantitative Strategy, Factset

BofA GLOBAL RESEARCH

Chart 36: Steady Compounder Products: YoY relative returns and Trends in Earnings Expectations

Steady Compounder Products have a low correlation with EPS cycle



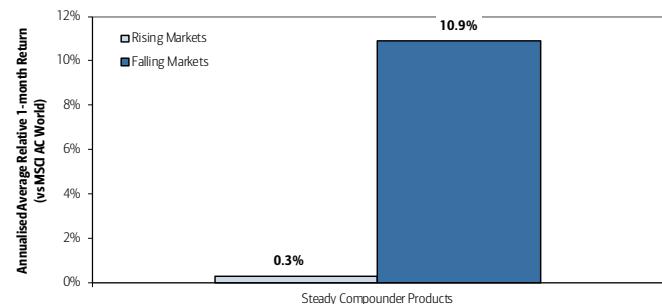
Source: BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Feb-22. The unshaded portion represents actual performance since Mar-22. 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 37: Steady Compounder Products: Relative Performance in Rising and Falling Markets

Steady Compounder Products outperform in rising and falling markets



Source: BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Feb-22. The unshaded portion represents actual performance since Mar-22. 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.

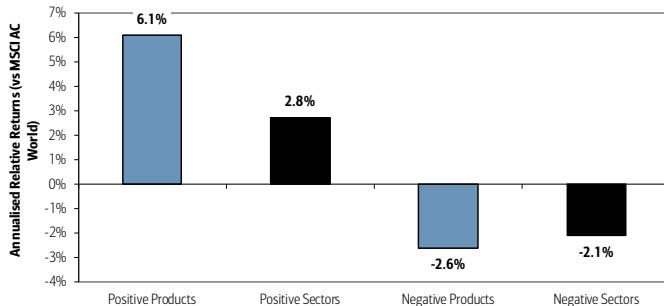
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Products Four Pillars

Chart 38: Performance of Product Allocation vs Sector Allocation based on Four Pillars

Since inception, Product Allocation would have added 8.7%. Sector Allocation would have added 4.9% p.a.



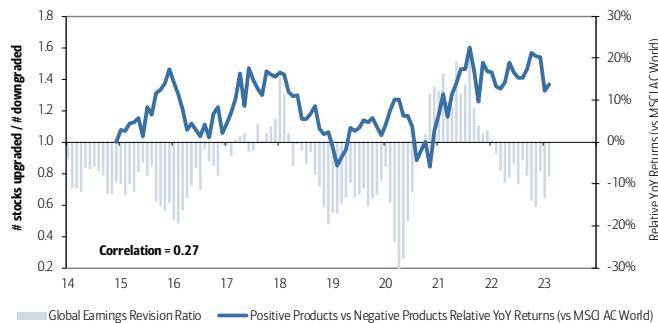
Source: BofA Global Quantitative Strategy, Factset

This performance is back-tested for period from Jan-14 to Feb-23. 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 39: Positive versus Negative Products YoY Performance Vs Trends in Earnings Expectations (back-tested)

Products performance by Four Pillars Rank (top vs bottom decile) is positively correlated to EPS cycle



Source: BofA Global Quantitative Strategy, Factset

This performance is back-tested for period from Jan-14 to Feb-23. 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: GICS Classification and Top and Bottom Products by Four Pillars Rank

GICS Sector classification and top 2 and bottom 2 Products by Four Pillars Rank

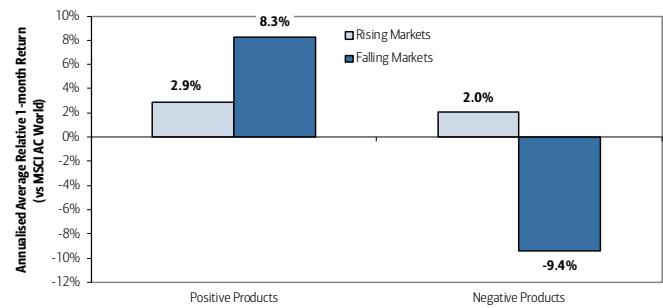
Sector	Top Ranked Products	Bottom Ranked Products
Communication Services	Telecom Services Telecom Carrier/Wireless	Telecom Equipment Internet - Online Marketing
Consumer Discretionary	Manufactured Building Makers Retail - Petrol Stations	Sunglasses Makers Internet - Fashion
Consumer Staples	Retail Distributors Non-alcoholic Beverage	Electronic Cigarette Personal Care Products
Energy	Petroleum Water Transport Oil/Gas Refineries	Power Supply Products Power Generation Products
Financials	Health Insurance Commercial Insurance	Blockchain Mining and Technology FinTech
Health Care	Health Plan Providers Acute Care Services	Drug Discovery Services Pharma - Infectious Disease
Industrials	Petroleum Water Transport Transportation Equipment Manufacturing	Hazardous Waste Services Power Supply Products
Information Technology	Semis Distributors Computer Servers	Programmable Semis Memory Semis
Materials	Diversified Metals Processing Infrastructure Component Manufacturing	Additives Manufacturing Electronics Materials Manufacturing
Real Estate	Real Estate Investment and Services Real Estate - Developers	Property Owners REITs
Utilities	Utilities - Electric Power Distributors	Environmental Climate Change Power Generation Products

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

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Chart 40: Positive versus Negative Products Relative Performance in Rising & Falling Markets (back-tested)

Products with highest Four Pillars Rank (top decile) outperforms in both the rising and falling markets



Source: BofA Global Quantitative Strategy, Factset

This performance is back-tested for period from Jan-14 to Feb-23. 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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Market Share and Market Breadth Screens

Table 8: Market Share Leaders Screen (top 30)

List of thirty stocks with the highest market share within Product Groups

BBG Code	Name	Product Group	Market Share (%)
8053 JP	Sumitomo Corp	Diversified Metal Mining	95%
AAPL US	Apple	Wearable Technology	94%
EL FP	EssilorLuxottica	Sunglasses Makers	82%
META US	Meta	Virtual Reality Equipment	78%
DELL US	Dell	Cloud Data Storage	77%
9618 HK	JD.com	Internet - Consumer Electronics	75%
QCOM US	Qualcomm	Communications Semis	67%
AAPL US	Apple	Smart Phone Manufacturing	61%
JNJ US	Johnson & Johnson	Pharma - Allergies	59%
601138 CH	Foxconn Indus Intern	Tech Hardware - Wireless/Wi-Fi Equi	59%
BN CN	Brookfield	Alternative Investment Managers	58%
VIPS US	Vipshop-ADR	Internet - Discount Stores	54%
DISH US	DISH Network	Satellite Services	52%
2330 TT	TSMC	General Semis	50%
8031 JP	Mitsui & Co	Diversified Metals Processing	49%
AMZN US	Amazon	Internet - Department Stores	48%
INTC US	Intel	Programmable Semis	47%
GOOGL US	Alphabet-A	Web-based Data Providers	46%
992 HK	Lenovo	Portable Computers	45%
WMT US	Walmart	Retail Warehouse/Superstores	44%
005930 KS	Samsung Electronics	Memory Semis	44%
CVNA US	Carvana	Internet - Auto Sales	44%
FLTR LN	Flutter Entertain(UK)	Internet - Online Casinos	42%
AIRFP	Airbus	Aircraft Manufacturing	41%
SQ US	Block	Blockchain Mining and Technology	40%
8001 JP	Itochu	Retail Distributors	39%
ENEL IM	Enel	Utilities - Electric+Natural Gas	37%
DOLE US	Dole	Nut and Vegetable	37%
ABBV US	AbbVie	Pharma - Autoimmune Disorders	37%
2317 TT	Hon Hai	Third Party Electronics Maker	36%

Source: BofA Global Quantitative Strategy, Factset

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Table 9: Market Share Laggards Screen (top 30)

List of thirty stocks with the smallest market share within Product Groups

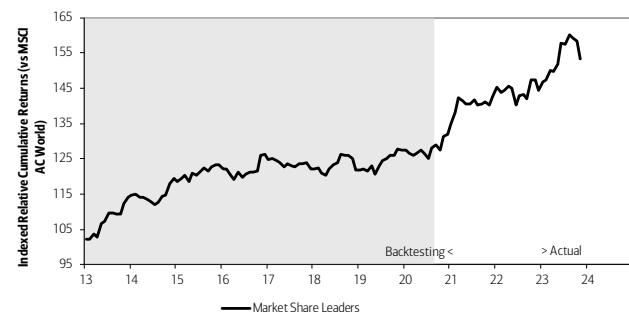
BBG Code	Name	Product Group	Share
603172 CH	Zhejiang Wanfeng Chemica	Environmental Climate Change	< 1%
600318 CH	Anhui Xinli Finance-A	FinTech	< 1%
000533 CH	Guangdong Macro	Industrial Machinery Distributors	< 1%
600125 CH	China Railway Tielong-A	Real Estate - Developers	< 1%
603075 CH	Hangzhou Heatwell Elec-A	Auto Parts Manufacturing	< 1%
603025 CH	Beijing Dahao Technology	Leasing Services	< 1%
MAADEN AB	Saudi Arabian Mining	Construction Companies	< 1%
601028 CH	Jiangsu Yulong-A	Oil/Gas Distributors	< 1%
ALGT US	Allegiant	Experience Providers	< 1%
GUBRF TI	Gubre Fabrikalar	Precious Metal Mining	< 1%
002992 CH	Shenzhen Baoming Technic	Energy Transition Commodities	< 1%
KRDMD TI	Kardemir	Multi-Industry / Unallocated	< 1%
046970 KS	Woori	Telecom Equipment	< 1%
CDIO US	Cardio Diagnostics	Clinical Diagnostics Devices	< 1%
GSDHO TI	Gsd As	Shipping Services	< 1%
688620 CH	Guangzhou Microelec	Programmable Semis	< 1%
301382 CH	Fengzhushou-A	Software - Telecom	< 1%
002058 CH	Shanghai Welltech Auto -A	Property Owners	< 1%
600079 CH	Humanwell Health-A	Pharma - Contract Manufacturing	< 1%
688176 CH	Jiangsu Yahong Meditech	Medical Devices - Specialized	< 1%
301428 CH	Shijihengtong Technology-	Information Technology Consulting	< 1%
4908 TT	Apac Opto Electronics	Interconnect Components	< 1%
115610 KS	Imagis	General Semis	< 1%
300397 CH	Xi'an Tian He Defense Tec	Electronics Materials Manufacturing	< 1%
301519 CH	Anhui Shunyu Water-A	Control Equipment Manufacturing	< 1%
002591 CH	Jiangxi Hengda Hi-Tech Co	Building Materials	< 1%
600307 CH	Gansu Jiu Steel-A	Coal Mining	< 1%
IEX IN	Indian Energy Exch	Environmental Services	< 1%
000899 CH	Jiangxi Ganneng Co-A	Power Distributors	< 1%
301325 CH	Shenzhen Manst Technolo	Factory Automation Equipment	< 1%

Source: BofA Global Quantitative Strategy, Factset

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Chart 41: Market Share Leaders: Indexed Relative Cumulative Performance

Market Leaders have outperformed by 1.0% in the last 6 Months



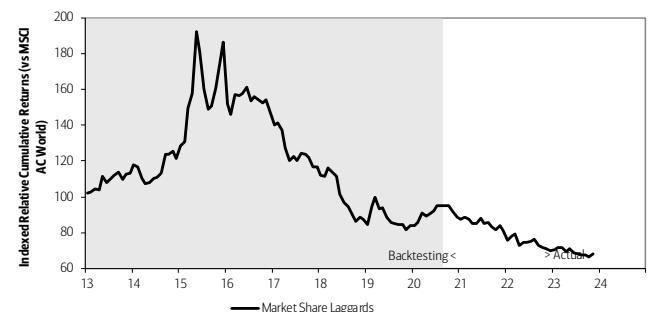
Source: BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Aug-20. The unshaded portion represents actual performance since Sep-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 42: Market Share Laggards: Indexed Relative Cumulative Performance

Market Laggards have outperformed by 1.1% in the last 3 Months



Source: BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Aug-20. The unshaded portion represents actual performance since Sep-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 10: Gaining Market Share Screen (top 30)

List of thirty stocks with the largest increase in market share (YoY) by Products

BBG Code	Name	Product Group	Market Share	Chg (%)
BN CN	Brookfield	Alternative Investment Managers	37.3%	
SHEL LN	Shell	Organic and Petrochemicals	13.3%	
VIE FP	Veolia	Waste - Collection	13.0%	
POWF IN	Power Finance	Diversified Loan Services	12.5%	
000733 CH	China Zhenhua Sci & Tec	Diversified Electronic Components	12.4%	
267250 KS	HD Hyundai	Ship Builders	11.0%	
GOOGL US	Alphabet-A	Web-based Data Providers	10.8%	
CCL US	Carnival Corp	Passenger Water Transport	10.7%	
PFE US	Pfizer	Pharma - Infectious Disease	10.0%	
CVS US	CVS Health Corp	Healthcare Support Services	9.3%	
DTE GR	Deutsche Telekom	Telecom Services	9.2%	
CFR SW	Richemont	Watch/Clock Makers	8.8%	
OPEN US	Opendoor Technologies	Content Providers	8.6%	
VYX US	NCR Voyix	Electronics - Commercial	8.4%	
FRE GR	Fresenius	Drug Delivery Devices	8.3%	
CMCSA US	Comcast Corp	Telecom Wireline/Landline	8.2%	
INTC US	Intel	Communications Semis	7.7%	
PDCO US	Patterson Cos	Veterinary Services	7.4%	
DIS US	Disney	Amusement Centres	7.2%	
ENEL IM	Enel	Traditional/Fossil Fuel Wholesale	7.1%	
MU US	Micron Tech	Memory Semis	6.8%	
DOLE US	Dole	Nut and Vegetable	6.7%	
RCL US	Royal Caribbean	Passenger Water Transport	6.7%	
MRVL US	Marvell Tech	Specialised Semis	6.5%	
BKR US	Baker Hughes	Oil/Gas Field Equipment	6.4%	
090460 KS	BH Co	Flexible Circuit	5.8%	
ZTS US	Zoetis	Veterinary Products	5.8%	
ON US	ON Semiconductor	Discrete Semis	5.5%	
TSLA US	Tesla	Auto Repair Services	5.5%	
ALO FP	Alstom	Rail Equipment Manufacturing	5.4%	

Source: BofA Global Quantitative Strategy, Factset

BofA GLOBAL RESEARCH

Table 11: Losing Market Share Screen (top 30)

List of thirty stocks with the largest decrease in market share (YoY) by Products

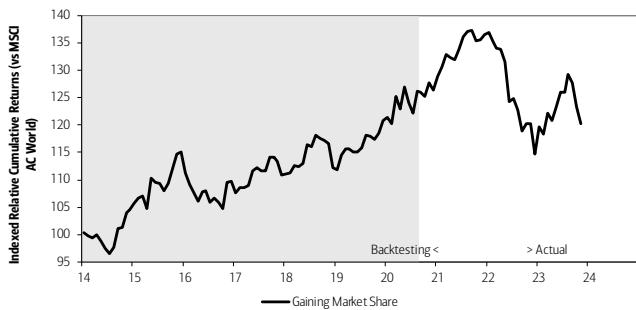
BBG Code	Name	Product Group	Market Share	Chg (%)
8267 JP	Aeon	Retail General Merchandise	-28.5%	
INTC US	Intel	Programmable Semis	-23.6%	
ITX SM	Inditex	Retail Fashion/Apparel/Accessories	-16.2%	
COIN US	Coinbase Global -Class A	Blockchain Mining and Technology	-15.3%	
ORCL US	Oracle	Software - IT Infrastructure	-15.3%	
600100 CH	Tsinghua Tong-A	Electronics - Security Equipment	-15.2%	
7011 JP	MHI	Transportation Equipment Manufact	-14.6%	
SMIN LN	Smiths Grp	Electronics - Security Equipment	-14.4%	
META US	Meta	Virtual Reality Equipment	-11.9%	
T US	AT&T	Telecom Services	-11.7%	
CON GR	Continental Ag	Auto Tires Manufacturing	-11.2%	
AMZN US	Amazon	Data Centres	-10.1%	
601921 CH	Zhejiang Publishing & Medi	Publishing Services	-9.9%	
002241 CH	GoerTek-A	Electronics - Audio	-9.1%	
3690 HK	Meituan	Travel Services	-8.3%	
NOVN SW	Novartis	Pharma - Ophthalmology	-7.7%	
BKR US	Baker Hughes	Oil/Gas Support Services	-7.6%	
Z US	Zillow-C	Content Providers	-7.5%	
9983JP	Fast Retailing	Young Adults Apparel Retail	-7.4%	
6981JP	Murata	Passive Components	-6.4%	
INVEB SS	Investor Ab-B Shs	Investment Holding Companies	-6.4%	
EDR US	Endeavor Group Hold-Class	Spectator Sports and Performing Ar	-6.3%	
RJEX IN	Rajesh Exports	Jewellery and Accessories Makers	-6.0%	
000069 CH	Shenzhen Overseas-A	Amusement Centres	-6.0%	
BMY US	Bristol-Myers	Pharma - Hematology	-5.9%	
8002JP	Marubeni	Retail Distributors	-5.7%	
386 HK	China Sinopec-H	Integrated Exploration and Productic	-5.6%	
TOPG MK	Top Glove	Medical Supplies	-5.5%	
RKT US	Rocket Companies	Finance - Retail Mortgage	-5.5%	
2681JP	Geo Hldgs	Retail Books/Movies/Music	-5.4%	

Source: BofA Global Quantitative Strategy, Factset

BofA GLOBAL RESEARCH

Chart 43: Gaining Market Share: Indexed Relative Cumulative Performance

Gaining Market Share have outperformed by 5.0% Year-to-Date



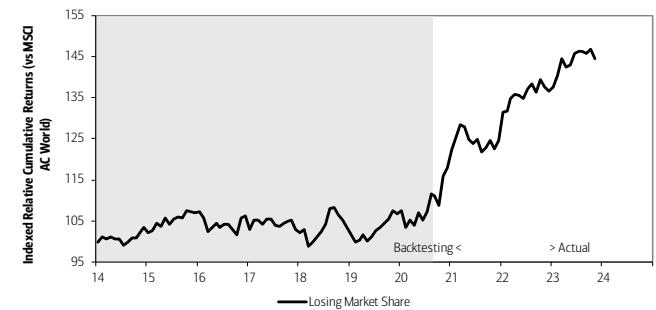
Source: BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Aug-20. The unshaded portion represents actual performance since Sep-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 44: Losing Market Share: Indexed Relative Cumulative Performance

Losing Market Share have underperformed by -1.3% in the last 3 Months



Source: BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Aug-20. The unshaded portion represents actual performance since Sep-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 12: Pure Product Plays Screen (top 30)

List of thirty stocks with exposure to least number of Products

BBG Code	Name	Country	Product Group Count
COST US	Costco	United States	1
2317 TT	Hon Hai	Taiwan	1
TGT US	Target	United States	1
1288 HK	Agricultural Bank-H	China	1
1800 HK	China Comm Const-H	China	1
LOW US	Lowe's	United States	1
BN CN	Brookfield	Canada	1
2628 HK	China Life-H	China	1
CA FP	Carrefour	France	1
TMUS US	T-Mobile	United States	1
600057 CH	Xiamen Xiangyu-A	China	1
2330 TT	TSMC	Taiwan	1
JBS33 BZ	JBS SA	Brazil	1
000270 KS	Kia	South Korea	1
HCA US	HCA	United States	1
EPD US	Enterprise Products	United States	1
1919 HK	COSCO Shipping-H	China	1
600019 CH	Baoshan Iron-A	China	1
600019 CH	Baoshan Iron-A	China	1
600019 CH	Baoshan Iron-A	China	1
HSBA LN	HSBC Plc	United Kingdom	1
TJX US	TJX	United States	1
3968 HK	China Merchants Bank-H	China	1
7181 JP	Japan Post Insurance	Japan	1
EXO NA	Exor Nv	Netherlands	1
KO US	Coca-Cola	United States	1
4938 TT	Pegatron Corp	Taiwan	1
2382 TT	Quanta	Taiwan	1
012330 KS	Hyundai Mobis	South Korea	1
ORFP	L'oreal	France	1

Source: BofA Global Quantitative Strategy, Factset

BofA GLOBAL RESEARCH

Table 13: Diversified Product Plays Screen (top 30)

List of thirty stocks with exposure to most number of Products

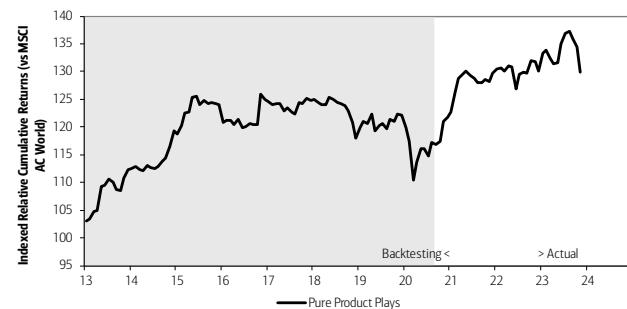
BBG Code	Name	Country	Product Group Count
000880 KS	Hanwha Corp	South Korea	22
MMM US	3M	United States	17
6501 JP	Hitachi	Japan	16
BRK/B US	Berkshire Hathaway	United States	15
4088JP	Air Water	Japan	14
6502JP	Toshiba	Japan	14
BAYN GR	Bayer	Germany	14
9041 JP	Kintetsu Group	Japan	14
8002JP	Marubeni	Japan	14
6758JP	Sony	Japan	13
7013JP	IHI Corp	Japan	13
9001JP	Tobu Railway	Japan	13
9044JP	Nankai Elec Rail	Japan	13
9008JP	Keio Electric	Japan	13
6752JP	Panasonic	Japan	13
006260 KS	LS Corp	South Korea	13
JNJ US	Johnson & Johnson	United States	12
600095 CH	Xiangcai-A	China	12
9006JP	Keikyu Corp	Japan	12
2371 TT	Tatung	Taiwan	12
NOVN SW	Novartis	Switzerland	11
000100 KS	Yuhan	South Korea	11
DRRD IN	Dr Reddy's	India	11
8058JP	Mitsubishi Corp	Japan	11
1303 TT	Nan Ya Plastics	Taiwan	11
ROG SW	Roche	Switzerland	11
9005JP	Tokyu Corp	Japan	11
JM SP	Jardine Matheson	Hong Kong	11
002921 CH	Shandong Liancheng Precisi-A	China	11
ACO/X CN	ATCO	Canada	11

Source: BofA Global Quantitative Strategy, Factset

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Chart 45: Pure Product Plays: Indexed Relative Cumulative Performance

Pure Product Plays have underperformed by -1.3% in the last 12 Months

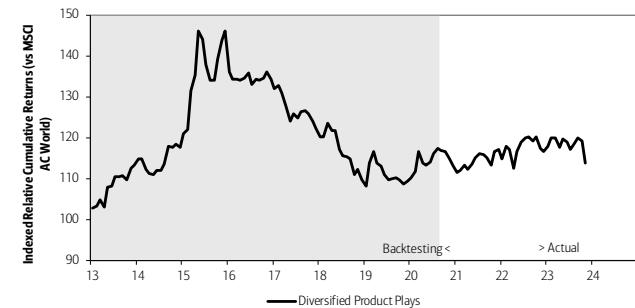
**Source:** BofA Global Quantitative Strategy, Factset

The shaded area shows back-tested results during the period from Jan-13 to Aug-20. The unshaded portion represents actual performance since Sep-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 46: Diversified Product Plays: Indexed Relative Cumulative Performance

Diversified Product Plays have underperformed by -4.7% in the last 1 Month

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

The shaded area shows back-tested results during the period from Jan-13 to Aug-20. The unshaded portion represents actual performance since Sep-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.

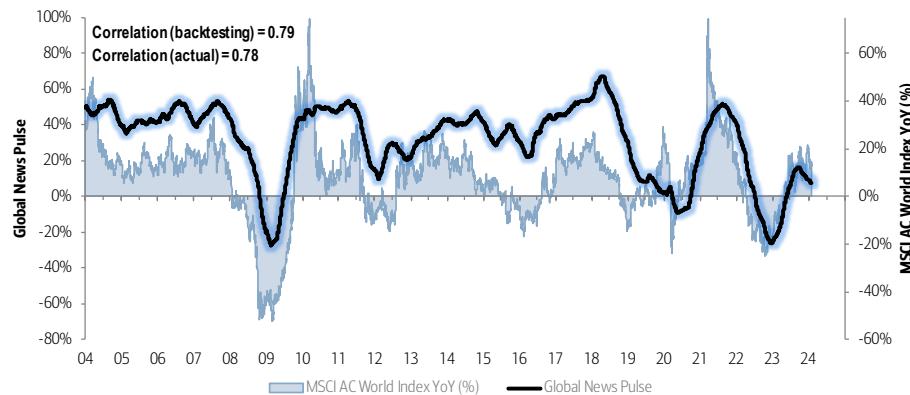
BofA GLOBAL RESEARCH



NewsAlpha

Chart 47: Global News Pulse and YoY Change in MSCI AC World Index

9% of news is positive

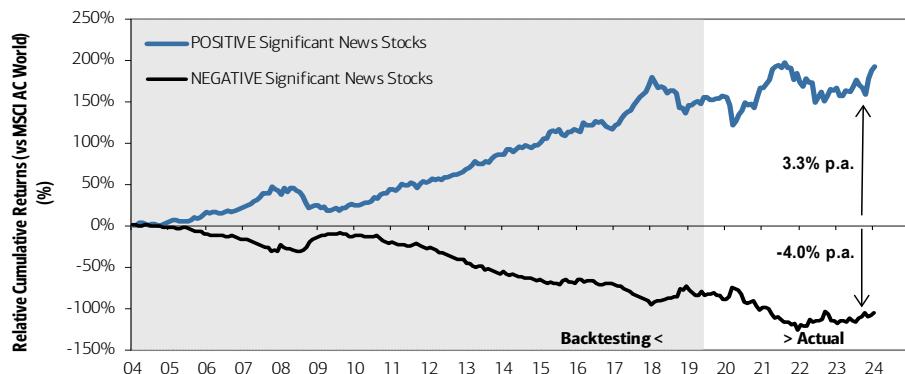


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 48: 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

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 14: Current News Pulse in Region-Sector News Pulse

Current news trend by region-sector

Current Pulse	Energy	Materials	Industrials	Cons.	Cons.	Health Care	Financials	Information	Comm.	Utilities	Real Estate	Country
				Discretionary	Staples							
Australia	25%	16%	-4%	40%	25%	6%	26%	30%	39%	39%	7%	21%
Belgium	0%	-1%	0%	86%	32%	13%	26%	0%	0%	87%	-76%	31%
Brazil	37%	38%	46%	28%	45%	37%	39%	89%	85%	48%	0%	43%
Canada	20%	-2%	27%	12%	33%	0%	8%	21%	-5%	-25%	47%	14%
China	59%	14%	48%	35%	18%	41%	17%	29%	14%	65%	5%	32%
France	49%	58%	42%	24%	-16%	43%	43%	29%	78%	72%	3%	34%
Germany	-	32%	28%	29%	5%	22%	56%	75%	6%	79%	13%	33%
Hong Kong	0%	0%	13%	88%	-18%	0%	64%	0%	20%	58%	20%	37%
India	53%	34%	48%	53%	37%	38%	39%	42%	48%	43%	61%	43%
Indonesia	20%	42%	29%	-11%	54%	-21%	72%	-	78%	0%	0%	50%
Italy	37%	0%	-47%	48%	-14%	37%	47%	0%	19%	63%	-	33%
Japan	76%	33%	52%	45%	42%	71%	62%	45%	56%	86%	49%	58%
Korea	24%	-20%	32%	40%	33%	66%	63%	26%	25%	48%	-	29%
Mexico	-	76%	52%	0%	80%	0%	78%	-	21%	0%	51%	48%
Netherlands	0%	38%	52%	63%	6%	21%	33%	59%	77%	-	-	33%
Singapore	0%	-	67%	92%	-50%	0%	54%	-55%	-4%	-	40%	29%
South Africa	68%	-19%	78%	37%	43%	51%	56%	0%	51%	-	56%	5%
Spain	68%	0%	59%	62%	0%	23%	71%	0%	-28%	12%	-	41%
Sweden	0%	7%	40%	28%	1%	34%	57%	-19%	41%	-	-17%	32%
Switzerland	-	41%	-8%	6%	19%	38%	28%	67%	-23%	95%	17%	25%
Taiwan	55%	-13%	0%	18%	87%	92%	81%	42%	43%	-	-37%	39%
Thailand	49%	-20%	30%	57%	19%	92%	52%	95%	51%	56%	63%	37%
United Kingdom	8%	17%	45%	4%	11%	69%	16%	16%	13%	38%	-50%	18%
USA	21%	7%	11%	13%	-8%	6%	5%	21%	9%	-26%	-6%	-1%
Global Sector	17%	3%	16%	22%	-5%	16%	1%	20%	8%	-16%	-11%	9%
Europe Sector	31%	26%	27%	23%	9%	39%	34%	26%	24%	40%	-24%	22%
APxJ Sector	48%	18%	41%	43%	33%	41%	39%	38%	21%	54%	19%	32%
GEM Sector	52%	15%	39%	43%	36%	44%	44%	38%	28%	52%	31%	33%

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

BofA GLOBAL RESEARCH

Table 15: 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							
Australia	10%	-9%	-6%	13%	5%	12%	-4%	-4%	-16%	-4%	-1%	-1%
Belgium	0%	-25%	0%	2%	12%	-37%	-12%	0%	0%	27%	3%	1%
Brazil	-5%	9%	-2%	12%	6%	-2%	-2%	0%	-2%	-2%	0%	0%
Canada	-3%	-9%	-8%	-6%	3%	0%	1%	-4%	4%	-2%	0%	0%
China	2%	4%	-1%	-5%	1%	-4%	3%	0%	-4%	0%	0%	0%
France	-1%	-2%	-2%	-9%	-3%	8%	-1%	-4%	4%	2%	11%	0%
Germany	-	-2%	-3%	-5%	-3%	-6%	-3%	6%	11%	-3%	-7%	0%
Hong Kong	0%	0%	-7%	-5%	7%	0%	21%	0%	-39%	-7%	4%	0%
India	-6%	7%	-1%	0%	-8%	-5%	-4%	19%	-4%	-1%	14%	0%
Indonesia	32%	1%	-16%	-14%	-22%	0%	-3%	-	5%	0%	0%	0%
Italy	10%	0%	1%	-6%	-33%	-10%	-16%	0%	-6%	-2%	-	0%
Japan	0%	0%	1%	0%	0%	0%	0%	-2%	0%	2%	0%	1%
Korea	34%	2%	-22%	-4%	-21%	16%	12%	20%	4%	-4%	-	0%
Mexico	-	5%	24%	0%	1%	0%	0%	-	5%	0%	74%	0%
Netherlands	0%	6%	-3%	34%	1%	-22%	-3%	12%	23%	-	-	0%
Singapore	0%	-	28%	3%	14%	0%	-9%	0%	-7%	-	-2%	0%
South Africa	0%	-3%	-3%	2%	-4%	-6%	-6%	0%	-2%	-	7%	0%
Spain	-1%	0%	-2%	0%	0%	-37%	-5%	0%	-11%	-14%	-	0%
Sweden	0%	-2%	-3%	-6%	-11%	6%	-1%	-18%	8%	-	0%	-1%
Switzerland	-	4%	-10%	-11%	-14%	-1%	2%	44%	-3%	0%	0%	0%
Taiwan	33%	4%	-5%	-6%	-1%	0%	-3%	4%	-15%	-	9%	0%
Thailand	-1%	4%	3%	-12%	-13%	1%	-4%	6%	22%	6%	2%	-1%
United Kingdom	-7%	9%	0%	-4%	-3%	3%	2%	-8%	5%	4%	12%	0%
USA	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Global Sector	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Europe Sector	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
APxJ Sector	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GEM Sector	0%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%

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

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Chart 49: Global News Pulse and Global News Pulse (last 30 days)

Global News Pulse, based on the last 30 days, has improved the last month

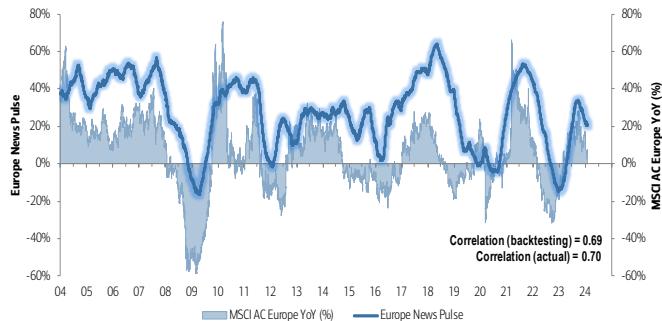


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 51: 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

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Chart 53: Asia Pac ex-Japan News Pulse and YoY change in the MSCI Asia Pac ex-Japan Index

News trends fell last month, however in aggregate remains positive



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

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Chart 50: USA News Pulse and YoY change in the MSCI USA Index

News is net negative, however it has improved last month

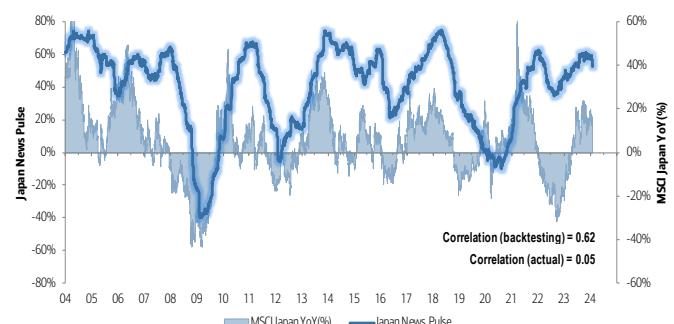


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 52: Japan News Pulse and YoY change in the MSCI Japan Index

58% of news is positive

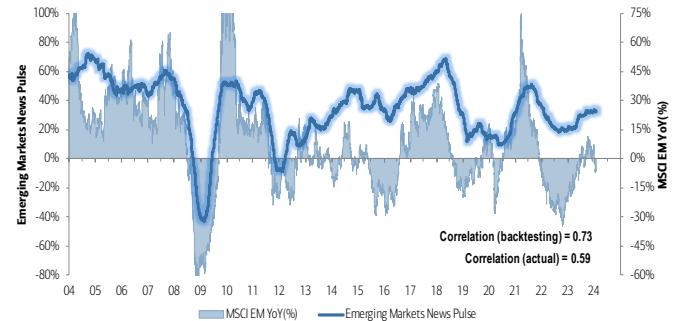


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 54: Emerging Markets News Pulse and YoY change in the MSCI Emerging Markets Index

News trends fell last month, however in aggregate remains positive



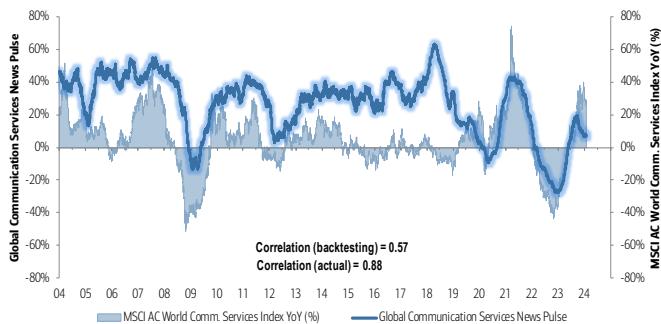
Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 55: Global Communication Services News Pulse vs MSCI AC World Communication Services Index

News has improved last month



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

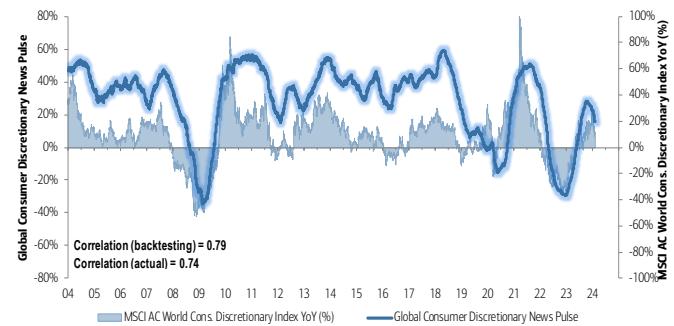
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Chart 56: Global Consumer Discretionary News Pulse vs MSCI AC World Consumer Discretionary Index

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

Chart 56: 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

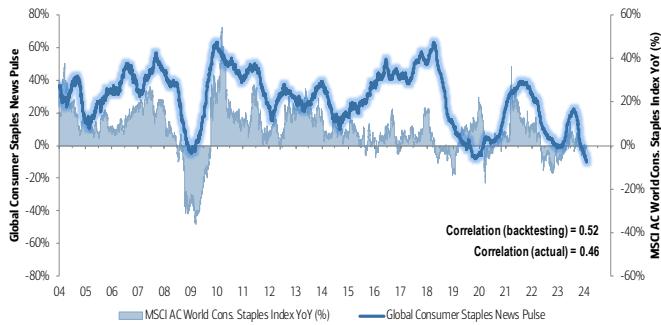


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 57: Global Consumer Staples News Pulse vs MSCI AC World Consumer Staples Index

News is net negative, however it has improved last month



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

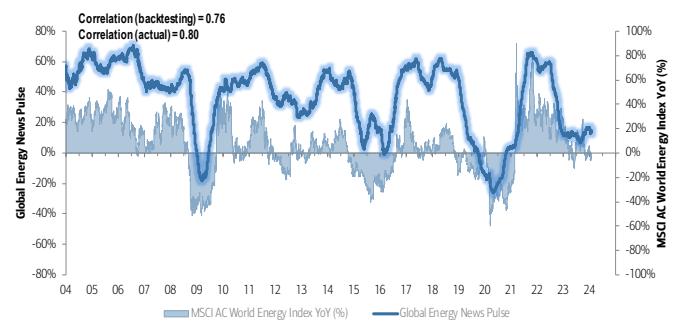
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Chart 58: Global Energy News Pulse vs MSCI AC World Energy Index

News is net negative, however it has improved last month

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

17% of news is positive



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

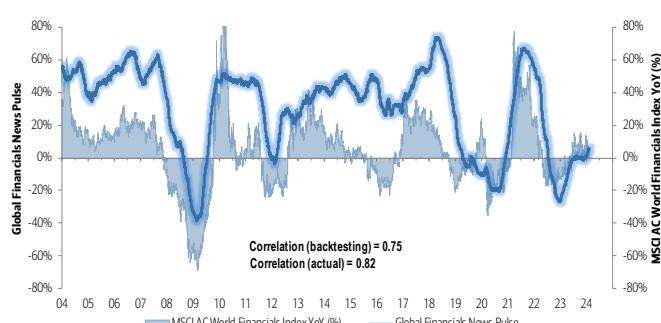
BofA GLOBAL RESEARCH

Chart 59: Global Financials News Pulse vs MSCI AC World Financials Index

News has improved last month

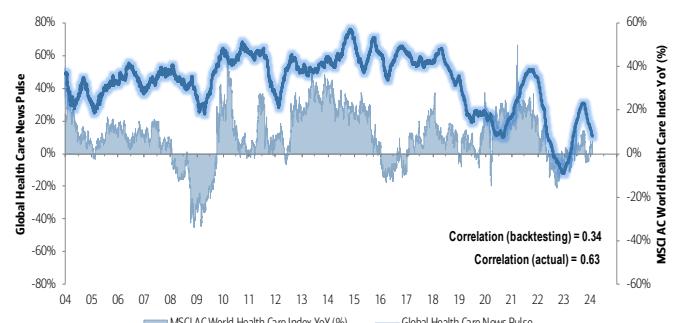
Chart 60: Global Health Care News Pulse vs MSCI AC World Health Care Index

News trends fell last month, however in aggregate remains positive



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

BofA GLOBAL RESEARCH



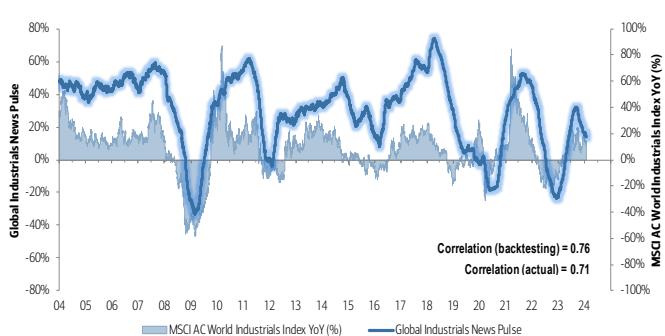
Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 61: Global Industrials News Pulse vs MSCI AC World Industrials Index

News trends fell last month, however in aggregate remains positive



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

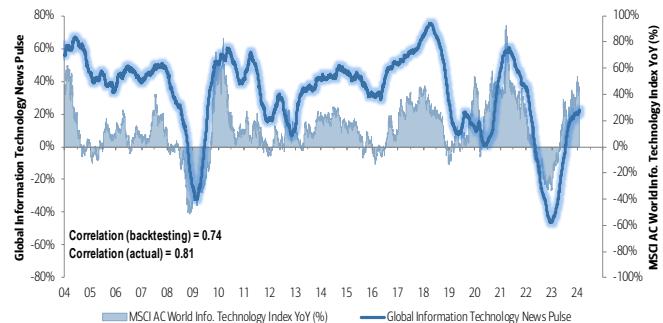
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Chart 62: Global Information Technology News Pulse vs MSCI AC World Information Technology Index

News trends fell last month, however in aggregate remains positive

Chart 62: Global Information Technology News Pulse vs MSCI AC World Information Technology Index

News trends fell last month, however in aggregate remains positive

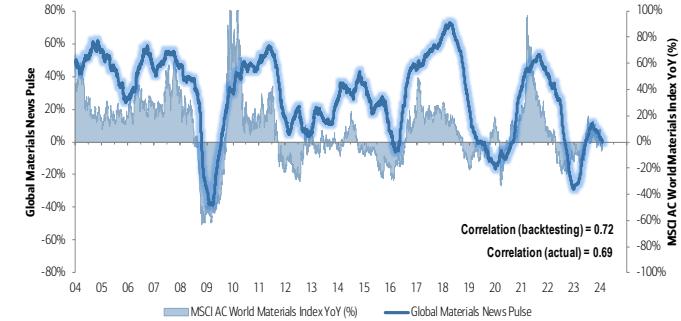


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 63: Global Materials News Pulse vs MSCI AC World Materials Index

News trends fell last month, however in aggregate remains positive

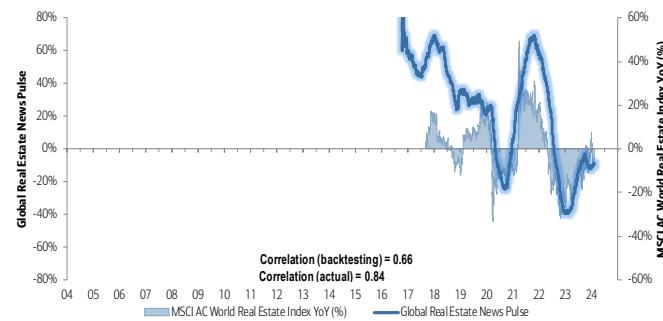


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

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

News is net negative, however it has improved last month

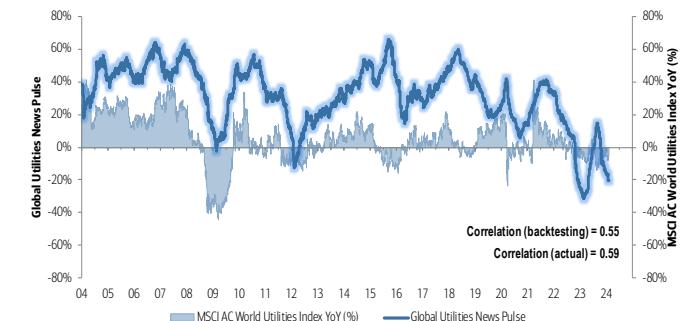


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 65: Global Utilities News Pulse vs MSCI AC World Utilities Index

News is net negative, however it has improved last month

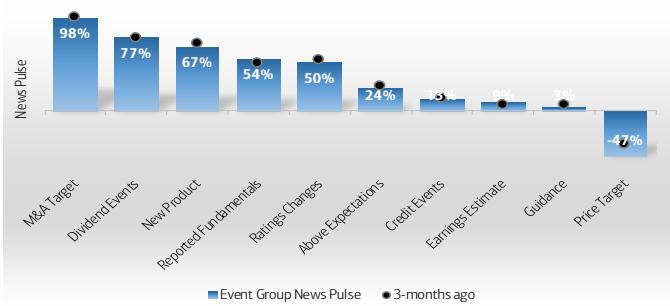


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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Chart 66: Current News Pulse by Significant News Events

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

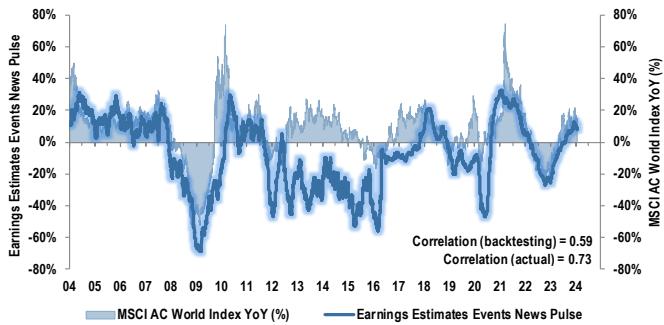


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

BofA GLOBAL RESEARCH

Chart 68: Global Earnings Estimate News Pulse vs MSCI AC World Index YoY (%)

News has improved last month

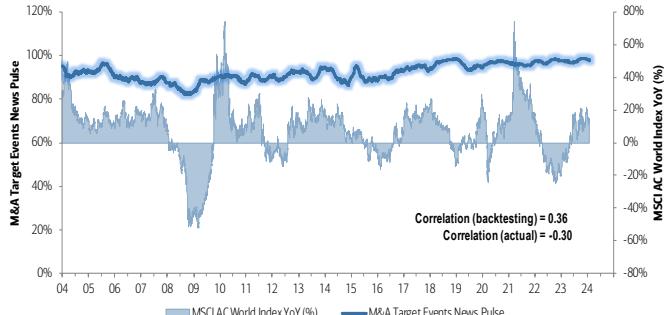


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

BofA GLOBAL RESEARCH

Chart 70: 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



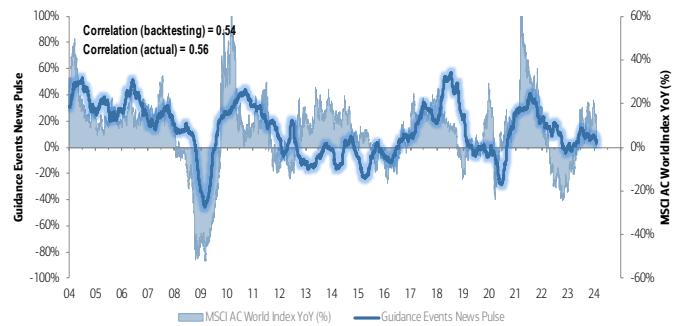
Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

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Chart 67: Global Guidance News Pulse vs MSCI AC World Index YoY (%)

News trends fell last month, however in aggregate remains positive

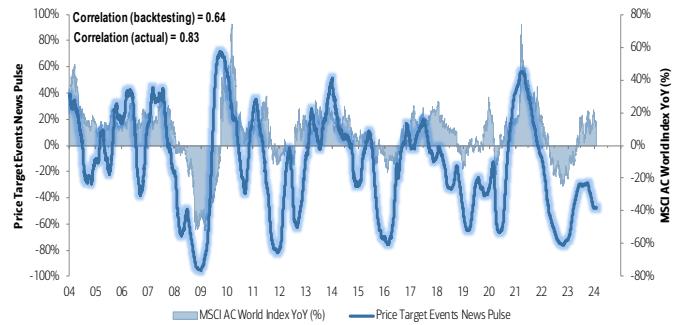


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

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Chart 69: Global Price Target News Pulse vs MSCI AC World Index YoY (%)

News is net negative, however it has improved last month

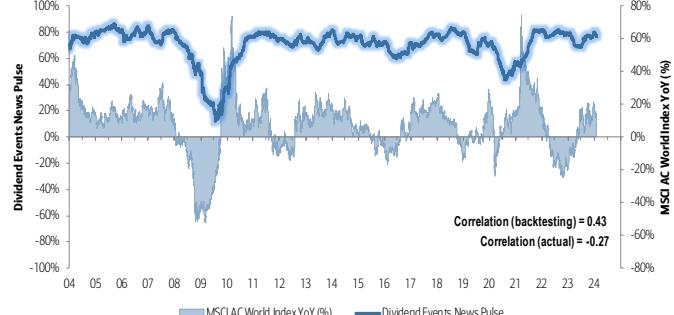


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

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Chart 71: Global Dividend News Pulse vs MSCI AC World Index YoY (%)

News trends fell last month, however in aggregate remains positive

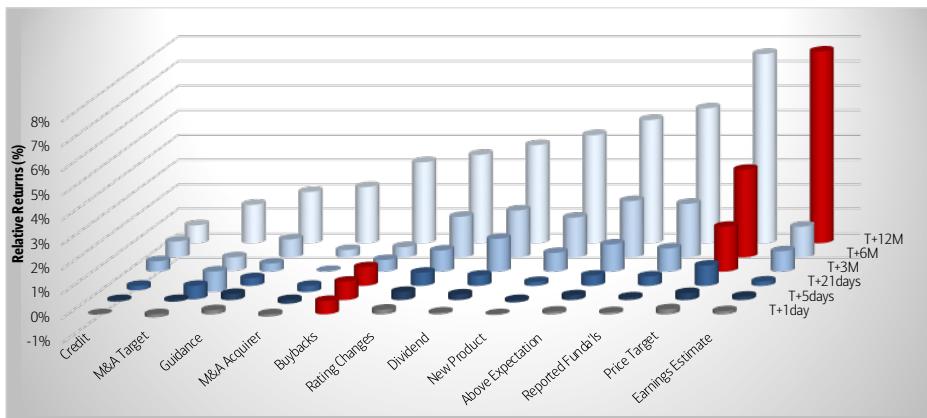


Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack.

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Chart 72: Average Relative Returns of POSITIVE Significant News Events by different holding period (back-tested 2000-2019)

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



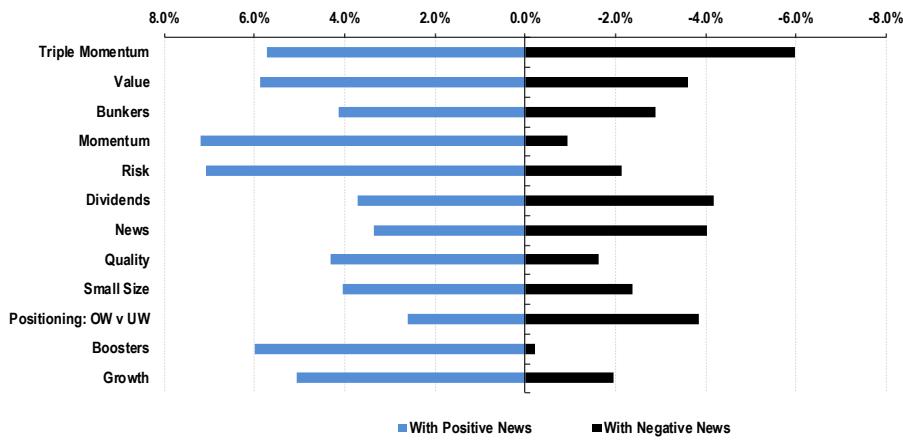
Source: BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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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Chart 73: News + Screen Performance: Annualised Relative Returns (sorted by largest diff in returns)

News enhances Alpha in all types of analysis



Source: BofA Global Quantitative Strategy, MSCI, ExShare, 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 16: Global Region-Sectors - Triple Momentum

In the US, Triple Momentum is most positive for Insurance and Software

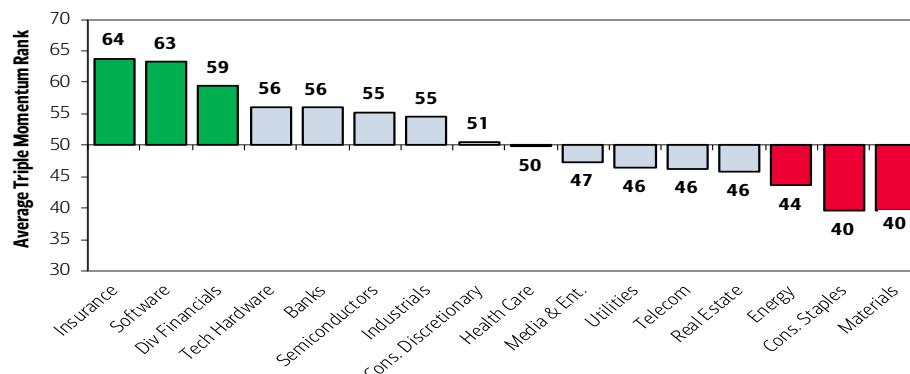
Average Triple Momentum Rank	Banks	Cons. Discretionary	Cons. Staples	Div Financials	Energy	Health Care	Industrials	Insurance	Materials	Media & Ent.	Real Estate	Semiconductors	Software	Tech Hardware	Telecom	Utilities	Region
Canada	33	42	40	71	40		46	81	16		45		68		39	25	43
USA	53	51	36	68	37	48	57	71	47	48	46	53	66	58	33	39	52
Belgium	65		75	18		44		51	13							63	50
Denmark	87	80	9			57	54	83	22							29	54
Finland			7		4	70	53	39	13					9	36	32	33
France	38	38	36	50	40	58	64	50	60	74	42	22	63		56	67	51
Germany	43	43	44	57		29	55	76	45	53	58	10	43		43	79	47
Italy	84	38			64	57	91	23								54	55
Netherlands	32	62	18	56		23	42	94	38	41		80				49	51
Spain	79	57			10	63	79							75	40	55	
Sweden	41	31		77		24	43		29					20	19	37	
Switzerland		32	28	29		50	43	57	28				32	83	23	40	
UK	29	55	40	55	26	64	57	42	39	52	83		36	67		58	50
Australia	30	33	30	42	19	31	62	68	47	62	41		81		36	65	45
Hong Kong	30	45		12		73	41	28			27	17			83	19	33
Japan	85	52	41	82	71	48	59	65	56	54	75	66	47	45	68	51	57
Singapore	32	68	28	29			71			25	38				83	76	49
China	27	50	25	43	51	43	44	42	31	35	9	30	71	67		51	41
India	63	77	52	66	82	75	65	52	57	79	88		63		72	73	67
Korea	60	43	28	37	21	44	36		19	43		97	51	32	17	65	38
Taiwan		6	84		7			48	54	48			57	76	48		57
Brazil	89	38	41		73	57	69	64	73						96	49	60
Mexico	86			61				47		37					40		54
Poland	70		21		15		85		41	34						36	45
South Africa	50	34	68	67	32			71	32		54				37		46
Asia Pac ex-Japan	48	54	38	45	49	54	50	52	40	44	35	52	67	63	47	53	49
Emerging ex-Asia	67	41	49	64	59	57	58	73	42	34	65		54		49	57	56
Europe	51	47	41	50	27	49	54	57	33	54	56	58	55	40	38	46	48
Japan	85	52	41	82	71	48	59	65	56	54	75	66	47	45	68	51	57
United States	53	51	36	68	37	48	57	71	47	48	46	53	66	58	33	39	52
Global	56	51	40	59	44	50	55	64	40	47	46	55	63	56	46	46	

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

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Chart 74: Global Sectors - Average Triple Momentum Rank

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



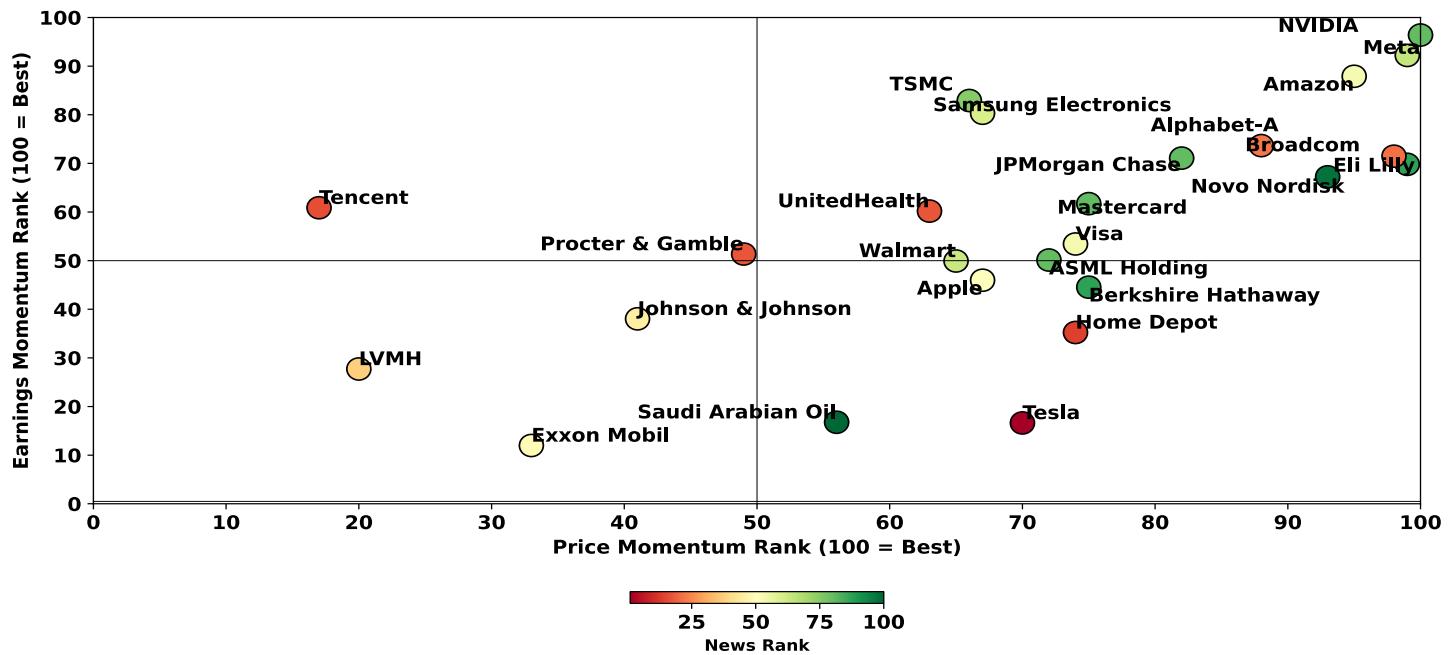
Source: BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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Chart 75: Global: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

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



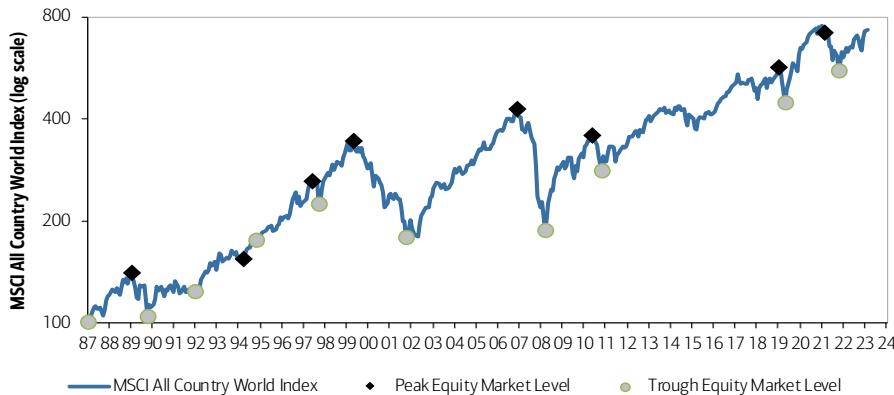
Source: BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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Early vs Late

Chart 76: MSCI AC World Index and Peaks and Troughs Level

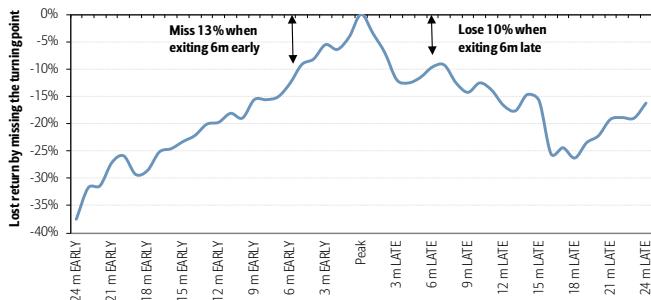
MSCI AC World Index and peaks and troughs in global equities



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Chart 77: Average equity market performance before and after major peaks in MSCI ACWI

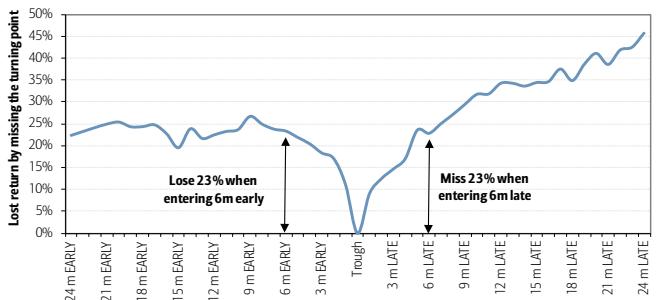
Around peaks in equities, one misses 13% by exiting 6m early vs 10% exiting 6m late



Source: BofA Global Quantitative Strategy, MSCI Major Peaks = Dec-89, Mar-00, Oct-07, Apr-11
BofA GLOBAL RESEARCH

Chart 78: Average equity market performance before and after major troughs in MSCI ACWI

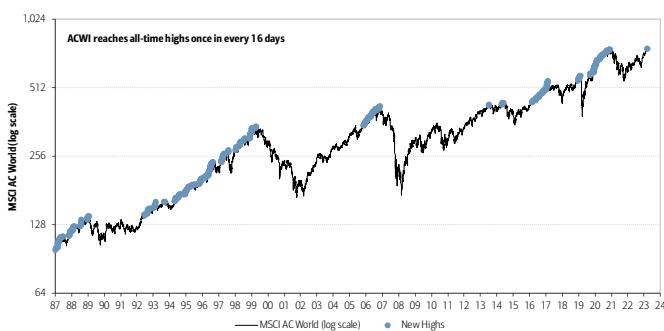
Around troughs in equities, one misses 23% by exiting 6m early vs 23% exiting 6m late



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Chart 79: MSCI AC World daily level (logged) and all-time highs

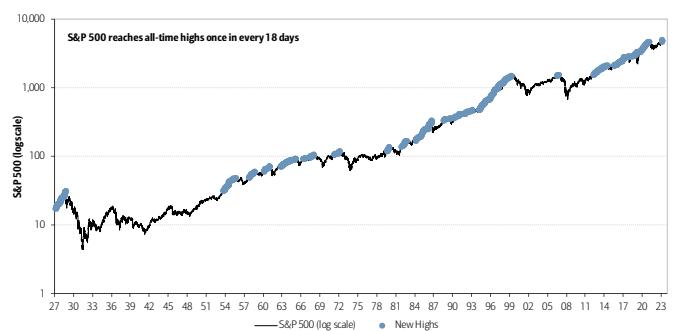
MSCI AC World reaches an all-time high every 16 days



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Chart 80: S&P 500 daily level (logged) and all-time highs

S&P 500 reaches all-time highs once in every 18 days



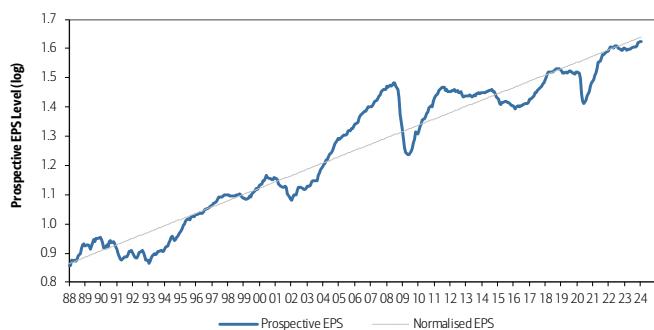
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Earnings Growth

Chart 81: Global Prospective EPS and Trend EPS

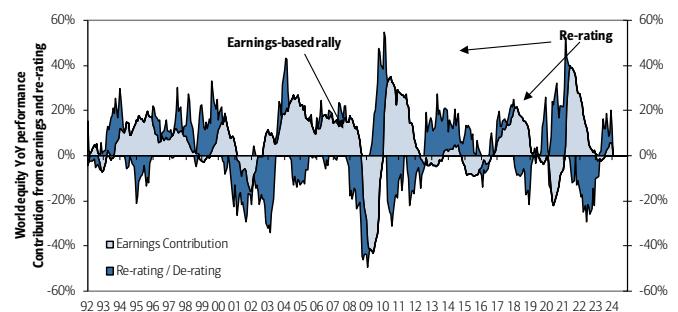
Earnings expectations have improved in World in last 6m



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Chart 82: Global YoY performance – contribution from earnings and re-rating/de-rating

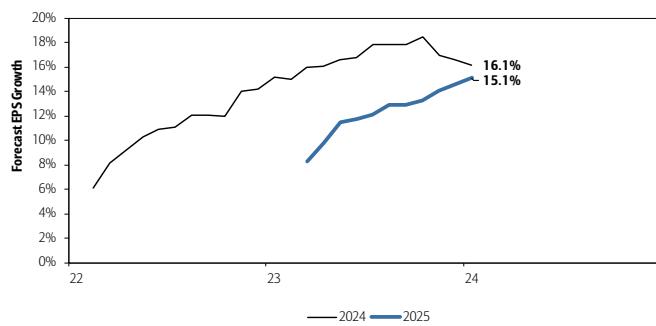
In the last 12m, re-rating contributed 6.9% earnings contributed 5.8%



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Chart 83: Global forecast EPS growth

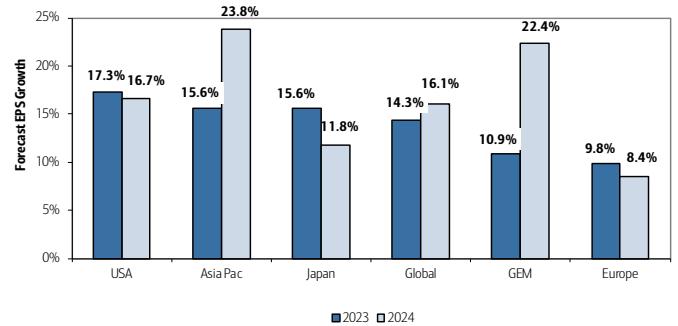
Global EPS growth forecast is currently at 16.1% for 2024



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Chart 84: Global EPS growth by region

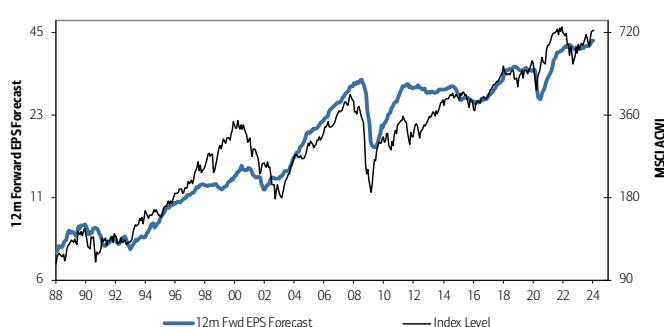
The EPS growth forecast for 2024 is highest in Asia Pac and Japan



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Chart 85: MSCI AC World 12m Fwd EPS and Market Level

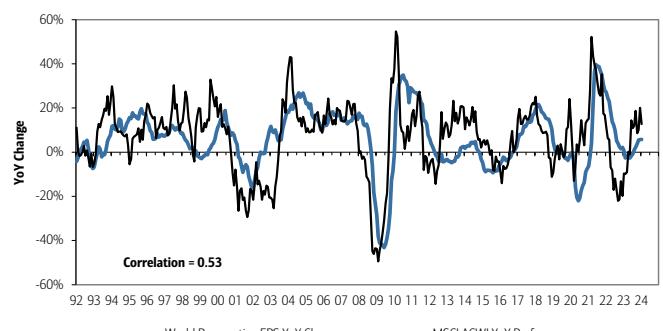
YoY change in prospective EPS and MSCI ACWI index has a correlation of 53%



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Chart 86: Global Prospective EPS and MSCI ACWI YoY Change

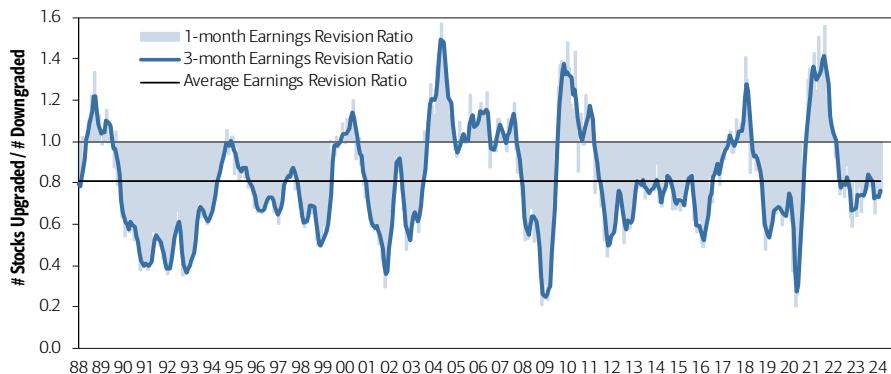
Global prospective EPS has improved by 6% in last 12m



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Chart 87: Global Earnings Revision Ratio

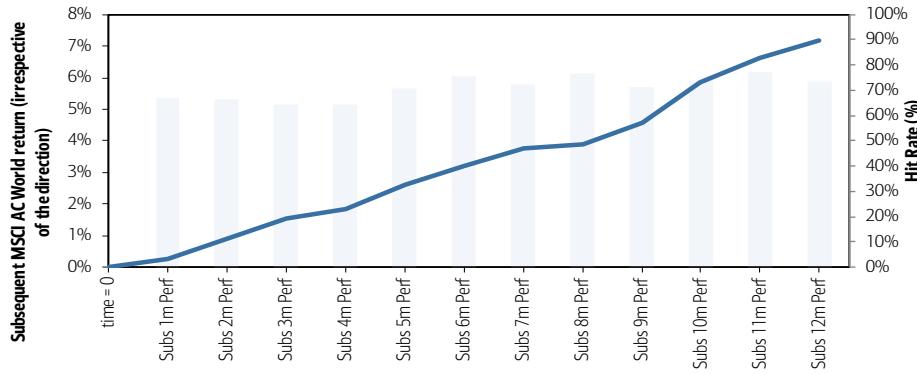
The Global Earnings Revision Ratio improved from 0.73 to 0.75



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Chart 88: Subs 12m MSCI ACWI perf for the current 3m ERR range of 0.70 – 0.80

Subs 12m MSCI ACWI perf for the current 3m ERR range of 0.70 – 0.80 is 7%

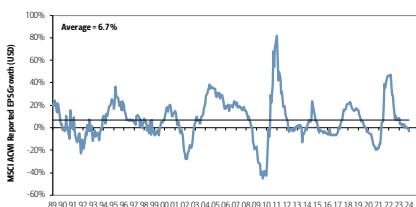


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 89: Global Reported Earnings Growth (USD)

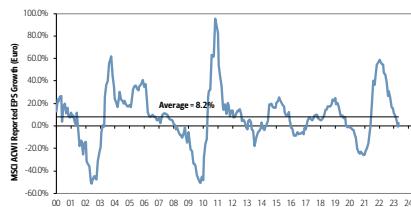
Global reported earnings growth is in negative territory



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Chart 90: Global Reported Earnings Growth (Euro)

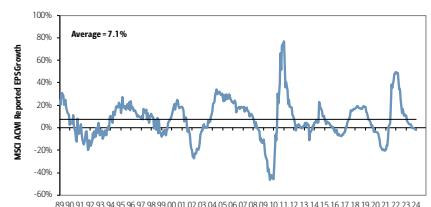
Global reported EPS growth has been trimmed



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Chart 91: Global Reported Earnings Growth (local)

Global reported EPS growth is currently negative



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Table 17: EPS Growth and EPS Revisions Levels & Average Performance

At current level of EPS revisions and EPS growth, global equities average -2% in the next 12m

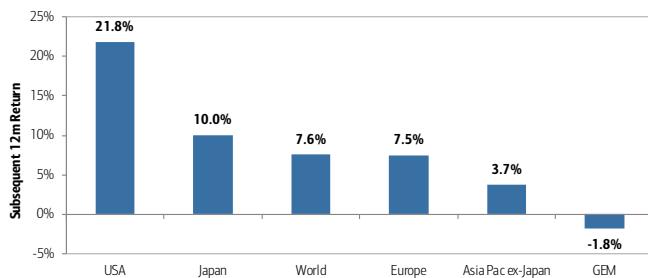
Average	EPS Growth Forecast									ERR Only
	-15% to -10%	-10% to -5%	-5% to 0%	0% to 5%	5% to 10%	10% to 15%	15% to 20%	20% to 25%	25% to 30%	
ERR (3m)										
1.40 to 1.60	-	-	-	-	-	-	7%	9%	-	3%
1.20 to 1.40	8%	16%	8%	7%	-	10%	0%	17%	9%	7%
1.00 to 1.20	19%	-	-	-	7%	-3%	7%	3%	-7%	4%
0.80 to 1.00	35%	-	7%	12%	15%	-1%	0%	-3%	-	5%
0.60 to 0.80	-	-25%	9%	12%	-2%	11%	15%	-	-	9%
0.40 to 0.60	-7%	5%	11%	9%	-9%	14%	-	-	-	7%
0.20 to 0.40	2%	-	14%	-	-	-	-	-	-	18%
0.00 to 0.20	-	-	-	-	-	-	-	-	-	-
Growth Only	1%	2%	10%	11%	2%	4%	5%	6%	-3%	-

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 92: Next 12m returns* when EPS growth, EPS Revisions and PB were similar to current levels

At current levels of EPS Growth, EPS Revisions and PB, equities returns are positive in next 12m



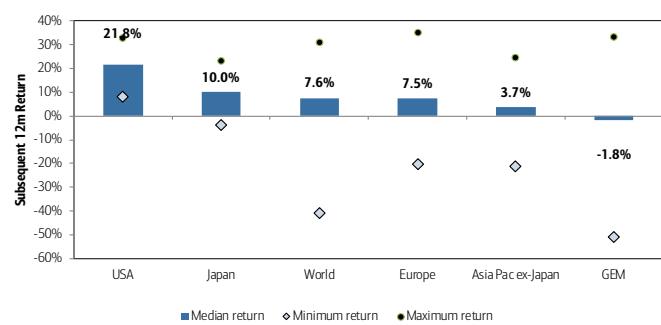
Source: BofA Global Quantitative Strategy, MSCI, IBES

*Data since 1988

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Chart 93: Next 12m & Min-Max returns* when EPS growth, EPS Revisions and PB were similar to current levels

At current levels of EPS Growth, EPS Revisions and PB, spread of min & max returns is largest for GEM



Source: BofA Global Quantitative Strategy, MSCI, IBES

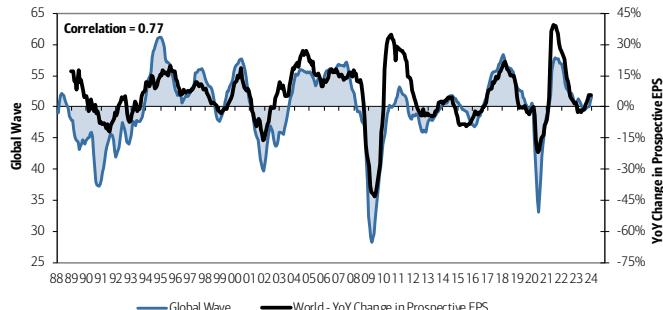
*Data since 1988

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Global Wave and Earnings

Chart 94: Global Wave and GLOBAL Prospective EPS

Global earnings cycle has a strong correlation with the Global Wave

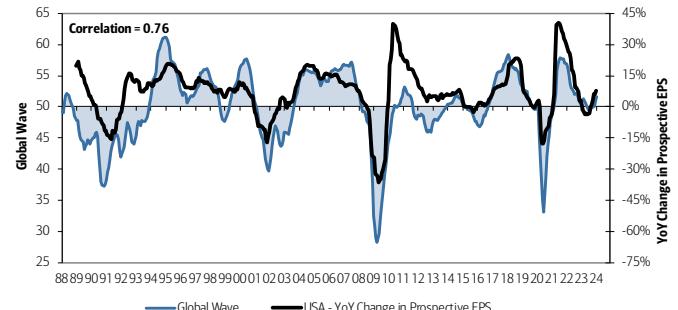


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 95: Global Wave and USA Prospective EPS

USA earnings forecasts tend to rise during an upturn

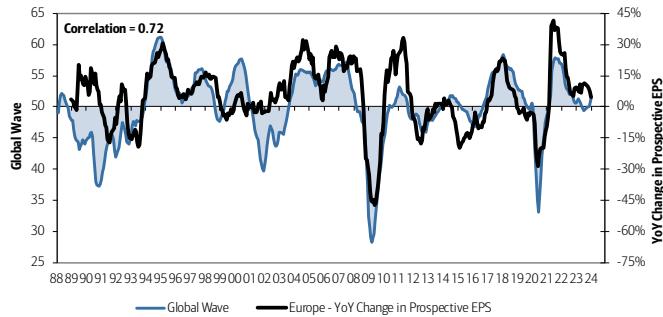


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 96: Global Wave and EUROPE Prospective EPS

Europe earnings cycle has a strong correlation with the Global Wave

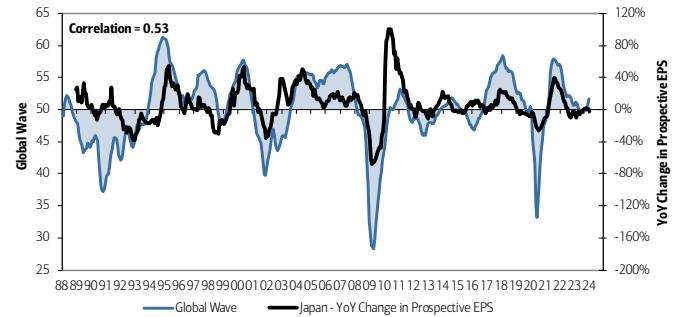


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 97: Global Wave and JAPAN Prospective EPS

Japan earnings cycle has a strong correlation with the Global Wave

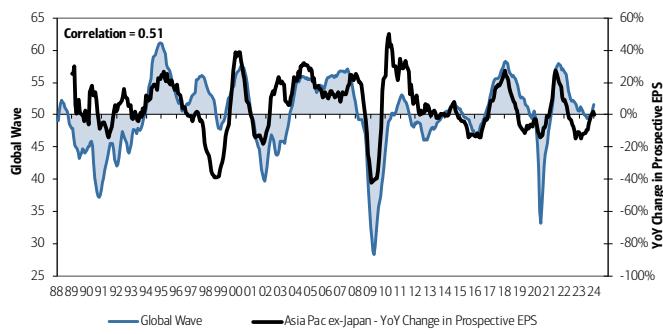


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 98: Global Wave and APxJ Prospective EPS

Asia Pac ex-Japan earnings forecasts have a 51% correlation with the Global Wave

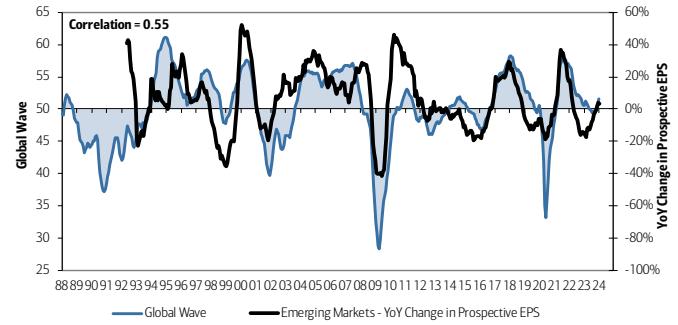


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 99: Global Wave and EMERGING MARKETS Prospective EPS

Emerging Markets earnings forecasts tend to rise during an upturn



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Valuations

Chart 100: Global Prospective PE

World prospective PE has been re-rated compared to last month

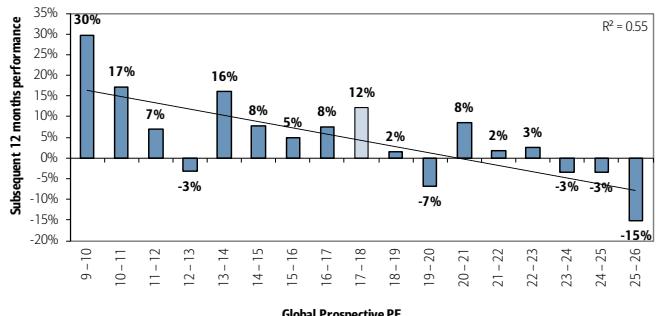


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 101: Prospective PE and MSCI AC World average subsequent 12m returns

For current PE level, MSCI ACWI returns 12.1% in the subsequent 12m on average

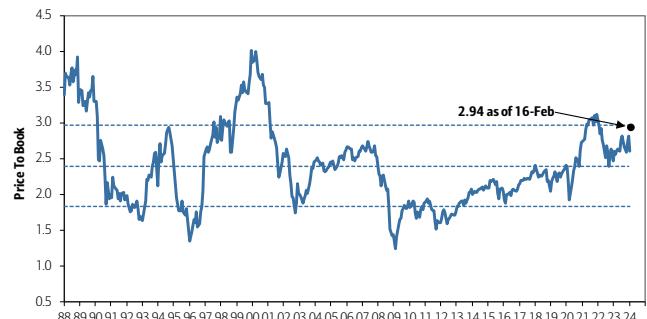


Source: BofA Global Quantitative Strategy, MSCI

BofA GLOBAL RESEARCH

Chart 102: Global Median Price-to-Book Ratio (Trailing)

Global PB (trailing) is currently above the long-term average

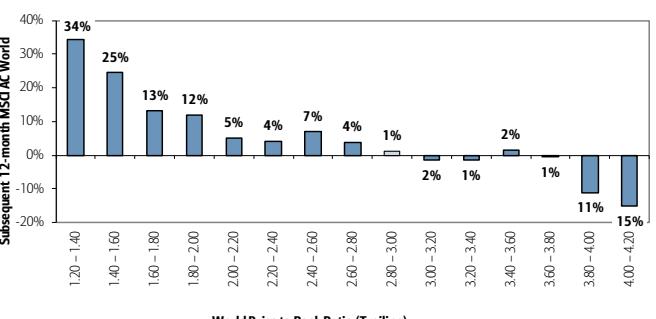


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 103: Price-to-Book (Trailing) and MSCI AC World subsequent 12m returns

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

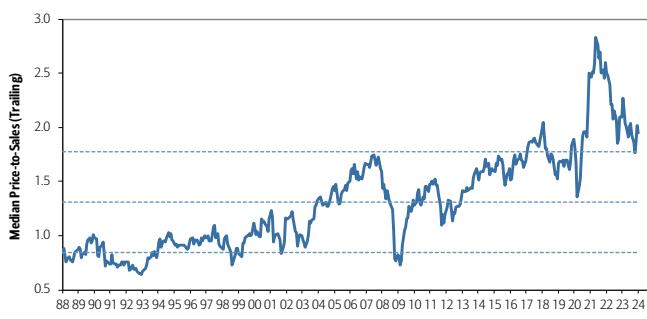


Source: BofA Global Quantitative Strategy, MSCI

BofA GLOBAL RESEARCH

Chart 104: Global Median Price-to-Sales (Trailing)

World Price-to-Sales Ratio is currently above the long-term average

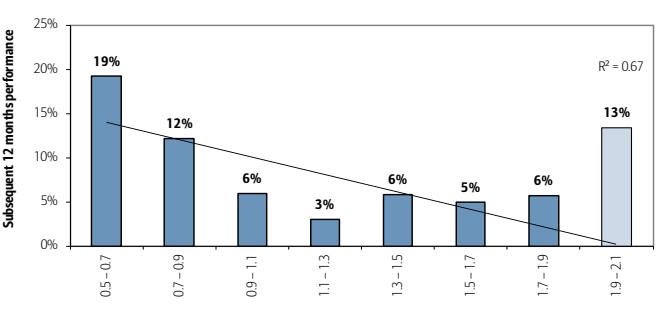


Source: BofA Global Quantitative Strategy, MSCI, Worldscope, Exshare

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Chart 105: Median Price-to-Sales (Trailing) and MSCI AC World average subsequent 12m returns

For current Price-to-Sales level, MSCI ACWI returns 13.4% in the subsequent 12m on average



Source: BofA Global Quantitative Strategy, MSCI

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Chart 106: Global Median EV/EBITDA

World EV/EBITDA is currently at 12.4x

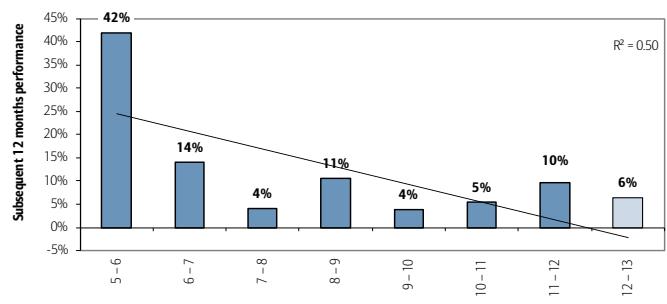


Source: BofA Global Quantitative Strategy, MSCI, Worldscope, Exshare

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Chart 107: Median EV/EBITDA and MSCI AC World average subsequent 12m returns

At current EV/EBITDA level, MSCI ACWI returns 6.4% in the subsequent 12m on average



Source: BofA Global Quantitative Strategy, MSCI

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Chart 108: Tobin's Q (EV / Total Assets) – Median of stocks globally

Global Tobin's Q is currently above the long-term average

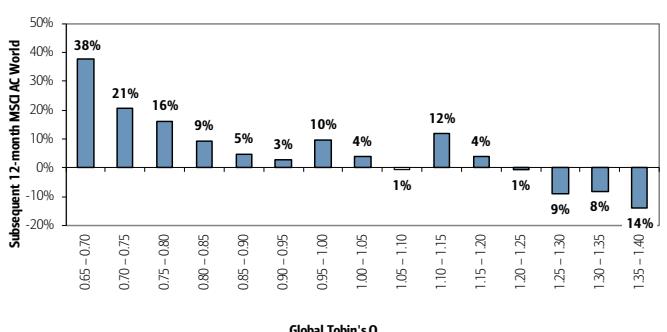


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 109: Median Tobin's Q and MSCI AC World average subsequent 12m returns

At current Tobin's Q level, MSCI ACWI returns -0.7% in the subsequent 12m on average

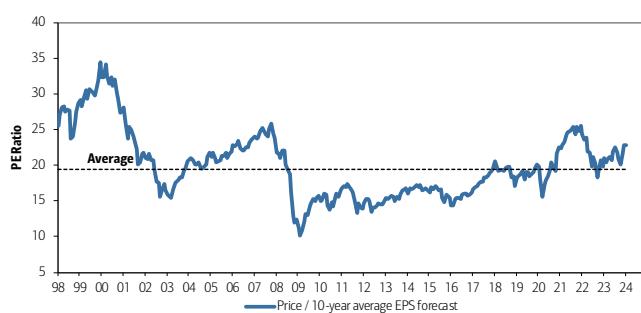


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

BofA GLOBAL RESEARCH

Chart 110: Global Cyclically-Adjusted PE (10-year average EPS forecast)

World Cyclically-adjusted PE is currently higher compared to 3m ago

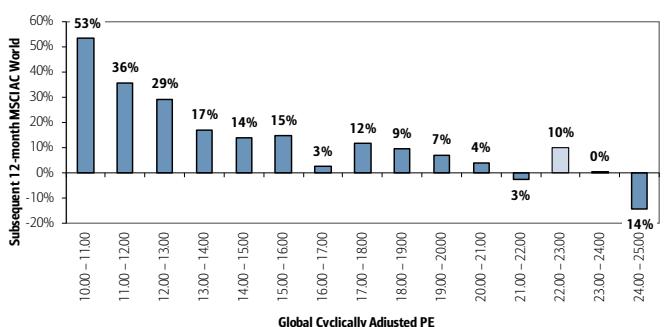


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 111: Global Cyclically-Adjusted PE and MSCI AC World average subsequent 12m returns

At current Cyclically-Adjusted PE level, MSCI ACWI returns 9.8% in the subsequent 12m on average



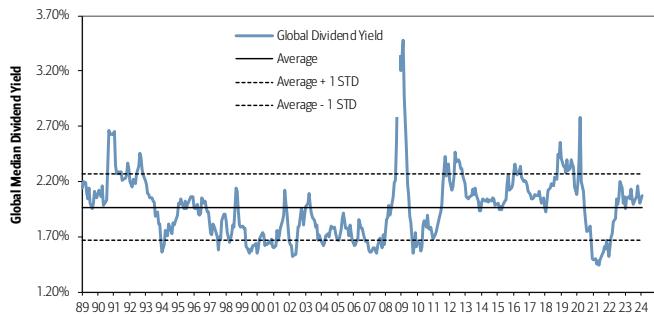
Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 112: Global Median Dividend Yield

Global median Dividend Yield is currently above the long-term average

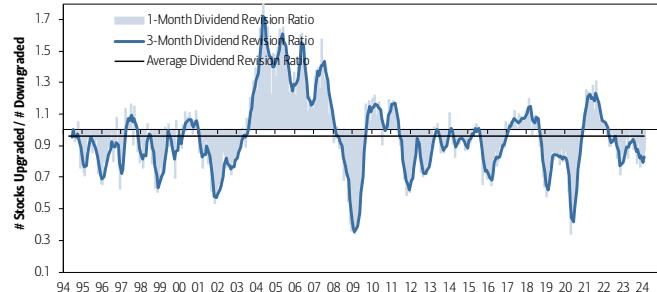


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 114: Global Dividend Revision Ratio

Asia Pacific ex-Japan has the weakest dividends trend

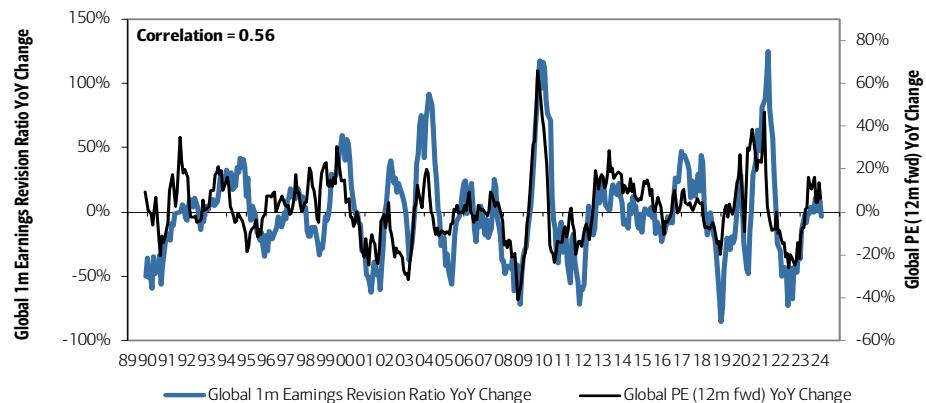


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 116: YoY change in Global Earnings Revision Ratio vs YoY change in Global Forward PE

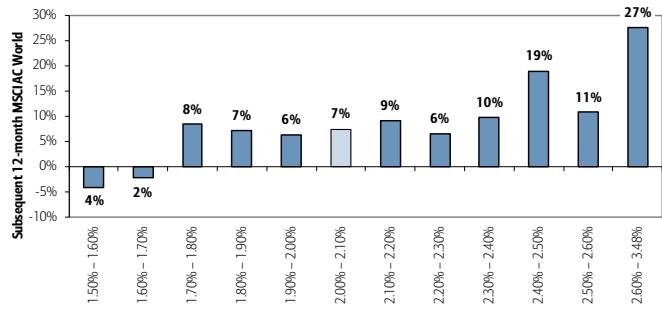
YoY change in Global ERR vs YoY change in Global PE has correlation of 0.56



Source: BofA Global Quantitative Strategy, MSCI, IBES

Chart 113: Global Median Dividend Yield and MSCI AC World average subsequent 12m returns

At current median Dividend Yield, MSCI ACWI returns 7.4% in the subsequent 12m on average

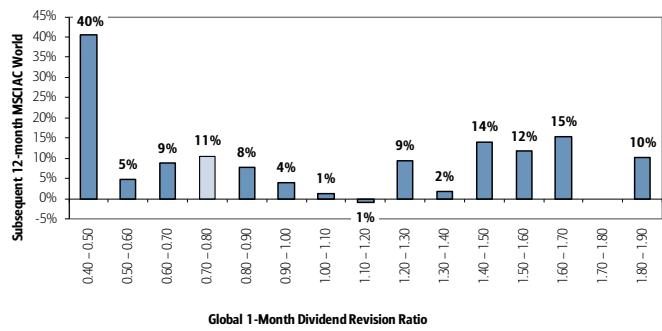


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 115: Global Dividend Revision Ratio and MSCI AC World average subsequent 12m returns

When DRR was at current levels in the past, MSCI ACWI returned 10.6% in the subsequent 12m on average



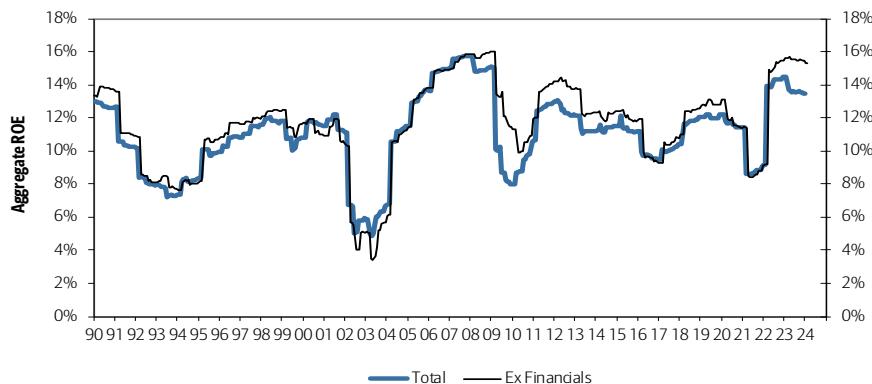
Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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ROE Aggregates

Chart 117: Global Aggregate ROE

Global ROE is currently 13%

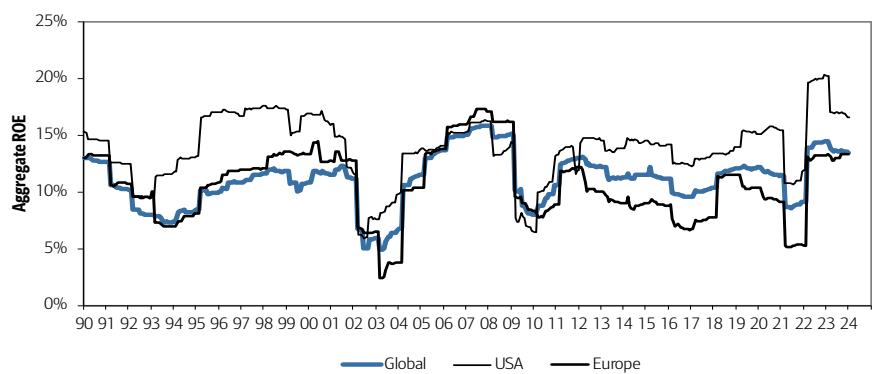


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 118: Global / USA / Europe Aggregate ROE

ROE in the US is trending higher than Europe

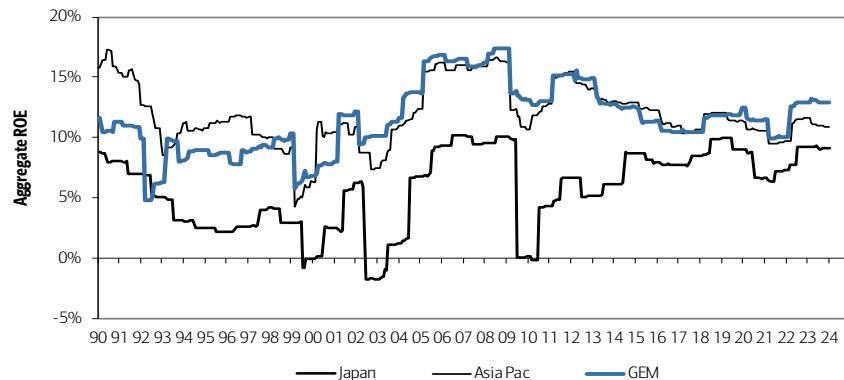


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 119: Japan / Asia Pac ex-Japan / Emerging Markets Aggregate ROE

Current ROE in Japan is 9%



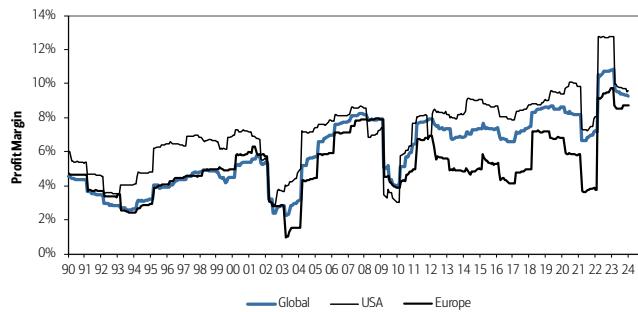
Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 120: Profit Margins: Global, USA, Europe

Global aggregate profit margin is 9%

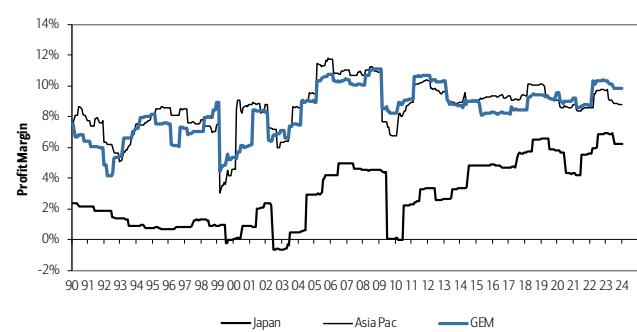


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 121: Profit Margins: Japan, Asia Pac ex-Japan, Emerging Markets

The profit margin in APxJ is 9%

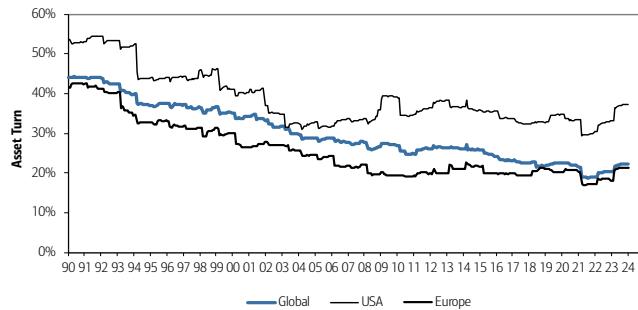


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 122: Asset Turn: Global, USA, Europe

Asset Turn in the US currently is 37%

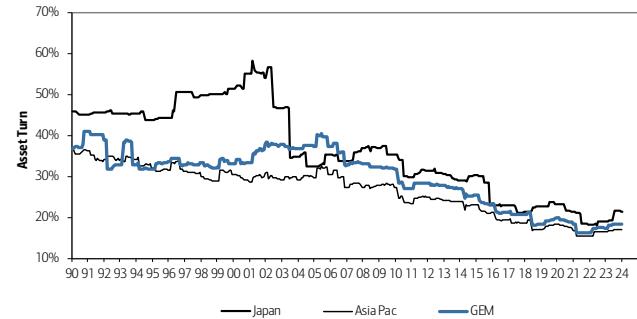


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 123: Asset Turn: Japan, Asia Pac ex-Japan, Emerging Markets

The Asset Turn in APxJ is 17%

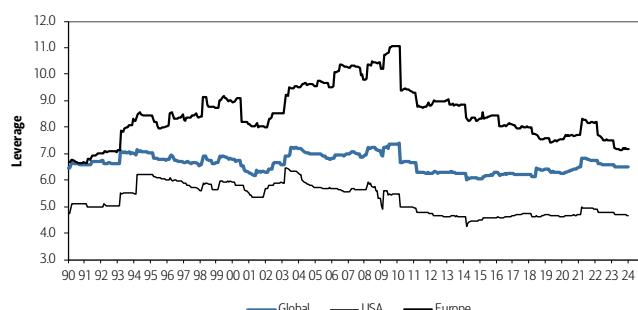


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 124: Leverage: Global, USA, Europe

Current Leverage in Europe is 2.9

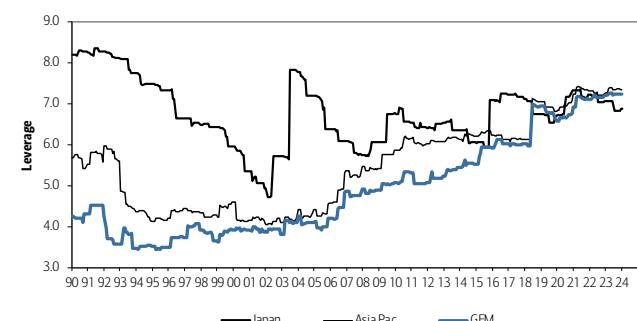


Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Chart 125: Leverage: Japan, Asia Pac ex-Japan, Emerging Markets

The current GEM Operating Leverage is 2.8



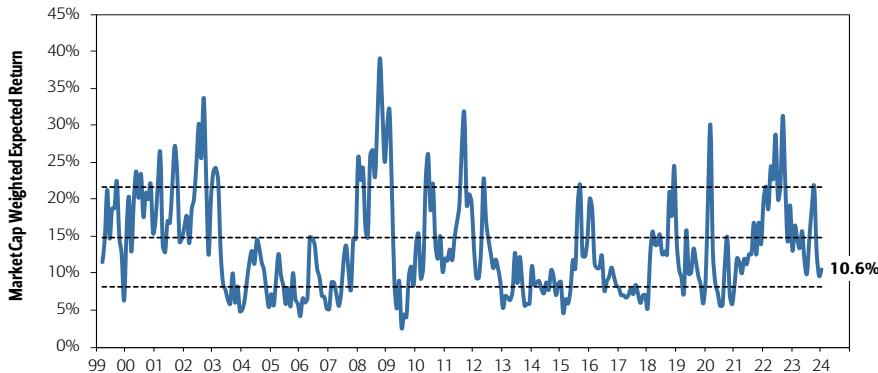
Source: BofA Global Quantitative Strategy, MSCI, World Scope

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Expected Return

Chart 126: Global expected return

The current Expected Return for World is 10.6%

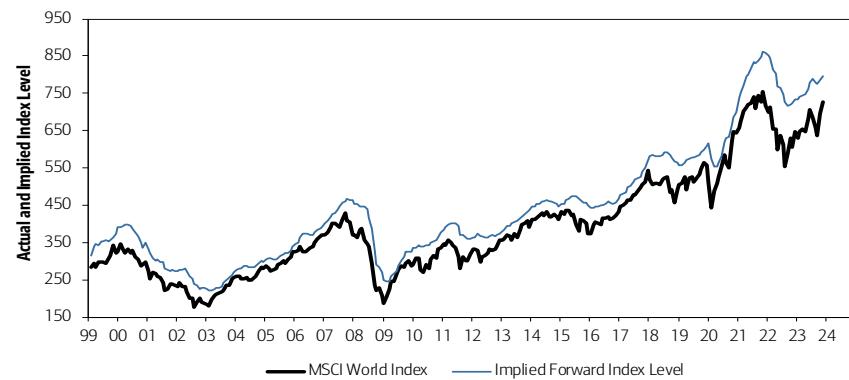


Source: BofA Global Quantitative Strategy

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Chart 127: MSCI World Index & Implied Index level

The expected return is impacted by changes to price targets and changes to stock prices

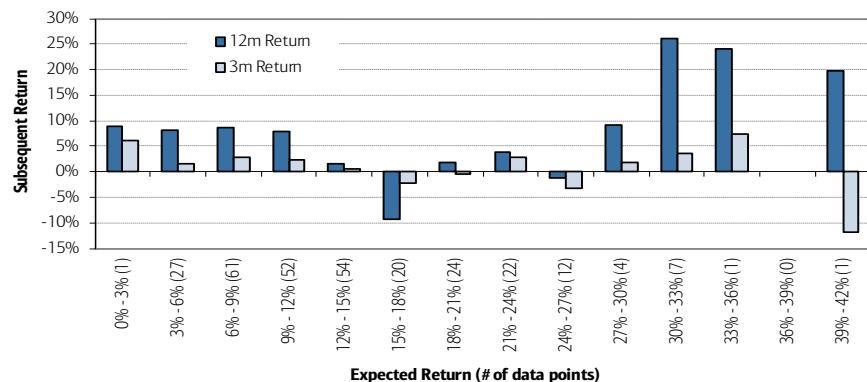


Source: BofA Global Quantitative Strategy

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Chart 128: Expected return versus actual subsequent return

MSCI AC World returned 8% on average when Expected Return has been in current range



Source: BofA Global Quantitative Strategy

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Speculation

One measure of speculation is the valuation premium investors are paying for exposure to high beta stocks. The back-testing in this analysis is from Jan-90 to Sep-09 and we introduced the current version of the analysis in Oct-09.

This analysis includes all stocks in the MSCI AC World Index as at each month-end. We define beta for each stock as the regression coefficient from regressing 60 months of monthly price returns against the monthly price returns of the MSCI AC World Index.

The screens are determined at the end of each month using month-end data from MSCI. We divide all the stocks in the analysis into five quintiles by beta. "High Beta" includes the top 20% of stocks in the analysis by beta and "Low Beta" includes the bottom 20%.

High beta acts as a stock screen and not as a recommended stock portfolio. The screens 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.

Performance Calculation Methodology

Refer to appendix "[Speculation Performance](#)" for detailed performance data.

Rebalancing and performance calculations are conducted each month, 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 performance is presented relative to the market capitalization-weighted MSCI AC World Index.

The 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.

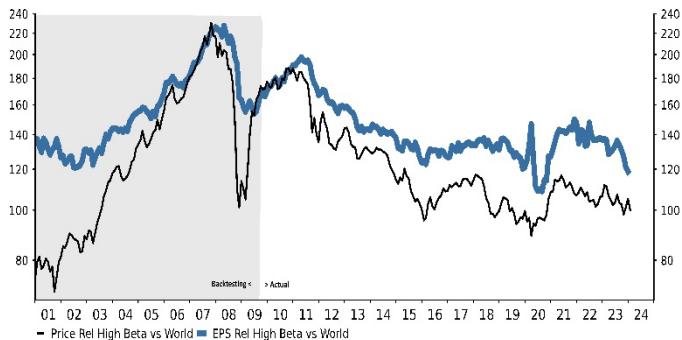
This report includes factors for informational or descriptive purposes, and inclusion here is not equivalent to a recommendation of the factor or portfolio.

Past performance is no guarantee of future results.

A complete performance record is available upon request.

Chart 129: High Beta (top quintile) Momentum & Value vs Global Index

Earnings momentum has deteriorated for Global High Beta stocks



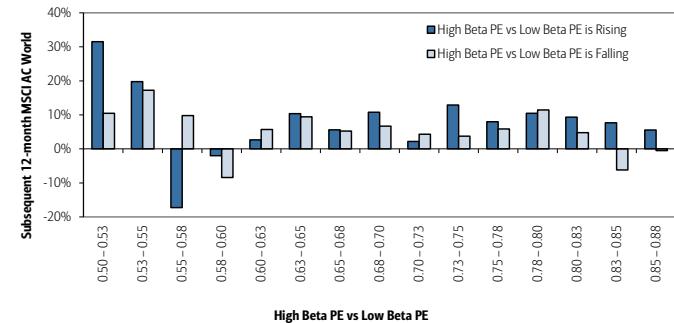
Source: BofA Global Quantitative Strategy, MSCI, IBES

The shaded area shows back-tested results during the period from Jan-90 to Sep-09. The unshaded portion represents actual performance since Oct-09. 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: Rising/Falling High Beta PE vs. Low Beta PE & subsequent 12-month Performance of MSCI ACWI

MSCI ACWI next 12m returns are stronger when High Beta PE is rising



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 133: Daily relative cumulative performance of high versus low beta

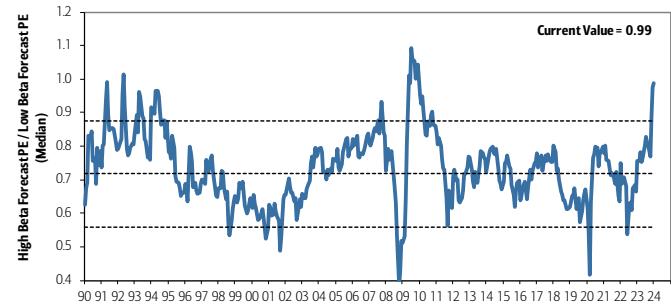
High Beta stocks have outperformed Low Beta in the last 12-months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 130: High Beta Forecast PE / Low Beta Forecast PE (median)
On PE (FORECAST) basis, High Beta stocks' discount to Low Beta stocks has diminished

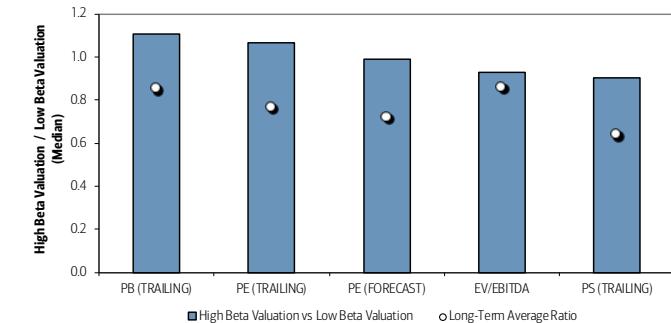


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 132: High Beta Valuation / Low Beta Valuation – Five valuation methods

Based on EV/EBITDA, High Beta stocks are trading at a discount of 7%

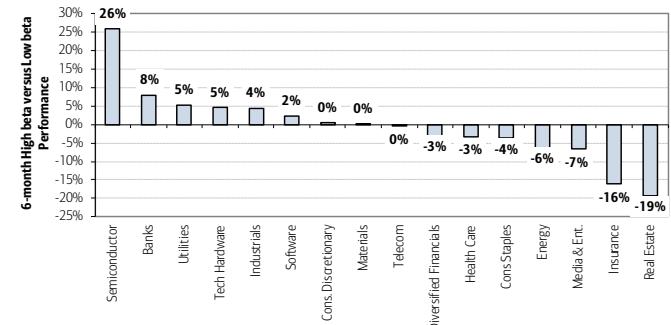


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 134: High vs Low beta: 6-month performance by global sectors

High Beta outperformed Low Beta the most in Semiconductor, Banks and Utilities sectors

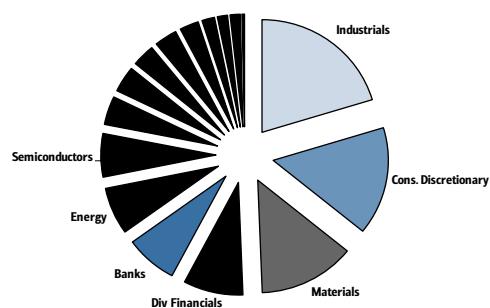


Source: BofA Global Quantitative Strategy, MSCI

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Chart 135: Sector weights of Global high Beta (top quintile)

Global High Beta stocks have most exposure to Industrials and least exposure to Industrials

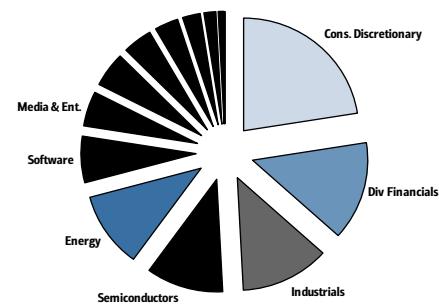


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 136: Sector weights of USA high Beta (top quintile)

USA High Beta is dominated by stocks from Cons. Discretionary

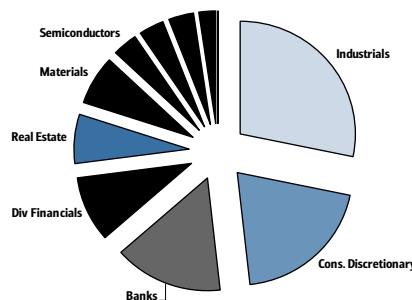


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 137: Sector weights of Europe high Beta (top quintile)

Europe High Beta stocks are most tilted towards Industrials

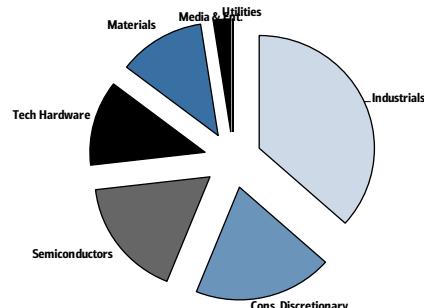


Source: BofA Global Quantitative Strategy, MSCI, Exshare

BofA GLOBAL RESEARCH

Chart 138: Sector weights of Japan high Beta (top quintile)

Japan High Beta is dominated by stocks from Industrials sector

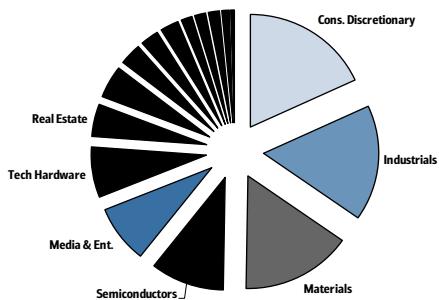


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 139: Sector weights of Asia Pac ex-Japan high Beta (top quintile)

Asia Pac ex-Japan High Beta is dominated by stocks from Cons. Discretionary

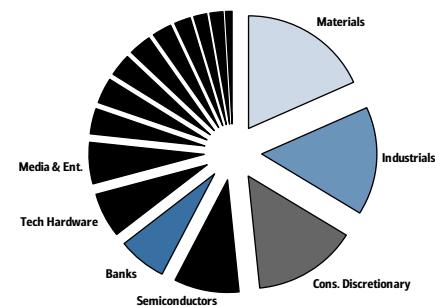


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 140: Sector weights of Emerging Markets high Beta (top quintile)

Emerging Markets High Beta stocks are most tilted towards Materials

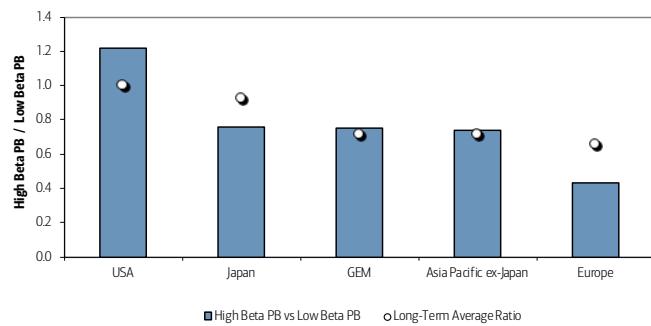


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 141: Speculation Measure by Region

High Beta vs Low Beta PB for Asia Pacific ex-Japan is currently above the long-term average



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 143: USA – High Beta Median PB vs. Low Beta Median PB

Based on PB USA High Beta stocks' premium to Low Beta stocks has reduced



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 145: Europe – High Beta Median PB vs. Low Beta Median PB

Based on PB Europe High Beta stocks are trading at a discount of 57%

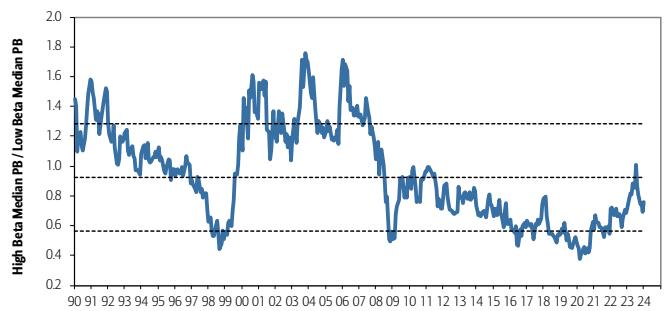


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 142: Japan – High Beta Median PB vs. Low Beta Median PB

High Beta vs Low Beta PB for Japan is currently below the long-term average

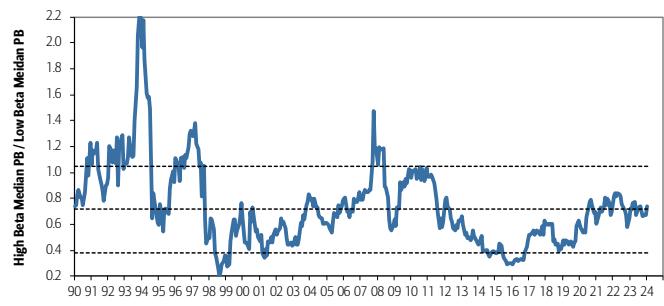


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 144: Asia Pac ex-Japan High Beta Median PB vs. Low Beta Median PB

High Beta vs Low Beta PB for Asia Pacific ex-Japan is currently above the long-term average

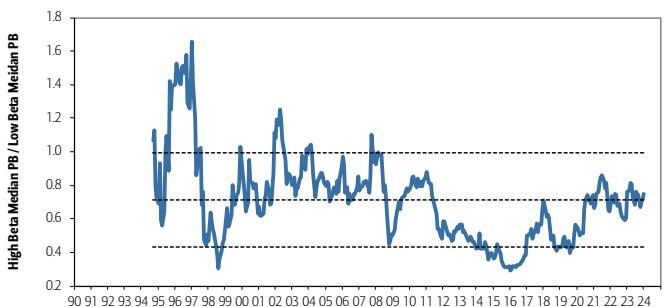


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 146: Emerging Markets High Beta Median PB vs. Low Beta Median PB

High Beta vs Low Beta PB for GEM is currently above the long-term average



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Four Stages of an upturn

Bounce: Markets rally from cycle lows but there is usually little or no evidence to justify the bounce.

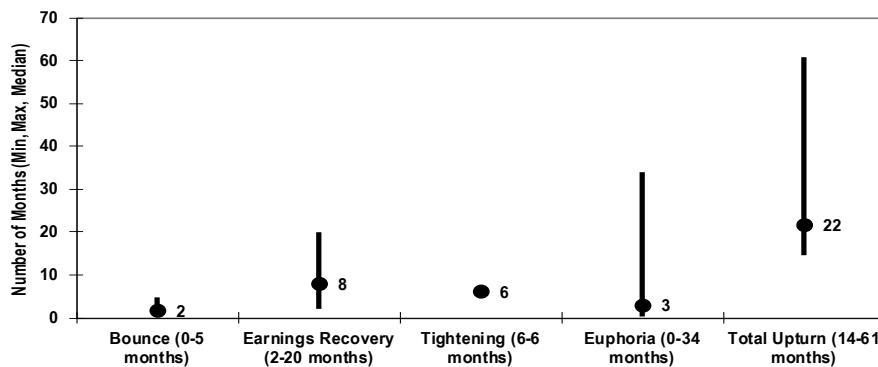
Earnings Recovery: Consensus earnings forecasts start to rise.

Tightening: The first 6 months after central banks start tightening.

Euphoria: From six months into the tightening cycle until markets peak.

Chart 147: Number of months in the four stages of an upturn

Upturn in an economic cycle averages 22 months

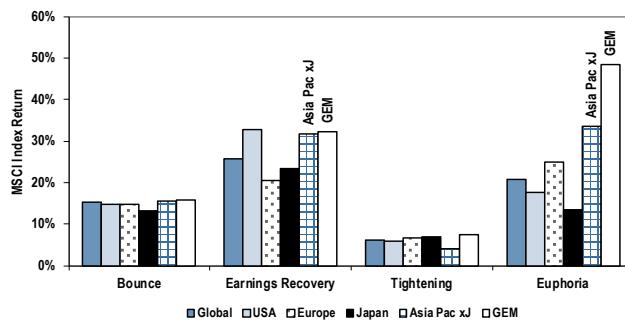


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 148: Regional performance in the four stages of an upturn

During Earnings Recovery phase, equity markets rally supported by earnings

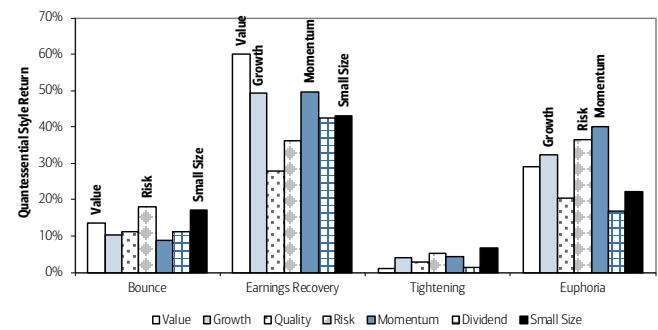


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 149: Global Style performance in the four stages of an upturn

In Earnings Recovery phase Value performs the best as cyclical styles rally

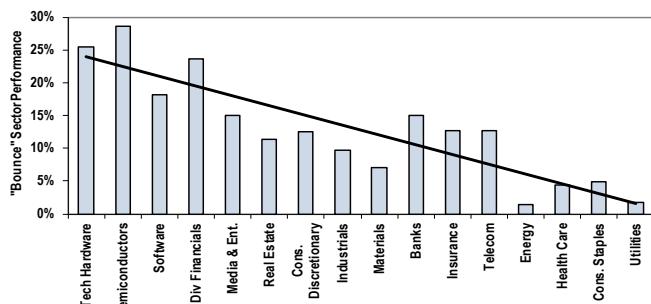


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 150: Global sector performance during the “Bounce” stage

During Bounce phase, the best performing sector is Semiconductors

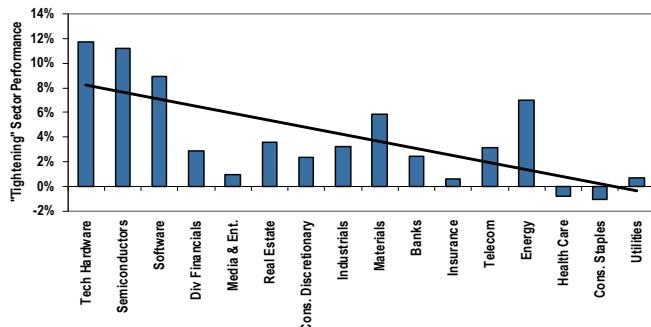


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 152: Global sector performance during the “Tightening” stage

During Tightening phase, the best performing sector is Tech Hardware

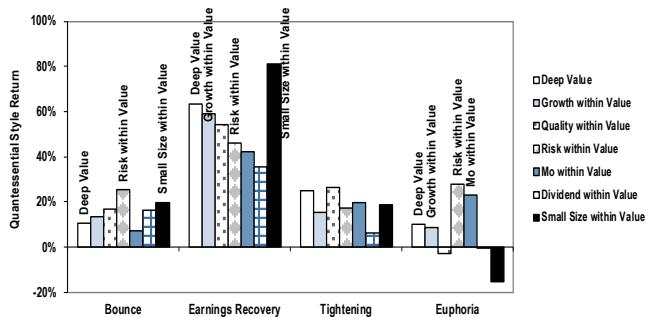


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 154: Which Styles within Value work first ?

In Earnings Recovery phase Small Size within Value performs the best within Value



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

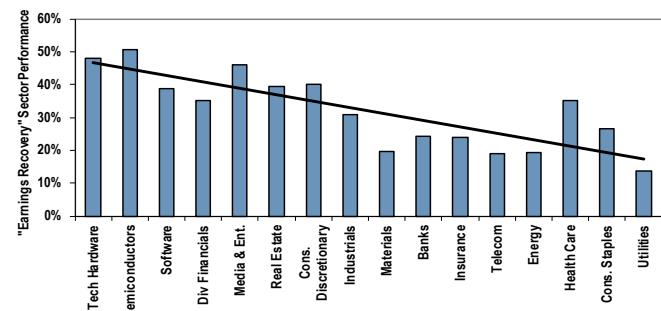
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Chart 151: Global sector performance during “Earnings Recovery”

In Earnings Recovery phase Semiconductors performs the best as cyclical sectors rally

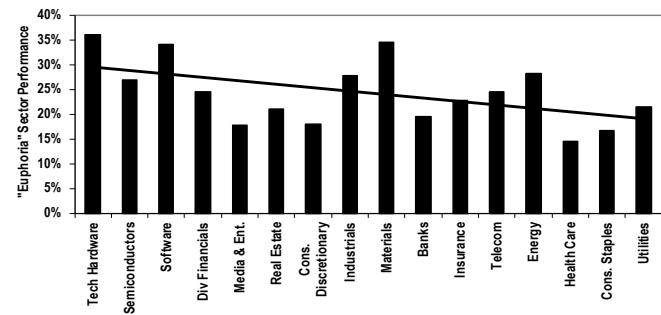


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 153: Global sector performance during the “Euphoria” stage

During Euphoria the best performing sector is Tech Hardware

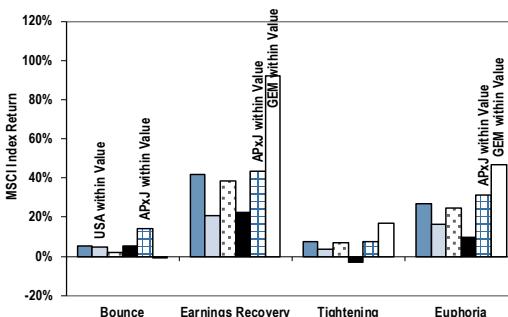


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg

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Chart 155: Which Regions within Value work first ?

In Earnings Recovery phase GEM within Value performs the best within Value



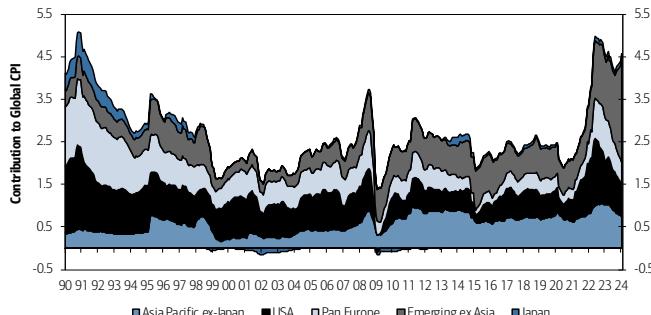
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg

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Global Inflation & Short Rates

Chart 156: Contribution to Global CPI Forecast by Region

Emerging ex Asia contributes the most, while Japan contributes the least to Global CPI forecast

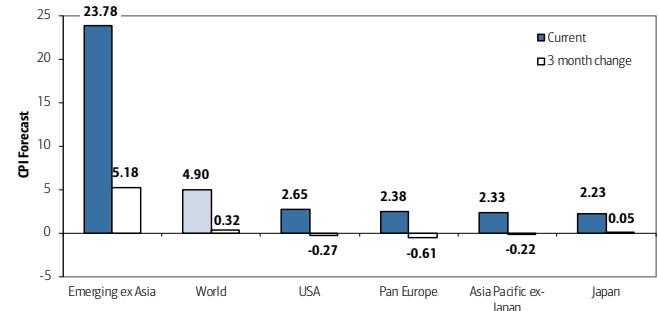


Source: BofA Global Quantitative Strategy, Consensus Economics

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Chart 157: Forecast CPI by region

Emerging ex Asia has the highest CPI forecast

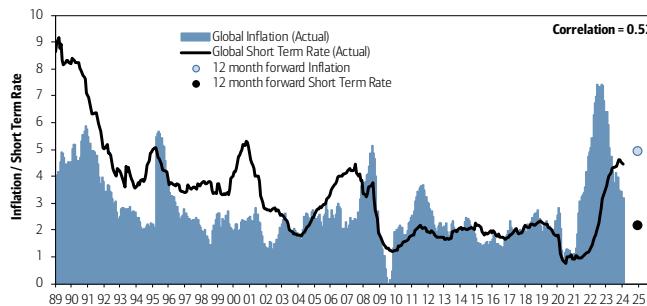


Source: BofA Global Quantitative Strategy, Consensus Economics

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Chart 158: Global Inflation and Short Rates

The forecast is for the short-rates to ease in the next 12-months

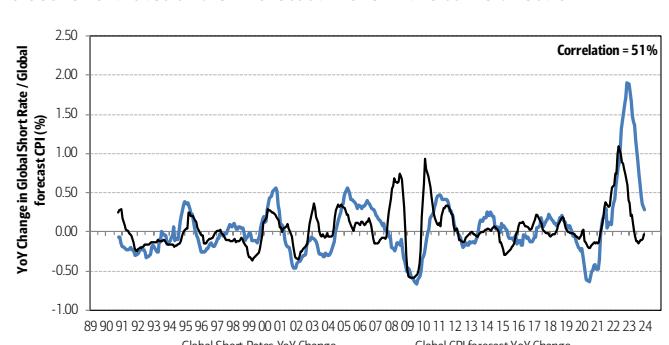


Source: BofA Global Quantitative Strategy, Consensus Economics

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Chart 159: YoY Change in Global Short Rates (Actual) and CPI Forecast

Global Short rates and CPI forecast move in the same direction

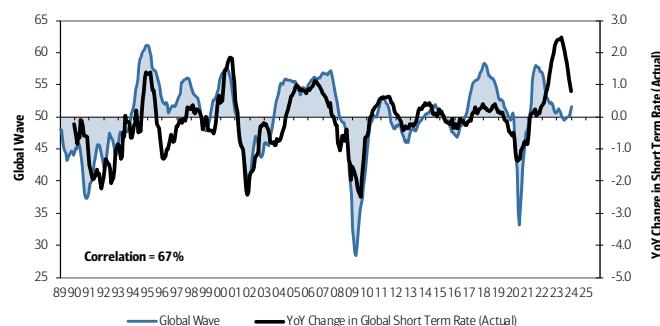


Source: BofA Global Quantitative Strategy, Consensus Economics

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Chart 160: Global Wave and Global Short Rates (Actual)

Central banks tighten as an upturn matures and inflation rises and vice-versa

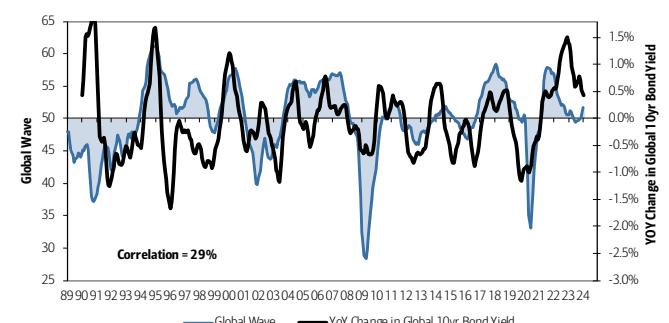


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 161: Global Wave and YoY change in Global 10 year Bond Yield

Bond Yields tend to rise during an upturn in the Global Wave

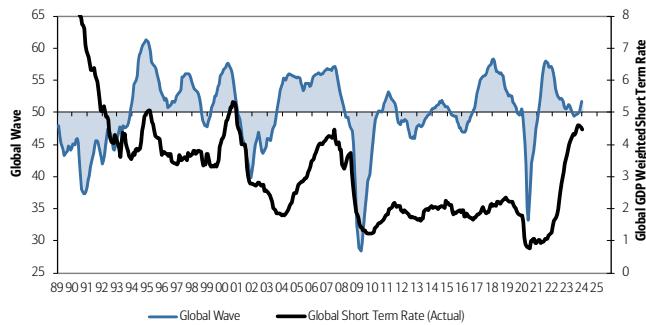


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 162: Global Short Term Rate (Actual) versus Global Wave

Global Short Term rates have a 67% correlation with the Global Wave

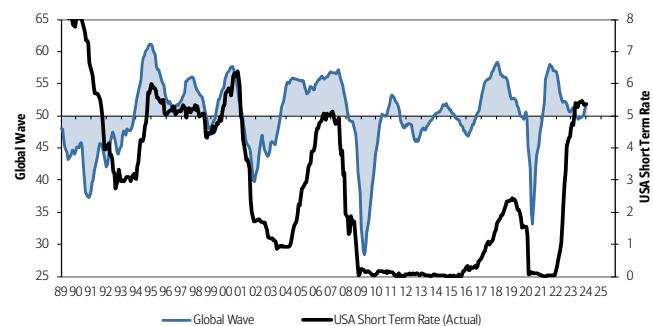


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 163: USA Short Term Rate (Actual) versus Global Wave

Central banks tighten as an upturn matures and inflation rises and vice-versa

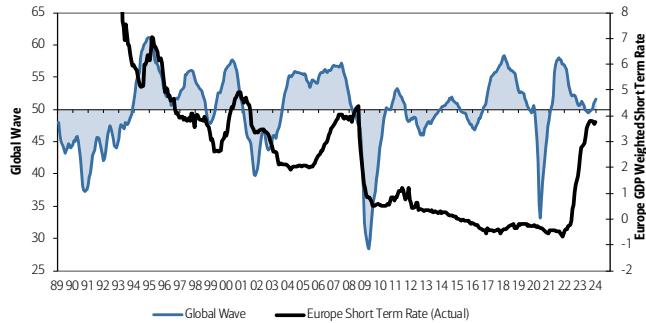


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 164: Europe Short Term Rate (Actual) versus Global Wave

Central banks tighten as an upturn matures and inflation rises and vice-versa

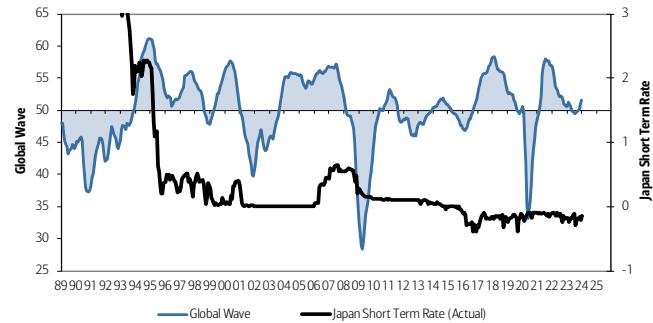


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 165: Japan Short Term Rate (Actual) versus Global Wave

Central banks tighten policy rates during a prolonged upturn as inflation rises

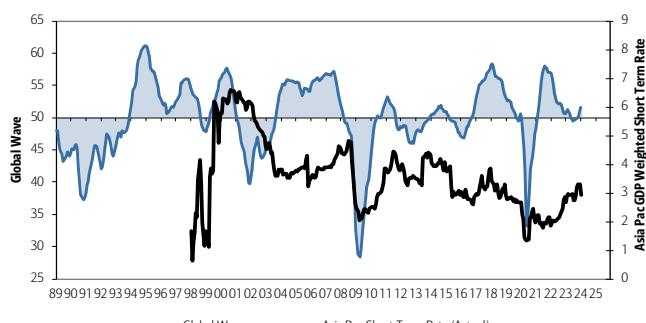


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 166: Asia Pac ex-Japan Short Term Rate (Actual) versus Global Wave

APxJ Short Term rates have a positive correlation with the Global Wave

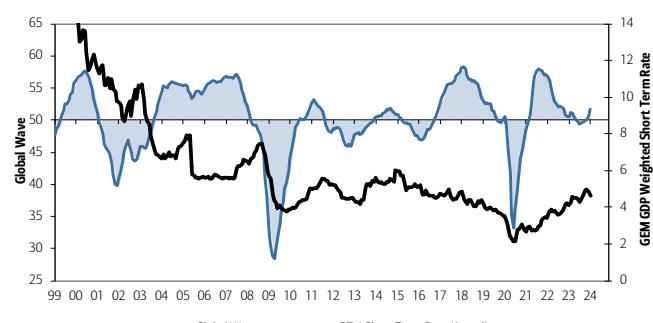


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

BofA GLOBAL RESEARCH

Chart 167: Emerging Markets Short Term Rate (Actual) versus Global Wave

EM Short Term rates (YoY change) have a positive correlation with the Global Wave



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

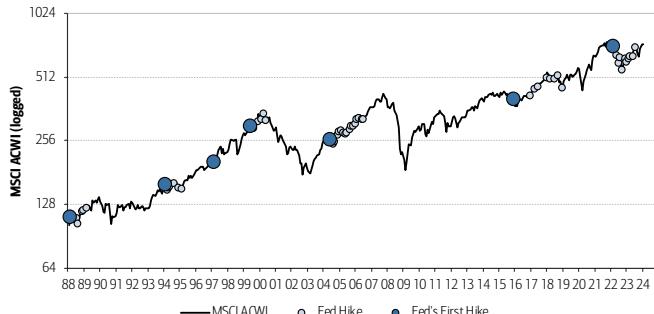
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Equity Markets vs Fed Policy

Chart 168: MSCI ACWI and Fed Tightening

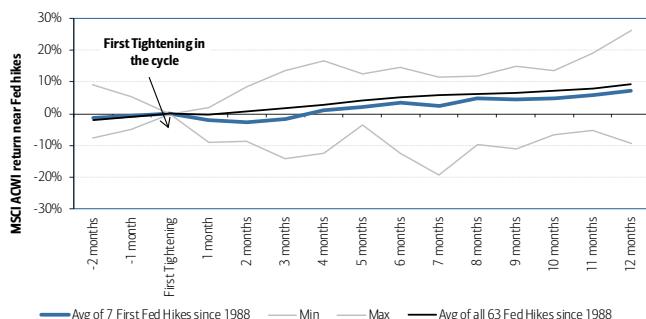
MSCI ACWI returns are muted when Fed is tightening monetary policy



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Chart 170: MSCI ACWI Performance near First Fed Tightenings

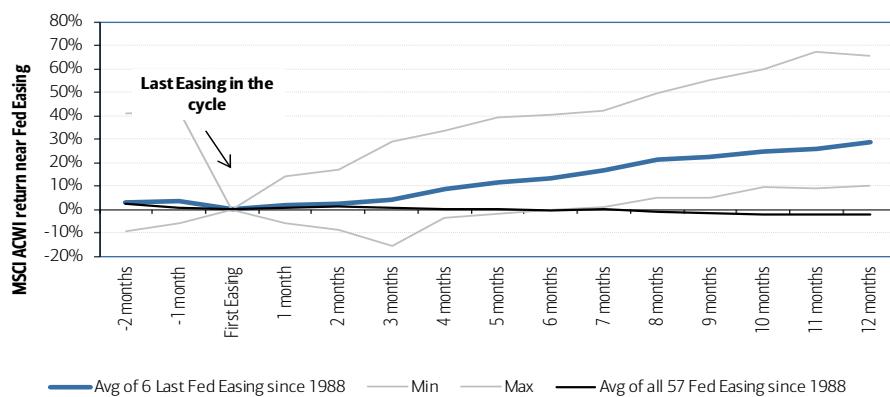
In 12m post the first tightening in the cycle, MSCI ACWI averages 7.1%



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Chart 172: MSCI ACWI Performance near Last Fed Easings

Global equities rally 28.4% in the 12m subs to last easing in the cycle



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Chart 169: MSCI ACWI and Fed Easing

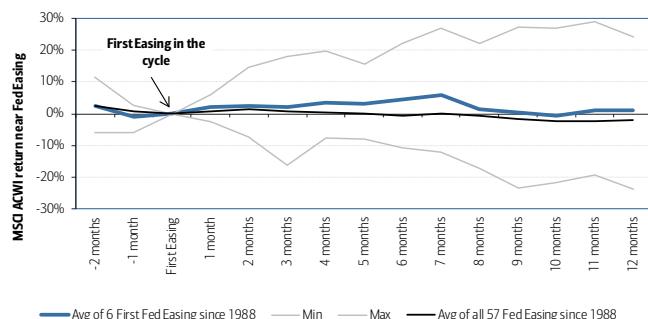
MSCI AC World Index rallies, on average post rate cuts from central banks



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Chart 171: MSCI ACWI Performance near First Fed Easings

In 12m post all Fed easings, MSCI ACWI has averaged -2.1%



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Global Quantessential Styles

Table 18: Global Style tilts based on back-testing and definitions

Style definition and style recommendations based on the direction of the Global Wave

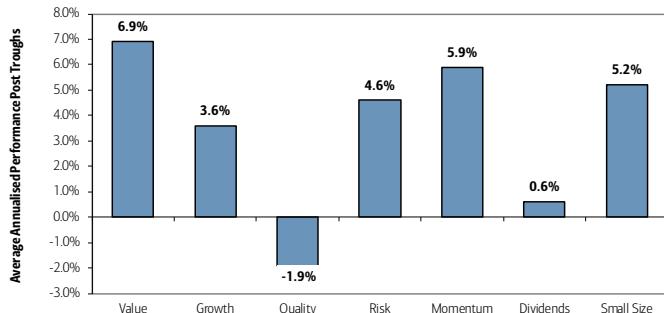
Style	Style definition (factors are equal-weighted)	Tilt when Global Wave is rising	Tilt when Global Wave is falling
Value	EV/EBITDA, Price-to-Sales (trailing), PE (forecast)	OVERWEIGHT	OVERWEIGHT
Growth	EPS Revisions, 2-year EPS Growth Forecast, 7-year EPS Growth	OVERWEIGHT	Neutral
Quality	S&P Quality 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, MSCI, Bloomberg, S&P, Exshare, Worldscope 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: Back-tested results (Jan-89 to Aug-09) when the Global Wave was rising

Value performed the best when the Global Wave was rising



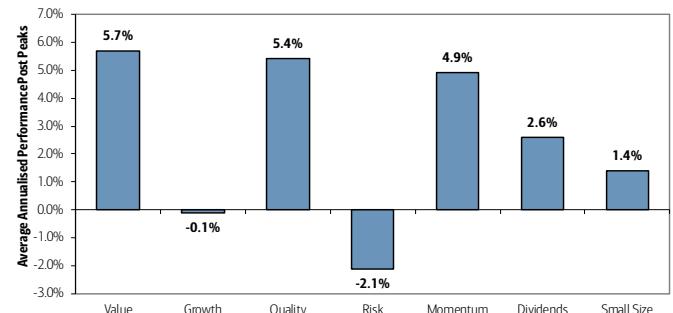
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

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.

BofA GLOBAL RESEARCH

Chart 174: Back-tested results (Jan-89 to Aug-09) when the Global Wave was falling

Value and Quality performed the best when the Global Wave was falling



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

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.

BofA GLOBAL RESEARCH

Chart 175: Price Sensitivity to Earnings Trends and Bond Yields Differs Dramatically by Style

Defensive styles tend to outperform when earnings and bond yields fall

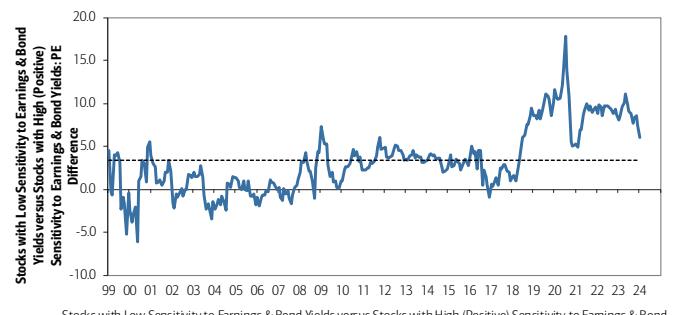


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

BofA GLOBAL RESEARCH

Chart 176: Global: Low vs High Earnings Trends and Bond Yield Sensitivity PE Ratio

Stocks with Low Sensitivity to Earnings & Bond Yields are trading at a PE premium



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

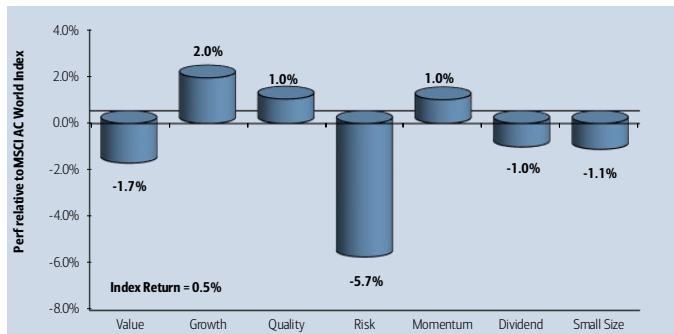
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Global Quantessential Style Performance

Chart 177: Quantessential Style relative performance: Last Month

Quantessential Growth was the best performing style last month



Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Styles.

BofA GLOBAL RESEARCH

Chart 179: Quantessential Style relative performance: 2023

The best performing style last year was Quantessential Risk

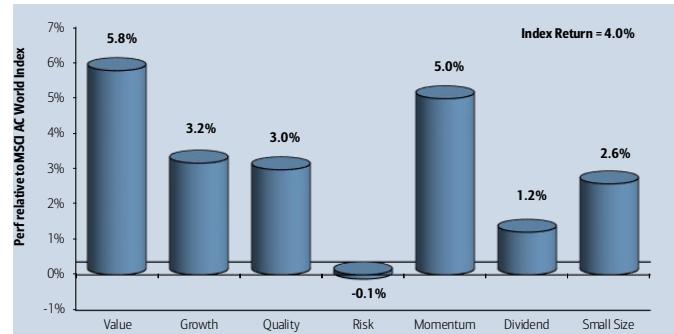


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Styles.

BofA GLOBAL RESEARCH

Chart 181: Quantessential Style back-testing results (Jan-89 to Aug-09)

Over the 20-year backtesting period, Value was the best performing style

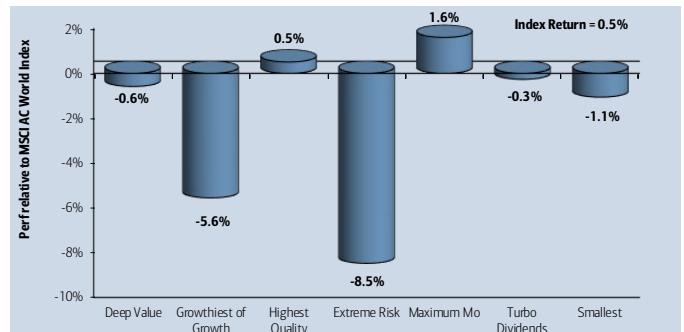


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Styles. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 178: Top 30 Style relative performance: Last Month

Maximum Mo was the best performing style last month

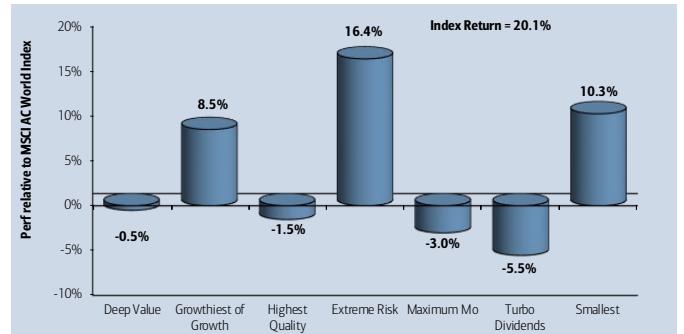


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Extreme Styles.

BofA GLOBAL RESEARCH

Chart 180: Top 30 Style relative performance: 2023

The best performing style last year was Extreme Risk

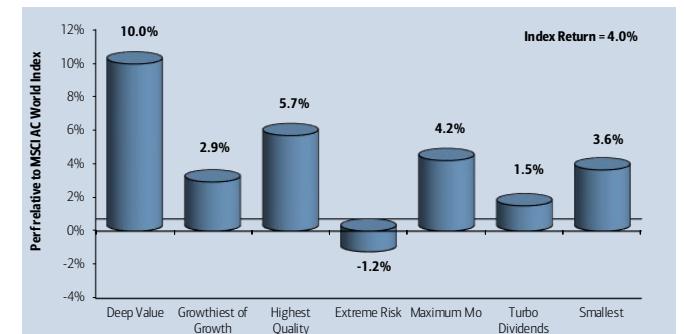


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Extreme Styles.

BofA GLOBAL RESEARCH

Chart 182: Top 30 Style back-testing results (Jan-89 to Aug-09)

Over the 20-year backtesting period, Deep Value was the best performing style

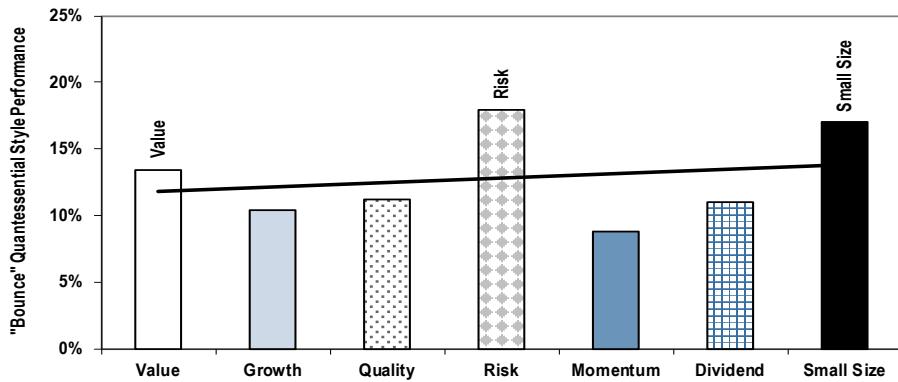


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Extreme Styles. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 183: Global Quantessential Style performance during the "Bounce" stage

Bounce phase supports rotation towards cyclical styles

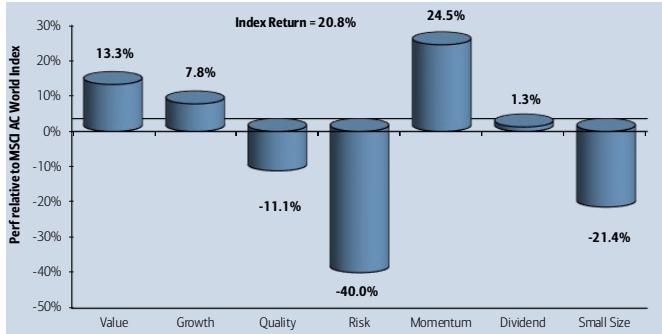


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg

BofA GLOBAL RESEARCH

Chart 184: Quantessential Style relative performance: 2011-2015

Momentum was the best performing style during this period



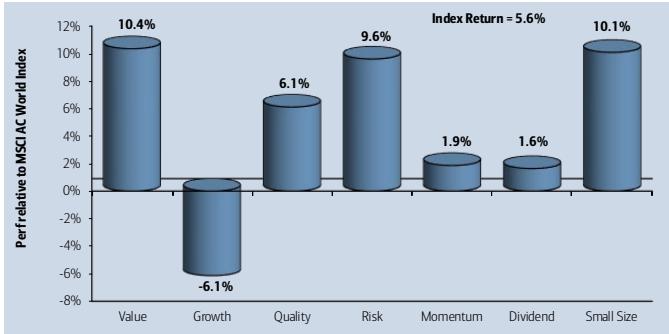
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, S&P, Bloomberg

Performance is based on our monthly-rebalanced 30-stock Quantessential Styles.

BofA GLOBAL RESEARCH

Chart 185: Quantessential Style relative performance: 2016

Value was the best performing style during 2016



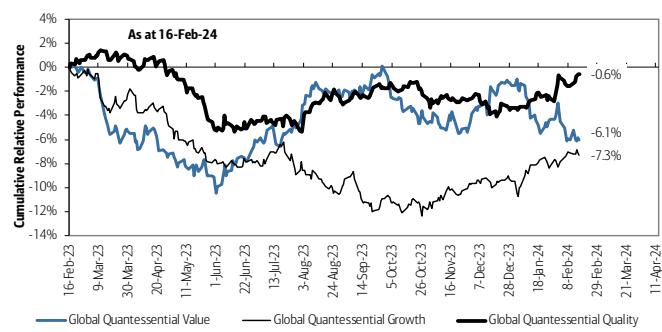
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, S&P, Bloomberg

Performance is based on our monthly-rebalanced 30-stock Quantessential Styles.

BofA GLOBAL RESEARCH

Chart 186: Quantessential Value/Growth/Quality - Cumulative Relative Perf Last 12-months

Global Quantessential Quality was the best performing style in the last 12m

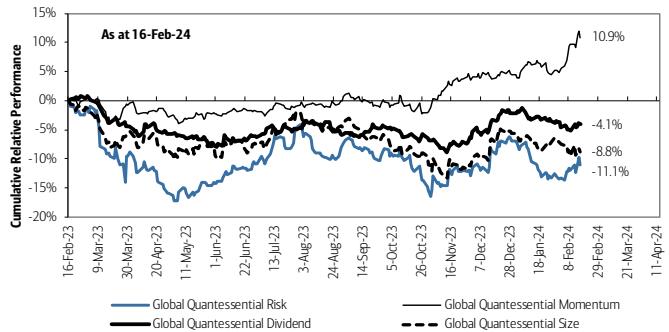


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg

BofA GLOBAL RESEARCH

Chart 187: Quantessential Risk/Mo/Dividend/Size - Cumulative Relative Perf Last 12-months

Global Quantessential Momentum was the best performing style in the last 12m



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

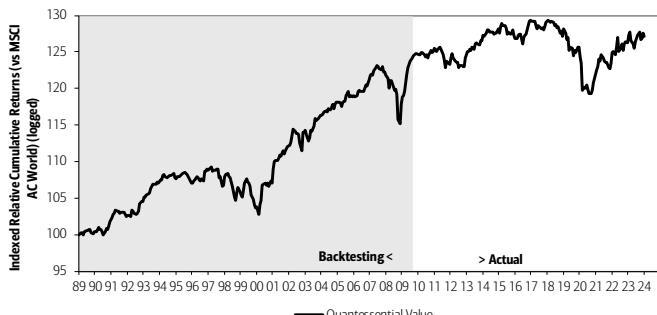
BofA GLOBAL RESEARCH



Global Quantessential Value

Chart 188: Global Quantessential Value relative cumulative performance

Value has underperformed by -1.7% in the last Year-to-Date



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Value. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 190: PE of Value (top quintile) relative to the PE of MSCI AC World Index

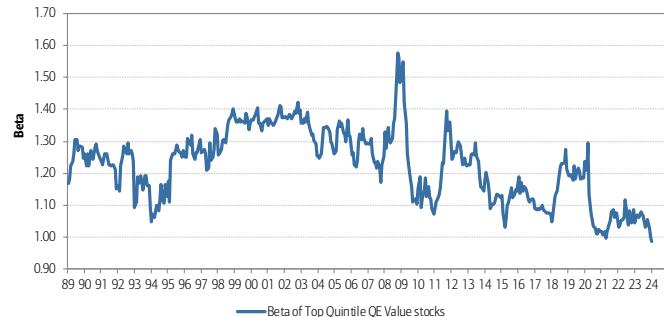
Top Quintile Value is trading at a 52% PE discount relative to the index



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

Chart 192: Median Beta of Quantessential Value (top quintile)

The beta of top quintile of stocks by value is currently 0.99



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

Chart 189: Quantessential Value: Daily Relative Cumulative Performance

In the last 2-years, Global Quantessential Value returned 7.9% relative to ACWI



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

Chart 191: Proportion of Value that is cyclical

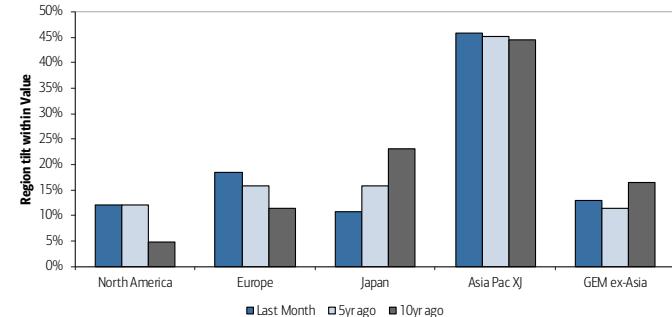
Currently 46% of Value is cyclical



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

Chart 193: Region Tilt of Value (top quintile)

Asia Pac ex Jap dominates the top quintile of stocks by Value

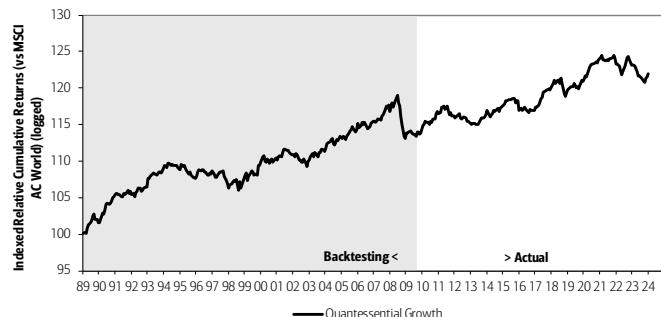


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Global Quantessential Growth

Chart 194: Global Quantessential Growth relative cumulative performance

Growth has outperformed by 1.9% in the last 6 Months

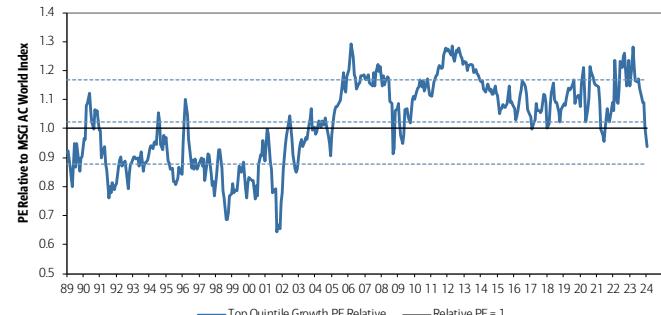


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Growth. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 196: PE of Growth (top quintile) relative to the PE of MSCI AC World Index

On a PE basis, TQ Growth is trading below the long-term average



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

Chart 198: Median Beta of Quantessential Growth (top quintile)

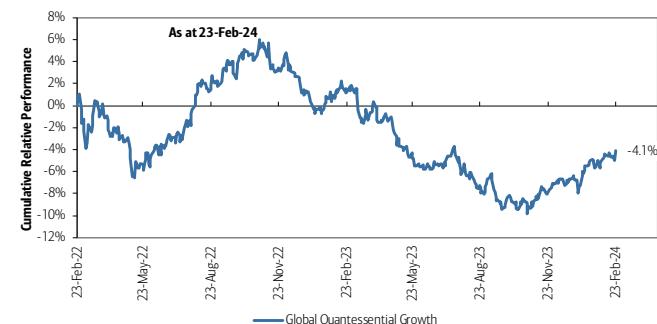
Current beta of the top quintile of stocks by Growth is 0.9



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Chart 195: Quantessential Growth: Daily Relative Cumulative Performance

In last 2-years, Global Quantessential Growth returned -4.1% relative to ACWI



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

Chart 197: Proportion of Growth that is cyclical

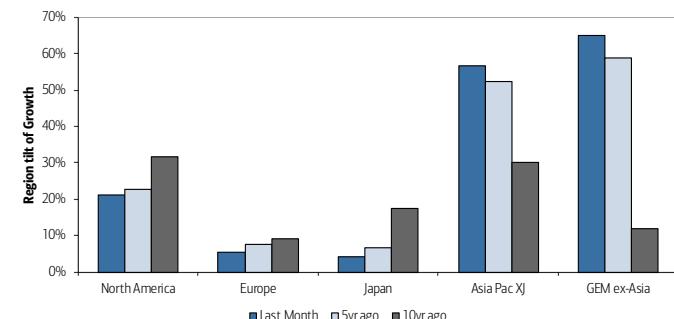
42% of stocks Growth stocks are cyclical



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Chart 199: Region Tilt of Growth (top quintile)

Last month GEM ex-Asia dominated the Growth space



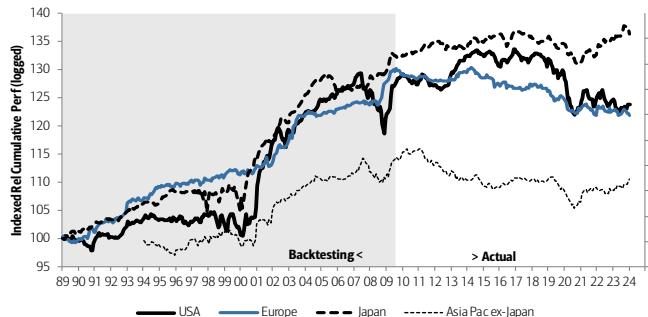
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH



Quantessential Value vs Growth by Regions

Chart 200: Quantessential Value rel cumulative perf - Since Inception

Long-term, Value returns were highest in Japan and lowest in APxJ

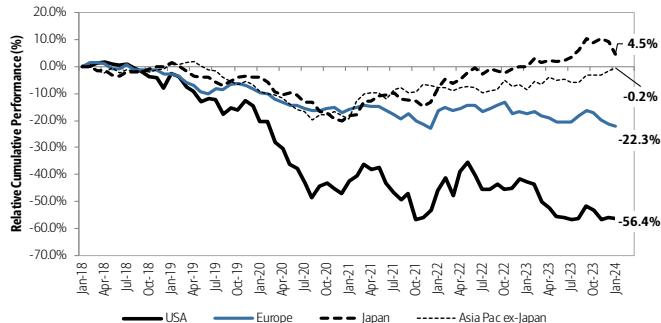


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 202: Quantessential Value rel cumulative perf - Last 6 years

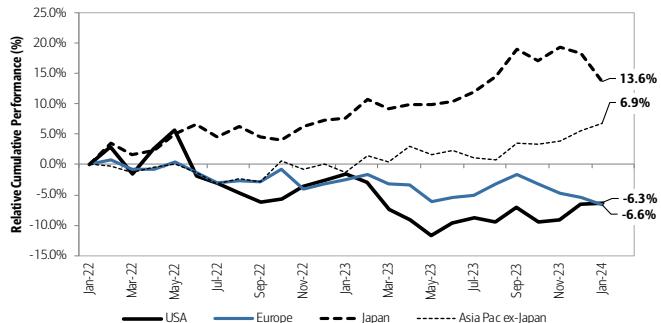
During last 6-years, best returns for Value were in Japan



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Chart 204: Quantessential Value rel cumulative perf - Last 2-years

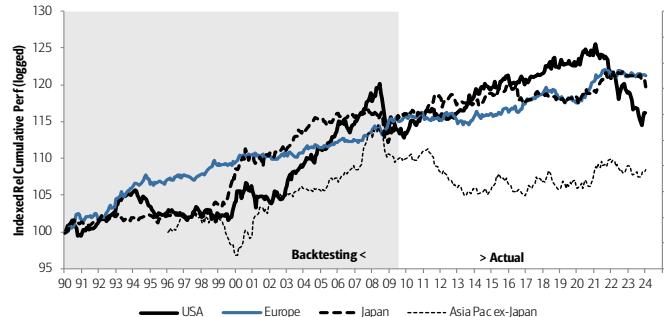
In the last 2-years, Value has performed the best in Japan



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Chart 201: Quantessential Growth rel cumulative perf - Since Inception

The best returns for Growth, since inception were in Europe

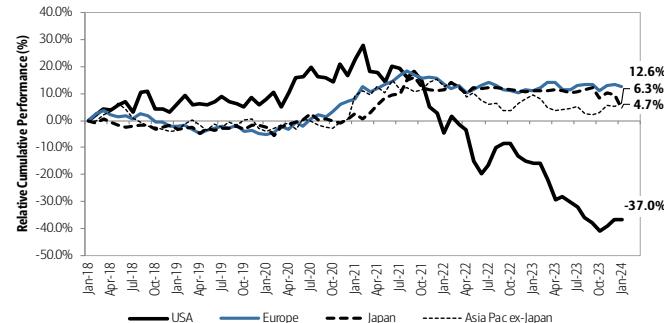


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
The shaded area shows back-tested results during the period from Jan-90 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 203: Quantessential Growth rel cumulative perf - Last 6 years

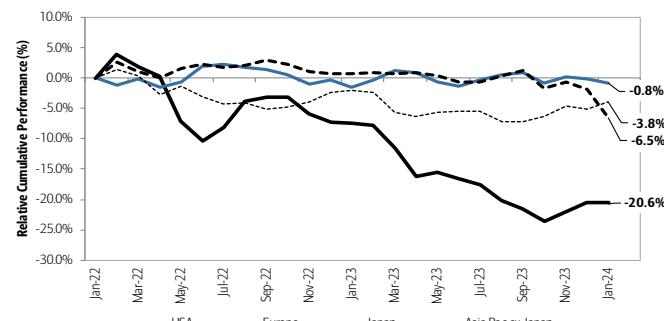
In the last 6-years, Growth has performed the best in Europe



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Chart 205: Quantessential Growth rel cumulative perf - Last 2-years

During last 2-years, best returns for Growth were in Europe

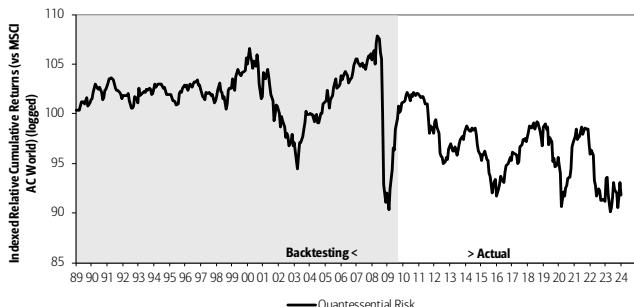


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, ExShare, Bloomberg
BofA GLOBAL RESEARCH

Global Quantessential Risk

Chart 206: Global Quantessential Risk relative cumulative performance

Risk has underperformed by -8.5% in the last 12 Months

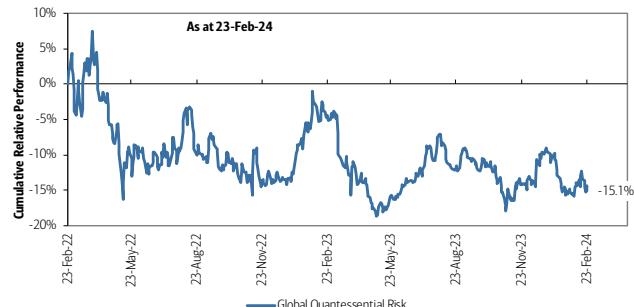


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Risk. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 208: Quantessential Risk: Daily Relative Cumulative Performance

In the last 2-years, Quantessential Risk returned -15.1% relative to ACWI



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

Chart 210: PE of Risk (top quintile) relative to the PE of MSCI AC World Index

Top Quintile Risk is trading at a 15% PE discount relative to the index

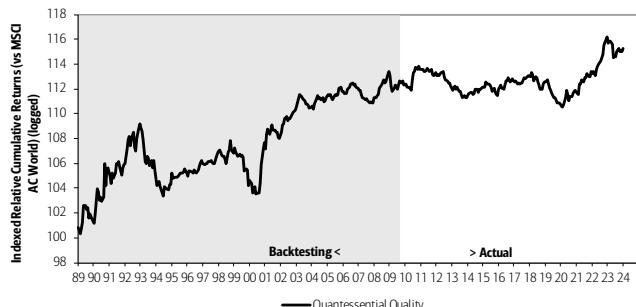


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
BofA GLOBAL RESEARCH

Global Quantessential Quality

Chart 207: Global Quantessential Quality relative cumulative performance

Quality has outperformed by 3.1% in the last 6 Months

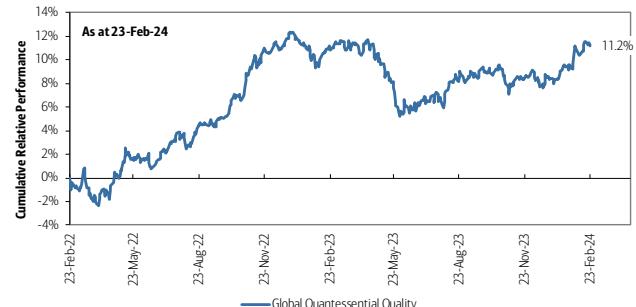


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Quality. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 209: Quantessential Quality: Daily Relative Cumulative Performance

In last 2-years, Quantessential Quality returned 11.2% relative to ACWI



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

Chart 211: PE of Quality (top quintile) relative to the PE of MSCI AC World Index

On a PE basis, TQ Quality is trading above the long-term average

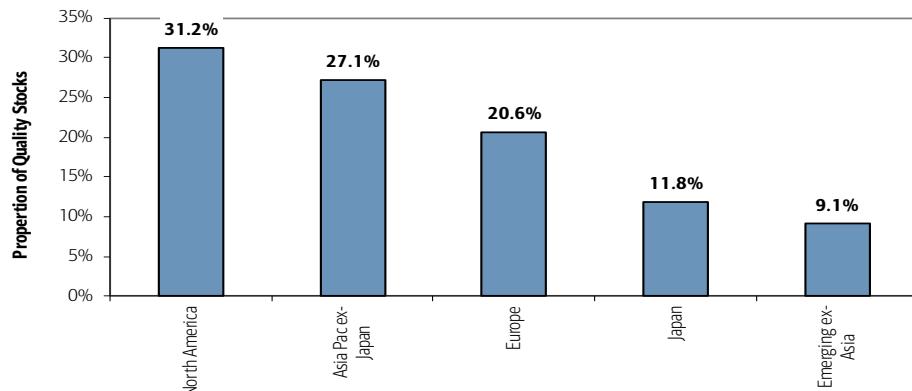


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
BofA GLOBAL RESEARCH



Chart 212: Proportion of Quantessential Quality stocks by Global Regions

North America has the highest proportion of Quality stocks

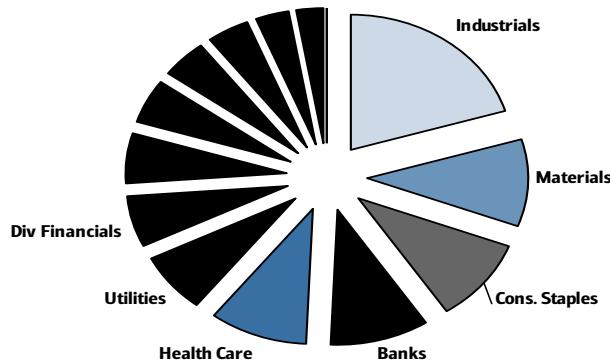


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

BofA GLOBAL RESEARCH

Chart 213: Proportion of Quantessential Quality stocks by Global Sectors

Quality (top quintile) has most exposure to Momentum, and least exposure to Small Size

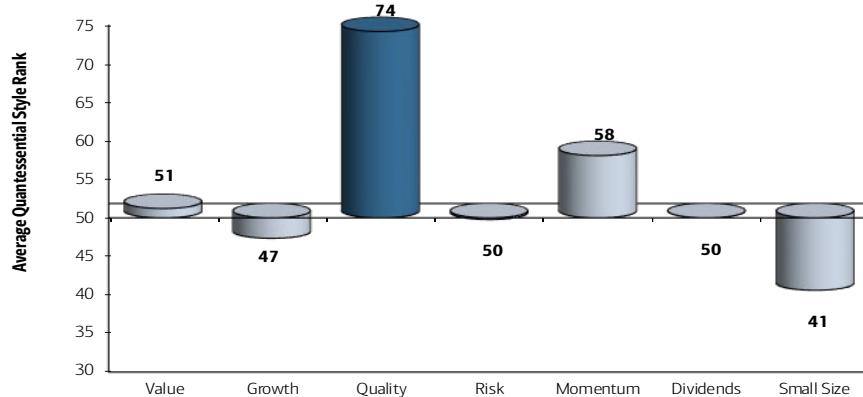


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

BofA GLOBAL RESEARCH

Chart 214: Average Style Rank (100=best, 50=median, 1=worst)

TQ Quality has Momentum tilt

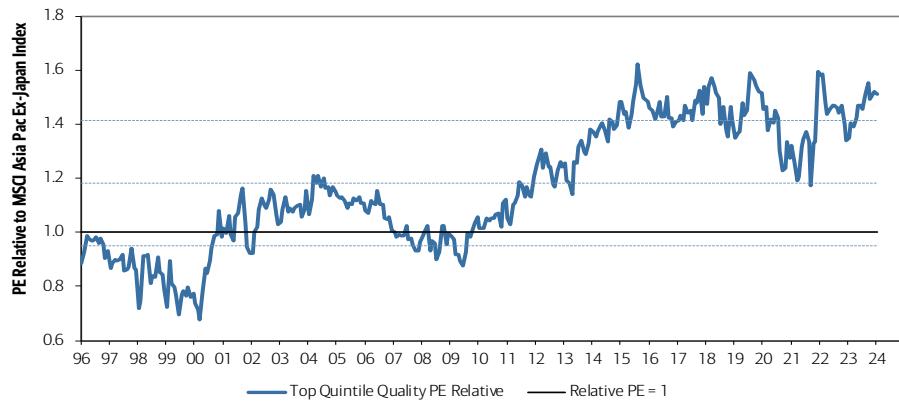


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

BofA GLOBAL RESEARCH

Chart 215: Asia Pac ex-Japan PE of Quality (top quintile) relative to the PE of MSCI AP ex-Japan Index

Current PE Relative is 1.5

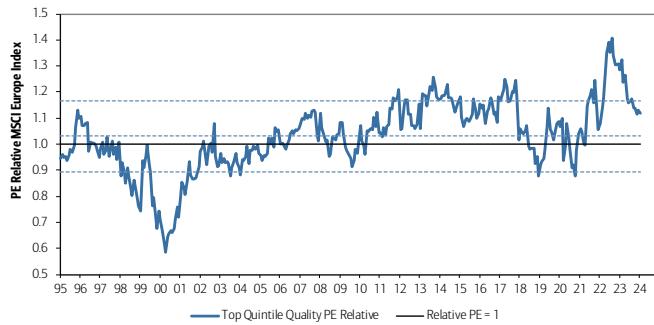


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

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Chart 216: Europe PE of Quality (top quintile) relative to the PE of MSCI Europe Index

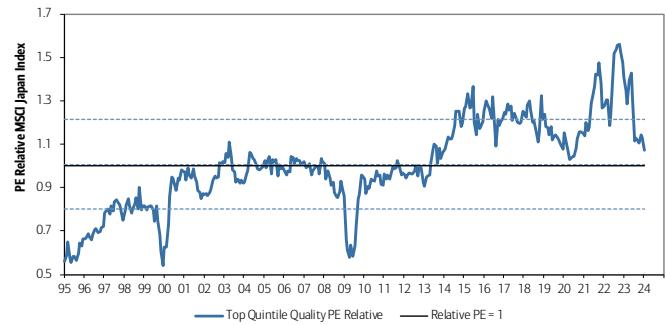
Rel PE has moderated recently



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

Chart 217: Japan PE of Quality (top quintile) relative to the PE of MSCI Japan Index

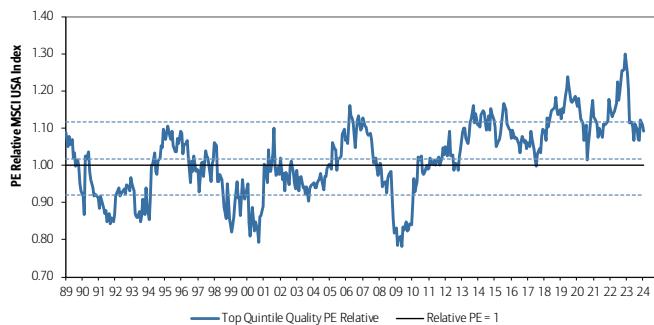
PE Rel remains above long-term average



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
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Chart 218: USA PE of Quality (top quintile) relative to the PE of MSCI USA Index

Rel PE has moderated recently



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
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Chart 219: Emerging Markets PE of Quality (top quintile) relative to the PE of MSCI Emerging Markets Index

Rel PE has moderated recently



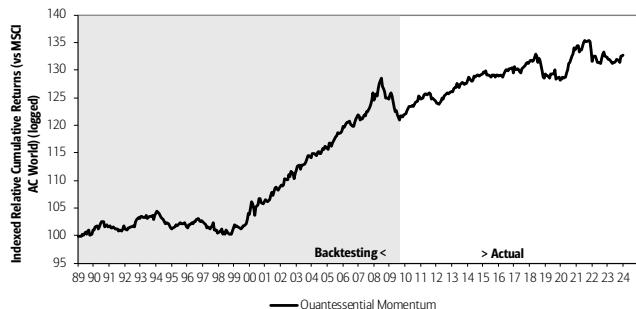
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
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Global Quantessential Momentum

Chart 220: Global Quantessential Momentum relative cumulative performance

Momentum has outperformed by 7.8% in the last 3 Months



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Momentum. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 222: Quantessential Momentum: Daily Relative Cumulative Performance

Quantessential Momentum outperformed the index in the last 2-years

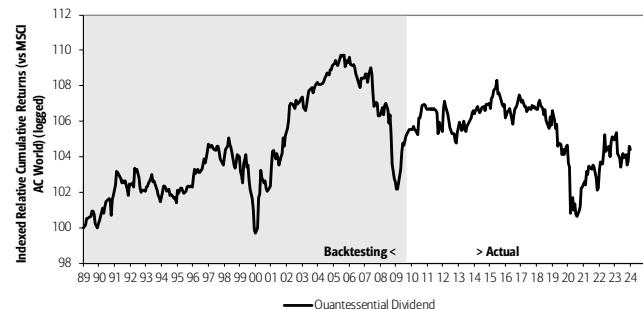


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
BofA GLOBAL RESEARCH

Global Quantessential Dividend

Chart 221: Global Quantessential Dividend relative cumulative performance

Dividend has underperformed by -4.1% in the last 12 Months

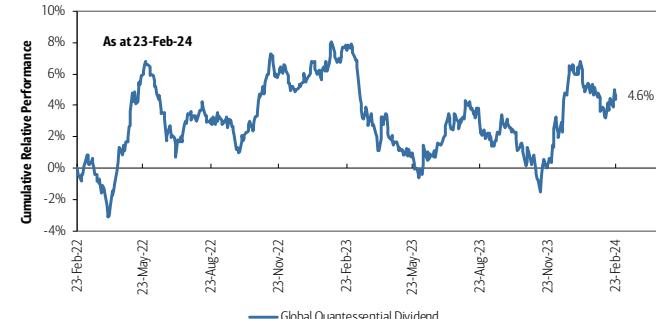


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Performance is based on our monthly-rebalanced 30-stock Quantessential Dividend. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 223: Quantessential Dividends: Daily Relative Cumulative Performance

In last 2-years, Quantessential Dividend returned 4.6% relative to ACWI



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

Chart 224: PE of Momentum (top quintile) relative to the PE of MSCI AC World Index

Top Quintile Momentum is expensive relative to the index



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

Chart 225: PE of Dividends (top quintile) relative to the PE of MSCI AC World Index

Top Quintile Dividend is trading below -1 STD on a forward PE basis

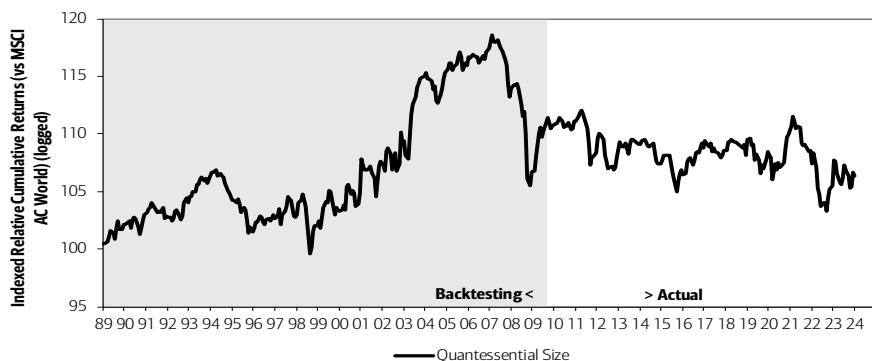


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
BofA GLOBAL RESEARCH

Global Quantessential Small Size

Chart 226: Global Quantessential Small Size relative cumulative performance

Small Size has underperformed by -1.1% in the last 1 Month



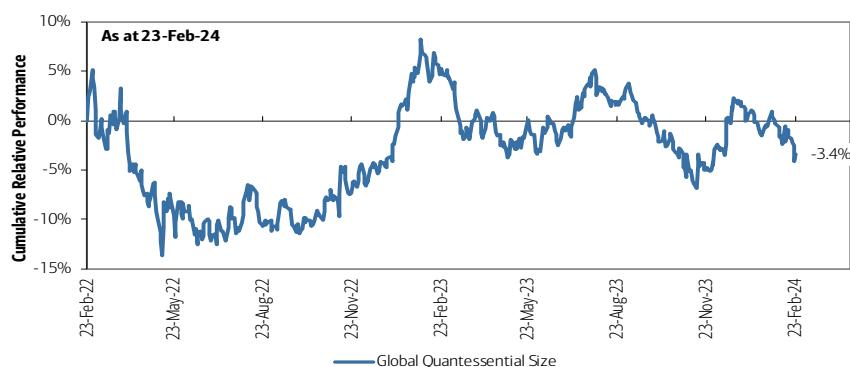
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

Performance is based on our monthly-rebalanced 30-stock Quantessential Size. The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 227: Quantessential Small Size: Daily Relative Cumulative Performance

In the last 2-years, Global Quantessential Size returned -3.4% relative to ACWI



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

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Chart 228: PE of Small Size (top quintile) relative to the PE of MSCI AC World Index

Top Quintile Size is inexpensive relative to the index



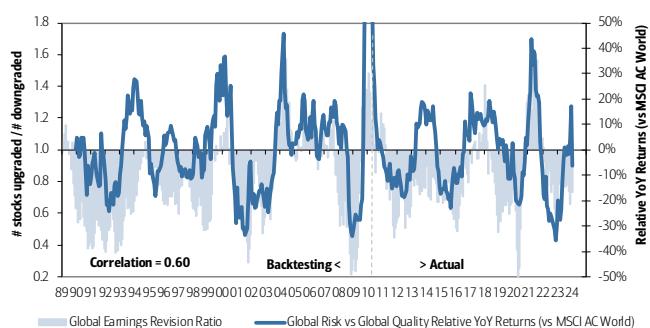
Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

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Risk Vs Quality

Chart 229: Risk vs Quality YoY perf vs Trends in Global Earnings Expectations

Risk versus Quality has a 60% correlation with trends in earnings cycle

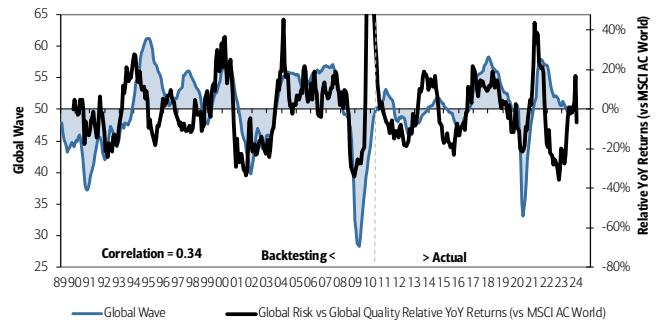


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Back-tested results are from Jan-89 to Aug-09. Actual performance is from Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. 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 230: Risk vs Quality YoY perf vs Global Wave

Quality outperforms Risk when the Global Wave is falling

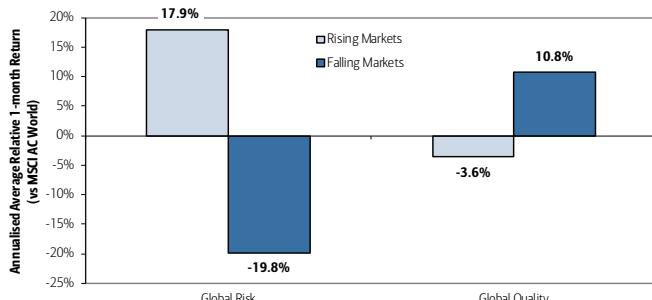


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope
Back-tested results are from Jan-89 to Aug-09. Actual performance is from Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 231: Risk outperforms in rising markets, underperforms in falling markets

Risk outperforms in rising markets, underperforms in falling markets

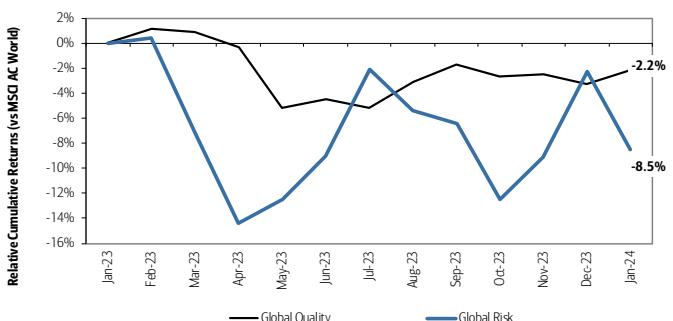


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

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Chart 232: Relative cumulative performance: Risk and Quality

Quantessential Quality outperformed Risk in the last 12-months



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

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Chart 233: PE of Risk (top quintile) vs. PE of Quality (top quintile)

Forecast PE for Top Quintile Quality is at 17.6 and Top Quintile Risk at 14.7



Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
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Chart 234: PB relative: High Quality vs High Risk

Trailing PB for Top Quintile Quality is at 4.9 and Top Quintile Risk at 2.3



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

Construction Methodology

Global Steady Compounders is a screen of stocks that have delivered consistent and superior earnings growth and performance over a ten year period. The back-testing in this analysis is from Jan-98 to May-16 and we introduced the current version of our Steady Compounders analysis in Jun-16.

For each region below, the universe of large liquid stocks included in the analysis is selected from the constituents of various indices that meet our minimum market cap, turnover and coverage requirements as specified in the table below. The regional universes are determined at the end of each month, using data and closing prices corresponding to the market's close on the last business day of each month. These minimum market cap, turnover, and number of estimate constraints were selected in order to maximise the number of large liquid stocks included in the analysis over the back-tested period (Jan-98 to May-16).

For example, for a stock to be included in the Asia Pac ex-Japan Steady Compounders analysis it must be in the largest 99% of stocks of the MSCI APxJ Index by total market cap, the largest 92% by average daily turnover in the last 6 months, and the largest 90% by average daily turnover in the last 20 days, and it must have a minimum of three IBES consensus earnings estimates. Table below shows the minimum values for each requirement as of January 2024, the most recent rebalance. This screen will be rebalanced on a monthly basis.

The universe for the Global Steady Compounders is the union of the five regional universes. The Global Steady Compounders are not simply a combined list of the regional Steady Compounders, but are determined from the combined universe of stocks from all the regions.

Table 19: Universe specification for inclusion in regional Steady Compounders analysis

Min. market cap and turnover requirements by region for inclusion in Steady Compounders

	\$US m (minimum)			% Percentile (top x% of stocks)			Min	# Stocks @ Jan-24	Indices Used
	TMCAP	ADTV 6m	ADTV 20d	TMCAP	ADTV 6m	ADTV 20d			
USA	610	3.5	3.7	50%	50%	50%	3	1972	MSCI, S&P 500, Nasdaq, Russell 3000
Europe	5360	7.1	6.2	60%	60%	60%	3	371	MSCI, Stoxx, FTSE All World Europe, FTSE All Share
Japan	421	1.2	1.2	40%	40%	40%	3	593	MSCI, Topix, Jasdaq
Asia Pac ex Japan	324	0.6	0.6	99%	92%	90%	3	1279	MSCI, Individual Country Exchanges
GEM	678	0.7	0.7	70%	70%	70%	3	2218	MSCI GEM IMI

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Stocks in the firm's restricted list are not included in this analysis.

For each eligible security, our monthly analysis determines the Global Steady Compounds as stocks with all of the following characteristics:

Above median earnings growth: where earnings growth is defined as the slope of the log-linear regression line using the preceding ten years of a monthly rolling twelve month forward IBES consensus EPS estimates.

Low volatility of earnings growth: defined as below median year-on-year change in ten years of a monthly rolling twelve month forward IBES consensus EPS estimate.

Above median two-year EPS growth forecasts: using FY2 IBES consensus EPS estimate divided by last reported EPS shown as a percentage

Above median performance: using monthly rolling twelve month returns in USD over the preceding ten year period.

Above-median revisions: using IBES consensus EPS estimates over the preceding three months

The Global Steady Compounds are determined using data and closing prices corresponding to the market's close on the last business day of each month from MSCI, IBES, Worldscope, Exshare, S&P, and Bloomberg databases.

We expect to publish the new Global Steady Compounds screen each month.

We show Momentum and Value charts for the 9 most expensive (by PE) and 9 least expensive stocks from Global Steady Compounds list, where available.

The Global Steady Compounds list act as stock screens and not as recommended stock portfolios. The Steady Compounder screens 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 screen referenced in this report 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. The screen referenced in this report was not created to act as a benchmark.

Performance Calculation Methodology

Refer to appendix "[Steady Compounds Performance](#)" for a detailed performance data and advance decline statistics.

Rebalancing and performance calculations are conducted each month, using data and closing prices corresponding to the relevant market's close on the last business day of each month. The performance of Global Steady Compounds list is computed on the basis of price return in USD. The performance is presented relative to the market capitalization-weighted MSCI AC World Index.

The 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.

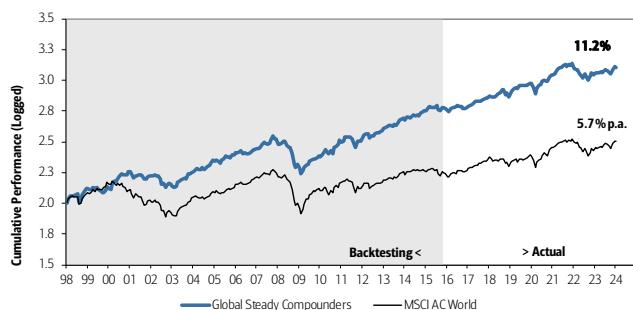
Past performance should not and cannot be viewed as an indicator of future performance.

A complete performance record is available upon request.



Chart 235: Global Steady Compounders Long-term cumulative returns

Steady Compounders have returned 11.2% p.a. since inception



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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.

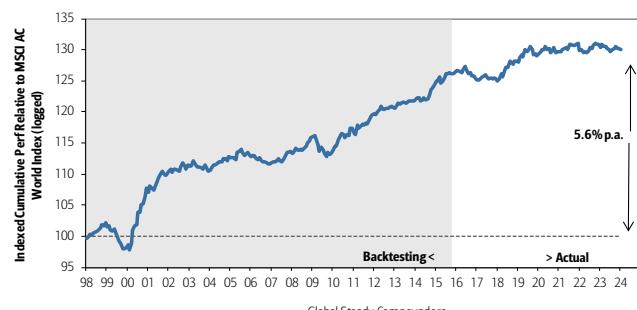
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Chart 236: Global Steady Compounders Long-term relative cumulative returns

Steady Compounders have outperformed MSCI ACWI by 5.6% on avg

Chart 236: Global Steady Compounders Long-term relative cumulative returns

Steady Compounders have outperformed MSCI ACWI by 5.6% on avg



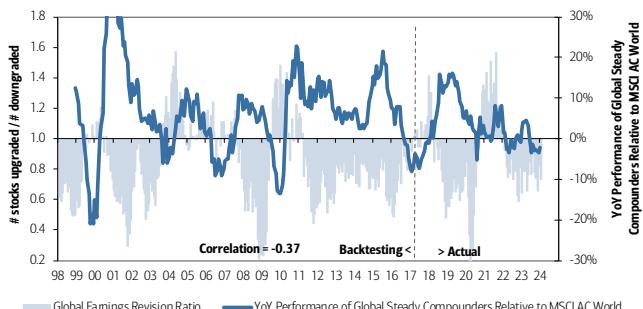
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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 237: Global Steady Compounders: YoY relative returns and Trend in Earnings Expectations

YoY Global Steady Compounders have underperformed by -2.1%



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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.

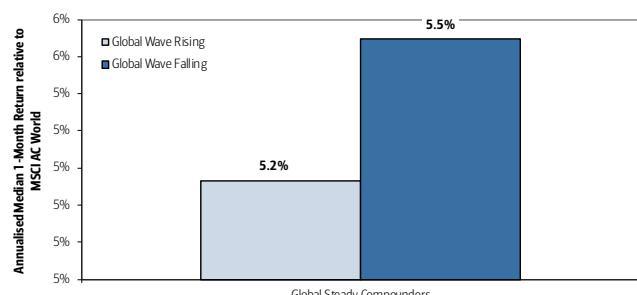
BofA GLOBAL RESEARCH

Chart 238: Global Steady Compounders: Annualized Relative Performance (since inception) vs Global Wave

YoY Global Steady Compounders have underperformed by -2.1%

Chart 238: Global Steady Compounders: Annualized Relative Performance (since inception) vs Global Wave

Global Steady Compounders outperform irrespective of the direction of the cycle

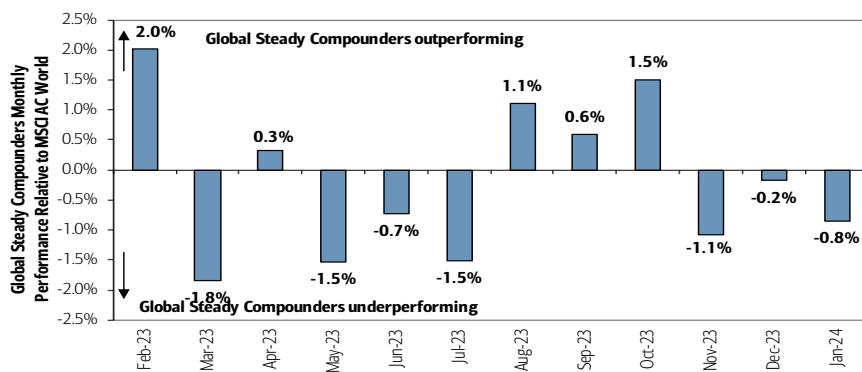


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 239: Global Steady Compounders: Relative Performance last 12 months

YoY Global Steady Compounders have underperformed by -2.1%



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 240: Global Steady Compounds: ROE Level

ROE of Global Steady Compounds is 15% vs Index ROE of 13%



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Chart 241: Global Steady Compounds: Median PE

Median PE of Steady Compounds is 23.1 vs Index PE of 17.4



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Chart 242: Global Steady Compounds: PEG Ratio

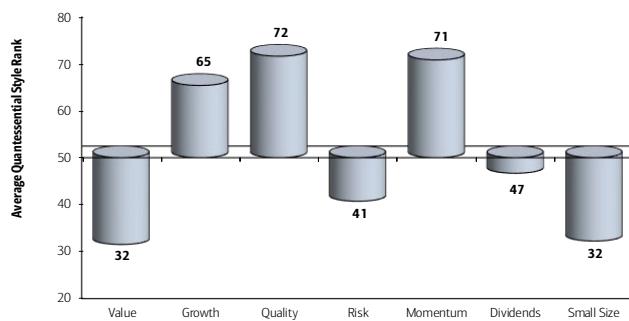
PEG of Global Steady Compounds is 189% vs Index PEG of 175%



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Chart 243: Global Steady Compounds: Style Tilt

Steady Compounds have exposure to Quality and Momentum



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 20: Global Steady Compounds: Average Characteristics

Steady Compounds & MSCI ACWI median factor characteristics

Factors	Average	MSCI AC World
EV/EBITDA	22.20	12.38
P/FCF	29.43	18.90
P/S (Trailing)	3.81	1.95
PB (Trailing)	6.11	2.08
PE (Forecast)	24.08	14.94
PEG Ratio	1.89	1.75
EPS FY2/Reportd	32.7%	22.0%
EPS Revisions	4.4%	1.7%
Trend Growth 7yr	12.3%	5.7%
FCF to Equity	15.4%	9.9%
Quality Rank	79	49
ROE	15.42	12.65
Profit Margins	0.11	0.10
Asset Turnover	0.58	0.53
Operating Leverage	2.23	2.41
Beta 60m	0.90	0.91
EPS Vol 3yr	6.4%	13.9%
Price Vol 1yr	7.5%	9.9%
Trend Price 12m	19.6%	-2.6%
Div Growth 5yr	11.0%	13.0%
Div Payout 5yr	31.3%	35.1%
Div Yield (Reported)	1.1%	2.5%
Market Cap (Total)	19,479	10,490
Turnover / Mcap 6m	1.07	0.94

Source: BofA Global Quantitative Strategy

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Table 21: Global Steady Compounds

Global Steady Compounds screen sorted by country and sector

BBG Code	Company Name	Country	Sector	PE
CWY AU	Cleanaway Waste Mgmt	Australia	Industrials	29.2
REA AU	REA Group	Australia	Media & Ent.	47.5
TNE AU	Technology One	Australia	Software	42.1
600612 CH	Lao Feng Xiang-A	China	Cons. Discretionary	12.1
600085 CH	Beijing Tongrentang-A	China	Health Care	27.8
002138 CH	Shenzhen Sunlo-A	China	Tech Hardware	17.9
600323 CH	Grandblue Env.-A	China	Utilities	7.3
NOVOB DC	Novo Nordisk	Denmark	Health Care	33.9
MTX GR	MTU Aero Engines	Germany	Industrials	17.2
HNR1 GR	Hannover Rueck	Germany	Insurance	12.3
KMB IN	Kotak Mahindra	India	Banks	25.6
BRGR IN	Berger Paints	India	Materials	47.6
PIDI IN	Pidilite Indus	India	Materials	60.2
UTCEM IN	Ultratech Cement	India	Materials	32.0
REC IM	Recordati Industria	Italy	Health Care	20.8
2801 JP	Kikkoman Corp	Japan	Cons. Staples	31.7
4527 JP	Rohto Pharmaceutical	Japan	Cons. Staples	20.7
8279 JP	Yaoko Co	Japan	Cons. Staples	16.2
1969 JP	Takasago Thermal Engg	Japan	Industrials	14.3
4091 JP	Taiyo Nippon Sanso	Japan	Materials	16.2
8056 JP	BIPROGY	Japan	Software	17.4
4684 JP	OBIC	Japan	Software	32.4
CLS SJ	Clicks Group	South Africa	Cons. Staples	24.1
2330 TT	TSMC	Taiwan	Semiconductors	16.3
3044 TT	Tripod Technology	Taiwan	Tech Hardware	11.9
LIN US	Linde	United Kingdom	Materials	26.0
AZO US	AutoZone	United States	Cons. Discretionary	17.7
DPZ US	Domino's Pizza	United States	Cons. Discretionary	26.8
GNTX US	Gentex Corp	United States	Cons. Discretionary	15.1
MCD US	McDonald's	United States	Cons. Discretionary	23.2
ORLY US	O'Reilly Automotive	United States	Cons. Discretionary	23.7
ROST US	Ross Stores	United States	Cons. Discretionary	24.1
SBUX US	Starbucks	United States	Cons. Discretionary	21.4
WEN US	Wendy's Co	United States	Cons. Discretionary	17.0
STZ US	Constellation Brands	United States	Cons. Staples	18.4
MNST US	Monster Beverage	United States	Cons. Staples	29.9
AXP US	American Express	United States	Div Financials	16.0
AMP US	Ameriprise Financial	United States	Div Financials	11.4
EEFT US	Euronet Worldwide	United States	Div Financials	11.9
FI US	Fiserv	United States	Div Financials	16.3
MA US	Mastercard	United States	Div Financials	31.1
MSCI US	MSCI	United States	Div Financials	40.1
SPGI US	S&P Global	United States	Div Financials	30.7
V US	Visa	United States	Div Financials	26.5
BSX US	Boston Scientific	United States	Health Care	27.9
CNMD US	Conmed	United States	Health Care	21.2
ELV US	Elevance Health	United States	Health Care	13.2
LLY US	Eli Lilly	United States	Health Care	50.3
GMED US	Globus Medical	United States	Health Care	19.2
RMD US	Resmed	United States	Health Care	24.9

Source: BofA Global Quantitative Strategy This screen is 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.

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Table 22: Global Steady Compounds (Continued...)

Global Steady Compounds screen sorted by country and sector

BB Code	Company Name	Country	Sector	PE
SYK US	Stryker	United States	Health Care	28.8
UNH US	UnitedHealth	United States	Health Care	18.2
ZTS US	Zoetis	United States	Health Care	30.8
AOS US	A.O. Smith	United States	Industrials	19.1
BAH US	Booz Allen Hamilton	United States	Industrials	25.5
CTAS US	Cintas	United States	Industrials	38.7
CW US	Curtiss-Wright	United States	Industrials	22.0
ETN US	Eaton	United States	Industrials	24.3
EXLS US	Exlservice Hldgs	United States	Industrials	19.1
FSS US	Fed Signal	United States	Industrials	26.2
HEI US	Heico	United States	Industrials	49.6
HUBB US	Hubbell	United States	Industrials	20.4
ITT US	ITT Inc	United States	Industrials	20.3
LII US	Lennox Int'l	United States	Industrials	21.4
MSA US	MSA Safety	United States	Industrials	22.2
NDSN US	Nordson	United States	Industrials	24.0
RBC US	RBC Bearings	United States	Industrials	28.3
TT US	Trane Tech	United States	Industrials	25.0
VRSK US	Verisk Analytics	United States	Industrials	36.2
GWW US	W.W. Grainger	United States	Industrials	23.0
AJG US	Gallagher Arthur	United States	Insurance	22.5
AIZ US	Assurant Inc	United States	Insurance	11.5
CINF US	Cincinnati Financial	United States	Insurance	17.8
EG US	Everest Group	United States	Insurance	6.3
GL US	Globe Life	United States	Insurance	10.7
HIG US	Hartford Fin.	United States	Insurance	8.8
MMC US	Marsh & McLennan	United States	Insurance	22.2
PRI US	Primerica Inc	United States	Insurance	13.0
PGR US	Progressive	United States	Insurance	21.3
SIGI US	Selective Insurance	United States	Insurance	13.4
APD US	Air Products	United States	Materials	19.1
MLM US	Martin Marietta	United States	Materials	24.0
KWR US	Quaker Chemical	United States	Materials	21.2
RPM US	RPM	United States	Materials	19.8
AMT US	American Tower	United States	Real Estate	40.2
EQIX US	Equinix	United States	Real Estate	75.0
AVGO US	Broadcom	United States	Semiconductors	24.2
BLKB US	Blackbaud	United States	Software	17.5
CDNS US	Cadence	United States	Software	48.4
FICO US	Fair Isaac	United States	Software	47.0
INTU US	Intuit	United States	Software	35.9
PTC US	PTC Inc	United States	Software	34.2
ROP US	Roper Tech	United States	Software	29.0
CRM US	Salesforce	United States	Software	29.5
SNPS US	Synopsys	United States	Software	38.2
VRSN US	VeriSign	United States	Software	24.2
BMI US	Badger Meter	United States	Tech Hardware	41.1
CWT US	California Water	United States	Utilities	19.0

Source: BofA Global Quantitative Strategy

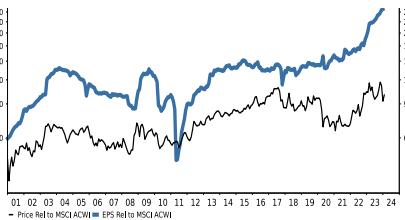
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Nine Least Expensive Global Steady Compounders

Chart 244: Everest Group - Momentum & Value

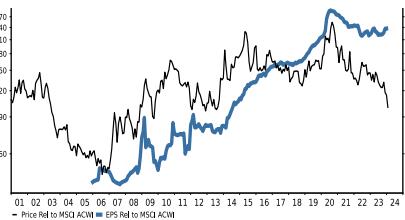
Everest Group has outperformed in the last 6 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 245: Grandblue Env.-A - Momentum & Value

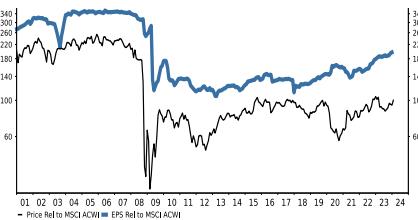
Relative EPS trend for Grandblue Env.-A has improved in the last 3 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 246: Hartford Fin. - Momentum & Value

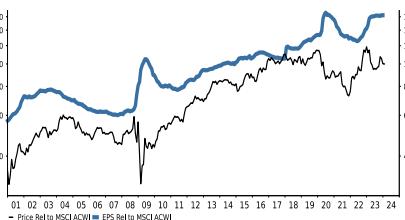
Hartford Fin. has outperformed in the last 3 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 247: Globe Life - Momentum & Value

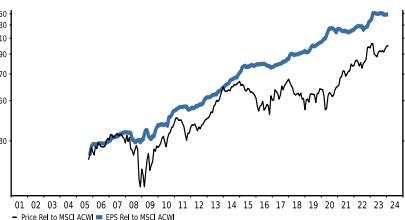
Globe Life has underperformed in the last 12 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 248: Ameriprise Financial - Momentum & Value

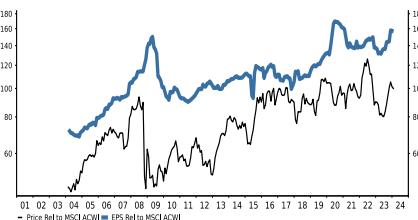
Relative EPS trend for Ameriprise Financial has improved in the last 3 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 249: Assurant Inc - Momentum & Value

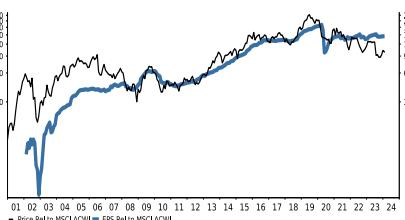
Assurant Inc has outperformed in the last 12 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 250: Euronet Worldwide - Momentum & Value

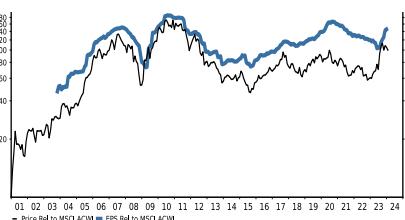
Euronet Worldwide has underperformed in the last 12 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 251: Tripod Technology - Momentum & Value

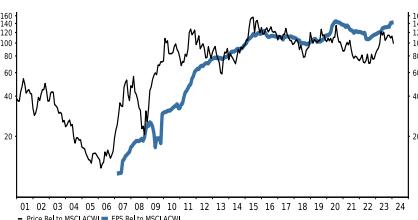
Tripod Technology has underperformed in the last 3 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 252: Lao Feng Xiang-A - Momentum & Value

Lao Feng Xiang-A has underperformed in the last 3 months



Source: BofA Global Quantitative Strategy, MSCI, IBES
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Nine Most Expensive Global Steady Compounds

Chart 253: Equinix - Momentum & Value

Equinix has underperformed in the last 12 months

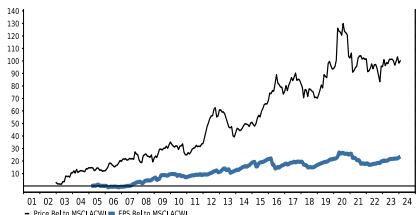


Chart 254: Pidilite Indus - Momentum & Value

Pidilite Indus has underperformed in the last 3 months

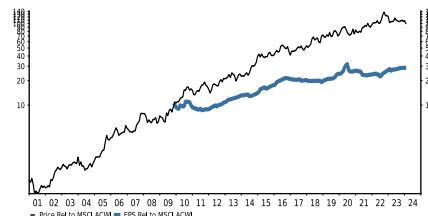


Chart 255: Eli Lilly - Momentum & Value

Relative EPS trend for Eli Lilly has improved in the last 6 months

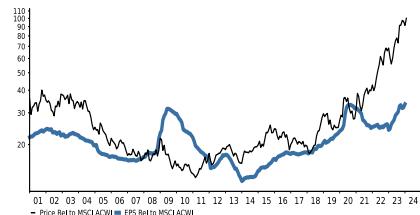


Chart 256: Heico - Momentum & Value

Relative EPS trend for Heico has improved in the last 6 months

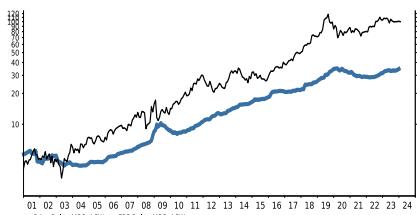


Chart 257: Cadence - Momentum & Value

Cadence has outperformed in the last 12 months

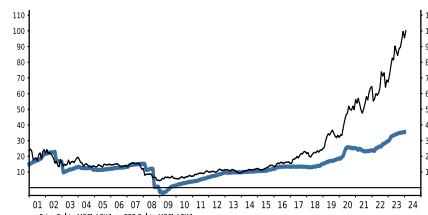


Chart 258: Berger Paints - Momentum & Value

Berger Paints has outperformed in the last 12 months

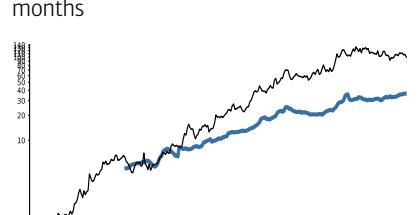


Chart 259: REA Group - Momentum & Value

Relative EPS trend for REA Group has improved in the last 6 months

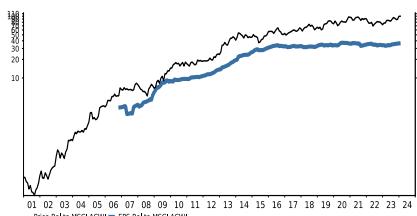


Chart 260: Fair Isaac - Momentum & Value

Fair Isaac has outperformed in the last 12 months

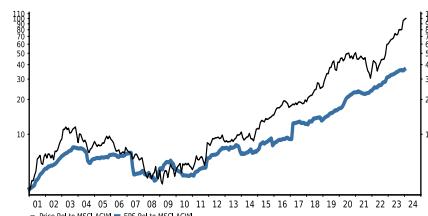
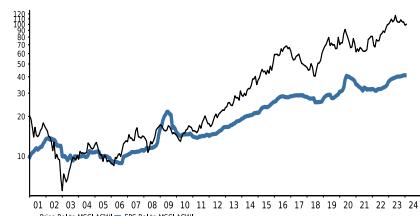


Chart 261: Technology One - Momentum & Value

Relative EPS trend for Technology One has improved in the last 6 months

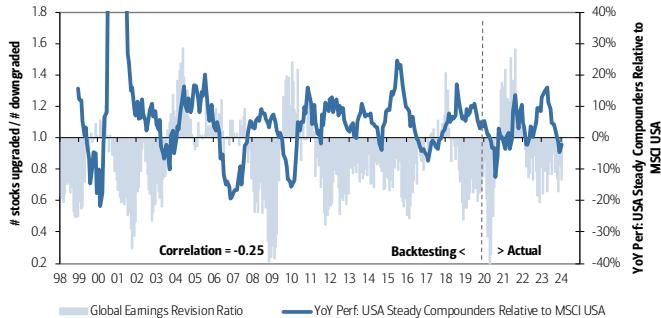


Regional Steady Compounds

USA Steady Compounds

Chart 262: USA Steady Compounds: YoY relative returns and Trend in Earnings Expectations

YoY USA Steady Compounds have underperformed by -2.1%



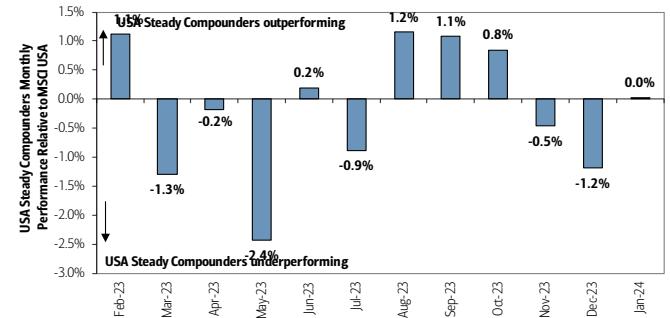
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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 263: USA Steady Compounds: Relative Performance last 12 months

USA Steady Compounds has mixed performance in the last 6 months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 23: USA Steady Compounds

USA Steady Compounds screen sorted by sector

BB Code	Company Name	Country	Sector	PE
LIN US	Linde	United Kingdom	Materials	26.0
AZO US	AutoZone	United States	Cons. Discretionary	17.7
DPZ US	Domino's Pizza	United States	Cons. Discretionary	26.8
ORLY US	O'Reilly Automotive	United States	Cons. Discretionary	23.7
ROST US	Ross Stores	United States	Cons. Discretionary	24.1
SBUX US	Starbucks	United States	Cons. Discretionary	21.4
WEN US	Wendy's Co	United States	Cons. Discretionary	17.0
CASY US	Casey's Stores	United States	Cons. Staples	20.1
STZ US	Constellation Brands	United States	Cons. Staples	18.4
COST US	Costco	United States	Cons. Staples	42.6
MNST US	Monster Beverage	United States	Cons. Staples	29.9
AMP US	Ameriprise Financial	United States	Div Financials	11.4
CBOE US	CBOE	United States	Div Financials	22.0
EEFT US	Euronet Worldwide	United States	Div Financials	11.9
FLT US	FleetCor Tech	United States	Div Financials	14.8
MA US	Mastercard	United States	Div Financials	31.1
MSCI US	MSCI	United States	Div Financials	40.1
SPGI US	S&P Global	United States	Div Financials	30.7
V US	Visa	United States	Div Financials	26.5
BSX US	Boston Scientific	United States	Health Care	27.9
CI US	Cigna	United States	Health Care	10.5
CNMD US	Conmed	United States	Health Care	21.2
ELV US	Elevance Health	United States	Health Care	13.2
LLY US	Eli Lilly	United States	Health Care	50.3
GMED US	Globus Medical	United States	Health Care	19.2
MCK US	McKesson	United States	Health Care	16.5
RMD US	Resmed	United States	Health Care	24.9
SYK US	Stryker	United States	Health Care	28.8
UNH US	UnitedHealth	United States	Health Care	18.2
ZTS US	Zoetis	United States	Health Care	30.8
AOS US	A.O. Smith	United States	Industrials	19.1
AME US	Ametek	United States	Industrials	23.5
BAH US	Buzz Allen Hamilton	United States	Industrials	25.5
BR US	Broadridge Fin.	United States	Industrials	24.9
CACI US	CACI Intl	United States	Industrials	16.0
CTAS US	Cintas	United States	Industrials	38.7
CW US	Curtiss-Wright	United States	Industrials	22.0
EXLS US	Exservice Hldgs	United States	Industrials	19.1
FSS US	Fed Signal	United States	Industrials	26.2
FCN US	FTI Consulting	United States	Industrials	22.9
HUBB US	Hubbell	United States	Industrials	20.4
ITT US	ITT Inc	United States	Industrials	20.3
LII US	Lennox Int'l	United States	Industrials	21.4
MSA US	MSA Safety	United States	Industrials	22.2
NDSN US	Nordson	United States	Industrials	24.0
PH US	Parker-Hannifin	United States	Industrials	18.9
RBC US	RBC Bearings	United States	Industrials	28.3
RSG US	Republic Services	United States	Industrials	28.5
TT US	Trane Tech	United States	Industrials	25.0
VRSK US	Verisk Analytics	United States	Industrials	36.2
GWW US	W.W. Grainger	United States	Industrials	23.0
WM US	Waste Mgt	United States	Industrials	27.2
WTS US	Watts Water	United States	Industrials	23.4

Source: BofA Global Quantitative Strategy

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Table 24: USA Steady Compounds: Average Characteristics

Steady Compounds & MSCI ACWI median factor characteristics

Factors	Average	MSCI USA
EV/EBITDA	22.26	16.48
P/FCF	29.32	23.24
P/S (Trailing)	4.09	2.94
PB (Trailing)	7.27	4.04
PE (Forecast)	24.86	18.73
PEG Ratio	2.01	2.08
EPS FY2/Reportd	28.3%	16.9%
EPS Revisions	3.9%	2.3%
Trend Growth 7yr	13.7%	8.3%
FCF to Equity	17.6%	14.8%
Quality Rank	80	67
ROE	18.35	15.56
Profit Margins	0.11	0.11
Asset Turnover	0.63	0.54
Operating Leverage	2.11	2.59
Beta 60m	0.92	1.10
EPS Vol 3yr	5.9%	12.5%
Price Vol 1yr	7.5%	9.5%
Trend Price 12m	23.1%	5.8%
Div Growth 5yr	12.6%	10.0%
Div Payout 5yr	24.9%	26.0%
Div Yield (Reported)	1.0%	2.1%
Market Cap (Total)	42,241	26,922
Turnover / Mcap 6m	1.13	1.63

Source: BofA Global Quantitative Strategy

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Table 25: USA Steady Compounders (cont.)

USA Steady Compounders screen sorted by sector

BB Code	Company Name	Country	Sector	PE
AON US	Aon	United States	Insurance	18.2
AIG US	Gallagher Arthur	United States	Insurance	22.5
MMC US	Marsh & McLennan	United States	Insurance	22.2
PRI US	Primerica Inc	United States	Insurance	13.0
PGR US	Progressive	United States	Insurance	21.3
RLI US	RLI	United States	Insurance	24.9
SIGI US	Selective Insurance	United States	Insurance	13.4
MLM US	Martin Marietta	United States	Materials	24.0
EA US	Electronic Arts	United States	Media & Ent.	17.9
NYT US	New York Times	United States	Media & Ent.	29.8
EQIX US	Equinix	United States	Real Estate	75.0
ACN US	Accenture	United States	Software	28.4
CDNS US	Cadence	United States	Software	48.4
FICO US	Fair Isaac	United States	Software	47.0
INTU US	Intuit	United States	Software	35.9
PTC US	PTC Inc	United States	Software	34.2
ROP US	Roper Tech	United States	Software	29.0
CRM US	Salesforce	United States	Software	29.5
SNPS US	Synopsys	United States	Software	38.2
TYL US	Tyler Tech	United States	Software	47.5
VRSN US	VeriSign	United States	Software	24.2
BMI US	Badger Meter	United States	Tech Hardware	41.1
MSI US	Motorola	United States	Tech Hardware	25.0

Source: BofA Global Quantitative Strategy

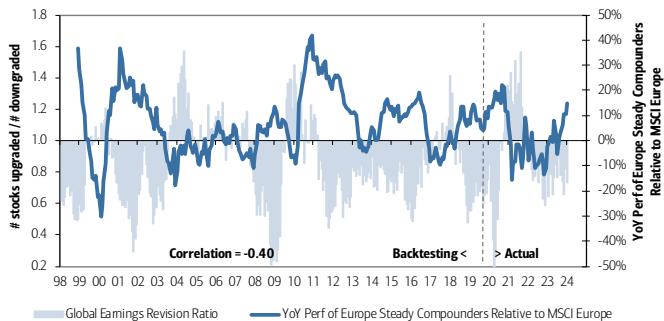
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Europe Steady Compounds

Chart 264: EUROPE Steady Compounds: YoY relative returns and Trend in Earnings Expectations

YoY Europe Steady Compounds have outperformed by 14.8%



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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 26: EUROPE Steady Compounds

Europe Steady Compounds screen sorted by sector

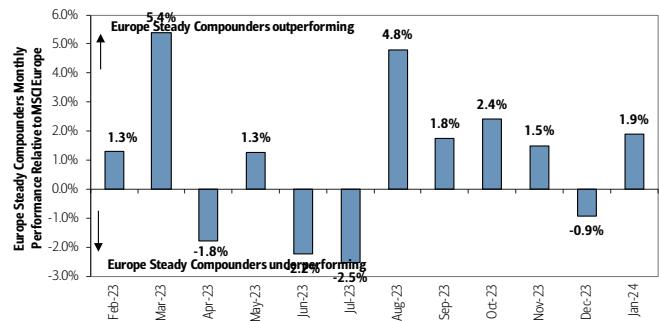
BB Code	Company Name	Country	Sector	PE
NOVOB DC	Novo Nordisk	Denmark	Health Care	33.9
OR FP	L'Oreal	France	Cons. Staples	33.6
EDEN FP	Edenred	France	Div Financials	23.6
SU FP	Schneider Electric	France	Industrials	21.6
DG FP	Vinci	France	Industrials	13.3
DB1 GR	Deutsche Boerse	Germany	Div Financials	18.2
HNR1 GR	Hannover Rueck	Germany	Insurance	12.3
MUV2 GR	MunichRe	Germany	Insurance	10.0
REC IM	Recordati Industria	Italy	Health Care	20.8
PRY IM	Prysmian	Italy	Industrials	15.2
WKL NA	Wolters Kluwer	Netherlands	Industrials	28.3
IBE SM	Iberdrola	Spain	Utilities	14.6
REL LN	RELX	United Kingdom	Industrials	26.4

Source: BofA Global Quantitative Strategy

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Chart 265: EUROPE Steady Compounds: Relative Performance last 12 months

Steady Compounds have outperformed by 1.9% last month



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 27: EUROPE Steady Compounds: Average Characteristics

Steady Compounds & MSCI ACWI median factor characteristics

Factors	Average	MSCI Europe
EV/EBITDA	17.65	11.40
P/FCF	23.41	18.25
P/S (Trailing)	5.43	1.75
PB (Trailing)	4.09	2.18
PE (Forecast)	20.77	14.98
PEG Ratio	2.04	1.78
EPS FY2/Reportd	24.0%	14.0%
EPS Revisions	2.1%	0.7%
Trend Growth 7yr	10.2%	4.3%
FCF to Equity	23.0%	11.7%
Quality Rank	64	43
ROE	18.25	13.47
Profit Margins	0.15	0.10
Asset Turnover	0.55	0.55
Operating Leverage	3.59	2.76
Beta 60m	0.83	1.15
EPS Vol 3yr	5.6%	13.1%
Price Vol 1yr	7.2%	8.8%
Trend Price 12m	14.6%	1.3%
Div. Growth 5yr	9.4%	12.3%
Div. Payout 5yr	48.4%	43.4%
Div. Yield (Reported)	1.8%	3.0%
Market Cap (Total)	58,436	14,972
Turnover / Mcap 6m	0.30	0.42

Source: BofA Global Quantitative Strategy

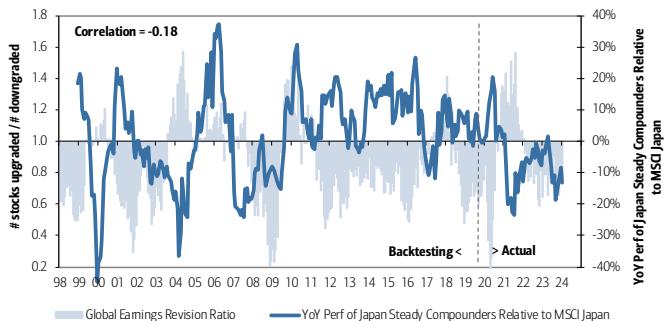
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Japan Steady Compounds

Chart 266: JAPAN Steady Compounds: YoY relative returns and Trend in Earnings Expectations

YoY Japan Steady Compounds have underperformed by -13.3%



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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 28: JAPAN Steady Compounds

Japan Steady Compounds screen sorted by sector

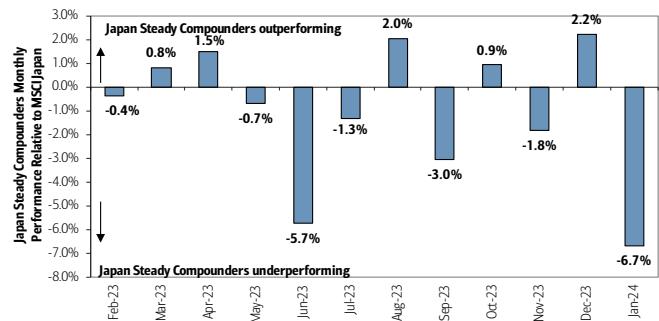
BB Code	Company Name	Country	Sector	PE
2801JP	Kikkoman Corp	Japan	Cons. Staples	31.7
7741JP	Hoya	Japan	Health Care	33.8
6370JP	Kurita Water	Japan	Industrials	19.9
1969JP	Takasago Thermal Engg	Japan	Industrials	14.3
8056JP	BIPROGY	Japan	Software	17.4
4684JP	OBIC	Japan	Software	32.4

Source: BofA Global Quantitative Strategy

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Chart 267: JAPAN Steady Compounds: Relative Performance last 12 months

Steady Compounds underperformed by -6.7% last month



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 29: JAPAN Steady Compounds: Average Characteristics

Steady Compounds & MSCI ACWI median factor characteristics

Factors	Average	MSCI Japan
EV/EBITDA	23.68	10.29
P/FCF	39.26	21.28
P/S (Trailing)	2.32	1.41
PB (Trailing)	3.33	1.52
PE (Forecast)	25.81	16.27
PEG Ratio	2.66	1.67
EPS FY2/Reportd	27.2%	18.6%
EPS Revisions	5.2%	2.6%
Trend Growth 7yr	12.7%	3.6%
FCF to Equity	15.2%	5.0%
Quality Rank	84	42
ROE	13.21	10.04
Profit Margins	0.07	0.07
Asset Turnover	0.07	0.69
Operating Leverage	0.07	2.03
Beta 60m	0.87	0.71
EPS Vol 3yr	8.2%	15.1%
Price Vol 1yr	10.2%	8.5%
Trend Price 12m	16.4%	8.8%
Div Growth 5yr	11.5%	9.0%
Div Payout 5yr	36.0%	32.7%
Div Yield (Reported)	1.3%	2.2%
Market Cap (Total)	8,226	10,834
Turnover / Mcap 6m	0.62	0.81

Source: BofA Global Quantitative Strategy

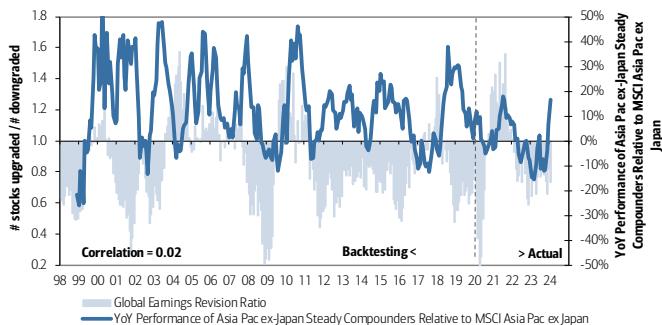
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Asia Pac ex-Japan Steady Compounds

Chart 268: Asia Pac ex-Japan Steady Compounds: YoY relative returns and Trend in Earnings Expectations

YoY Asia Pac ex-Japan Steady Compounds have outperformed by 16.5%



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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 30: Asia Pac ex-Japan Steady Compounds

Asia Pac ex-Japan Steady Compounds screen sorted by sector

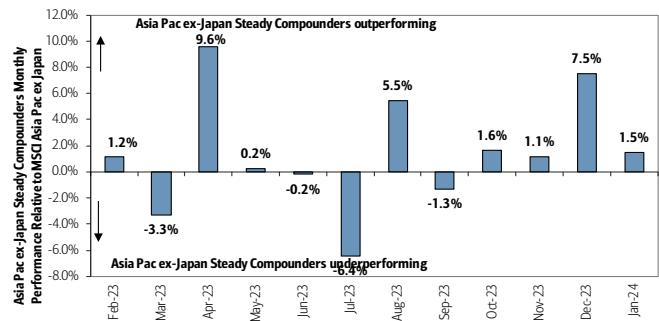
BB Code	Company Name	Country	Sector	PE
COH AU	Cochlear	Australia	Health Care	50.8
CWY AU	Cleanaway Waste Mgmt	Australia	Industrials	29.2
REA AU	REA Group	Australia	Media & Ent.	47.5
ICICIBC IN	ICICI Bank	India	Banks	17.2
CPLA IN	Cipla	India	Health Care	25.2
LT IN	Larsen & Toubro	India	Industrials	29.6
BRGR IN	Berger Paints	India	Materials	47.6
PIDI IN	Pidilite Indus	India	Materials	60.2
UTCEM IN	Ultratech Cement	India	Materials	32.0
MEL NZ	Meridian Energy	New Zealand	Utilities	31.6
2330 TT	TSMC	Taiwan	Semiconductors	16.3
3044 TT	Tripod Technology	Taiwan	Tech Hardware	11.9

Source: BofA Asia Pac Quantitative Strategy

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Chart 269: Asia Pac ex-Japan Steady Compounds: Relative Performance last 12 months

Steady Compounds have outperformed by 1.5% last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Table 31: Asia Pac ex-Japan Steady Compounds: Average Characteristics

Steady Compounds & MSCI ACWI median factor characteristics

Factors	Average	MSCI Asia Pac xJ
EV/EBITDA	29.57	12.06
P/FCF	49.93	17.78
P/S (Trailing)	4.58	1.82
PB (Trailing)	5.22	1.77
PE (Forecast)	31.64	13.80
PEG Ratio	2.62	1.30
EPS FY2/Reportd	47.2%	33.5%
EPS Revisions	5.4%	1.5%
Trend Growth 7yr	11.0%	3.3%
FCF to Equity	16.0%	7.2%
Quality Rank	56	40
ROE	15.41	11.37
Profit Margins	0.10	0.10
Asset Turnover	0.64	0.52
Operating Leverage	1.70	2.24
Beta 60m	0.98	0.74
EPS Vol 3yr	5.4%	13.9%
Price Vol 1yr	8.9%	11.7%
Trend Price 12m	24.1%	-13.9%
Div Growth 5yr	19.2%	17.7%
Div Payout 5yr	37.7%	34.8%
Div Yield (Reported)	0.9%	2.4%
Market Cap (Total)	14,352	5,868
Turnover / Mcap 6m	0.30	1.00

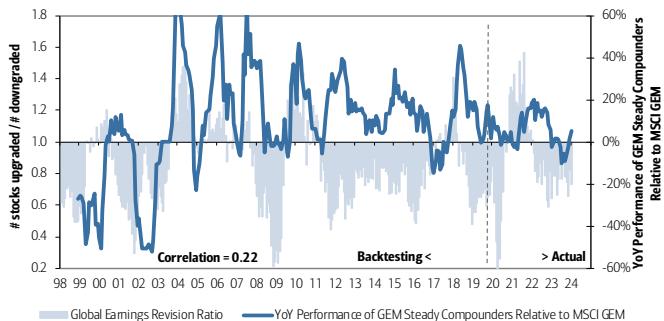
Source: BofA Asia Pac Quantitative Strategy

BofA GLOBAL RESEARCH

Emerging Markets Steady Compounds

Chart 270: Emerging Markets Steady Compounds: YoY relative returns and Trend in Earnings Expectations

YoY GEM Steady Compounds have outperformed by 5.0%



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to May-16. Actual performance is from Jun-16. 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 32: Emerging Markets Steady Compounds

Emerging Markets Steady Compounds screen sorted by sector

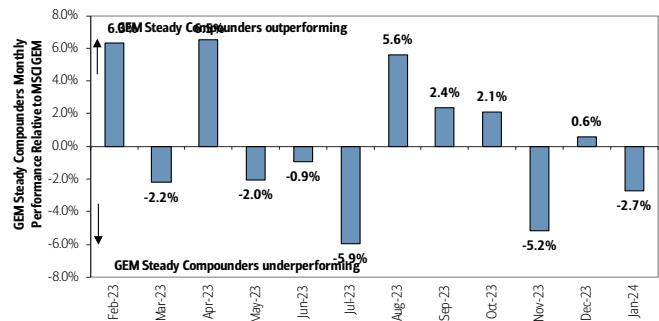
BB Code	Company Name	Country	Sector	PE
600612 CH	Lao Feng Xiang-A	China	Cons. Discretio	12.1
600519 CH	Kweichow Moutai-A	China	Cons. Staples	22.7
600085 CH	Beijing Tongrentang-A	China	Health Care	27.8
002262 CH	Jiangsu Nhwa Pharma-/	China	Health Care	17.3
002595 CH	Shandong Himile Med	China	Industrials	12.0
002138 CH	Shenzhen Sunlo-A	China	Tech Hardware	17.9
ICICIBC IN	ICICI Bank	India	Banks	17.2
MSIL IN	Maruti Suzuki	India	Cons. Discretio	23.3
BRGR IN	Berger Paints	India	Materials	47.6
PIDI IN	Pidilite Indus	India	Materials	60.2
SI IN	Supreme Ind.	India	Materials	41.3
UTCEM IN	Ultratech Cement	India	Materials	32.0
ALINMA AB	Alinma Bank	Saudi Arabia	Banks	15.3
2330 TT	TSMC	Taiwan	Semiconductor	16.3

Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 271: Emerging Markets Steady Compounds: Relative Performance last 12 months

Steady Compounds underperformed by -2.7% last month



Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Table 33: Emerging Markets Steady Compounds: Average Characteristics

Steady Compounds & MSCI ACWI median factor characteristics

Factors	Average	MSCI GEM
EV/EBITDA	20.01	11.33
P/FCF	32.65	15.59
P/S (Trailing)	4.67	1.71
PB (Trailing)	4.68	1.77
PE (Forecast)	20.31	13.07
PEG Ratio	1.53	1.05
EPS FY2/Reportd	53.8%	33.3%
EPS Revisions	6.5%	1.9%
Trend Growth 7yr	18.3%	4.9%
FCF to Equity	10.6%	8.5%
Quality Rank	57	42
ROE	17.17	12.49
Profit Margins	0.11	0.11
Asset Turnover	0.68	0.52
Operating Leverage	1.67	2.35
Beta 60m	0.76	0.76
EPS Vol 3yr	13.9%	15.6%
Price Vol 1yr	8.3%	11.6%
Trend Price 12m	11.1%	-10.2%
Div. Growth 5yr	28.4%	20.1%
Div. Payout 5yr	35.6%	35.2%
Div. Yield (Reported)	0.9%	2.5%
Market Cap (Total)	11,933	5,658
Turnover / Mcap 6m	0.54	0.95

Source: BofA Global Quantitative Strategy

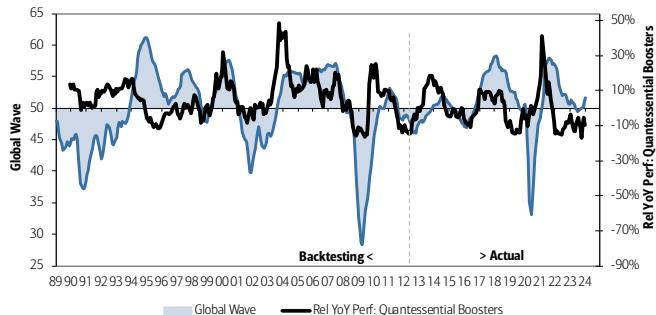
BofA GLOBAL RESEARCH



Global Boosters and Bunkers

Chart 272: YoY Global Quantessential Boosters performance versus the Global Wave

Global QE Boosters have underperformed the index by -9.7% in the last 12m

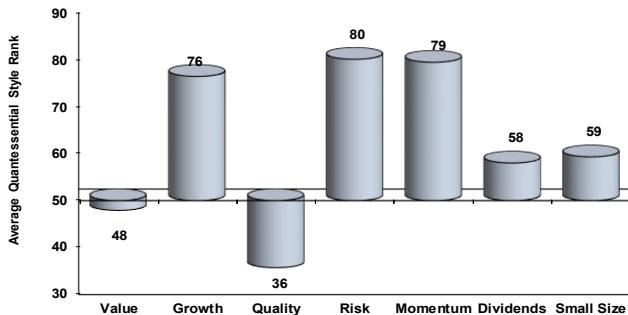


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope
Back-tested results are from Jan-89 to Feb-12. Actual performance is from Mar-12. Back-tested performance depicts the theoretical (not actual) performance 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 274: Style characteristics of Global Quantessential Boosters

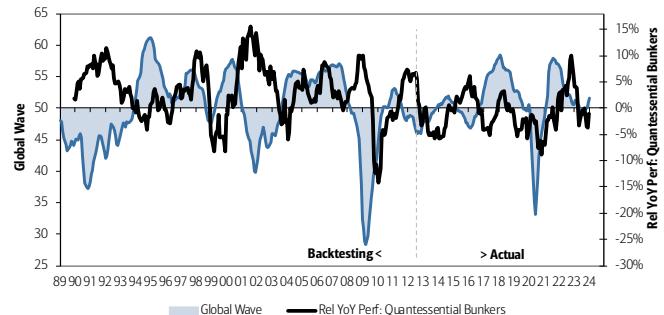
Boosters are overweight cyclical styles for an upturn



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

Chart 273: YoY Global Quantessential Bunkers performance versus the Global Wave

Benchmark-aware Global Bunkers have a -48% correlation with trends in earnings cycle

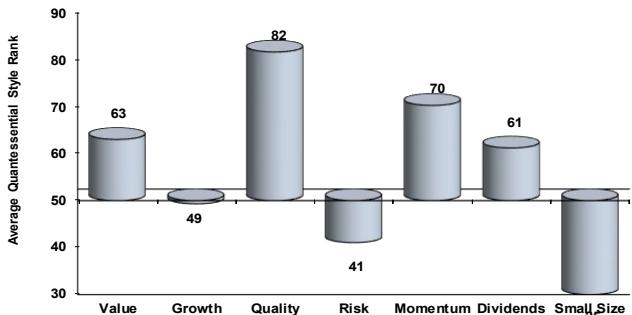


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope
Back-tested results are from Jan-89 to Feb-12. Actual performance is from Mar-12. Back-tested performance depicts the theoretical (not actual) performance 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 275: Style characteristics of Global Quantessential Bunkers

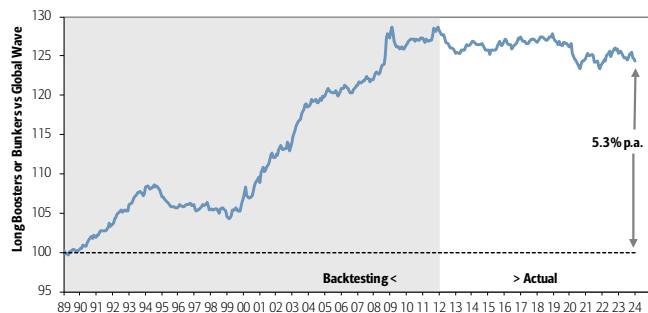
Bunkers are overweight defensive styles for a downturn



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

Chart 276: LONG Quantessential Boosters OR Bunkers relative cumulative performance based on the direction of the Global Wave

Rotating into Boosters or Bunkers based on Global Wave direction averages 5.3% p.a.

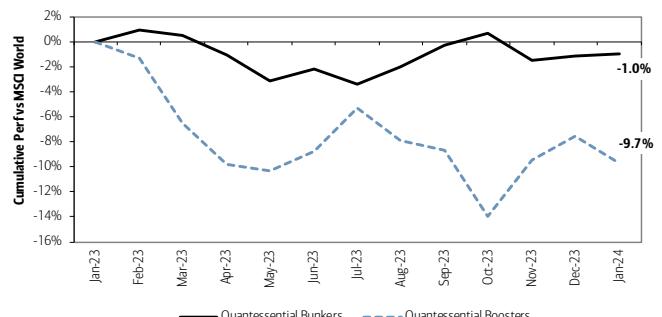


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope
The shaded area shows back-tested results during the period from Jan-89 to Feb-12. The unshaded portion represents actual performance since Mar-12. Back-tested 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 277: Global Quantessential Boosters vs Bunkers Cumulative 12 month relative performance

Quantessential Bunkers outperformed Quantessential Boosters in the last 12-months



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

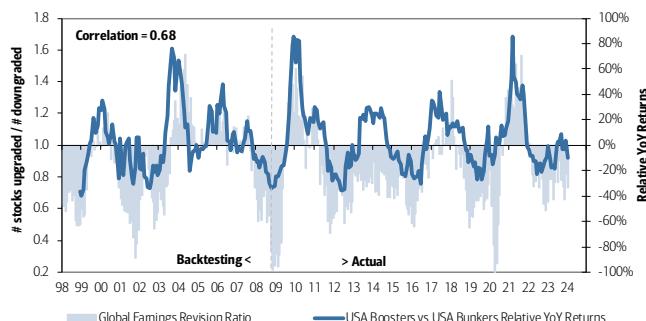


Regional Boosters and Bunkers

USA Bunkers and Boosters

Chart 278: USA Boosters and Bunkers: YoY Returns vs Global Earnings Expectations

USA Bunkers outperforms, on average when profits cycle is slowing



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 280: USA Boosters and Bunkers: relative cumulative performance

USA Boosters have underperformed by -1.5% in the last 6 Months



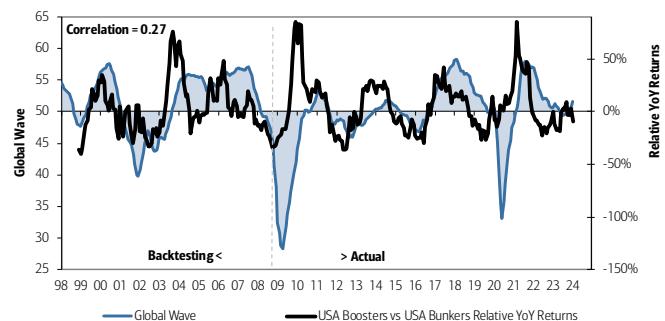
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 279: USA Boosters and Bunkers: YoY Returns vs Global Wave

USA Boosters have underperformed by -9.7% in the last 12m



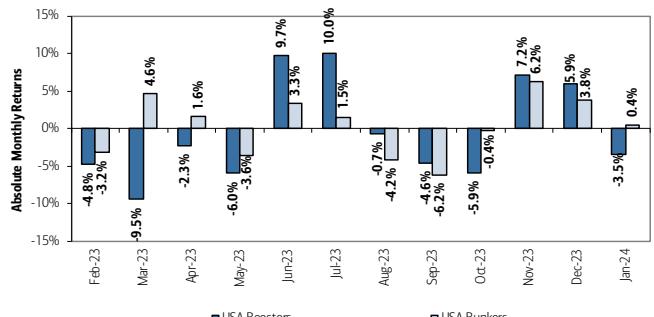
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 281: USA Boosters and Bunkers Monthly Performance: Last 12-Months

USA Bunkers has outperformed in 2 out of last 6 months

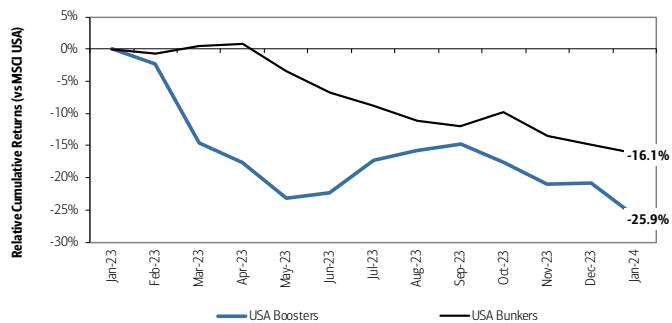


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 282: USA Boosters and Bunkers: Cumulative 12 month relative performance

Bunkers outperformed Boosters in the last 12-months

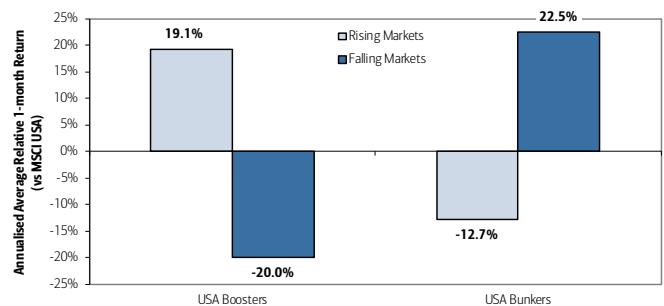


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 283: USA Boosters and Bunkers: Performance in Rising & Falling Markets

USA Bunkers outperforms in falling markets, underperforms in rising markets



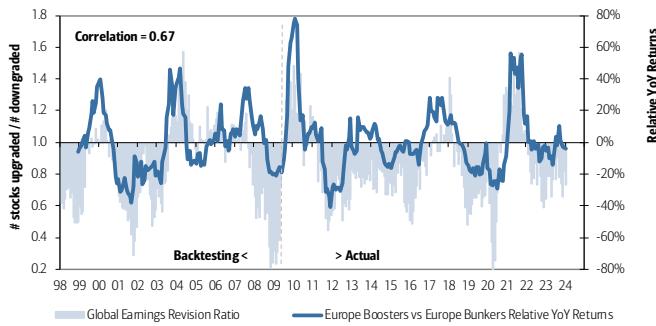
Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Europe Bunkers and Boosters

Chart 284: Europe Boosters and Bunkers: YoY Returns vs Global Earnings Expectations

Europe Boosters have underperformed Bunkers by -4.2% in the last 12m



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 286: Europe Boosters and Bunkers: relative cumulative performance

Europe Boosters have underperformed by -1.5% in the last Year-to-Date



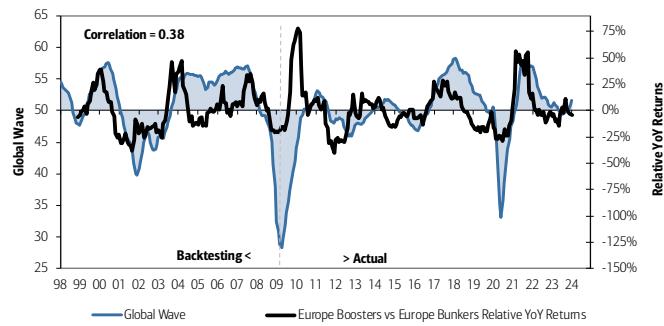
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 285: Europe Boosters and Bunkers: YoY Returns vs Global Wave

Europe Boosters have underperformed Bunkers by -4.2% in the last 12m



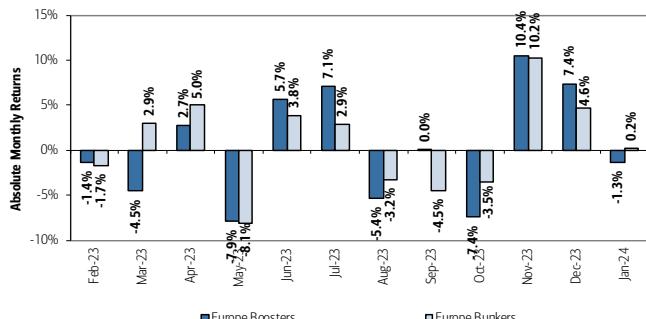
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 287: Europe Boosters and Bunkers Monthly Performance: Last 12-Months

Europe Boosters has outperformed in 2 out of last 3 months

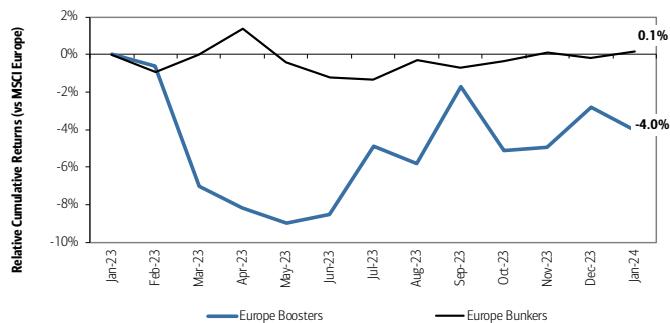


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 288: Europe Boosters and Bunkers: Cumulative 12 month relative performance

Bunkers outperformed Boosters by 4.2% in the last 12-months

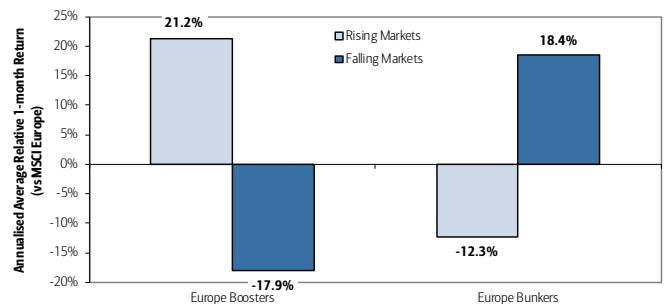


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 289: Europe Boosters and Bunkers: Performance in Rising & Falling Markets

Boosters outperforms in rising markets, underperforms in falling markets



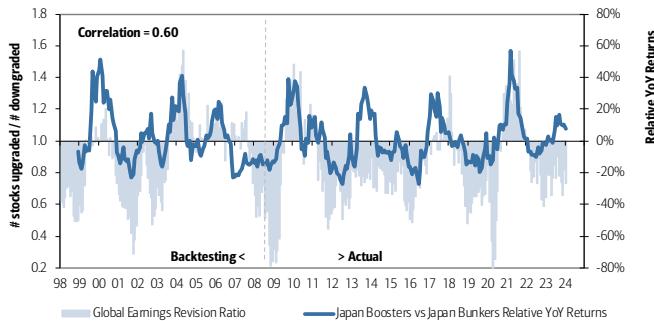
Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Japan Bunkers and Boosters

Chart 290: Japan Boosters and Bunkers: YoY Returns vs Global Earnings Expectations

Japan Boosters versus Bunkers has a 60% correlation with trends in earnings cycle



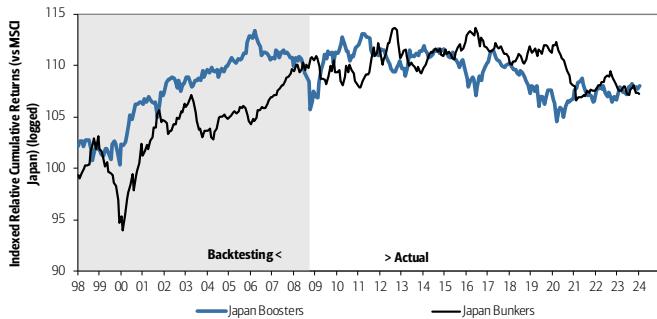
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 292: Japan Boosters and Bunkers: relative cumulative performance

Japan Boosters have outperformed by 1.9% in the last Year-to-Date



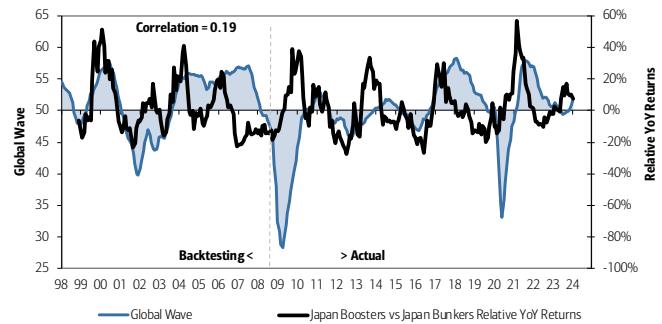
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 291: Japan Boosters and Bunkers: YoY Returns vs Global Wave

Boosters outperforms Bunkers, on average during rising Global Wave



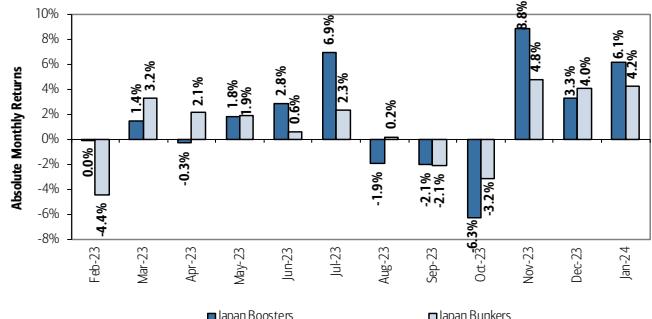
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 293: Japan Boosters and Bunkers Monthly Performance: Last 12-Months

Japan Boosters has outperformed Japan Bunkers last month

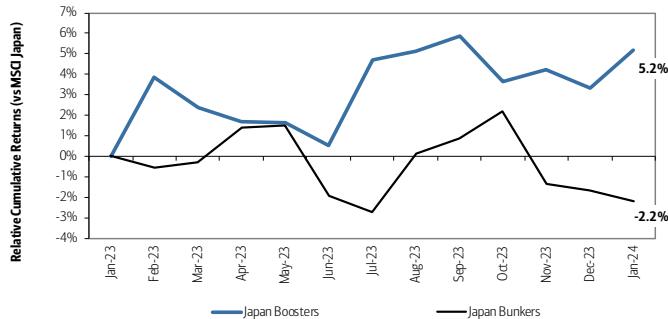


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 294: Japan Boosters and Bunkers: Cumulative 12 month relative performance

Boosters outperformed Bunkers by 7.4% in the last 12-months

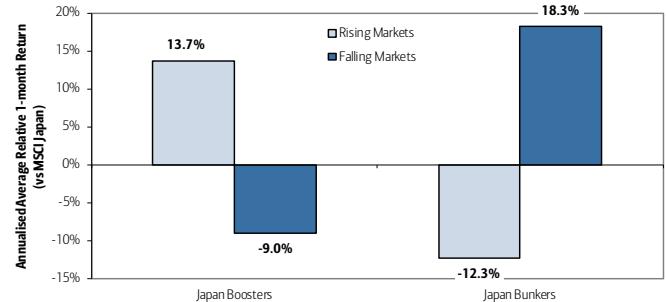


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 295: Japan Boosters and Bunkers: Performance in Rising & Falling Markets

Performance of Boosters and Bunkers tends to move with the cycle



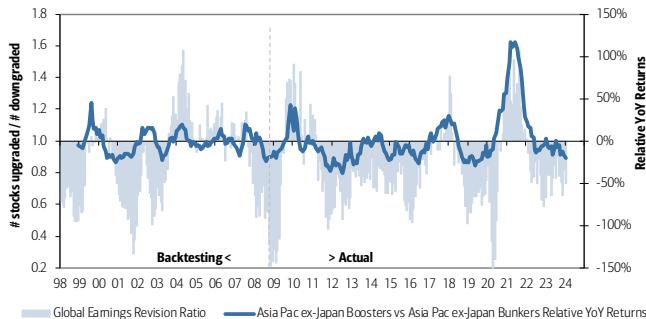
Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Asia Pac ex-Japan Bunkers and Boosters

Chart 296: Asia Pac ex-Japan Boosters and Bunkers: YoY Returns vs Global Earnings Expectations

APxJ Boosters versus Bunkers has a 59% correlation with trends in earnings cycle



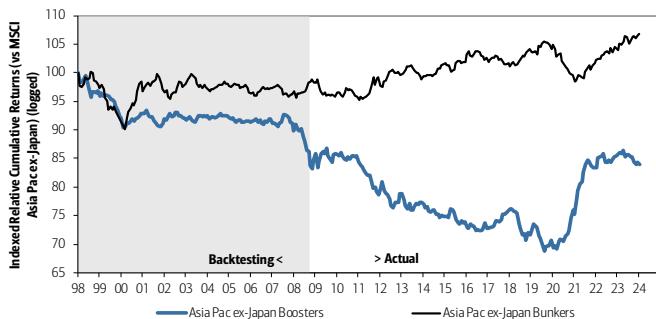
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 298: Asia Pac ex-Japan Boosters and Bunkers: relative cumulative performance

Asia Pac ex-Japan Boosters have underperformed by -19.6% in the last 12 Months



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 297: Asia Pac ex-Japan Boosters and Bunkers: YoY Returns vs Global Wave

APxJ Boosters versus Bunkers has a 18% correlation with the Global Wave



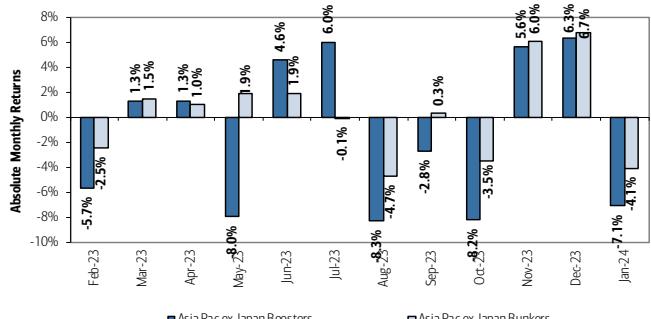
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 299: Asia Pac ex-Japan Boosters and Bunkers Monthly Performance: Last 12-Months

APxJ Bunkers has outperformed in 2 out of last 6 months

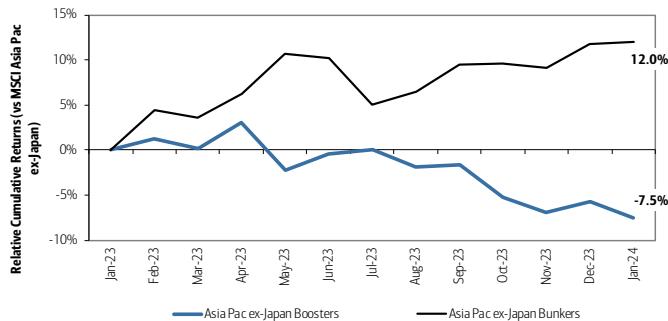


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 300: Asia Pac ex-Japan Boosters and Bunkers: Cumulative 12-month relative performance

Bunkers outperformed Boosters in the last 12-months

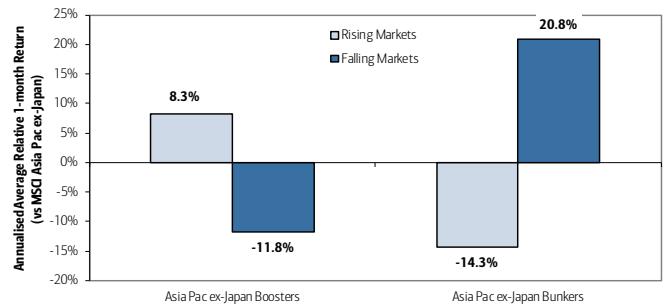


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 301: Asia Pac ex-Japan Boosters and Bunkers: Performance in Rising & Falling Markets

Bunkers outperforms in falling markets, underperforms in rising markets



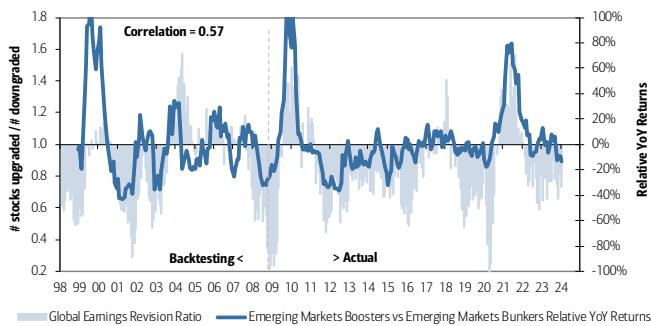
Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Emerging Markets Bunkers and Boosters

Chart 302: Emerging Markets Boosters and Bunkers: YoY Returns vs Global Earnings Expectations

EM Boosters have underperformed Bunkers by -13.5% in the last 12m



Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 304: Emerging Markets Boosters and Bunkers: relative cumulative performance

Emerging Markets Boosters have underperformed by -13.5% in the last 12 Months



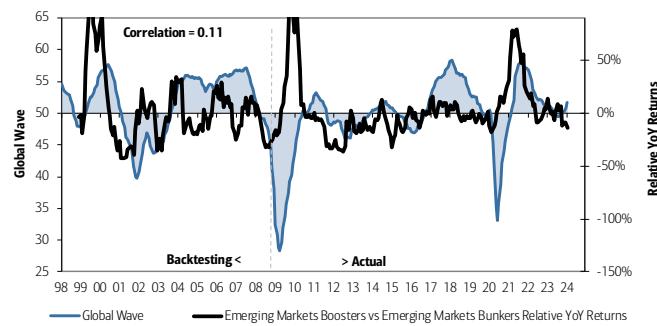
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 303: Emerging Markets Boosters and Bunkers: YoY Returns vs Global Wave

EM Boosters have underperformed Bunkers by -13.5% in the last 12m



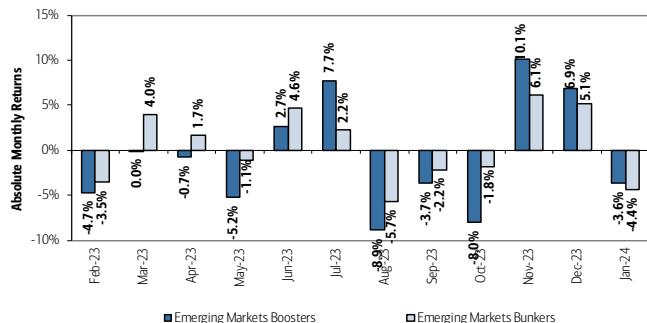
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, S&P, Worldscope

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 305: Emerging Markets Boosters and Bunkers Monthly Performance: Last 12-Months

EM Boosters has outperformed EM Bunkers last month

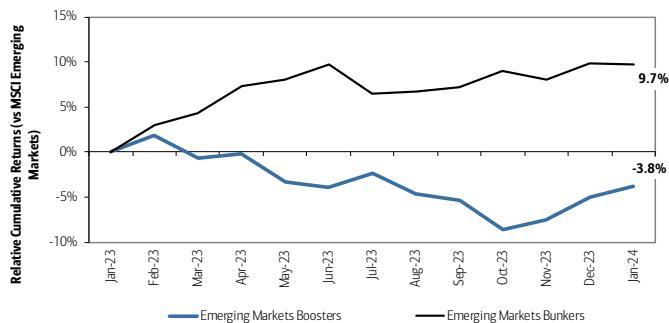


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 306: Emerging Markets Boosters and Bunkers: Cumulative 12-month relative performance

Bunkers outperformed Boosters by 13.5% in the last 12-months

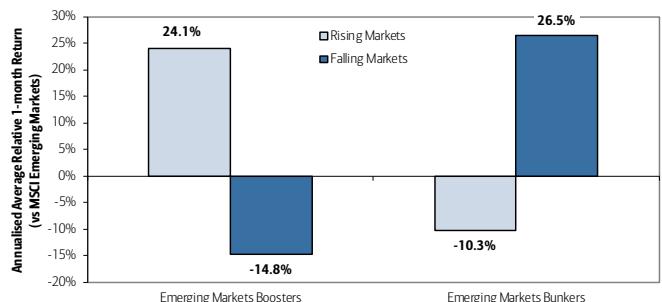


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 307: Emerging Markets Boosters and Bunkers: Performance in Rising & Falling Markets

Boosters outperforms in rising markets, underperforms in falling markets



Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Boosters by Investor Type

In this analysis, we screen for stocks with characteristics that tend to outperform in an economic upturn that also overlap with the Quality, Value, Growth or Dividend styles in order to help investors with style biases position more aggressively.

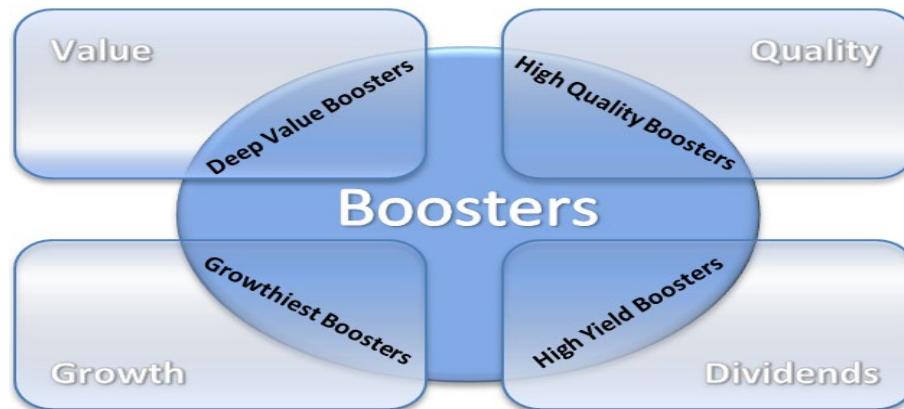
Boosters are stocks with style characteristics that tend to outperform in economic upturns. History shows that when our macro indicator – the Global Wave – is rising some styles tend to outperform, including Value, High Growth, Low Quality, High Risk, Momentum and Small Size. Boosters are stocks with these characteristics.

We provide these four types of Boosters screens for a global universe of stocks and also for each region of the world (US, Europe, Japan, Asia Pac ex-Japan, and Emerging Markets). The four global Boosters screens include 30 stocks while the various regional Boosters screens include 25 stocks. Refer to the appendix "[Boosters by Investor Type Methodology](#)" for a detailed description of the Screen Construction Methodology. Refer to appendix "[Boosters by Investor Type Performance](#)" for detailed performance data and advance decline statistics.

We highlight stocks that currently screen as High Quality Boosters, Growthiest Boosters, Deep Value Boosters and High Yield Boosters in each region of the world. See "[Regional Boosters by Investor Type](#)".

Chart 308: Boosters for four types of investors: Value, Quality, Growth and Dividends

Four types of Boosters that overlaps with Quality, Value, Growth or Dividend styles



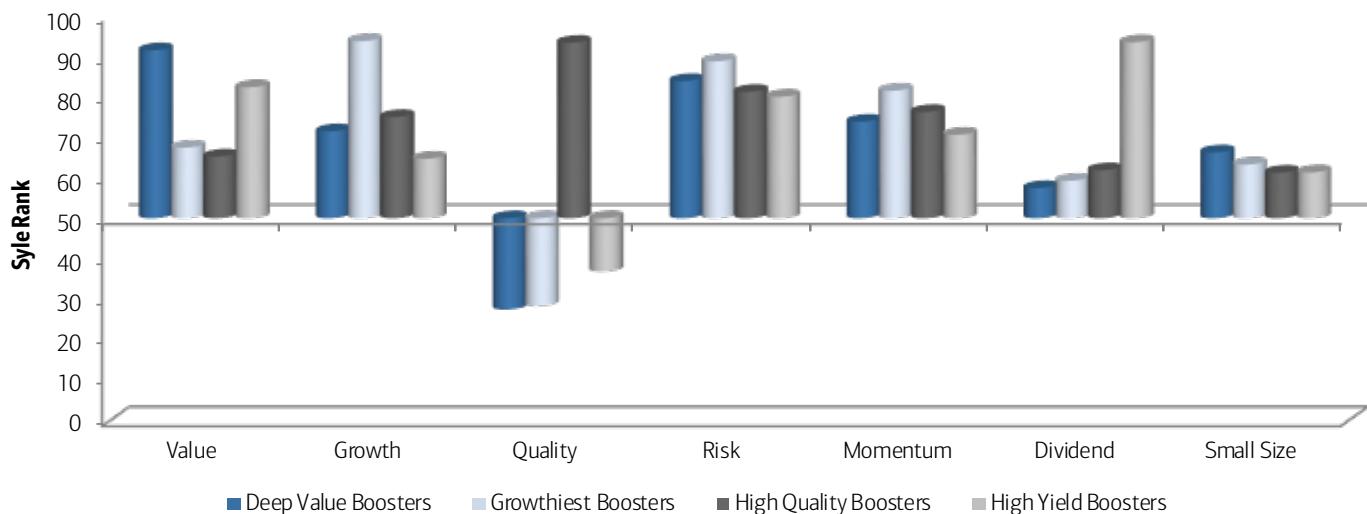
Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Global Boosters by Investor Type

Chart 309: Style Tilts: Global Boosters by Investor Type

High Quality Boosters provides exposure to Quality stocks with an upturn style characteristics

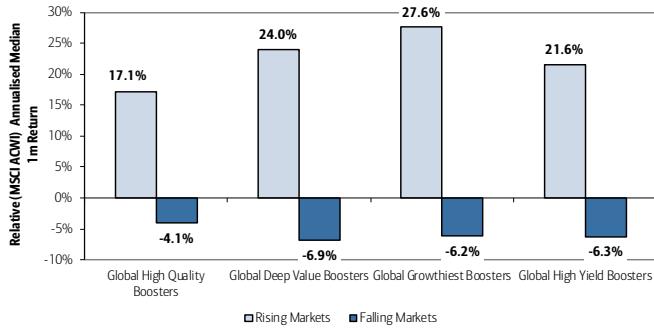


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg

BofA GLOBAL RESEARCH

Chart 310: Performance in Rising and Falling Markets

All four types of Boosters outperforms in rising markets, underperforms in falling markets

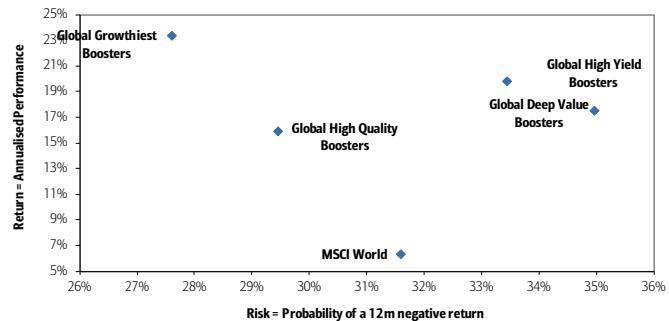


Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg
Back-tested results are from Jan-96 to Aug-16. Actual performance is from Sep-16. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 311: Risk-return profile of Global Boosters by Investor Type

Growthiest Boosters have the best risk-return characteristics



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

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Global Contenders & Defenders

The universe of large and liquid stocks included in this analysis is selected from the constituents of the MSCI AC World Index that meet our market cap, turnover and coverage requirements. The universe will be recalculated every 6 months in line with the six-month rebalancing of the MSCI Index.

For a stock to be included in the analysis it must be in the largest 60% of stocks of the MSCI AC World Index by market cap, the largest 60% by average daily turnover in the last 6 months and last 20-days, and it must have a minimum of three consensus earnings estimates. This table shows the minimum values for each requirement as of January 2024, the most recent universe rebalance.

The Global Contenders & Defenders are determined at the end of each month using month-end data from MSCI, IBES, and ExShare databases. Stocks in the firm's restricted list at the time of the month-end analysis are excluded from the analysis.

Our monthly analysis produces rankings for each eligible security for earnings momentum, price momentum and valuation.

Chart 312: Global Contenders Ranks Definition

Contenders Rank is a combination of Earnings Momentum, Price Momentum and PE Rank

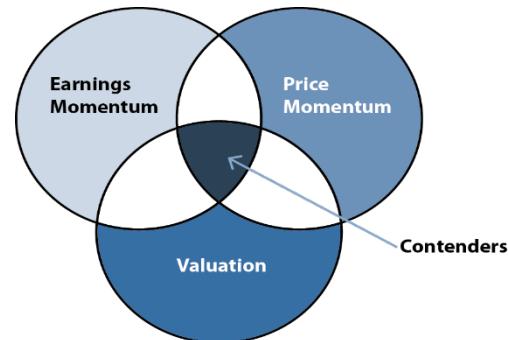
- An Earnings Revision Rank from 1 (worst) to 100 (best) is a percentile rank calculated for each stock based on a 3-month earnings revision to consensus EPS estimates.
- A Price Momentum Rank from 1 (worst) to 100 (best) is a percentile rank calculated for each stock based on the slope of a log-linear regression of daily prices in last twelve months.
- A PE Rank from 1 (worst) to 100 (best) is a percentile rank calculated for each stock based on Price-to-12-month-forward EPS forecast.
- The Contenders Rank is a combination of the Earnings Revision Rank, Price Momentum Rank, and PE Rank.

Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 313: Global Contenders Methodology

Thirty-stocks Global Contenders are inexpensive stocks with rising earnings and price momentum



Source: BofA Global Quantitative Strategy

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At inception in May 2010, the Global Contenders were the thirty lowest PE stocks with above average earnings momentum and price momentum that met the region and sector distribution of the MSCI AC World Index (subject to rounding). In each subsequent month, a stock will drop out of the Global Contenders only when either the Earnings Revision Rank falls below average (rank of 50) or the Price Momentum Rank falls below average (rank of 50). When a stock falls out of the Contenders it is replaced by the stock with the highest Contenders Rank that is not already a Contender, subject to regional and sector constraints.

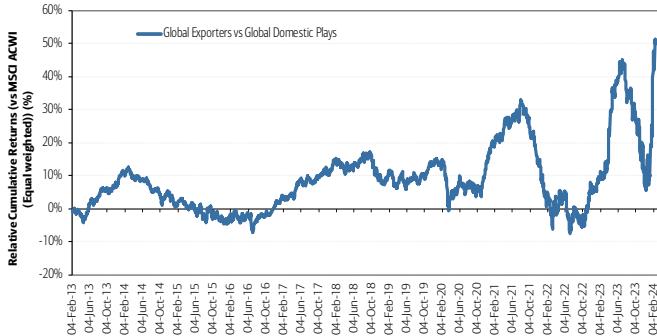
At inception, the Global Defenders were the thirty highest PE stocks with below average earnings momentum and price momentum that met the region and sector distribution of the MSCI AC World Index (subject to rounding). In each subsequent month, a stock will drop out of the Global Defenders only when either the Earnings Revision Rank moves above average (rank of 50) or the Price Momentum Rank moves above average (rank of 50). When a stock falls out of the Defenders it is replaced by the stock with the lowest Contenders Rank that is not already a Defender, subject to regional and sector constraints.

Our back-testing results showed the average monthly turnover rate to be 25% for the Global Contenders and 27% for the Global Defenders. This indicates that roughly 7-8 stocks of the 30 Contenders and 7-8 stocks of the 30 Defenders would be expected to change each month, on average.

Geographic Revenue Exposure

Chart 314: Global Exporters vs. Domestic Plays Relative Cumulative Performance

Global Exporters have outperformed Global Domestic Plays by +14.0% year-to-date

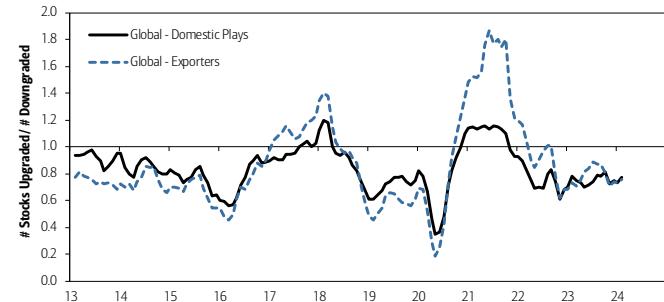


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 315: Earnings Revision Ratio: Global Domestic Plays vs. Exporters

3-Month Ratio is below 1.00 for Global Domestic Plays and Exporters

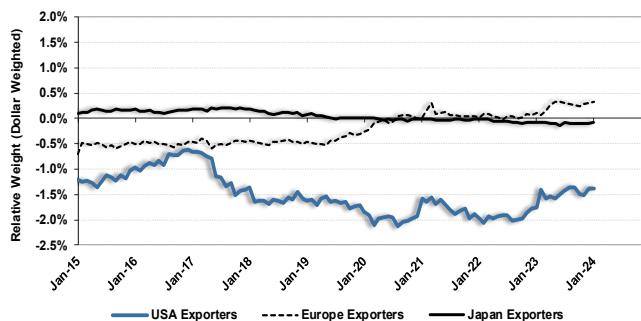


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 316: USA, Europe & Japan - Exporters Positioning

Funds are most underweight USA Exporters

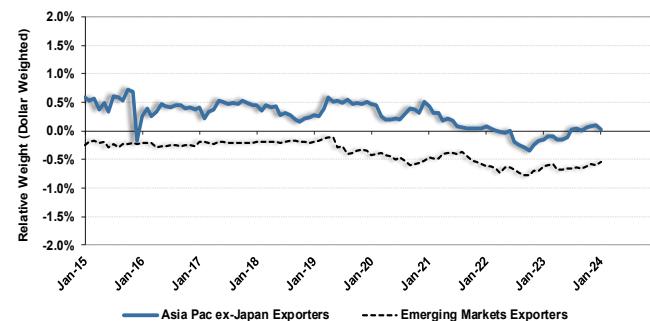


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 317: APxJ & Emerging Markets - Exporters Positioning

Funds are overweight Asia Pac ex-Japan Exporters

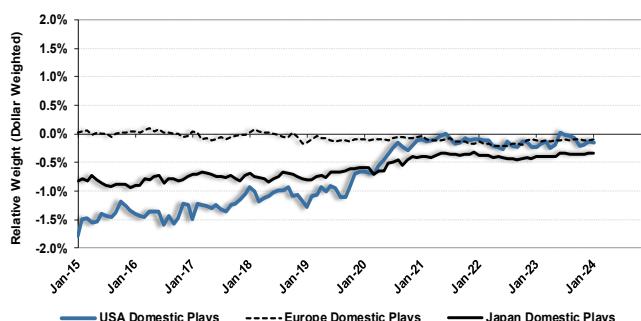


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 318: USA, Europe & Japan - Domestic Plays Positioning

Long-only funds are underweight Domestic Plays in Japan

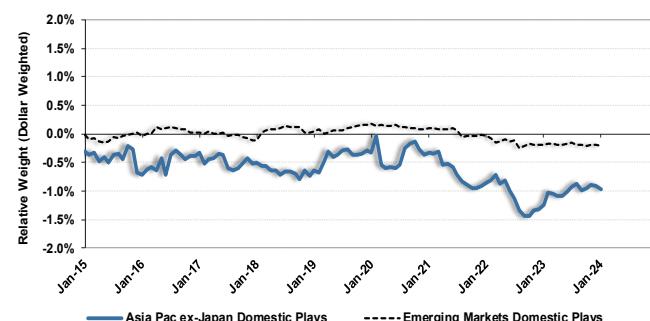


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 319: APxJ & Emerging Markets - Domestic Plays Positioning

Funds are most underweight Asia Pac ex-Japan Domestic Plays



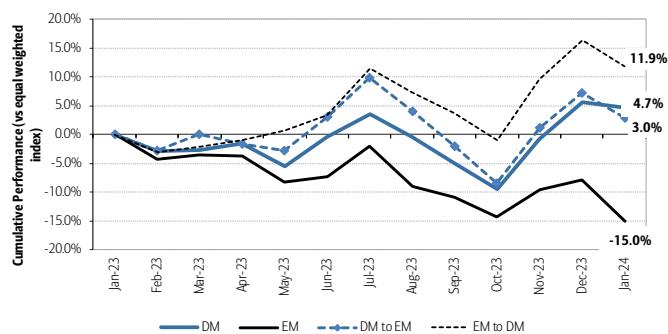
Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

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Chart 320: Performance (equal-weighted) based on Region and Revenue Exposure

Developed Markets have outperformed stocks with revenue exposure to EM

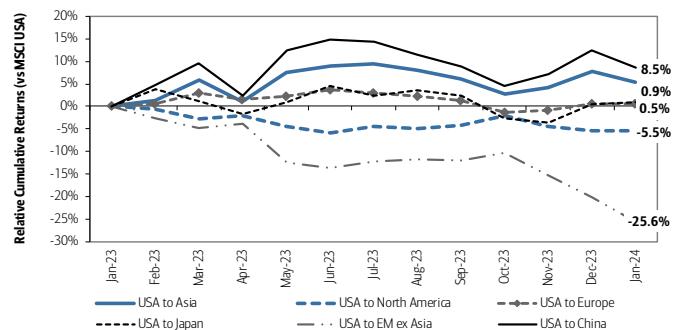


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 321: Performance of US stocks by regional revenue exposure

In the last 12m, Exporters from USA to China performed the best, and USA to EM ex Asia performed the worst

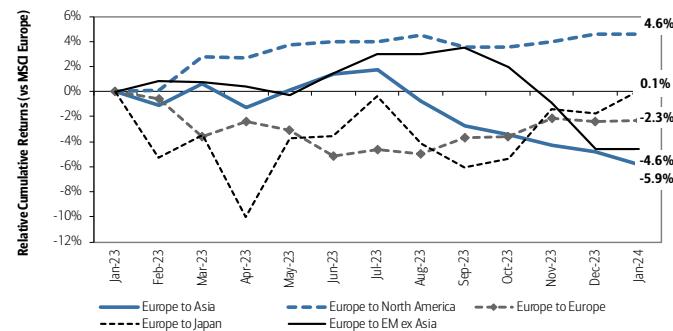


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 322: Performance of Europe stocks by regional revenue exposure

In the last 12m, Exporters from Europe to North America performed the best

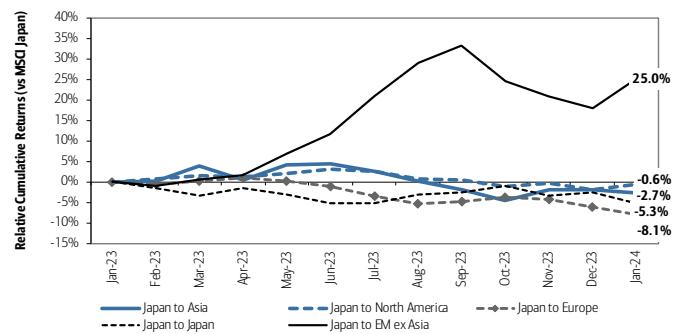


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 323: Performance of Japan stocks by regional revenue exposure

Japan Exporters have mixed returns in the last 12m

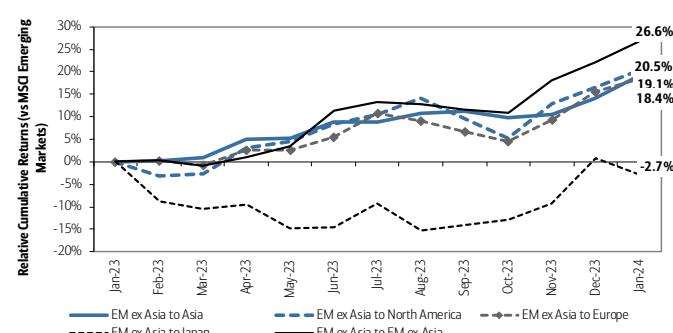


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 324: Performance of EM ex Asia stocks by regional revenue exposure

In the last 12m, Exporters from EM ex Asia to EM ex Asia performed the best

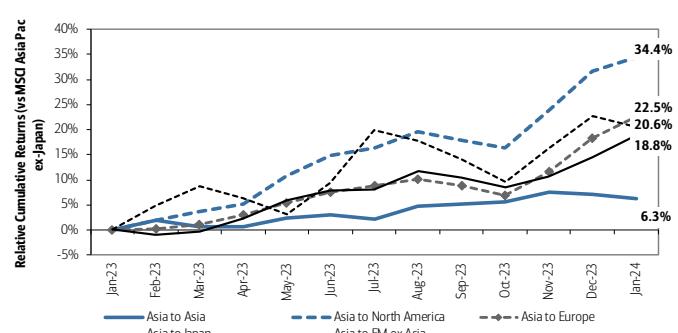


Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Chart 325: Performance of Asia Pac ex-Japan stocks by regional revenue exposure

In the last 12m, Exporters from Asia to North America performed the best, and Asia to Asia performed the worst



Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Chart 326: Performance of DM stocks with Revenue exposure to China (YoY) vs Earnings Cycle

DM stocks with revenue exposure to China tend to underperform in global downturns



Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH

Table 34: Global ex-Japan stocks with revenue exposure to Japan

Screen to highlight Global non-Japan stocks with revenue exposure to Japan

Symbol	Company Name	BBG Code	Country	Region	Sector	MCAP (Total \$ US m)	Avg Daily TO (6m \$US m)	Revenue Exposure
202636	AFLAC	AFL US	United States	North America	Insurance	50,103	175.6	58%
676100	Anglo Platinum	AMS SJ	South Africa	Emerging ex-Asia	Materials	11,368	13.4	37%
004561	Antofagasta	ANTO LN	United Kingdom	Europe	Materials	21,782	15.5	28%
281911	Prudential Fin.	PRU US	United States	North America	Insurance	38,090	145.5	26%
200784	AMD	AMD US	United States	North America	Semiconductors	270,932	7,739.0	20%
287932	Teck Resources	TECK/B CN	Canada	North America	Materials	20,621	68.3	19%
BNG8PQ	NN Group	NN NA	Netherlands	Europe	Insurance	11,776	39.8	18%
B61X7R	SITC Int'l	1308 HK	China	Asia Pac ex-Japan	Industrials	4,077	9.0	18%
B1XZS8	Anglo American (UK)	AAL LN	United Kingdom	Europe	Materials	32,306	68.3	16%
645166	Langan Precision	3008 TT	Taiwan	Asia Pac ex-Japan	Tech Hardware	10,618	59.0	15%
204685	Albemarle	ALB US	United States	North America	Materials	13,464	377.6	15%
B0MP1B	Shenzhou Int'l	2313 HK	China	Asia Pac ex-Japan	Cons. Discretionary	13,413	34.8	14%
250665	Lattice Semi	LSCC US	United States	North America	Semiconductors	8,389	144.8	14%
B4TPSL	Alchip Tech	3661 TT	Taiwan	Asia Pac ex-Japan	Semiconductors	9,233	205.8	14%
614469	BHP	BHPAU	Australia	Asia Pac ex-Japan	Materials	158,387	254.2	13%
BHNCRK	ESR	1821 HK	Hong Kong	Asia Pac ex-Japan	Real Estate	5,562	7.3	12%
B3BQFC	Adaro Energy Indonesia	ADRO IJ	Indonesia	Asia Pac ex-Japan	Energy	4,865	7.7	12%
203206	Analog Devices	ADI US	United States	North America	Semiconductors	95,856	578.9	11%
238086	W.W. Grainger	GWV US	United States	North America	Industrials	44,783	187.7	11%
BYZWWMR	Vat Group Ag	VACN SW	Switzerland	Europe	Industrials	14,223	25.3	11%
235211	Freeport-McMoRan	FCX US	United States	North America	Materials	56,901	412.1	11%
288540	Texas Instruments	TXN US	United States	North America	Semiconductors	145,384	853.0	10%
250224	Lam Research	LRCX US	United States	North America	Semiconductors	109,106	712.8	10%
BMWS3X	Viatris	VTRS US	United States	North America	Health Care	14,118	92.4	10%
BMD02L	Uipath - Class A	PATH US	United States	North America	Software	11,129	167.0	10%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 35: Developed Markets stocks with revenue exposure to China

Screen to highlight Developed Markets stocks with revenue exposure to China

Symbol	Company Name	BBG Code	Country	Sector	MCAP (Total \$US m)	Avg Daily TO (6m) \$US m	Revenue Exposure
608625	Fortescue	FMG AU	Australia	Materials	60,816	96.3	89%
B02T2J	Las Vegas Sands	LVS US	United States	Cons. Discretionary	37,114	243.0	63%
271492	Qualcomm	QCOM US	United States	Semiconductors	165,737	997.2	62%
614469	BHP	BHP AU	Australia	Materials	158,387	254.2	58%
686930	TDK	6762 JP	Japan	Tech Hardware	19,793	83.5	55%
622010	Rio Tinto	RIO AU	Australia	Materials	32,618	112.3	54%
B01Z7J	Monolithic Power	MPWR US	United States	Semiconductors	28,797	259.5	52%
B17KC6	Wilmar Int'l	WIL SP	Singapore	Cons. Staples	15,813	14.0	51%
661040	Murata	6981 JP	Japan	Tech Hardware	41,818	107.5	50%
234760	First Quantum	FM CN	Canada	Materials	6,330	64.1	46%
250665	Lattice Semi	LSCC US	United States	Semiconductors	8,389	144.8	45%
BNKJSM	Marvell Tech	MRVL US	United States	Semiconductors	58,412	586.6	42%
680060	Sharp	6753 JP	Japan	Cons. Discretionary	4,436	24.1	39%
588950	Infineon	IFX GR	Germany	Semiconductors	47,869	140.7	37%
B505PN	NXP Semiconductor	NXPI US	Netherlands	Semiconductors	54,285	420.8	36%
664180	Nitto Denko	6988 JP	Japan	Materials	12,089	40.8	35%
664050	Nippon Paint	4612 JP	Japan	Materials	18,950	23.9	33%
642872	Hirose Electricco	6806 JP	Japan	Tech Hardware	4,280	17.5	33%
204685	Albemarle	ALB US	United States	Materials	13,464	377.6	33%
222470	Corning	GLW US	United States	Tech Hardware	27,713	116.3	33%
680526	Shiseido	4911 JP	Japan	Cons. Staples	11,302	95.1	33%
BDZ78H	Broadcom	AVGO US	United States	Semiconductors	551,226	2,746.0	32%
718472	Swatch Group	UHR SW	Switzerland	Cons. Discretionary	6,871	31.0	32%
627094	Disco Corp	6146 JP	Japan	Semiconductors	29,931	290.1	31%
BJN59B	Dr Ing Hc F Porsche Ag	P911 GR	Germany	Cons. Discretionary	39,148	42.4	31%
575602	BMW	BMW GR	Germany	Cons. Discretionary	60,952	100.6	29%
635693	FANUC	6954 JP	Japan	Industrials	28,251	109.5	29%
674720	Rohm	6963 JP	Japan	Semiconductors	7,270	70.8	29%
232052	Estee Lauder	EL US	United States	Cons. Staples	30,637	375.4	28%
287932	Teck Resources	TECK/B CN	Canada	Materials	20,621	68.3	28%
246324	Intel	INTC US	United States	Semiconductors	180,419	1,599.4	27%
204655	Applied Materials	AMAT US	United States	Semiconductors	137,443	837.8	27%
248013	KLA	KLAC US	United States	Semiconductors	80,981	489.7	27%
676396	SMC	6273 JP	Japan	Industrials	38,212	116.0	27%
687049	Advantest	6857 JP	Japan	Semiconductors	30,520	396.2	27%
B09M9D	Kone Oyj	KNEBV FH	Finland	Industrials	22,615	27.1	26%
BGOSCK	BE Semiconductor	BESI NA	Netherlands	Semiconductors	12,323	54.1	26%
250224	Lam Research	LRCX US	United States	Semiconductors	109,106	712.8	26%
B1XZS8	Anglo American (UK)	AAL LN	United Kingdom	Materials	32,306	68.3	26%
BCRWZ1	Richemont	CFRSW	Switzerland	Cons. Discretionary	78,496	153.1	25%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 36: Emerging Markets stocks with revenue exposure to China
 Screen to highlight Emerging Markets stocks with revenue exposure to China

Symbol	Company Name	BBG Code	Country	Sector	MCAP (Total \$US m)	Avg Daily TO (6m \$US m)	Revenue Exposure
B52J81	AirTac Int'l	1590 TT	Taiwan	Industrials	6,006	17.1	96%
BOP6L8	WPG	3702 TT	Taiwan	Tech Hardware	4,678	16.3	79%
618666	Catcher Tech	2474 TT	Taiwan	Tech Hardware	4,228	14.2	72%
B01VZN	LG Display	034220 KS	South Korea	Tech Hardware	4,116	14.1	66%
219628	Vale	VALE3 BZ	Brazil	Materials	62,246	351.6	51%
BH4DMW	Silergy Corp	6415 TT	Taiwan	Semiconductors	4,723	42.5	49%
B6RV67	Parade Technolog	4966 TT	Taiwan	Semiconductors	2,891	41.2	47%
628360	Nanya Tech	2408 TT	Taiwan	Semiconductors	6,800	27.1	44%
BDVLJ7	Orion Corp	271560 KS	South Korea	Cons. Staples	2,716	10.4	44%
619022	Cheng Shin Rubber	2105 TT	Taiwan	Cons. Discretionary	4,707	10.3	42%
698438	Yageo Corp	2327 TT	Taiwan	Tech Hardware	7,463	34.2	42%
645166	Largan Precision	3008 TT	Taiwan	Tech Hardware	10,618	59.0	41%
B11875	Nan Ya Printed	8046 TT	Taiwan	Tech Hardware	4,686	30.6	38%
662158	Nan Ya Plastics	1303 TT	Taiwan	Materials	15,431	11.1	37%
677168	SEMCO	009150 KS	South Korea	Tech Hardware	7,813	36.8	34%
634854	Formosa Plastics	1301 TT	Taiwan	Materials	14,664	15.0	33%
628819	AUO Corp	2409 TT	Taiwan	Tech Hardware	4,526	19.7	33%
B02GKC	Suzano	SUZB3 BZ	Brazil	Materials	13,833	58.7	33%
634691	LG Chem	051910 KS	South Korea	Materials	22,982	102.2	31%
B05638	Global Unichip	3443 TT	Taiwan	Semiconductors	6,615	199.4	31%
626073	Delta Electronics	2308 TT	Taiwan	Tech Hardware	23,237	65.1	29%
B4TPSL	Alchip Tech	3661 TT	Taiwan	Semiconductors	9,233	205.8	27%
670039	Uni-President	1216 TT	Taiwan	Cons. Staples	13,143	18.0	27%
B613DJ	Hanmi Pharma	128940 KS	South Korea	Health Care	3,111	13.8	27%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 37: Developed Europe stocks with revenue exposure to the USA (>30%)

Screen to highlight Developed Europe stocks with revenue exposure to the USA

Symbol	Company Name	BBG Code	Country	Sector	MCAP (Total \$US m)	Avg Daily TO (6m \$US m)	Revenue Exposure
BNHKYX	Argenx	ARGX BB	Belgium	Health Care	22,384	26.7	92%
005367	Ashtead Group	AHT LN	United Kingdom	Industrials	29,008	35.8	85%
067760	Pearson	PSON LN	United Kingdom	Cons. Discretionary	8,789	15.0	69%
B19NLV	Experian	EXPN LN	United Kingdom	Industrials	38,606	39.7	67%
BD6K45	Compass Group	CPG LN	United Kingdom	Cons. Discretionary	47,539	51.5	65%
B09DHL	MTU Aero Engines	MTX GR	Germany	Industrials	12,494	39.2	64%
584235	Deutsche Telekom	DTE GR	Germany	Telecom	123,199	136.1	63%
BDOQ39	Koninklijke Ahold	AD NA	Netherlands	Cons. Staples	27,144	58.4	62%
BMV7PQ	Investor Ab-B Shs	INVEB SS	Sweden	Div Financials	43,360	58.1	60%
BYWH8S	Hellofresh	HFG GR	Germany	Cons. Staples	2,321	19.4	59%
BOLCW0	Hikma Pharma	HIK LN	United Kingdom	Health Care	5,438	9.2	57%
BDR05C	National Grid	NG/ LN	United Kingdom	Utilities	49,550	61.5	56%
BPHOY2	Aegon	AGN NA	Netherlands	Insurance	12,047	34.0	56%
BP6KMJ	Novo Nordisk	NOVOB DC	Denmark	Health Care	387,877	291.9	55%
092232	Smith & Nephew	SN/ LN	United Kingdom	Health Care	12,351	23.7	53%
559699	UCB	UCB BB	Belgium	Health Care	18,445	22.5	53%
BN7SWP	GSK	GSK LN	United Kingdom	Health Care	81,768	79.3	52%
474171	Remy Cointreau	RCO FP	France	Cons. Staples	5,247	13.2	50%
BNZGVV	Universal Music	UMG NA	Netherlands	Media & Ent.	54,159	31.4	50%
B082RF	Rentokil Initial	RTO LN	United Kingdom	Industrials	13,116	31.8	48%
B1WY23	Smiths Grp	SMIN LN	United Kingdom	Industrials	7,181	11.5	46%
B545MG	Swiss Re	SREN SW	Switzerland	Insurance	36,678	77.2	45%
BJT1GR	Alcon	ALC SW	Switzerland	Health Care	38,119	60.4	45%
711038	Roche	ROG SW	Switzerland	Health Care	202,370	295.6	45%
706271	Sodexo	SW FP	France	Cons. Discretionary	16,754	19.8	44%
721247	EssilorLuxottica	EL FP	France	Health Care	89,823	71.8	44%
B0R80X	Avolta	AVOL SW	Switzerland	Cons. Discretionary	5,827	13.5	42%
040520	Halma	HLMA LN	United Kingdom	Tech Hardware	10,602	16.6	42%
714209	Skanska	SKAB SS	Sweden	Industrials	7,018	11.4	42%
BMHVLR	Tenaris SA	TEN IM	Italy	Energy	18,870	40.3	42%
098952	AstraZeneca	AZN LN	United Kingdom	Health Care	207,241	162.5	42%
769835	Getinge	GETIB SS	Sweden	Health Care	5,503	14.9	41%
598662	Koninklijke Philips	PHIA NA	Netherlands	Health Care	19,949	47.7	41%
595937	Ericsson	ERICB SS	Sweden	Tech Hardware	17,222	43.4	40%
BMXVKB	Bachem Holding Ag-Reg B	BANB SW	Switzerland	Health Care	5,088	7.3	40%
710306	Novartis	NOVN SW	Switzerland	Health Care	237,345	273.8	40%
733337	Lonza	LONN SW	Switzerland	Health Care	36,876	112.5	39%
451957	Kerry Group	KYGA ID	Ireland	Cons. Staples	15,908	28.8	39%
B8C3BL	Sage Group	SGE LN	United Kingdom	Software	15,405	27.3	39%
435209	Fresenius	FRE GR	Germany	Health Care	15,981	36.6	39%
563396	Nemetschek Se	NEM GR	Germany	Software	10,792	8.6	39%
BNZFHC	Hexagon-B	HEXAB SS	Sweden	Tech Hardware	28,634	37.3	39%
BM8H5Y	Dassault Systemes	DSY FP	France	Software	70,024	46.3	38%
B11ZRK	Legrand	LRFP	France	Industrials	25,984	39.1	38%
B058TZ	Safran	SAF FP	France	Industrials	80,486	86.8	38%
BRJL17	UBS	UBSG SW	Switzerland	Div Financials	104,890	182.2	37%
584332	Sartorius-Pfd	SRT3 GR	Germany	Health Care	13,864	32.8	37%
023740	Diageo	DGE LN	United Kingdom	Cons. Staples	81,886	96.5	37%
B8KF9B	WPP	WPP LN	United Kingdom	Media & Ent.	10,559	18.5	36%
BN4MYF	Vestas Wind	VWS DC	Denmark	Industrials	28,943	54.6	35%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 38: Developed Europe stocks with revenue exposure to the USA (>30%)...continued...

Screen to highlight Developed Europe stocks with revenue exposure to the USA

Symbol	Company Name	BBG Code	Country	Sector	(Total \$US m)	MCAP (6m \$US m)	Avg Daily TO (6m \$US m)	Revenue Exposure
BN4MYF	Vestas Wind	VWS DC	Denmark	Industrials	28,943	54.6	35%	
B18ZRK	Logitech	LOGN SW	Switzerland	Tech Hardware	14,622	55.1	35%	
B4YVF5	Brenntag	BNR GR	Germany	Industrials	13,805	28.0	35%	
596230	Lindt & Sprungli	LISN SW	Switzerland	Cons. Staples	17,181	9.1	35%	
B10RZP	Unilever	ULVR LN	United Kingdom	Cons. Staples	122,494	116.7	35%	
BYZ2QP	Sartorius Stedim	DIM FP	France	Health Care	25,153	14.9	35%	
BD594Y	Siemens Healthineers	SHL GR	Germany	Health Care	63,544	34.0	35%	
710889	ABB	ABBN SW	Switzerland	Industrials	80,493	108.6	34%	
BZ01RF	Demant	DEMAN T DC	Denmark	Health Care	10,241	13.1	34%	
BWXCOZ	Flutter Entertain(UK)	FLTR LN	Ireland	Cons. Discretionary	36,638	89.1	34%	
451180	Hannover Rueck	HNRI GR	Germany	Insurance	29,108	24.3	33%	
079805	BP	BP/LN	United Kingdom	Energy	100,505	148.4	33%	
484628	SAP	SAP GR	Germany	Software	214,582	259.1	33%	
B63H84	Rolls-Royce	RR/LN	United Kingdom	Industrials	32,283	51.5	32%	
712387	Nestle	NESN SW	Switzerland	Cons. Staples	306,761	320.0	32%	
590294	Nokia	NOKIA FH	Finland	Tech Hardware	20,539	49.8	32%	
B24CGK	Reckitt Benckiser	RKT LN	United Kingdom	Cons. Staples	52,162	64.6	32%	
B0Z5YZ	Arkema	AKE FP	France	Materials	8,258	13.8	32%	
B798FW	Novozymes	NZYMB DC	Denmark	Materials	11,734	24.7	31%	
506921	Bayer	BAYN GR	Germany	Health Care	30,841	139.4	31%	
B1Q3J3	AB SKF	SKFB SS	Sweden	Industrials	8,489	23.1	31%	
B1YXBJ	Air Liquide	AI FP	France	Materials	98,809	101.3	31%	
715603	Sonova	SOON SW	Switzerland	Health Care	19,302	39.5	31%	
316383	Intertek Group	ITRK LN	United Kingdom	Industrials	9,234	11.6	30%	

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 39: Japan stocks with revenue exposure to the USA (>20%)

Screen to highlight Japan stocks with revenue exposure to the USA

Symbol	Company Name	BBG Code	Sector	MCAP (Total \$US m)	ADT (6m \$US m)	Revenue Exposure
B0FS5D	Seven & i	3382JP	Cons. Staples	35,512	89.8	72%
635640	Subaru	7270JP	Cons. Discretionary	15,739	56.0	71%
687044	Takeda Pharma	4502JP	Health Care	47,219	119.8	52%
613210	Bridgestone	5108JP	Cons. Discretionary	31,463	72.8	51%
649080	Kikkoman Corp	2801JP	Cons. Staples	12,124	34.1	50%
643514	Honda	7267JP	Cons. Discretionary	62,289	181.1	47%
664286	Nissan	7201JP	Cons. Discretionary	16,990	100.9	41%
659101	Mizuho	8411JP	Banks	46,937	198.8	40%
649955	Kyowa Kirin	4151JP	Health Care	8,620	15.7	40%
656946	Marubeni	8002JP	Industrials	29,295	95.9	39%
B5LTM9	Otsuka	4578JP	Health Care	22,226	38.9	38%
663955	Nintendo	7974JP	Media & Ent.	73,830	186.1	37%
649750	Kubota	6326JP	Industrials	18,200	54.5	37%
688507	Terumo	4543JP	Health Care	25,733	64.0	35%
680458	Shin-Etsu	4063JP	Materials	81,353	210.5	35%
690030	Mazda Motor	7261JP	Cons. Discretionary	7,873	62.6	34%
665880	Olympus	7733JP	Health Care	19,057	85.4	34%
690054	Toyota Indus	6201JP	Industrials	28,053	50.2	34%
661650	Seiko Epson	6724JP	Tech Hardware	5,707	18.2	33%
685894	Sumitomo Corp	8053JP	Industrials	28,574	76.8	33%
630720	Eisai	4523JP	Health Care	14,198	72.7	32%
625072	Daikin	6367JP	Industrials	47,895	184.0	32%
666010	Ono Pharma	4528JP	Health Care	9,458	30.7	32%
BQRRZ0	Recruit	6098JP	Industrials	68,767	159.0	32%
682150	Sony	6758JP	Cons. Discretionary	126,777	278.2	31%
651312	Tokio Marine	8766JP	Insurance	53,838	108.1	30%
617232	Canon	7751JP	Tech Hardware	37,228	88.7	29%
641628	Dentsu	4324JP	Media & Ent.	7,267	28.4	29%
650626	Lasertec	6920JP	Semiconductors	25,659	2,263.6	28%
617369	CAPCOM	9697JP	Media & Ent.	10,292	43.1	27%
640587	Hamamatsu Photonics	6965JP	Tech Hardware	6,633	16.9	27%
B3FF8W	Hoshizaki Elec	6465JP	Industrials	5,346	11.4	26%
688380	Sysmex Corp	6869JP	Health Care	11,491	29.8	26%
614650	Brother Inds	6448JP	Tech Hardware	4,380	14.3	26%
664054	Taiyo Nippon Sanso	4091JP	Materials	11,170	15.2	25%
B019MQ	Asahi Intecc	7747JP	Health Care	5,262	17.0	24%
612528	Trend Micro	4704JP	Software	8,193	35.7	24%
635693	FANUC	6954JP	Industrials	28,251	109.5	23%
656302	Sumitomo Mitsui	8316JP	Banks	70,456	359.0	23%
649374	Kirin	2503JP	Cons. Staples	13,275	41.1	23%
698526	Yamaha Motor	7272JP	Cons. Discretionary	10,113	52.6	23%
657270	Panasonic	6752JP	Cons. Discretionary	23,649	98.2	23%
649926	Kyocera	6971JP	Tech Hardware	22,552	55.9	22%
B8BRV4	Japan Airlines	9201JP	Industrials	8,504	62.5	22%
664310	Nomura	8604JP	Div Financials	16,647	57.9	22%
664238	Yamaha	7951JP	Cons. Discretionary	4,185	25.2	22%
633517	Mitsubishi UFJ	8306JP	Banks	121,083	618.0	21%
649668	Konami	9766JP	Media & Ent.	8,959	29.7	21%
664176	Nissin Food	2897JP	Cons. Staples	10,089	30.0	21%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 40: Emerging Markets ex Asia stocks with revenue exposure to the USA (>10%)

Screen to highlight Emerging Markets ex-Asia stocks with revenue exposure to the USA

Symbol	Company Name	BBG Code	Country	Sector	MCAP (Total \$US \$US m)	ADT (6m \$US m)	Revenue Exposure
730221	Cd Projekt Sa	CDR PW	Poland	Media & Ent.	2,627	10.1	71%
B1V74X	JBS SA	JBSS3 BZ	Brazil	Cons. Staples	10,518	32.0	58%
239254	Gruma, S.A.B.	GRUMAB MM	Mexico	Cons. Staples	6,939	10.3	57%
244820	Industrias Penoles	PE&OLES* MM	Mexico	Materials	5,238	3.8	52%
239247	Bimbo	BIMBOA MM	Mexico	Cons. Staples	20,152	12.6	52%
264551	Gerdau	GGBR4 BZ	Brazil	Materials	4,925	46.1	46%
204342	Alfa	ALFAA MM	Mexico	Industrials	3,799	5.1	34%
282388	Arca Continental	AC* MM	Mexico	Cons. Staples	19,593	16.1	33%
BL0L91	Sibanye Stillwater	SSWSJ	South Africa	Materials	3,482	20.6	33%
240645	Cemex SAB	CEMEXCPO MM	Mexico	Materials	12,618	35.0	31%
BH3T8K	Orbia Advance	ORBIA* MM	Mexico	Materials	4,016	5.1	27%
BC9ZH8	Richter Gedeon	RICHT HB	Hungary	Health Care	5,057	4.4	25%
B03MYK	Turkish Airlines	THYAO TI	Turkiye	Industrials	12,404	329.6	21%
B1323K	SABIC Agri-Nutrients	SAFCO AB	Saudi Arabia	Materials	16,274	15.7	20%
264367	Grupo Mexico	GMEXICOB MM	Mexico	Materials	40,254	30.5	20%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



Table 41: Asia Pac ex Japan stocks with revenue exposure to the USA (>30%)

Screen to highlight Asia Pac ex-Japan stocks with revenue exposure to the USA

Symbol	Company Name	BBG Code	Country	Sector	Total MCAP (\$US m)	ADT (6m) \$US m	Revenue Exposure
BMX9K0	Legend Biotech-ADR	LEGN US	China	Health Care	10,037	48.1	100%
615159	Mphasis	MPHL IN	India	Software	5,901	15.4	82%
BF4QXG	Wiwynn	6669 TT	Taiwan	Tech Hardware	12,289	158.2	80%
B734XQ	Zhen Ding Tech	4958 TT	Taiwan	Tech Hardware	3,056	9.6	75%
645993	Inventec Corp	2356 TT	Taiwan	Tech Hardware	6,293	86.5	74%
BFXZDY	ASE Tech	3711 TT	Taiwan	Semiconductors	19,016	44.2	67%
688910	TSMC	2330 TT	Taiwan	Semiconductors	520,307	504.0	66%
600521	Accton Tech	2345 TT	Taiwan	Tech Hardware	9,467	58.0	66%
BGHHOL	WuXi AppTec-H	2359 HK	China	Health Care	2,781	40.3	66%
618041	Computershare	CPU AU	Australia	Industrials	10,133	29.1	64%
620605	WIPRO	WPRO IN	India	Software	30,067	37.5	60%
629489	HCL Technologies	HCLT IN	India	Software	51,382	41.8	57%
B1FJOC	Brambles	BXB AU	Australia	Industrials	13,448	35.9	55%
614101	Quanta	2382 TT	Taiwan	Tech Hardware	30,482	393.6	53%
BDHQ2J	Genscript Biotech	1548 HK	China	Health Care	3,515	21.9	53%
B85LKS	AAC Tech	2018 HK	China	Tech Hardware	2,692	16.5	51%
B5VSK2	Indorama Ventures	IVL TB	Thailand	Materials	3,735	14.0	50%
621179	Cochlear	COH AU	Australia	Health Care	13,190	29.2	50%
BWFGD6	Tech Mahindra	TECHM IN	India	Software	15,666	34.9	50%
618549	CSL	CSL AU	Australia	Health Care	96,342	141.5	49%
670263	Aurobindo Pharma	ARBP IN	India	Health Care	8,117	25.0	48%
625398	Aristocrat	ALL AU	Australia	Cons. Discretionary	19,079	35.8	47%
618965	China Airlines	2610 TT	Taiwan	Industrials	3,926	25.6	47%
634578	Eclat Textile	1476 TT	Taiwan	Cons. Discretionary	4,795	10.7	46%
667248	Wistron	3231 TT	Taiwan	Tech Hardware	10,608	347.5	46%
629467	Doosan Enerbility	034020 KS	South Korea	Industrials	7,410	37.0	44%
641095	Dr Reddy's	DRRD IN	India	Health Care	12,293	31.6	43%
621120	Tata Elxsi	TELX IN	India	Software	5,703	13.2	42%
622574	Compal	2324 TT	Taiwan	Tech Hardware	5,048	45.3	41%
640586	HMM	011200 KS	South Korea	Industrials	7,068	43.6	41%
677172	Samsung Electronics	005930 KS	South Korea	Tech Hardware	325,181	767.7	39%
B4TPSL	Alchip Tech	3661 TT	Taiwan	Semiconductors	9,233	205.8	39%
B61JC6	Treasury Wine (TWE)	TWE AU	Australia	Cons. Staples	5,683	28.0	38%
B4PLX1	Pegatron Corp	4938 TT	Taiwan	Tech Hardware	7,040	17.9	37%
643856	Hon Hai	2317 TT	Taiwan	Tech Hardware	45,399	93.1	36%
BGDY26	Beigene	6160 HK	China	Health Care	14,553	21.3	35%
698758	Yang Ming	2609 TT	Taiwan	Industrials	5,339	72.3	34%
686774	Swire Pacific	19 HK	Hong Kong	Real Estate	6,631	8.9	34%
621808	Lenovo	992 HK	China	Tech Hardware	12,675	59.3	34%
614376	Lupin	LPC IN	India	Health Care	8,252	18.2	34%
B28YTC	Macquarie Group	MQG AU	Australia	Div Financials	48,656	90.9	33%
BRJS8F	Delta Electronics (Thai)	DELTA TB	Thailand	Tech Hardware	27,688	38.9	33%
658248	Sun Pharma	SUNP IN	India	Health Care	40,981	28.8	32%
BZ8GX8	WiseTech	WTC AU	Australia	Software	16,082	36.2	31%
BLD4QD	Haier Smart Home-H	6690 HK	China	Cons. Discretionary	8,063	23.8	31%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



DM-2-EM**Table 42: DM-2-EM**

Screen to highlight Developed Markets stocks with revenue exposure to Emerging Markets

BGK4T3	Futu-ADR	FUTU US	Hong Kong	Div Financials	4,301	105.9	100%
B5B23W	Sands China	1928 HK	Hong Kong	Cons. Discretionary	21,224	37.4	100%
B23X1H	MercadoLibre	MELI US	United States	Cons. Discretionary	85,749	572.9	95%
624226	Jardine C&C	JCNC SP	Singapore	Industrials	7,693	7.4	93%
608625	Fortescue	FMG AU	Australia	Materials	60,816	96.3	89%
271492	Qualcomm	QCOM US	United States	Semiconductors	165,737	997.2	84%
B63QM7	Nexon	3659 JP	Japan	Media & Ent.	13,839	47.8	84%
266927	Pan American Silver	PAAS CN	Canada	Materials	4,964	13.4	84%
646587	Galaxy Ent.	27 HK	Hong Kong	Cons. Discretionary	22,715	39.9	83%
643655	HK & China Gas	3 HK	Hong Kong	Utilities	13,248	10.7	80%
B1Y1SQ	Jeronimo Martins	JMT PL	Portugal	Cons. Staples	14,410	14.7	78%
BF13KN	Wheaton Precious	WPM CN	Canada	Materials	21,363	48.4	77%
BJDS7L	Prosus Nv	PRX NA	Netherlands	Cons. Discretionary	79,533	104.3	76%
B01Z7J	Monolithic Power	MPWR US	United States	Semiconductors	28,797	259.5	76%
687049	Advantest	6857 JP	Japan	Semiconductors	30,520	396.2	74%
550190	BBVA	BBVA SM	Spain	Banks	56,220	107.9	73%
BP6NH4	Grab	GRAB US	Singapore	Industrials	11,638	62.7	71%
614469	BHP	BHP AU	Australia	Materials	158,387	254.2	71%
234760	First Quantum	FM CN	Canada	Materials	6,330	64.1	70%
248013	KLA	KLAC US	United States	Semiconductors	80,981	489.7	69%
B05NXN	Xinyi Glass	868 HK	Hong Kong	Industrials	3,484	8.2	68%
200247	AES	AES US	United States	Utilities	11,169	117.7	68%
603050	Hang Lung Prop	101 HK	Hong Kong	Real Estate	5,226	7.3	68%
B9895B	Coca-Cola HBC AG	CCH LN	United Kingdom	Cons. Staples	10,919	11.7	67%
204655	Applied Materials	AMAT US	United States	Semiconductors	137,443	837.8	66%
B929F4	ASML Holding	ASML NA	Netherlands	Semiconductors	349,539	370.8	66%
250224	Lam Research	LRCX US	United States	Semiconductors	109,106	712.8	66%
BGOSCK	BE Semiconductor	BESI NA	Netherlands	Semiconductors	12,323	54.1	66%
288418	Teradyne	TER US	United States	Semiconductors	14,876	154.6	66%
B02T2J	Las Vegas Sands	LVS US	United States	Cons. Discretionary	37,114	243.0	63%
BNKJSM	Marvell Tech	MRVL US	United States	Semiconductors	58,412	586.6	63%
B17KC6	Wilmar Int'l	WIL SP	Singapore	Cons. Staples	15,813	14.0	62%
689567	Tokyo Electron	8035 JP	Japan	Semiconductors	89,906	496.9	60%
286685	Lundin Mining	LUN CN	Canada	Materials	6,355	26.9	59%
B0MOC8	Sumco Corp	3436 JP	Japan	Semiconductors	5,404	71.7	59%
627094	Disco Corp	6146 JP	Japan	Semiconductors	29,931	290.1	57%
BDHLTQ	Baker Hughes	BKR US	United States	Energy	28,775	246.6	56%
204685	Albemarle	ALB US	United States	Materials	13,464	377.6	55%
686930	TDK	6762 JP	Japan	Tech Hardware	19,793	83.5	55%
622010	Rio Tinto	RIO AU	Australia	Materials	32,618	112.3	54%
277920	Schlumberger	SLB US	United States	Energy	69,212	508.9	53%
B3NPHP	Mosaic Co	MOS US	United States	Materials	10,204	135.8	53%
528983	Erste Group	EBS AV	Austria	Banks	18,698	19.2	50%
B29NF3	Franco-Nevada	FNV CN	Canada	Materials	20,910	80.2	50%
661040	Murata	6981 JP	Japan	Tech Hardware	41,818	107.5	50%
287932	Teck Resources	TECK/B CN	Canada	Materials	20,621	68.3	49%
BHNCRK	ESR	1821 HK	Hong Kong	Real Estate	5,562	7.3	49%
B1XZS8	Anglo American (UK)	AAL LN	United Kingdom	Materials	32,306	68.3	48%
B61X7R	SITC Int'l	1308 HK	Hong Kong	Industrials	4,077	9.0	48%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

BofA GLOBAL RESEARCH



EM-2-DM**Table 43: EM-2-DM**

Screen to highlight Emerging Markets stocks with revenue exposure to Developed Markets

Symbol	Company Name	BBG Code	Country	Sector	Free MCAP (\$US m)	Avg Daily TO (6m \$US m)	Revenue Exposure
712797	LPP	LPP PW	Poland	Cons. Discretionary	7,252	13.2	100%
BF52QF	Reinet Investments	RNI SJ	South Africa	Div Financials	4,944	6.5	100%
BMX9K0	Legend Biotech-ADR	LEGN US	China	Health Care	10,037	48.1	100%
BF4QXG	Wiwynn	6669 TT	Taiwan	Tech Hardware	12,289	158.2	92%
730221	Cd Projekt Sa	CDR PW	Poland	Media & Ent.	2,627	10.1	90%
633605	Feng Tay	9910 TT	Taiwan	Cons. Discretionary	5,111	9.7	89%
BYX9GP	Doosan Bobcat	241560 KS	Korea	Industrials	3,823	11.7	89%
620605	WIPRO	WPRO IN	India	Software	30,067	37.5	89%
B54JP7	Inari Amertron	INRI MK	Malaysia	Semiconductors	2,517	5.4	89%
BYNJCV	Samsung Biologics	207940 KS	Korea	Health Care	44,795	31.9	88%
620512	Infosys	INFO IN	India	Software	83,009	107.1	87%
BD6F8V	LTIMindtree	LTIM IN	India	Software	19,415	28.4	87%
615159	Mphasis	MPHL IN	India	Software	5,901	15.4	87%
600521	Accton Tech	2345 TT	Taiwan	Tech Hardware	9,467	58.0	84%
629489	HCL Technologies	HCLT IN	India	Software	51,382	41.8	83%
B01NPJ	TCS	TCS IN	India	Software	168,137	90.0	83%
B4PLX1	Pegatron Corp	4938 TT	Taiwan	Tech Hardware	7,040	17.9	82%
643856	Hon Hai	2317 TT	Taiwan	Tech Hardware	45,399	93.1	80%
B28SM0	Persistent Systems	PSYS IN	India	Software	7,738	34.5	78%
621120	Tata Elxsi	TELX IN	India	Software	5,703	13.2	78%
698758	Yang Ming	2609 TT	Taiwan	Industrials	5,339	72.3	78%
BGHHOL	WuXi AppTec-H	2359 HK	China	Health Care	2,781	40.3	77%
688910	TSMC	2330 TT	Taiwan	Semiconductors	520,307	504.0	77%
B734XQ	Zhen Ding Tech	4958 TT	Taiwan	Tech Hardware	3,056	9.6	76%
BFXZDY	ASE Tech	3711 TT	Taiwan	Semiconductors	19,016	44.2	76%
670263	Aurobindo Pharma	ARBP IN	India	Health Care	8,117	25.0	75%
BMXNYN	Pepco Group Nv	PCO PW	Poland	Cons. Discretionary	3,182	8.7	75%
BWFGD6	Tech Mahindra	TECHM IN	India	Software	15,666	34.9	75%
645993	Inventec Corp	2356 TT	Taiwan	Tech Hardware	6,293	86.5	74%
B1V74X	JBS SA	JBSS3 BZ	Brazil	Cons. Staples	10,518	32.0	74%
B5VSK2	Indorama Ventures	IVL TB	Thailand	Materials	3,735	14.0	72%
BL6B9P	WuXi Biologics	2269 HK	China	Health Care	11,149	135.5	72%
640586	HMM	011200 KS	Korea	Industrials	7,068	43.6	69%
B7T5KQ	Hankook Tire & Tech	161390 KS	Korea	Cons. Discretionary	4,761	8.5	68%
667248	Wistron	3231 TT	Taiwan	Tech Hardware	10,608	347.5	67%
BKWGSQ	Smoore Int'l	6969 HK	China	Cons. Staples	3,711	7.7	66%
677164	Samsung SDI	006400 KS	Korea	Tech Hardware	19,192	107.1	66%
B018C0	Minor Intl	MINT TB	Thailand	Cons. Discretionary	4,811	12.4	66%
638878	Balkrishna Indus	BIL IN	India	Cons. Discretionary	5,713	8.5	66%
BNSP8W	LG Energy Solution	373220 KS	Korea	Industrials	66,800	104.9	65%
239254	Gruma, S.A.B.	GRUMAB MM	Mexico	Cons. Staples	6,939	10.3	65%
614101	Quanta	2382 TT	Taiwan	Tech Hardware	30,482	393.6	64%
649092	Kia	000270 KS	Korea	Cons. Discretionary	30,997	73.4	62%
B4TPSL	Alchip Tech	3661 TT	Taiwan	Semiconductors	9,233	205.8	62%
618965	China Airlines	2610 TT	Taiwan	Industrials	3,926	25.6	62%
BD9Q2J	Genscript Biotech	1548 HK	China	Health Care	3,515	21.9	62%
BZBFKT	Bid Corp	BID SJ	South Africa	Cons. Staples	8,190	19.3	62%
605104	Asustek	2357 TT	Taiwan	Tech Hardware	10,572	73.3	61%
634578	Eclat Textile	1476 TT	Taiwan	Cons. Discretionary	4,795	10.7	59%
621808	Lenovo	992 HK	China	Tech Hardware	12,675	59.3	59%

Source: BofA Global Quantitative Strategy, MSCI, Bloomberg, FactSet

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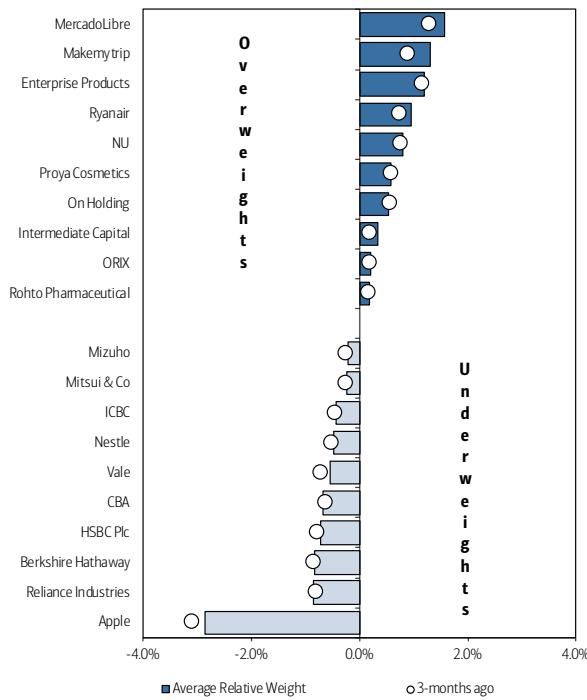


Global Positioning in Stocks

The chart below shows investors' most significant overweight and underweight positions.

Chart 327: Global Stocks Positioning

Global funds are most overweight MercadoLibre and have increased their exposure in the last 3m

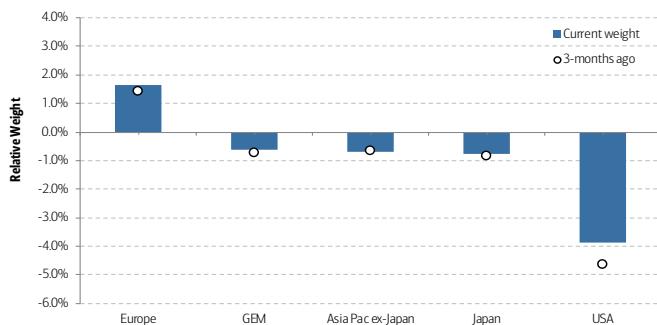


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges
Name with * represents non-benchmark stocks

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Chart 328: Global Positioning: Regions

Funds are most overweight Europe and most underweight USA



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

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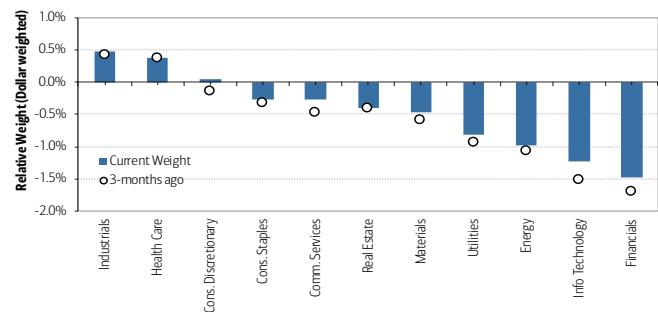
For each of the funds in the analysis, we calculate weights relative-to-benchmark ("active weight") for every stock in that portfolio. We aggregate these active weights across all funds. The chart below shows investors' most significant overweight and underweight positions. These are the largest average aggregate active weights subject to the constraints:

Constraints:

- held by at least 50 funds
- average active weight greater than 15bps
- average daily turnover greater than US\$10m
- the total dollar value of the aggregate active weight is greater than US\$500m.
- top two overweights and underweights by each region.

Chart 329: Global Positioning: Sectors

Funds in this analysis are most overweight Industrials, Health Care, and Cons. Discretionary



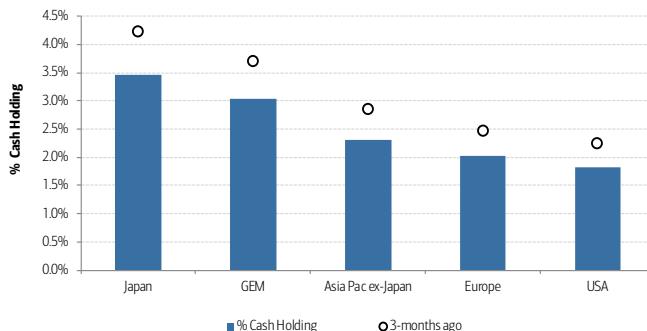
Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 330: Global Positioning: Cash

Funds have reduced their cash balance in all regions in last 3m

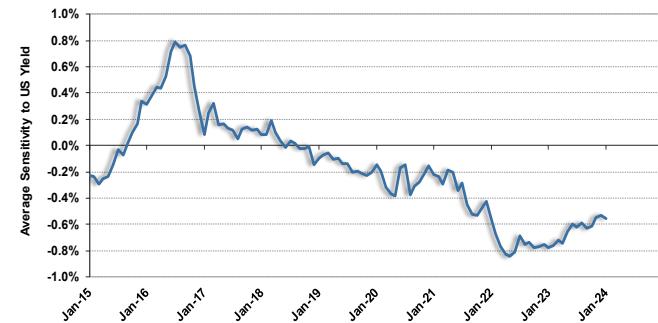


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 331: Global Funds' Relative Equity Duration through time

Funds are not positioned for rising bond yields

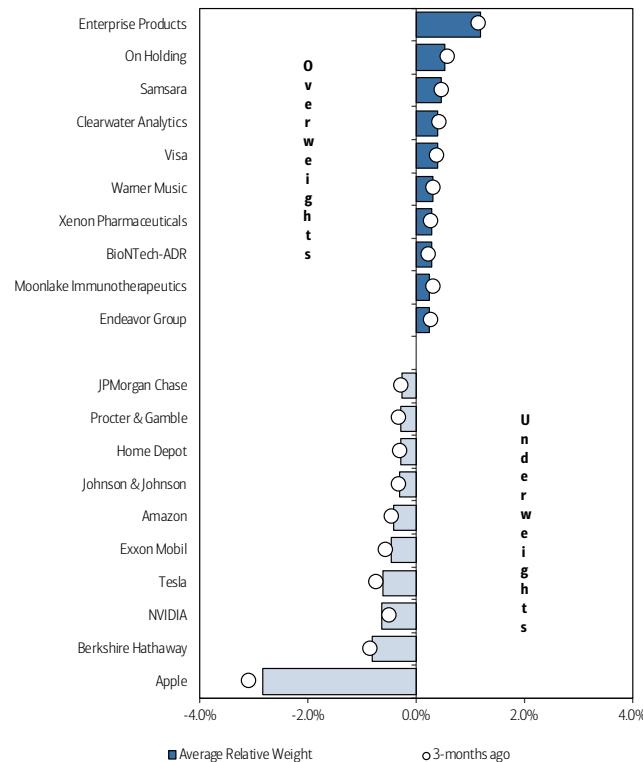


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 332: USA Stocks Positioning

Funds are most underweight Apple but have increased their exposure in the last 3m

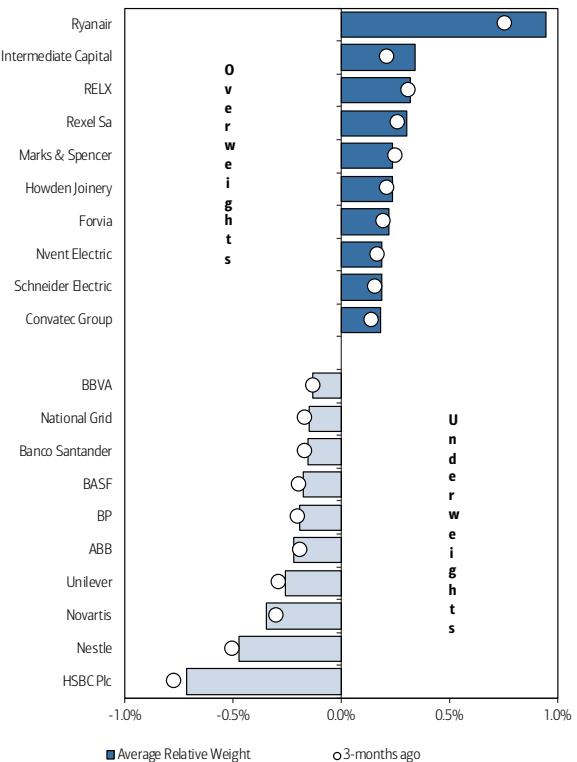


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges Name with * represents non-benchmark stocks

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Chart 333: Europe Stocks Positioning

Funds in Europe are most overweight Ryanair and have increased their exposure in the last 3m

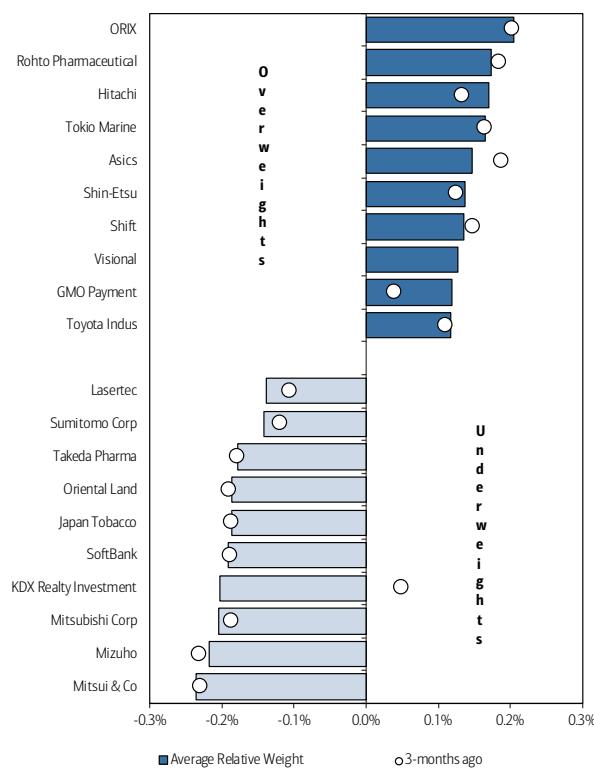


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges Name with * represents non-benchmark stocks

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Chart 334: Japan Stocks Positioning

ORIX is the most overweight stock in Japan, and Mitsui & Co is the most underweight

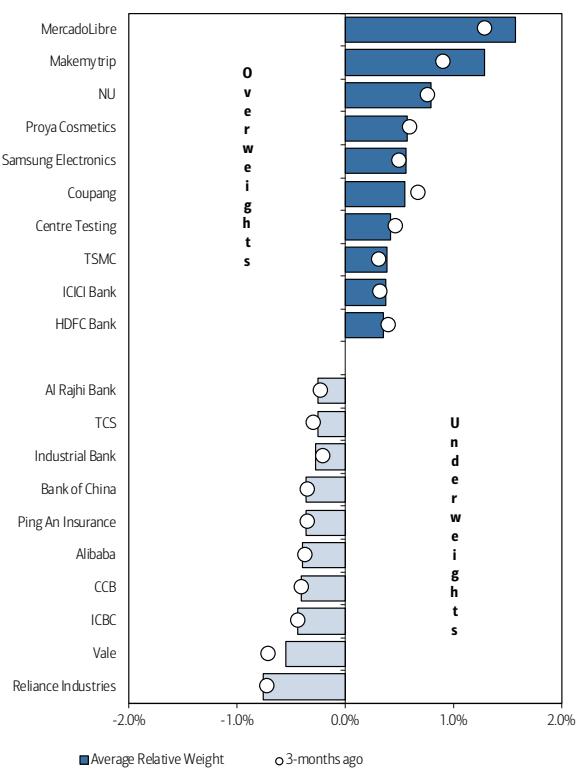


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges Name with * represents non-benchmark stocks

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Chart 335: Emerging Markets Stocks Positioning

In EM, the funds are most overweight MercadoLibre and most underweight Reliance Industries

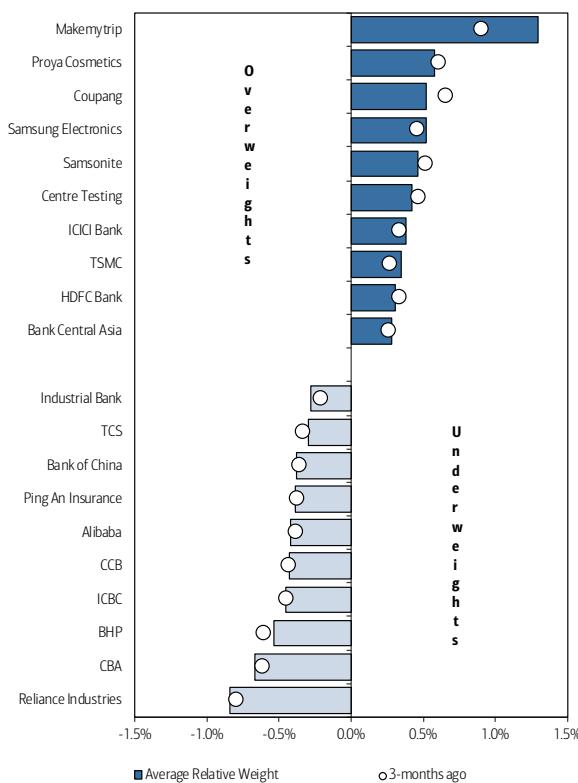


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges Name with * represents non-benchmark stocks

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Chart 336: Asia Pac ex-Japan Stocks Positioning

Funds in APxJ are most overweight Makemytrip and have increased their exposure in the last 3m



Source: BofA Asia Pac Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges
Name with * represents non-benchmark stocks

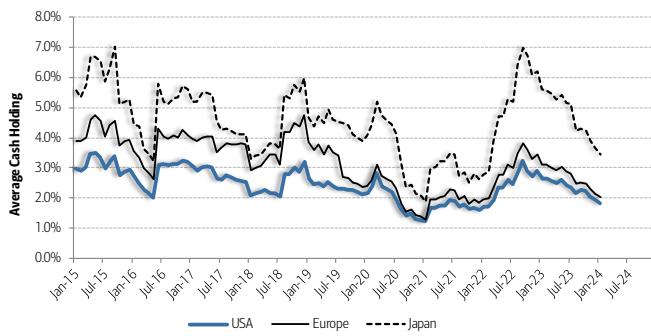
For each of the funds in the analysis, we calculate weights relative-to-benchmark ("active weight") for every stock in that portfolio. We aggregate these active weights across all funds. The chart below shows investors' most significant overweight and underweight positions. These are the largest average aggregate active weights subject to the constraints:

Constraints:

- held by at least 50 funds
- average active weight greater than 15bps
- average daily turnover greater than US\$10m
- the total dollar value of the aggregate active weight is greater than US\$500m.

Chart 337: USA, Europe & Japan: Trends in Investor Cash Positioning

Average cash balance is currently highest in Japan at 3.5%



Source: BofA Asia Pac Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 338: Asia Pac ex-Japan & Emerging Markets: Trends in Investor Cash Positioning

Average cash balance is currently highest in GEM at 3.0%

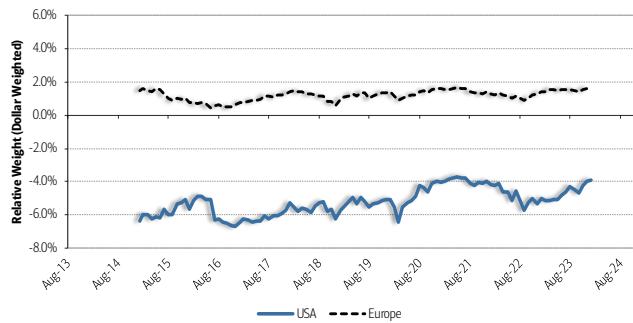


Source: BofA Asia Pac Quantitative Strategy, MSCI, FTSE, Factset, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 339: USA and Europe - Regional Positioning

Funds are currently overweight Europe by 1.63%

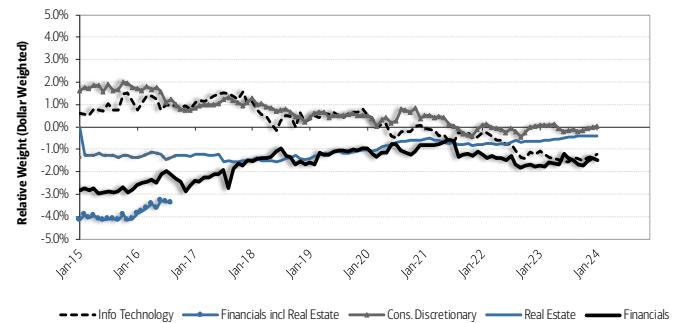


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 340: Global Early Cyclicals & Financials – Sector Positioning

Funds are most overweight Cons. Discretionary

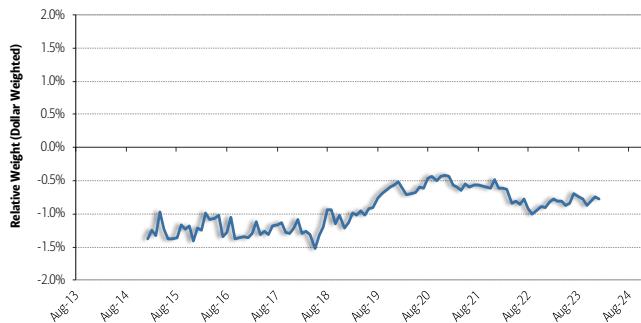


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 341: Japan: Regional Positioning

Funds have added to their active exposure in the last 3m

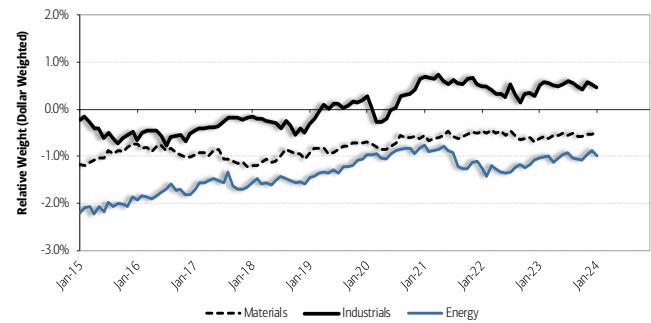


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 342: Global: Late Cyclicals – Sector Positioning

In last 3m, funds have increased exposure the most to Industrials

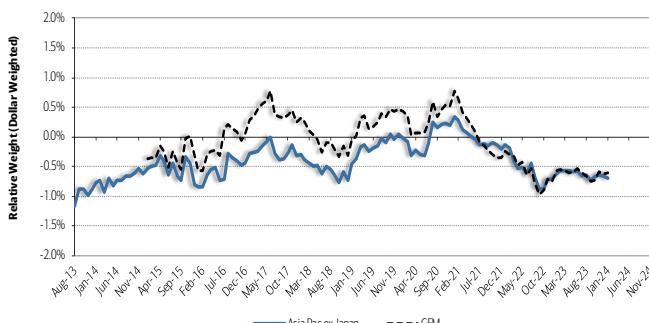


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 343: Asia Pac ex-Japan and Emerging Markets - Regional Positioning

Funds are currently underweight EM by -0.69%

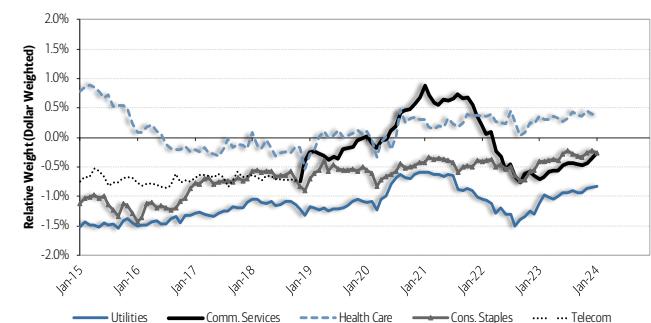


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 344: Global: Defensives – Sector Positioning

Funds are most overweight Health Care



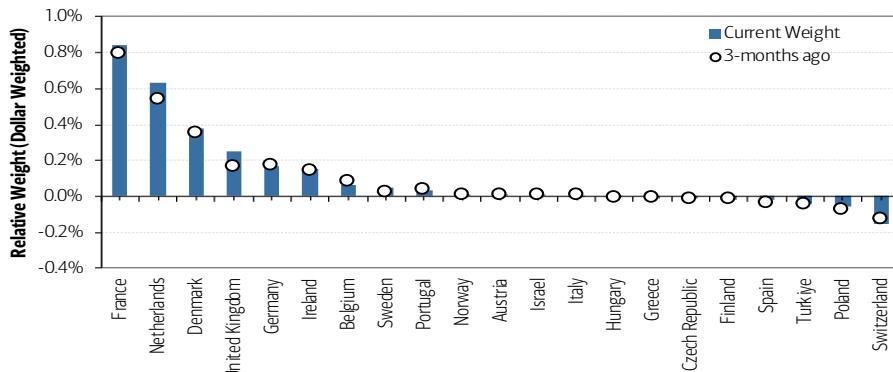
Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 345: Europe: Country Positioning

Funds in this analysis are most overweight France, Netherlands, and Denmark

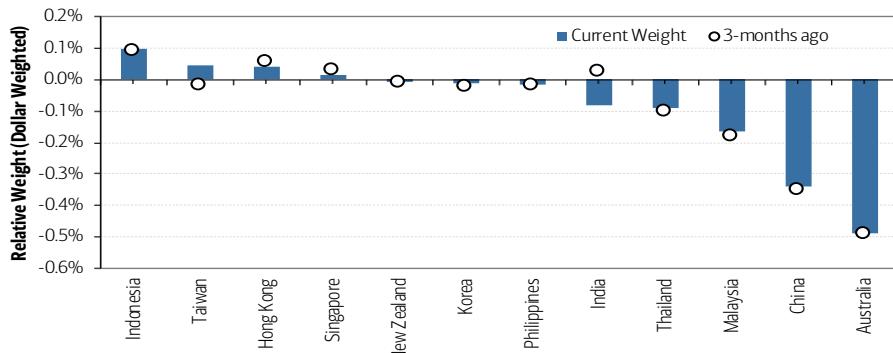


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 346: Asia Pac ex-Japan: Country Positioning

Funds are most overweight Indonesia and most underweight Australia

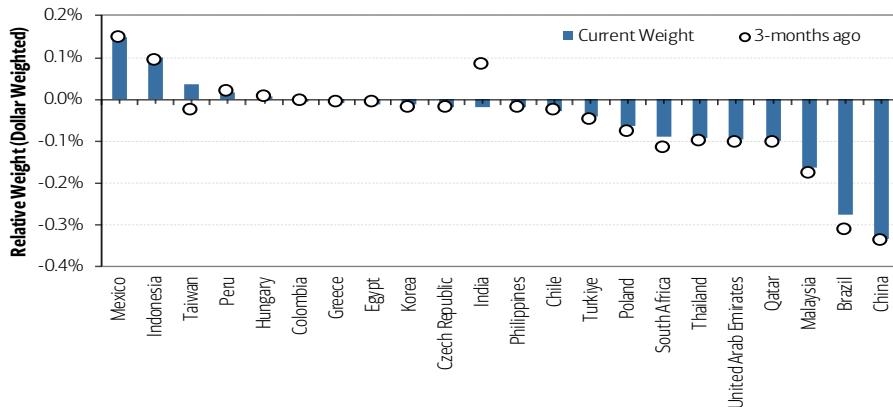


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Country Stock Exchanges

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Chart 347: Emerging Markets: Country Positioning

Funds in this analysis are most overweight Mexico, Indonesia, and Taiwan



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

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Global Fund Performance

Methodology

In this report we analyse relative returns of large long-only equity funds which declare portfolio holdings on a regular basis (frequency differs by fund, but is typically monthly or quarterly), manage more than US\$500m in any one region, for which we have identified and have access to their benchmark, and which have a ready-made "fund price" available from various data sources (Factset, Bloomberg). The table below summarizes the total number of funds, their funds under management and number of unique benchmarks used in this analysis.

Table 44: Summary Stats for Fund Returns

Earnings expectations have improved in World in last 6m

Number of Funds	Total FUM (\$US millions)	Unique Benchmarks
2148	14,125,747	479

Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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We divide funds by type based on various characteristics, including Region, Investment Style, Active / Passive, Active Share Ratio (ASR), Funds Under Management (FUM), Market Cap of Stocks, Portfolio Size (# of stocks in the fund), and Turnover.

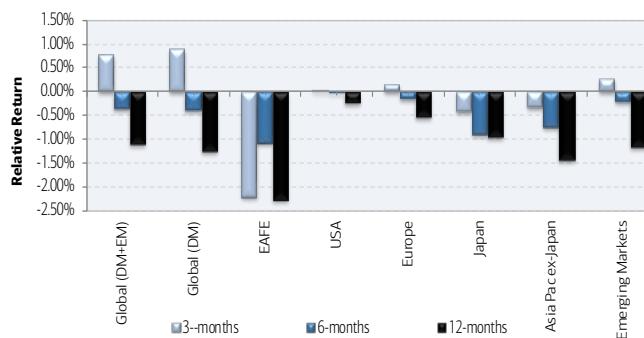
For each period of return we currently include in the report (1m, 3m, 6m, 12m, Year-to-date, 2yr, 3yr) we only include funds which were in our analysis and have price return for the entire period in question. We calculate relative returns of each fund for each period. Relative return is defined as the difference between a fund's return and the benchmark return. We calculate Median, Top Quartile, and Bottom Quartile relative returns across all funds for each group of fund in the analysis.

The data in this report is based on the most recent month-end data. The number of funds may change each month based on data availability and an annual refresh of the funds included in this analysis.

These "Benchmark Indices" are managed by MSCI, S&P, FTSE and Country Indices such as NSE, CNX among others.

Chart 348: Relative returns of Funds by Region: Periodic returns

USA funds have performed best in the last 6m

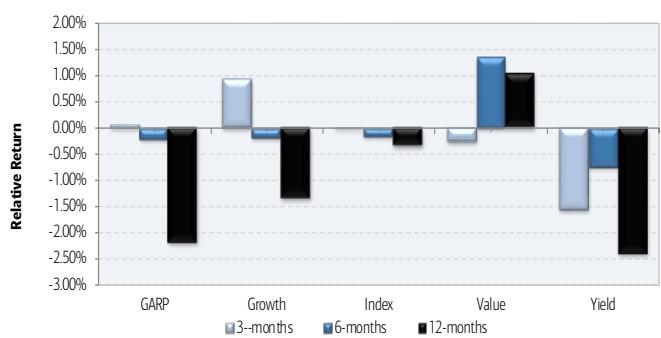


Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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Chart 349: Relative returns of Funds by Investment Style: Periodic returns

Value funds have performed the best in the last 12m



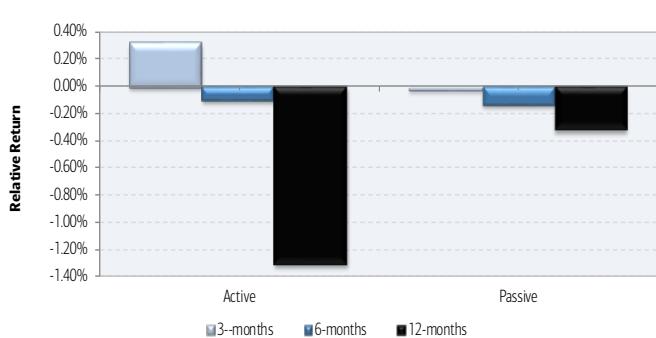
Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices

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Chart 350: Relative returns of Funds by Type (Active/Passive): Periodic returns

Active funds have performed best in the last 6m



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices
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Chart 352: Relative returns of Funds by FUM (USD \$): Periodic returns

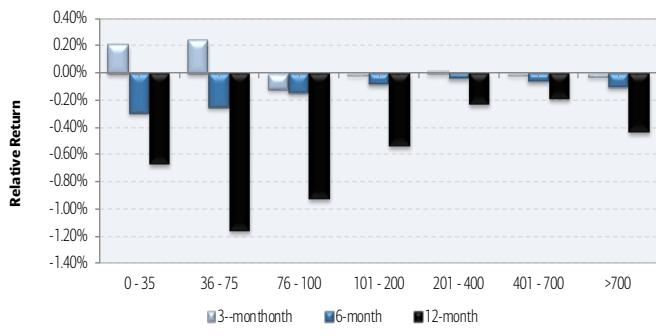
>\$10bn funds have performed the best in the last 12m



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices
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Chart 354: Relative returns of Funds by Portfolio Size (# of stocks): Periodic returns

201 - 400 funds have performed best in the last 6m



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices
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Chart 351: Relative returns of Funds by ASR: Periodic returns

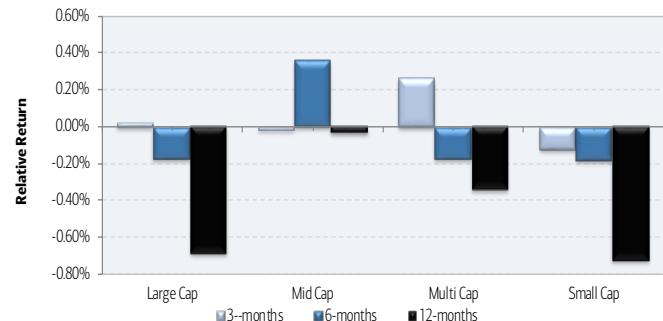
41-60% funds have performed best in the last 6m



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices
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Chart 353: Relative returns of Funds by MCAP: Periodic returns

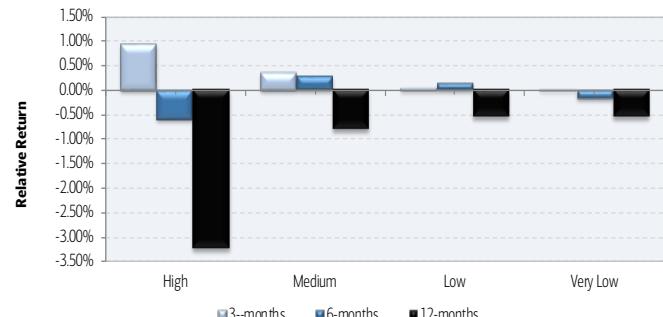
Last month the best performing fund group was Mid Cap



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices
BofA GLOBAL RESEARCH

Chart 355: Relative returns of Funds by Turnover: Periodic returns

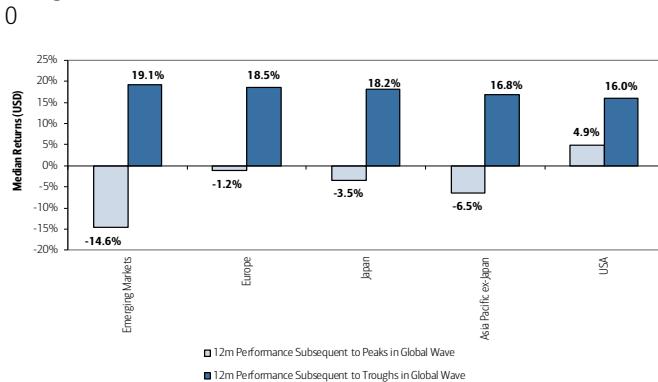
Medium funds have performed best in the last 6m



Source: BofA Global Quantitative Strategy, Factset, Bloomberg, Benchmark Indices
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Regional Allocation

Chart 356: Regional Performance after the Global Wave Peaks and Troughs



Source: BofA Global Quantitative Strategy, MSCI, IBES, Factset, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 357: S&P 500 Index (logged)

S&P 500 has rallied +4.4% year-to-date (until 21-Feb-24)

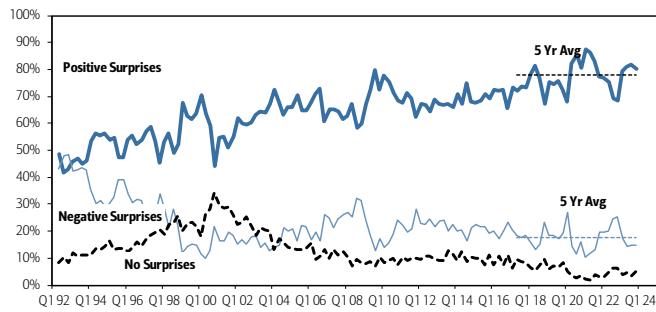


Source: BofA Global Quantitative Strategy, S&P

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Chart 358: Proportion of S&P 500 Companies Reporting an Earnings Surprise

S&P 500 Earnings 4Q23 - Positive surprises 80% out of 332 companies (66%) reported

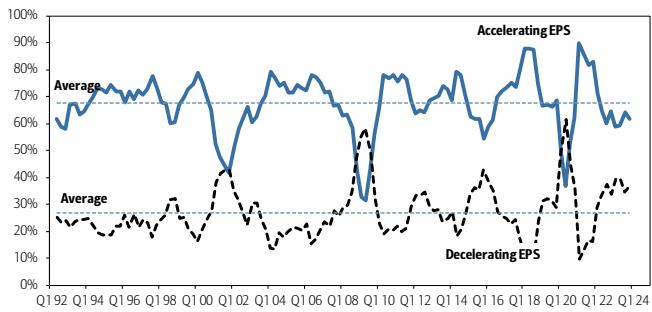


Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 359: Proportion of S&P 500 Reporting Up / Down YoY EPS Growth

S&P 500 Earnings 4Q23 - Positive growth 62% out of 332 companies (66%) reported

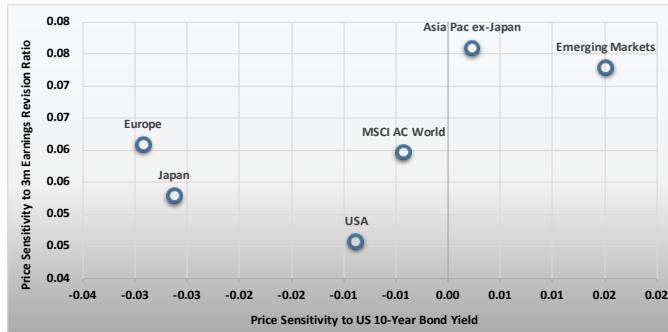


Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 360: Regional Price Sensitivity to Earnings Trends and Bond Yields

EM is most sensitive to EPS trends and bond yields

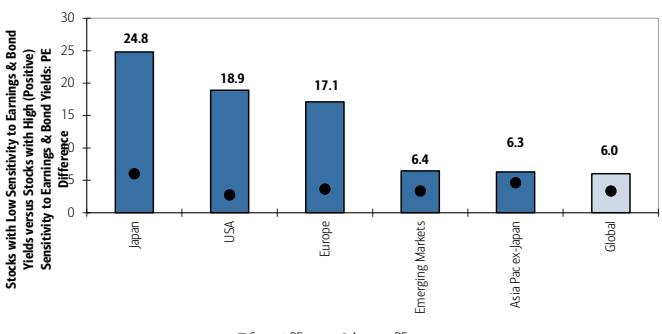


Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

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Chart 361: Regional Low vs High Earnings Trends and Bond Yields Sensitivity PE Ratio

High Earnings trends and Bond Yields sensitive stocks are trading at a discount



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

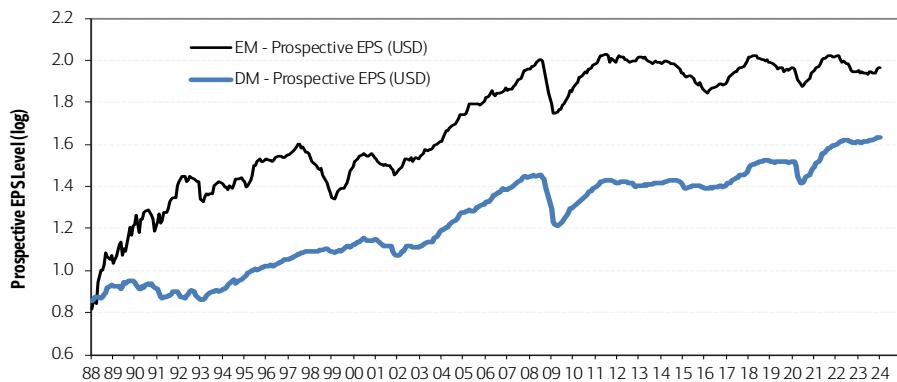
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Emerging vs Developed Markets

Chart 362: Prospective EPS and Trend EPS – Emerging Markets Vs Developed Markets

Prospective EPS has ticked up recently for Emerging Markets

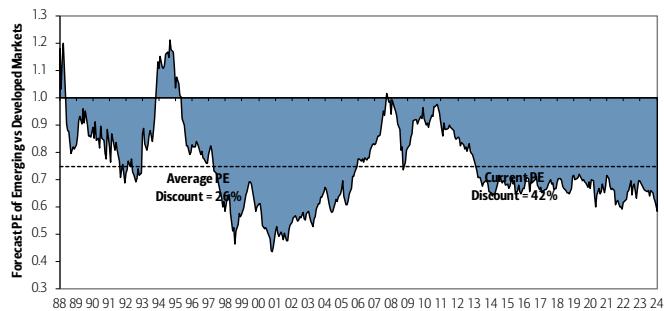


Source: BofA Global Quantitative Strategy, IBES, MSCI

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Chart 363: Emerging vs Developed Markets Forecast PE

EM is trading at 42% discount to DM currently

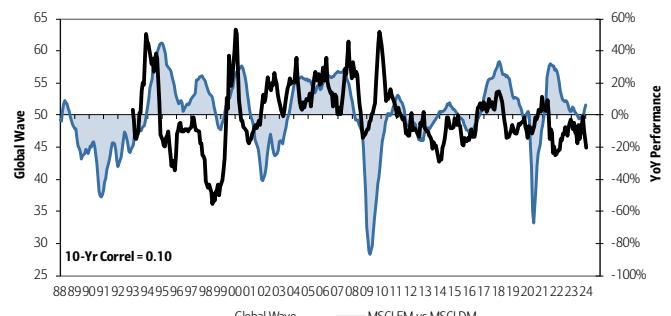


Source: BofA Global Quantitative Strategy, IBES, MSCI

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Chart 364: Emerging Markets relative Performance vs the Global Wave

EM has underperformed DM by 20.5% in the last 12m

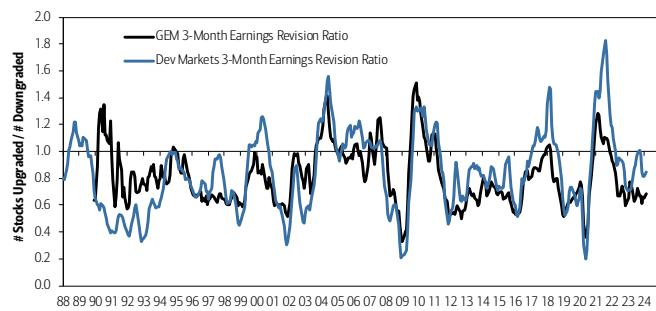


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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Chart 365: Emerging vs Developed Markets Earnings Revision Ratio

ERR in both regions is below 1.0 (more downgrades than upgrades)

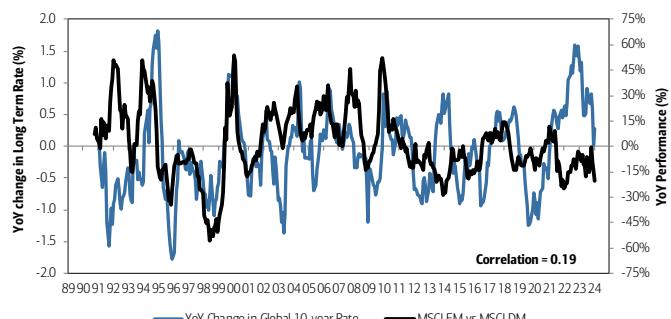


Source: BofA Global Quantitative Strategy, IBES, MSCI

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Chart 366: Emerging vs Developed Markets performance and Long Term Rates

EM tends to outperform DM in rising yield environment



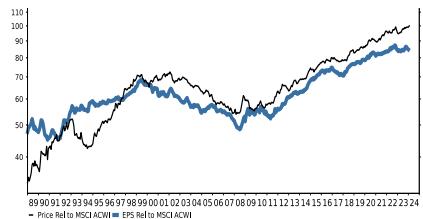
Source: BofA Global Quantitative Strategy, MSCI, Bloomberg

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USA

Chart 367: USA: Momentum & Value vs World

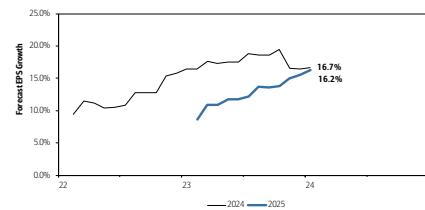
USA has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 370: USA: Forecast EPS Growth

Forecast EPS growth for 2025 is 16%



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 373: USA: Prospective PE

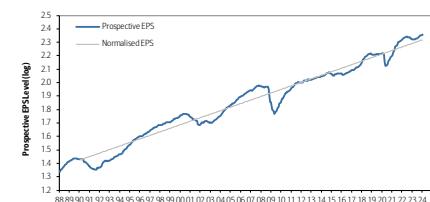
USA prospective PE has been re-rated compared to last month



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 368: USA: Prospective EPS

Earnings expectations have improved in USA in last 6m



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 369: USA: Earnings Revision Ratio

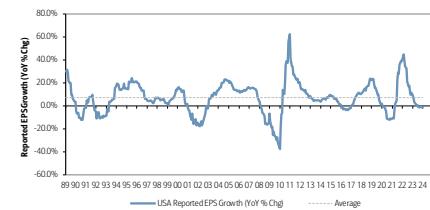
Earnings revisions improved in USA last month



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 371: USA: Reported EPS (LTM)

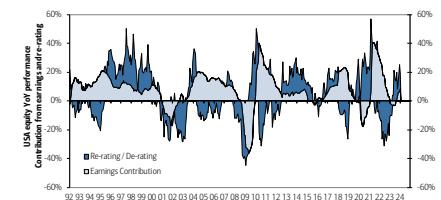
Current reported EPS growth is -2%



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 372: USA: Earnings Contribution

In the last 12m, re-rating contributed 11.1% to equity performance (19.2%)



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 374: USA: PB Trailing

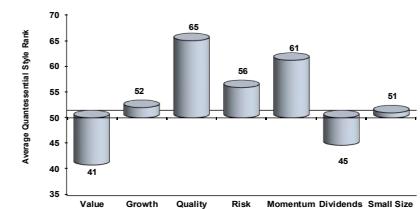
USA PB is currently at 4.7



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 375: USA: Average Style Rank

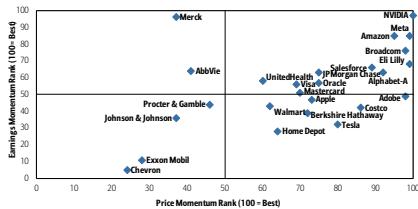
From a style perspective the US is tilted towards Quality



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 376: USA: Quadrant Analysis for Stocks

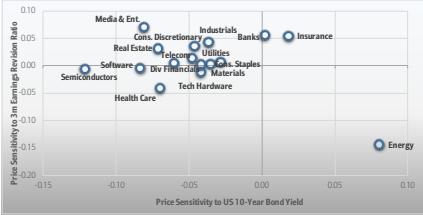
There are more stocks in the attractive top-right quadrant than bottom-left



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 379: USA Sectors: Price Sensitivity to Earnings Trends and Bond Yields

Insurance are most positively sensitive to earnings and yields

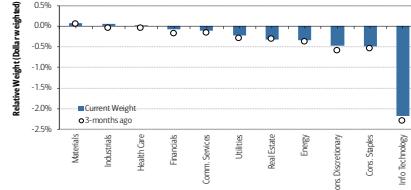


Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Chart 377: USA: Sector Positioning

Funds are most overweight Materials

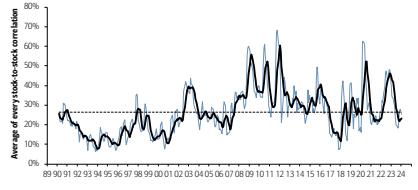


Source: BofA Global Quantitative Strategy, MSCI, FTSE, Factset, Bloomberg, 13F Filings, Benchmark Indices, Stock Exchanges

BofA GLOBAL RESEARCH

Chart 378: USA: Stock-to-stock correlation

correlations are trending below long-term avg

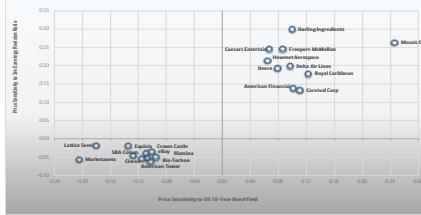


Source: BofA Global Quantitative Strategy, MSCI, Exshare, Factset

BofA GLOBAL RESEARCH

Chart 380: USA Stocks: Price Sensitivity to Earnings Trends and Bond Yields

Mosaic Co is positively sensitive to earnings and yield moves



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Chart 381: USA: Low vs High Earnings Trends and Bond Yields Sensitivity PE Ratio

The relative PE currently is 18.9x



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

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Europe

Chart 382: Europe vs. The World – Momentum & Value

Relative EPS trend for Europe has deteriorated in last 12m



Chart 385: Europe: Forecast EPS Growth

Forecast EPS growth for 2024 is 8%

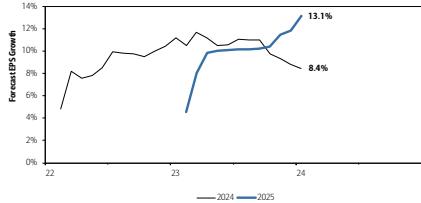


Chart 388: Europe: Prospective PE

Europe prospective PE has been re-rated compared to last month



Chart 383: Europe: Prospective EPS

Earnings expectations have improved in Europe in last 3m

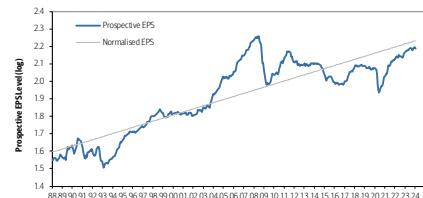


Chart 384: Europe: Earnings Revision Ratio

Earnings revisions improved in Europe last month but remains below long term average



Chart 386: Europe: Reported EPS (LTM)

Current reported EPS growth is 4%

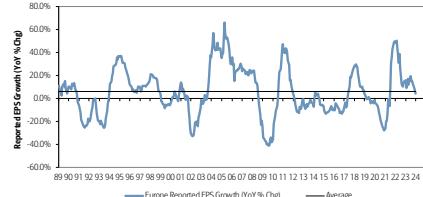


Chart 387: Europe: Earnings Contribution

In the last 12m, earnings contributed 4.8% to equity performance (7.3%)

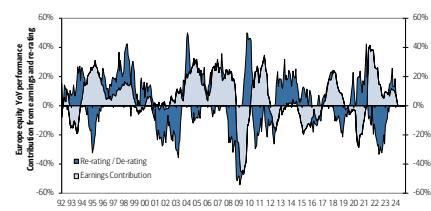


Chart 389: Europe: PB Trailing

PB (trailing) is currently below the long-term average



Chart 390: Europe: Average Style Rank

From a style perspective Europe is tilted towards Value

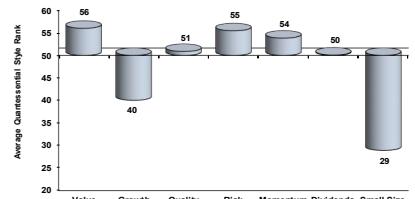
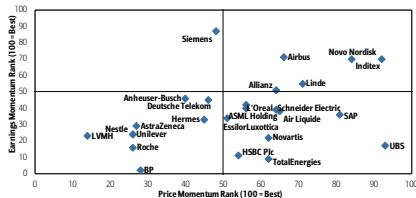


Chart 391: Europe: Quadrant Analysis for Stocks

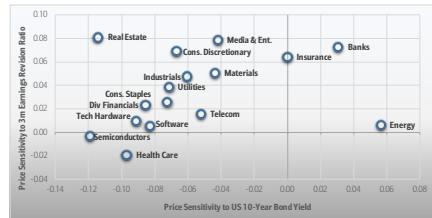
20% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 394: Europe Sectors: Price Sensitivity to Earnings Trends and Bond Yields

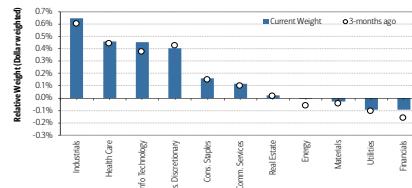
Banks are most positively sensitive to earnings and yields



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Chart 392: Europe: Sector Positioning

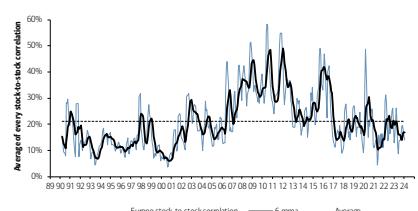
Funds are most overweight Industrials



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

Chart 393: Europe: Stock-to-stock correlation

Correlations are trending below long-term avg

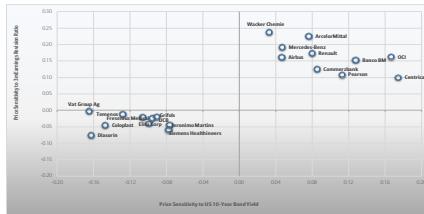


Source: BofA Global Quantitative Strategy, MSCI, Exshare, Factset

BofA GLOBAL RESEARCH

Chart 395: Europe Stocks: Price Sensitivity to Earnings Trends and Bond Yields

OCI is positively sensitive to earnings and yield moves



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Chart 396: Europe: Low vs High Earnings Trends and Bond Yields Sensitivity PE Ratio

The relative PE currently is 17.1x



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

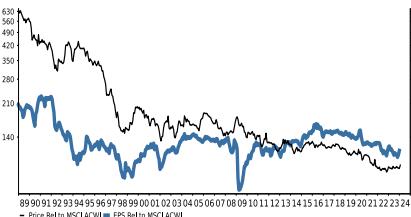
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Japan

Chart 397: Japan vs. The World – Momentum & Value

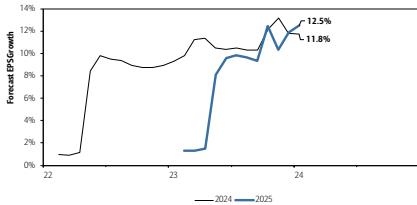
Japan has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 400: Japan: Forecast EPS Growth

Forecast EPS growth for 2025 is 12%



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 403: Japan: Prospective PE

Japan forecast PE is currently at 15.1



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 398: Japan: Prospective EPS

Earnings expectations have moderated in Japan in last 12m



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 399: Japan: Earnings Revision Ratio

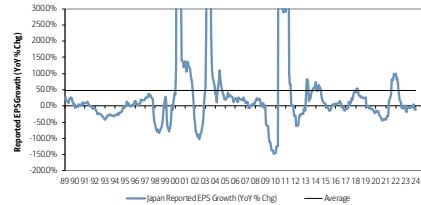
Earnings revisions improved for Japan last month and remains above long-term average



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 401: Japan: Reported EPS (LTM)

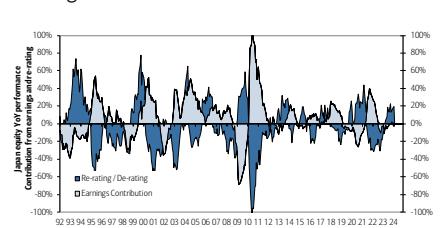
Current reported EPS growth is -11%



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 402: Japan: Earnings Contribution

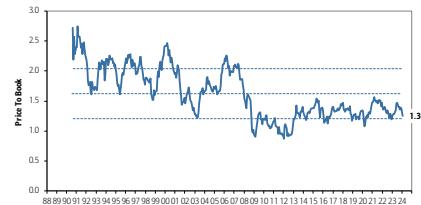
In the last 12m, re-rating contributed 18.2% earnings contributed -2.1%



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 404: Japan: PB Trailing

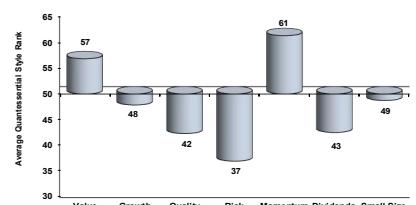
Japan PB is currently at 1.5



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 405: Japan: Average Style Rank

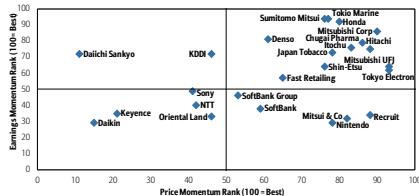
From a style perspective Japan is tilted towards Momentum



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 406: Japan: Quadrant Analysis for Stocks

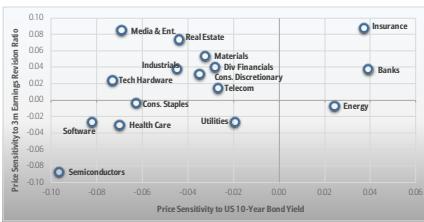
Majority of the stocks fall in the attractive top-right quadrant



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, BofA GLOBAL RESEARCH

Chart 409: Japan Sectors: Price Sensitivity to Earnings Trends and Bond Yields

Insurance are most positively sensitive to earnings and yields

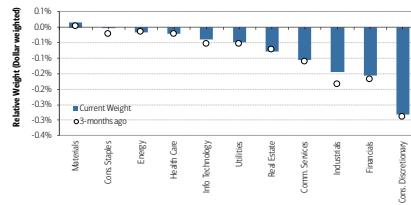


Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Chart 407: Japan: Sector Positioning

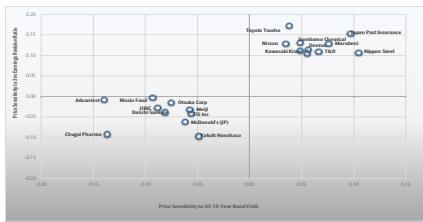
Funds are most overweight Materials



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

Chart 410: Japan Stocks: Price Sensitivity to Earnings Trends and Bond Yields

Japan Post Insurance is positively sensitive to earnings and yield moves

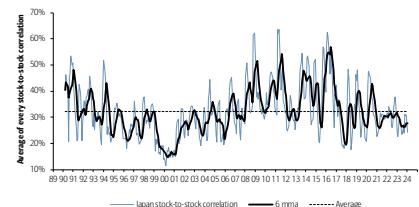


Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Chart 408: Japan: Stock-to-stock correlation

Correlations are trending below long-term avg



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

BofA GLOBAL RESEARCH

Chart 411: Japan: Low vs High Earnings Trends and Bond Yields Sensitivity PE Ratio

The relative PE currently is 24.8x



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Asia Pac ex-Japan

Chart 412: APxJ vs. The World – Momentum & Value

Relative EPS trend for Asia Pac ex-Japan has deteriorated in last 6m

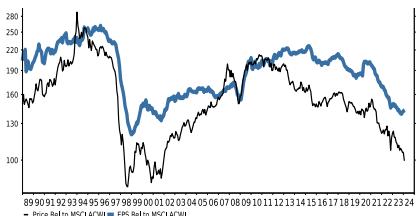


Chart 415: APxJ: Forecast EPS Growth

Forecast EPS growth for 2024 is 24%

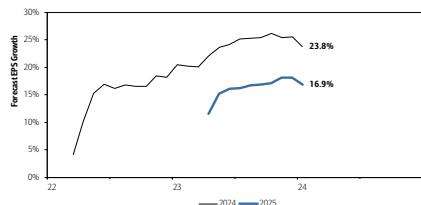


Chart 418: APxJ: Prospective PE

Asia Pac ex-Japan prospective PE has been re-rated compared to last month



Chart 413: APxJ: Prospective EPS

Earnings expectations have improved in Asia Pacific Ex-Japan in last 6m

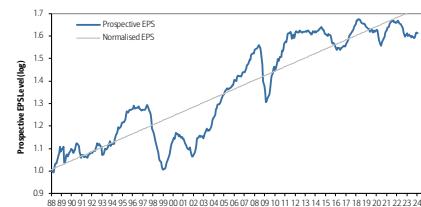


Chart 414: APxJ: Earnings Revision Ratio

Earnings revisions fell in Asia Pac Ex-Japan last month, but the trend remains strong



Chart 416: APxJ: Reported EPS (LTM)

Current reported EPS growth is -12%

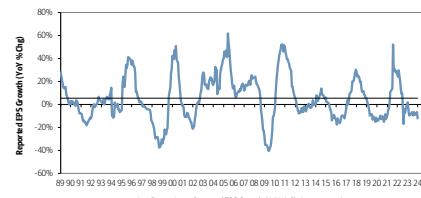


Chart 417: APxJ: Earnings Contribution

In the last 12m, re-rating contributed -8.4% to equity performance (-8.3%)

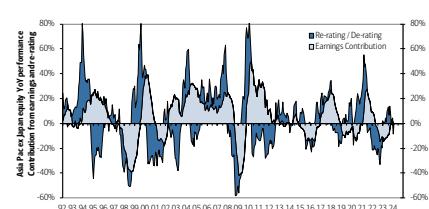


Chart 419: APxJ: PB Trailing

Asia Pac ex-Japan PB is currently at 1.6

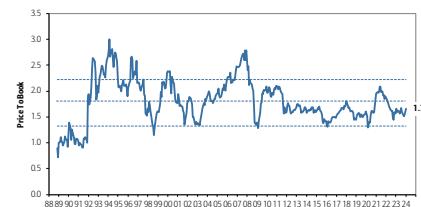


Chart 420: APxJ: Average Style Rank

APxJ has most exposure to Small Size stocks

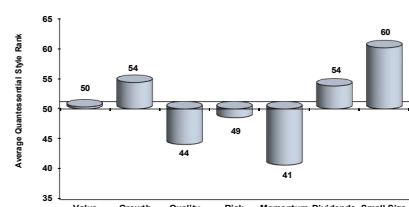
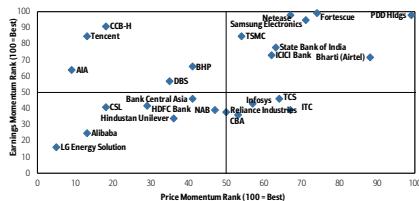


Chart 421: APxJ: Quadrant Analysis for Stocks

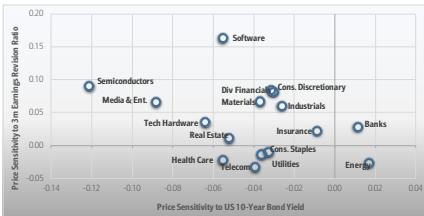
32% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 424: APxJ Sectors: Price Sensitivity to Earnings Trends and Bond Yields

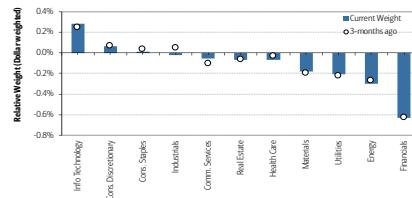
Banks are most positively sensitive to earnings and yields



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Chart 422: APxJ: Sector Positioning

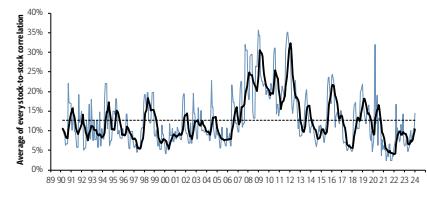
Funds are most overweight Info Technology



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

Chart 423: APxJ: Stock-to-stock correlation

Correlations are trending below long-term avg

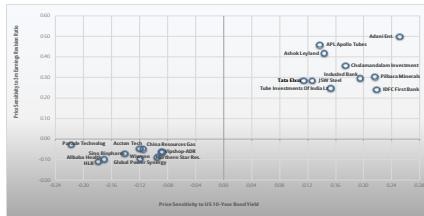


Source: BofA Global Quantitative Strategy, MSCI, Exshare, Factset

BofA GLOBAL RESEARCH

Chart 425: APxJ Stocks: Price Sensitivity to Earnings Trends and Bond Yields

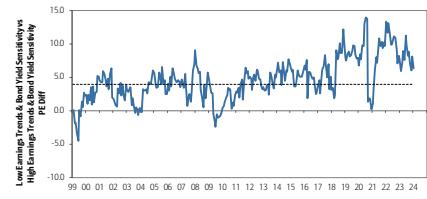
Ashok Leyland is positively sensitive to earnings and yield moves



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Chart 426: APxJ: Low vs High Earnings Trends and Bond Yields Sensitivity PE Ratio

The PE difference is currently 6.3x



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Emerging Markets (GEM)

Chart 427: GEM vs. The World – Momentum & Value

Emerging Markets has underperformed the world in last 12m

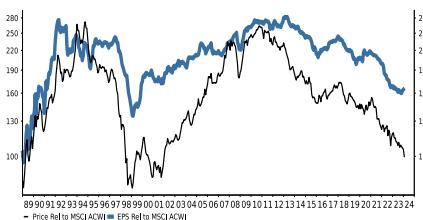


Chart 428: GEM: Prospective EPS

Chart 428: GEM: Prospective EPS

Earnings expectations have improved in GEM in last 3m

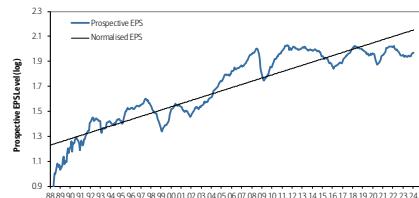


Chart 429: GEM: Earnings Revision Ratio

Earnings revisions fell in Emerging Markets last month



Chart 430: GEM: Forecast EPS Growth

Forecast EPS growth for 2024 is 22%

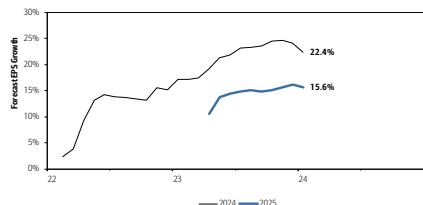


Chart 431: GEM: Reported EPS (LTM)

Current reported EPS growth is -12%

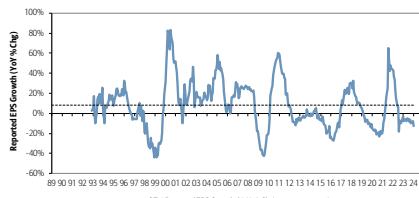


Chart 432: GEM: Earnings Contribution

In the last 12m, earnings contributed 3.3% to equity performance (-5.4%)

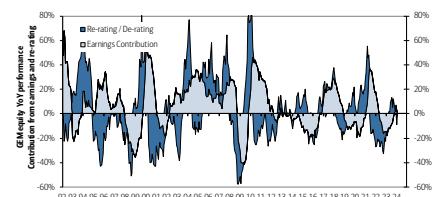


Chart 433: GEM: Prospective PE

PE (12m fwd) is currently below the long-term average



Chart 434: GEM: PB Trailing

GEM PB is currently at 1.6



Chart 435: GEM: Average Style Rank

From a style perspective the US is tilted towards Small Size

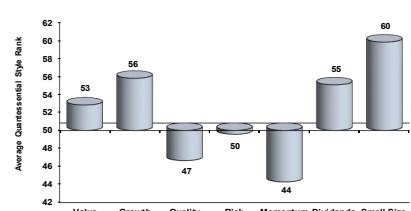
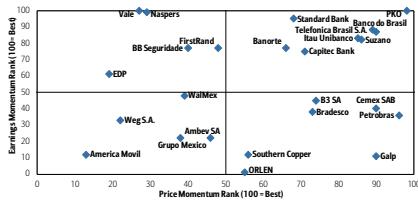


Chart 436: GEM: Quadrant Analysis for Stocks

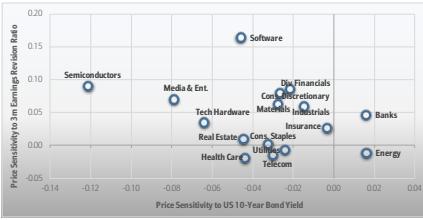
32% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, MSCI, IBES
BofA GLOBAL RESEARCH

Chart 439: GEM Sectors: Price Sensitivity to Earnings Trends and Bond Yields

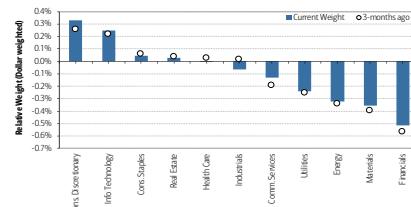
Banks are most positively sensitive to earnings and yields



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Chart 437: GEM: Sector Positioning

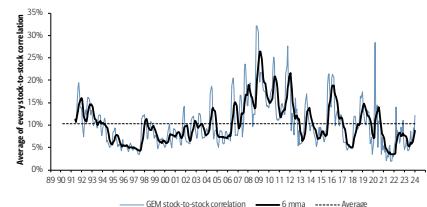
Funds are most overweight Cons. Discretionary



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

Chart 438: GEM: Stock-to-stock correlation

Correlation are trending above long-term avg

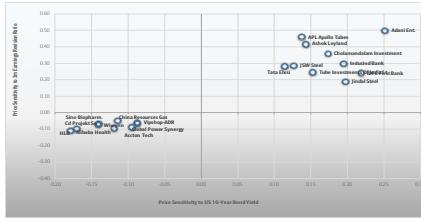


Source: BofA Global Quantitative Strategy, MSCI, Exshare, Factset

BofA GLOBAL RESEARCH

Chart 440: GEM Stocks: Price Sensitivity to Earnings Trends and Bond Yields

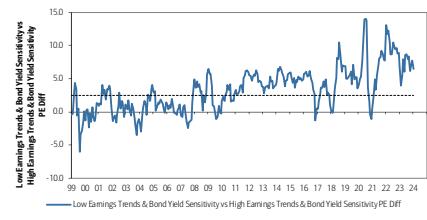
Ashok Leyland is positively sensitive to earnings and yield moves



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Chart 441: GEM: High vs Low Earnings Trends and Bond Yields Sensitivity PE Ratio

The relative PE currently is 6.4x



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg
BofA GLOBAL RESEARCH

Global Sector Allocation

Construction Methodology

Our system for ranking global sectors incorporates four components representing macro, bottom-up, style, and valuation. The backtesting in this analysis is from Dec-92 to Aug-10 and we introduced the current version of analysis in Sep-10.

This analysis includes stocks in the MSCI AC World Index as at each month-end. The model determines the Positive Sectors which we expect to outperform the MSCI AC World Index, the Negative Sectors which we expect to underperform the Index, and the Neutral Sectors which we expect to perform roughly in-line with the Index using the month-end data. In this analysis, the 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 ten GICS sectors into fifteen at the end of each month. The number of sectors included in the analysis stays constant through time. Each sector's performance is based on its respective MSCI index.

A Combined Rank is the equal-weighted average of the Top-Down Rank, Bottom-Up Rank, Style Rank, and PE Rank.

Sectors with a Combined Rank of 60 or above are selected as the Positive Sectors, while sectors with a Combined Rank of 40 or below are selected as the Negative Sectors. Sectors that have a Combined Rank between 40 and 60 are Neutral Sectors

Chart 442: Global Sector Allocation Ranks Definition

Four Pillars Rank is a combination of Top-Down, Bottom-Up, Style, PE Rank

Top-Down Rank – a percentile rank based on performance in previous periods in which the Global Wave was rising or falling. The sector which averaged the best performance during periods in which the Global Wave was rising will have a Top-Down Rank of 100.

Bottom-Up Rank – a percentile rank based on the proportion of stocks with above average earnings and price momentum less the proportion of stocks with below average earnings and price momentum from our Global Contenders & Defenders analysis.

Sector Style Rank – a percentile rank based on the average Style Rank of stocks in that sector and the style tilts suggested by our back-testing. The sector with the most extreme exposure to the styles which back-testing suggests should outperform as the Global Wave is rising will have a Sector Style Rank of 100.

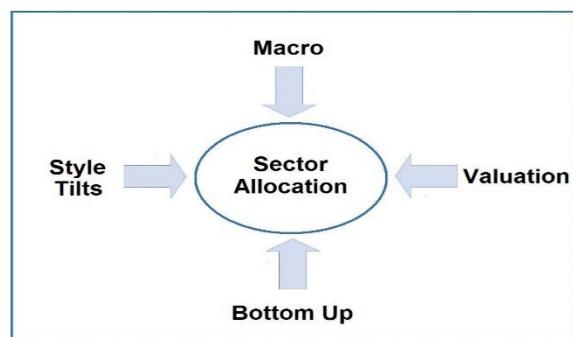
Sector PE Rank – a percentile rank of prospective sector PE based on IBES consensus EPS estimates. The sector with the lowest PE will have Rank of 100.

Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 443: Global Sector Allocation Concept

Framework for Sector Allocation



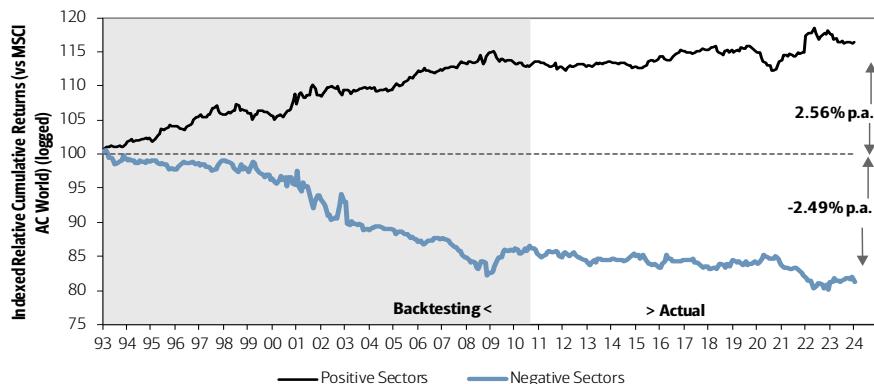
Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH



Chart 444: Relative performance of positive and negative global sectors

Sectors with attractive returns return 2.56% p.a. relative to ACWI



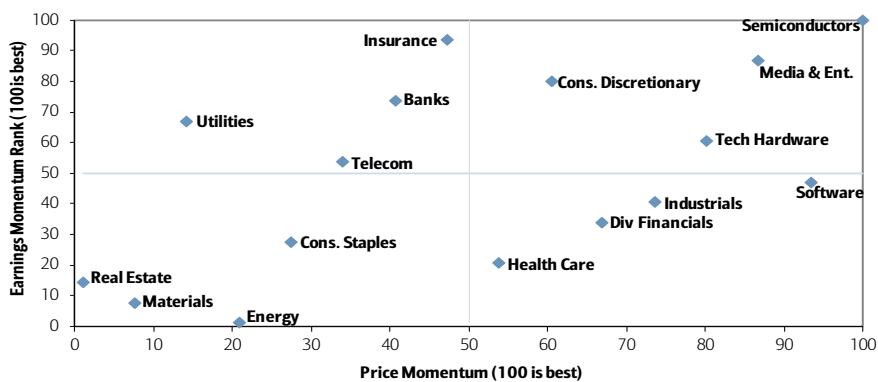
Source: BofA Global Quantitative Strategy, MSCI, IBES

The shaded area shows back-tested results during the period from Jan-93 to Aug-10. The unshaded portion represents actual performance since Sep-10. 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 445: Global Sectors Quadrant Analysis

25% of sectors are in the unattractive bottom-left quadrant

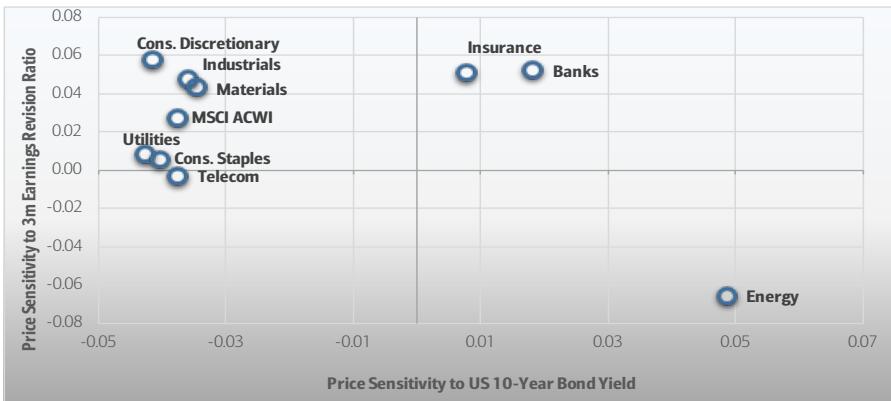


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 446: Global Sectors Price Sensitivity to Earnings Trends and Bond Yields

Banks and Insurance are most positively sensitive to earnings and yields



Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Table 45: Global Sector Ranking

Four Pillars rank is strongest for Div Financials, Industrials and Tech Hardware

Sector	Top	Bottom	Style	PE Rank	Combined	Recommendation
Div Financials	67	80	41	100	72	Positive
Industrials	80	93	60	47	70	Positive
Tech Hardware	93	60	100	21	69	Positive
Insurance	60	87	34	80	65	Positive
Cons. Discretionary	47	74	87	54	65	Positive
Semiconductors	100	67	80	8	64	Positive
Software	87	100	54	1	60	Positive
Energy	41	34	67	87	57	Neutral
Materials	74	14	67	60	54	Neutral
Banks	34	54	27	100	54	Neutral
Media & Ent.	27	41	93	27	47	Neutral
Utilities	14	47	47	74	46	Neutral
Telecom	14	47	47	67	44	Neutral
Health Care	54	1	21	34	27	Negative
Real Estate	21	21	14	14	18	Negative
Cons. Staples	8	8	1	41	14	Negative

Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Table 46: Global Region Ranking

Four Pillars analysis is most positive on EM ex Asia most negative on Japan

Region	Top Down		Bottom Up		Combined	
	Rank	Rank	Rank	Style Rank	PE Rank	Rank
North America	59	49	50	50	45	51
Dev Europe	42	47	55	55	58	51
Japan	33	60	47	47	52	48
Asia Pac ex Japan	50	55	48	48	54	52
EM ex Asia	49	61	54	54	69	58

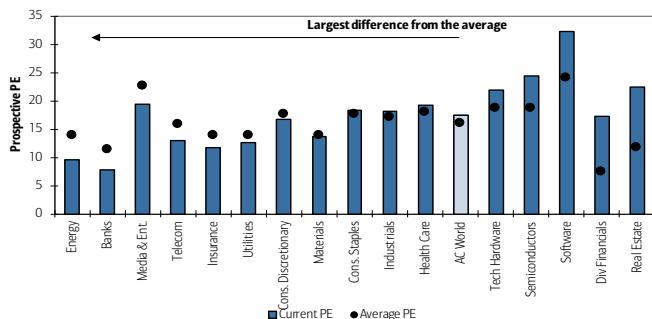
Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH



Chart 447: Prospective PE by Global Sectors: by the largest difference from long-term average

Current PE (17.4x) of the world is above its long-term average

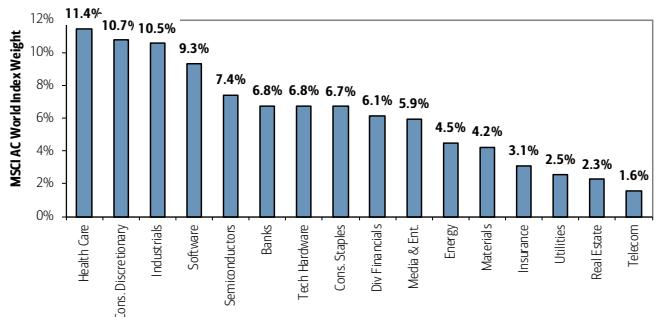


Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare

BofA GLOBAL RESEARCH

Chart 448: Sector Weights: MSCI AC World

Sector with the largest weight in ACWI is Health Care

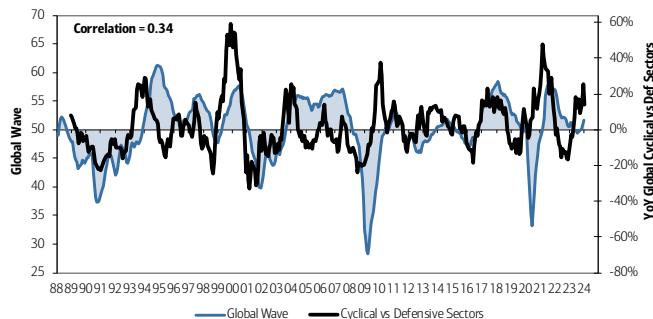


Source: BofA Global Quantitative Strategy, MSCI

BofA GLOBAL RESEARCH

Chart 449: Cyclical vs Defensive sector performance and the Global Wave

ERR trend is strongest in Div Financials among global sectors

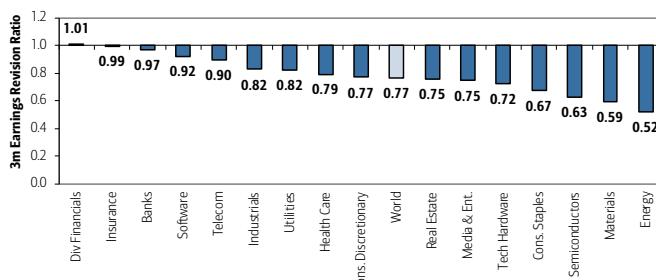


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

BofA GLOBAL RESEARCH

Chart 451: Three-Month Earnings Revision Ratio by Sector

ERR trend is strongest in Div Financials among global sectors

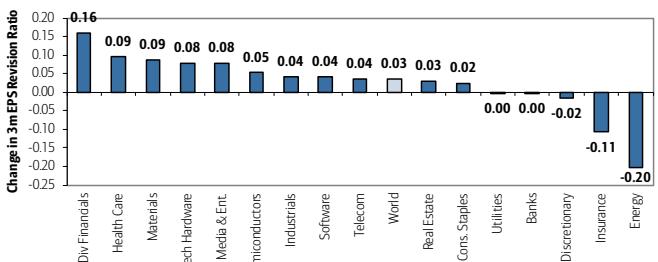


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 452: One-Month Change in the Three-Month Earnings Revision Ratio by Sector

Highlights sectors for which 3m ERR has improved last month



Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Regional Sector Allocation

We divide the world into 75 regional-sectors based on five regions and 15 sectors. For each regional-sector our analysis produces a Top-Down Rank, Bottom-Up Rank, a Style Rank, and a Value Rank.

A **Top-Down Rank** from 1 (worst) to 100 (best) is a rank calculated for each region-sector based on 1) average performance in periods in which the Global Wave was falling, or 2) average performance in periods in which the Global Wave was rising, depending on the direction of the Global Wave.

A **Bottom-Up Rank** from 1 (worst) to 100 (best) is a rank for region-sector based on the proportion of stocks with above average earnings and price momentum less the proportion of stocks with below average earnings and price momentum.

A **Style Rank** from 1 (worst) to 100 (best) is a rank based on the average Style Ranks of the styles that back-testing of the Global Wave currently suggests tilting towards.

A **Value Rank** from 1 (expensive) to 100 (inexpensive) is a rank based on PE (price divided by twelve-month forward consensus earnings estimate).

The **Combined Rank** is an average of the Top Down Rank, Bottom Up Rank, Style Rank, and Value Rank.

The same analysis is applied for calculating the four pillars rank at the stock level.

Table 47: Four Pillars Ranks

Region-Sectors that screen well on our Four Pillars analysis include Emerging Ex-Asia Energy, Emerging Ex-Asia Utilities and Emerging Ex-Asia Industrials

Country-Sector Name	Four Pillars		Top			Target	
	Rank	Rank	Down	Bottom	Style		
				Up Rank	Rank	PE Rank	Weight
Emerging Ex-Asia Energy	87	100	63	88	97	1%	
Emerging Ex-Asia Utilities	84	99	71	97	68	0%	
Emerging Ex-Asia Industrials	81	65	68	93	99	0%	
Asia Pac ex-Japan Semiconductors	80	97	87	87	48	1%	
Emerging Ex-Asia Cons. Discretionary	79	89	63	96	69	0%	
Emerging Ex-Asia Banks	79	82	91	60	83	1%	
Japan Semiconductors	78	96	59	89	70	0%	
Asia Pac ex-Japan Tech Hardware	78	73	93	95	51	1%	
Asia Pac ex-Japan Cons. Discretionary	77	66	92	76	72	1%	
Asia Pac ex-Japan Div Financials	69	81	59	77	57	0%	
Emerging Ex-Asia Div Financials	68	60	51	85	77	0%	
Japan Utilities	68	1	71	99	100	0%	
Japan Energy	67	7	71	100	91	0%	
Japan Industrials	67	48	96	79	47	1%	
Asia Pac ex-Japan Materials	67	87	45	71	66	1%	
Japan Cons. Discretionary	66	40	89	72	64	1%	
Asia Pac ex-Japan Energy	66	80	29	73	82	0%	
Japan Insurance	65	6	88	91	76	1%	
North America Insurance	64	46	97	41	71	2%	
Japan Materials	64	38	68	69	80	0%	
Developed Europe Real Estate	61	51	63	80	52	0%	
North America Div Financials	61	77	95	43	31	5%	
Japan Div Financials	61	3	84	92	65	0%	
Japan Banks	61	10	77	75	81	0%	
Developed Europe Banks	61	41	56	47	98	2%	

Source: BofA Global Quantitative Strategy

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Table 48: Four Pillars Ranks (Continued...)

Four Pillars rank is a combination of Top Down, Bottom-Up, Style and PE rank

Country-Sector Name	Four Pillars	Top		Style Rank	PE Rank	Target Weight
	Rank	Down Rank	Bottom Up Rank			
Developed Europe Software	60	95	84	55	9	0%
Emerging Ex-Asia Materials	60	83	15	52	90	0%
Japan Real Estate	60	33	77	84	46	0%
North America Software	60	74	100	61	4	7%
North America Media & Ent.	59	63	83	67	23	5%
Developed Europe Tech Hardware	59	72	33	45	84	0%
North America Tech Hardware	58	90	76	49	16	6%
Emerging Ex-Asia Cons. Staples	56	68	47	68	41	0%
North America Industrials	56	69	99	31	26	6%
Japan Software	56	84	47	65	27	0%
Asia Pac ex-Japan Banks	54	54	44	24	93	2%
Asia Pac ex-Japan Software	53	98	71	35	10	0%
Emerging Ex-Asia Software	53	78	51	81	1	0%
Asia Pac ex-Japan Health Care	52	79	67	53	11	0%
Japan Tech Hardware	52	88	47	56	17	0%
North America Cons. Discretionary	51	53	81	57	14	7%
Asia Pac ex-Japan Industrials	51	43	31	63	67	0%
Emerging Ex-Asia Insurance	50	59	51	4	86	0%
Asia Pac ex-Japan Insurance	49	32	20	51	94	1%
Developed Europe Cons. Discretionary	46	57	41	25	62	2%
North America Semiconductors	46	91	43	39	13	4%
Developed Europe Insurance	46	27	31	40	88	1%
North America Energy	46	55	19	36	73	3%
Emerging Ex-Asia Telecom	46	86	39	5	53	0%
Developed Europe Energy	45	47	16	23	96	2%
Asia Pac ex-Japan Utilities	45	13	77	83	7	0%
North America Banks	45	49	12	32	85	2%
Developed Europe Div Financials	42	20	61	29	55	1%
Asia Pac ex-Japan Media & Ent.	41	22	27	64	50	0%
Asia Pac ex-Japan Real Estate	40	18	27	37	79	0%
Developed Europe Materials	40	70	13	19	59	1%
Developed Europe Semiconductors	35	76	33	27	6	1%
Developed Europe Utilities	35	24	33	20	63	1%
Developed Europe Industrials	35	71	9	21	38	2%
Asia Pac ex-Japan Telecom	34	17	33	7	78	0%
Japan Cons. Staples	33	4	57	44	24	0%
Japan Media & Ent.	32	28	20	59	20	0%
Developed Europe Media & Ent.	30	16	51	9	44	1%
North America Materials	28	36	7	33	36	2%
North America Utilities	28	15	5	48	43	0%
Asia Pac ex-Japan Cons. Staples	25	44	20	16	21	1%
Japan Telecom	25	26	39	13	22	0%
Developed Europe Health Care	22	30	11	8	40	3%
North America Health Care	22	35	1	17	34	8%
Developed Europe Telecom	22	12	16	3	56	1%
Japan Health Care	21	19	25	28	12	0%
North America Real Estate	20	64	4	12	2	0%
Developed Europe Cons. Staples	20	23	8	1	49	3%
North America Telecom	19	2	20	11	45	1%
North America Cons. Staples	14	9	3	15	30	4%

Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH



Global Quant Strategy Fifty – Methodology

The Global Quant Strategy Fifty is a screen that reflects our macro views, bottom-up analysis, style tilts and valuation bias, and targets region-sector exposures relative to the MSCI All Country World Index.

Each month using four pillars region-sector ranks (calculated based on month-end data - see below) are used to determine ten overweight and ten underweight region-sector recommendations. Each overweight region-sector is given an additional 2% weight relative to the MSCI ACWI and each underweight region-sector is reduced by 2% (or to 0% if the region-sector weight is less than 2%). The screen then targets the adjusted region-sector weights. There are seventy-five region-sectors (fifteen major sectors within five major regions) and, at times, certain region-sectors will be excluded based on the availability of data (four pillars rank) or their lower weight in the index.

Stocks are selected from a universe which includes the constituents of the MSCI ACWI. Stocks in the firm's restricted list are not included in this analysis. The screen can include BofA rated stocks or unrated or uncovered stocks.

The stocks are selected based on the four pillars stock ranks and selected so they meet the region and sector distribution of the MSCI ACWI, adjusted for the region-sector overweights and underweights (subject to rounding). On monthly basis stocks will drop out of the screen based on their four pillars ranks and the next best four pillar-ranked stock is picked with that region-sector.

Table 49: Global Strategy Regional Sector Recommendations

Regional-sector allocation is currently most positive on Europe and Insurance

	Emerging ex-Asia	North America	Asia Pacific ex-Japan	Japan	Europe
Banks	Overweight				
Cons. Discretionary	Overweight		Overweight		
Cons. Staples		Underweight	Underweight		Underweight
Div Financials					
Energy	Overweight				
Health Care		Underweight		Underweight	
Industrials	Overweight				
Insurance					
Materials					
Media & Ent.				Underweight	
Real Estate		Underweight			
Semiconductors			Overweight	Overweight	
Software					
Tech Hardware			Overweight		
Telecom		Underweight			Underweight
Utilities	Overweight	Underweight		Overweight	

Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH



Global Quant Strategy Fifty

The Global Quant Strategy Fifty is a screen that reflects our macro views, bottom-up analysis, style tilts and valuation bias, and targets region-sector exposures relative to the MSCI AC World index (refer to the Methodology section for details). This monthly screen is a list of 50 stocks with a 2% position in each stock, rebalanced to 2% each month.

Table 50: Global Quant Strategy Fifty

50-stock screen that reflects our macro views, bottom-up analysis, style tilts and valuation

BBG Code	Company Name	Country	Sector	MCAP (Total US\$m)		ADTV US\$m		Beta	PE^	PB*^	Four Pillars		Bottom Up Rank		Top Down Rank		Style Rank PE Rank		BofA Rating
				Total	US\$m	Weight					Pillars	Bottom	Up Rank	Down Rank	Style Rank	PE Rank			
AXSB IN	Axis Bank	AP	Banks	39,627	115	2%	1.15	12.3	2.3	78	95	93	55	68	55	68	Neutral		
VIPS US	Vipshop-ADR	AP	Cons. Discretionary	7,372	50	2%	0.70	6.7	1.6	85	82	100	63	93	63	93	Buy		
3034 TT	Novatek Micro	AP	Semiconductors	9,935	60	2%	1.23	13.1	5.0	74	94	73	64	64	64	64	Buy		
992 HK	Lenovo	AP	Tech Hardware	12,675	59	2%	1.20	9.2	2.9	83	82	98	69	69	84	84	Neutral		
DNB NO	DNB Bank	EU	Banks	30,257	30	2%	1.47	8.4	1.3	77	82	84	53	87	U/P	87	Buy		
CON GR	Continental Ag	EU	Cons. Discretionary	16,555	26	2%	1.80	8.2	1.0	77	82	85	54	88	88	88	Buy		
TEN IM	Tenaris SA	EU	Energy	18,870	40	2%	1.63	6.9	1.2	69	50	80	55	55	92	92	Neutral		
PHIA NA	Koninklijke Philips	EU	Health Care	19,949	48	2%	0.98	13.7	1.4	74	94	73	65	62	62	62	Neutral		
TEP FP	Teleperformance	EU	Industrials	9,419	31	2%	1.04	9.2	2.0	70	66	71	57	85	85	85	Buy		
HEI GR	Heidelberg Materials	EU	Materials	17,369	33	2%	1.51	8.0	0.8	72	98	42	59	89	89	89	Buy		
7202 JP	Isuzu Motors	JP	Cons. Discretionary	10,810	41	2%	1.26	8.4	1.1	80	82	90	61	87	87	87	Buy		
8002 JP	Marubeni	JP	Industrials	29,295	96	2%	1.13	9.1	1.2	81	98	80	60	85	85	85	Neutral		
8035 JP	Tokyo Electron	JP	Semiconductors	89,906	497	2%	1.53	33.4	7.3	57	71	83	58	14	14	14	Buy		
9502 JP	Chubu Electric	JP	Utilities	9,943	28	2%	0.20	7.3	0.5	66	99	6	66	91	91	---	---		
C US	Citigroup	NA	Banks	108,167	816	2%	1.67	9.3	0.5	61	66	45	51	83	83	83	Buy		
RCL US	Royal Caribbean	NA	Cons. Discretionary	32,662	286	2%	2.70	13.7	6.2	76	94	71	78	62	62	62	Neutral		
DHI US	D.R. Horton	NA	Cons. Discretionary	48,346	342	2%	1.67	9.8	1.9	75	97	56	67	81	81	81	Buy		
EXPE US	Expedia	NA	Cons. Discretionary	20,446	283	2%	2.09	11.9	11.4	70	95	50	66	70	70	70	Neutral		
ACI US	Albertsons-A	NA	Cons. Staples	12,216	73	2%	0.37	8.0	5.7	70	49	99	42	89	89	89	---		
COF US	Capital One	NA	Div Financials	51,617	272	2%	1.60	9.6	0.9	76	97	69	55	82	82	82	Buy		
KKR US	KKR	NA	Div Financials	76,588	235	2%	1.63	17.4	3.3	74	91	92	68	44	44	44	Buy		
AMP US	Ameriprise Financial	NA	Div Financials	39,699	166	2%	1.42	11.4	9.4	73	96	75	48	72	72	72	Buy		
TRGP US	Targa Resources	NA	Energy	19,007	136	2%	2.32	12.7	7.6	72	94	68	60	66	66	66	Buy		
HAL US	Halliburton	NA	Energy	32,033	268	2%	2.19	10.3	3.6	70	81	63	59	79	79	79	Buy		
MOH US	Molina Health	NA	Health Care	20,780	126	2%	0.39	15.0	5.5	71	92	71	64	56	56	56	Neutral		
UTHR US	United Therapeutics	NA	Health Care	10,080	70	2%	0.56	9.6	2.0	70	65	81	50	82	82	82	U/P		
CNC US	Centene Corp	NA	Health Care	40,779	222	2%	0.37	11.0	1.6	69	80	76	47	75	75	75	Neutral		
DAL US	Delta Air Lines	NA	Industrials	25,185	369	2%	1.57	5.9	2.6	78	68	82	68	95	95	95	Buy		
URI US	United Rentals	NA	Industrials	42,704	347	2%	1.94	14.5	4.2	74	78	92	67	58	58	58	Buy		
PCAR US	PACCAR	NA	Industrials	52,484	199	2%	0.94	13.2	3.0	68	94	52	60	64	64	64	Neutral		
PRU US	Prudential Fin.	NA	Insurance	38,090	145	2%	1.43	7.8	1.4	74	98	53	54	90	90	90	Neutral		
CEUS	Celanese	NA	Materials	15,924	122	2%	1.46	12.1	2.3	75	95	77	59	69	69	69	U/P		
META US	Meta	NA	Media & Ent.	867,118	5947	2%	1.24	21.9	5.9	65	89	76	63	33	33	33	Buy		
NFLX US	Netflix	NA	Media & Ent.	249,984	2327	2%	1.17	34.8	9.5	65	85	97	65	12	12	12	Buy		
EA US	Electronic Arts	NA	Media & Ent.	37,272	242	2%	0.82	17.9	4.9	62	91	70	45	43	43	43	Buy		
QCOM US	Qualcomm	NA	Semiconductors	165,737	997	2%	1.47	15.2	6.7	67	78	87	47	54	54	54	Buy		
NVDA US	NVIDIA	NA	Semiconductors	1,519,717	21984	2%	1.64	30.0	42.0	66	86	99	62	17	17	17	Buy		
MU US	Micron Tech	NA	Semiconductors	94,156	1013	2%	1.36	34.3	1.9	65	85	98	64	13	13	13	Buy		
GEN US	Gen Digital	NA	Software	15,014	76	2%	1.13	10.5	5.9	70	80	70	53	77	77	77	Buy		
ORCL US	Oracle	NA	Software	305,988	1075	2%	0.96	18.6	134.3	60	76	85	40	40	40	40	Neutral		
OTEX CN	Open Text	NA	Software	11,901	31	2%	1.19	8.9	2.7	60	48	54	49	86	—	—	—		
CRM US	Salesforce	NA	Software	273,501	1208	2%	1.25	29.5	4.2	59	72	89	57	17	17	17	Buy		
NTAP US	NetApp	NA	Tech Hardware	18,207	151	2%	1.31	13.7	22.1	79	94	59	62	62	62	62	U/P		
FFIV US	F5	NA	Tech Hardware	10,895	77	2%	1.13	14.3	3.6	70	78	90	54	59	59	59	U/P		
JBL US	Jabil	NA	Tech Hardware	16,398	229	2%	1.45	12.9	5.3	68	45	92	70	65	65	65	Buy		
PKO PW	PKO	XA	Banks	16,005	28	2%	1.64	7.6	1.3	87	99	81	77	91	91	91	Neutral		
NPN SJ	Naspers	XA	Cons. Discretionary	31,438	83	2%	0.76	10.5	2.0	70	64	90	50	77	77	77	Buy		
PETR4 BZ	Petrobras	XA	Energy	45,861	317	2%	1.70	5.0	1.2	77	50	91	70	97	97	97	Buy		
THYAO TI	Turkish Airlines	XA	Industrials	12,404	330	2%	0.87	5.2	1.3	79	100	42	79	96	—	—	—		
SBSGP3 BZ	SABESP	XA	Utilities	10,909	35	2%	1.24	12.6	1.6	76	94	71	72	67	67	67	Buy		
Portfolio	Average			94,226	836	100%	1.31	13.2	7.2	72	82	76	60	68	68	68			
Portfolio	Median			27,240	148	100%	1.29	11.2	2.6	72	85	80	59	74	74	74			

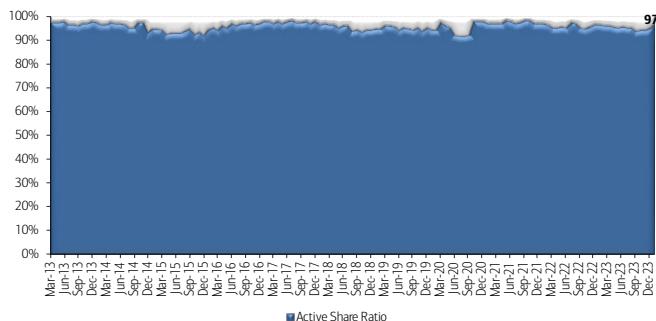
Source: BofA Global Quantitative Strategy, MSCI, IBES, Exshare, Worldscope
Note: * ADTV= Average Daily Turnover ^ Forward PE ** Trailing PB Additions are in bold and for relegated stocks please refer to Appendix W. BofA Fundamental Analyst Recommendation as at 21 Feb 2024. The BofA Fundamental analysts' stock recommendations are included for informational purpose only and are not used in this Quantitative model.

BofA GLOBAL RESEARCH



Chart 453: Global Quant Strategy Fifty: Active Share Ratio

The ASR of Global Quant Fifty is 97%

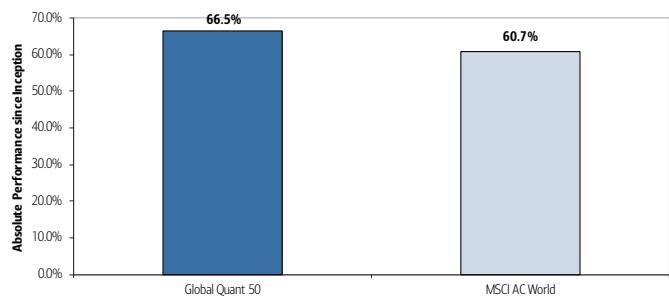


Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 454: Global Quant Fifty vs MSCI AC World Performance since Feb-13

Global Quant Fifty has performed the ACWI by 6% since inception

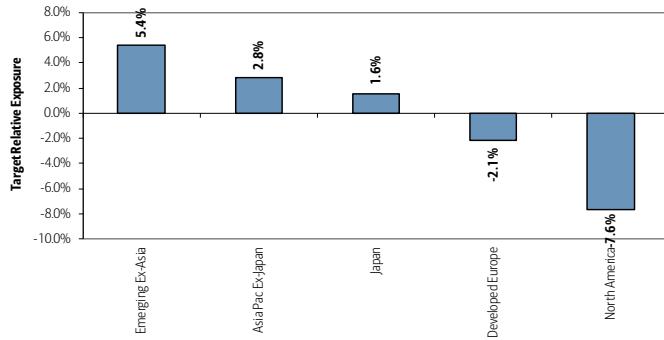


Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 455: Target region weights relative to MSCI AC World Index

Global Quant Fifty is most overweight Emerging Ex-Asia and Asia Pac Ex-Japan

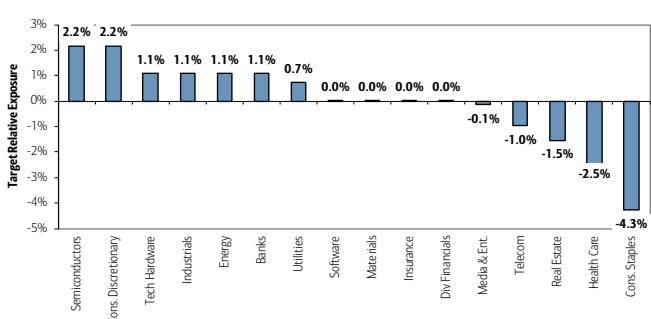


Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 456: Target sector weights relative to MSCI AC World Index

Global Quant Fifty is most overweight Semiconductors and Cons. Discretionary sectors

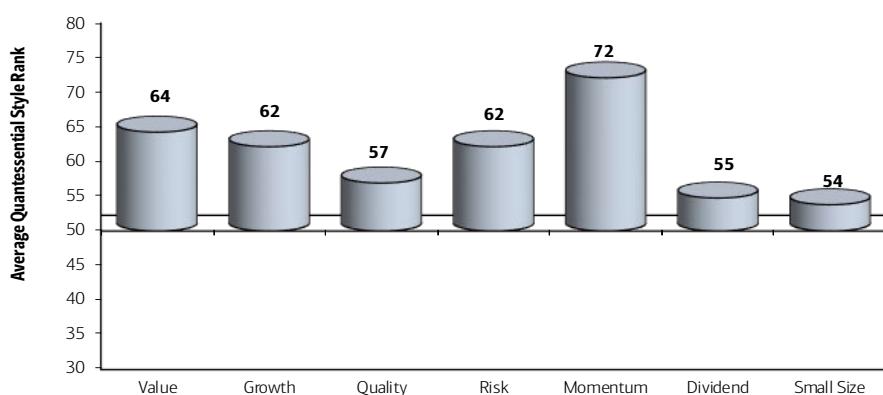


Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH

Chart 457: Style tilts of Global Quant Strategy Fifty

Global Quant Fifty is most overweight Momentum and Value



Source: BofA Global Quantitative Strategy

BofA GLOBAL RESEARCH



Banks

Chart 458: Global Banks vs. The World – Momentum & Value*

Relative EPS trend for World Banks has deteriorated in last 6m



Chart 459: USA Banks vs. The World – Momentum & Value

USA Banks has outperformed the world in last 6m

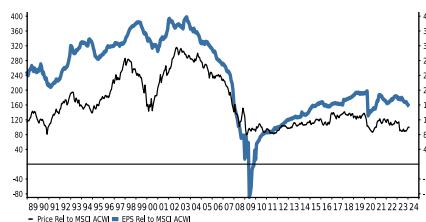


Chart 460: Japan Banks vs. The World – Momentum & Value

Japan Banks has outperformed in last 12m

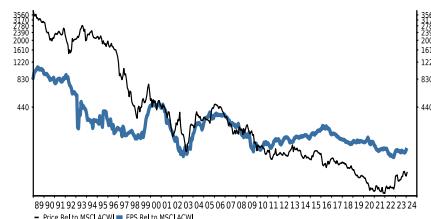


Chart 461: Europe Banks vs. The World – Momentum & Value

Relative EPS trend for Europe Banks has deteriorated in last 3m

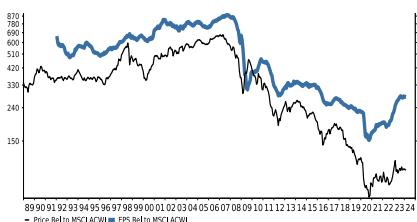


Chart 462: APxJ Banks vs. The World – Momentum & Value

APxJ Banks has underperformed the world in last 12m



Chart 463: Emerging Markets Banks vs. The World – Momentum & Value

EM Banks has underperformed the world in last 12m



Chart 464: Global Banks forecast EPS growth

Forecast EPS growth for 2025 is 7%

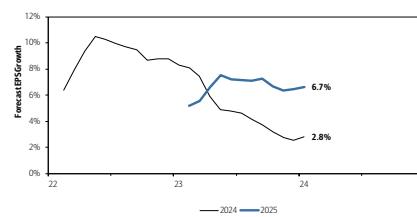


Chart 465: Global Banks – average Style Rank (100=best, 50=median, 1=worst)

Banks are dominated by Value stocks

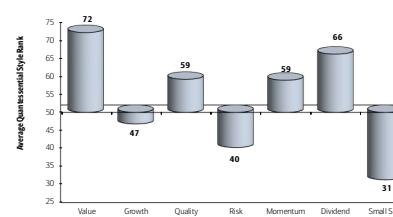


Chart 466: Global Banks Prospective EPS and Trend EPS

Prospective EPS has moderated slightly last month

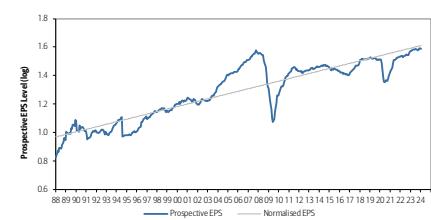
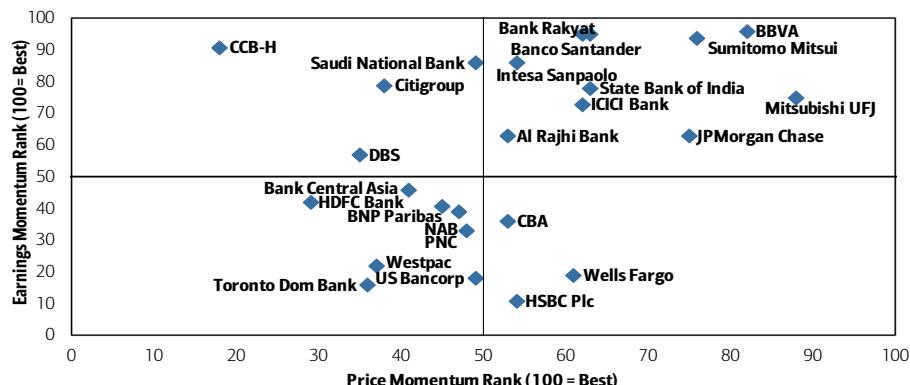


Chart 467: Quadrant Analysis of Global Banks Stocks

There are more stocks in the attractive top-right quadrant than bottom-left



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Consumer Discretionary

Chart 468: Global Consumer Discretionary vs. The World – Momentum & Value*

World Cons. Discretionary has underperformed in last 6m

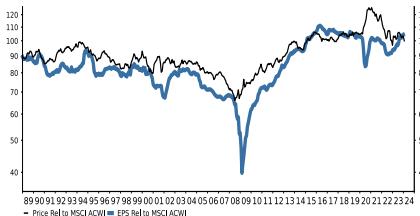


Chart 469: USA Consumer Discretionary vs. The World – Momentum & Value

Relative EPS trend for USA Cons. Discretionary has improved in last 12m



Chart 470: Japan Consumer Discretionary vs. The World – Momentum & Value

Relative EPS trend for Japan Cons. Discretionary has improved in last 3m

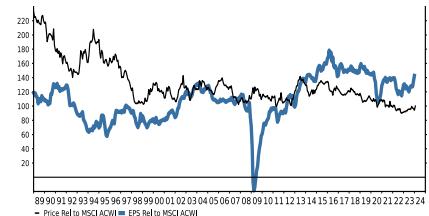


Chart 471: Europe Consumer Discretionary vs. The World – Momentum & Value

Europe Cons. Discretionary has underperformed the world in last 12m

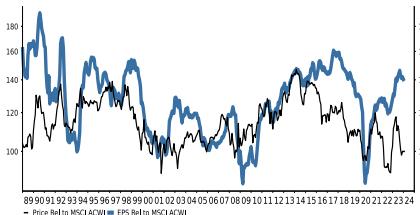


Chart 472: APxJ Consumer Discretionary vs. The World – Momentum & Value

APxJ Cons. Discretionary has underperformed in last 6m

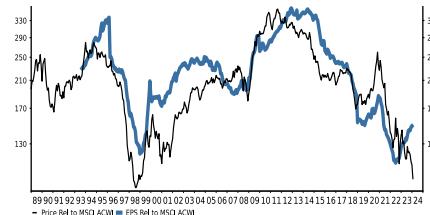


Chart 473: Emerging Markets Consumer Discretionary vs. The World – Momentum & Value

Relative EPS trend for EM Cons. Discretionary has improved in last 3m



Chart 474: Global Consumer Discretionary forecast EPS growth

Forecast EPS growth for 2025 is 19%

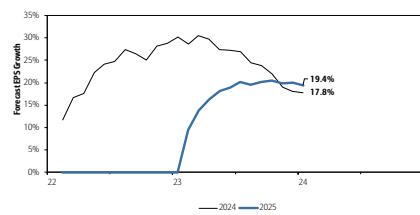


Chart 475: Global Consumer Discretionary – average Style Rank (100=best, 50=median, 1=worst)

Global Cons. Discretionary sector is tilted towards Risk, Value and Small Size

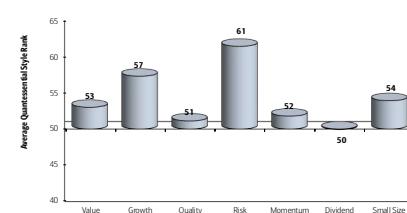


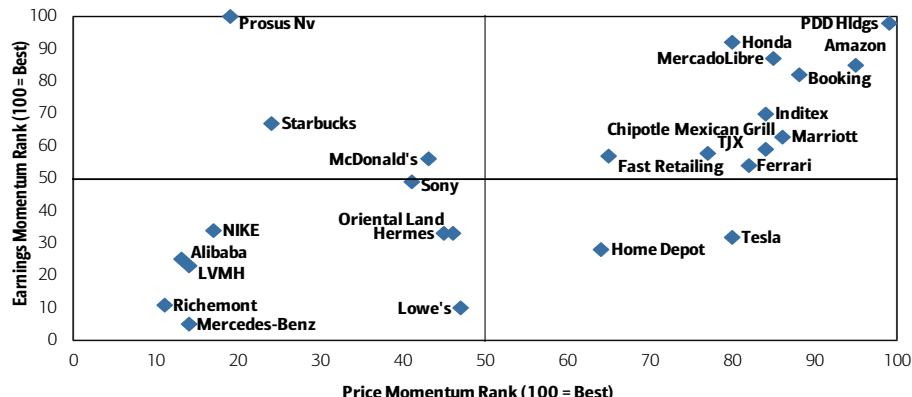
Chart 476: Global Consumer Discretionary Prospective EPS and Trend EPS

Prospective EPS has moderated slightly last month



Chart 477: Quadrant Analysis of Global Consumer Discretionary Stocks

44% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH



Consumer Staples

Chart 478: Global Consumer Staples vs. The World – Momentum & Value*

Relative EPS trend for World Cons. Staples has deteriorated in last 6m

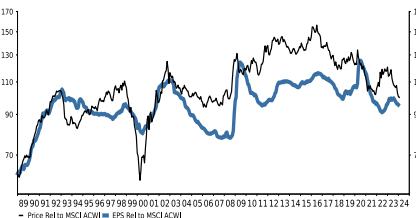


Chart 479: USA Consumer Staples vs. The World – Momentum & Value

USA Cons. Staples has underperformed the world in last 12m

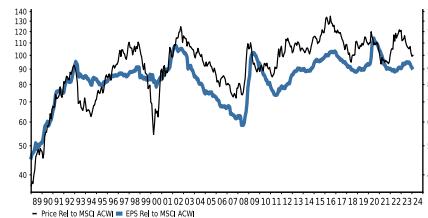


Chart 480: Japan Consumer Staples vs. The World – Momentum & Value

Japan Cons. Staples has underperformed in last 6m

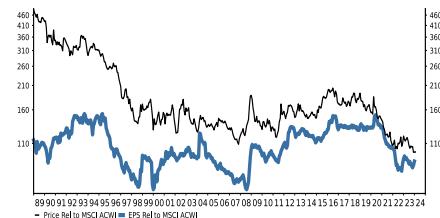


Chart 481: Europe Consumer Staples vs. The World – Momentum & Value

Europe Cons. Staples has underperformed in last 6m

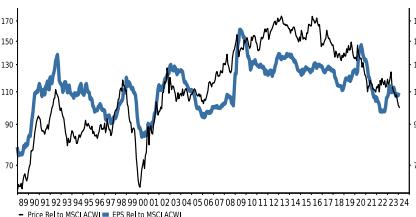


Chart 482: APxJ Consumer Staples vs. The World – Momentum & Value

APxJ Cons. Staples has underperformed in last 6m

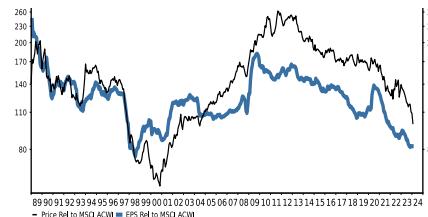


Chart 483: Emerging Markets Consumer Staples vs. The World – Momentum & Value

Relative EPS trend for EM Cons. Staples has deteriorated in last 6m

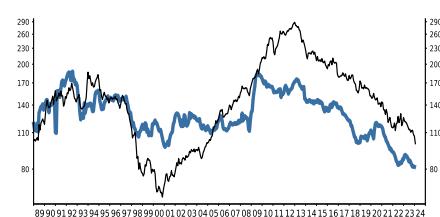


Chart 484: Global Consumer Staples forecast EPS growth

Forecast EPS growth for 2024 is 11%

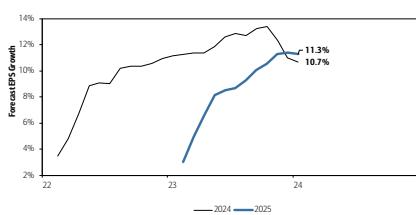


Chart 485: Global Consumer Staples – average Style Rank (100=best, 50=median, 1=worst)

Global Cons. Staples is overweight Quality

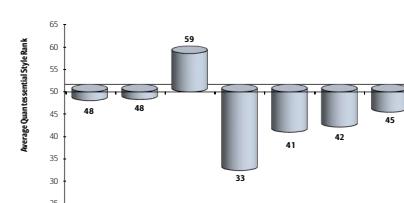


Chart 486: Global Consumer Staples Prospective EPS and Trend EPS

Prospective EPS has risen by 2% in last 3m

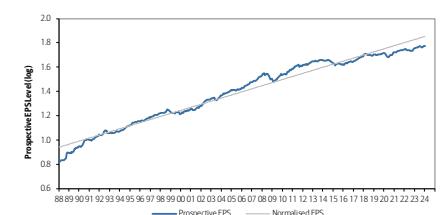


Chart 487: Quadrant Analysis of Global Consumer Staples Stocks

12% of largest 25 stocks are in the top-right quadrant



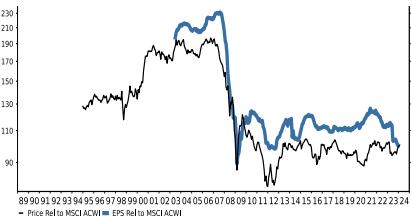
Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Diversified Financials

Chart 488: Global Diversified Financials vs. The World – Momentum & Value*

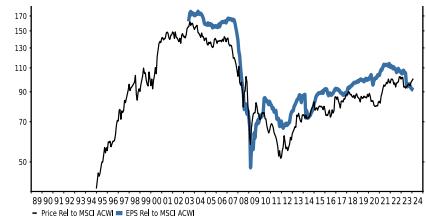
World Div Financials has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 489: USA Diversified Financials vs. The World – Momentum & Value

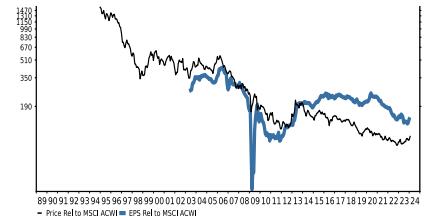
Relative EPS trend for USA Div Financials has deteriorated in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 490: Japan Diversified Financials vs. The World – Momentum & Value

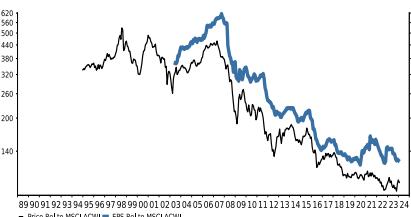
Japan Div Financials has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 491: Europe Diversified Financials vs. The World – Momentum & Value

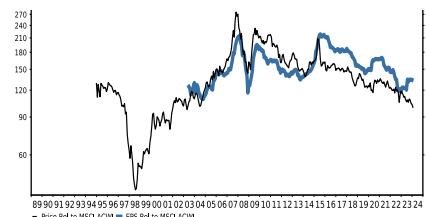
Europe Div Financials has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 492: APxJ Diversified Financials vs. The World – Momentum & Value

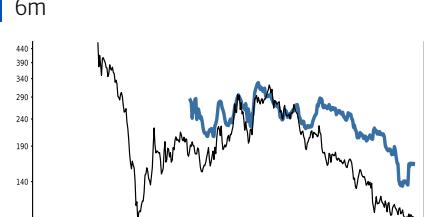
Relative EPS trend for APxJ Div Financials has deteriorated in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 493: Emerging Markets Diversified Financials vs. The World – Momentum & Value

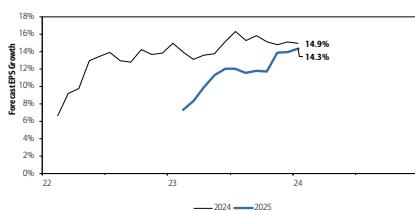
EM Div Financials has underperformed in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 494: Global Diversified Financials forecast EPS growth

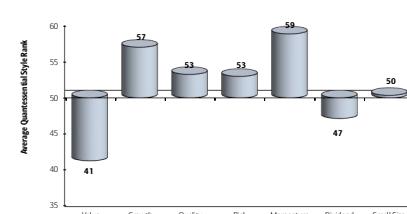
Forecast EPS growth for 2025 is 14%



Source: BofA Global Quantitative Strategy, MSCI
BofA GLOBAL RESEARCH

Chart 495: Global Diversified Financials – average Style Rank (100=best, 50=median, 1=worst)

Global Div Financials is tilted towards Momentum and Growth



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

BofA GLOBAL RESEARCH

Chart 496: Global Diversified Financials Prospective EPS and Trend EPS

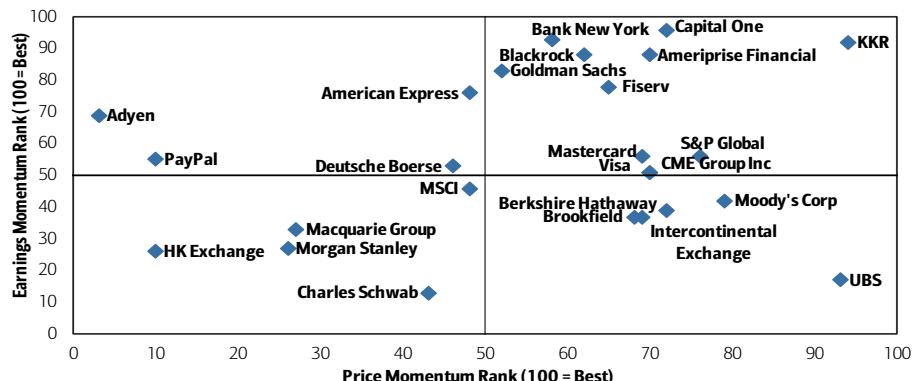
Prospective EPS has risen by 2% in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 497: Quadrant Analysis of Global Diversified Financials Stocks

44% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Energy

Chart 498: Global Energy vs. The World – Momentum & Value*

World Energy has underperformed in last 6m

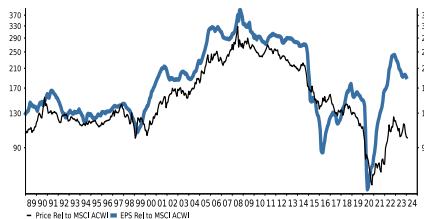


Chart 499: USA Energy vs. The World – Momentum & Value

USA Energy has underperformed in last 6m

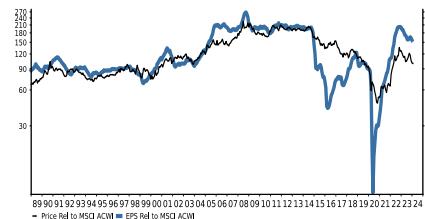


Chart 500: Japan Energy vs. The World – Momentum & Value

Japan Energy has outperformed the world in last 6m

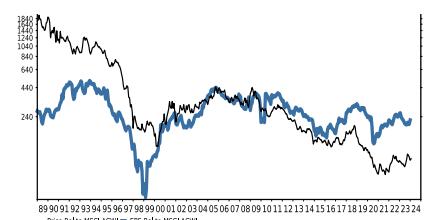


Chart 501: Europe Energy vs. The World – Momentum & Value

Europe Energy has underperformed in last 6m

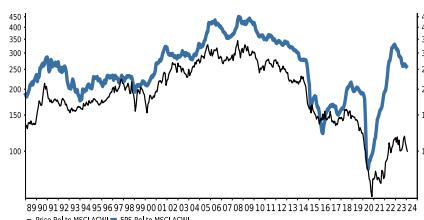


Chart 502: APxJ Energy vs. The World – Momentum & Value

Relative EPS trend for APxJ Energy has deteriorated in last 3m



Chart 503: Emerging Markets Energy vs. The World – Momentum & Value

Relative EPS trend for EM Energy has deteriorated in last 6m



Chart 504: Global Energy forecast EPS growth

Forecast EPS growth for 2024 is 1%

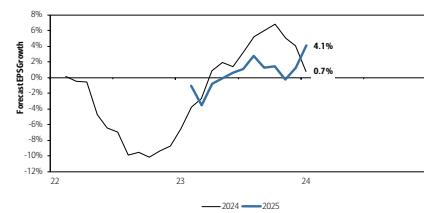


Chart 505: Global Energy – average Style Rank (100=best, 50=median, 1=worst)

Energy are most overweight Value

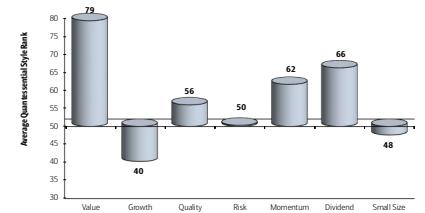


Chart 506: Global Energy Prospective EPS and Trend EPS

Prospective EPS has moderated slightly last month

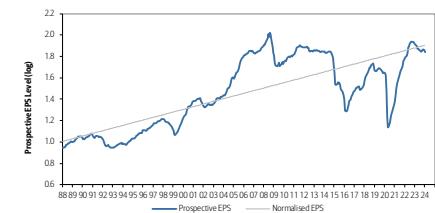
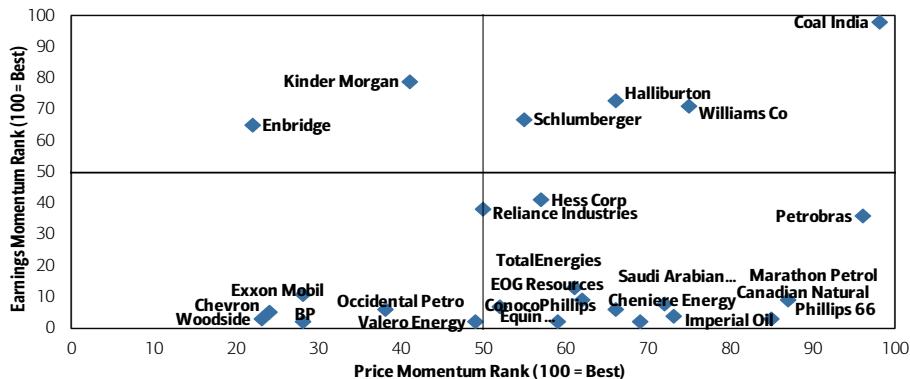


Chart 507: Quadrant Analysis of Global Energy Stocks

16% of largest 25 stocks are in the top-right quadrant



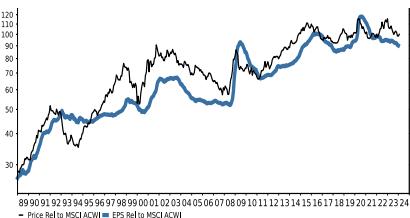
Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Health Care

Chart 508: Global Health Care vs. The World – Momentum & Value*

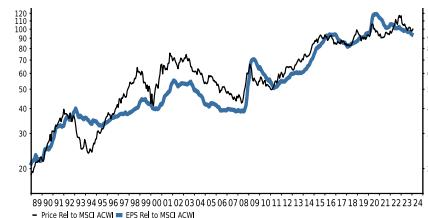
Relative EPS trend for World Health Care has deteriorated in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 509: USA Health Care vs. The World – Momentum & Value

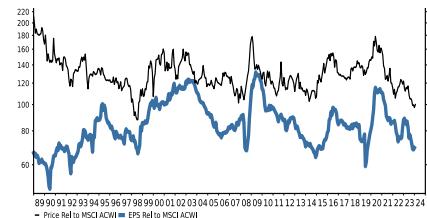
Relative EPS trend for USA Health Care has deteriorated in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 510: Japan Health Care vs. The World – Momentum & Value

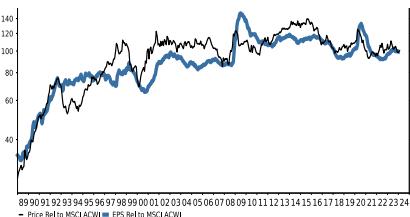
Japan Health Care has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 511: Europe Health Care vs. The World – Momentum & Value

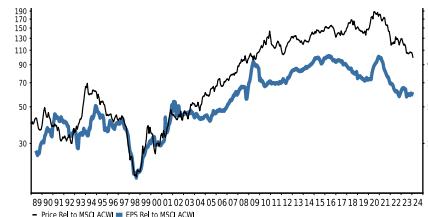
Relative EPS trend for Europe Health Care has deteriorated in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 512: APxJ Health Care vs. The World – Momentum & Value

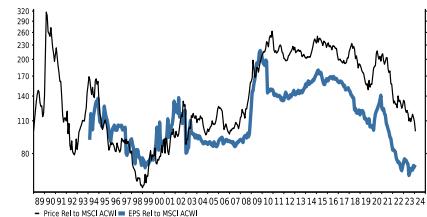
Relative EPS trend for APxJ Health Care has improved in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 513: Emerging Markets Health Care vs. The World – Momentum & Value

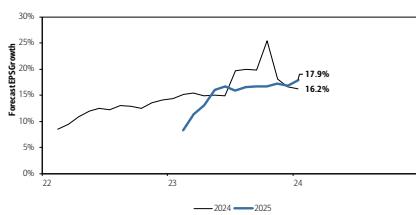
Relative EPS trend for EM Health Care has deteriorated in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 514: Global Health Care forecast EPS growth

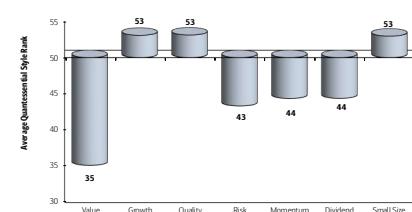
Forecast EPS growth for 2025 is 18%



Source: BofA Global Quantitative Strategy, MSCI
BofA GLOBAL RESEARCH

Chart 515: Global Health Care – average Style Rank (100=best, 50=median, 1=worst)

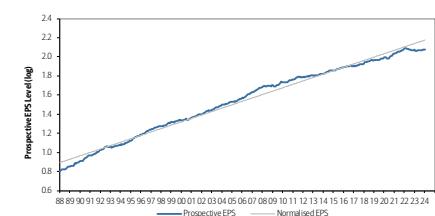
Global Health Care is overweight Growth and Quality



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

Chart 516: Global Health Care Prospective EPS and Trend EPS

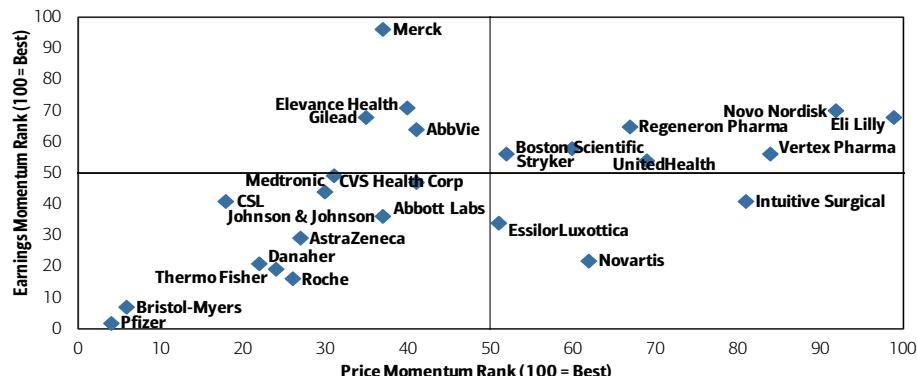
Prospective EPS has moderated slightly last month



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 517: Quadrant Analysis of Global Health Care Stocks

28% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Industrials

Chart 518: Global Industrials vs. The World – Momentum & Value*

Relative EPS trend for World Industrials has deteriorated in last 3m

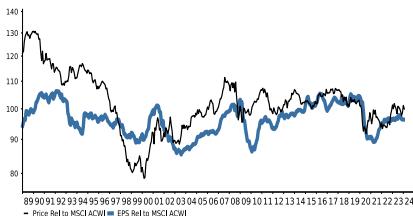


Chart 519: USA Industrials vs. The World – Momentum & Value

Relative EPS trend for USA Industrials has deteriorated in last 3m

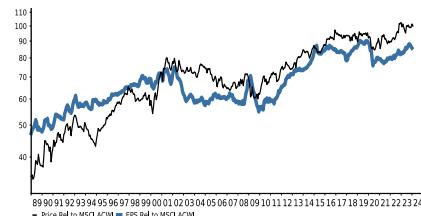


Chart 520: Japan Industrials vs. The World – Momentum & Value

Japan Industrials has outperformed the world in last 6m

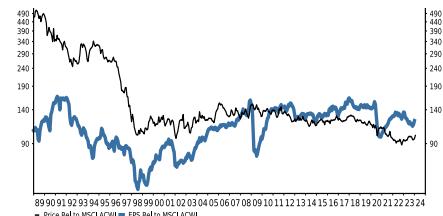


Chart 521: Europe Industrials vs. The World – Momentum & Value

Relative EPS trend for Europe Industrials has improved in last 12m

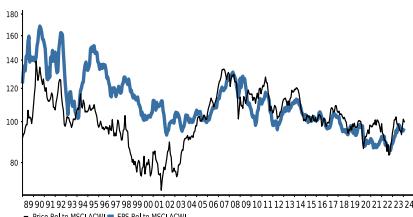


Chart 522: APxJ Industrials vs. The World – Momentum & Value

Relative EPS trend for APxJ Industrials has deteriorated in last 6m

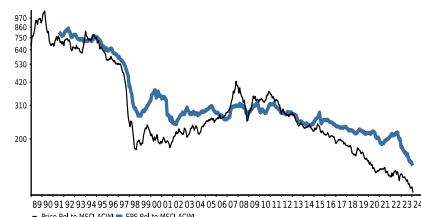


Chart 523: Emerging Markets Industrials vs. The World – Momentum & Value

Relative EPS trend for EM Industrials has deteriorated in last 3m

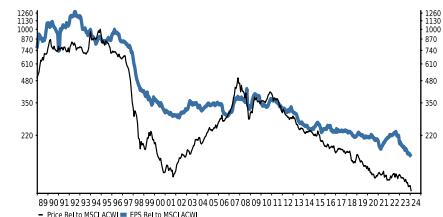


Chart 524: Global Industrials forecast EPS growth

Forecast EPS growth for 2025 is 17%

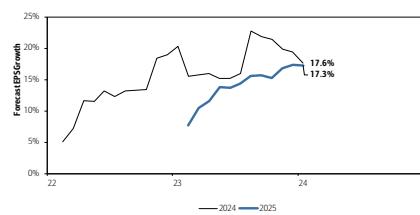


Chart 525: Global Industrials – average Style Rank (100=best, 50=median, 1=worst)

Industrials are tilted towards Risk

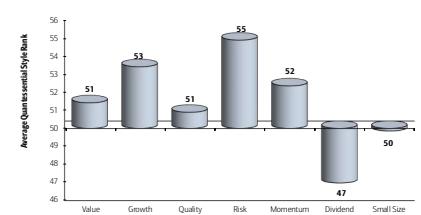


Chart 526: Global Industrials Prospective EPS and Trend EPS

Prospective EPS has moderated slightly last month

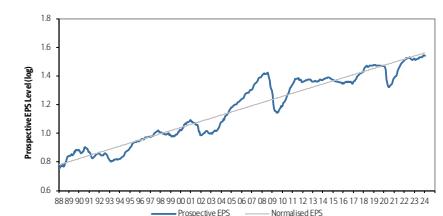
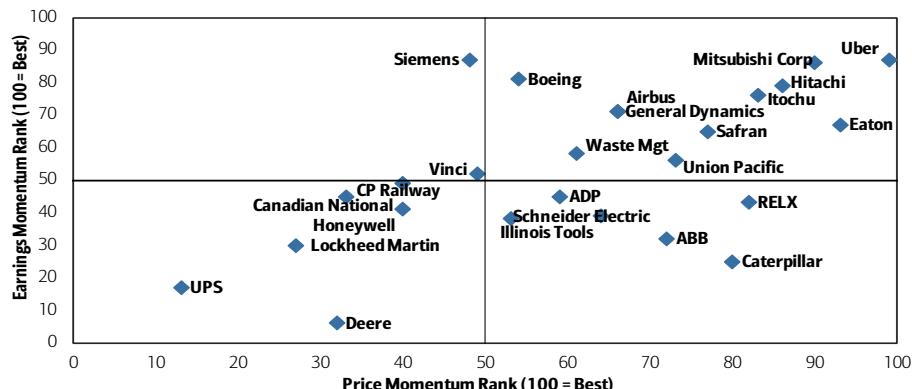


Chart 527: Quadrant Analysis of Global Industrials Stocks

There are more stocks in the attractive top-right quadrant than bottom-left



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Insurance

Chart 528: Global Insurance vs. The World – Momentum & Value*

Relative EPS trend for World Insurance has improved in last 3m

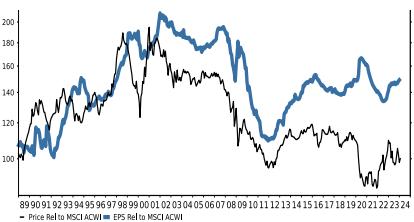


Chart 529: USA Insurance vs. The World – Momentum & Value

USA Insurance has underperformed in last 3m

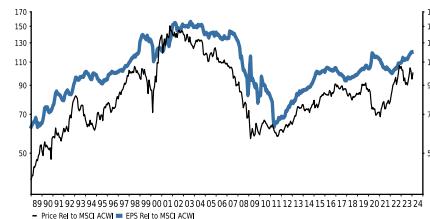


Chart 530: Japan Insurance vs. The World – Momentum & Value

Relative EPS trend for Japan Insurance has improved in last 6m



Chart 531: Europe Insurance vs. The World – Momentum & Value

Relative EPS trend for Europe Insurance has deteriorated in last 12m

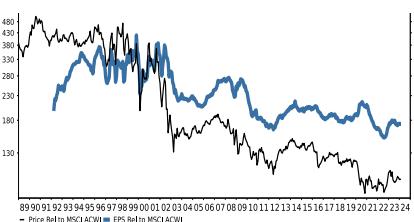


Chart 532: APxJ Insurance vs. The World – Momentum & Value

APxJ Insurance has underperformed the world in last 12m

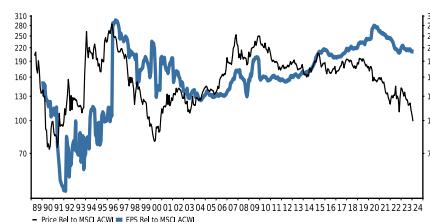


Chart 533: Emerging Markets Insurance vs. The World – Momentum & Value

Relative EPS trend for EM Insurance has deteriorated in last 6m

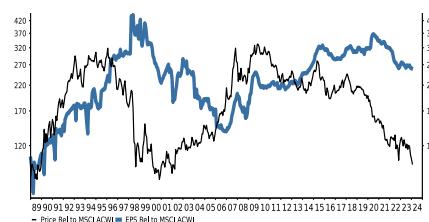


Chart 534: Global Insurance forecast EPS growth

Forecast EPS growth for 2024 is 18%

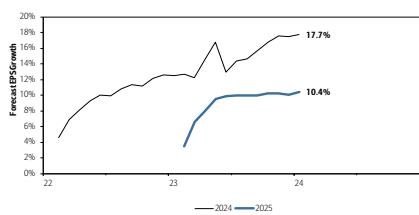


Chart 535: Global Insurance – average Style Rank (100=best, 50=median, 1=worst)

Insurance are most overweight Value

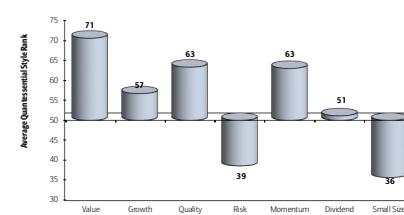


Chart 536: Global Insurance Prospective EPS and Trend EPS

Prospective EPS has risen by 5% in last 3m

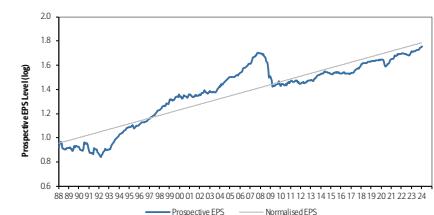
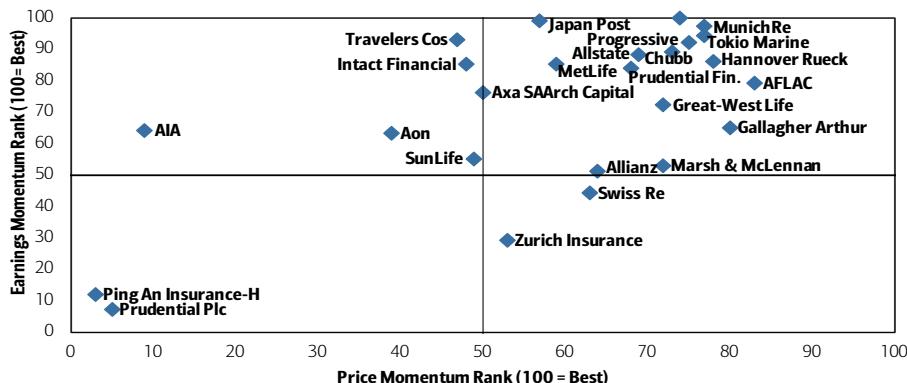


Chart 537: Quadrant Analysis of Global Insurance Stocks

60% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH



Materials

Chart 538: Global Materials vs. The World – Momentum & Value*

Relative EPS trend for World Materials has deteriorated in last 12m

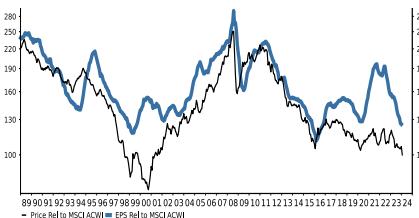


Chart 539: USA Materials vs. The World – Momentum & Value

USA Materials has underperformed in last 6m

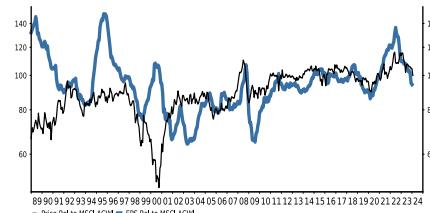


Chart 540: Japan Materials vs. The World – Momentum & Value

Japan Materials has outperformed in last 12m

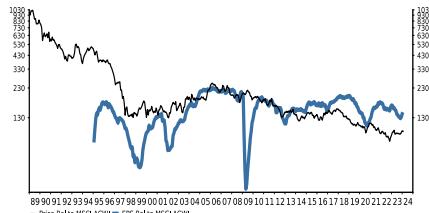


Chart 541: Europe Materials vs. The World – Momentum & Value

Europe Materials has underperformed in last 3m

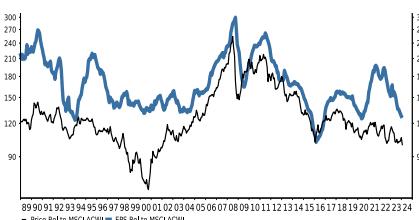


Chart 542: APxJ Materials vs. The World – Momentum & Value

APxJ Materials has underperformed the world in last 12m

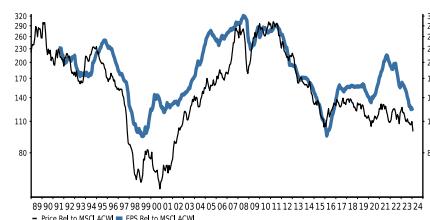


Chart 543: Emerging Markets Materials vs. The World – Momentum & Value

EM Materials has underperformed the world in last 12m



Chart 544: Global Materials forecast EPS growth

Forecast EPS growth for 2024 is 25%

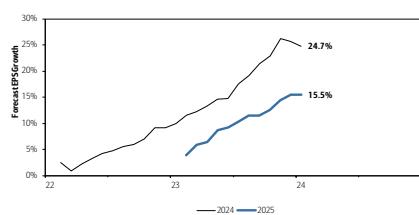


Chart 545: Global Materials – average Style Rank (100=best, 50=median, 1=worst)

Materials are most overweight Value

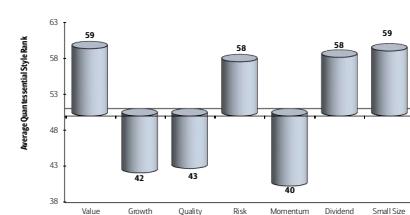


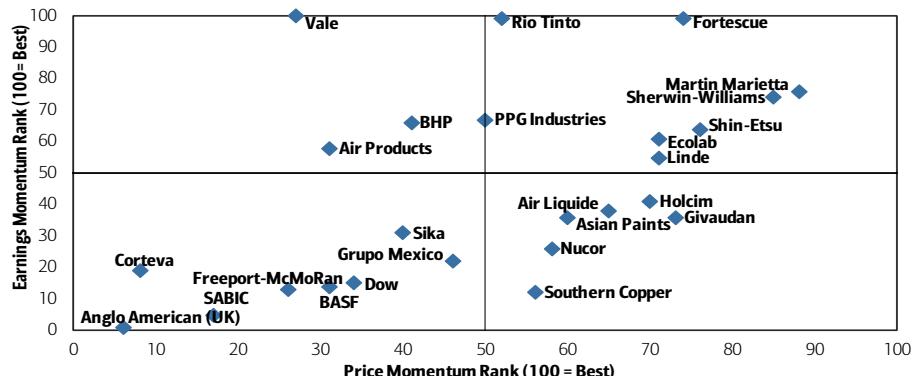
Chart 546: Global Materials Prospective EPS and Trend EPS

Prospective EPS has moderated slightly in the last 3m



Chart 547: Quadrant Analysis of Global Materials Stocks

There are more stocks in the unattractive bottom-left quadrant than top-right



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Media & Entertainment

Chart 548: Global Media & Entertainment vs. The World – Momentum & Value*

World Media & Ent. has outperformed in last 12m

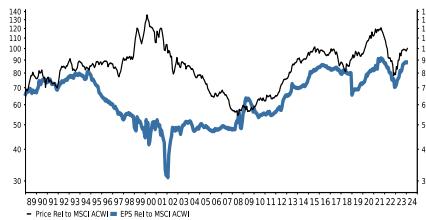


Chart 549: USA Media & Entertainment vs. The World – Momentum & Value

Relative EPS trend for USA Media & Ent. has improved in last 6m

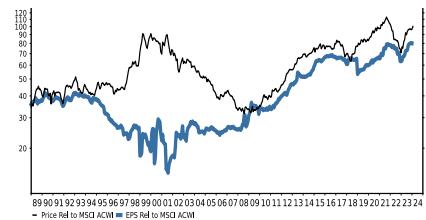


Chart 550: Japan Media & Entertainment vs. The World – Momentum & Value

Japan Media & Ent. has outperformed the world in last 6m

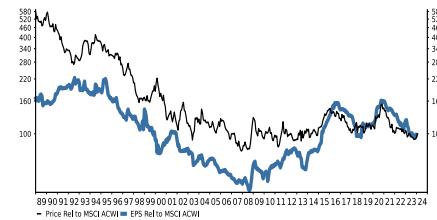


Chart 551: Europe Media & Entertainment vs. The World – Momentum & Value

Relative EPS trend for Europe Media & Ent. has deteriorated in last 3m

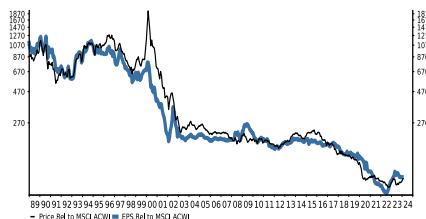


Chart 552: APxJ Media & Entertainment vs. The World – Momentum & Value

Relative EPS trend for APxJ Media & Ent. has improved in last 12m

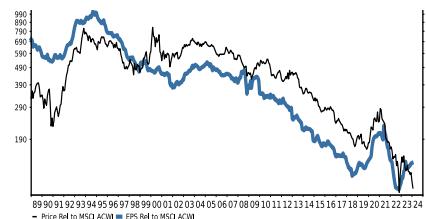


Chart 553: Emerging Markets Media & Entertainment vs. The World – Momentum & Value

EM Media & Ent. has underperformed the world in last 12m

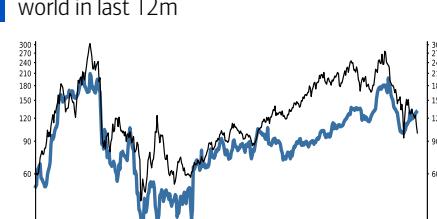


Chart 554: Global Media & Entertainment forecast EPS growth

Forecast EPS growth for 2025 is 18%

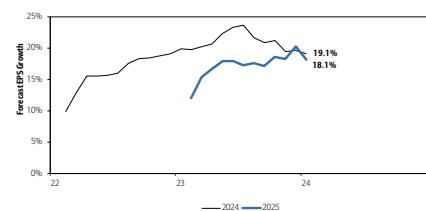


Chart 555: Global Media & Entertainment – average Style Rank (100=best, 50=Media & Entertainment, 1=worst)

Media & Ent. are tilted towards Risk

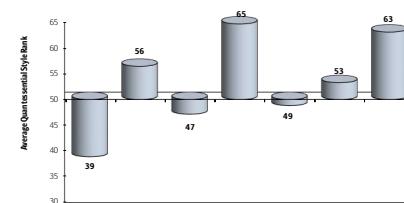


Chart 556: Global Media & Entertainment Prospective EPS and Trend EPS

Earnings forecast has improved in the last 6m

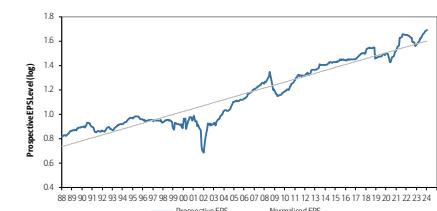
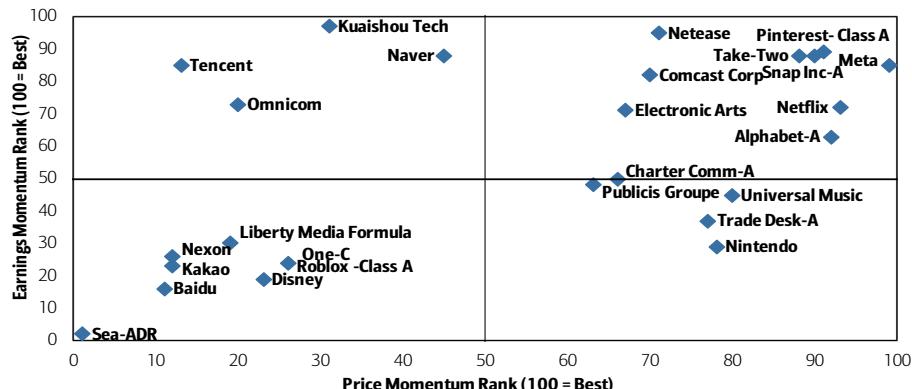


Chart 557: Quadrant Analysis of Global Media & Entertainment Stocks

36% of largest 25 stocks are in the top-right quadrant



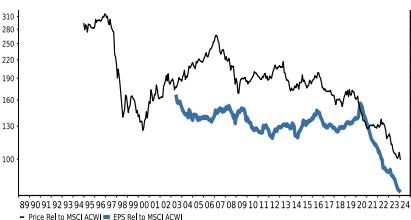
Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Real Estate

Chart 558: Global Real Estate vs. The World – Momentum & Value*

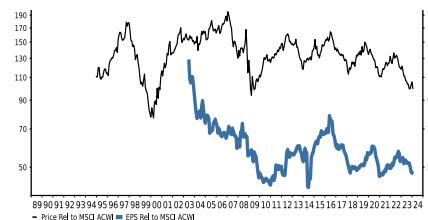
Relative EPS trend for World Real Estate has deteriorated in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 559: USA Real Estate vs. The World – Momentum & Value

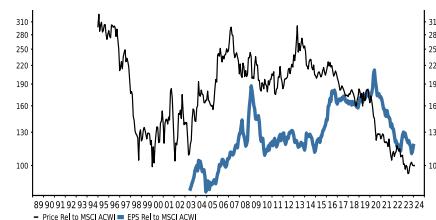
USA Real Estate has underperformed the world in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 560: Japan Real Estate vs. The World – Momentum & Value

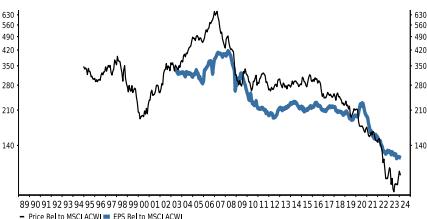
Japan Real Estate has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 561: Europe Real Estate vs. The World – Momentum & Value

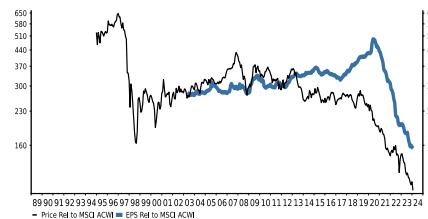
Relative EPS trend for Europe Real Estate has deteriorated in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 562: APxJ Real Estate vs. The World – Momentum & Value

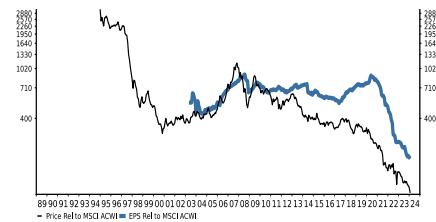
Relative EPS trend for APxJ Real Estate has deteriorated in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 563: Emerging Markets Real Estate vs. The World – Momentum & Value

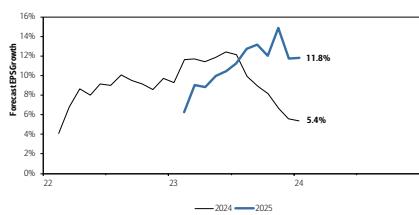
EM Real Estate has underperformed in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 564: Global Real Estate forecast EPS growth

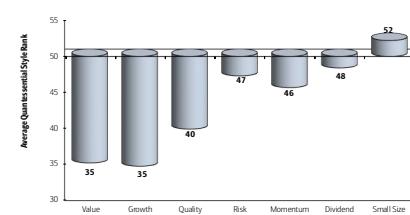
Forecast EPS growth for 2025 is 12%



Source: BofA Global Quantitative Strategy, MSCI
BofA GLOBAL RESEARCH

Chart 565: Global Real Estate – average Style Rank (100=best, 50=median, 1=worst)

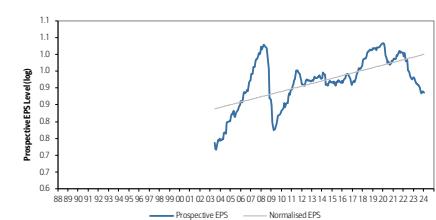
Real Estate are dominated by Small Size stocks



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

Chart 566: Global Real Estate Prospective EPS and Trend EPS

Prospective EPS has moderated slightly last month



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 567: Quadrant Analysis of Global Real Estate Stocks

20% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH



Semiconductors & Semiconductor Equipment

Chart 568: Global Semiconductors vs. The World – Momentum & Value*

World Semiconductors has outperformed in last 12m

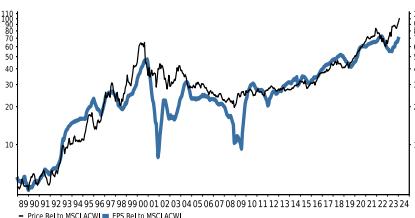


Chart 569: USA Semiconductors vs. The World – Momentum & Value

Relative EPS trend for USA Semiconductors has improved in last 6m

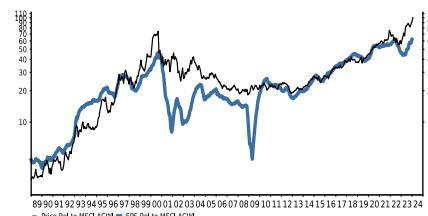


Chart 570: Japan Semiconductors vs. The World – Momentum & Value

Relative EPS trend for Japan Semiconductors has deteriorated in last 12m

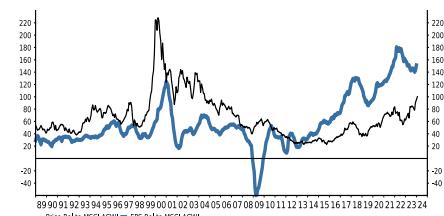


Chart 571: Europe Semiconductors vs. The World – Momentum & Value

Europe Semiconductors has outperformed the world in last 6m

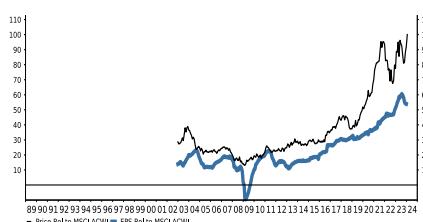


Chart 572: APxJ Semiconductors vs. The World – Momentum & Value

Relative EPS trend for APxJ Semiconductors has improved in last 6m

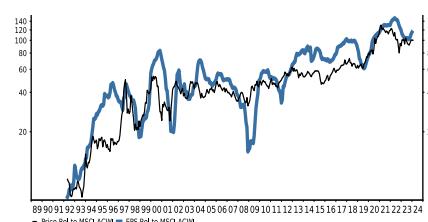


Chart 573: Emerging Markets Semiconductors vs. The World – Momentum & Value

Relative EPS trend for EM Semiconductors has improved in last 12m

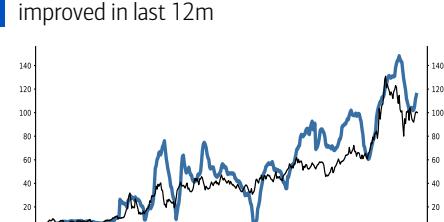


Chart 574: Global Semiconductors forecast EPS growth

Forecast EPS growth for 2024 is 39%

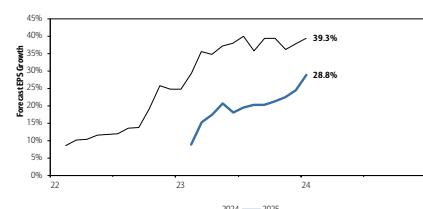


Chart 575: Global Semiconductors – average Style Rank (100=best, 50=median, 1=worst)

Semiconductors are most overweight Risk

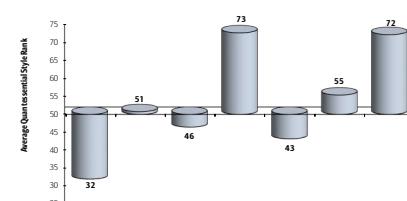


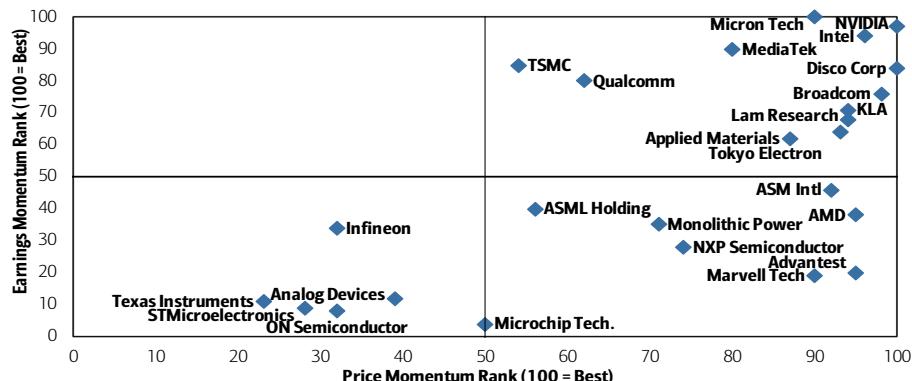
Chart 576: Global Semiconductors Prospective EPS and Trend EPS

Prospective EPS has risen by 2% last month



Chart 577: Quadrant Analysis of Global Semiconductors Stocks

48% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

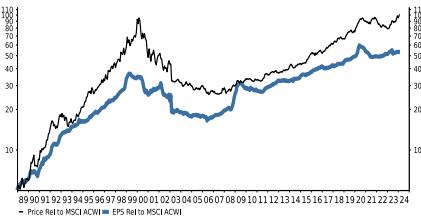
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Software & Services

Chart 578: Global Software vs. The World – Momentum & Value*

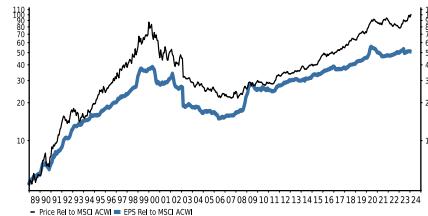
World Software has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 579: USA Software vs. The World – Momentum & Value

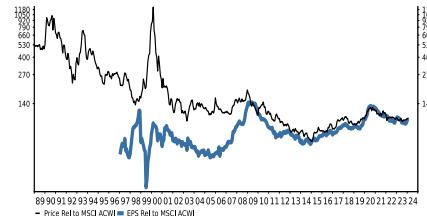
Relative EPS trend for USA Software has improved in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 580: Japan Software vs. The World – Momentum & Value

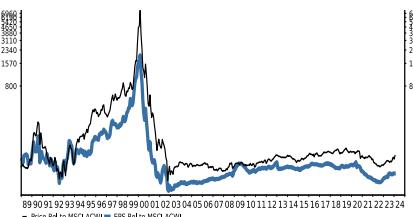
Japan Software has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 581: Europe Software vs. The World – Momentum & Value

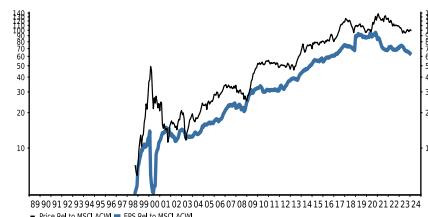
Relative EPS trend for Europe Software has improved in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 582: APxJ Software vs. The World – Momentum & Value

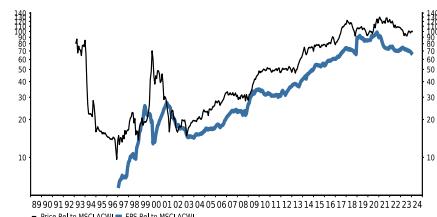
APxJ Software has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 583: Emerging Markets Software vs. The World – Momentum & Value

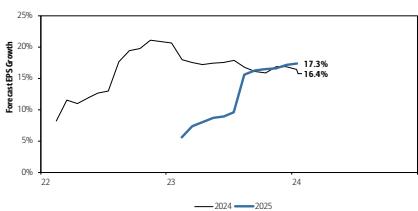
EM Software has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 584: Global Software forecast EPS growth

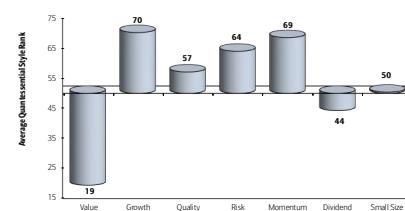
Forecast EPS growth for 2025 is 17%



Source: BofA Global Quantitative Strategy, MSCI
BofA GLOBAL RESEARCH

Chart 585: Global Software – average Style Rank (100=best, 50=median, 1=worst)

Software are tilted towards Growth

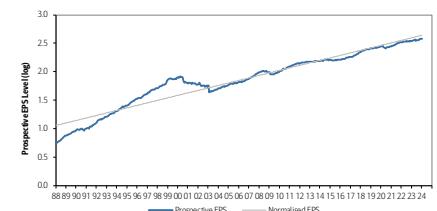


Source: BofA Global Quantitative Strategy, IBES, MSCI, S&P, Exshare, Bloomberg

BofA GLOBAL RESEARCH

Chart 586: Global Software Prospective EPS and Trend EPS

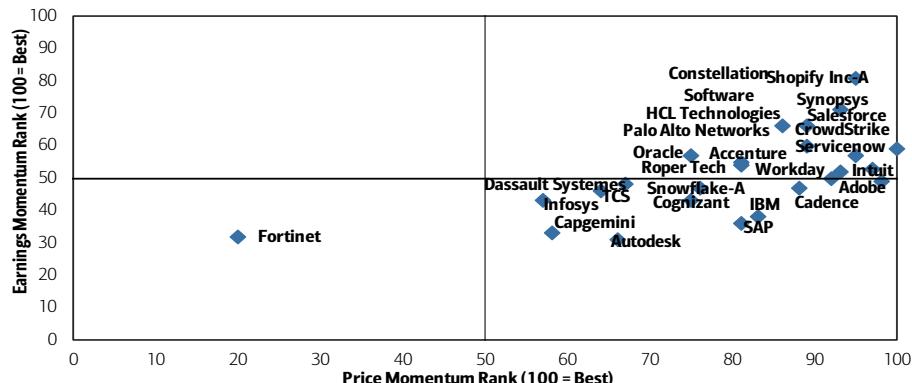
Prospective EPS has risen by 1% last month



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 587: Quadrant Analysis of Global Software Stocks

There are more stocks in the attractive top-right quadrant than bottom-left



Source: BofA Global Quantitative Strategy, IBES, MSCI

BofA GLOBAL RESEARCH

Technology Hardware

Chart 588: Global Tech Hardware vs. The World – Momentum & Value*

World Tech Hardware has outperformed in last 12m

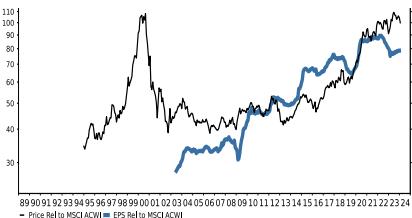


Chart 589: USA Tech Hardware vs. The World – Momentum & Value

USA Tech Hardware has underperformed in last 3m

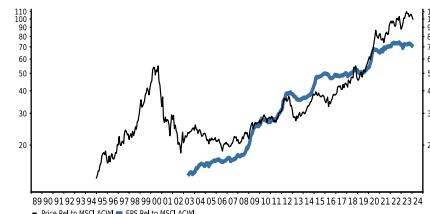


Chart 590: Japan Tech Hardware vs. The World – Momentum & Value

Japan Tech Hardware has outperformed the world in last 3m

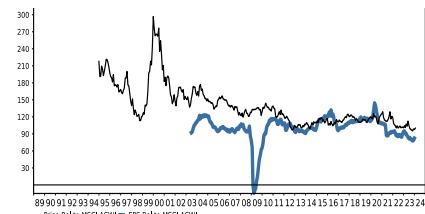


Chart 591: Europe Tech Hardware vs. The World – Momentum & Value

Relative EPS trend for Europe Tech Hardware has deteriorated in last 12m

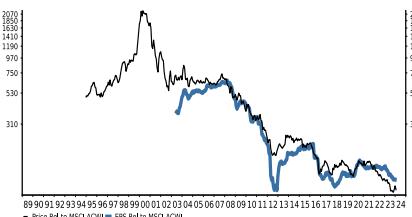


Chart 592: APxJ Tech Hardware vs. The World – Momentum & Value

APxJ Tech Hardware has underperformed in last 3m

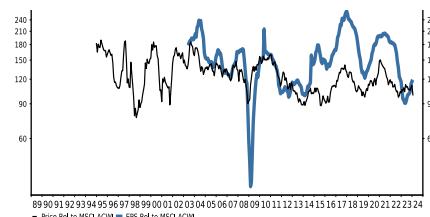


Chart 593: Emerging Markets Tech Hardware vs. The World – Momentum & Value

EM Tech Hardware has underperformed in last 3m

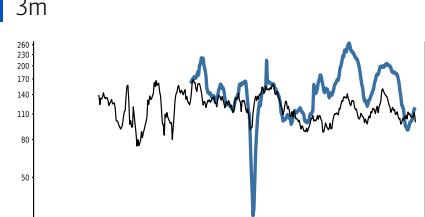


Chart 594: Global Tech Hardware forecast EPS growth

Forecast EPS growth for 2024 is 25%

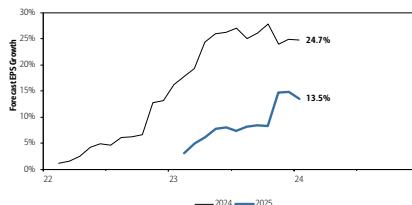


Chart 595: Global Tech Hardware – average Style Rank (100=best, 50=median, 1=worst)

Tech Hardware are most overweight Small Size

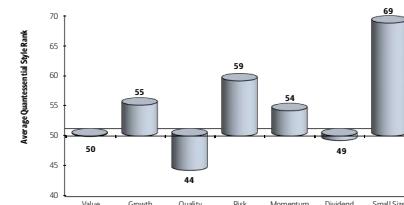


Chart 596: Global Tech Hardware Prospective EPS and Trend EPS

Prospective EPS has risen by 1% last month

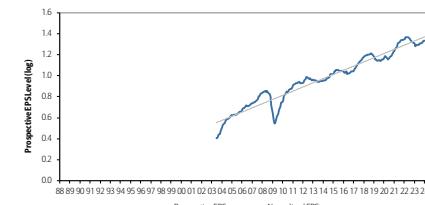
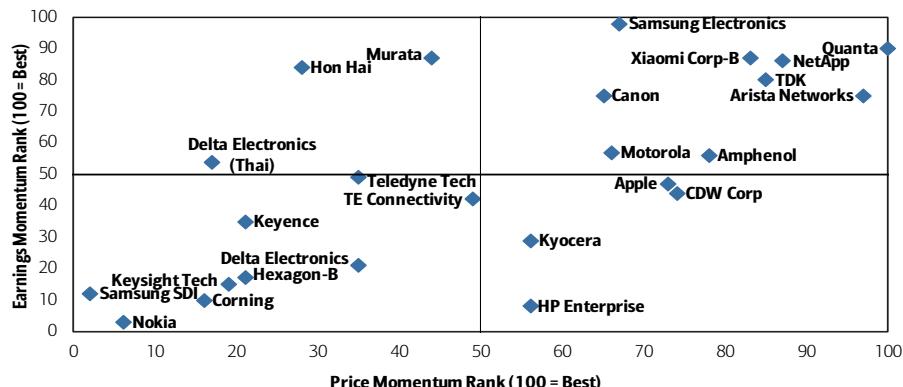


Chart 597: Quadrant Analysis of Global Tech Hardware Stocks

14% of largest 25 stocks are in the top-right quadrant



Source: BofA Global Quantitative Strategy, IBES, MSCI

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Telecommunication Services

Chart 598: Global Telecom vs. The World – Momentum & Value*

Relative EPS trend for World Telecom has deteriorated in last 12m

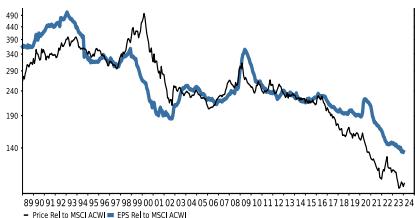


Chart 599: USA Telecom vs. The World – Momentum & Value

Relative EPS trend for USA Telecom has deteriorated in last 3m

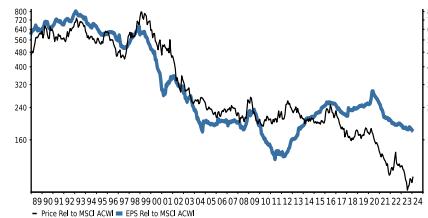


Chart 600: Japan Telecom vs. The World – Momentum & Value

Japan Telecom has underperformed the world in last 12m

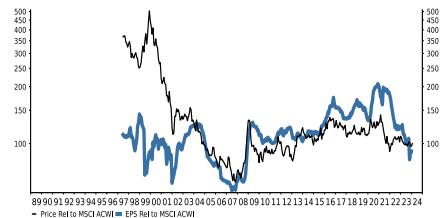


Chart 601: Europe Telecom vs. The World – Momentum & Value

Relative EPS trend for Europe Telecom has deteriorated in last 12m

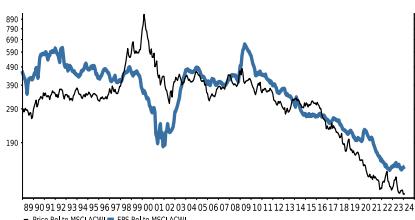


Chart 602: APxJ Telecom vs. The World – Momentum & Value

APxJ Telecom has underperformed the world in last 12m

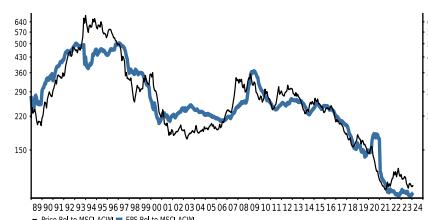


Chart 603: Emerging Markets Telecom vs. The World – Momentum & Value

EM Telecom has underperformed in last 3m

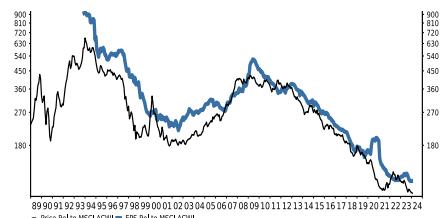


Chart 604: Global Telecom forecast EPS growth

Forecast EPS growth for 2024 is 17%

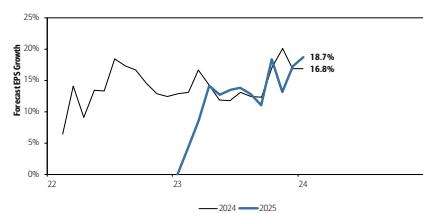


Chart 605: Global Telecom – average Style Rank (100=best, 50=median, 1=worst)

Telecom are tilted towards Value

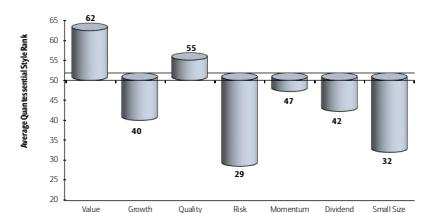


Chart 606: Global Telecom Prospective EPS and Trend EPS

Earnings forecast has improved in the last 3m

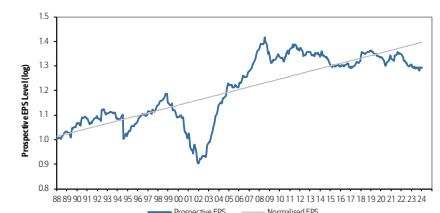
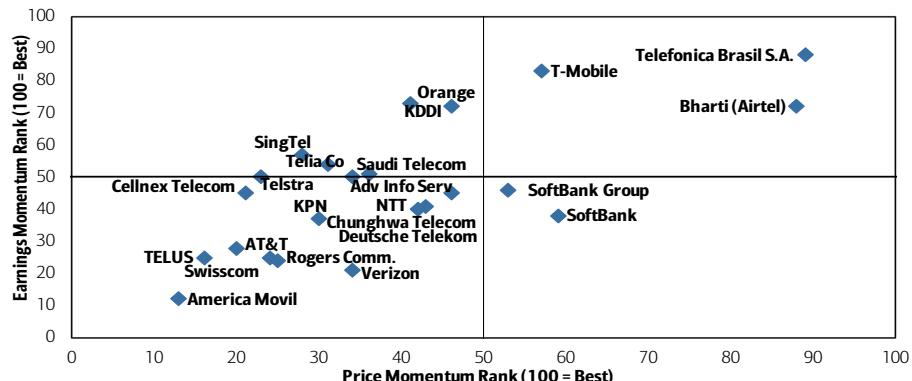


Chart 607: Quadrant Analysis of Global Telecom Stocks

Majority of Telecom stocks exhibit falling earnings and price momentum characteristics



Source: BofA Global Quantitative Strategy, IBES, MSCI

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Utilities

Chart 608: Global Utilities vs. The World – Momentum & Value*

Relative EPS trend for World Utilities has improved in last 12m

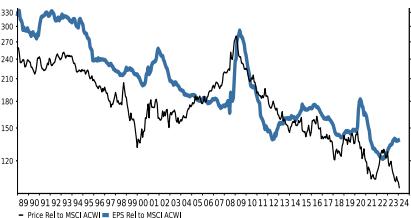


Chart 609: USA Utilities vs. The World – Momentum & Value

USA Utilities has underperformed the world in last 12m

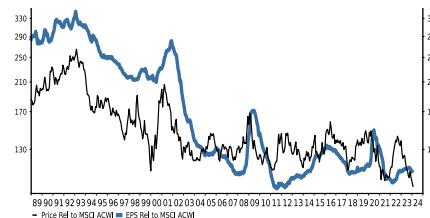


Chart 610: Japan Utilities vs. The World – Momentum & Value

Relative EPS trend for Japan Utilities has improved in last 12m

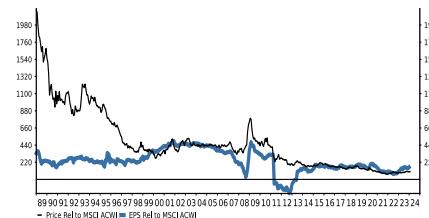


Chart 611: Europe Utilities vs. The World – Momentum & Value

Europe Utilities has underperformed in last 3m

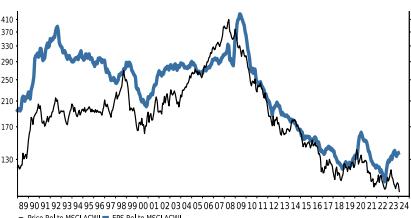


Chart 612: APxJ Utilities vs. The World – Momentum & Value

Relative EPS trend for APxJ Utilities has improved in last 6m

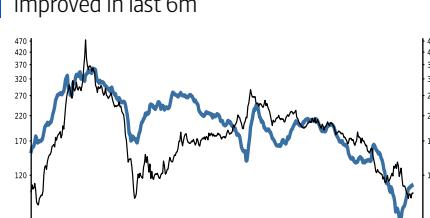


Chart 613: Emerging Markets Utilities vs. The World – Momentum & Value

Relative EPS trend for EM Utilities has improved in last 12m

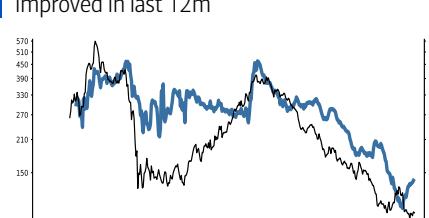


Chart 614: Global Utilities forecast EPS growth

Forecast EPS growth for 2024 is 11%

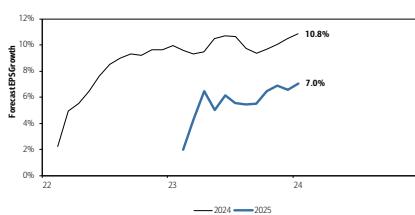


Chart 615: Global Utilities – average Style Rank (100=best, 50=median, 1=worst)

Utilities are dominated by Value stocks

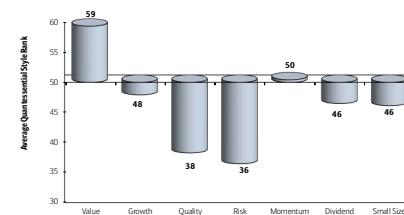


Chart 616: Global Utilities Prospective EPS and Trend EPS

Prospective EPS has risen by 3% in last 3m

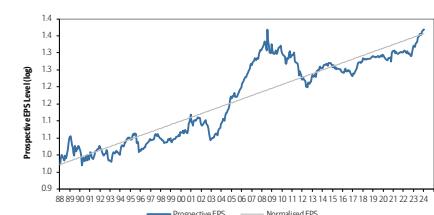
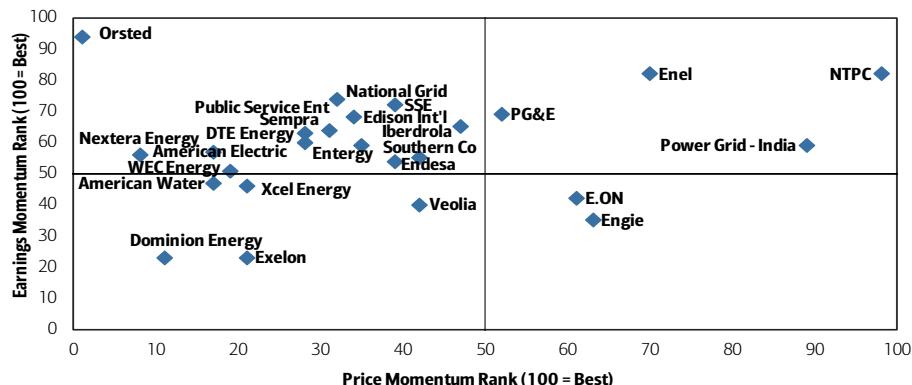


Chart 617: Quadrant Analysis of Global Utilities Stocks

16% of largest 25 stocks are in the top-right quadrant



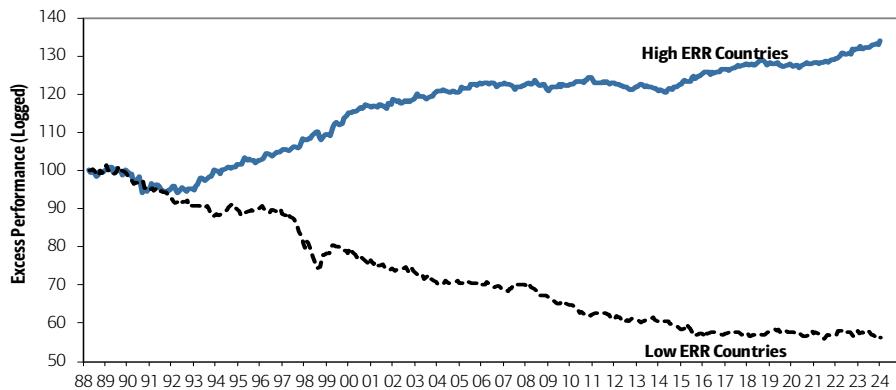
Source: BofA Global Quantitative Strategy, IBES, MSCI

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Country Allocation

Chart 618: Excess Performance of Countries with Highest & Lowest Earnings Revision Ratio

Countries with higher Earnings Revision Ratio outperform those with lower Ratio

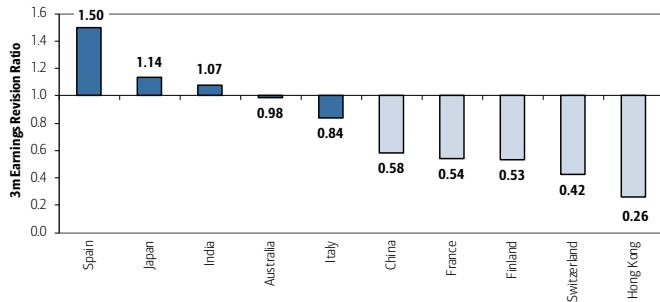


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 619: Largest Twenty Countries – Highest & Lowest ERR

The 3-Month Earnings Revision Ratio is highest in Spain, Japan and India

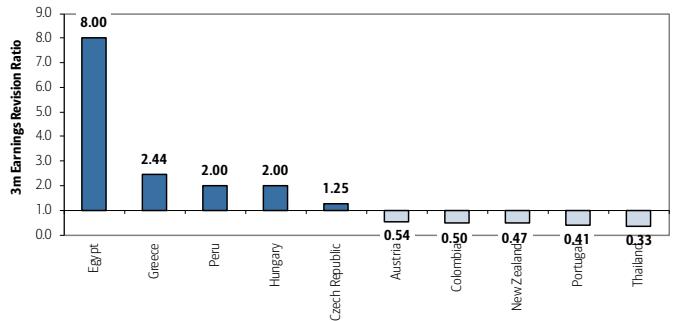


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 620: Smaller Countries – High & Low ERR

Among global countries, the 3-Month Ratio is strongest in Egypt

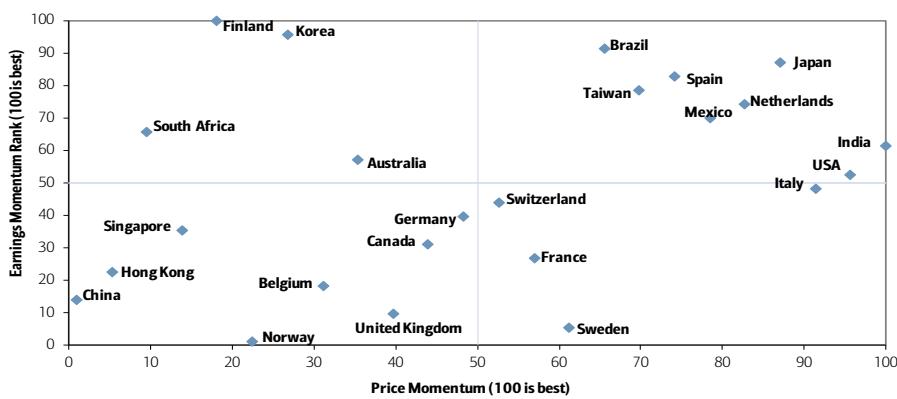


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 621: Price Momentum & Earnings Momentum Characteristics by Country

Countries with above average earnings and price momentum include Japan, India and Spain



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Most Important Stocks

Our Most Important Stocks analysis determines which regional-sectors and stocks are the most important to benchmark-aware investors. Index weight is important but so is the extent to which performance differs from index.

The following two charts highlight the thirty most important region-sectors and the thirty most important stocks in the World.

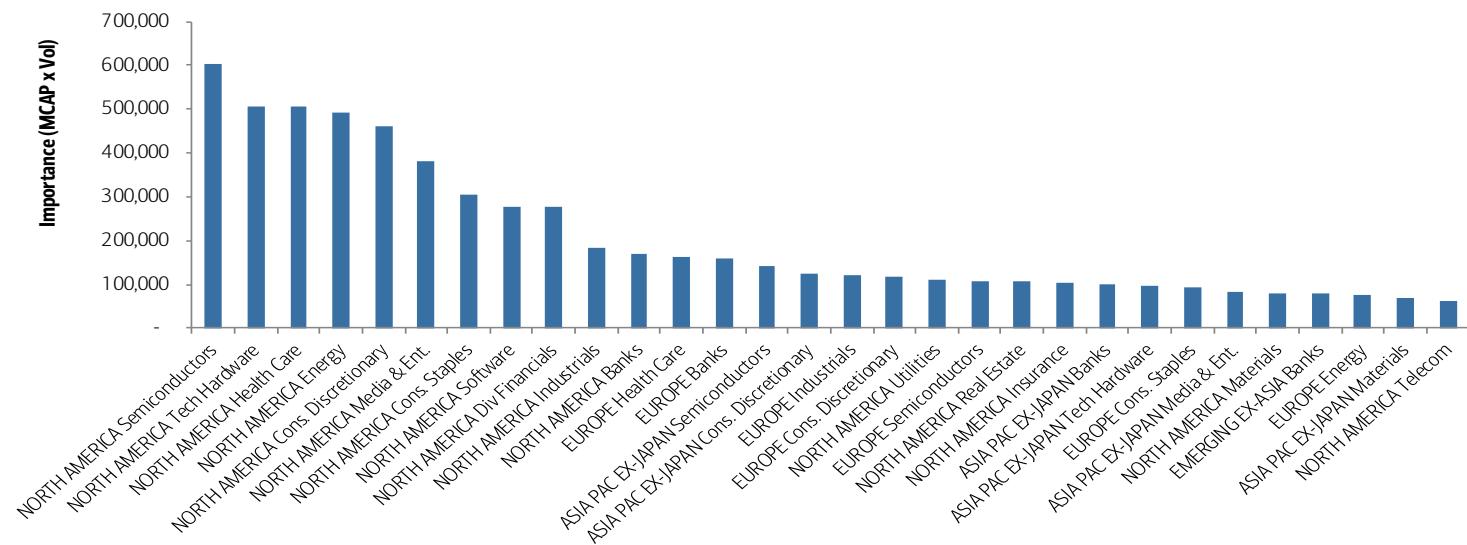
The universe of stocks included in this analysis is selected from the constituents of the MSCI AC World Index. The universe is determined at the end of each month using month-end data from MSCI databases.

Stocks in the firm's restricted list are not included in this analysis.

Weights are based on the MSCI AC World Index as of the most recent month-end, while volatility of relative performance is based on ten years of returns as of the most recent month-end. We define Importance as the index weight multiplied by the volatility of relative performance.

Chart 622: Most Important Region-Sectors (top 30)

The Most Important region-sectors are NORTH AMERICA Semiconductors and NORTH AMERICA Tech Hardware

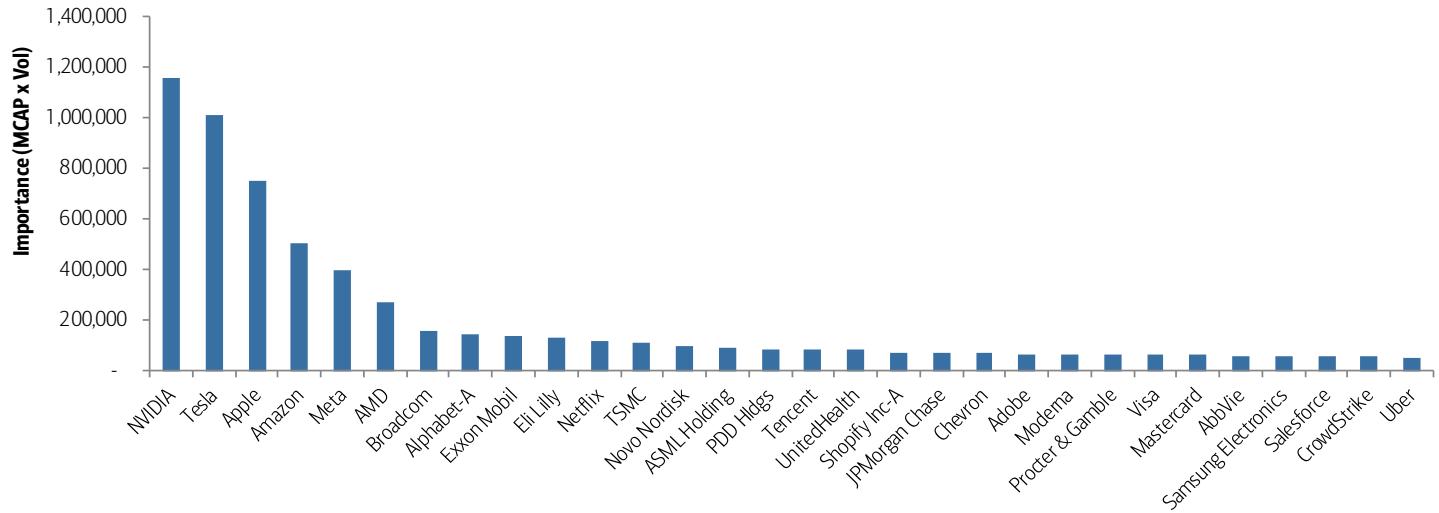


Source: BofA Asia Pac Quantitative Strategy, MSCI, Exshare

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Chart 623: Most Important Stocks (top 30)

The Most Important global stocks include NVIDIA, Tesla, Apple, Amazon and Meta

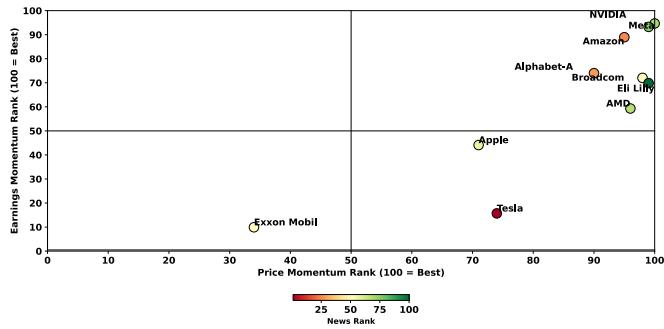


Source: BofA Asia Pac Quantitative Strategy, MSCI, Exshare

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Chart 624: Most Important Stocks (top 10) – Triple Momentum Quadrant Analysis

Triple Momentum is most positive for NVIDIA and Eli Lilly

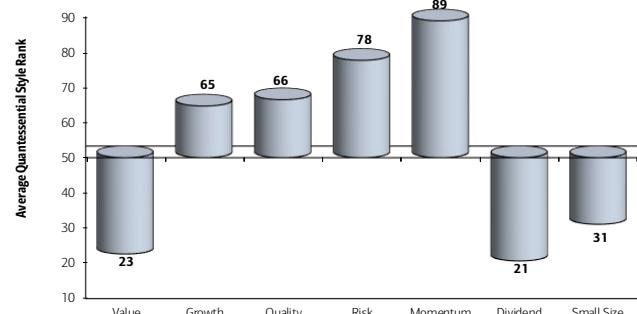


Source: BofA Asia Pac Quantitative Strategy, MSCI, Exshare

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Chart 625: Most Important Stocks (top 10) - Style Characteristics

From a style perspective ten Most Important stocks are tilted towards Momentum



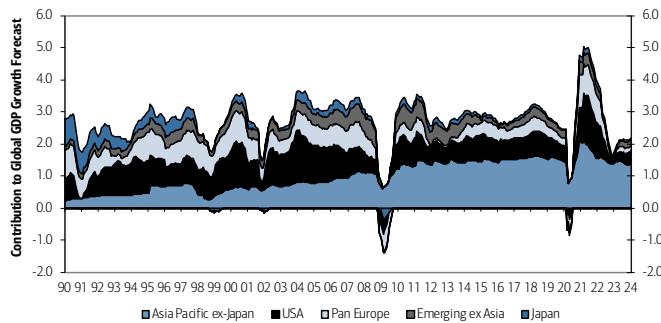
Source: BofA Asia Pac Quantitative Strategy, MSCI, Exshare

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Additional Macro Indicators

Chart 626: Contribution to Global GDP Forecast by Region

Asia Pacific ex-Japan has contributed most positively to the Global GDP Forecasts



Source: BofA Global Quantitative Strategy, MSCI, Haver

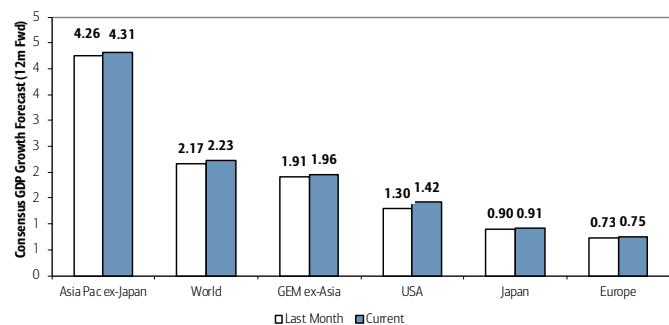
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Chart 627: Global GDP forecasts by Region

The GDP Forecasts are highest in Asia Pac ex-Japan and lowest in Europe

Chart 627: Global GDP forecasts by Region

The GDP Forecasts are highest in Asia Pac ex-Japan and lowest in Europe

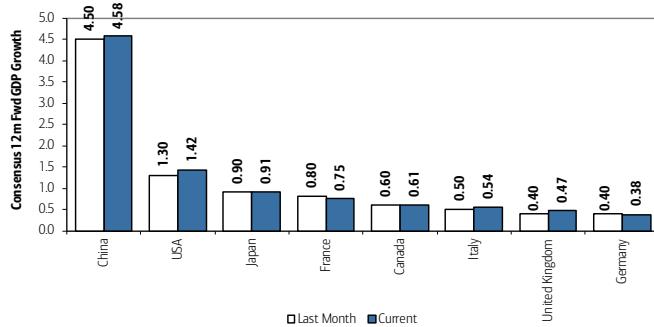


Source: BofA Global Quantitative Strategy, MSCI, Haver

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Chart 628: Global GDP forecasts by Countries

The GDP Forecasts have improved the most in USA



Source: BofA Global Quantitative Strategy, MSCI, Haver

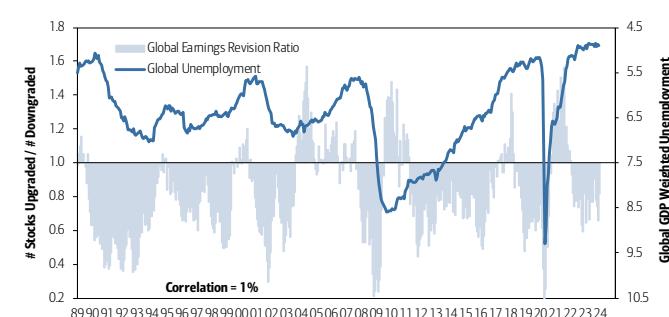
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Chart 629: Global Unemployment and Trends in Global Profit Expectations

Global IP forecasts fell in last 3m

Chart 629: Global Unemployment and Trends in Global Profit Expectations

Global GDP weighted Unemployment Rate has increased in last 3m



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

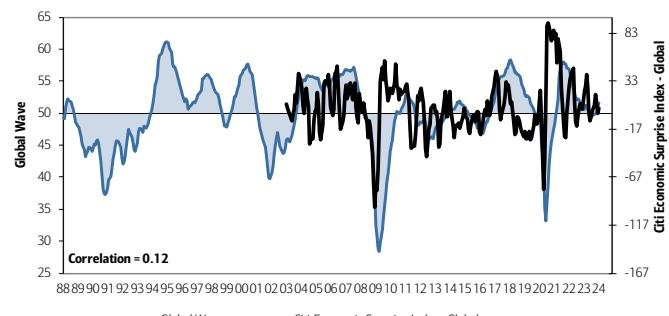
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Chart 630: Global Industrial Production Forecast and Trends in Global Profit Expectations

Global IP forecasts fell in last 3m

Chart 631: Citi Economic Surprise Index vs the Global Wave

Economic data releases have been better compared to Bloomberg consensus



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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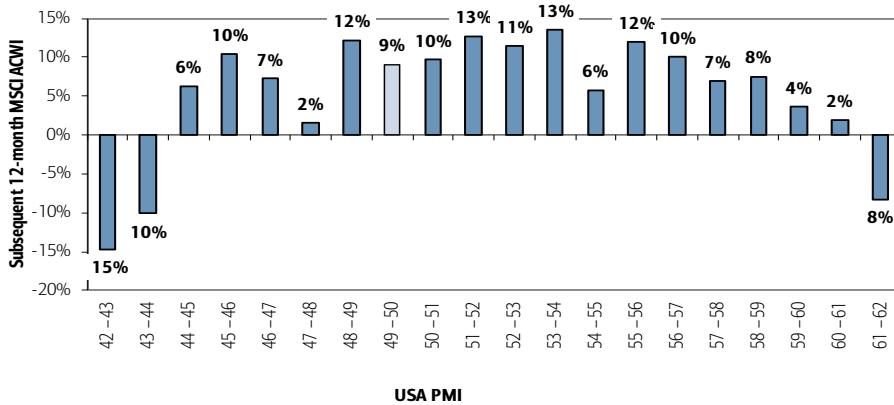
Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver

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Chart 632: USA PMI and MSCI ACWI subsequent 12m returns

MSCI ACWI averages 9% in the subsequent 12m when PMI was at current levels in the past

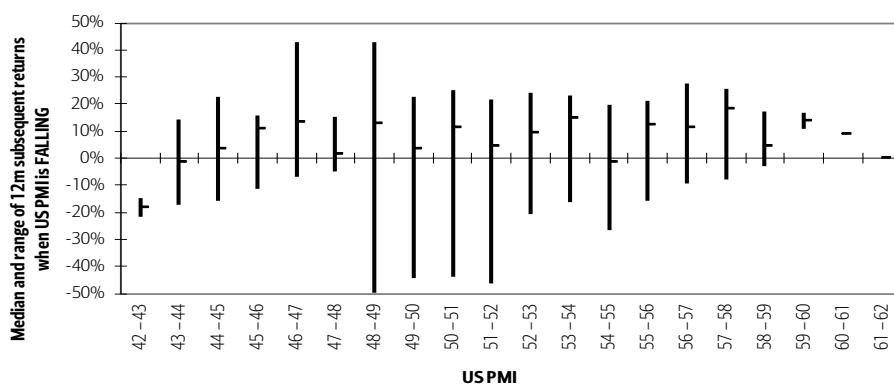


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg, OECD, IMF

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Chart 633: 2m fall in USA PMI and subsequent 12m MSCI ACWI return

For current level of PMI & falling, MSCI ACWI returns 3% in the subsequent 12m on average



Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg, OECD, IMF

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Chart 634: USA PMI and MSCI ACWI YoY Performance

USA PMI ticked up recently, but still remains in contraction territory

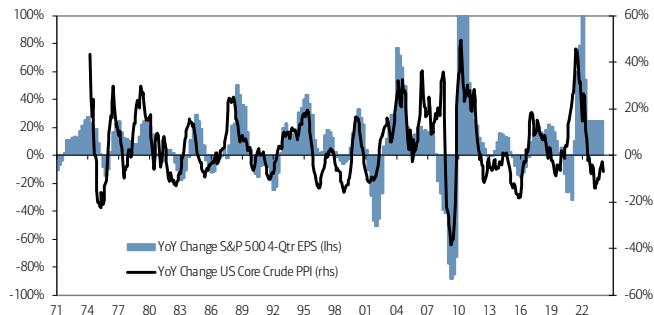


Source: BofA Global Quantitative Strategy, MSCI, IBES, Bloomberg, OECD, IMF

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Chart 635: US Core Crude PPI and US Reported Profits

US Reported Profits have remained resilient



Source: BofA Global Quantitative Strategy, S&P

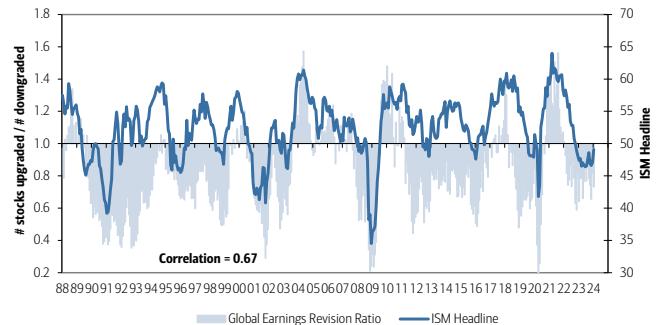
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Chart 636: US ISM and Trends in Global Profit Expectations

US ISM and Trends in Global Profit Expectations has a strong correlation

Chart 636: US ISM and Trends in Global Profit Expectations

US ISM and Trends in Global Profit Expectations has a strong correlation



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

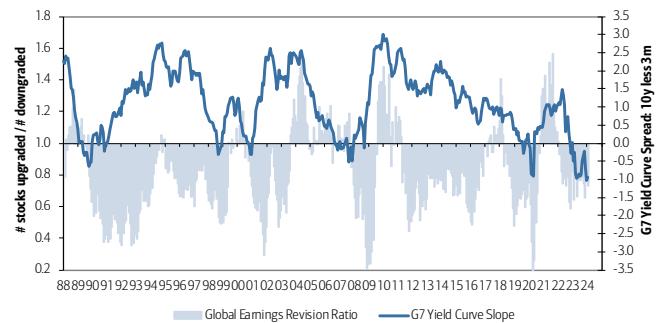
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Chart 637: OECD G7 CLI and Trends in Global Profit Expectations

OECD G7 CLI has improved in recent months

Chart 638: G7 Yield Curve Slope & Trends in Profit Expectations

G7 Yield Curve Slope remains inverted



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

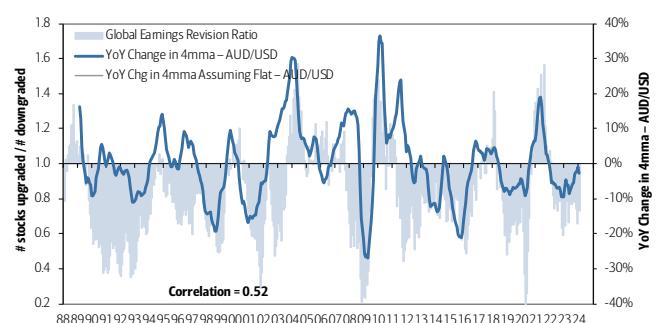
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Chart 639: KOSPI and Trends in Global Profit Expectations

KOSPI and Trends in Global Profit Expectations has a 56% correlation

Chart 640: AUD and Trends in Global Profit Expectations

AUD has appreciated vs USD in the last 12-months



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

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

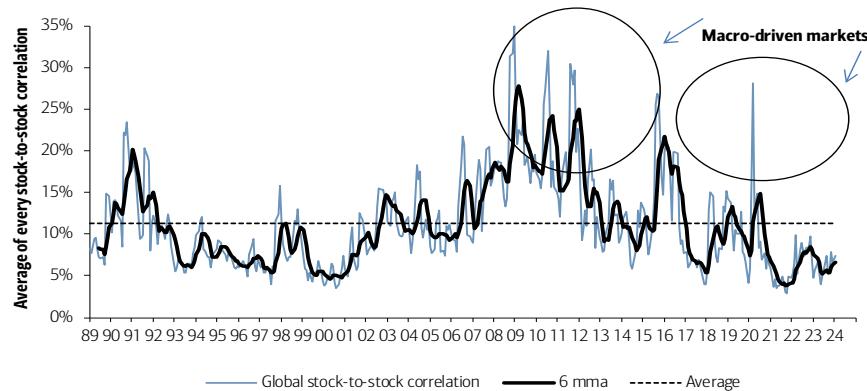
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Global stock-to-stock correlation

Chart 641: Global Stock-to-stock correlations

Stock-to-stock correlations remain well below the long-term average

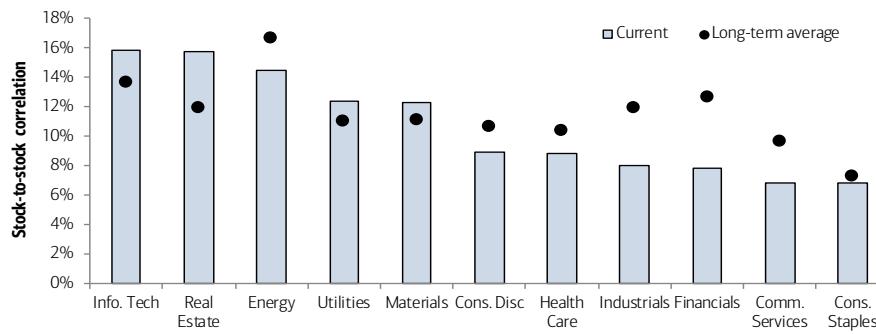


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 642: Global Sector stock-to-stock correlation: Current vs Long-term

Stock-to-stock correlation is highest in Info. Tech sector

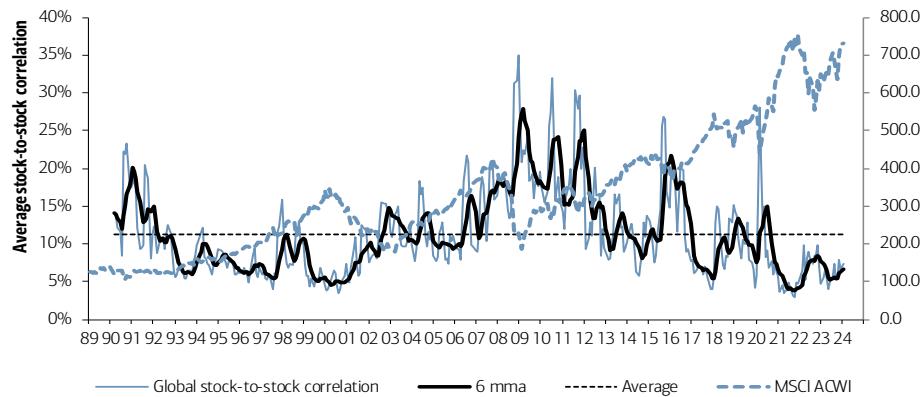


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 643: Global stock-to-stock correlation and MSCI ACWI

Global Stock-to-Stock correlations and MSCI AC World level



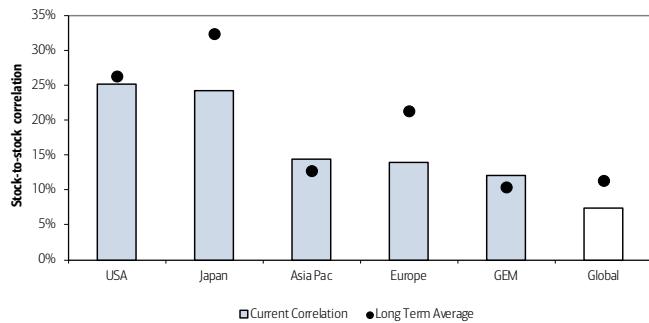
Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Regional stock-to-stock correlation

Chart 644: Regional stock-to-correlation: Current vs Long-term level

Stock-to-stock correlation is highest in USA sector

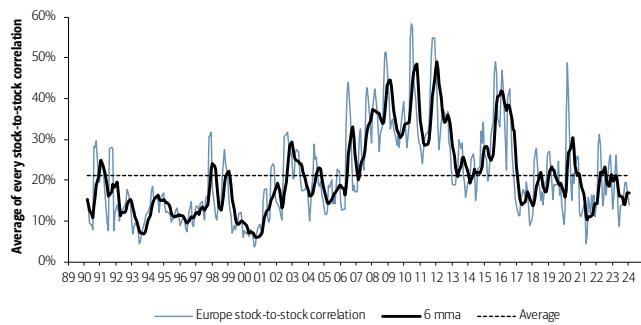


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 646: Europe stock-to-stock correlation

The trend in stock-to-stock correlations have ticked-up in Europe recently

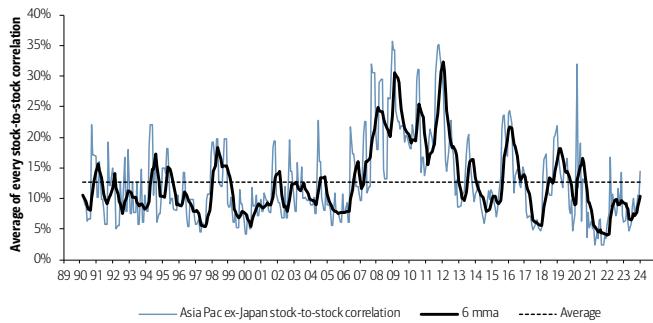


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 648: Asia Pac ex Japan stock-to-stock correlation

The trend in stock-to-stock correlations have ticked-up in Asia Pac ex-Japan recently

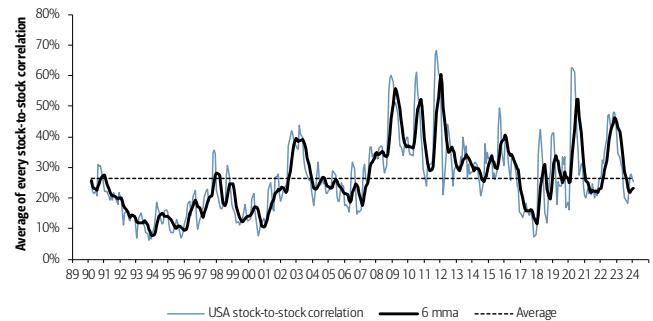


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 645: USA stock-to-stock correlation

Stock-to-stock correlations have fallen in the USA last month

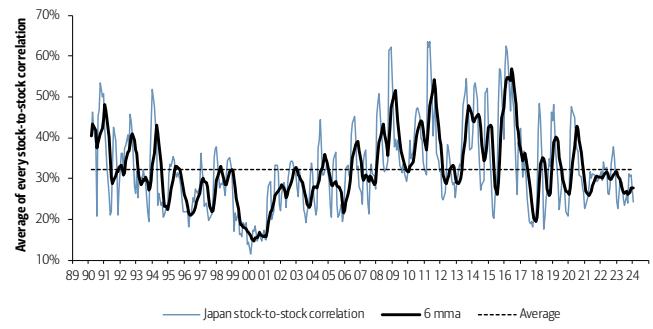


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 647: Japan stock-to-stock correlation

Stock-to-stock correlations have fallen in Japan last month

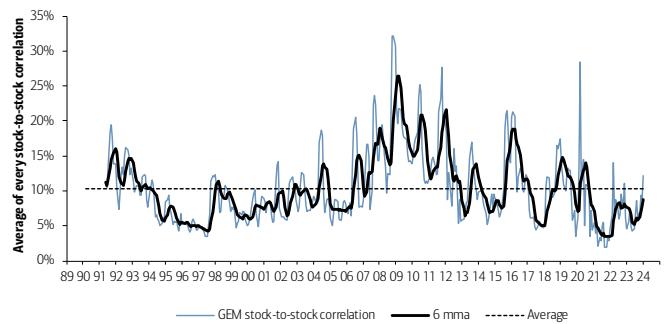


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 649: Emerging Markets stock-to-stock correlation

Stock-to-stock correlations have risen in GEM last month



Source: BofA Global Quantitative Strategy, MSCI, Exshare

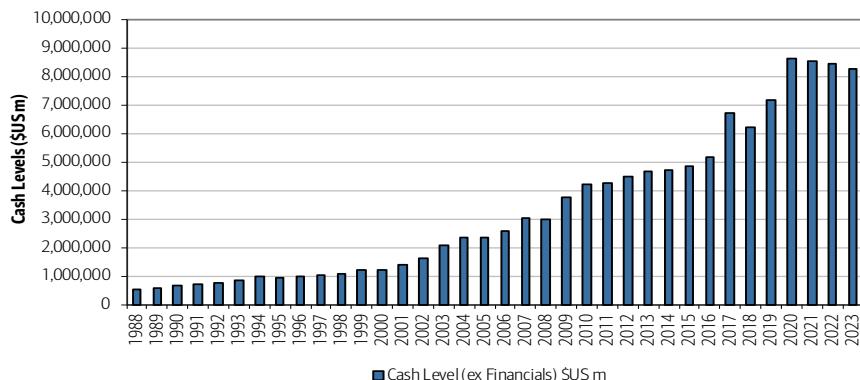
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Cash - Over \$8 trillion

Chart 650: Total cash and cash equivalents

Total cash on balance sheet for stocks in ACWI is \$8.2tr

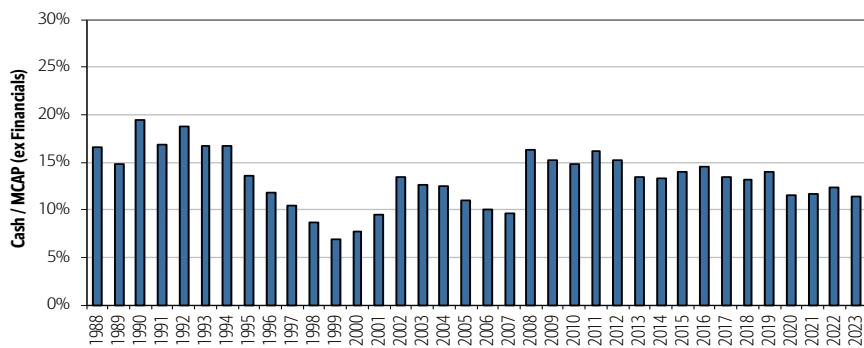


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 651: Cash-to-Market Cap

Globally cash on balance sheet is 11% of market cap

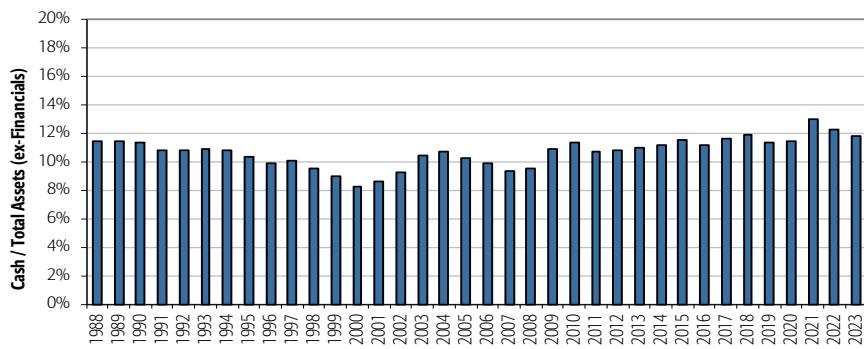


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 652: Cash-to-Total Assets

Cash-to-Total Assets globally is at 12%



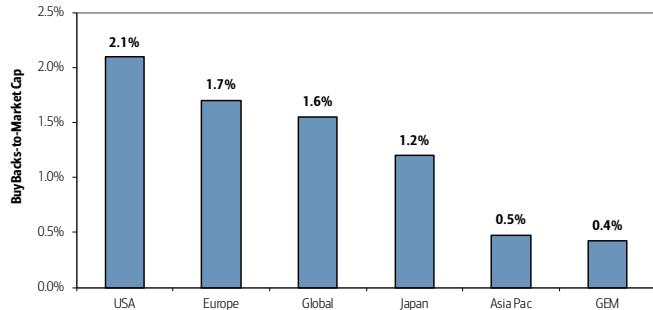
Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Buy-Backs

Chart 653: Buy-Backs (last 12 months) relative to Market Cap by Region

The USA has the highest ratio of Buybacks-to-MCAP

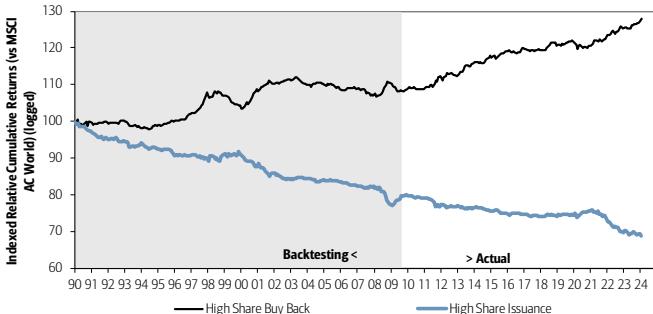


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 655: High Share Buy-Backs and High Share Issuance Relative Cumulative Performance

High Share Buy Back have outperformed by 4.0% in the last 1 Month



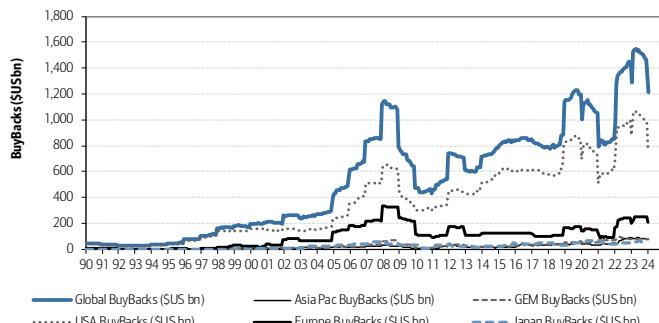
Source: BofA Global Quantitative Strategy, MSCI, Exshare

The shaded area shows back-tested results during the period from Jan-90 to Aug-09. The unshaded portion represents actual performance since Sep-09. 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 657: Buy-Backs Dollar Value (\$US bn) by Regions

YoY, buyback activity has dropped by 6%



Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 654: % Global stocks buying back shares

Globally, 28% of stocks are buying back their shares

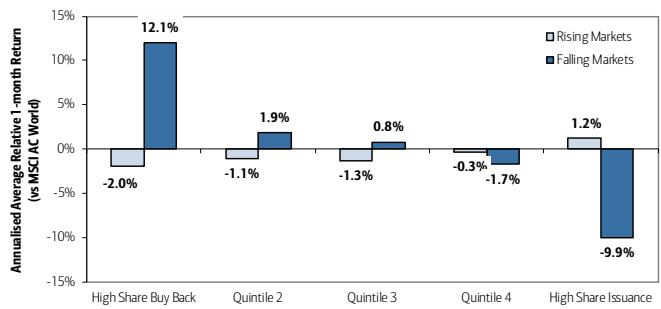


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 656: Share Buy-Backs (by Quintile) Performance in Rising and Falling Markets

Companies buying back share outperform in falling markets

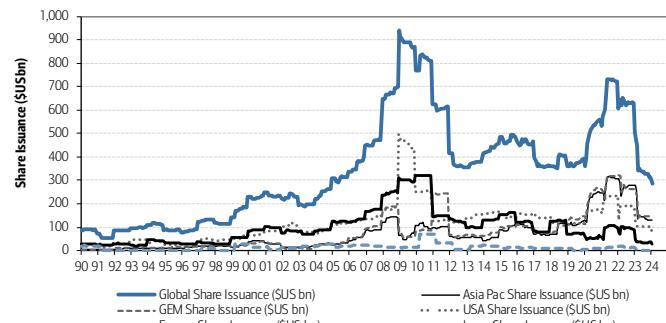


Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Chart 658: Share Issuance Dollar Value (\$US bn) by Regions

YoY, share issuance has dropped by 44%



Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, Worldscope

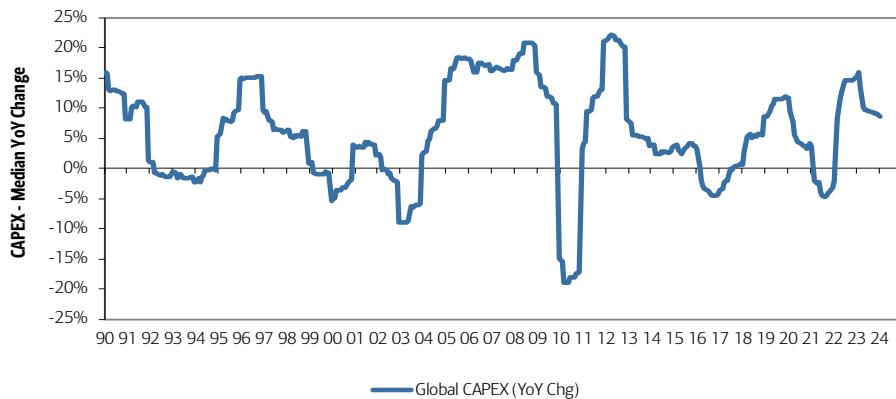
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Global Capex Cycle

Chart 659: Global Capex Cycle

YoY Change in CAPEX is still positive, but corporates are cutting capex spend

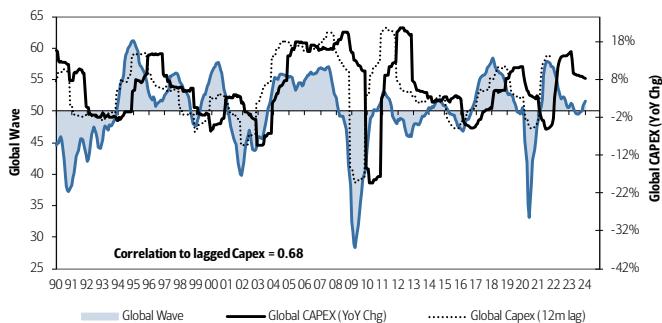


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 660: Global Capex Cycle and the Global Wave

12m lag CAPEX cycle has a correlation of 68% with Global Wave

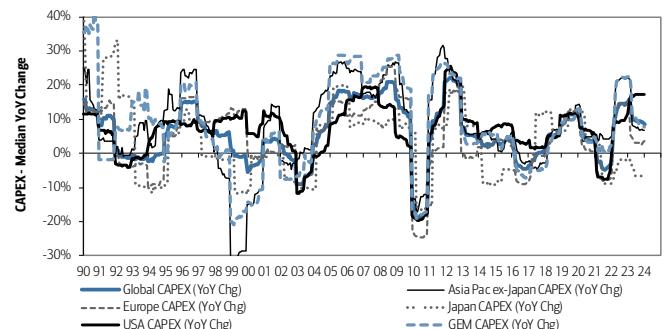


Source: BofA Global Quantitative Strategy, MSCI, IBES, Haver, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database, Worldscope

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Chart 661: Capex levels by global regions

CAPEX in APxJ has risen by 6.7% in the last 12m

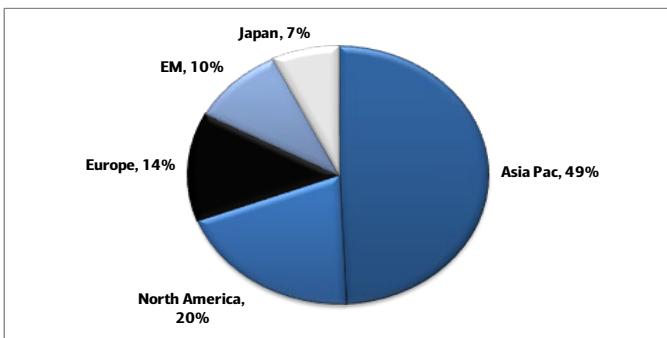


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 662: Region Tilts of Top Quintile by Capex Growth

Asia Pac has the highest CAPEX spend globally

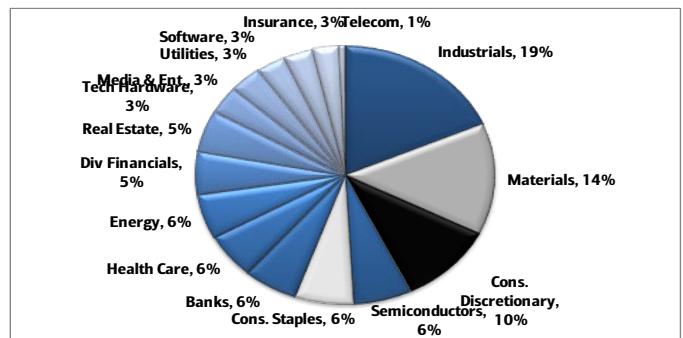


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 663: Sector Tilts of Top Quintile by Capex Growth

In the World, CAPEX is highest in Industrials and lowest in Telecom

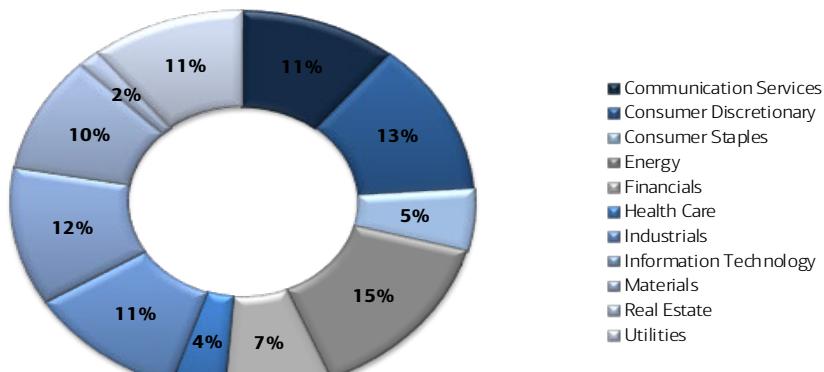


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 664: Global Sectors Capex Level

CAPEX is currently highest in Energy

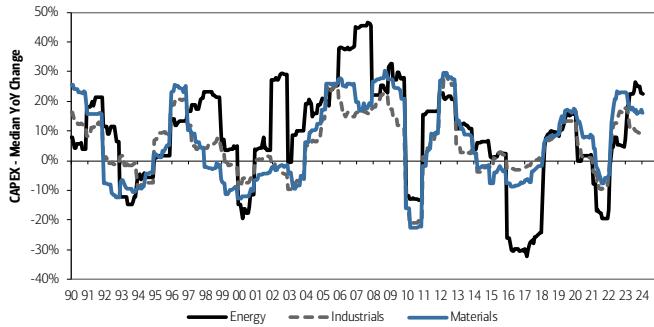


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 665: Late Cyclic Sectors Capex Growth (YoY Chg)

Capex spending has improved in Energy

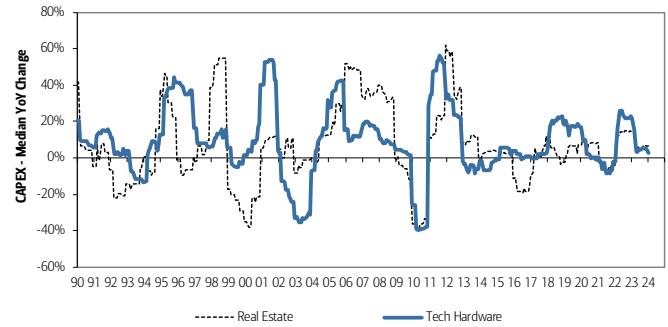


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 666: Early Cyclic Sectors Capex Growth (YoY Chg)

YoY change in Capex is strongest in Real Estate

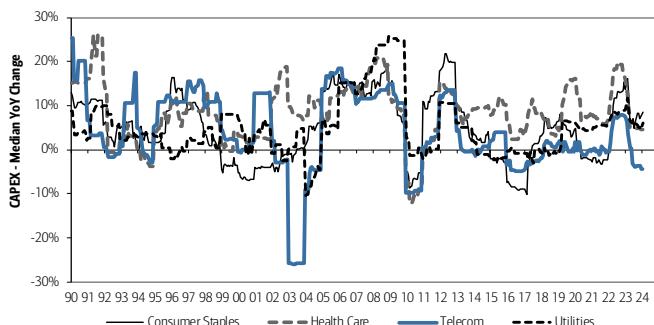


Source: BofA Global Quantitative Strategy, MSCI, Worldscope

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Chart 667: Defensive Sectors Capex Growth (YoY Chg)

YoY change in Capex is strongest in Cons. Staples



Source: BofA Global Quantitative Strategy, MSCI, Worldscope

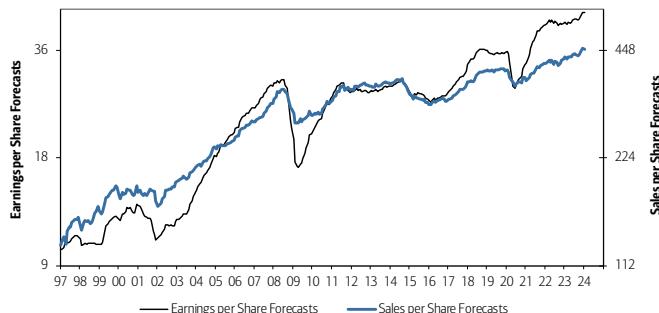
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Margins

Chart 668: Global – Trends in EPS and Sales Forecasts

Global EPS forecasts have improved in the last 3m

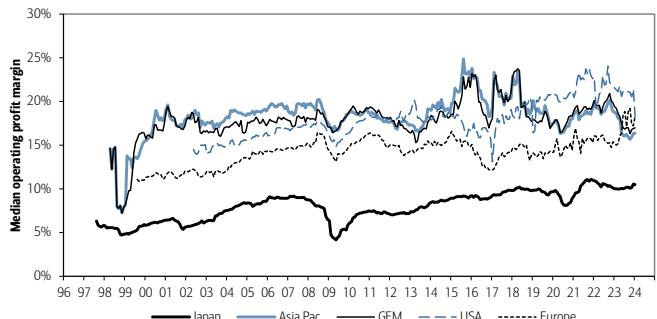


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 669: Changes in Forecast Operating Profit Margin by Region

Operating Margins have improved the most in Europe in last 3m

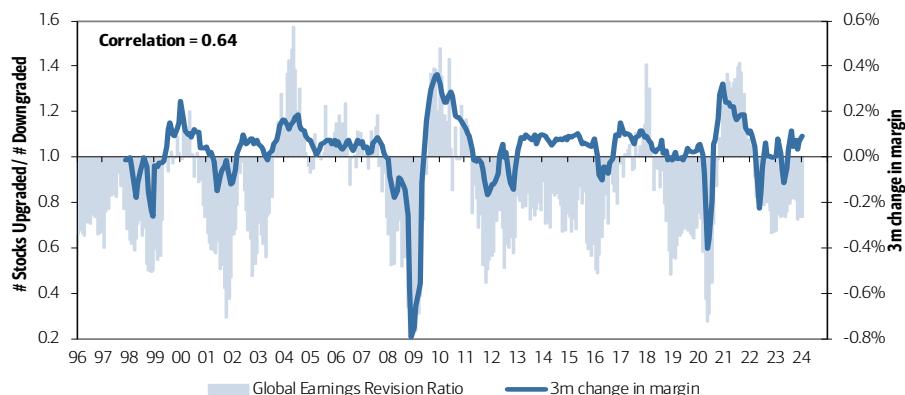


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 670: Three-month change in forecast margins vs Global Earnings Revision Ratio

Operating profit margins have improved in last 3m by 0.1%

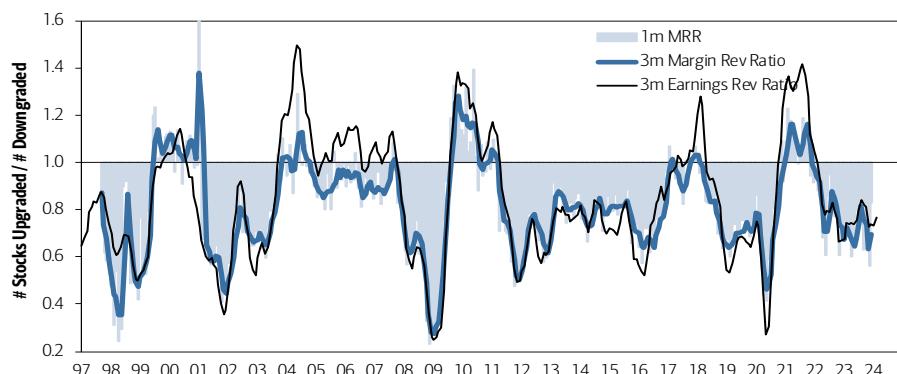


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 671: Global Margin Revision Ratio and Global Earnings Revision Ratio

Downgrades outnumber upgrades as the Margin Revision Ratio stays below 1.00



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Margins: Where's the pressure?

This table below shows the 3-month change in forecast operating margins for each of 15 sectors in each of the largest 25 countries of the world.

Table 51: Global Forecast Operating Margins – change in the last three months

100% of countries within Tech Hardware had a rise in operating margins in last 3m

	Energy	Materials	Industrials	Cons. Staples	Health Care	Telecom	Utilities	Media & Ent.	Semiconductors	Cons. Discretionary	Banks	Insurance	Div Financials	Real Estate	Software	Tech Hardware	Country	
Canada	0.0%	-	-	-	-	-5.1%	-1.4%	-	-	0.2%	-	0.4%	-	-	#####	-	0.2%	
USA	-1.2%	-2.0%	-1.0%	0.0%	-0.1%	-	0.1%	-0.5%	-0.9%	0.6%	-1.6%	0.6%	-0.2%	-0.3%	2.4%	1.3%	0.0%	
Belgium	-	0.0%	-	0.7%	-	-	-	-	-	-0.4%	-4.0%	-	-	-	-	-	-0.2%	
Finland	-	0.9%	0.0%	-	-	-	-	-	-	-	0.8%	-	-	-	-	0.9%	0.8%	
France	-	0.7%	-0.3%	0.0%	-0.5%	0.3%	-	-0.2%	-	0.1%	1.1%	-	-0.4%	-	0.3%	-	0.0%	
Germany	-	0.3%	0.0%	0.6%	-2.5%	-	0.2%	2.5%	-2.0%	-0.3%	0.7%	-	-	-	1.2%	-	0.2%	
Italy	-	-	0.5%	-0.5%	-	1.3%	0.5%	-	-	-	1.8%	-	-	-	-	-	1.0%	
Netherlands	-	0.2%	0.1%	0.0%	-	-	-	-	1.7%	-2.8%	-	15.7%	-	-	-	-	0.1%	
Norway	-	2.4%	-	1.2%	-	0.1%	-	-	-	-	-	-2.0%	-	-	-	-	0.1%	
Spain	-	-	-	-	-	0.7%	-	-	-	-	-	-2.5%	-	-	-	-	-1.5%	
Sweden	-	-1.3%	-	-	-	0.6%	-	-	-	-	-	0.3%	-	-	-	-	0.4%	
Switzerland	-	3.5%	0.5%	0.4%	-0.3%	-	-	-	-	-2.7%	-	-	15.2%	-	-56.8%	-	0.4%	
UK	-1.5%	0.9%	0.8%	0.2%	1.8%	393.4%	3.1%	-2.8%	-	-	30.8%	-	0.3%	-	-3.6%	-	0.3%	
Australia	0.0%	-0.3%	0.0%	0.1%	0.1%	0.4%	-	0.2%	-	-0.2%	-0.4%	-	-3.1%	-	-0.3%	0.5%	-	0.0%
Hong Kong	-	-	0.9%	0.9%	-	-	-	-	-	0.2%	-	0.4%	-	-0.1%	-	-	0.4%	
Japan	0.1%	0.2%	0.2%	0.1%	-0.1%	0.0%	0.0%	0.0%	-0.7%	0.2%	1.4%	0.3%	0.6%	0.1%	0.3%	0.1%	0.1%	
Singapore	-	-	0.2%	-	-	-1.1%	-	-	-	-	-0.3%	-	-	1.0%	-	-	0.2%	
China	-0.4%	-0.4%	0.0%	0.1%	0.0%	0.1%	0.3%	0.4%	-0.6%	0.1%	0.3%	-0.5%	-0.2%	0.3%	0.1%	0.3%	0.0%	
India	0.0%	0.5%	2.2%	-0.5%	-0.4%	-	0.0%	-	-	-0.2%	1.3%	-0.4%	-24.8%	-21.1%	3.0%	-	0.0%	
Korea	-	-0.3%	-	-	-	-	-	-	-	-	-0.3%	-1.3%	0.3%	-	-	-	0.0%	
Brazil	-0.1%	0.0%	-	0.2%	-	-	-	-	-	-	1.9%	-0.6%	-	-	-	-	0.1%	
South Africa	-2.2%	-0.4%	-	0.0%	-4.3%	-2.3%	-	-	-	0.2%	-	-	-2.9%	-	-	-	-0.4%	
WORLD	-0.1%	-0.1%	0.1%	0.1%	0.0%	0.1%	0.3%	0.2%	-0.6%	0.1%	0.3%	0.2%	0.0%	0.1%	0.4%	0.2%	0.1%	

Key :

- = operating margins have increased by more than 0.5% in the last 3 months
- = operating margins have increased by less than 0.5% in the last 3 months
- = operating margins have fallen by less than 0.5% in the last 3 months
- = operating margins have fallen by more than 0.5% in the last 3 months

Source: BofA Global Quantitative Strategy, MSCI, IBES

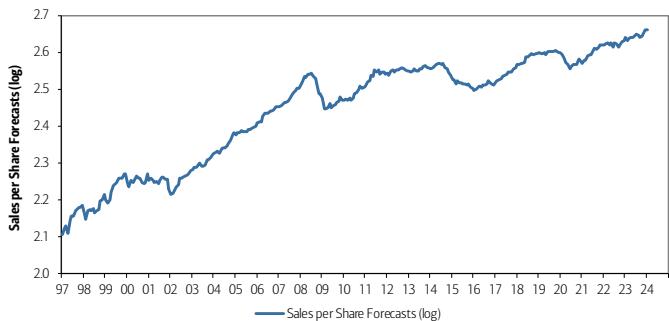
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Sales Growth

Chart 672: Global trend in Sales Forecasts

Global Sales forecasts have improved in the last 3m

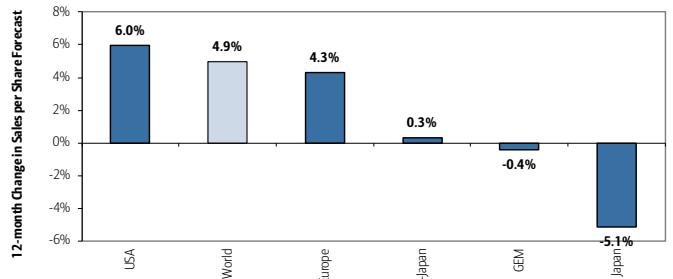


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 673: Twelve-month change in Sales Forecasts by Global Regions

In last 12m, Sales forecasts have improved the most in USA

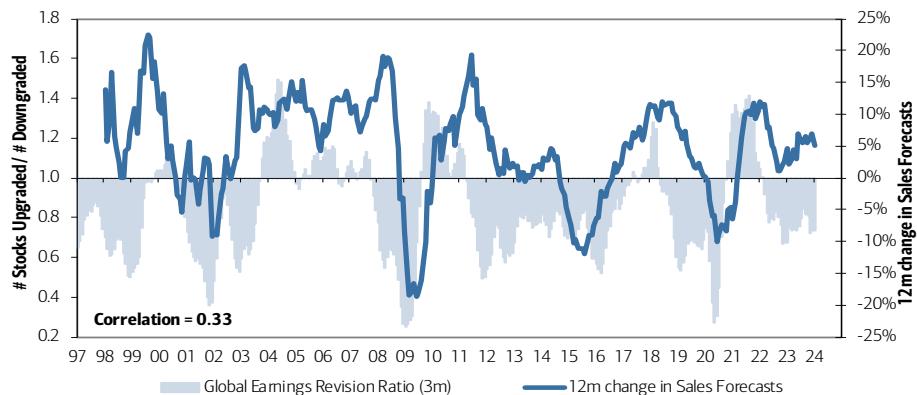


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 674: Twelve-month change in Sales Forecast and Earnings Revision Ratio

Global Sales growth forecasts have improved in the last 12m

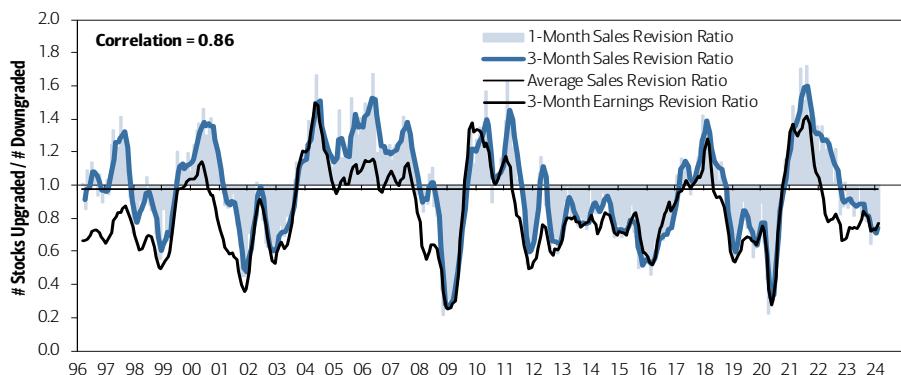


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 675: Global Sales Revision Ratio

Global Sales and Earnings Revision Ratio have a 86% correlation



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Sales Growth: Where's the top line growth?

This table below shows the 3-month change in sales forecasts for each of 15 sectors in each of the largest 25 countries of the world.

Table 52: Global Sales Forecasts - change in the last three months

Global Tech Hardware had the biggest increase in Sales forecasts in last 3m

	Banks	Cons. Discretionary	Cons. Staples	Div Financials	Energy	Health Care	Industrials	Insurance	Materials	Media & Ent.	Real Estate	Semiconductors	Software	Tech Hardware	Telecom	Utilities	Country
Canada	4.5%	1.3%	4.4%	-	5.3%	-	2.7%	35.8%	-5.2%	-	7.1%	-	3.6%	-	8.9%	10.5%	10.1%
USA	0.9%	-0.4%	0.7%	0.6%	0.4%	2.8%	1.5%	1.9%	-1.8%	2.4%	1.0%	5.7%	2.8%	-3.8%	1.7%	-1.0%	1.0%
Belgium	1.3%	5.9%	0.7%	-	-	2.8%	-	-15.2%	-23.6%	-0.9%	-	-	-	-	-	-	-0.2%
Finland	-	-	-	-	3.3%	8.0%	1.7%	10.8%	0.9%	-	-	-	-	-2.1%	2.1%	-	-10.4%
France	3.5%	-5.8%	2.2%	-23.8%	-4.2%	2.5%	5.9%	2.4%	-3.3%	-2.6%	6.6%	-1.9%	2.5%	-	3.5%	5.3%	0.6%
Germany	3.2%	3.6%	-0.3%	4.4%	-	-10.5%	3.6%	-4.0%	0.2%	-1.6%	0.0%	4.3%	5.1%	-	0.9%	3.5%	2.0%
Italy	7.0%	2.6%	2.2%	2.9%	4.4%	4.7%	9.3%	3.3%	-	-	-	-	-	-	4.2%	2.5%	2.9%
Netherlands	4.6%	-25.4%	-1.1%	-	-	-	3.1%	11.9%	1.5%	-	-	3.9%	-	-	3.4%	-	-0.9%
Norway	5.0%	-	9.6%	-	7.6%	-	-	11.8%	-0.5%	-	-	-	-	-	7.5%	-	9.1%
Spain	8.3%	3.5%	-	-	5.2%	4.5%	5.2%	-	-	-	-	-	-	-	2.2%	4.8%	4.3%
Sweden	3.2%	16.0%	0.4%	-0.9%	-	12.1%	7.1%	-	7.4%	-	-	-	-	7.6%	6.8%	-	10.0%
Switzerland	15.9%	1.8%	4.7%	4.3%	-	2.5%	2.1%	1.6%	5.6%	-	6.9%	-	1.6%	4.8%	5.0%	7.9%	2.9%
UK	2.0%	-4.7%	4.3%	9.0%	-4.8%	4.3%	5.6%	26.7%	0.9%	-7.5%	4.3%	-	9.5%	7.5%	2.3%	1.8%	1.1%
Australia	4.1%	5.9%	4.0%	-0.1%	1.7%	4.5%	3.0%	6.6%	3.2%	-	-38.7%	-	6.0%	-	4.5%	4.6%	2.5%
Hong Kong	1.1%	2.5%	5.3%	1.6%	-	-	4.4%	1.2%	-	-	-6.5%	-	-	-	1.5%	-1.4%	-1.6%
Japan	0.9%	7.9%	3.2%	9.8%	7.7%	6.1%	3.6%	5.9%	5.5%	-	2.0%	5.1%	5.8%	4.3%	5.2%	2.9%	5.1%
Singapore	4.1%	7.6%	-0.1%	3.0%	-	-	4.0%	-	-	4.0%	2.7%	-	-	-	2.6%	4.5%	1.9%
China	-4.0%	-4.6%	-3.5%	-3.6%	-5.5%	-12.1%	3.0%	-2.1%	2.8%	-	-5.0%	-12.6%	-5.5%	-2.3%	7.2%	-7.3%	-4.3%
India	5.1%	40.9%	2.7%	8.7%	-1.2%	3.0%	0.5%	2.3%	1.8%	7.0%	-	-	2.5%	-	7.6%	-1.3%	5.4%
Korea	1.1%	3.4%	-5.7%	-3.4%	3.0%	-8.8%	1.3%	-16.5%	-3.7%	-	-	25.9%	2.9%	5.5%	-22.1%	5.7%	2.6%
Taiwan	4.2%	3.1%	8.8%	2.9%	2.8%	-5.1%	7.9%	3.3%	1.9%	-	-	8.7%	-	4.3%	5.0%	-	5.5%
Brazil	4.6%	0.2%	2.6%	6.9%	-3.3%	-3.2%	5.0%	4.4%	2.8%	-	-	-	4.5%	-	4.7%	9.4%	1.1%
Mexico	9.3%	-	6.3%	-	-	-	-5.8%	-	1.0%	-12.7%	-22.6%	-	-	-	5.5%	-	2.6%
South Africa	1.8%	1.1%	3.6%	-6.4%	1.0%	3.2%	1.8%	0.3%	-2.6%	-1.2%	-15.0%	-	-	-	4.6%	-	1.2%
WORLD	4.1%	-4.1%	4.0%	4.7%	1.0%	3.7%	4.7%	6.1%	3.8%	3.4%	-	11.9%	3.9%	13.1%	5.7%	0.4%	4.0%

Key:

- = sales forecasts have increased by more than +1 Standard Deviation of 3 month change across country-sectors
- = sales forecasts have increased by less than +1 Standard Deviation of 3 month change across country-sectors
- = sales forecasts have fallen by less than +1 Standard Deviation of 3 month change across country-sectors
- = sales forecasts have fallen by more than +1 Standard Deviation of 3 month change across country-sectors

Source: BofA Global Quantitative Strategy, MSCI, IBES

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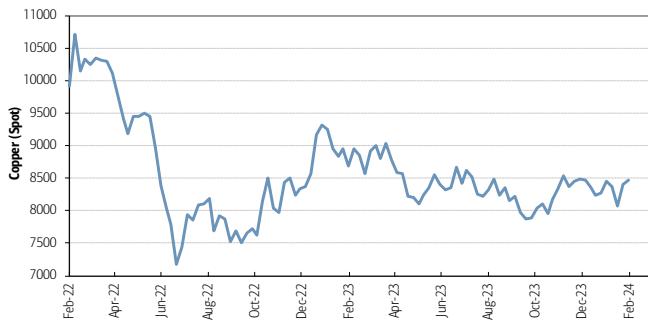


Tactical View

Short Term Momentum Indicators - as at 16th Feb 2024

Chart 676: Copper (Spot), weekly last 2 years

Copper price increased (+0.8%)



Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 677: AUD-USD cross rate, weekly last 2 years

AUD appreciated (+0.5%)

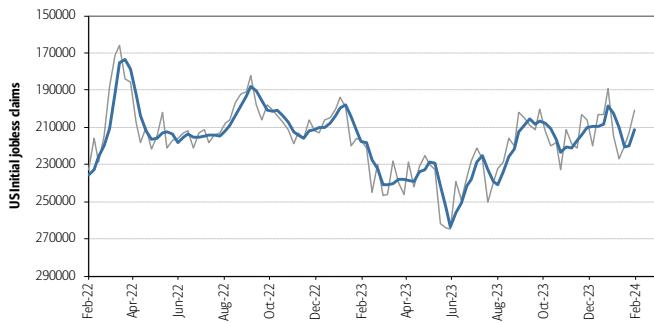


Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 678: US Initial jobless claims, weekly last 2 years

US initial jobless claims fell by -12,000 to 201,000

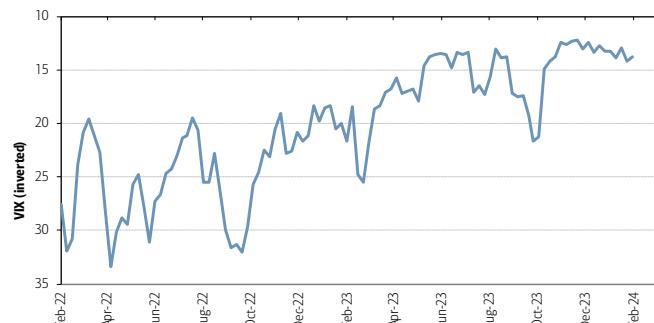


Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 679: VIX, weekly last 2 years

VIX moved from 14.2 to 13.8

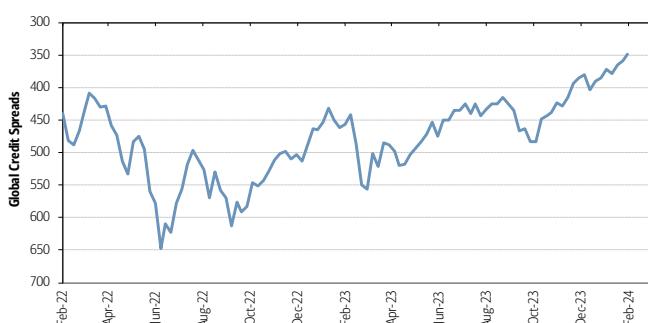


Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 680: Global Credit Spreads, weekly 2 years

Global credit spreads narrowed (-10 bps)



Source: BofA Global Quantitative Strategy, Bloomberg

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Chart 681: Global Cycle Sensitives, weekly returns 2 year

Global Cycle Sensitives underperformed (-0.9%)



Source: BofA Global Quantitative Strategy, Bloomberg

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Cycle Sensitives

The Global Cycle Sensitives are stocks that our analysis shows have tended to outperform as the cycle improves, and underperform as the cycle deteriorates. The back-testing for this analysis is from Jan-93 to Aug-05 and we introduced the current version of the analysis in Sep-05.

This analysis includes all stocks in the MSCI AC World Index as at each month-end with 1) market cap > US\$5bn, 2) median daily turnover in the preceding 6 months > US\$5m, and 3) number of broker estimates is greater than four. We define cycle sensitivity as the regression coefficient from regressing 60 months of three-month price returns against the three-month change in the Global Earnings Revision Ratio. The Cycle Sensitives are the 30-stocks with the highest cycle sensitivity and the list is sector-neutralised (approximately) to the MSCI AC World Index. The screens are determined at the end of each month using month-end data from MSCI.

The Cycle Sensitives acts as a stock screen and not as a recommended stock portfolio. The screens 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.

Performance Calculation Methodology

Refer to appendix "[Cycle Sensitives Performance](#)" for detailed performance data and advance decline statistics.

Rebalancing and performance calculations are conducted each month, 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 performance is presented relative to the market capitalization-weighted MSCI AC World Index.

The 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.

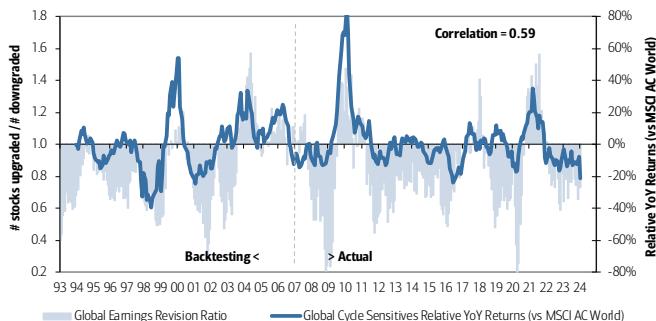
Past performance is no guarantee of future results.

A complete performance record is available upon request.



Chart 682: Global Cycle Sensitives versus Trends in Global Earnings Expectations

Global Cycle Sensitives has a strong positive correlation with trends in earnings expectations



Source: BofA Global Quantitative Strategy, MSCI

Back-tested results are from Jan-93 to Aug-05. Actual performance is from Sep-05. 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 53: Global Cycle Sensitives

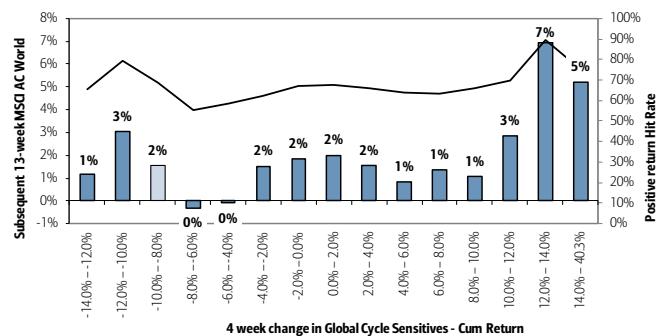
30-stocks sector-neutral screen of stocks with the highest price-sensitivity to changes in Global ERR

Bloomberg	Code	Company Name	Country	Sector	MCAP (Free Avg Daily TO	
					US\$m)	(6m \$US mn)
IIB IN	IndusInd Bank	Asia Pac ex-Japan	Banks	5,311	61.8	
SBIN IN	State Bank of India	Asia Pac ex-Japan	Banks	13,767	118.1	
1211 HK	BYD-H	Asia Pac ex-Japan	Cons. Discretionary	23,258	217.1	
NIO US	NIO-ADR	Asia Pac ex-Japan	Cons. Discretionary	7,785	465.5	
CFC IN	Cholamandalam Inve	Asia Pac ex-Japan	Div Financials	5,985	27.0	
APHS IN	Apollo Hospitals	Asia Pac ex-Japan	Health Care	7,700	27.4	
2269 HK	WuXi Biologics	Asia Pac ex-Japan	Health Care	10,034	135.5	
2603 TT	Evergreen Marine	Asia Pac ex-Japan	Industrials	4,885	99.3	
PLS AU	Pilbara Minerals	Asia Pac ex-Japan	Materials	6,709	99.1	
SE US	Sea-ADR	Asia Pac ex-Japan	Media & Ent.	13,969	349.9	
2303 TT	United Microelectro	Asia Pac ex-Japan	Semiconductors	17,617	85.9	
PSYS IN	Persistent Systems	Asia Pac ex-Japan	Software	5,029	34.5	
TECHM IN	Tech Mahindra	Asia Pac ex-Japan	Software	8,616	34.9	
WPRO IN	WIPRO	Asia Pac ex-Japan	Software	7,517	37.5	
DELTA TB	Delta Electronics (Th	Asia Pac ex-Japan	Tech Hardware	6,922	38.9	
1810 HK	Xiaomi Corp-B	Asia Pac ex-Japan	Tech Hardware	24,173	175.7	
NESTE FH	Neste	Europe	Energy	14,729	32.8	
VWS DC	Vestas Wind	Europe	Industrials	28,943	54.6	
2413 JP	M3	Japan	Health Care	7,109	48.0	
9984 JP	SoftBank Group	Japan	Telecom	45,475	375.7	
TSLA US	Tesla	North America	Cons. Discretionary	535,012	27,825.4	
CELH US	Celsius	North America	Cons. Staples	7,482	258.9	
DAR US	Darling Ingredients	North America	Cons. Staples	6,906	94.2	
SQ US	Block	North America	Div Financials	35,719	661.1	
Z US	Zillow-C	North America	Real Estate	8,693	154.4	
FDX US	FedEx	North America	Industrials	57,632	533.4	
CINF US	Cincinnati Financial	North America	Insurance	17,380	66.6	
ROKU US	Roku	North America	Media & Ent.	10,927	543.8	
ENPH US	Enphase Energy	North America	Semiconductors	14,199	500.8	
AES US	AES	North America	Utilities	11,169	117.7	

Source: BofA Global Quantitative Strategy, MSCI, IBES

Chart 683: Global Cycle Sensitives Large Performance Months

For current 4wk change, MSCI ACWI averages 1.5% in the subs 13wks with a hit rate of 68.8%



Source: BofA Global Quantitative Strategy, MSCI

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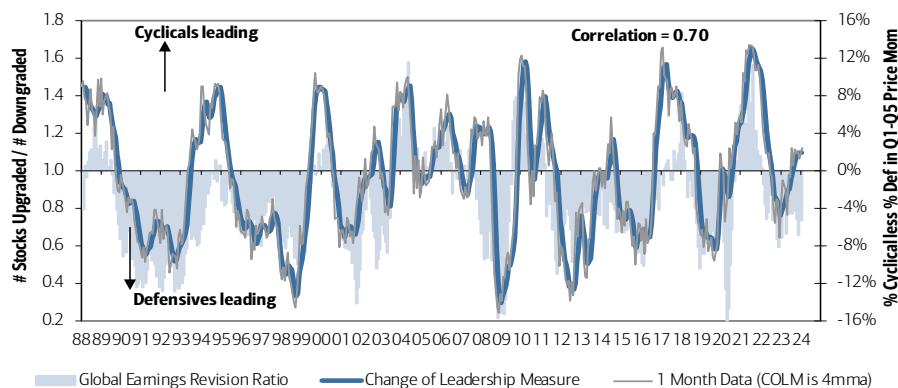


Change of Leadership Measure

The Change of Leadership Measure captures whether cyclicals or defensives are leading performance. We first calculate the "top quintile by price momentum" as the top 20% of stocks in the MSCI AC World Index by price return over the last 12 months and the "bottom quintile by price momentum" as the bottom 20% of stocks by this measure. We calculate the proportion of stocks in the top quintile by price momentum that are from cyclical sectors (Energy, Materials, Industrials) less the proportion of stocks that are from defensive sectors (Consumer Staples, Utilities, Insurance). We then calculate the same for the bottom quintile by price momentum and take the difference between the results for the two quintiles. The Change of Leadership Measure is four-month-moving-average of this time series.

Chart 684: Change of Leadership Measure and trends in global profit expectations

Change of Leadership Measure has a 70% correlation with trends in earnings cycle

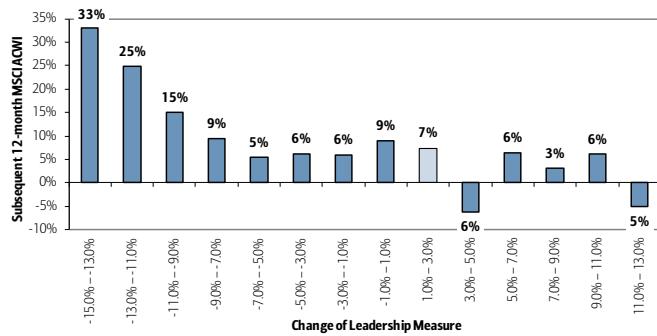


Source: BofA Global Quantitative Strategy, MSCI

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Chart 685: Change of Leadership Measure & subsequent 12-month Performance of MSCI ACWI

For current level of COLM, MSCI ACWI averages 7.4% in the subsequent 12m

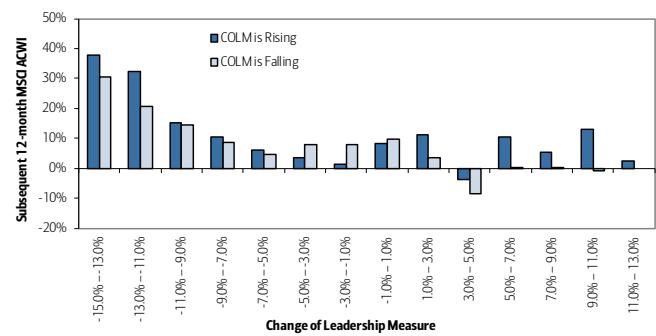


Source: BofA Global Quantitative Strategy, MSCI

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Chart 686: Rising/Falling Change of Leadership Measure & subsequent 12-month Performance of MSCI ACWI

When COLM is at current level and rising, MSCI ACWI averages 11.4% in the subsequent 12m



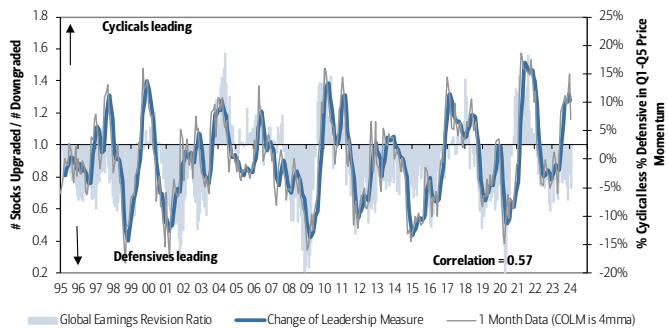
Source: BofA Global Quantitative Strategy, MSCI

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Chart 687: USA Change of Leadership Measure and trends in global profit expectations

Cyclical sectors outperforms, on average during an improving earnings cycle

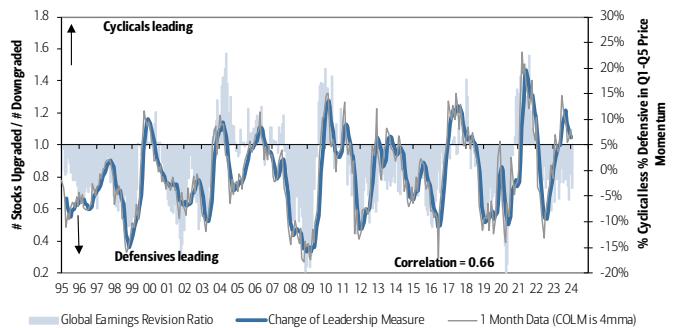


Source: BofA Global Quantitative Strategy, MSCI

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Chart 688: Europe Change of Leadership Measure and trends in global profit expectations

Europe Change of Leadership Measure has a 66% correlation with trends in earnings cycle

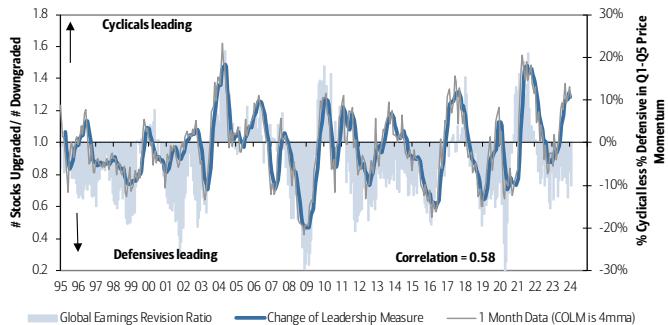


Source: BofA Global Quantitative Strategy, MSCI

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Chart 689: Japan Change of Leadership Measure and trends in global profit expectations

Japan Change of Leadership Measure has a 58% correlation with trends in earnings cycle

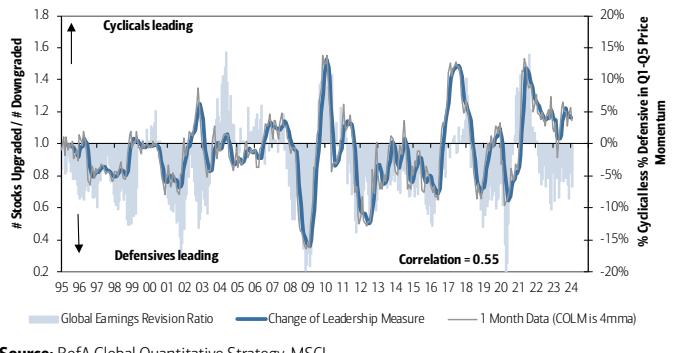


Source: BofA Global Quantitative Strategy, MSCI

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Chart 690: Asia Pac ex-Japan Change of Leadership Measure and trends in global profit expectations

Cyclical sectors are leading performance in Asia Pac ex-Japan

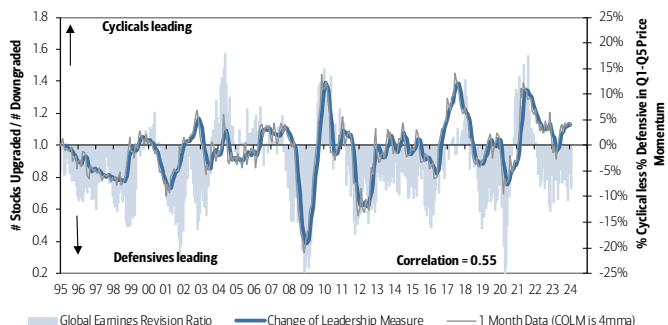


Source: BofA Global Quantitative Strategy, MSCI

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Chart 691: Emerging Markets Change of Leadership Measure and trends in global profit expectations

Cyclical sectors outperform, on average, when profits cycle is accelerating



Source: BofA Global Quantitative Strategy, MSCI

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Interest Rate Sensitivity

Construction Methodology

Our interest rate sensitivity analysis determines the extent to which share prices move as interest rates change. The back-testing in this analysis is from Jan-89 to May-04 and we introduced the current version of the analysis in Jun-04.

This analysis includes all stocks in the MSCI AC World Index as at each month-end. We define Interest Rates Sensitivity for each stock as the regression coefficient from regressing 60 months of monthly price returns against the 3-month change in the US ten-year bond yield. The screens are determined at the end of each month using month-end data from MSCI and Bloomberg databases. We divide all the stocks in the analysis into five quintiles by interest rate sensitivity. We name the top quintile "Bearish on Bonds" and the bottom quintile "Bullish on Bonds".

Interest Rate Sensitivity acts as a stock screen and not as a recommended stock portfolio. The screens 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.

Performance Calculation Methodology

Refer to appendix "[Interest Rate Sensitivity Performance](#)" for detailed performance data and advance decline statistics.

Rebalancing and performance calculations are conducted each month, 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 performance is presented relative to the market capitalization-weighted MSCI AC World Index.

The 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.

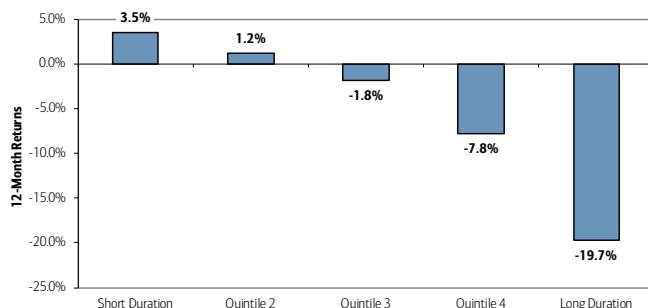
Past performance is no guarantee of future results.

A complete performance record is available upon request.



Chart 692: YoY Performance of Global Stocks by Interest Rate Sensitivity Quintile

Short Duration outperformed Long Duration by 23.2% in the last 12-months

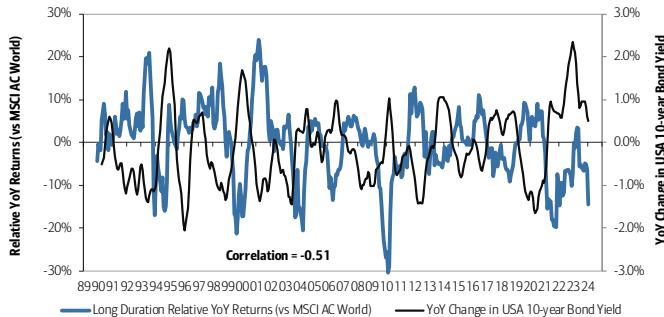


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 694: Long Duration YoY Performance vs. YoY change in US Long Bond Yield

Long Duration have underperformed by -14.6% in the last 12m

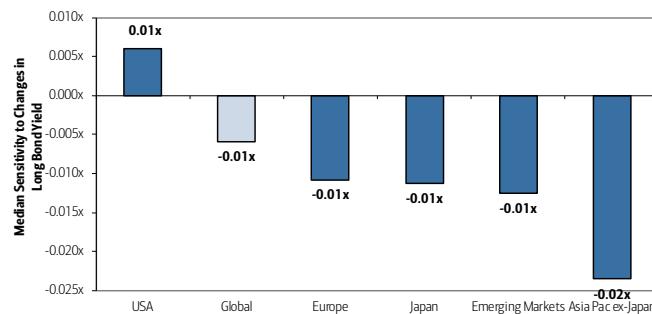


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 696: Share Price Sensitivity to Changes in the US Long Bond Yield by Region

USA has the highest sensitivity to US long bond yields

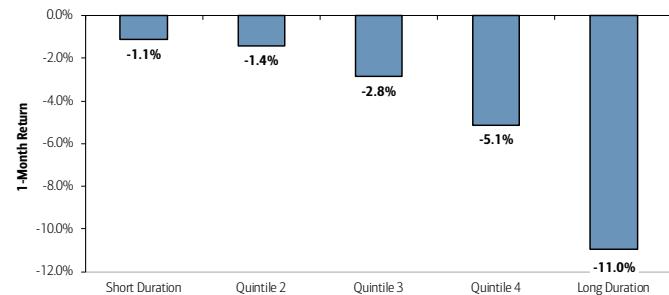


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 693: Last Month's Performance of Global Stocks by Interest Rate Sensitivity Quintile

Short Duration outperformed Long Duration last month

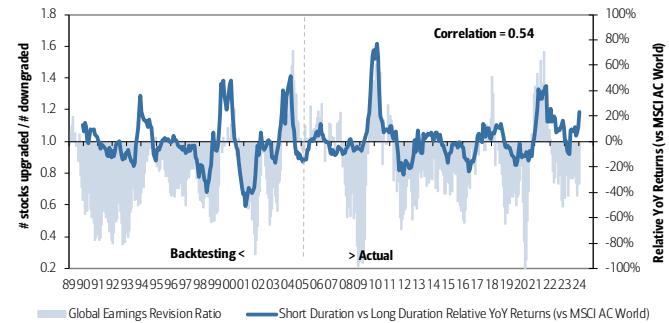


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 694: Long Duration YoY Performance vs. YoY change in US Long Bond Yield

Short Duration versus Long Duration has a 54% correlation with trends in earnings cycle



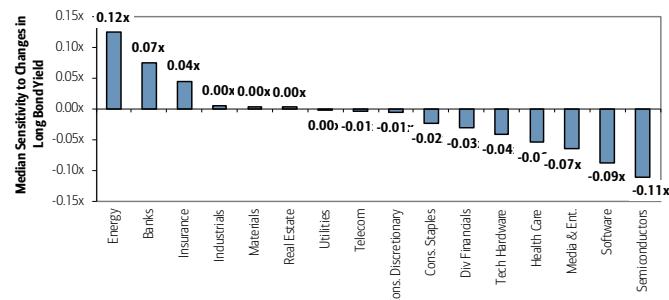
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-89 to May-04. Actual performance is from Jun-04. 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 696: Share Price Sensitivity to Changes in the US Long Bond Yield by Global Sector

Energy has the highest sensitivity, while Semiconductors has the lowest sensitivity to bond yields



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Thirty Short Duration Stocks

These Thirty Global Short Duration stocks includes thirty stocks with the highest sensitivity to changes in the US 10-year bond yields that meet the region and sector distribution of the MSCI AC World Index (subject to rounding).

For a stock to be included in this screen it must be in the largest 60% of stocks of the MSCI AC World Index by market cap, the largest 60% by average daily turnover in the last 6 months and last 20 days, and it must have a minimum of three consensus earnings estimates.

Table 54: Global Short Duration

Benchmark-aware thirty stocks screen with the highest sensitivity to changes in the US 10-year bond yields

BBG Code	Company Name	Region	Country	Sector	MCAP (Free \$US)
IIB IN	IndusInd Bank	Asia Pac Ex Japan	India	Banks	5,311
TVSL IN	TVS Motor	Asia Pac Ex Japan	India	Cons. Discretionary	5,725
3711 TT	ASE Tech	Asia Pac Ex Japan	Taiwan	Semiconductors	13,311
RNO FP	Renault	Developed Europe	France	Cons. Discretionary	7,323
BAYN GR	Bayer	Developed Europe	Germany	Health Care	30,841
LDO IM	Leonardo	Developed Europe	Italy	Industrials	7,124
CABK SM	CaixaBank	Developed Europe	Spain	Banks	17,722
IMB LN	Imperial Brands	Developed Europe	United Kingdom	Cons. Staples	20,588
7272 JP	Yamaha Motor	Japan	Japan	Cons. Discretionary	8,596
7011 JP	MHI	Japan	Japan	Industrials	21,798
MTB US	M&T Bank	North America	United States	Banks	22,918
CCL US	Carnival Corp	North America	United States	Cons. Discretionary	16,704
RCL US	Royal Caribbean	North America	United States	Cons. Discretionary	31,029
ADM US	Archer Daniels	North America	United States	Cons. Staples	29,797
LPLA US	LPL Financial	North America	United States	Div Financials	18,103
OXY US	Occidental Petro	North America	United States	Energy	38,198
CI US	Cigna	North America	United States	Health Care	89,075
JAZZ US	Jazz Pharma	North America	United States	Health Care	7,361
DAL US	Delta Air Lines	North America	United States	Industrials	6,296
TXT US	Textron	North America	United States	Industrials	16,779
MOS US	Mosaic Co	North America	United States	Materials	10,204
NWSA US	News Corp	North America	United States	Media & Ent.	9,393
OMC US	Omnicom	North America	United States	Media & Ent.	17,856
MCHP US	Microchip Tech.	North America	United States	Semiconductors	46,366
ON US	ON Semiconductor	North America	United States	Semiconductors	30,695
IT US	Gartner	North America	United States	Software	36,058
IBM US	IBM	North America	United States	Software	167,315
PTC US	PTC Inc	North America	United States	Software	21,467
HPE US	HP Enterprise	North America	United States	Tech Hardware	19,615
JBL US	Jabil	North America	United States	Tech Hardware	16,398

Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH



Thirty Long Duration Stocks

These Thirty Global Long Duration stocks includes thirty stocks with the lowest sensitivity to changes in the US 10-year bond yields that meet the region and sector distribution of the MSCI AC World Index (subject to rounding).

For a stock to be included in this screen it must be in the largest 60% of stocks of the MSCI AC World Index by market cap, the largest 60% by average daily turnover in the last 6 months and last 20 days, and it must have a minimum of three consensus earnings estimates.

Table 55: Global Long Duration

Benchmark-aware thirty stocks screen with the lowest sensitivity to changes in the US 10-year bond yields

BBG Code	Company Name	Region	Country	Sector	MCAP (Free \$US)
3968 HK	China Merchants Bank	Asia Pac Ex Japan	China	Banks	14,252
2331 HK	Li Ning	Asia Pac Ex Japan	China	Cons. Discretionary	5,038
2379 TT	Realtek Semiconductor	Asia Pac Ex Japan	Taiwan	Semiconductors	7,308
ZAL GR	Zalando	Developed Europe	Germany	Cons. Discretionary	4,549
KYGA ID	Kerry Group	Developed Europe	Ireland	Cons. Staples	14,317
FBK IM	FirecoBank	Developed Europe	Italy	Banks	8,908
LONN SW	Lonza	Developed Europe	Switzerland	Health Care	36,876
VACN SW	Vat Group Ag	Developed Europe	Switzerland	Industrials	12,800
9843 JP	Nitori	Japan	Japan	Cons. Discretionary	10,558
6383 JP	Daifuku Co	Japan	Japan	Industrials	6,108
MELI US	MercadoLibre	North America	Argentina	Cons. Discretionary	77,174
ENB CN	Enbridge	North America	Canada	Energy	75,951
WPM CN	Wheaton Precious	North America	Canada	Materials	21,363
SHOP CN	Shopify Inc-A	North America	Canada	Software	96,927
C US	Citigroup	North America	United States	Banks	108,167
ETSY US	Etsy Inc	North America	United States	Cons. Discretionary	8,188
CLX US	Clorox	North America	United States	Cons. Staples	18,011
MKTX US	Marketaxess	North America	United States	Div Financials	8,497
MRNA US	Moderna	North America	United States	Health Care	32,690
WST US	West Pharma	North America	United States	Health Care	27,552
CPRT US	Copart	North America	United States	Industrials	41,392
TRU US	Transunion	North America	United States	Industrials	13,374
ROKU US	Roku	North America	United States	Media & Ent.	10,927
SNAP US	Snap Inc-A	North America	United States	Media & Ent.	16,311
AMD US	AMD	North America	United States	Semiconductors	270,932
ENPH US	Enphase Energy	North America	United States	Semiconductors	14,199
DOCU US	Docusign	North America	United States	Software	12,379
OKTA US	Okta	North America	United States	Software	12,956
AAPL US	Apple	North America	United States	Tech Hardware	2,882,952
ZBRA US	Zebra Tech	North America	United States	Tech Hardware	12,298

Source: BofA Global Quantitative Strategy, MSCI, IBES

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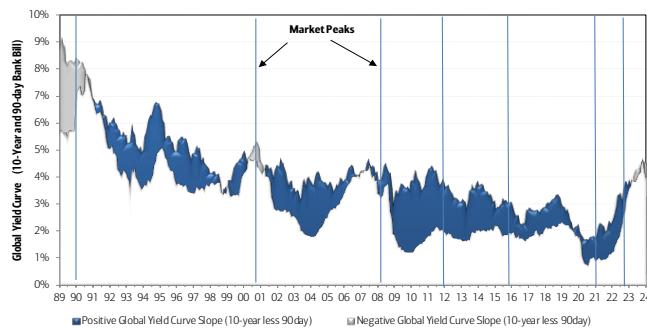
Yield Curve Slope and Equities Performance

In this analysis we investigate the relationship between the slope of the yield curve and global equity market and sector performance over the last three decades. For the ~50 countries in MSCI All Country World Index, we calculated a GDP-weighted 10-year bond yield and a GDP-weighted 90-day bank bill rates. The difference between the global 10-year bond yield and the global 90-day rate represents the slope of the global yield curve.

We determine periods in which the global yield curve slope was between various 50bp ranges, for example, (-1.00% to -0.50%), (-0.50% to 0.00%), (0.00% - 0.50%), and so on. For each global sector and each month the yield curve falls within a certain range, we calculate the subsequent 12-month equity market and sector performance (relative to MSCI All Country World Index). The median relative return indicates how each sector tends to perform in different yield curve environments.

Chart 698: Global yield curve slope (10-year vs. 90-day) and major market peaks (MSCI ACWI)

The Global Yield Curve Slope remains inverted



Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Chart 700: Global yield curve slope (difference between 10-year and 90-day rates)

The Global Yield Curve Slope is negative

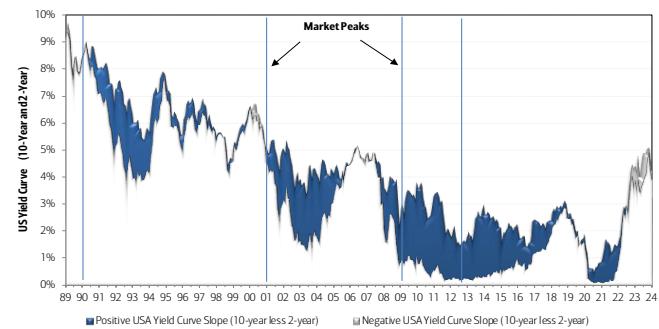


Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Chart 699: USA yield curve slope (10-year vs. 2-year) and major market peaks (MSCI ACWI)

The USA Yield Curve Slope stays inverted

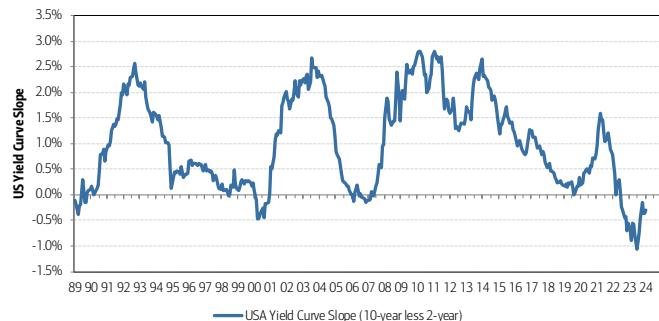


Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Chart 701: USA yield curve slope (difference between 10-year and 2-year rates)

The current USA Yield Curve Slope is at -0.3%



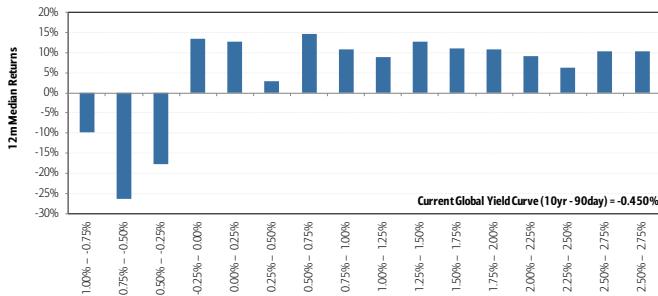
Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Chart 702: Subsequent MSCI ACWI returns (median 12m) in various Global Yield Curve slope (10-year vs. 90-day) ranges

The median ACWI returns is -17.7% when Global Yield Curve is in Current Slope Range = -0.50% – -0.25%

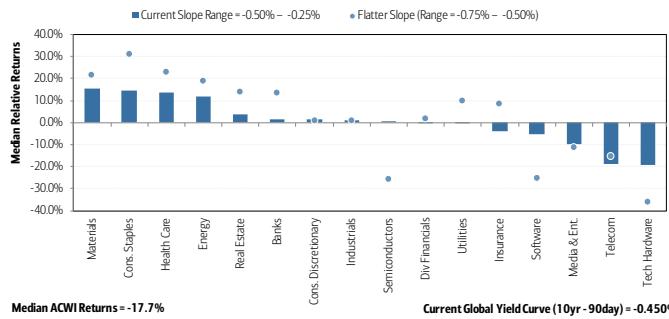


Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Chart 704: Current and flatter Global Yield Curve slope: Subsequent sector returns (12m relative)

For Flatter Slope (Range = -0.75% – -0.50%), the best performing sector is Cons. Staples

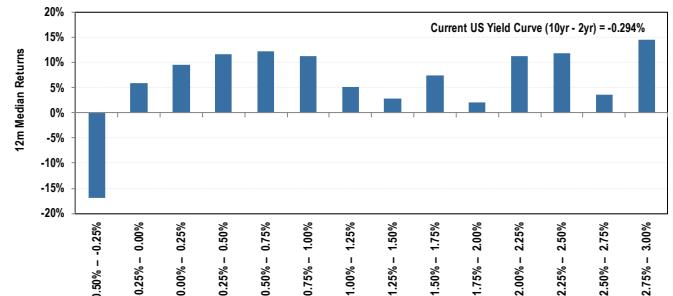


Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Chart 703: Subsequent MSCI ACWI returns (median 12m) in various USA Yield Curve slope (10-year vs. 2-year) ranges

The median ACWI returns is -17.0% when US Yield Curve is in Current Slope Range = -0.50% – -0.25%

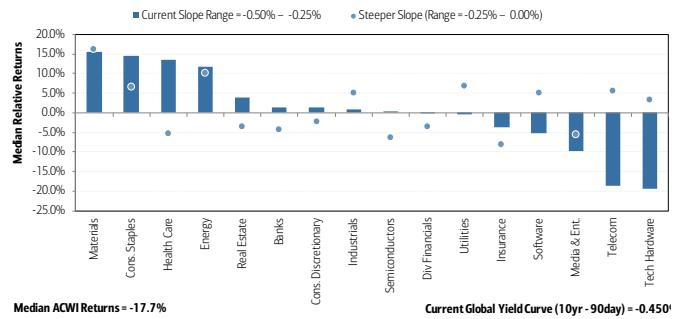


Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

BofA GLOBAL RESEARCH

Chart 705: Current and steeper Global Yield Curve slope: Subsequent sector returns (12m relative)

For Steeper Slope (Range = -0.25% – 0.00%), the best performing sector is Materials



Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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Table 56: Global Yield Curve slope and subsequent sector relative returns (median 12m)

Median Sector Returns across various Global Yield Curve Slope

Global Sector	-1.00% – -0.75%	-0.75% – -0.50%	-0.50% – -0.25%	-0.25% – 0.00%	0.00% – 0.25%	0.25% – 0.50%	0.50% – 0.75%	0.75% – 1.00%	1.00% – 1.25%	1.25% – 1.50%	1.50% – 1.75%	1.75% – 2.00%	2.00% – 2.25%	2.25% – 2.50%	2.50% – 2.75%	2.50% – 2.75%
Materials	2.6%	21.4%	15.5%	16.3%	0.7%	-2.3%	-4.3%	-3.8%	-0.5%	-7.4%	-10.8%	-5.4%	4.3%	2.0%	6.4%	6.4%
Cons. Staples	10.6%	30.7%	14.6%	6.5%	-4.2%	3.0%	-0.6%	-2.5%	1.9%	-1.3%	0.3%	4.3%	1.0%	6.2%	2.1%	2.1%
Health Care	14.8%	22.8%	13.5%	-5.3%	-4.9%	5.3%	-3.2%	-3.8%	-0.1%	8.1%	10.2%	8.4%	1.8%	-1.4%	0.7%	0.7%
Energy	5.5%	18.8%	11.8%	10.1%	-1.6%	-3.9%	-8.2%	-0.6%	-0.9%	-2.9%	-5.6%	0.7%	7.2%	-7.8%	-0.6%	-0.6%
Real Estate	4.8%	13.9%	3.9%	-3.6%	-12.8%	-10.4%	-7.1%	-2.7%	0.4%	-1.6%	-0.3%	7.1%	12.0%	2.1%	2.8%	2.8%
Banks	0.4%	13.2%	1.4%	-4.3%	-10.7%	-12.7%	-4.9%	3.1%	0.2%	-0.2%	0.0%	3.2%	-0.2%	-9.6%	-9.6%	-9.6%
Cons. Discretionary	0.8%	0.7%	1.4%	-2.3%	1.3%	5.2%	-0.1%	1.4%	0.2%	0.4%	-2.0%	-1.2%	-2.8%	7.6%	5.4%	5.4%
Industrials	-4.7%	0.8%	1.0%	5.1%	-1.4%	-4.2%	-0.4%	0.8%	0.9%	1.4%	-1.7%	-1.7%	-0.3%	4.0%	2.2%	2.2%
Semiconductors	5.4%	-25.7%	0.4%	-6.3%	8.6%	11.5%	15.1%	11.6%	7.7%	6.2%	11.0%	2.6%	4.8%	2.9%	2.9%	2.9%
Div Financials	1.1%	1.5%	-0.3%	-3.6%	-6.9%	-4.2%	-1.0%	4.3%	0.1%	3.5%	1.7%	0.4%	-4.8%	-12.8%	-10.5%	-10.5%
Utilities	-2.7%	9.6%	-0.5%	6.8%	-2.2%	-2.6%	0.9%	-5.7%	-3.0%	-4.0%	-5.2%	-6.3%	-0.9%	-7.8%	-14.1%	-14.1%
Insurance	-6.3%	8.7%	-3.8%	-8.1%	-9.0%	-7.0%	-0.4%	-0.2%	1.0%	4.9%	1.7%	2.2%	-3.6%	-6.3%	-7.9%	-7.9%
Software	15.1%	-25.5%	-5.2%	4.9%	28.8%	22.8%	13.0%	7.8%	12.4%	8.0%	5.8%	3.9%	5.9%	3.0%	-0.9%	-0.9%
Media & Ent.	-4.3%	-11.5%	-9.8%	-5.5%	10.5%	14.1%	2.3%	0.9%	-1.7%	1.8%	3.7%	1.7%	-1.0%	5.9%	5.7%	5.7%
Telecom	-6.2%	-15.5%	-18.6%	5.6%	2.8%	7.1%	0.2%	-10.1%	-5.2%	-2.6%	-4.2%	-4.2%	-1.4%	-2.6%	-3.9%	-3.9%
Tech Hardware	-18.8%	-36.2%	-19.4%	3.4%	10.6%	12.8%	8.4%	4.5%	5.0%	5.2%	8.8%	-0.8%	-7.8%	2.7%	0.8%	0.8%
World	-9.8%	-26.5%	-17.7%	13.3%	12.7%	2.8%	14.6%	10.9%	8.9%	12.8%	11.0%	10.8%	9.1%	6.2%	10.4%	10.4%

Source: BofA Global Quantitative Strategy, MSCI, Exshare, OECD, Bloomberg

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FX Sensitivity

Construction Methodology

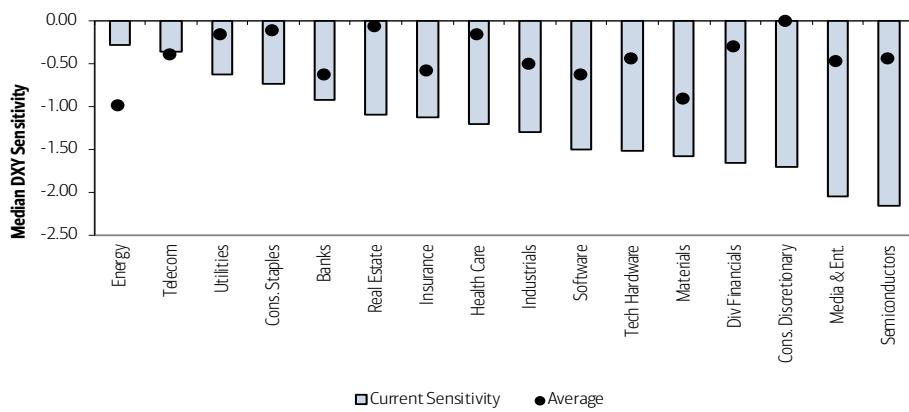
Our USD sensitivity analysis determines the extent to which share prices move as USD change. The back-testing in this analysis is from Jan-93 to Oct-10 and we introduced the current version of the analysis in Nov-10.

This analysis includes all stocks in the MSCI AC World Index as at each month-end. We define USD Sensitivity for each stock as the regression coefficient from regressing 60 months of monthly price returns against the 3-month change in the DXY Index. The screens are determined at the end of each month using month-end data from MSCI and Bloomberg databases. We divide all the stocks in the analysis into five quintiles by USD sensitivity. We name the top quintile "Positive Sensitivity" and the bottom quintile "Negative Sensitivity".

USD Sensitivity acts as a stock screen and not as a recommended stock portfolio. The screens 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.

Chart 706: Sensitivity of USD by Global Sectors

Energy is least sensitive to USD, while Semiconductors is most sensitive



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 57: Global Stocks with Positive Sensitivity to DXY

20-stocks global screen with positive USD sensitivity (DXY)

Bloomberg	Company Name	Country	Sector
TOUCN	Tourmaline Oil	Canada	Energy
SQM/B CI	SQM	Chile	Industrials
1138 HK	COSCO Shipping Energy-H	China	Energy
1171 HK	Yanzhou Energy-H	China	Energy
ADANI IN	Adani Power	India	Utilities
ADRO IJ	Adaro Energy Indonesia	Indonesia	Energy
ESLT IT	Elbit Systems	Israel	Industrials
1605 JP	INPEX	Japan	Energy
4568 JP	Daiichi Sankyo	Japan	Health Care
9042 JP	Hankyu Hanshin	Japan	Industrials
9041 JP	Kintetsu Group	Japan	Industrials
EQNR NO	Equinor	Norway	Energy
MAADEN AB	Saudi Arabian Mining	Saudi Arabia	Materials
JCNC SP	Jardine C&C	Singapore	Industrials
001570 KS	Kum Yang	South Korea	Materials
BH TB	Bumrungrad Hospital	Thailand	Health Care
ISCTR TI	IsBank	Turkiye	Banks
THYAO TI	Turkish Airlines	Turkiye	Industrials
HEKTS TI	Hektas Ticaret T.A.S	Turkiye	Materials
SASA TI	Sasa Polyester Sanayi	Turkiye	Materials

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 58: Global Stocks with Negative Sensitivity to DXY

20-stocks global screen with negative USD sensitivity (DXY)

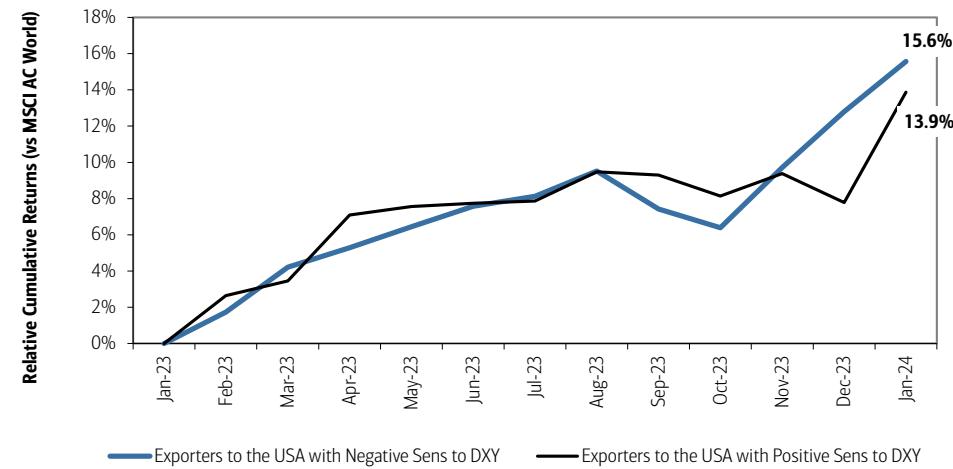
Bloomberg	Company Name	Country	Sector
CSNA3 BZ	CSN	Brazil	Materials
SHOP CN	Shopify Inc-A	Canada	Software
2333 HK	Great Wall Motor-H	China	Cons. Discretionar
3808 HK	Sinotruk Hong Kong	China	Industrials
1772 HK	Ganfeng Lithium-H	China	Materials
2899 HK	Zijin Mining-H	China	Materials
6098 HK	Country Garden Serv	China	Real Estate
6865 HK	Flat Glass-H	China	Semiconductors
3800 HK	GCL Tech	China	Semiconductors
2018 HK	AAC Tech	China	Tech Hardware
1810 HK	Xiaomi Corp-B	China	Tech Hardware
ZAL GR	Zalando	Germany	Cons. Discretionar
1585 HK	Yadea Group	Hong Kong	Cons. Discretionar
1347 HK	Hua Hong	Hong Kong	Semiconductors
KGH PW	KGHM	Poland	Materials
SE US	Sea-ADR	Singapore	Media & Ent.
034020 KS	Doosan Enerbility	South Korea	Industrials
2609 TT	Yang Ming	Taiwan	Industrials
DELTATB	Delta Electronics (Thai)	Thailand	Tech Hardware
KOZAL TI	Koza Altin	Turkiye	Materials

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 707: Performance: Global (ex US) stocks with revenue exposure to the US with sensitivity to DXY

Exporters to the USA with Negative Sens to DXY have outperformed by 1.7% in the last 12-months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 59: Global ex US stocks with revenue exposure to the US and positive sensitivity to DXY

Screen of Global ex-US stocks with revenue exposure to the US and positive sensitivity to USD (DXY)

Symbol	Company Name	BBG Code	Country	Sector	Avg Daily		Revenue Exposure	Sensitivity to DXY
					MCAP (Free \$US m)	TO (6m \$US m)		
B03MYK	Turkish Airlines	THYAO TI	Turkiye	Industrials	4,962	329.6	21%	1.3
BD4TZK	OCI	OCI NA	Netherlands	Materials	3,051	13.6	29%	0.9
BDRJLN	Nutrien	NTR CN	Canada	Materials	24,813	98.4	53%	0.8
079805	BP	BP/LN	United Kingdom	Energy	100,505	148.4	30%	0.7
617232	Canon	7751 JP	Japan	Tech Hardware	27,921	88.7	29%	0.7
614650	Brother Inds	6448 JP	Japan	Tech Hardware	3,942	14.3	26%	0.7
635640	Subaru	7270 JP	Japan	Cons. Discretionary	12,591	56.0	71%	0.6
666010	Ono Pharma	4528 JP	Japan	Health Care	7,094	30.7	32%	0.6
216616	Cameco	CCO CN	Canada	Energy	20,818	83.3	60%	0.6
BNHKYX	Argenx	ARGX BB	Belgium	Health Care	22,384	26.7	92%	0.5
665880	Olympus	7733 JP	Japan	Health Care	18,104	85.4	34%	0.5
B1323K	SABIC Agri-Nutrients	SAFCO AB	Saudi Arabia	Materials	7,974	15.7	20%	0.4
B61JC6	Treasury Wine (TWE)	TWE AU	Australia	Cons. Staples	5,683	28.0	38%	0.3
045449	Imperial Brands	IMB LN	United Kingdom	Cons. Staples	20,588	28.4	21%	0.3
649955	Kyowa Kirin	4151 JP	Japan	Health Care	4,310	15.7	36%	0.3
649374	Kirin	2503 JP	Japan	Cons. Staples	11,283	41.1	23%	0.2
098952	AstraZeneca	AZN LN	United Kingdom	Health Care	207,241	162.5	40%	0.2
BMWGTH	RB Global	RBA CN	Canada	Industrials	11,727	19.4	56%	0.2
612528	Trend Micro	4704 JP	Japan	Software	7,784	35.7	24%	0.2
711038	Roche	ROG SW	Switzerland	Health Care	202,370	295.6	44%	0.1
B5LTM9	Otsuka	4578 JP	Japan	Health Care	16,669	38.9	38%	0.1
651312	Tokio Marine	8766 JP	Japan	Insurance	48,455	108.1	30%	0.1
B24CGK	Reckitt Benckiser	RKT LN	United Kingdom	Cons. Staples	52,162	64.6	32%	0.1
023740	Diageo	DGE LN	United Kingdom	Cons. Staples	81,886	96.5	37%	0.1
BP6KMJ	Novo Nordisk	NOVOB DC	Denmark	Health Care	368,484	291.9	48%	0.1
613210	Bridgestone	5108 JP	Japan	Cons. Discretionary	25,170	72.8	51%	0.1
B8BRV4	Japan Airlines	9201 JP	Japan	Industrials	2,806	62.5	22%	0.1
BMHVLR	Tenaris SA	TEN IM	Italy	Energy	7,548	40.3	42%	0.1
618041	Computershare	CPU AU	Australia	Industrials	9,120	29.1	64%	0.1
211222	Saputo	SAP CN	Canada	Cons. Staples	5,261	17.2	47%	0.0

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Oil Price Sensitivity

Construction Methodology

Our Oil Price Sensitivity analysis determines the extent to which share prices move as the Oil Price moves. The back-testing in this analysis is from Jan-98 to Sep-08 and we introduced the current version of the analysis in Oct-08.

This analysis includes all stocks in Materials, Energy, and Industrials sectors of the MSCI AC World Index as at each month-end. We define Oil Price Sensitivity for each stock as the regression coefficient from regressing 60 months of monthly price returns against the 3-month change in the Oil Price – Brent Crude. The screens are determined at the end of each month using month-end data from MSCI and Bloomberg databases.

Positive Oil Price Sensitivity includes the 15 stocks with the highest sensitivity while Negative Oil Price Sensitivity includes the 15 stocks with the lowest sensitivity.

Oil Price Sensitivity acts as a stock screen and not as a recommended stock portfolio. The screens 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.

Performance Calculation Methodology

Refer to appendix "[Oil Price Sensitivity Performance](#)" for detailed performance data and advance decline statistics.

Rebalancing and performance calculations are conducted each month, 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 performance is presented relative to the market capitalization-weighted MSCI AC World Index.

The 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.

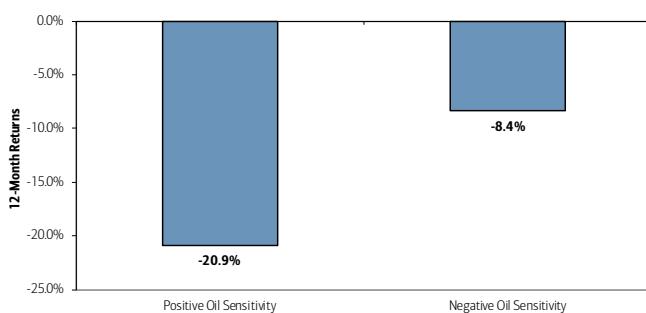
Past performance is no guarantee of future results.

A complete performance record is available upon request.



Chart 708: 12-month Performance of Global Stocks by Oil Price Sensitivity

Negative Oil Sensitivity outperformed Positive Oil Sensitivity in the last 12-months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 710: YoY perf of Positive vs Negative Oil Price Sensitivity

Positive Oil Sensitivity outperforms, on average during an improving earnings cycle



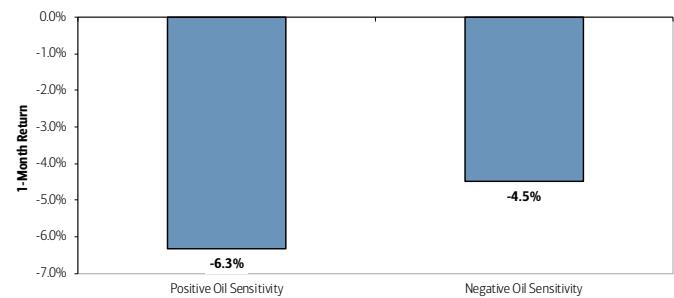
Source: BofA Global Quantitative Strategy, MSCI, IBES

Back-tested results are from Jan-98 to Sep-08. Actual performance is from Oct-08. 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 709: Last Month's Performance of Global Stocks by Oil Price Sensitivity

Negative Oil Sensitivity outperformed Positive Oil Sensitivity by 1.8% last month

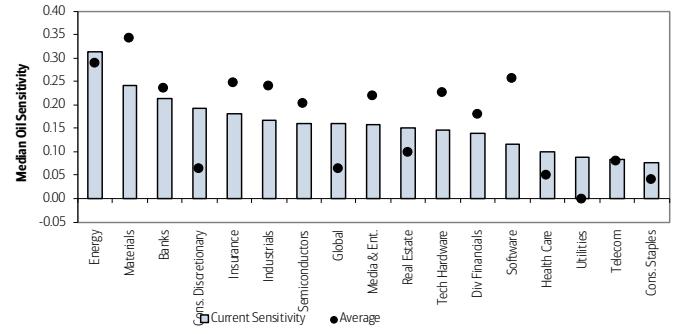


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 711: Median Sensitivity to Oil

Energy has the highest sensitivity, while Cons. Staples has the lowest sensitivity to Oil



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 60: Global Positive Oil Price Sensitivity (15-stocks)

15-stocks global screen for stocks that are positively sensitive to oil price

Name	Sector	Country	MCAP (Total
			US\$mn)
Adani Ent.	Industrials	India	43,132
APL Apollo Tubes	Materials	India	5,021
CG Power	Industrials	India	8,617
China Hongqiao	Materials	China	6,933
Doosan Enerbility	Industrials	South Korea	7,410
Evergreen Marine	Industrials	Taiwan	10,177
Halliburton	Energy	United States	32,033
Jindal Steel	Materials	India	9,301
MEG Energy	Energy	Canada	5,430
Mosaic Co	Materials	United States	10,204
Occidental Petro	Energy	United States	50,931
PRIOR	Energy	Brazil	7,888
SASOL	Materials	South Africa	5,639
West Fraser	Materials	Canada	6,503
Yang Ming	Industrials	Taiwan	5,339

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Table 61: Global Negative Oil Price Sensitivity (15-stocks)

15-stocks global screen for stocks that are negatively sensitive to oil price

Name	Sector	Country	MCAP (Total
			US\$mn)
Aselsan	Industrials	Turkiye	7,604
Barrick Gold	Materials	Canada	27,592
Daifuku Co	Industrials	Japan	7,636
Ecolab	Materials	United States	56,499
EQT Corp	Energy	United States	14,559
Keisei Elec Rail	Industrials	Japan	7,900
Kintetsu Group	Industrials	Japan	5,948
Misumi Group	Industrials	Japan	5,006
Nippon Paint	Materials	Japan	18,950
Northern Star Res.	Materials	Australia	9,990
Odakyu Elec. Railway	Industrials	Japan	5,699
Rockwell	Industrials	United States	29,092
Shin-Etsu	Materials	Japan	81,353
Tobu Railway	Industrials	Japan	5,625
Yaskawa Electric Corp	Industrials	Japan	10,266

Source: BofA Global Quantitative Strategy, MSCI, IBES

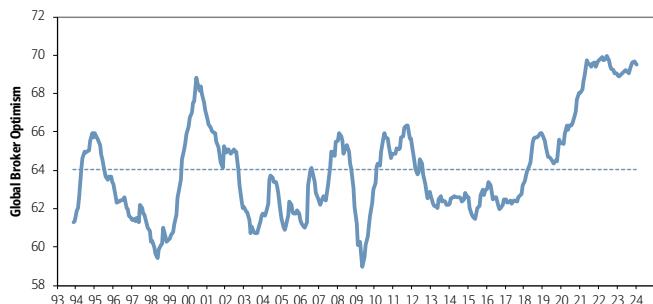
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Optimism Aggregates

Chart 712: Global Broker Optimism (based on analysts' buy/hold/sell recommendations)

The Global Broker Optimism is currently at 69.5

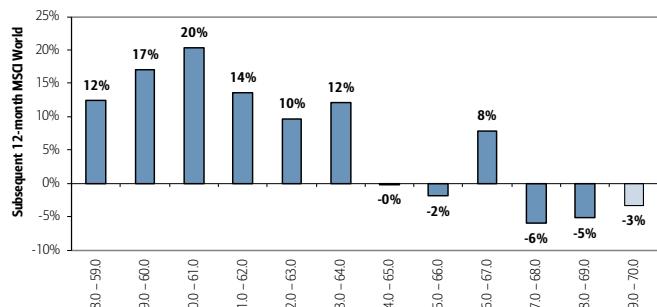


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 713: Global Broker Optimism and MSCI AC World subsequent 12m performance

For current level of Broker Optimism, MSCI ACWI averages -3.3% in the subsequent 12m

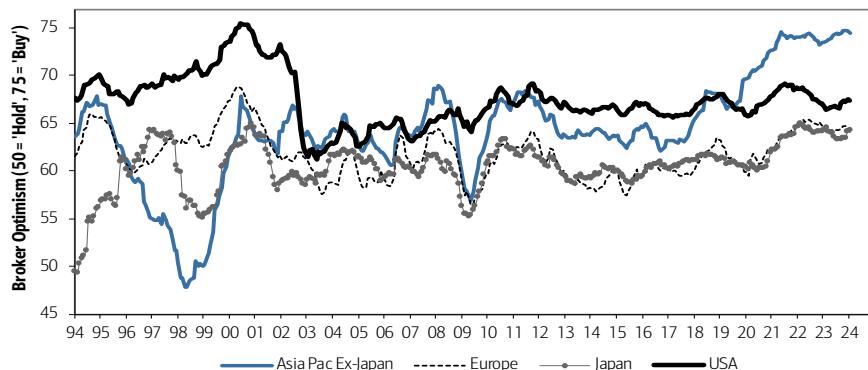


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 714: Broker Optimism by Regions

The Broker Optimism is currently highest in Asia Pac Ex-Japan

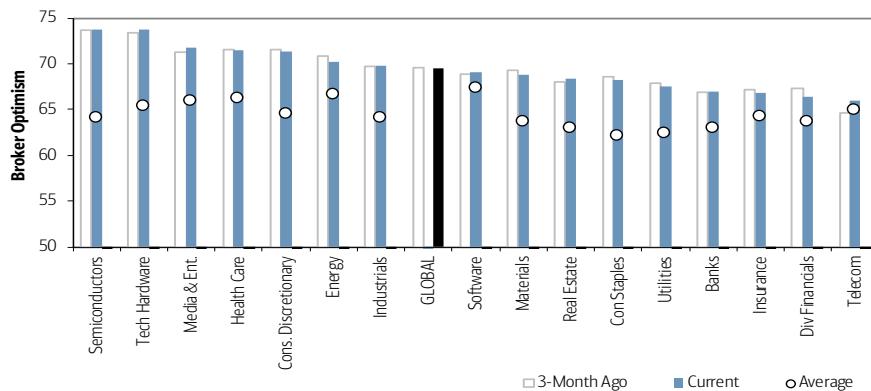


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 715: Broker Optimism by Global sectors

The Broker Optimism is currently highest in Semiconductors



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Global Optimism

The table below shows the Ranks based on current Optimism Level for each of the 15 sectors in each of the largest 25 countries.

Table 62: Global Optimism

Among global countries, Optimism is highest in China and lowest in Switzerland

	Energy	Materials	Industrials	Cons. Staples	Health Care	Telecom	Utilities	Media & Ent.	Semiconductors	Cons. Discretionary	Banks	Insurance	Div Financials	Real Estate	Software	Tech Hardware	Country
Canada	69.5	72.1	70.0	64.3	-	70.2	62.0	-	-	68.5	59.0	64.8	64.9	75.2	67.7	-	67.6
USA	70.4	63.9	66.1	63.6	70.4	62.2	67.1	69.1	69.3	68.4	67.0	64.9	65.4	68.3	69.4	67.9	67.4
Belgium	-	64.3	-	56.3	70.5	-	75.0	-	-	87.5	58.0	55.8	83.4	46.8	-	-	67.1
Finland	74.0	62.8	62.2	61.0	71.5	51.3	63.3	-	-	-	75.0	61.8	-	-	-	58.0	63.7
France	74.0	72.9	65.2	64.1	64.5	72.8	73.3	73.0	75.0	66.1	64.5	81.3	73.1	59.1	70.4	-	67.3
Germany	-	63.5	68.5	56.4	64.8	80.8	77.5	73.5	80.0	67.9	68.3	63.6	64.9	69.4	66.3	-	66.8
Italy	68.9	-	74.1	59.5	59.9	64.8	64.2	-	-	67.3	69.8	63.5	72.3	-	-	-	66.6
Netherlands	-	66.1	60.1	62.9	47.5	67.0	-	71.8	67.0	73.8	61.6	73.5	69.9	-	-	-	65.3
Norway	59.0	56.0	53.5	63.3	-	60.0	-	57.8	-	-	50.0	62.5	-	-	-	-	58.6
Spain	68.3	-	64.4	-	69.0	64.1	56.6	-	-	69.8	71.1	-	-	-	-	-	63.6
Sweden	-	50.9	59.2	66.8	72.3	64.6	-	-	-	55.2	60.8	-	56.1	56.9	-	58.5	58.9
Switzerland	-	60.7	52.4	59.5	60.5	52.8	58.3	-	-	65.0	50.0	50.5	63.6	55.5	51.5	54.5	57.4
UK	73.3	67.0	68.3	64.1	69.3	58.4	67.4	65.0	-	63.1	64.6	63.9	60.8	61.6	62.0	51.5	64.8
Australia	69.0	63.8	59.4	64.9	58.3	76.8	63.4	63.5	-	66.8	45.3	73.4	62.4	61.7	66.5	-	62.9
Hong Kong	-	-	76.1	80.6	-	71.8	61.4	-	-	86.3	64.4	87.5	79.3	68.1	-	-	71.8
Japan	69.8	61.0	64.0	61.4	67.3	64.9	49.7	70.3	73.5	63.7	66.1	66.6	60.6	61.8	65.6	66.5	64.3
Singapore	-	-	66.6	67.8	-	84.0	79.5	71.8	-	78.0	64.0	-	41.8	72.1	-	-	69.1
China	79.9	81.5	81.4	79.5	80.0	62.5	81.2	80.0	77.2	80.8	71.9	74.1	69.1	76.7	79.8	82.4	79.1
India	69.3	62.3	68.8	67.3	64.2	64.0	57.1	58.8	-	65.9	71.8	79.5	74.5	64.6	49.4	-	65.9
Korea	78.3	74.6	76.0	75.8	74.7	78.2	66.8	71.8	80.5	77.6	76.4	79.2	75.7	-	73.4	81.2	76.1
Taiwan	56.3	49.3	59.4	67.8	81.3	58.3	-	-	68.0	78.4	52.4	59.6	63.8	-	-	66.9	63.9
Brazil	64.5	64.5	70.4	67.9	70.3	72.4	69.4	-	-	67.5	67.8	62.5	63.1	-	75.0	-	67.8
Mexico	-	61.4	58.8	68.7	-	61.5	-	-	-	-	60.6	-	-	70.5	-	-	63.5
Russia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	71.8	53.9	62.5	56.6	75.0	63.1	-	-	-	64.0	70.1	67.2	64.1	75.0	-	-	62.5
WORLD	70.2	68.8	69.8	68.2	71.4	65.9	67.5	72.0	73.6	71.5	66.9	66.9	66.6	68.4	69.1	73.7	69.5

Key : Rank of 100 = Highest Optimism
 = Highest Optimism
 = High Optimism
 = Lowest Optimism

Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH



Optimism

Construction Methodology

Our Optimism analysis monitors whether stocks with improving and falling broker optimism outperform or underperform market indices. The back-testing in this analysis is from Jan-94 to Feb-07 and we introduced the current version of the analysis in Mar-07.

This analysis includes all stocks in the MSCI AC World Index as at each month-end. We calculate the six-month change in the IBES consensus recommendation at the end of each month using month-end data. We divide all the stocks in the analysis into five quintiles by the six-month change in Optimism. We name the top quintile "Increasing Optimism" and the bottom quintile "Decreasing Optimism".

Increasing and Decreasing Optimism act as stock screens and not as recommended stock portfolios. The screens 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.

Performance Calculation Methodology

Refer to appendix "[Optimism Performance](#)" for detailed performance data and advance decline statistics.

Rebalancing and performance calculations are conducted each month, 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 performance is presented relative to the market capitalization-weighted MSCI AC World Index.

The 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.

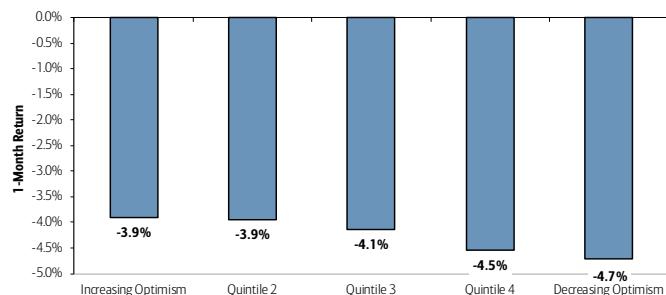
This report includes factors for informational or descriptive purposes, and inclusion here is not equivalent to a recommendation of the factor or portfolio.

Past performance is no guarantee of future results.

A complete performance record is available upon request.

Chart 716: Last Month's Performance of Global Stocks by Optimism

Increasing Optimism outperformed Decreasing Optimism last month

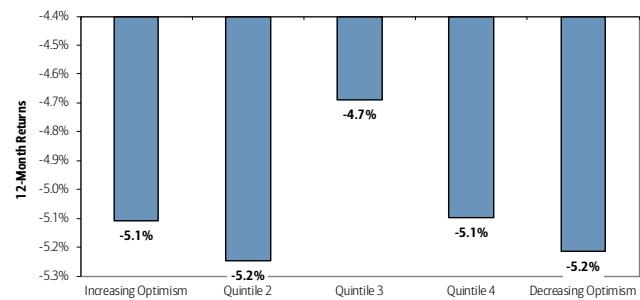


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 717: YoY Performance of Global Stocks by 6m Change in Optimism

Increasing Optimism outperformed Decreasing Optimism in last 12m

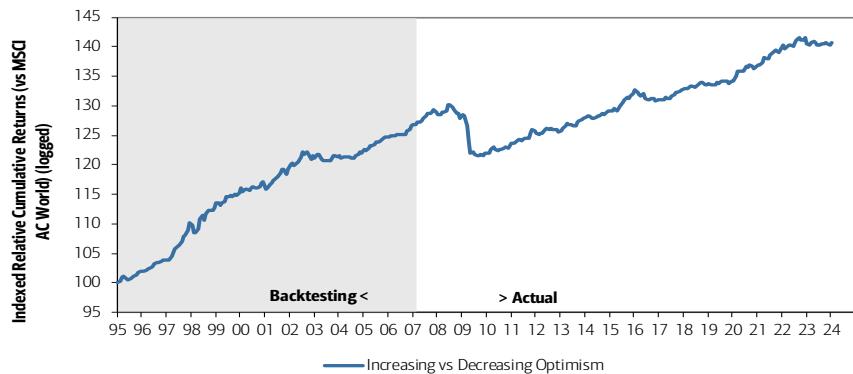


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 718: Relative cumulative performance of increasing versus decreasing optimism

Increasing Optimism have outperformed by 0.1% in the last 12 Months



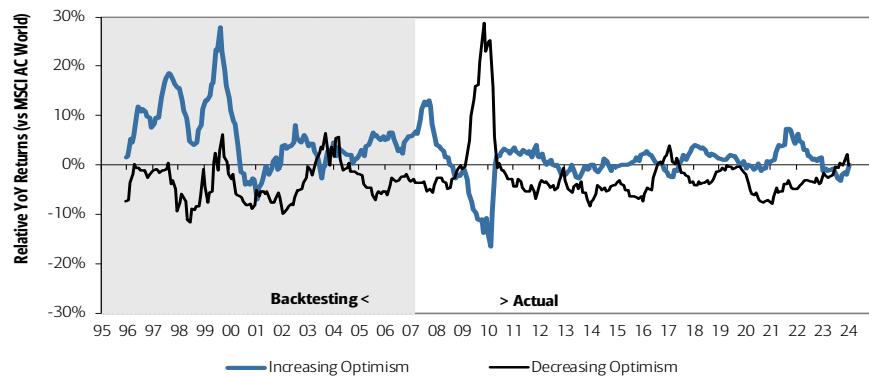
Source: BofA Global Quantitative Strategy, MSCI, IBES

The shaded area shows back-tested results during the period from Jan-94 to Feb-07. The unshaded portion represents actual performance since Mar-07. 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 719: Relative YoY Performance of Increasing and Decreasing Optimism

Increasing Optimism outperformed Decreasing Optimism in the last 12-months



Source: BofA Global Quantitative Strategy, MSCI, IBES

The shaded area shows back-tested results during the period from Jan-94 to Feb-07. The unshaded portion represents actual performance since Mar-07. 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: Global Increasing Optimism (top 50 by change in broker recommendation)

50-stocks global screen where Broker Optimism has been improving

BBG Code	Company Name	Country	Sector
DELTA TB	Delta Electronics (Thai)	Thailand	Tech Hardware
2357 TT	Asustek	Taiwan	Tech Hardware
ALBI AB	Bank Albilad	Saudi Arabia	Banks
RBL AB	Riyad Bank	Saudi Arabia	Banks
URW FP	Unibail-Rodamco-Westfield	France	Real Estate
RJHI AB	Al Rajhi Bank	Saudi Arabia	Banks
3045 TT	Taiwan Mobile	Taiwan	Telecom
4704 JP	Trend Micro	Japan	Software
ITSA4 BZ	Itausa	Brazil	Banks
SGP AU	Stockland	Australia	Real Estate
EDV AU	Endeavour	Australia	Cons. Staples
TLC AU	The Lottery	Australia	Cons. Discretionary
BBCA IJ	Bank Central Asia	Indonesia	Banks
MAADEN AB	Saudi Arabian Mining	Saudi Arabia	Materials
COAL IN	Coal India	India	Energy
OTEX CN	Open Text	Canada	Software
PKG US	Packaging Corp	United States	Materials
TWE AU	Treasury Wine (TWE)	Australia	Cons. Staples
GEN US	Gen Digital	United States	Software
2885 TT	Yuanta Financial	Taiwan	Div Financials
HNAL IN	Hindustan Aeronautics	India	Industrials
KOFUBL MM	Coca-Cola Femsa	Mexico	Cons. Staples
LW US	Lamb Weston	United States	Cons. Staples
AMXB MM	America Movil	Mexico	Telecom
2454 TT	MediaTek	Taiwan	Semiconductors
TNB MK	Tenaga	Malaysia	Utilities
NED SJ	Nedbank	South Africa	Banks
CLX US	Clorox	United States	Cons. Staples
CON GR	Continental Ag	Germany	Cons. Discretionary
PSN LN	Persimmon	United Kingdom	Cons. Discretionary
EAND UH	Emirates Telecom	United Arab Emirates	Telecom
LISN SW	Lindt & Sprungli	Switzerland	Cons. Staples
IP US	Int'l Paper	United States	Materials
JM SP	Jardine Matheson	Hong Kong	Industrials
MPL AU	Medibank	Australia	Insurance
SHOP CN	Shopify Inc-A	Canada	Software
SAABB SS	Saab Ab-B	Sweden	Industrials
FSV CN	Firstservice	Canada	Real Estate
IH IN	Indian Hotels	India	Cons. Discretionary
CVX US	Chevron	United States	Energy
PINS US	Pinterest- Class A	United States	Media & Ent.
REG US	Regency Centers	United States	Real Estate
CARLB DC	Carlsberg	Denmark	Cons. Staples
6383 JP	Daifuku Co	Japan	Industrials
PODD US	Insulet Corp	United States	Health Care
4568 JP	Daiichi Sankyo	Japan	Health Care
EUROB GA	Eurobank Ergasias	Greece	Banks
GEHC US	Ge Healthcare Tech	United States	Health Care
HMCL IN	Hero Motor	India	Cons. Discretionary
TRMB US	Trimble	United States	Tech Hardware

Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH



Table 64: Global Decreasing Optimism (top 50 by change in broker recommendation)

50-stocks global screen where Broker Optimism has been falling

BBG Code	Company Name	Country	Sector
VERAV	Verbund	Austria	Utilities
1801 JP	Taisei	Japan	Industrials
2880 TT	Hua Nan Financial	Taiwan	Banks
PAYC US	Paycom Software	United States	Industrials
COMI EY	Commercial Intl Bank	Egypt	Banks
WPP LN	WPP	United Kingdom	Media & Ent.
AD NA	Koninklijke Ahold	Netherlands	Cons. Staples
DIVI IN	Divi's Labs	India	Health Care
BARN SW	Barry Callebaut	Switzerland	Cons. Staples
ALINMA AB	Alinma Bank	Saudi Arabia	Banks
GALP PL	Galp	Portugal	Energy
MKL US	Markel	United States	Insurance
BAMI IM	Banco BM	Italy	Banks
NBK KK	National Bank Of Kuwait	Kuwait	Banks
086520 KS	Ecopro	South Korea	Industrials
LIFCOB SS	Lifco Ab-B	Sweden	Industrials
1878 JP	Daito Trust	Japan	Real Estate
138040 KS	Meritz Financial	South Korea	Div Financials
BAYN GR	Bayer	Germany	Health Care
FM CN	First Quantum	Canada	Materials
1301 TT	Formosa Plastics	Taiwan	Materials
FTNT US	Fortinet	United States	Software
PSYS IN	Persistent Systems	India	Software
TATA IN	Tata Steel	India	Materials
TD CN	Toronto Dom Bank	Canada	Banks
WDP BB	Warehouses De Pa	Belgium	Real Estate
3034 TT	Novatek Micro	Taiwan	Semiconductors
SHP SJ	Shoprite	South Africa	Cons. Staples
BRIT IN	Britannia Inds	India	Cons. Staples
PKN PW	ORLEN	Poland	Energy
MTD US	Mettler-Toledo	United States	Health Care
JNPR US	Juniper Networks	United States	Tech Hardware
SLM SJ	Sanlam	South Africa	Insurance
66 HK	MTR	Hong Kong	Industrials
NOKIA FH	Nokia	Finland	Tech Hardware
SGX SP	Sing Exchange	Singapore	Div Financials
INDT SS	Indutrade Ab	Sweden	Industrials
2887 TT	Taishin Financial	Taiwan	Banks
ALD AU	Ampol	Australia	Energy
CNA LN	Centrica	United Kingdom	Utilities
FMC US	FMC	United States	Materials
KYGA ID	Kerry Group	Ireland	Cons. Staples
WEC US	WEC Energy	United States	Utilities
DECK US	Deckers Outdoor	United States	Cons. Discretionary
CTCA CN	Canadian Tire	Canada	Cons. Discretionary
EQNR NO	Equinor	Norway	Energy
HCLT IN	HCL Technologies	India	Software
6301 JP	Komatsu	Japan	Industrials
CPI SJ	Capitec Bank	South Africa	Banks
FORTUM FH	Fortum	Finland	Utilities

Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH



Performance Opportunity

Performance Opportunity refers to dispersion of returns, and hence how large or small the opportunity is to differentiate between outperforming and underperforming assets. If the dispersion of returns is small there is limited opportunity to overweight outperforming assets and underweight underperforming assets. If the dispersion of returns is large then performance opportunity is higher.

We calculate Performance Opportunity for Country, Sector, Style, Size and Currency. In each instance, we calculate the standard deviations of returns each month, annualise the return, and calculate a rolling twelve month average (which is shown in the charts below).

Country Opportunity measures the spread of returns from the 12 largest countries in the world by index weighting the MSCI AC World Index.

Sector Opportunity measures the spread of returns of 15 MSCI global sectors.

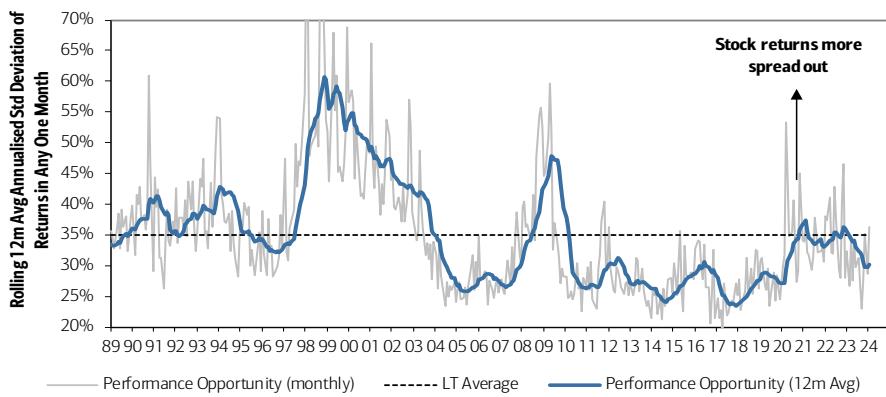
Style Opportunity measures the spread of returns of our seven global Quantessential Styles.

Size Opportunity measures the spread of returns in the largest 20% of stocks in the MSCI AC World index by market cap, and the same for the smallest 20%.

Currency Opportunity measures the spread of returns from each possible currency cross-rate combination of USD, Euro, Yen, AUD, CAD, CHF, and GBP.

Chart 720: Performance opportunity from stock selection

Performance opportunity from stock selection has diminished in the last 6-months

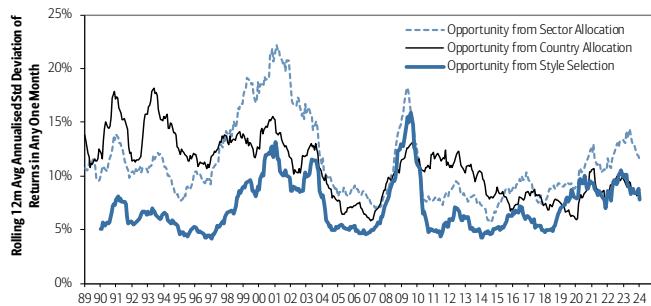


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 721: Opportunity to Add Value from Global Sector, Country, and Style Allocation

Performance opportunity is highest from Sector Allocation



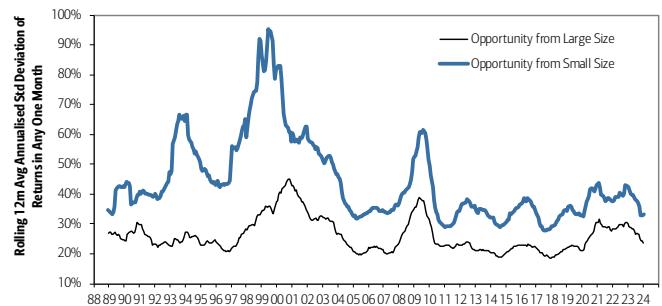
Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 722: Opportunity from Top and Bottom Quintile by Size

Opportunity to add value via Small Size stocks exceeds that of Large Size

Opportunity to add value via Small Size stocks exceeds that of Large Size

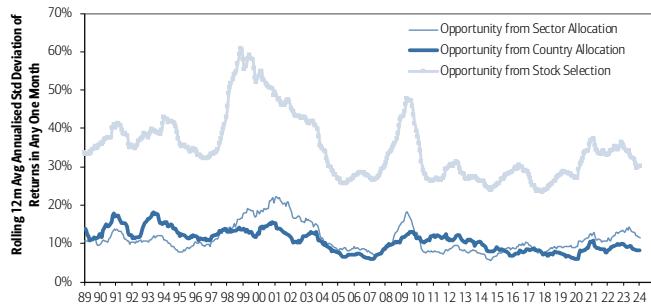


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 723: Opportunity from Global Sector & Country Allocation, and Stock Selection

Opportunity to add alpha from stock selection far exceeds sector or country allocation



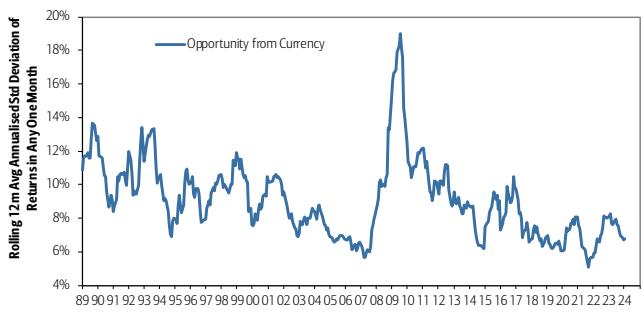
Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 724: Opportunity from Currency Allocation

Performance opportunity from currency allocation has diminished in the last 6-months

Performance opportunity from currency allocation has diminished in the last 6-months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 725: Dispersion of Forecast PEs Globally

Dispersion of forecast PE has narrowed in recent months



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Institutional Investor Universe

Institutional investors reduce their ability to outperform a benchmark by focusing on large liquid stocks.

We approximate a global institutional investors' universe as large liquid stocks selected from the constituents of the MSCI AC World Index that meet our minimum market cap, turnover and coverage requirements. The Institutional Investor Universe is determined at the end of each month using month-end data from MSCI databases.

The Institutional Investor Universe is defined as the largest 60% of stocks of the MSCI AC World Index by market cap, the largest 60% by average daily turnover in the last 6 months and last 20 days, with a minimum of three consensus earnings estimates. Table below shows the minimum values for each requirement as of January 2024, the latest re-balance.

Table 65: Minimum requirements for inclusion in Global Quantessential Styles

Minimum market cap, turnover and coverage requirements for inclusion in Quantessential Styles

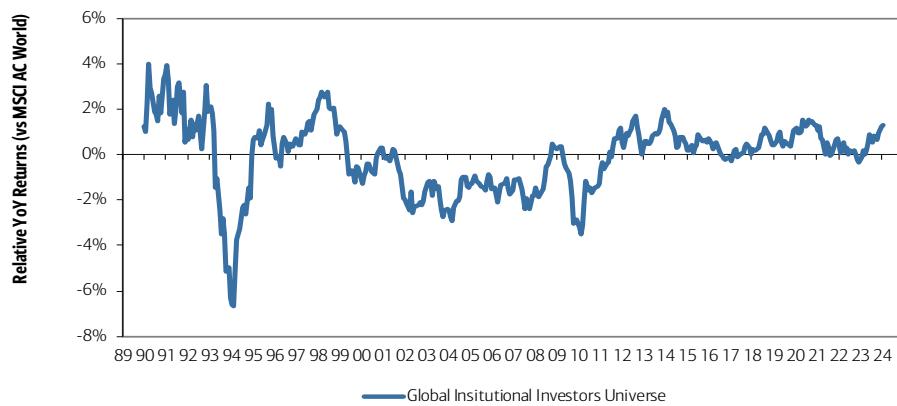
	Percentile	Minimum
Market Cap US\$m	60th	4,355
6-month Median Daily Turnover US\$m	60th	21.1
20-day Median Daily Turnover US\$m	60th	22.8
Number of analysts' estimates	-	3

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 726: Global Institutional Investor Universe – YoY perf relative to MSCI AC World Index

YoY, Global Institutional Investors Universe has outperformed by 1.3%



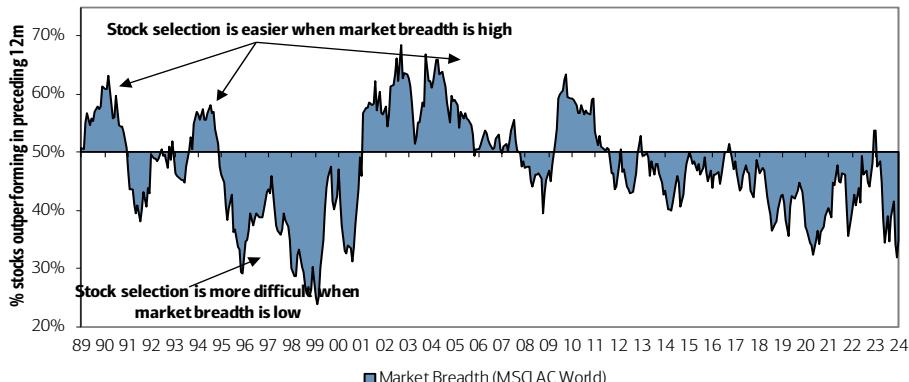
Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Market Breadth

Chart 727: Global market breadth – proportion of stocks outperforming MSCI AC World

Stock selection is difficult when market breadth is low

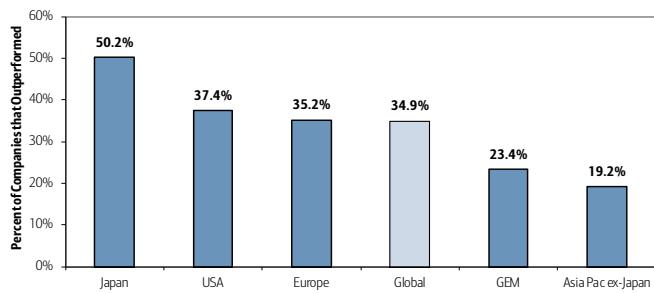


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 728: Market Breadth by Region, Last 12 months

Market Breadth is highest in Japan

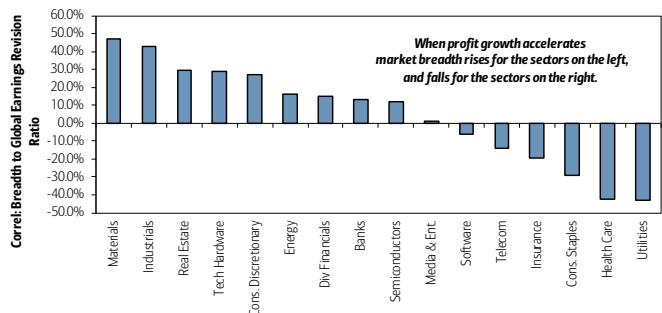


Source: BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 729: Correlation of sector market breadth to Global Earnings Revision Ratio

Market Breadth tends to increase with Earnings Revision Ratio for Materials and Industrials

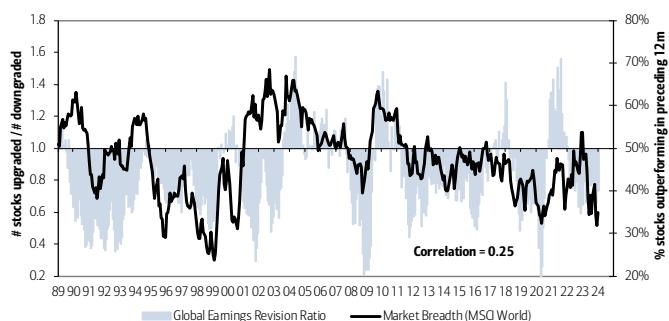


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 730: Global market breadth versus trends in global profit expectations

Global Market Breadth has a 25% correlation with trend in earnings

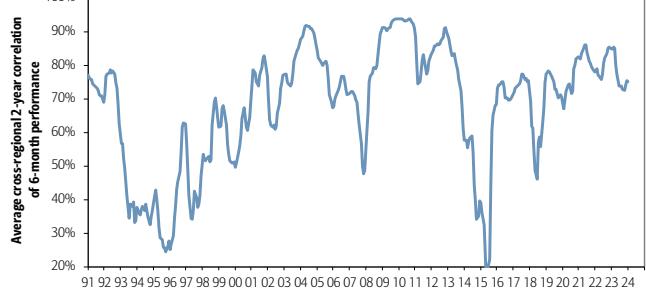


Source: BofA Global Quantitative Strategy, MSCI, IBES

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Chart 731: Average Cross-Regional Correlation of Performance

Performance correlation between regions remain elevated



Source: BofA Global Quantitative Strategy, MSCI, IBES

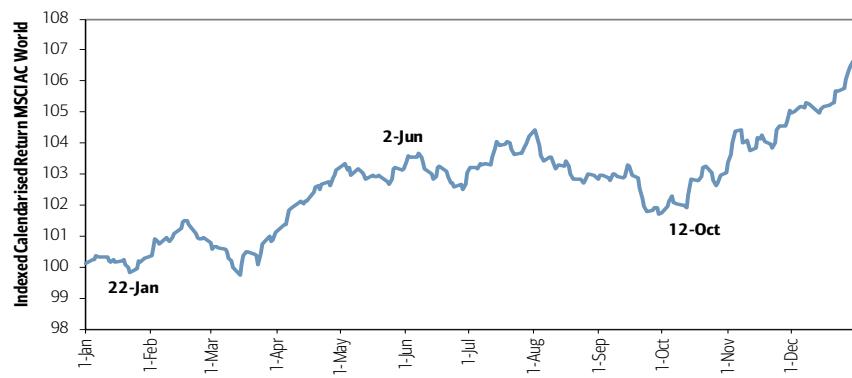
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Seasonality

Chart 732: Average cumulative daily return of MSCI AC World index for the calendar year

On average 2/3rds of index returns are achieved in the 4th quarter

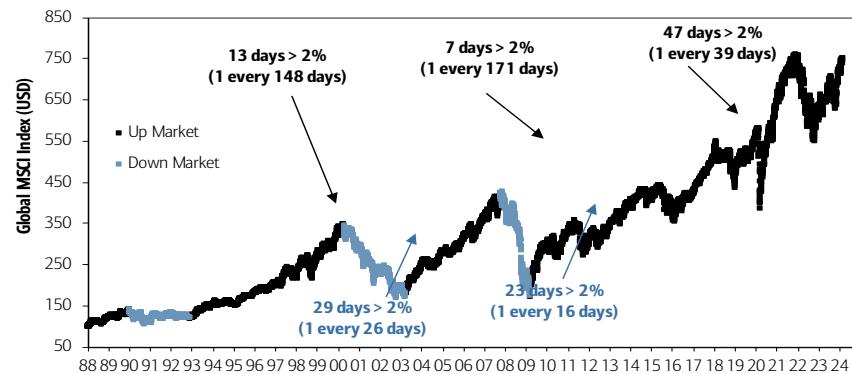


Source: BofA Global Quantitative Strategy, MSCI

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Chart 733: There are more positive days (+2%) in bear markets than bull markets

There are more positive days (+2%) in downturns than upturns

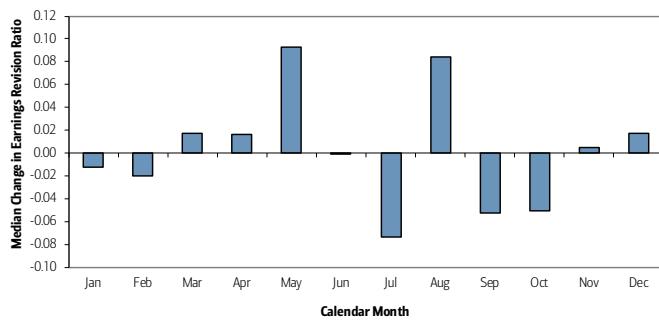


Source: BofA Global Quantitative Strategy, MSCI

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Chart 734: Seasonality of Global Earnings Expectations

Earnings expectations are higher at the beginning of the year, on average



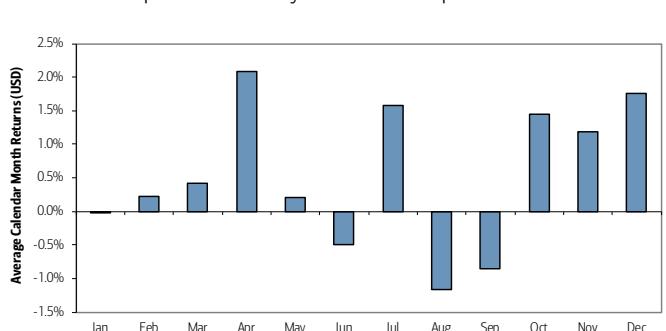
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1988.

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Chart 735: Seasonality of Market Performance (USD) - MSCI AC World

Global markets perform similarly in the second quarter



Source: BofA Global Quantitative Strategy, MSCI

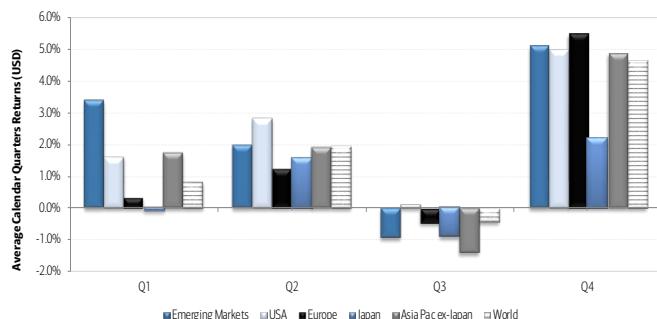
Performance is based on official MSCI Index level since 1987.

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Seasonality by Global Regions

Chart 736: Seasonality of Market Performance (USD) - Global Regions

2/3rds of equity returns come in the fourth quarter, on average



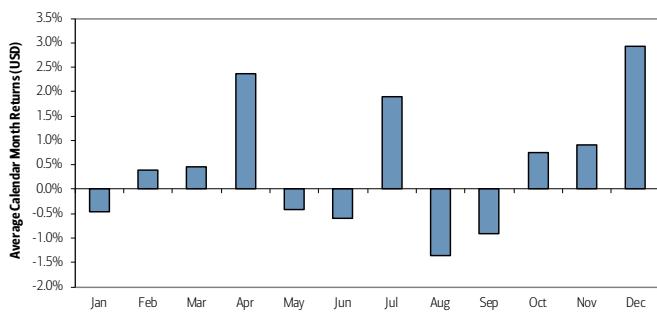
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 738: Seasonality of Market Performance (USD) - MSCI Europe

Fourth quarter has the best returns for equities, on average



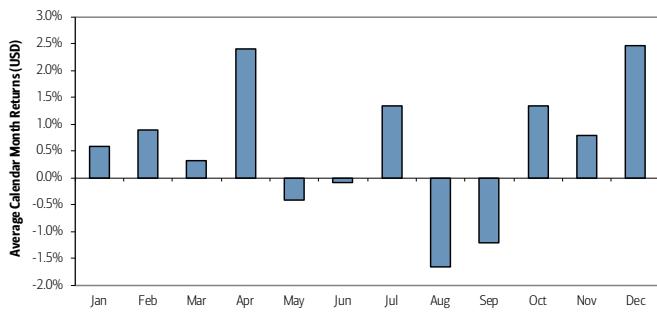
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 740: Seasonality of Market Performance (USD) - MSCI Asia Pac ex-Japan

The best month for Asia Pac ex-Japan equities is December



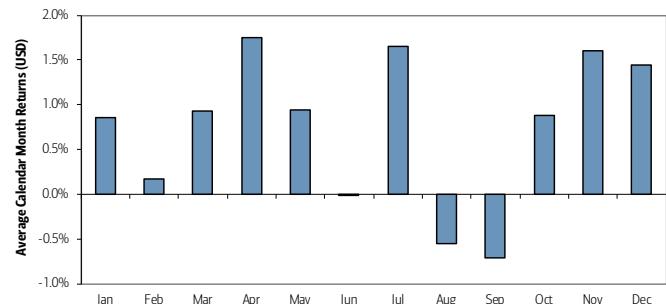
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 737: Seasonality of Market Performance (USD) - MSCI USA

The best month for USA equities is April



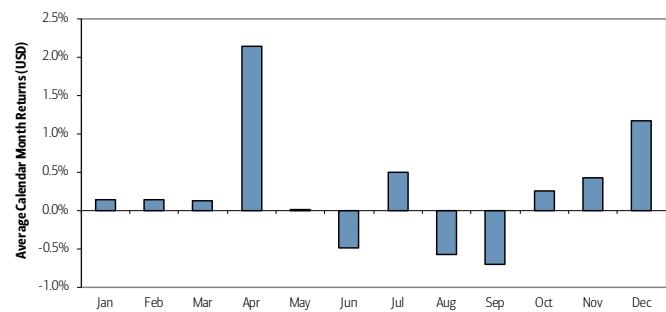
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 739: Seasonality of Market Performance (USD) - MSCI Japan

The best month for Japan equities is April



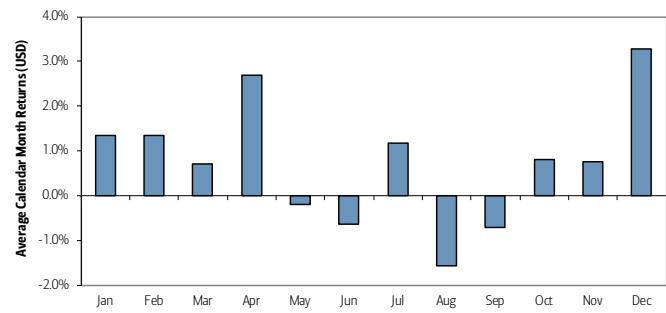
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 741: Seasonality of Market Performance (USD) - MSCI Emerging Markets

The best month for GEM equities is December



Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

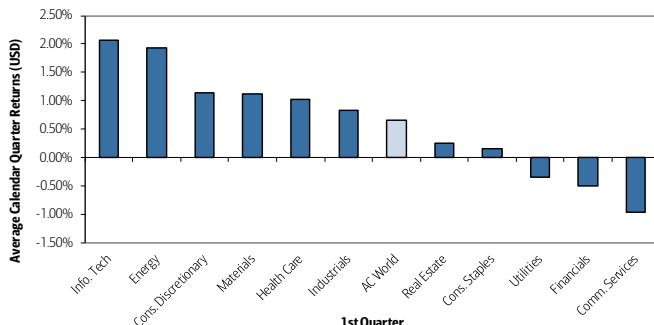
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Seasonality by Global Sectors

Chart 742: Seasonality of Sector Performance (USD) - 1st Quarter

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



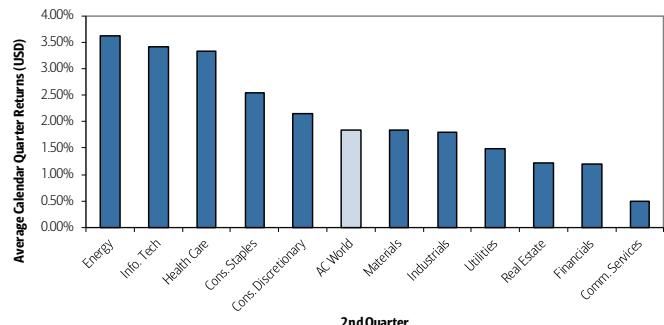
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 743: Seasonality of Sector Performance (USD) - 2nd Quarter

Energy performed the best, on average during 2nd Quarter



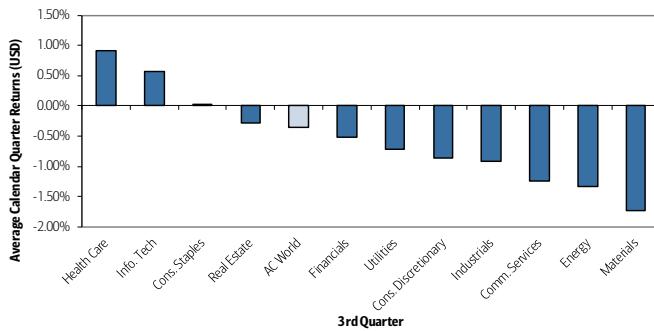
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 744: Seasonality of Sector Performance (USD) - 3rd Quarter

The best performing sector in 3rd Quarter is Health Care



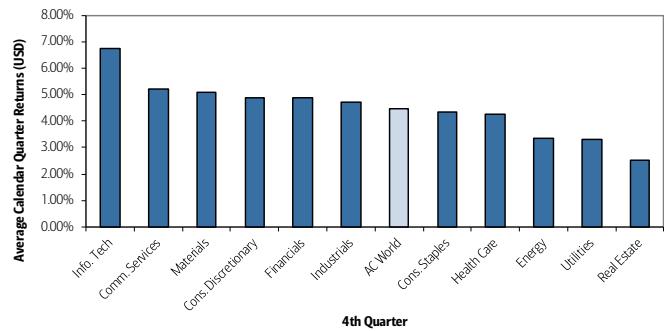
Source: BofA Global Quantitative Strategy, MSCI

Performance is based on official MSCI Index level since 1987.

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Chart 745: Seasonality of Sector Performance (USD) - 4th Quarter

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



Source: BofA Global Quantitative Strategy, MSCI

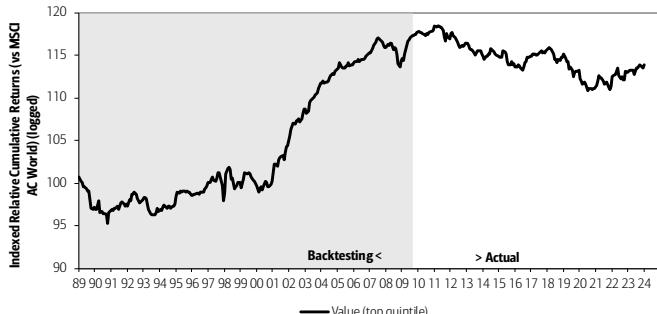
Performance is based on official MSCI Index level since 1987.

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Seasonality by Global Styles

Chart 746: Global Quantessential Value (top quintile) relative cumulative returns

TQ Value has outperformed by 3.3% in the last 12 Months

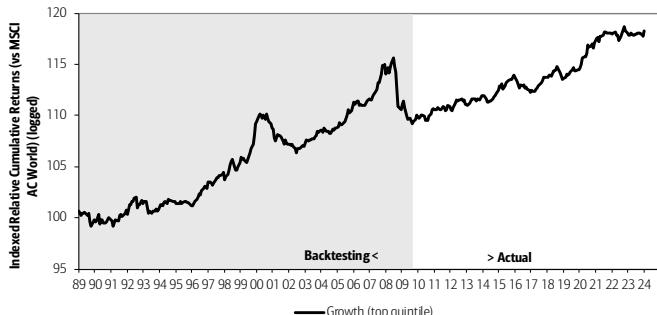


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 748: Global Quantessential Growth (top quintile) relative cumulative returns

TQ Growth has outperformed by 1.8% in the last 12 Months

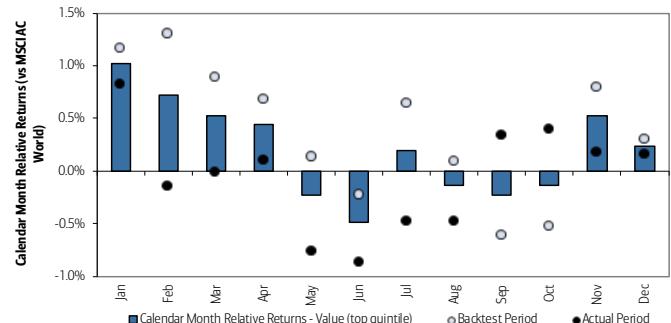


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 747: Global Quantessential Value (top quintile) Seasonality

January is the best month for Value, on average

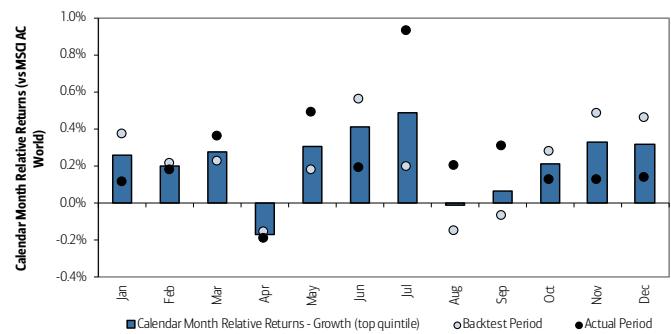


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 749: Global Quantessential Growth (top quintile) Seasonality

Third quarter tends to be the weakest for Growth, on average



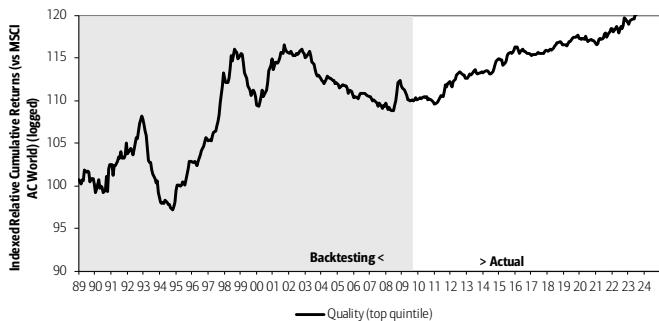
Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH



Chart 750: Global Quantessential Quality (top quintile) relative cumulative returns

TQ Quality has outperformed by 10.6% in the last 6 Months

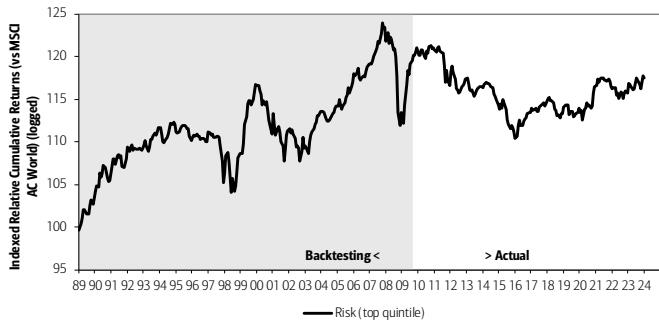


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 752: Global Quantessential Risk (top quintile) relative cumulative returns

TQ Risk has outperformed in 2023

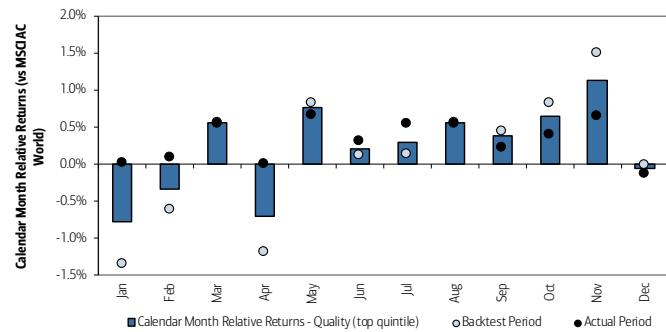


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 751: Global Quantessential Quality (top quintile) Seasonality

Quality tends to outperform in November, on average

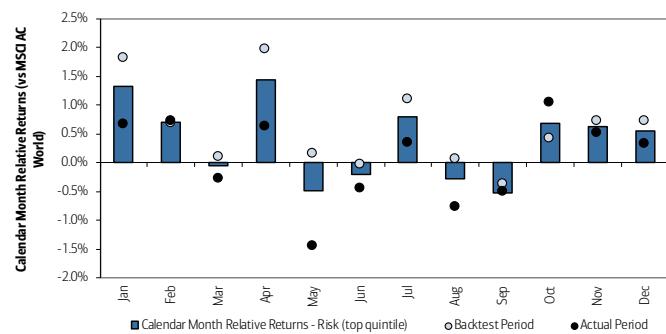


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 753: Global Quantessential Risk (top quintile) Seasonality

Risk tends to outperform in April, on average



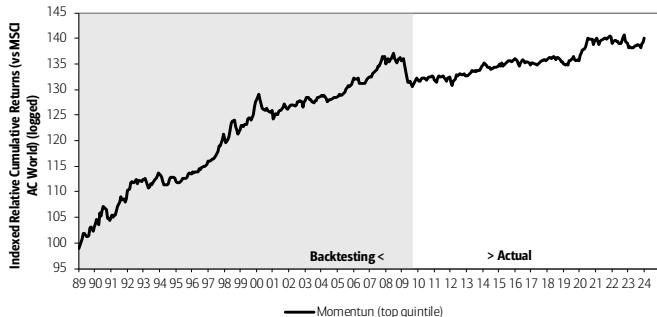
Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH



Chart 754: Global Quantessential Momentum (top quintile) relative cumulative returns

TQ Momentum has outperformed by 8.7% in the last 12 Months

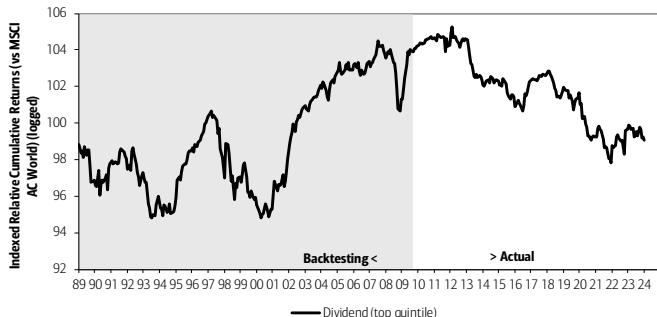


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 756: Global Quantessential Dividend (top quintile) relative cumulative returns

TQ Dividend has underperformed by -3.4% in the last 12 Months

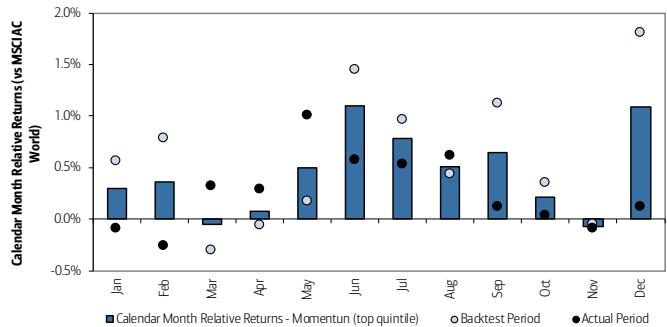


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 755: Global Quantessential Momentum (top quintile) Seasonality

Momentum tends to outperform in June, on average

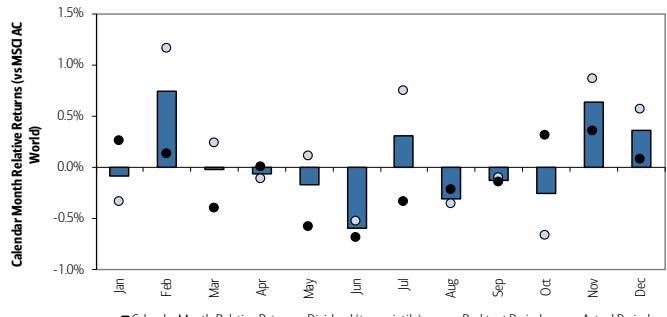


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH

Chart 757: Global Quantessential Dividend (top quintile) Seasonality

February is the best month for Dividend, on average



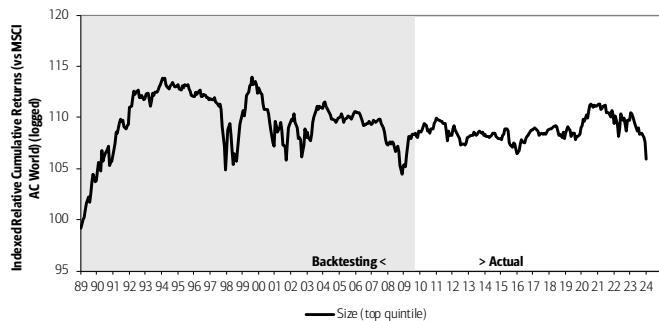
Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

BofA GLOBAL RESEARCH



Chart 758: Global Quantessential Size (top quintile) relative cumulative returns

TQ Size has underperformed by -7.2% Year-to-Date

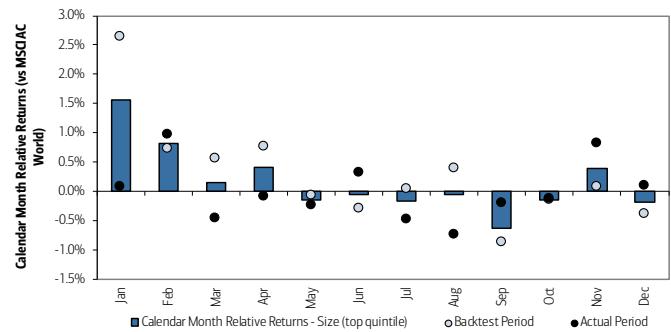


Source: BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
The shaded area shows back-tested results during the period from Jan-89 to Aug-09. The unshaded portion represents actual performance since Sep-09. Back-tested performance depicts the theoretical (not actual) performance 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 759: Global Quantessential Size (top quintile) Seasonality

January is the best month for Small Size, on average



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

The back-tested results for the period from Jan-89 to Aug-09. The actual performance since Sep-09. 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

Appendix A: Countries Momentum & Value Charts

Asia Pac ex-Japan Countries

Chart 760: Australia vs. The World – Momentum & Value

Australia has underperformed in last 6m

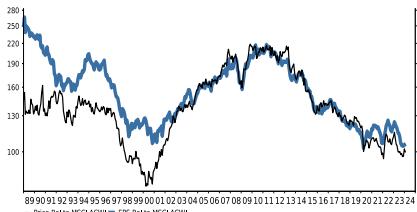


Chart 761: China vs. The World – Momentum & Value

China has underperformed the world in last 12m



Chart 762: Hong Kong vs. The World – Momentum & Value

Relative EPS trend for Hong Kong has deteriorated in last 3m

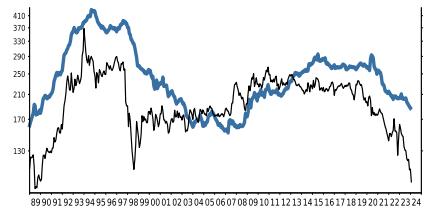


Chart 763: India vs. The World – Momentum & Value

India has outperformed in last 12m

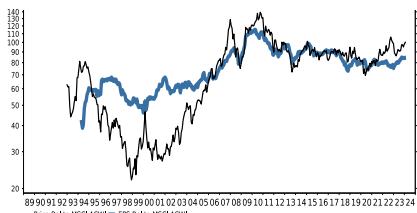


Chart 764: Indonesia vs. The World – Momentum & Value

Relative EPS trend for Indonesia has deteriorated in last 12m

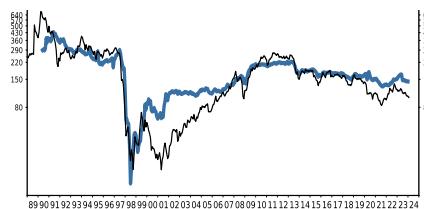


Chart 765: Malaysia vs. The World – Momentum & Value

Malaysia has underperformed the world in last 12m

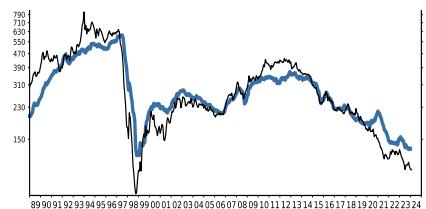


Chart 766: New Zealand vs. The World – Momentum & Value

New Zealand has underperformed in last 6m

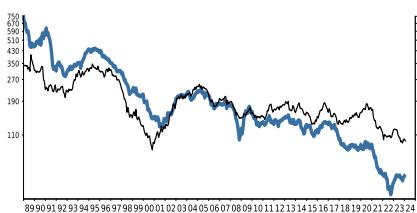


Chart 767: Philippines vs. The World – Momentum & Value

Relative EPS trend for Philippines has improved in last 6m

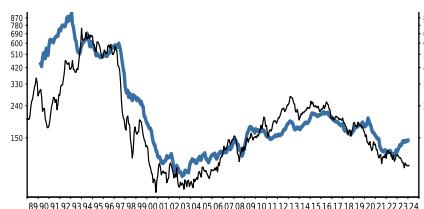


Chart 768: Singapore vs. The World – Momentum & Value

Singapore has underperformed in last 3m

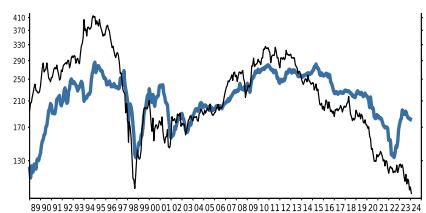


Chart 769: South Korea vs. The World – Momentum & Value

Relative EPS trend for South Korea has improved in last 12m



Chart 770: Taiwan vs. The World – Momentum & Value

Taiwan has outperformed the world in last 6m

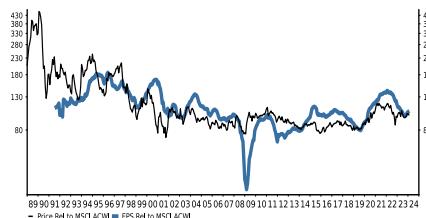
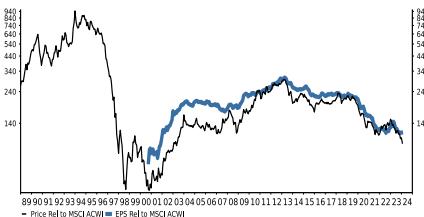


Chart 771: Thailand vs. The World – Momentum & Value

Thailand has underperformed the world in last 12m



Emerging Markets Countries

Chart 772: Brazil vs. The World – Momentum & Value

Brazil has underperformed the world in last 12m

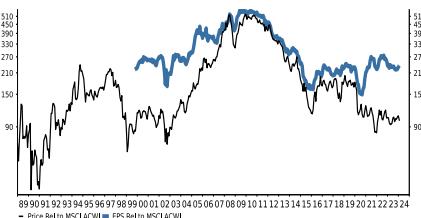


Chart 773: Chile vs. The World – Momentum & Value

Chile has underperformed the world in last 12m

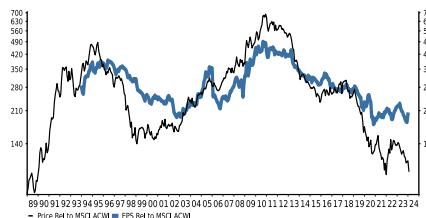


Chart 774: Colombia vs. The World – Momentum & Value

Relative EPS trend for Colombia has deteriorated in last 6m

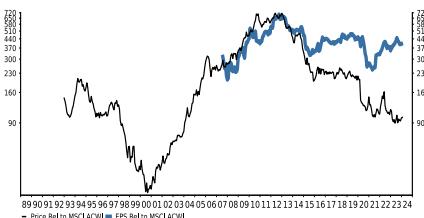


Chart 775: Czech Republic vs. The World – Momentum & Value

Czech Republic has underperformed the world in last 12m

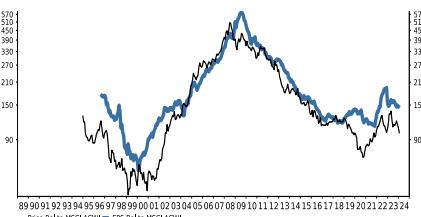


Chart 776: Egypt vs. The World – Momentum & Value

Egypt has outperformed the world in last 3m

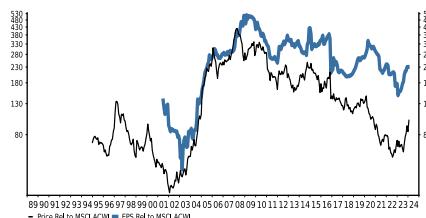


Chart 777: Greece vs. The World – Momentum & Value

Relative EPS trend for Greece has improved in last 12m

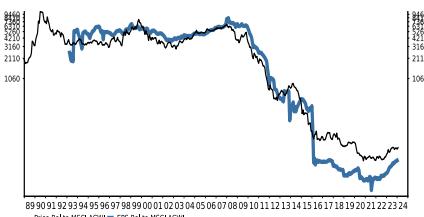
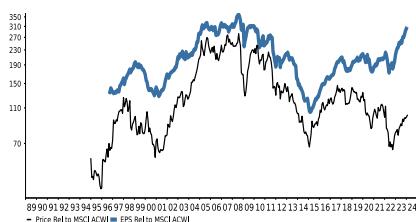


Chart 778: Hungary vs. The World – Momentum & Value

Relative EPS trend for Hungary has improved in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 779: Mexico vs. The World – Momentum & Value

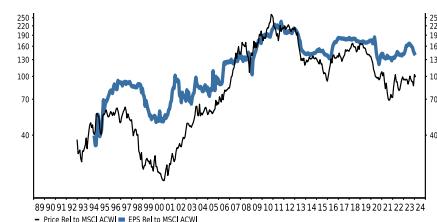
Mexico has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 780: Peru vs. The World – Momentum & Value

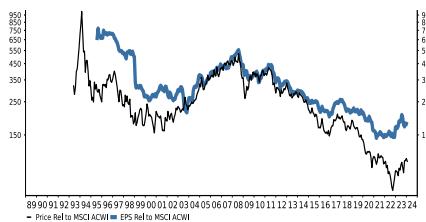
Relative EPS trend for Peru has improved in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 781: Poland vs. The World – Momentum & Value

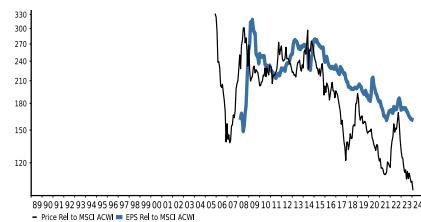
Relative EPS trend for Poland has improved in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 782: Qatar vs. The World – Momentum & Value

Relative EPS trend for Qatar has deteriorated in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 783: South Africa vs. The World – Momentum & Value

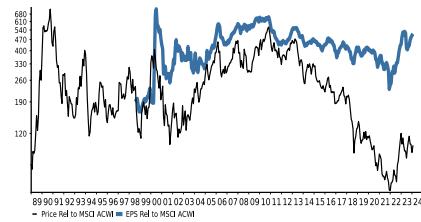
South Africa has underperformed in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 784: Turkiye vs. The World – Momentum & Value

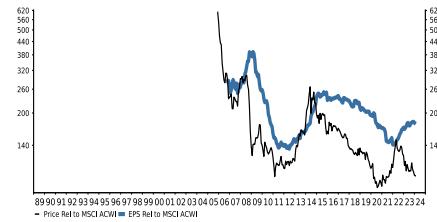
Turkiye has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 785: UAE vs. The World – Momentum & Value

UAE has underperformed the world in last 12m

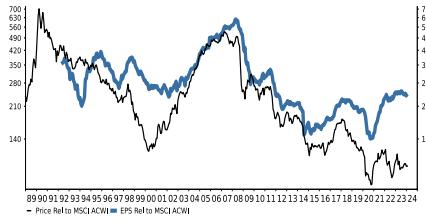


Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Europe Countries

Chart 786: Austria vs. The World – Momentum & Value

Austria has underperformed in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 787: Belgium vs. The World – Momentum & Value

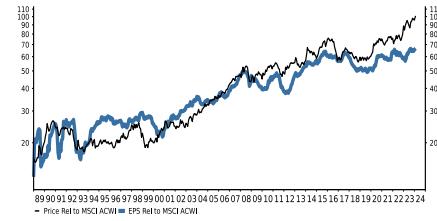
Relative EPS trend for Belgium has deteriorated in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 788: Denmark vs. The World – Momentum & Value

Denmark has outperformed in last 12m

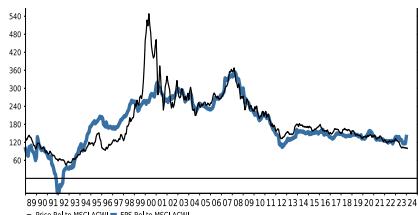


Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH



Chart 789: Finland vs. The World – Momentum & Value

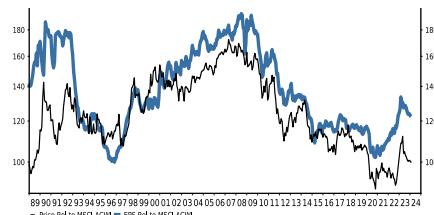
Relative EPS trend for Finland has deteriorated in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 790: France vs. The World – Momentum & Value

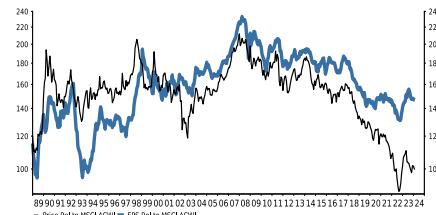
Relative EPS trend for France has deteriorated in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 791: Germany vs. The World – Momentum & Value

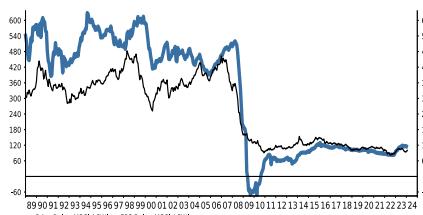
Relative EPS trend for Germany has improved in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 792: Ireland vs. The World – Momentum & Value

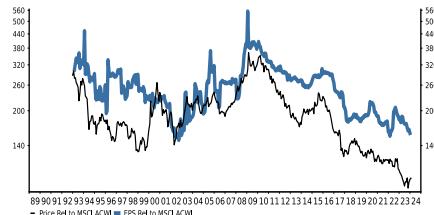
Relative EPS trend for Ireland has improved in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 793: Israel vs. The World – Momentum & Value

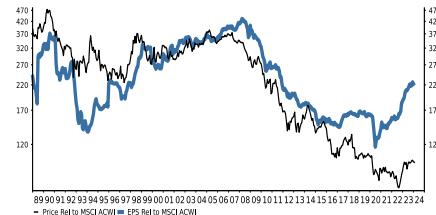
Israel has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 794: Italy vs. The World – Momentum & Value

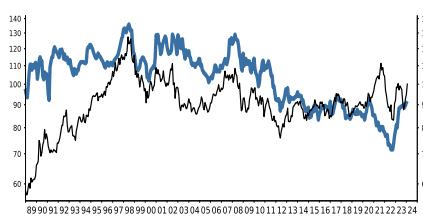
Italy has outperformed in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 795: Netherlands vs. The World – Momentum & Value

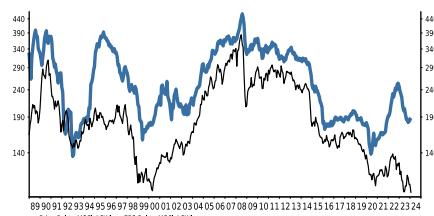
Relative EPS trend for Netherlands has improved in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 796: Norway vs. The World – Momentum & Value

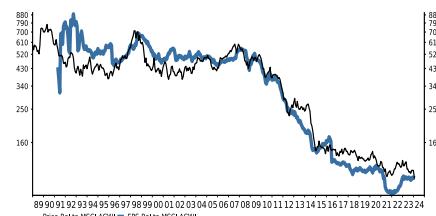
Norway has underperformed in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 797: Portugal vs. The World – Momentum & Value

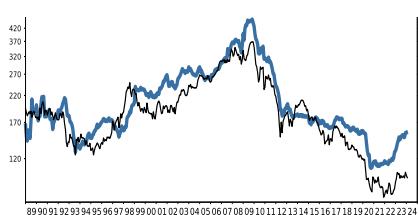
Portugal has underperformed in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 798: Spain vs. The World – Momentum & Value

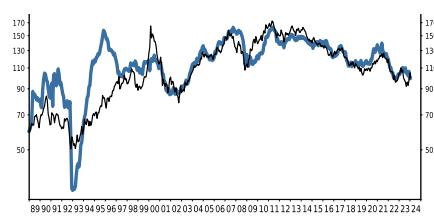
Relative EPS trend for Spain has improved in last 12m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 799: Sweden vs. The World – Momentum & Value

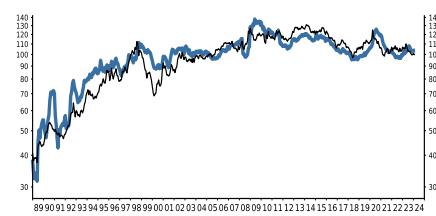
Sweden has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 800: Switzerland vs. The World – Momentum & Value

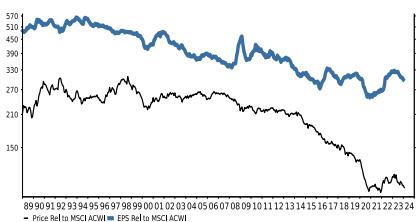
Switzerland has underperformed in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 801: UK vs. The World – Momentum & Value

Relative EPS trend for United Kingdom has deteriorated in last 12m

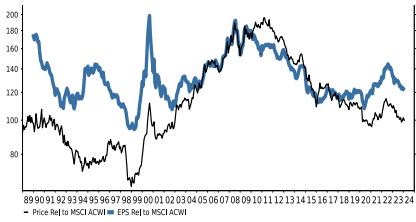


Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Canada, Japan, USA

Chart 802: Canada vs. The World – Momentum & Value

Canada has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
BofA GLOBAL RESEARCH

Chart 803: Japan vs. The World – Momentum & Value

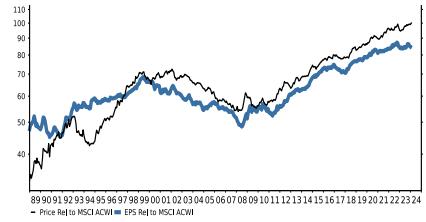
Japan has outperformed the world in last 6m



Source: BofA Global Quantitative Strategy, IBES, MSCI
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Chart 804: USA vs. The World – Momentum & Value

USA has outperformed the world in last 3m



Source: BofA Global Quantitative Strategy, IBES, MSCI
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Appendix B:

Quantessential Style Performance

Table 66: Quantessential Style back-testing results: Jan-89 to Aug-09

Quantessential Styles back-testing performance across different periods (1m, 3m, 12m, YTD)

Style	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Quantessential Value	6.1%	19.1%	87.4%	-0.2%	62.7%	52.8%	593.0%	9.82%
Quantessential Growth	1.9%	9.7%	44.1%	-32.5%	22.4%	16.7%	321.1%	7.20%
Quantessential Quality	6.4%	13.1%	50.0%	-18.8%	16.5%	18.1%	306.2%	7.02%
Quantessential Risk	8.7%	27.9%	124.1%	-38.2%	70.8%	12.2%	121.6%	3.93%
Quantessential Momentum	-0.4%	4.4%	17.2%	-37.2%	1.7%	45.8%	496.7%	9.03%
Quantessential Dividend	5.9%	16.3%	69.0%	-22.8%	36.3%	-6.5%	188.0%	5.25%
Quantessential Size	6.8%	13.5%	78.3%	-22.2%	47.5%	2.1%	276.0%	6.62%
MSCI AC World	3.4%	11.5%	47.0%	-18.5%	20.8%	10.3%	127.0%	4.05%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 67: Quantessential Style Actual Performance Ending Jan-24

Quantessential Styles actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Quantessential Value	-1.2%	17.1%	4.8%	11.8%	-1.2%	186.8%	7.63%
Quantessential Growth	2.5%	21.6%	5.2%	6.7%	2.5%	268.1%	9.52%
Quantessential Quality	1.6%	15.8%	6.5%	10.5%	1.6%	187.6%	7.65%
Quantessential Risk	-5.2%	21.6%	-2.6%	4.2%	-5.2%	67.8%	3.68%
Quantessential Momentum	1.5%	22.6%	8.8%	17.5%	1.5%	324.2%	10.61%
Quantessential Dividend	-0.5%	19.5%	4.3%	8.7%	-0.5%	144.3%	6.43%
Quantessential Size	-0.6%	20.7%	-1.0%	6.0%	-0.6%	102.0%	5.03%
MSCI AC World	0.5%	14.8%	3.4%	12.7%	0.5%	154.4%	6.73%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 68: Quantessential Style Actual Performance: Quarterly and Semi-annually

Quantessential Styles actual performance ending Jan-24 across different periods (quarter, semi-annual)

Style	1Q23'	2Q23'	3Q23'	4Q23'	1H23'	2H23'
Quantessential Value	8.0%	5.1%	1.7%	9.9%	13.5%	11.8%
Quantessential Growth	5.9%	-0.6%	-7.0%	13.8%	5.3%	5.9%
Quantessential Quality	4.9%	0.2%	-1.2%	9.3%	5.2%	8.0%
Quantessential Risk	10.0%	4.0%	-1.5%	15.9%	14.5%	14.1%
Quantessential Momentum	4.4%	4.1%	-2.5%	15.0%	8.6%	12.1%
Quantessential Dividend	3.2%	3.9%	-2.6%	13.2%	7.3%	10.3%
Quantessential Size	11.9%	3.3%	-2.8%	12.2%	15.7%	9.1%
MSCI AC World	6.8%	5.6%	-3.8%	10.7%	12.8%	6.5%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 69: Quantessential Style Advance Decline Ending Jan-24

Quantessential Styles advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	QE Value		QE Growth		QE Quality		QE Risk		QE Momentum		QE Dividend		QE Size	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	10	20	19	11	18	12	10	20	19	11	15	15	12	18
Last 3-Months	34	13	44	8	34	8	34	16	45	7	40	5	36	15
Last 6-Months	31	26	45	38	29	20	33	40	50	35	29	24	36	42
Last 12-Months	45	50	76	75	47	34	54	66	76	65	46	46	69	66
Year-To-Date	10	20	19	11	18	12	10	20	19	11	15	15	12	18
Since Inception Sep-09	351	317	494	388	278	198	357	364	426	420	330	277	544	423

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Appendix C:

Top 30 Style Performance

Table 70: Top 30 Style back-testing results: Jan-89 to Aug-09

Extreme Styles back-testing performance across different periods (1m, 3m, 12m, YTD)

Style	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Deep Value	5.7%	14.1%	87.0%	-14.6%	50.2%	76.0%	1398.9%	14.00%
Growthiest of Growth	1.0%	9.2%	39.7%	-42.9%	27.3%	48.8%	302.5%	6.97%
Highest Quality	5.0%	12.9%	52.9%	-22.8%	16.4%	-14.1%	581.8%	9.73%
Extreme Risk	13.6%	30.2%	172.9%	-44.1%	89.5%	-6.8%	77.4%	2.81%
Maximum Mo	-3.0%	-0.2%	0.4%	-59.4%	-21.0%	1.9%	414.4%	8.25%
Turbo Dividends	3.7%	14.4%	97.2%	-23.1%	50.1%	14.4%	205.4%	5.55%
Smallest	7.0%	17.6%	111.1%	7.5%	85.8%	21.0%	362.3%	7.69%
MSCI AC World	3.4%	11.5%	47.0%	-18.5%	20.8%	10.3%	127.0%	4.05%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 71: Top 30 Style Actual Performance Ending Jan-24

Extreme Styles actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Deep Value	-0.1%	12.2%	1.9%	12.1%	-0.1%	67.8%	3.68%
Growthiest of Growth	-5.0%	19.3%	-4.3%	12.3%	-5.0%	452.2%	12.66%
Highest Quality	1.0%	17.6%	6.6%	13.3%	1.0%	363.3%	11.29%
Extreme Risk	-8.0%	27.2%	-4.7%	1.3%	-8.0%	29.6%	1.82%
Maximum Mo	2.1%	30.5%	0.7%	12.6%	2.1%	332.5%	10.76%
Turbo Dividends	0.3%	15.2%	1.4%	5.1%	0.3%	38.1%	2.28%
Smallest	-0.5%	31.6%	0.9%	8.1%	-0.5%	55.2%	3.12%
MSCI AC World	0.5%	14.8%	3.4%	12.7%	0.5%	154.4%	6.73%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 72: Top 30 Style Actual Performance: Quarterly and Semi-annually

Extreme Styles actual performance ending Jan-24 across different periods (quarter, semi-annual)

Style	1Q23'	2Q23'	3Q23'	4Q23'	1H23'	2H23'
Deep Value	7.3%	3.9%	3.3%	3.9%	11.4%	7.3%
Growthiest of Growth	5.8%	10.5%	-5.9%	16.9%	16.9%	10.0%
Highest Quality	6.0%	3.5%	-4.4%	12.9%	9.8%	8.0%
Extreme Risk	12.6%	2.1%	-3.4%	22.9%	15.0%	18.7%
Maximum Mo	3.5%	1.4%	-2.9%	14.9%	5.0%	11.5%
Turbo Dividends	3.9%	1.3%	0.7%	8.1%	5.3%	8.8%
Smallest	10.2%	7.2%	-5.7%	17.0%	18.2%	10.3%
MSCI AC World	6.8%	5.6%	-3.8%	10.7%	12.8%	6.5%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 73: Top 30 Style Advance Decline Ending Jan-24

Extreme Styles advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	Growthiest of													
	Deep Value		Growth		Highest Quality		Extreme Risk		Maximum Mo		Turbo Dividends		Smallest	
Last Month	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last 3-Months	13	17	10	20	17	13	10	20	19	11	16	14	14	16
Last 6-Months	29	11	31	10	36	4	27	10	38	8	28	11	43	10
Last 12-Months	26	27	27	29	25	18	21	34	31	34	23	26	39	37
Year-To-Date	47	36	48	43	35	21	43	56	58	62	44	45	70	50
Since Inception Sep-09	13	17	10	20	17	13	10	20	19	11	16	14	14	16
	288	246	351	327	136	57	286	310	319	337	268	273	421	334

Source: BofA Global Quantitative Strategy, MSCI, IBES

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Appendix D:

Top Quintile Style Performance

Table 74: Top Quintile Style back-testing results: Jan-89 to Aug-09

Quantessential Styles (top quintile) back-testing performance across different periods (1m, 3m, 12m, YTD)

Style	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Value (top quintile)	4.7%	16.6%	90.6%	-4.4%	59.4%	73.3%	858.7%	11.56%
Growth (top quintile)	1.1%	11.4%	50.6%	-29.0%	31.0%	46.2%	561.6%	9.57%
Quality (top quintile)	3.9%	14.0%	57.4%	-9.8%	29.5%	25.0%	589.5%	9.79%
Risk (top quintile)	5.3%	20.0%	133.5%	-12.6%	84.7%	91.3%	965.3%	12.13%
Momentum (top quintile)	-1.6%	8.9%	28.9%	-29.5%	10.1%	56.8%	1660.3%	14.89%
Dividend (top quintile)	2.8%	13.6%	82.8%	-5.8%	57.0%	51.6%	418.2%	8.29%
Size (top quintile)	3.3%	14.9%	92.8%	-5.7%	60.0%	30.4%	535.4%	9.36%
MSCI AC World (EW)	3.3%	13.6%	66.4%	-10.6%	39.1%	39.9%	332.9%	7.35%

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

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. Back-tested performance 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: Top Quintile Style Actual Performance Ending Jan-24

Quantessential Styles (top quintile) actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Value (top quintile)	-2.5%	8.3%	-4.3%	-1.9%	-2.5%	43.9%	2.57%
Growth (top quintile)	-2.3%	8.7%	-4.9%	-3.3%	-2.3%	153.4%	6.70%
Quality (top quintile)	0.1%	15.7%	4.6%	10.9%	0.1%	199.4%	7.95%
Risk (top quintile)	-5.6%	13.8%	-6.0%	-2.7%	-5.6%	48.8%	2.81%
Momentum (top quintile)	0.3%	17.2%	0.8%	3.5%	0.3%	156.4%	6.79%
Dividend (top quintile)	-5.0%	4.9%	-8.0%	-8.5%	-5.0%	35.0%	2.12%
Size (top quintile)	-11.5%	-3.4%	-18.4%	-23.1%	-11.5%	50.2%	2.88%
MSCI AC World (EW)	-4.3%	7.5%	-6.1%	-5.2%	-4.3%	68.7%	3.72%

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

Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis.

Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 76: Top Quintile Style Actual Performance: Quarterly and Semi-annually

Quantessential Styles (top quintile) actual performance ending Jan-24 across different periods (quarter, semi-annual)

Style	1Q23'	2Q23'	3Q23'	4Q23'	1H23'	2H23'
Value (top quintile)	5.2%	-1.3%	-0.5%	5.2%	3.9%	4.7%
Growth (top quintile)	4.1%	-0.8%	-3.7%	5.9%	3.3%	2.0%
Quality (top quintile)	5.7%	2.9%	-2.5%	11.5%	8.8%	8.7%
Risk (top quintile)	8.2%	0.9%	-4.8%	12.5%	9.2%	7.2%
Momentum (top quintile)	0.6%	1.1%	-4.7%	10.4%	1.7%	5.2%
Dividend (top quintile)	4.5%	-2.3%	-2.1%	4.8%	2.1%	2.6%
Size (top quintile)	5.8%	-7.0%	-5.0%	3.4%	-1.5%	-1.8%
MSCI AC World (EW)	4.4%	-0.7%	-4.2%	7.4%	3.7%	2.9%

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

Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis.

Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 77: Top Quintile Style Advance Decline Ending Jan-24

Quantessential Styles (top quintile) advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	Value (top quintile)		Growth (top quintile)		Quality (top quintile)		Risk (top quintile)		Momentum (top quintile)		Dividend (top quintile)		Size (top quintile)	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	257	308	232	322	169	215	177	402	335	245	187	313	107	473
Last 3-Months	456	218	572	292	378	58	507	152	584	158	427	138	287	396
Last 6-Months	353	440	537	747	233	210	316	405	495	541	298	372	224	597
Last 12-Months	538	514	1001	1202	269	223	360	449	727	872	428	493	423	657
Year-To-Date	257	308	232	322	169	215	177	402	335	245	187	313	107	473
Since Inception Sep-09	2849	1947	6208	6381	733	485	1748	1749	3517	4064	2446	1831	2555	1877

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

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Appendix E: Boosters Performance

Table 78: Boosters back-testing results: Jan-98 to Aug-08

Boosters back-testing performance across different periods (1m, 3m, 12m, YTD)

Boosters	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Global	-19.4%	-30%	-34%	-47%	-41%	38%	33%	2.7%
USA	-21.0%	-29%	-29%	-44%	-37%	-4%	2%	0.2%
Europe	-24.9%	-32%	-33%	-42%	-36%	58%	24%	2.0%
Japan	-13.6%	-24%	-24%	-37%	-31%	17%	60%	4.5%
Asia Pac ex-Japan	-17.3%	-32%	-40%	-54%	-51%	25%	-8%	-0.8%
Emerging Markets	-23.4%	-34%	-46%	-58%	-56%	62%	209%	11.1%
Australia	-14.9%	-41%	-44%	-50%	-51%	121%	187%	10.3%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 79: Boosters Actual Performance Ending Jan-24

Boosters actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Boosters	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Global	-4.5%	10%	-9%	-12%	-5%	51%	2.7%
USA	-3.5%	10%	-2%	-7%	-3%	387%	10.9%
Europe	-1.3%	17%	3%	3%	-1%	29%	1.7%
Japan	6.1%	19%	7%	21%	6%	63%	3.2%
Asia Pac ex-Japan	-7.1%	4%	-15%	-16%	-7%	39%	2.2%
Emerging Markets	-3.6%	13%	-8%	-9%	-4%	43%	2.4%
Australia	3.7%	35%	8%	-17%	4%	-73%	-8.3%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 80: Boosters Advance Decline Ending Jan-24

Boosters advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Region	Global		USA		Europe		Japan		Asia Pac ex-Japan		Emerging Markets		Australia	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	8	22	6	24	12	18	24	6	7	23	10	20	5	5
Last 3-Months	26	12	19	20	28	11	28	7	19	18	29	16	10	3
Last 6-Months	22	32	23	27	19	32	26	24	11	40	21	41	9	12
Last 12-Months	35	46	27	35	29	41	47	25	19	53	34	64	16	17
Year-To-Date	8	22	6	24	12	18	24	6	7	23	10	20	5	5
Since Inception Sep-08	244	241	444	295	383	383	409	417	216	272	642	682	165	173

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

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Table 81: Boosters Monthly Performance Last 12 months

Boosters actual performance ending Jan-24 for last 12-months

Boosters	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Global	-5.7%	-2.2%	-0.3%	-8.3%	6.5%	8.5%	-6.6%	-1.8%	-10.4%	5.5%	9.7%	-4.5%
USA	-4.8%	-9.5%	-2.3%	-6.0%	9.7%	10.0%	-0.7%	-4.6%	-5.9%	7.2%	5.9%	-3.5%
Europe	-1.4%	-4.5%	2.7%	-7.9%	5.7%	7.1%	-5.4%	0.0%	-7.4%	10.4%	7.4%	-1.3%
Japan	0.0%	1.4%	-0.3%	1.8%	2.8%	6.9%	-1.9%	-2.1%	-6.3%	8.8%	3.3%	6.1%
Asia Pac ex-Japan	-5.7%	1.3%	1.3%	-8.0%	4.6%	6.0%	-8.3%	-2.8%	-8.2%	5.6%	6.3%	-7.1%
Emerging Markets	-4.7%	0.0%	-0.7%	-5.2%	2.7%	7.7%	-8.9%	-3.7%	-8.0%	10.1%	6.9%	-3.6%
Australia	-14.8%	-9.9%	0.1%	-5.6%	5.6%	0.2%	-8.2%	-3.9%	-9.8%	10.7%	17.9%	3.7%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 82: Boosters Monthly Performance Advance Decline Ending Jan-24

Boosters advance decline ending Jan-24 for last 12-months

Region	Global		USA		Europe		Japan		Asia Pac ex-Japan		Emerging Markets		Australia	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Jan-24	8	22	6	24	12	18	24	6	7	23	10	20	5	5
Dec-23	24	6	20	10	23	7	22	8	20	9	23	7	7	1
Nov-23	24	6	15	15	26	4	24	6	19	11	23	7	7	2
Oct-23	3	27	6	24	5	25	1	29	1	29	3	27	0	10
Sep-23	10	23	7	23	15	13	9	21	10	20	11	19	4	5
Aug-23	7	23	17	13	6	24	11	19	4	26	3	27	3	7
Jul-23	24	6	27	3	26	4	26	4	21	9	21	9	6	4
Jun-23	26	4	30	0	23	6	20	10	25	5	22	8	7	3
May-23	26	4	6	24	1	29	13	17	25	5	12	18	5	5
Apr-23	6	24	6	24	1	29	13	17	6	24	12	18	5	5
Mar-23	20	10	14	16	20	10	13	17	17	13	12	18	4	6
Feb-23	13	17	6	24	12	18	20	10	14	16	11	19	1	9

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

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Table 83: Benchmark Performance: Jan-98 to Aug-08

MSCI regional benchmarks back-testing performance across different periods (1m, 3m, 12m, YTD)

Benchmark	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
MSCI AC World	-12.7%	-17%	-19%	-28%	-27%	34%	29%	2.4%
MSCI USA	-9.3%	-9%	-12%	-23%	-20%	18%	19%	1.6%
MSCI Europe	-15.2%	-21%	-26%	-33%	-33%	47%	35%	2.9%
MSCI Japan	-11.9%	-18%	-16%	-28%	-24%	17%	9%	0.8%
MSCI Asia Pac ex-Japan	-17.1%	-25%	-29%	-40%	-39%	67%	72%	5.2%
MSCI Emerging Markets	-17.7%	-28%	-29%	-35%	-37%	108%	91%	6.2%
MSCI Australia	-10.3%	-12%	-13%	-30%	-27%	49%	80%	5.6%

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

BofA GLOBAL RESEARCH

Table 84: Benchmark Performance Ending Jan-24

MSCI regional benchmarks actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Benchmark	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
MSCI AC World	0.5%	15%	3%	13%	1%	148%	6.1%
MSCI USA	1.5%	16%	6%	19%	1%	317%	9.8%
MSCI Europe	-0.2%	15%	2%	7%	0%	41%	2.3%
MSCI Japan	4.6%	18%	7%	16%	5%	67%	3.4%
MSCI Asia Pac ex-Japan	-4.8%	7%	-7%	-8%	-5%	56%	2.9%
MSCI Emerging Markets	-4.7%	7%	-7%	-5%	-5%	24%	1.4%
MSCI Australia	1.6%	14%	5%	4%	2%	66%	3.4%

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

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Appendix F:

Bunkers Performance

Table 85: Bunkers back-testing results: Jan-98 to Aug-08

Bunkers back-testing performance across different periods (1m, 3m, 12m, YTD)

Bunkers	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Global	-5.2%	-2%	-8%	-16%	-14%	52%	77%	5.5%
USA	-7.0%	-2%	-7%	-15%	-13%	19%	46%	3.6%
Europe	-11.2%	-15%	-23%	-31%	-29%	57%	51%	3.9%
Japan	-13.2%	-20%	-18%	-25%	-23%	53%	70%	5.1%
Asia Pac ex-Japan	-12.9%	-19%	-23%	-34%	-33%	69%	59%	4.4%
Emerging Markets	-15.1%	-17%	-17%	-26%	-29%	188%	547%	19.0%
Australia	-11.9%	-9%	-12%	-30%	-23%	66%	180%	10.0%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 86: Bunkers Actual Performance Ending Jan-24

Bunkers actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Bunkers	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Global	0.0%	10%	1%	2%	0%	204%	7.5%
USA	0.4%	11%	-1%	3%	0%	227%	8.0%
Europe	0.2%	16%	3%	7%	0%	72%	3.6%
Japan	4.2%	14%	8%	14%	4%	49%	2.6%
Asia Pac ex-Japan	-4.1%	9%	0%	4%	-4%	130%	5.6%
Emerging Markets	-4.4%	7%	-3%	4%	-4%	41%	2.3%
Australia	0.8%	22%	2%	-3%	1%	58%	3.0%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 87: Bunkers Advance Decline Ending Jan-24

Bunkers advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Region	Global		USA		Europe		Japan		Asia Pac ex-Japan		Emerging Markets		Australia	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	16	14	18	12	13	17	25	5	7	23	5	25	7	3
Last 3-Months	31	6	31	8	34	5	34	4	31	7	26	12	11	0
Last 6-Months	27	19	27	24	26	25	28	17	27	20	23	34	9	8
Last 12-Months	40	29	40	29	44	35	45	27	37	34	43	50	12	13
Year-To-Date	16	14	18	12	13	17	25	5	7	23	5	25	7	3
Since Inception Sep-08	227	154	418	253	398	294	342	308	238	194	479	490	160	127

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

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Table 88: Bunkers Monthly Performance Last 12 months

Bunkers actual performance ending Jan-24 for last 12-months

Bunkers	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Global	-3.9%	4.1%	1.2%	-3.4%	2.7%	0.9%	-3.5%	-4.7%	-0.6%	7.3%	2.7%	0.0%
USA	-3.2%	4.6%	1.6%	-3.6%	3.3%	1.5%	-4.2%	-6.2%	-0.4%	6.2%	3.8%	0.4%
Europe	-1.7%	2.9%	5.0%	-8.1%	3.8%	2.9%	-3.2%	-4.5%	-3.5%	10.2%	4.6%	0.2%
Japan	-4.4%	3.2%	2.1%	1.9%	0.6%	2.3%	0.2%	-2.1%	-3.2%	4.8%	4.0%	4.2%
Asia Pac ex-Japan	-2.5%	1.5%	1.0%	1.9%	1.9%	-0.1%	-4.7%	0.3%	-3.5%	6.0%	6.7%	-4.1%
Emerging Markets	-3.5%	4.0%	1.7%	-1.1%	4.6%	2.2%	-5.7%	-2.2%	-1.8%	6.1%	5.1%	-4.4%
Australia	-5.4%	-2.2%	1.1%	-4.4%	3.4%	2.6%	-7.7%	-4.2%	-5.1%	10.2%	9.7%	0.8%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis.

Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 89: Bunkers Monthly Performance Advance Decline Ending Jan-24

Bunkers advance decline ending Jan-24 for last 12-months

Region	Global		USA		Europe		Japan		Asia Pac ex-Japan		Emerging Markets		Australia	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Jan-24	16	14	18	12	13	17	25	5	7	23	5	25	7	3
Dec-23	24	6	22	8	26	4	27	3	29	1	27	3	10	0
Nov-23	26	4	27	3	28	2	26	4	28	2	26	4	10	0
Oct-23	14	16	16	14	7	23	5	25	6	24	9	21	0	10
Sep-23	7	25	3	27	5	25	10	20	13	17	9	21	2	8
Aug-23	8	22	6	24	4	26	15	15	5	25	3	27	1	9
Jul-23	18	12	21	9	19	11	19	11	13	17	18	12	5	5
Jun-23	21	9	23	7	20	10	20	10	19	11	25	5	9	1
May-23	21	9	6	24	1	29	16	14	19	11	8	22	0	10
Apr-23	8	22	6	24	1	29	16	14	15	15	8	22	0	10
Mar-23	20	10	20	10	26	4	19	11	18	12	19	11	7	3
Feb-23	23	7	25	5	21	9	24	6	19	11	20	10	3	7

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

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Table 90: Benchmark Performance Last 12 months

MSCI regional benchmarks actual performance ending Jan-24 for last 12-months

Benchmark	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
MSCI AC World	-3.0%	2.8%	1.3%	-1.3%	5.6%	3.6%	-3.0%	-4.3%	-3.1%	9.1%	4.7%	0.5%
MSCI USA	-2.6%	3.4%	1.2%	0.5%	6.5%	3.3%	-1.9%	-4.8%	-2.4%	9.2%	4.6%	1.5%
MSCI Europe	-0.8%	2.0%	3.6%	-6.5%	4.6%	3.0%	-4.2%	-4.0%	-3.8%	9.7%	4.9%	-0.2%
MSCI Japan	-3.9%	2.9%	0.4%	1.8%	4.0%	3.0%	-2.4%	-2.8%	-4.5%	8.5%	4.3%	4.6%
MSCI Asia Pac ex-Japan	-6.9%	2.5%	-1.8%	-2.7%	2.6%	5.4%	-6.4%	-3.0%	-4.1%	7.3%	4.5%	-4.8%
MSCI Emerging Markets	-6.5%	2.7%	-1.3%	-1.9%	3.2%	5.8%	-6.4%	-2.8%	-3.9%	7.9%	3.7%	-4.7%
MSCI Australia	-2.9%	-1.0%	1.5%	-3.3%	2.0%	2.7%	-1.2%	-3.2%	-3.3%	4.3%	7.3%	1.6%

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

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Appendix G:

Boosters By Investor Type Performance

Table 91: Boosters By Investor Type back-testing results: Jan-96 to Aug-16

Boosters By Investor Type back-testing performance across different periods (1m, 3m, 12m, YTD)

Boosters By Type	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Global Deep Value Boosters	3.6%	10.8%	18.6%	9.3%	1.1%	-10.5%	1225%	13.3%
USA Deep Value Boosters	2.4%	1.5%	10.3%	-1.1%	-2.4%	98.5%	889%	11.7%
Europe Deep Value Boosters	2.0%	2.0%	12.7%	1.1%	-1.8%	40.4%	398%	8.1%
Japan Deep Value Boosters	7.3%	8.7%	23.7%	2.1%	2.2%	22.0%	203%	5.5%
APxJ Deep Value Boosters	1.3%	11.6%	21.9%	9.3%	12.0%	5.0%	2590%	17.3%
EM Deep Value Boosters	0.3%	14.9%	26.1%	17.7%	19.9%	-1.3%	3511%	19.0%
Global Growthiest Boosters	3.5%	11.0%	21.0%	12.8%	6.2%	27.5%	1719%	15.1%
USA Growthiest Boosters	0.5%	2.7%	13.7%	1.7%	-0.6%	71.6%	326%	7.3%
Europe Growthiest Boosters	0.9%	1.7%	11.6%	1.9%	0.5%	40.0%	211%	5.6%
Japan Growthiest Boosters	1.4%	3.1%	14.7%	3.0%	-2.0%	31.1%	56%	2.2%
APxJ Growthiest Boosters	4.8%	13.3%	23.9%	21.8%	14.8%	3.1%	1057%	12.6%
EM Growthiest Boosters	2.1%	20.9%	34.8%	36.8%	32.6%	-3.1%	1369%	13.9%
Global High Quality Boosters	3.5%	7.7%	16.5%	5.5%	7.8%	39.2%	1626%	14.8%
USA High Quality Boosters	1.8%	1.0%	13.8%	2.3%	3.8%	76.1%	486%	8.9%
Europe High Quality Boosters	3.6%	3.1%	10.9%	2.0%	2.9%	24.6%	329%	7.3%
Japan High Quality Boosters	1.9%	6.7%	17.7%	7.1%	4.1%	25.2%	127%	4.0%
APxJ High Quality Boosters	6.4%	14.5%	22.6%	13.9%	1.7%	4.2%	555%	9.5%
EM High Quality Boosters	2.3%	10.2%	23.2%	15.7%	6.5%	-12.6%	1126%	12.9%
Global High Yield Boosters	3.4%	11.0%	20.3%	11.2%	5.5%	1.9%	1521%	14.4%
USA High Yield Boosters	2.1%	5.0%	17.0%	7.0%	7.0%	100.2%	929%	11.9%
Europe High Yield Boosters	2.7%	0.4%	9.7%	-4.8%	-0.5%	21.0%	185%	5.2%
Japan High Yield Boosters	5.6%	6.5%	20.6%	7.3%	3.2%	43.4%	172%	5.0%
APxJ High Yield Boosters	2.6%	12.7%	20.4%	9.2%	5.7%	-10.5%	832%	11.4%
EM High Yield Boosters	3.8%	25.9%	34.1%	18.3%	21.5%	5.4%	1830%	15.4%

Source: BofA Global Quantitative Strategy, MSCI, Exshare 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. 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 92: Boosters By Investor Type Actual Performance Ending Jan-24

Boosters By Investor Type actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Boosters By Type	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Global Deep Value Boosters	1.7%	16.2%	-3.0%	9.4%	1.7%	146.4%	12.9%
USA Deep Value Boosters	-1.9%	16.3%	0.7%	-0.6%	-1.9%	81.5%	8.4%
Europe Deep Value Boosters	-2.2%	15.5%	0.4%	7.8%	-2.2%	46.1%	5.2%
Japan Deep Value Boosters	6.5%	19.0%	9.6%	30.7%	6.5%	37.4%	4.4%
APxJ Deep Value Boosters	-6.5%	3.2%	-15.2%	-22.6%	-6.5%	9.2%	1.2%
EM Deep Value Boosters	-3.3%	6.1%	-7.1%	1.6%	-3.3%	25.2%	3.1%
Global Growthiest Boosters	-0.1%	14.9%	-9.3%	3.5%	-0.1%	220.1%	17.0%
USA Growthiest Boosters	-0.8%	21.6%	3.9%	5.9%	-0.8%	177.4%	14.8%
Europe Growthiest Boosters	-1.6%	21.5%	4.3%	16.5%	-1.6%	50.7%	5.7%
Japan Growthiest Boosters	6.5%	22.2%	7.3%	32.9%	6.5%	47.6%	5.4%
APxJ Growthiest Boosters	-10.2%	1.3%	-20.0%	-19.5%	-10.2%	117.9%	11.1%
EM Growthiest Boosters	-4.7%	10.3%	-9.0%	3.2%	-4.7%	134.2%	12.2%
Global High Quality Boosters	-2.1%	15.5%	-1.0%	-0.4%	-2.1%	37.6%	4.4%
USA High Quality Boosters	1.6%	28.6%	9.6%	18.3%	1.6%	157.2%	13.6%
Europe High Quality Boosters	-0.6%	17.0%	3.1%	8.0%	-0.6%	40.3%	4.7%
Japan High Quality Boosters	4.7%	19.4%	3.1%	15.0%	4.7%	42.8%	4.9%
APxJ High Quality Boosters	-8.2%	4.8%	-14.7%	-20.9%	-8.2%	20.7%	2.6%
EM High Quality Boosters	-4.5%	3.2%	-13.9%	-19.4%	-4.5%	68.0%	7.2%
Global High Yield Boosters	1.5%	19.9%	8.2%	7.5%	1.5%	65.6%	7.0%
USA High Yield Boosters	-0.7%	15.0%	2.2%	0.6%	-0.7%	69.2%	7.3%
Europe High Yield Boosters	-0.6%	18.0%	2.4%	4.0%	-0.6%	17.6%	2.2%
Japan High Yield Boosters	7.2%	17.7%	11.2%	32.1%	7.2%	58.7%	6.4%
APxJ High Yield Boosters	-6.4%	1.2%	-14.1%	-23.0%	-6.4%	37.7%	4.4%
EM High Yield Boosters	-2.7%	8.5%	-4.9%	-8.1%	-2.7%	26.8%	3.2%

Source: BofA Global Quantitative Strategy, MSCI, Exshare Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 93: Boosters By Investor Type Advance Decline Ending Jan-24

Boosters By Investor Type advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Style	Last Month			Last 3-Months			Last 6-Months		Last 12-Months		Year-To-Date	Since Inception
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Global Deep Value Boosters	17	13	33	9	24	29	78	65	17	13	408	370
USA Deep Value Boosters	19	6	23	13	29	18	36	35	36	35	258	212
Europe Deep Value Boosters	20	5	25	5	29	10	48	17	48	17	265	205
Japan Deep Value Boosters	16	9	19	15	35	17	70	21	70	21	365	261
APxJ Deep Value Boosters	5	20	20	19	20	34	31	57	5	20	256	277
EM Deep Value Boosters	11	14	20	16	23	23	41	42	41	42	244	247
Global Growthiest Boosters	15	15	35	12	30	42	88	83	15	15	432	387
USA Growthiest Boosters	21	4	27	12	34	21	48	47	48	47	280	245
Europe Growthiest Boosters	22	3	29	7	30	16	57	28	57	28	331	260
Japan Growthiest Boosters	18	7	22	14	31	24	66	33	66	33	374	321
APxJ Growthiest Boosters	6	19	17	17	11	42	25	69	6	19	289	349
EM Growthiest Boosters	15	10	22	14	25	31	44	62	44	62	324	333
Global High Quality Boosters	15	15	31	11	31	26	74	72	15	15	350	348
USA High Quality Boosters	23	2	26	6	29	9	48	25	48	25	229	181
Europe High Quality Boosters	21	4	22	10	25	16	47	23	47	23	215	200
Japan High Quality Boosters	22	3	22	10	21	25	47	27	47	27	271	218
APxJ High Quality Boosters	5	20	19	16	15	34	19	57	5	20	223	256
EM High Quality Boosters	13	12	23	16	28	24	37	50	37	50	254	254
Global High Yield Boosters	15	15	35	8	36	29	80	72	15	15	404	339
USA High Yield Boosters	19	6	28	14	35	25	52	42	52	42	356	293
Europe High Yield Boosters	24	1	24	7	33	10	46	26	46	26	273	226
Japan High Yield Boosters	18	7	24	13	34	17	63	20	63	20	349	260
APxJ High Yield Boosters	5	20	19	23	18	46	28	74	5	20	304	332
EM High Yield Boosters	20	5	23	18	29	28	49	53	49	53	334	315

Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Table 94: Benchmark Performance: Jan-96 to Aug-16

MSCI regional benchmarks back-testing performance across different periods (1m, 3m, 12m, YTD)

Benchmark	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
MSCI World	0.1%	3.5%	12.1%	5.0%	4.3%	34.1%	129.0%	4.1%
MSCI USA	-0.1%	3.7%	12.7%	9.5%	6.1%	77.5%	256.0%	6.3%
MSCI Europe	0.0%	-0.8%	5.6%	-6.0%	-3.5%	9.2%	100.4%	3.4%
MSCI Japan	0.3%	4.1%	12.0%	1.0%	-0.1%	25.5%	-16.2%	-0.9%
MSCI Asia Pac ex Japan	1.7%	8.8%	18.5%	10.0%	8.0%	1.3%	66.0%	2.5%
MSCI GEM	2.3%	10.7%	20.7%	9.2%	12.5%	-13.5%	95.0%	3.3%

Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Table 95: Benchmark Performance Ending Jan-24

MSCI regional benchmarks actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Benchmark	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
MSCI World	0.5%	14.8%	3.4%	12.7%	0.5%	75.4%	7.9%
MSCI USA	1.5%	15.9%	5.7%	19.2%	1.5%	123.3%	11.4%
MSCI Europe	-0.2%	14.9%	1.6%	7.3%	-0.2%	37.2%	4.4%
MSCI Japan	4.6%	18.4%	7.1%	16.1%	4.6%	37.9%	4.4%
MSCI Asia Pac ex Japan	-4.8%	6.7%	-7.1%	-8.3%	-4.8%	13.4%	1.7%
MSCI GEM	-4.7%	6.6%	-6.8%	-5.4%	-4.7%	9.2%	1.2%

Source: BofA Global Quantitative Strategy, MSCI, Exshare

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Appendix H:

Interest Rate Sensitivity Performance

Table 96: Interest Rate Sensitivity back-testing results: Jan-89 to May-04

Interest Rate Sensitivity back-testing performance across different periods (1m, 3m, 12m, YTD)

Interest Rate Sensitivity	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since	Annualised
Short Duration	-3.5%	-9%	5%	46%	-2%	-2%	160%	6.4%
Quintile 2	-1.7%	-6%	7%	40%	0%	25%	153%	6.2%
Quintile 3	-0.3%	-2%	10%	40%	3%	27%	175%	6.8%
Quintile 4	0.1%	-1%	10%	35%	3%	35%	242%	8.3%
Long Duration	0.8%	0%	11%	32%	5%	41%	366%	10.5%
MSCI AC World (EW)	-0.9%	-4%	9%	39%	2%	28%	207%	7.6%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 97: Interest Rate Sensitivity Actual Performance Ending Jan-24

Interest Rate Sensitivity actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Interest Rate Sensitivity	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since	Annualised
Short Duration	-1.1%	12%	0%	3%	-1%	35%	124%	4.2%
Quintile 2	-1.4%	11%	-1%	1%	-1%	22%	141%	4.6%
Quintile 3	-2.8%	9%	-3%	-2%	-3%	13%	133%	4.4%
Quintile 4	-5.1%	5%	-9%	-8%	-5%	5%	142%	4.6%
Long Duration	-11.0%	0%	-17%	-20%	-11%	-16%	57%	2.3%
MSCI AC World (EW)	-4.3%	8%	-6%	-5%	-4%	12%	145%	4.7%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 98: Interest Rate Sensitivity Advance Decline Ending Jan-24

Interest Rate Sensitivity advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Interest Rate Sensitivity	Short Duration		Quintile 2		Quintile 3		Quintile 4		Long Duration	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	259	320	259	320	218	361	177	402	107	472
Last 3-Months	481	156	546	139	504	205	442	276	277	378
Last 6-Months	345	372	404	442	402	479	307	555	184	549
Last 12-Months	397	402	534	490	545	553	410	629	241	584
Year-To-Date	259	320	259	320	218	361	177	402	107	472
Last 5-Years	1316	1232	2323	2221	2689	2586	2277	2396	1080	1577
Since Inception Jun-04	1585	1535	2911	2800	3401	3207	2889	2914	1378	1845

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

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Appendix I:

Oil Price Sensitivity Performance

Table 99: Oil Price Sensitivity back-testing results: Jan-98 to Sep-08

Oil Price Sensitivity back-testing performance across different periods (1m, 3m, 12m, YTD)

Oil Price Sensitivity	1mth	3mth	6mth	12mth	YTD	Last 5yr since Inception	Annualised
Positive Oil Sensitivity	-28.9%	-41%	-36%	-50%	-50%	54%	164%
Negative Oil Sensitivity	-19.4%	-26%	-39%	-53%	-54%	51%	131%
MSCI AC World	-15.2%	-20%	-24%	-33%	-31%	58%	95%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 100: Oil Price Sensitivity Actual Performance Ending Jan-24

Oil Price Sensitivity actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Oil Price Sensitivity	1mth	3mth	6mth	12mth	YTD	Last 5yr since Inception	Annualised
Positive Oil Sensitivity	-6.3%	-1%	-12%	-21%	-6%	-8%	17%
Negative Oil Sensitivity	-4.5%	6%	-4%	-8%	-4%	-25%	25%
MSCI AC World	-4.3%	8%	-6%	-5%	-4%	12%	149%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 101: Oil Price Sensitivity Advance Decline Ending Jan-24

Oil Price Sensitivity advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Oil Price Sensitivity	Positive Oil Sensitivity		Negative Oil Sensitivity	
	Advance	Decline	Advance	Decline
Last Month	3	12	2	13
Last 3-Months	8	11	11	11
Last 6-Months	9	14	8	22
Last 12-Months	9	18	14	29
Year-To-Date	3	12	2	13
Since Inception Oct-08	82	87	84	138

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

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Appendix J: Optimism Performance

Table 102: Optimism back-testing results: Jan-94 to Feb-07

Optimism back-testing performance across different periods (1m, 3m, 12m, YTD)

Optimism	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Increasing Optimism	1.5%	8%	23%	24%	4%	193%	382%	13.8%
Quintile 2	1.0%	6%	16%	17%	3%	144%	356%	13.3%
Quintile 3	0.4%	5%	14%	17%	2%	127%	272%	11.4%
Quintile 4	0.7%	5%	15%	15%	2%	124%	245%	10.7%
Decreasing Optimism	1.2%	5%	15%	15%	2%	127%	60%	3.9%
MSCI AC World Index	1.1%	6%	17%	18%	3%	145%	163%	8.3%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg. 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. 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 103: Optimism Actual Performance Ending Jan-24

Optimism actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Optimism	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Increasing Optimism	-3.9%	8%	-6%	-5%	-4%	17%	44%	2.2%
Quintile 2	-3.9%	6%	-7%	-5%	-4%	16%	34%	1.8%
Quintile 3	-4.1%	7%	-5%	-5%	-4%	19%	57%	2.7%
Quintile 4	-4.5%	8%	-6%	-5%	-5%	14%	51%	2.5%
Decreasing Optimism	-4.7%	8%	-6%	-5%	-5%	-4%	-3%	-0.2%
MSCI AC World Index	-4.3%	8%	-6%	-5%	-4%	12%	40%	2.0%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg. Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 104: Optimism Advance Decline Ending Jan-24

Optimism advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Optimism	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5	
	Advance	Decline								
Last Month	206	377	216	364	204	341	198	362	177	375
Last 3-Months	611	300	681	429	707	414	676	405	560	304
Last 6-Months	576	814	790	1125	853	1170	809	1069	535	811
Last 12-Months	1016	1310	1727	2025	1557	1894	1585	1863	1007	1252
Year-To-Date	206	377	216	364	204	341	198	362	177	375
Since Inception Mar-07	6894	6695	12153	11348	11882	11596	11198	10699	6623	6684

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

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Appendix K: Speculation Performance

Table 105: Speculation back-testing results: Jan-90 to Sep-09

Speculation back-testing performance across different periods (1m, 3m, 12m, YTD)

Beta	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
High Beta 60m	8.7%	34%	105%	14%	92%	58%	695%	10.5%
Quintile 2	7.8%	25%	74%	12%	62%	43%	454%	8.6%
Quintile 3	5.6%	19%	59%	9%	46%	35%	370%	7.7%
Quintile 4	4.3%	14%	40%	8%	31%	30%	353%	7.5%
Low Beta 60m	1.8%	8%	23%	3%	11%	26%	162%	4.7%
MSCI AC World Index	5.6%	20%	58%	11%	47%	43%	357%	7.6%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 106: Speculation Actual Performance Ending Jan-24

Speculation actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Beta	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
High Beta 60m	-4.4%	17%	-3%	1%	-4%	44%	51%	2.9%
Quintile 2	-3.1%	13%	-2%	0%	-3%	23%	72%	3.9%
Quintile 3	-4.3%	6%	-6%	-6%	-4%	6%	70%	3.8%
Quintile 4	-4.5%	3%	-9%	-8%	-4%	5%	85%	4.4%
Low Beta 60m	-5.5%	-1%	-11%	-13%	-6%	-17%	58%	3.2%
MSCI AC World Index	-4.3%	8%	-6%	-5%	-4%	12%	72%	3.9%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 107: Speculation Advance Decline Ending Jan-24

Speculation advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Speculation	High Beta 60m		Quintile 2		Quintile 3		Quintile 4		Low Beta 60m	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	177	402	215	365	208	372	215	365	206	374
Last 3-Months	507	152	542	181	473	285	428	335	379	297
Last 6-Months	316	405	406	444	389	539	342	591	264	496
Last 12-Months	360	449	519	508	514	636	468	677	313	552
Year-To-Date	177	402	215	365	208	372	215	365	206	374
Since Inception Oct-09	1748	1749	3458	3152	3809	3679	3307	3274	1628	1897

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

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Appendix L: Cycle Sensitives Performance

Table 108: Cycle Sensitives back-testing results: Jan-93 to Aug-05

Cycle Sensitives back-testing performance across different periods (1m, 3m, 12m, YTD)

Cycle Sensitives	1mth	3mth	6mth	12mth	YTD	Last 5yr Since Inception	Annualised
Global Cycle Sensitives	5.0%	12%	5%	28%	9%	-7%	83%
MSCI AC World index	0.6%	5%	2%	17%	3%	-11%	136%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 109: Cycle Sensitives Actual Performance Ending Jan-24

Cycle Sensitives actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Cycle Sensitives	1mth	3mth	6mth	12mth	YTD	Last 5yr Since Inception	Annualised
Global Cycle Sensitives	-7.8%	14%	-9%	-8%	-8%	8%	93%
MSCI AC World index	0.5%	15%	3%	13%	1%	49%	143%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 110: Cycle Sensitives Advance Decline Ending Jan-24

Cycle Sensitives advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Global	Cycle Sensitives	
	Advance	Decline
Last Month	7	23
Last 3-Months	31	15
Last 6-Months	25	29
Last 12-Months	33	41
Year-To-Date	7	23
Last 5-Years	180	206
Since Inception Sep-05	255	269

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

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Appendix M: Global Quantessential Boosters & Bunkers Performance

Table 111: Global Quantessential Boosters & Bunkers back-testing results: Jan-89 to Feb-12

Quantessential Boosters & Bunkers back-testing performance across different periods (1m, 3m, 12m, YTD)

Global	1mth	3mth	6mth	12mth	YTD	Last 5yr since Inception	Annualised
Quantessential Boosters	7.2%	12%	6%	-13%	16%	-25%	535%
Quantessential Bunkers	3.1%	9%	10%	2%	8%	1%	502%
MSCI World	4.8%	10%	7%	-4%	11%	-10%	174%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 112: Global Quantessential Boosters & Bunkers Actual Performance Ending Jan-24

Quantessential Boosters & Bunkers actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Global	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Quantessential Boosters	-1.5%	22%	-1%	3%	-1%	77%	4.9%
Quantessential Bunkers	0.7%	13%	6%	12%	1%	107%	6.3%
MSCI World	0.5%	15%	3%	13%	1%	120%	6.8%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 113: Global Quantessential Boosters & Bunkers Advance Decline Ending Jan-24

Quantessential Boosters & Bunkers advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Global	Boosters		Bunkers	
	Advance	Decline	Advance	Decline
Last Month	27	23	34	16
Last 3-Months	61	20	54	14
Last 6-Months	56	71	62	37
Last 12-Months	108	114	94	72
Year-To-Date	27	23	34	16
Since Inception Mar-12	663	700	589	474

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

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Appendix N: Steady Compounders Performance

Table 114: Steady Compounders back-testing results: Jan-98 to May-16

Steady Compounders back-testing performance across different periods (1m, 3m, 12m, YTD)

Steady Compounders	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
Global	1.5%	8.7%	1.8%	0.5%	2.6%	76.1%	505.2%	10.3%
USA	2.2%	7.1%	-0.6%	3.3%	2.3%	114.5%	592.3%	11.1%
Europe	1.1%	8.3%	2.5%	4.3%	2.6%	69.0%	536.0%	10.6%
Japan	1.2%	9.6%	4.4%	14.4%	2.6%	110.7%	67.9%	2.9%
Asia Pac ex-Japan	2.8%	8.5%	5.1%	-0.9%	0.4%	63.9%	1545.3%	16.4%
Emerging Markets	4.8%	13.0%	9.5%	-2.6%	2.0%	83.6%	257.6%	7.2%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg 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. 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 115: Steady Compounders Actual Performance Ending Jan-24

Steady Compounders actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Steady Compounders	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
Global	-0.3%	12.5%	4.7%	10.6%	-0.3%	111.1%	10.2%
USA	1.5%	14.1%	7.4%	17.0%	1.5%	188.7%	14.8%
Europe	1.7%	17.6%	13.9%	22.0%	1.7%	67.1%	6.9%
Japan	-2.1%	11.2%	0.5%	2.8%	-2.1%	13.2%	1.6%
Asia Pac ex-Japan	-3.3%	17.4%	8.6%	8.1%	-3.3%	68.4%	7.0%
Emerging Markets	-7.4%	-0.8%	-3.8%	-0.4%	-7.4%	88.5%	8.6%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 116: Steady Compounders Advance Decline Ending Jan-24

Steady Compounders advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Region	Global		USA		Europe		Japan		Asia Pac		Emerging Markets	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Last Month	51	38	51	28	7	6	5	5	2	7	2	11
Last 3-Months	87	23	78	20	20	3	10	2	10	2	11	7
Last 6-Months	78	61	77	41	23	9	10	7	10	8	9	11
Last 12-Months	164	141	114	76	40	15	19	13	17	19	18	17
Year-To-Date	51	38	51	28	7	6	5	5	2	7	2	11
Since Inception May-16	764	641	438	286	163	128	107	113	133	131	109	112

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

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Table 117: Steady Compounders Monthly Performance Last 12 months

Steady Compounders actual performance ending Jan-24 for last 12-months

Steady Compounders	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Global	-1.0%	1.0%	1.6%	-2.8%	4.9%	2.0%	-1.8%	-3.7%	-1.6%	8.0%	4.5%	-0.3%
USA	-1.4%	2.1%	1.0%	-2.0%	6.7%	2.5%	-0.7%	-3.7%	-1.5%	8.7%	3.4%	1.5%
Europe	0.5%	7.3%	1.8%	-5.3%	2.4%	0.5%	0.6%	-2.3%	-1.4%	11.2%	4.0%	1.7%
Japan	-4.2%	3.8%	1.9%	1.1%	-1.7%	1.7%	-0.4%	-5.9%	-3.6%	6.7%	6.5%	-2.1%
Asia Pac ex-Japan	-5.7%	-0.9%	7.8%	-2.4%	2.4%	-1.0%	-0.9%	-4.3%	-2.5%	8.4%	12.0%	-3.3%
Emerging Markets	-0.2%	0.5%	5.2%	-3.9%	2.3%	-0.1%	-0.7%	-0.4%	-1.8%	2.7%	4.3%	-7.4%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, bloom be Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 118: Steady Compounds Advance Decline Last 12 months

Steady Compounds advance decline ending Jan-24 for last 12-months

Region	Global		USA		Europe		Japan		Asia Pac		Emerging Markets	
	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline	Advance	Decline
Jan-24	51	38	51	28	7	6	5	5	2	7	2	11
Dec-23	56	28	43	25	14	3	8	1	9	0	13	1
Nov-23	71	8	57	6	12	0	4	2	6	1	10	3
Oct-23	22	49	22	37	5	3	1	4	3	7	4	7
Sep-23	11	58	10	48	2	5	1	3	1	5	5	4
Aug-23	26	41	27	29	2	4	3	2	1	4	4	4
Jul-23	19	11	39	24	5	3	5	0	3	3	6	2
Jun-23	50	17	56	9	7	1	4	3	2	3	3	3
May-23	22	54	17	42	0	8	7	1	2	2	5	2
Apr-23	40	33	33	28	10	2	5	5	4	1	5	2
Mar-23	53	32	45	23	15	3	9	2	4	4	5	4
Feb-23	32	61	23	46	8	8	2	7	3	11	3	6

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

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Table 119: Benchmark Performance during back-testing: Jan-98 to May-16

MSCI regional benchmarks back-testing performance across different periods (1m, 3m, 12m, YTD)

Benchmarks	1mth	3mth	6mth	12mth	YTD	Last 5yr	Since Inception	Annualised
MSCI AC World	-0.2%	8.3%	-1.1%	-7.4%	0.8%	15.7%	76.7%	3.1%
MSCI USA	1.6%	8.8%	0.5%	-1.2%	2.4%	55.1%	114.8%	4.2%
MSCI Europe	-1.4%	6.4%	-5.3%	-12.5%	-2.7%	-6.7%	40.2%	1.9%
MSCI Japan	-1.0%	7.6%	-3.8%	-9.8%	-4.0%	16.3%	26.4%	1.3%
MSCI Asia Pac ex-Japan	-1.9%	9.0%	-0.6%	-18.1%	-0.7%	-17.1%	117.6%	4.3%
MSCI Emerging Markets	-3.9%	9.1%	-0.8%	-19.6%	1.7%	-30.9%	95.8%	3.7%

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

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Table 120: Benchmark Performance Ending Jan-24

MSCI regional benchmarks actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Benchmarks	1mth	3mth	6mth	12mth	YTD	Since Inception	Annualised
MSCI AC World	0.5%	14.8%	3.4%	12.7%	0.5%	81.5%	8.1%
MSCI USA	1.5%	15.9%	5.7%	19.2%	1.5%	131.5%	11.6%
MSCI Europe	-0.2%	14.9%	1.6%	7.3%	-0.2%	36.2%	4.1%
MSCI Japan	4.6%	18.4%	7.1%	16.1%	4.6%	43.5%	4.8%
MSCI Asia Pac ex-Japan	-4.8%	6.7%	-7.1%	-8.3%	-4.8%	23.3%	2.8%
MSCI Emerging Markets	-4.7%	6.6%	-6.8%	-5.4%	-4.7%	20.8%	2.5%

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

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Table 121: Benchmark Performance Last 12 months

MSCI regional benchmarks actual performance ending Jan-24 for last 12-months

Benchmarks	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
MSCI AC World	-3.0%	2.8%	1.3%	-1.3%	5.6%	3.6%	-3.0%	-4.3%	-3.1%	9.1%	4.7%	0.5%
MSCI USA	-2.6%	3.4%	1.2%	0.5%	6.5%	3.3%	-1.9%	-4.8%	-2.4%	9.2%	4.6%	1.5%
MSCI Europe	-0.8%	2.0%	3.6%	-6.5%	4.6%	3.0%	-4.2%	-4.0%	-3.8%	9.7%	4.9%	-0.2%
MSCI Japan	-3.9%	2.9%	0.4%	1.8%	4.0%	3.0%	-2.4%	-2.8%	-4.5%	8.5%	4.3%	4.6%
MSCI Asia Pac ex-Japan	-6.9%	2.5%	-1.8%	-2.7%	2.6%	5.4%	-6.4%	-3.0%	-4.1%	7.3%	4.5%	-4.8%
MSCI Emerging Markets	-6.5%	2.7%	-1.3%	-1.9%	3.2%	5.8%	-6.4%	-2.8%	-3.9%	7.9%	3.7%	-4.7%

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

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Appendix O:

Global Quant Strategy Fifty Performance

Table 122: Global Quant Strategy Fifty Actual Performance Ending Jan-24

Quant Strategy Fifty actual performance ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Global Quant Fifty	Since Inception						
	1mth	3mth	6mth	12mth	YTD	Feb-13	Annualised
Global Quant 50	-4.6%	9.0%	-8.9%	-3.7%	-4.6%	66%	4.8%
MSCI AC World	0.5%	14.8%	3.4%	12.7%	0.5%	61%	4.4%

Source: BofA Global Quantitative Strategy, MSCI, IBES, Worldscope, Exshare, S&P, Bloomberg Note: No transaction costs are included in the return figures. The performance figures are updated on a monthly basis. Past performance is no guarantee of future results. A complete performance record is available on request.

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Table 123: Global Quant Strategy Fifty Advance Decline Ending Jan-24

Quant Strategy Fifty advance decline ending Jan-24 across different periods (1m, 3m, 12m, YTD)

Global Quant Fifty	Global Quant 50	
	Advance	Decline
Last Month	29	21
Last 3-Months	61	17
Last 6-Months	60	60
Last 12-Months	133	110
Year-To-Date	29	21
Since Inception Feb-13	1460	1210

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

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Appendix P: Global Quant Strategy Fifty Relegations

Table 124: Global Quant Strategy Fifty - Relegated Stocks

Stocks that were relegated this month from Global Quant Strategy Fifty screen

BBG Code	Name
RENT3 BZ	Localiza
GIB/A CN	CGI
KLAC US	KLA
LRCX US	Lam Research
CMCSA US	Comcast Corp
TECK/B CN	Teck Resources
AIZ US	Assurant Inc
FDX US	FedEx
JAZZ US	Jazz Pharma
CNQ CN	Canadian Natural
FANG US	Diamondback Energy
BN CN	Brookfield
DKS US	Dick's Sporting
JPM US	JPMorgan Chase
6146 JP	Disco Corp
AKRBP NO	Aker BP
2324 TT	Compal
3711 TT	ASE Tech
FMG AU	Fortescue

Source: BofA Global Quantitative Strategy

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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.



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