

Global Earnings Revision Ratio

Positive end to 2023

Global Earnings Revision Ratio ends 2023 on a positive

The Global Earnings Revision Ratio jumped in December from 0.66 to 0.82 to end 2023 with positive momentum. Also, the three-month Global Earnings Revision Ratio improved from 0.72 to 0.74 and will contribute a slight positive to the Global Wave in the next monthly update of our global cycle indicator. In the past, when the one-month Ratio was near current levels and improving, the MSCI AC World Index averaged 9.8% in the next 12 months. The signal for equities starts on a positive in 2024.

The Ratio improved on most regions

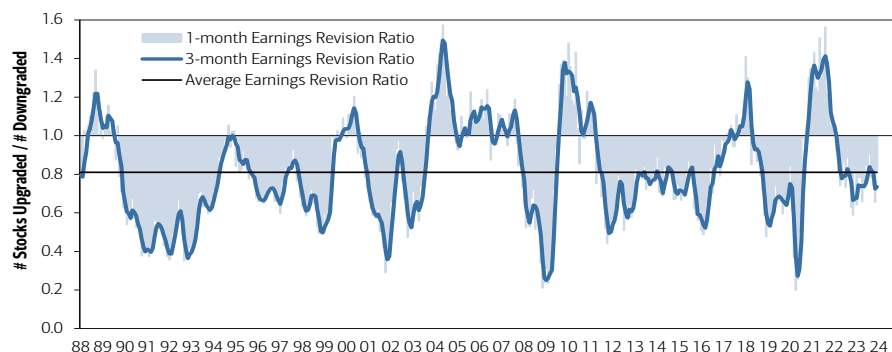
In December, the Earnings Revision Ratio improved in all [regions](#) except [Europe](#) where it fell from 0.73 to 0.70. The Ratio improved the most in [Asia Pac ex-Japan](#) (0.49 to 0.69) to reach the highest level in six months, and advanced in the [USA](#) (0.72 to 0.93) and [Emerging Markets](#) (0.55 to 0.74). The Ratio remain highest in [Japan](#) (1.05 to 1.25).

Broad sector improvement, highest for Insurance

The Ratio improved in 13 of 16 global [sectors](#) last month. The Ratio is highest for [Insurance](#) (1.16), and there were also more upgrades than downgrades for [Diversified Financials](#) (1.11) and [Banks](#) (1.03). Among sectors, the Ratio is lowest and fell the most for [Energy](#) (1.31 to 0.59) as the oil price moderated. The Ratio also remains relatively low for [Materials](#) (0.66) and [Tech Hardware](#) (0.67).

Chart 1: Global Earnings Revision Ratio

The Global Earnings Revision Ratio improved from 0.66 to 0.82 in December



Source: BofA Global Quantitative Strategy, MSCI, IBES

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Quant Strategy
Global

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Refer to important disclosures on page 35 to 37.

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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.

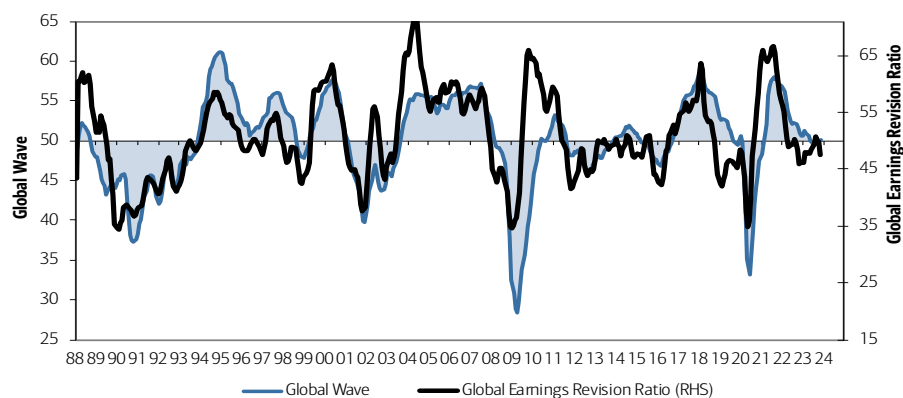
The screens in this report are not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decisions.

Global Earnings Expectations

The Earnings Revision Ratio measures the number of stocks for which the consensus EPS estimate has risen versus the number for which it has fallen.

Chart 2: Global Earnings Revision Ratio and the Global Wave

Strong relationship between the Global Earnings Revision Ratio and the Global Wave



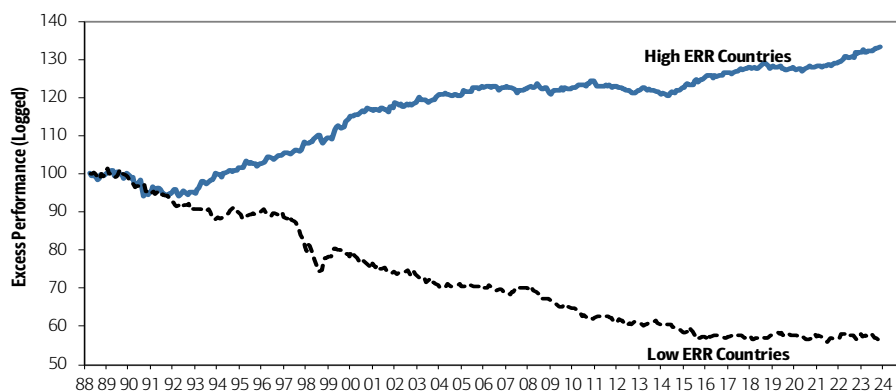
Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset, Bloomberg, OECD, IMF, ICE Bond Indices, National Statistics Database

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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Chart 3: Excess performance of Countries with Highest and Lowest EPS Revision Ratio

Countries with higher Earnings Revision Ratio outperformed the ones with lower Ratio



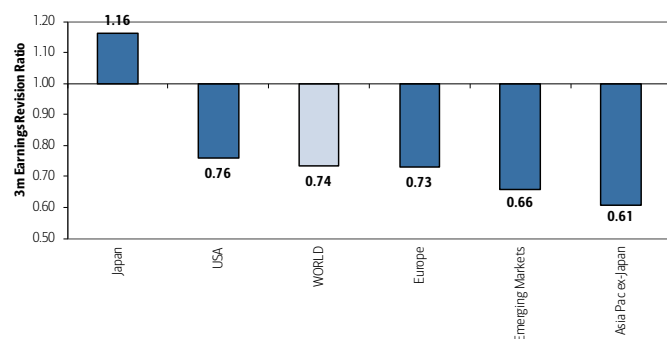
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Global Regions Earnings Revision Ratio

Chart 4: Earnings Revision Ratio by Region – Last 3 Months

Japan has the highest 3-month ERR among regions

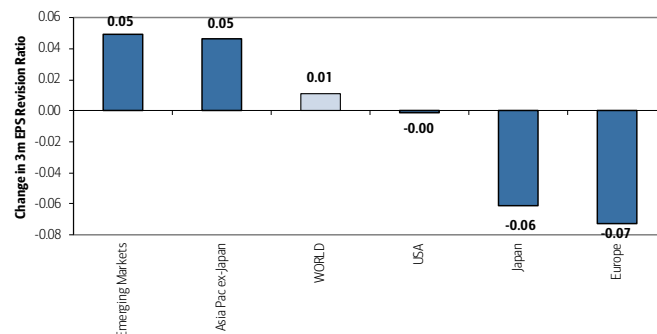


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 5: 1-month Change in three-month Earnings Revision Ratio

Emerging Markets 3-month ERR improved the most

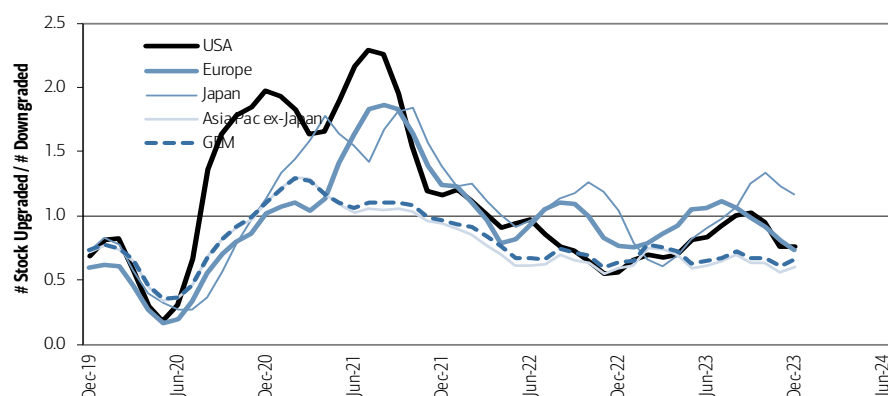


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 6: Trends in Earnings Expectations by Region

Japan has the highest 3-month ERR among regions



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Table 1: Global Regions Earnings Revision Ratio

World 3-month ERR advanced from 0.72 to 0.74

Regions	Oct-23	Nov-23	Dec-23	Last 3 Months
WORLD	0.74	0.66	0.82	0.74
USA	0.65	0.72	0.93	0.76
Europe	0.76	0.73	0.70	0.73
Japan	1.19	1.05	1.25	1.16
Asia Pac ex-Japan	0.66	0.49	0.69	0.61
Emerging Markets	0.71	0.55	0.74	0.66

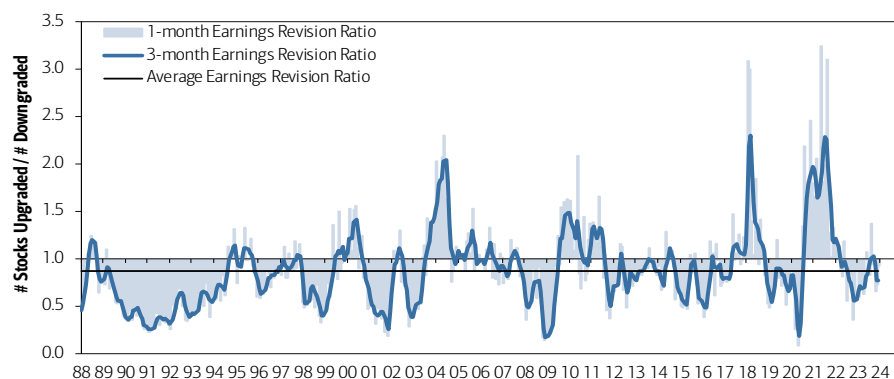
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Regional Earnings Revisions Trend

Chart 7: Trends in Earnings Expectations – USA

Earnings revisions improved for USA last month and remains above long-term average

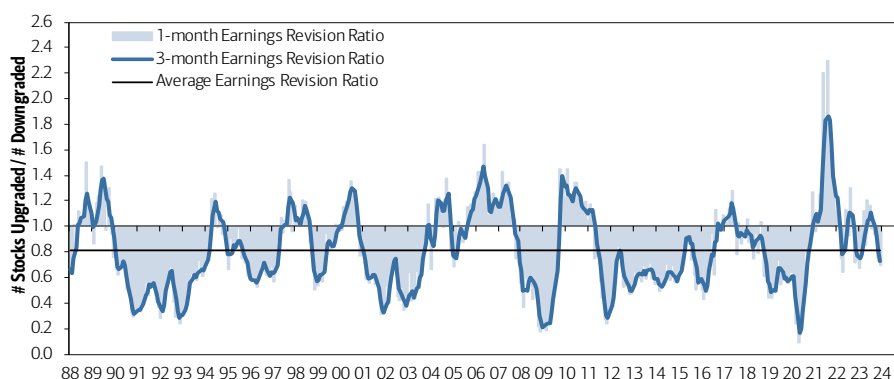


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 8: Trends in Earnings Expectations – Developed Europe

Earnings revisions for Europe fell last month and remains below long term trend

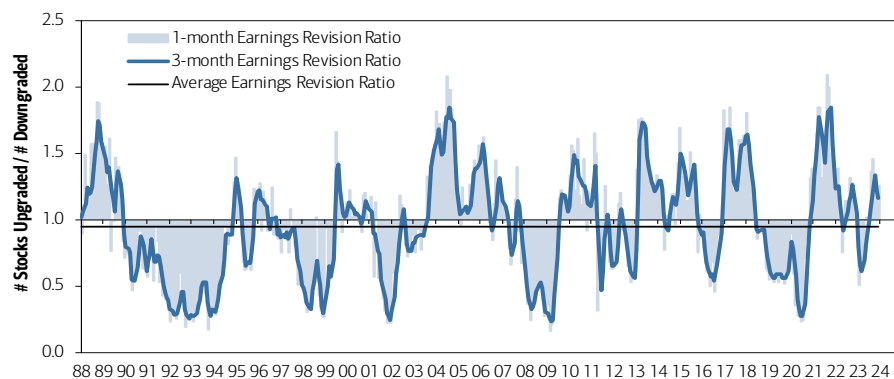


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 9: Trends in Earnings Expectations – Japan

The trend is weak but earnings revisions improved in Japan last month

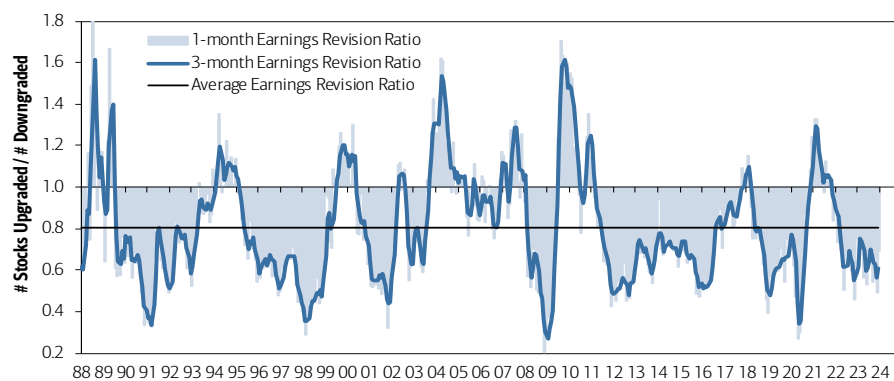


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 10: Trends in Earnings Expectations – Asia Pac ex-Japan

Earnings revisions improved in Asia Pac Ex-Japan last month but remains below long term average

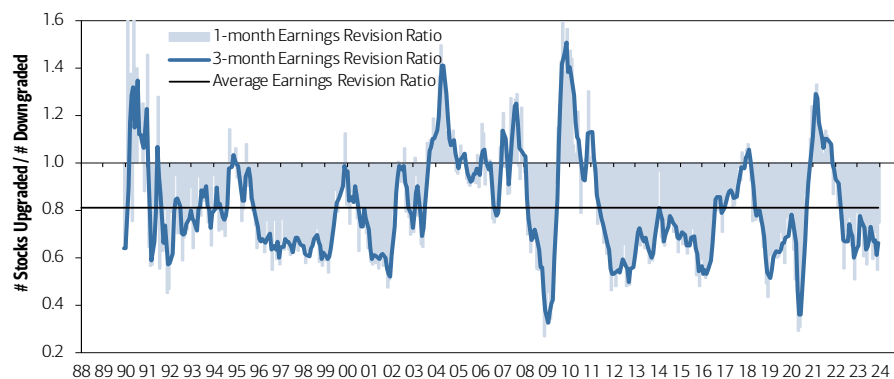


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 11: Trends in Earnings Expectations – Global Emerging Markets

Earnings revisions improved in Emerging Markets last month but remains below long term average

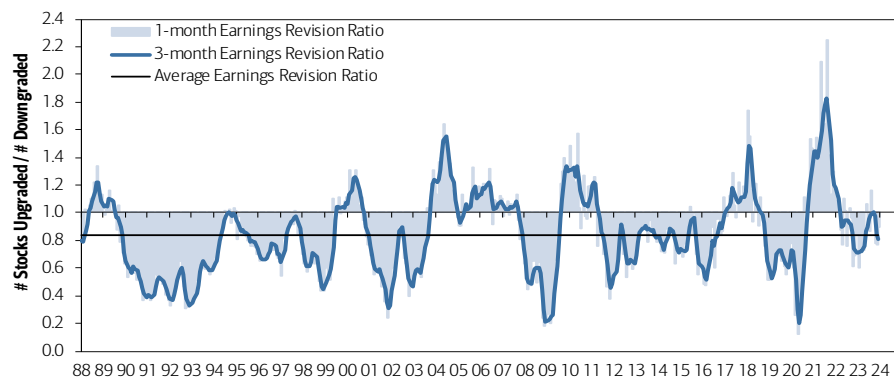


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 12: Trends in Earnings Expectations – Developed Markets

Earnings revisions improved for Developed Markets last month and remains above long-term average



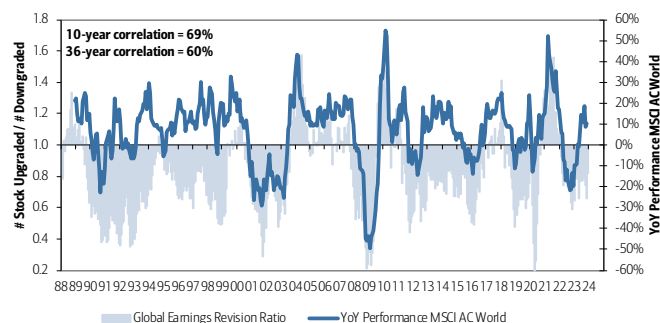
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Equity market performance vs Earnings Revision Ratio

Chart 13: Global: YoY Market Perf vs Earnings Revisions Ratio

YoY Global Equity Market Performance vs Global ERR has correlation of 0.60

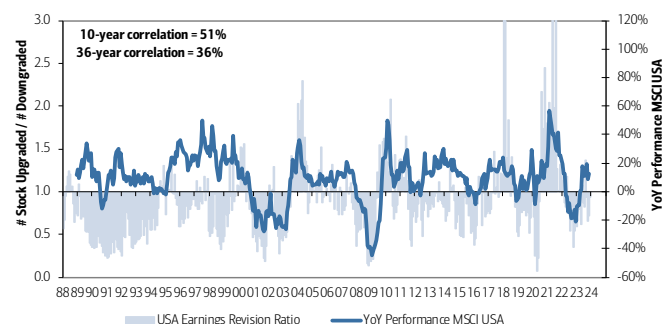


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 14: USA: YoY Market Perf vs Earnings Revisions Ratio

YoY USA Equity Market Performance vs USA ERR has correlation of 0.36

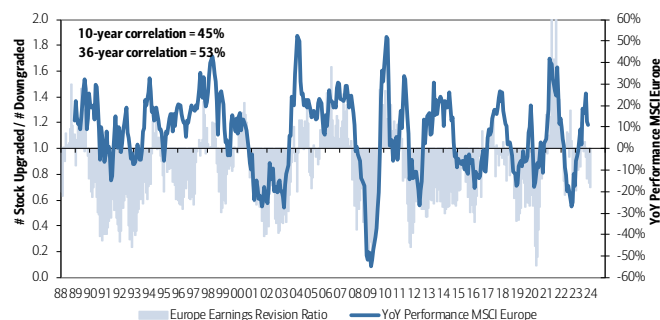


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 15: Europe: YoY Market Perf vs Earnings Revisions Ratio

YoY Europe Equity Market Perf vs Europe ERR has correlation of 0.53

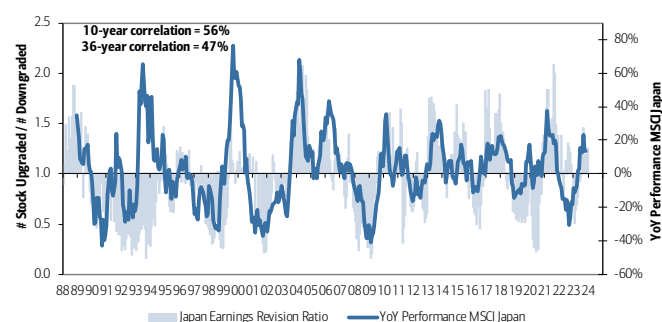


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 16: Japan: YoY Market Perf vs Earnings Revisions Ratio

YoY Japan Equity Market Performance vs Japan ERR has correlation of 0.47

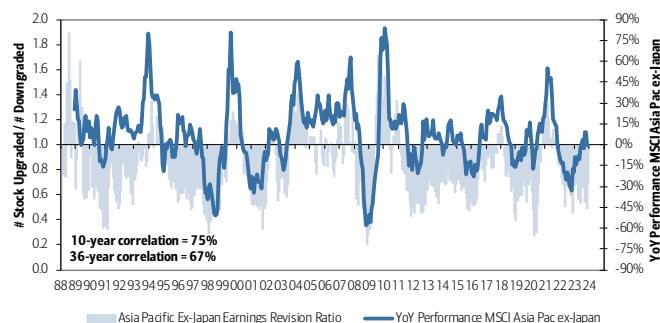


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 17: Asia Pac ex-Jap: YoY Market Perf vs Revisions Ratio

YoY APxJ Equity Market Performance vs APxJ ERR has correlation of 0.67

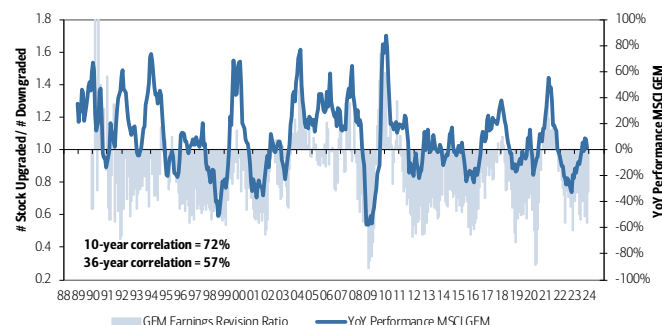


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 18: GEM: YoY Market Perf vs Earnings Revisions Ratio

YoY GEM Equity Market Performance vs GEM ERR has correlation of 0.57

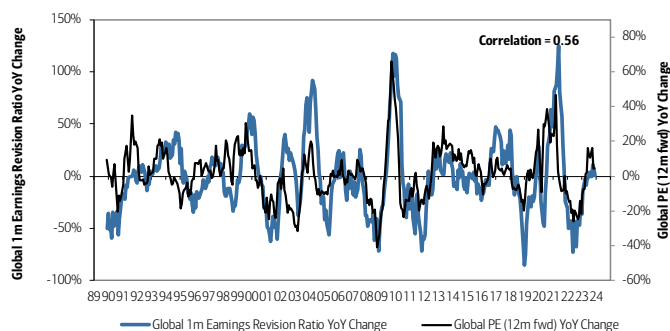


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Valuation vs Earnings Revision Ratio

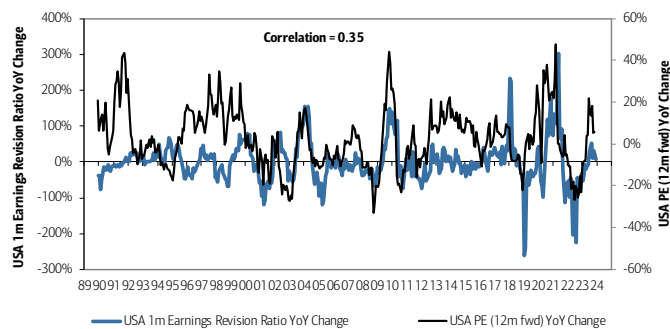
Chart 19: Global: YoY change in ERR vs YoY change in Forward PE
YoY change in Global ERR vs YoY change in Global PE has correlation of 0.56



Source : BofA Global Quantitative Strategy, MSCI, IBES

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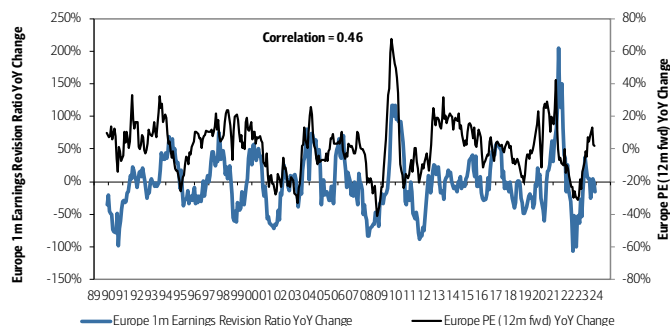
Chart 20: USA: YoY change in ERR vs YoY change in Forward PE
YoY change in USA ERR vs YoY change in USA PE has correlation of 0.35



Source : BofA Global Quantitative Strategy, MSCI, IBES

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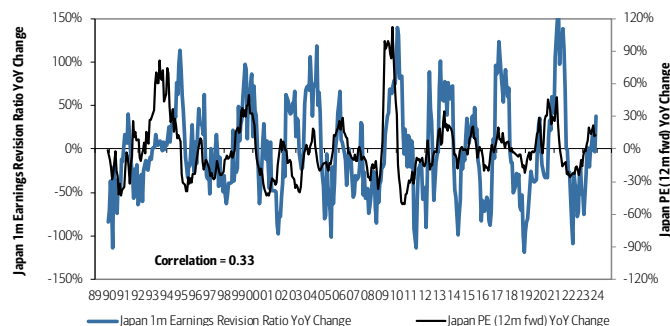
Chart 21: Europe: YoY change in ERR vs YoY change in Forward PE
YoY change in Europe ERR vs YoY change in Europe PE has correlation of 0.46



Source : BofA Global Quantitative Strategy, MSCI, IBES

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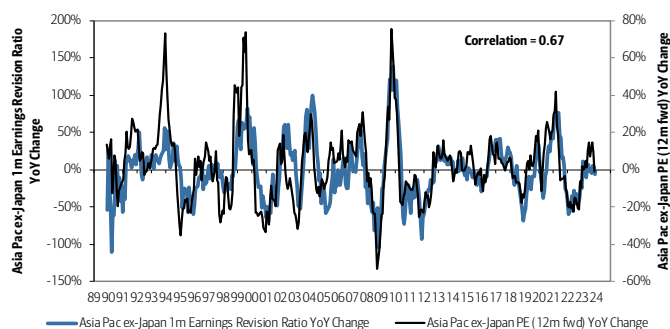
Chart 22: Japan: YoY change in ERR vs YoY change in Forward PE
YoY change in Japan ERR vs YoY change in Japan PE has correlation of 0.33



Source : BofA Global Quantitative Strategy, MSCI, IBES

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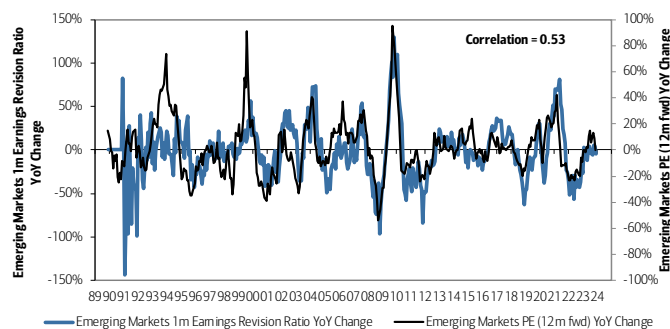
Chart 23: APxJ: YoY change in ERR vs YoY change in Forward PE
YoY change in APxJ ERR vs YoY change in Asia Pac ex-Japan PE has correlation of 0.67



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 24: GEM: YoY change in ERR vs YoY change in Forward PE
YoY change in GEM ERR vs YoY change in GEM PE has correlation of 0.53

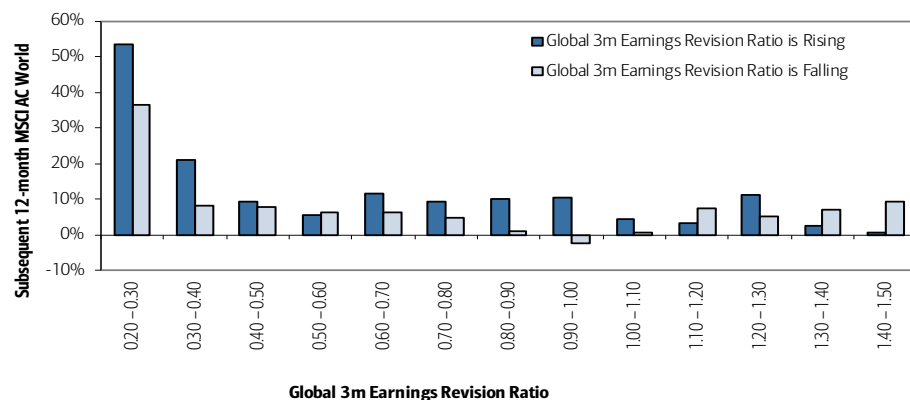


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 25: Global Earnings Revision Ratio ranges and Subs 12 months MSCI ACWI performance

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

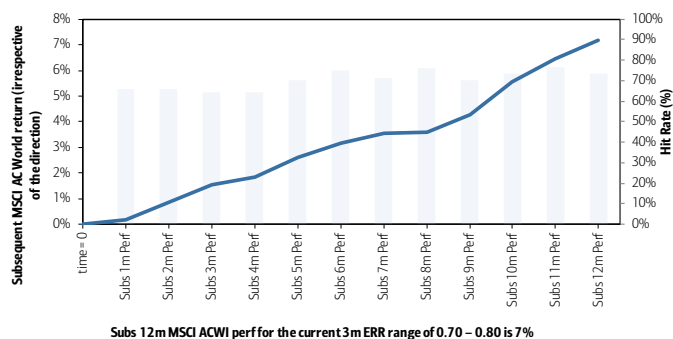


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 26: Subs 12m MSCI ACWI perf for the current 3m ERR range

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

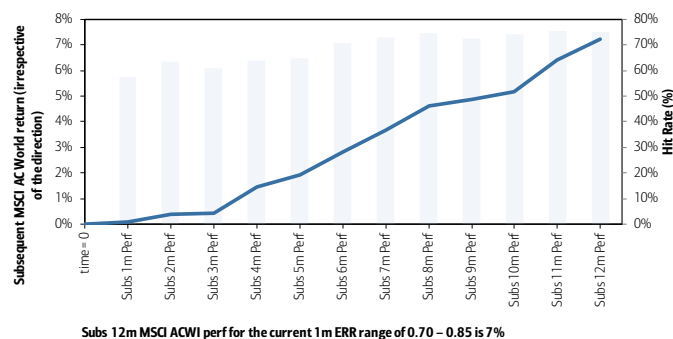


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 27: Subs 12m MSCI ACWI perf for the current 1m ERR range

Subs 12m MSCI ACWI perf for the current 1m ERR range of 0.70 – 0.85 is 7%

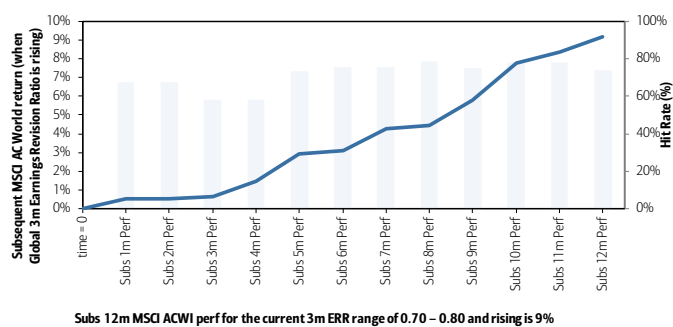


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 28: Subs 12m ACWI perf for current 3m ERR range and rising

Subs 12m MSCI ACWI perf for the current 3m ERR range of 0.70 – 0.80 and rising is 9%

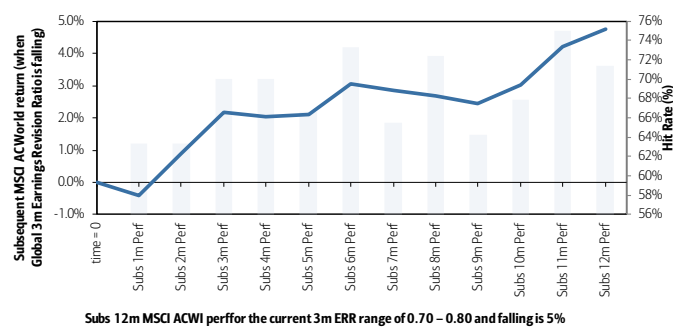


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 29: Subs 12m ACWI perf for current 3m ERR range and falling

Subs 12m MSCI ACWI perf for the current 3m ERR range of 0.70 – 0.80 and falling is 5%

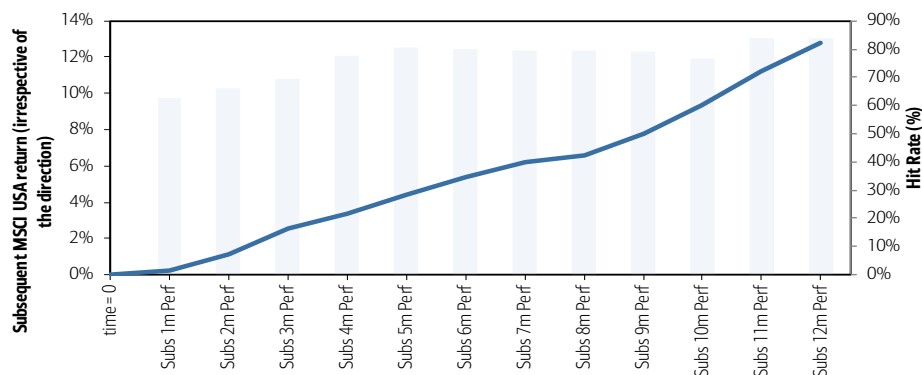


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 30: Subs 12m MSCI USA perf for the current 3m ERR range

Subs 12m MSCI USA perf for the current 3m ERR range of 0.70 – 0.80 is 13%

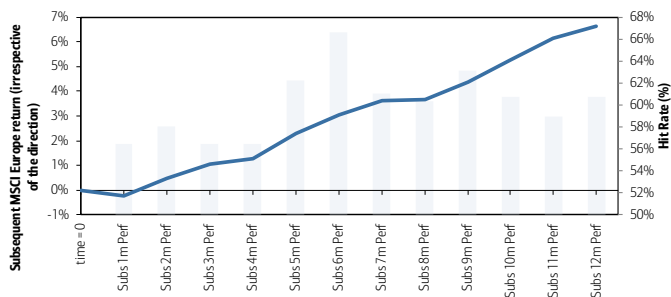
**Subs 12m MSCI USA perf for the current 3m ERR range of 0.70 – 0.80 is 13%**

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 31: Subs 12m MSCI Europe perf for the current 3m ERR range

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

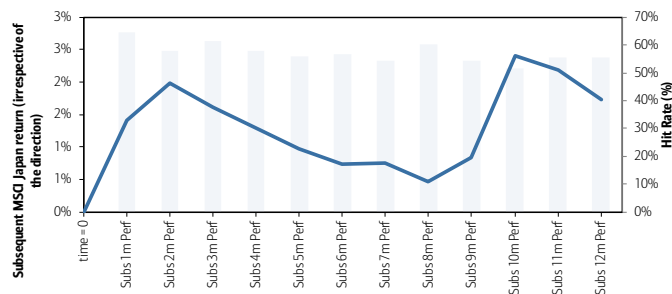
**Subs 12m MSCI Europe perf for the current 3m ERR range of 0.70 – 0.80 is 7%**

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 32: Subs 12m MSCI Japan perf for the current 3m ERR range

Subs 12m MSCI Japan perf for the current 3m ERR range of 0.70 – 0.80 is 2%

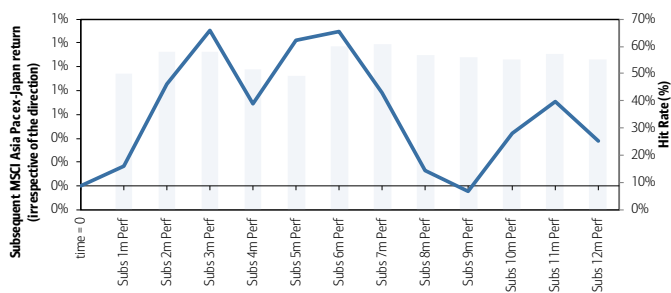
**Subs 12m MSCI Japan perf for the current 3m ERR range of 0.70 – 0.80 is 2%**

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 33: Subs 12m MSCI APxj perf for the current 3m ERR range

Subs 12m MSCI APxj perf for the current 3m ERR range of 0.70 – 0.80 is 0%

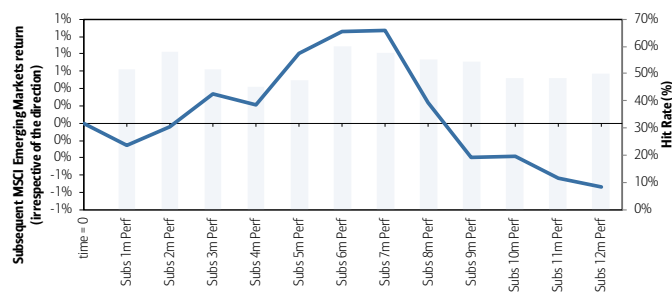
**Subs 12m MSCI APxj perf for the current 3m ERR range of 0.70 – 0.80 is 0%**

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 34: Subs 12m MSCI GEM perf for the current 3m ERR range

Subs 12m MSCI GEM perf for the current 3m ERR range of 0.70 – 0.80 is -1%

**Subs 12m MSCI GEM perf for the current 3m ERR range of 0.70 – 0.80 is -1%**

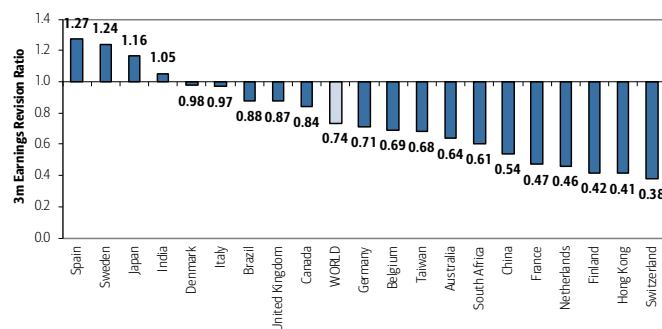
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Global Countries Earnings Revision Ratio

Chart 35: Three month Earnings Revision Ratio by Global Countries

The Ratio is currently highest in Spain and lowest in Switzerland

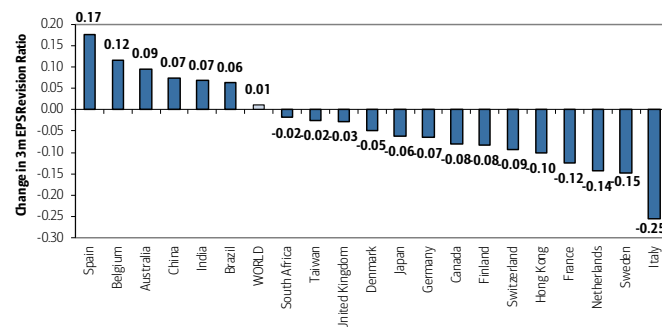


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 36: 1-month change in three-month Earnings Revision Ratio by Global Countries

Spain 3-month ERR improved the most



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Table 2: Global Country Earnings Revision Ratios

World 3-month ERR advanced from 0.72 to 0.74

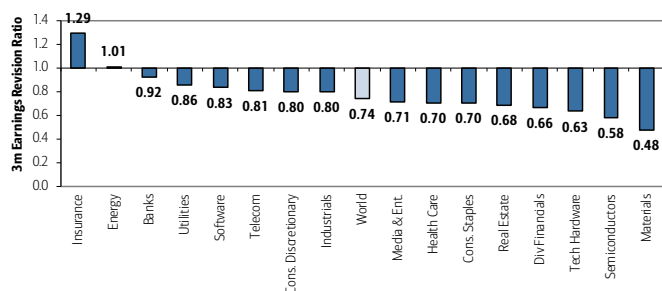
Country	Oct-23	Nov-23	Dec-23	Last 3 Months
Japan	1.19	1.05	1.25	1.16
United Kingdom	0.93	0.88	0.82	0.87
China	0.65	0.38	0.63	0.54
Canada	0.86	0.67	1.05	0.84
France	0.57	0.43	0.42	0.47
Switzerland	0.38	0.34	0.41	0.38
Germany	0.81	0.70	0.64	0.71
Australia	0.56	0.64	0.72	0.64
India	0.91	1.02	1.26	1.05
Taiwan	0.67	0.69	0.69	0.68
Netherlands	0.38	0.46	0.54	0.46
Sweden	1.35	1.25	1.13	1.24
Hong Kong	0.53	0.42	0.31	0.41
Denmark	1.23	1.08	0.69	0.98
Spain	1.00	0.85	2.60	1.27
Italy	0.86	1.21	0.86	0.97
Brazil	1.00	0.77	0.88	0.88
South Africa	0.45	0.79	0.64	0.61
Belgium	0.50	0.86	0.64	0.69
Finland	0.47	0.32	0.50	0.42
WORLD	0.74	0.66	0.82	0.74

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Earnings Revision Ratio by Global Sectors

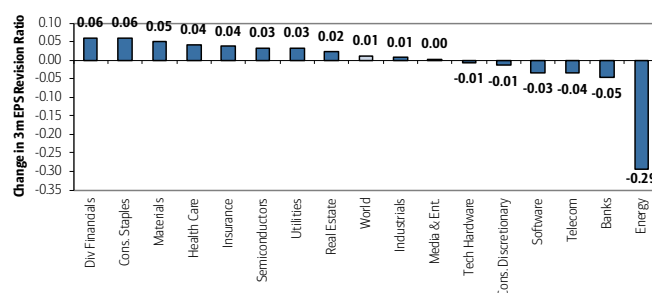
Chart 37: Three month Earnings Revision Ratio by Global Sector
ERR trend is strongest in Insurance among global sectors



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 38: 1-month change in the three-month Earnings Revision Ratio by global sector
Div Financials 3-month ERR improved the most among sectors



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Table 3: Global Sector Earnings Revision Ratios

Insurance, Energy and Banks have the highest 3-month ERR among sectors

Sector	Oct-23	Nov-23	Dec-23	Last 3 Months
Energy	1.29	1.31	0.59	1.01
Materials	0.46	0.34	0.66	0.48
Industrials	0.81	0.70	0.90	0.80
Cons. Discretionary	0.84	0.73	0.82	0.80
Cons. Staples	0.74	0.61	0.75	0.70
Health Care	0.73	0.58	0.81	0.70
Banks	0.80	0.94	1.03	0.92
Div Financials	0.45	0.57	1.11	0.66
Insurance	1.38	1.33	1.16	1.29
Software	0.77	0.81	0.93	0.83
Tech Hardware	0.69	0.54	0.67	0.63
Semiconductors	0.57	0.41	0.79	0.58
Telecom	0.86	0.81	0.76	0.81
Media & Ent.	0.83	0.57	0.76	0.71
Utilities	0.87	0.76	0.95	0.86
Real Estate	0.66	0.68	0.73	0.68
World	0.74	0.66	0.82	0.74

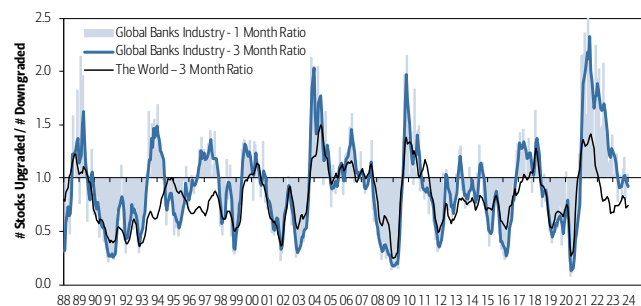
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Banks

Chart 39: Global Banks Sector vs The World

Earnings revisions improved for Banks last month and remains above long-term average

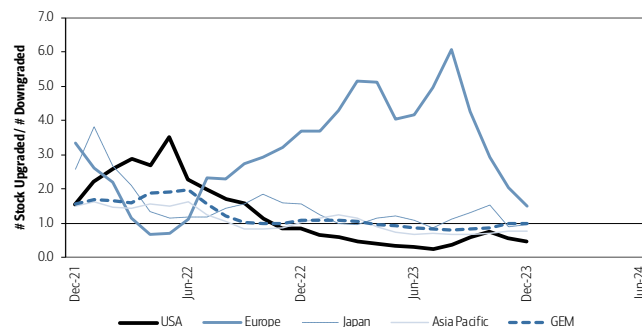


Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 40: Global Banks Sector by Region

Earnings revisions improved for Banks last month and remains above long-term average



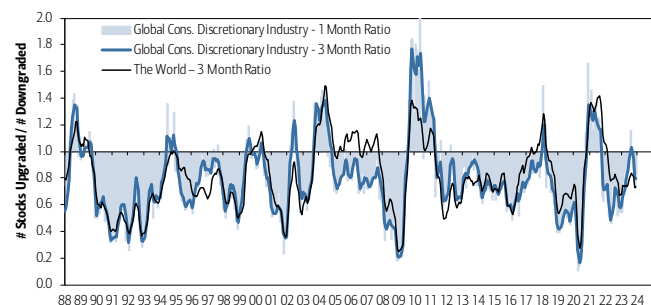
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Consumer Discretionary

Chart 41: Global Consumer Discretionary Sector vs The World

The trend is weak but earnings revisions improved in Cons. Discretionary last month

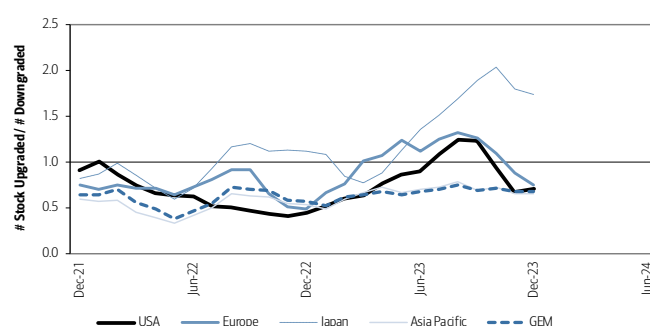


Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 42: Global Consumer Discretionary Sector by Region

The trend is weak but earnings revisions improved in Cons. Discretionary last month



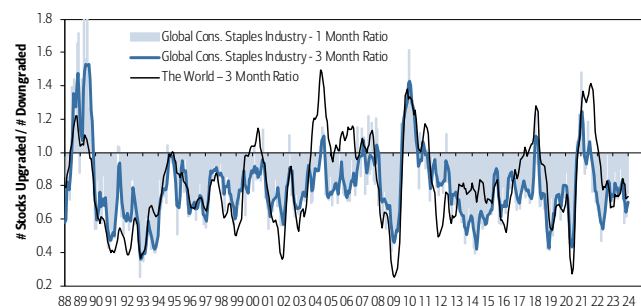
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Consumer Staples

Chart 43: Global Consumer Staples Sector vs The World

Earnings revisions improved in Cons. Staples last month but remains below long term average

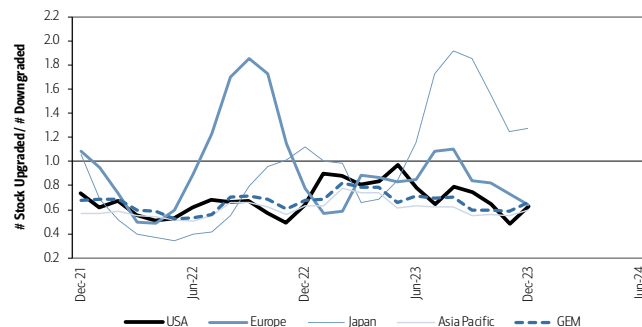


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 44: Global Consumer Staples Sector by Region

Earnings revisions improved in Cons. Staples last month but remains below long term average



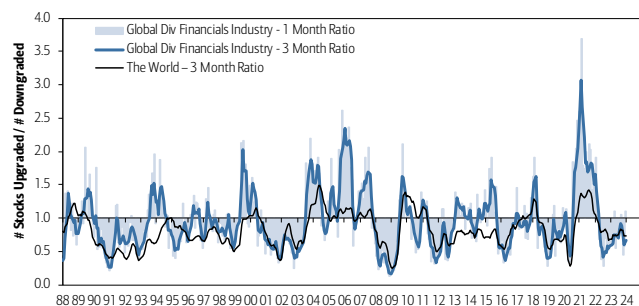
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Diversified Financials

Chart 45: Global Diversified Financials Sector vs The World

Earnings revisions improved for Div Financials last month and remains above long-term average

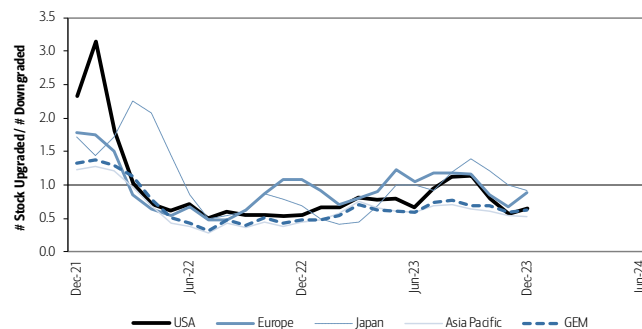


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 46: Global Diversified Financials Sector by Region

Earnings revisions improved for Div Financials last month and remains above long-term average



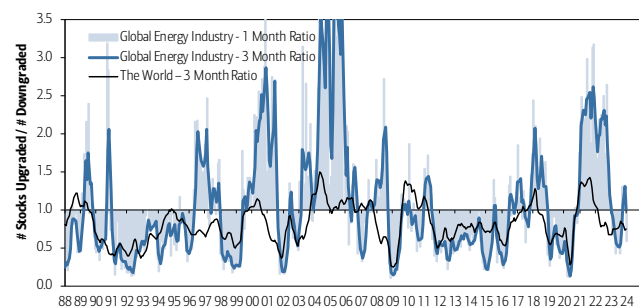
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Energy

Chart 47: Global Energy Sector vs The World

ERR fell in Energy last month and the trend moderated

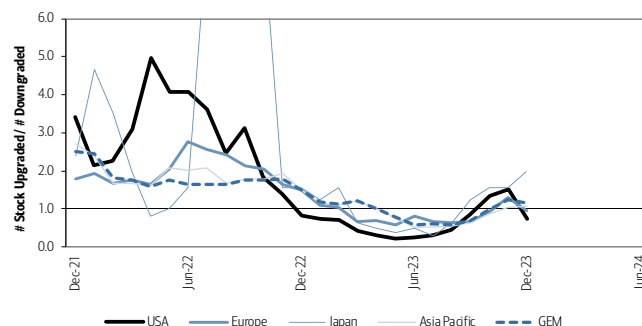


Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 48: Global Energy Sector by Region

ERR fell in Energy last month and the trend moderated



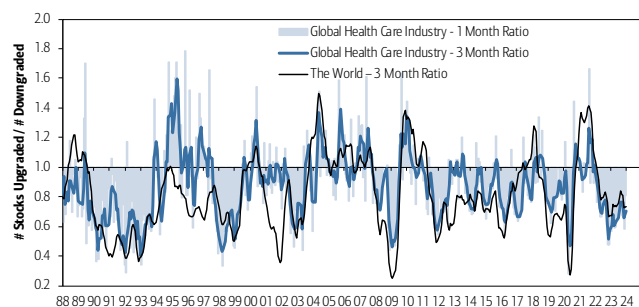
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Health Care

Chart 49: Global Health Care Sector vs The World

Earnings revisions improved in Health Care last month

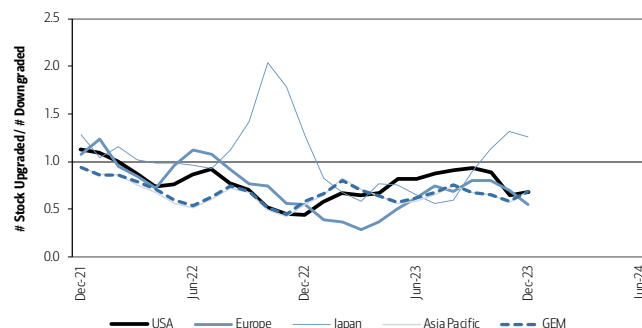


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 50: Global Health Care Sector by Region

Earnings revisions improved in Health Care last month



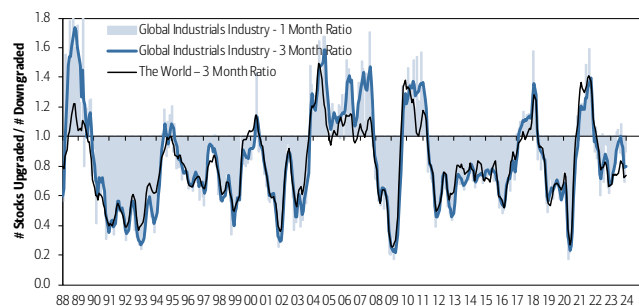
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Industrials

Chart 51: Global Industrials Sector vs The World

Earnings trend improved in Industrials in the last three months

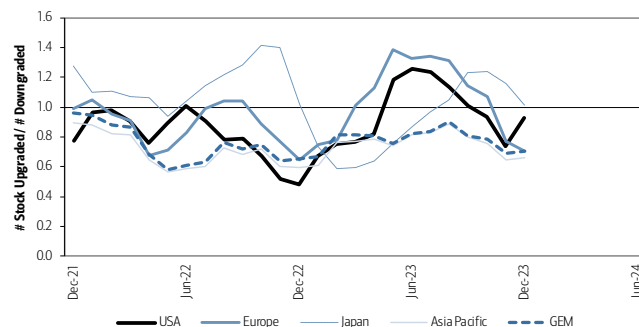


Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 52: Global Industrials Sector by Region

Earnings trend improved in Industrials in the last three months



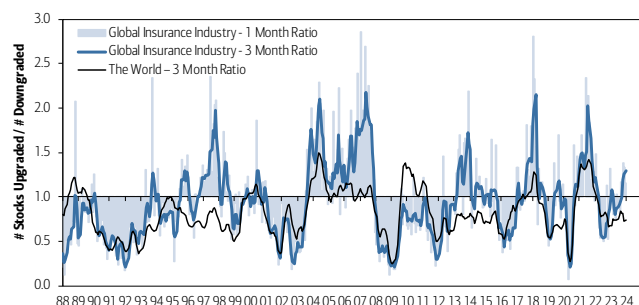
Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Insurance

Chart 53: Global Insurance Sector vs The World

Earnings revision moderated in Insurance last month but remains above average

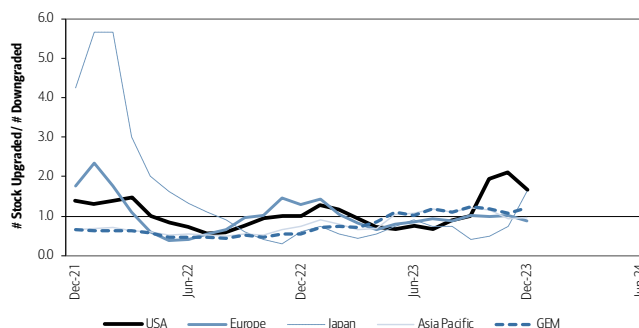


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 54: Global Insurance Sector by Region

Earnings revision moderated in Insurance last month but remains above average



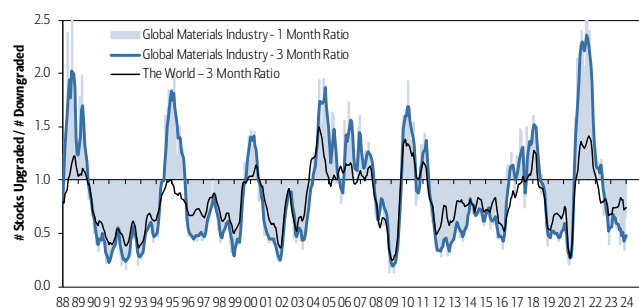
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Materials

Chart 55: Global Materials Sector vs The World

Earnings revisions improved in Materials last month but remains below long term average

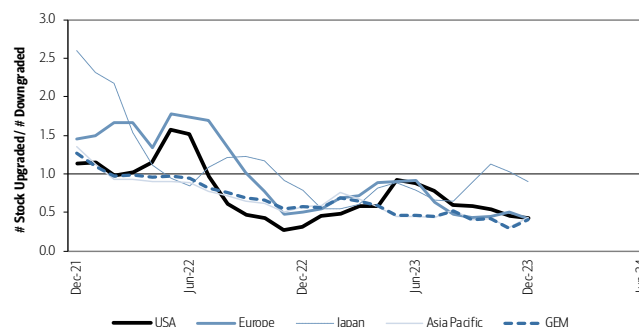


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 56: Global Materials Sector by Region

Earnings revisions improved in Materials last month but remains below long term average

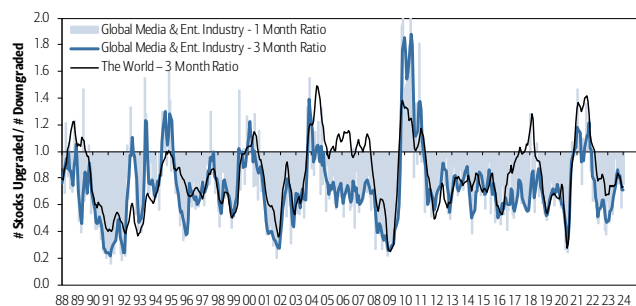


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Media & Entertainment

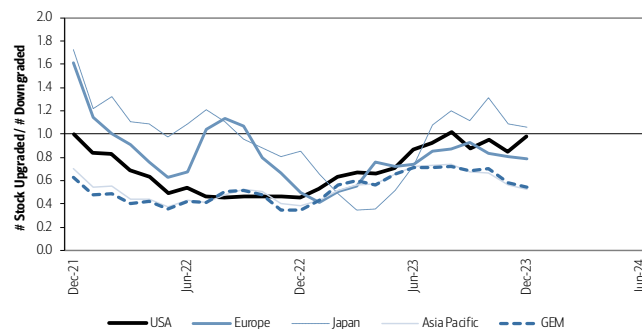
Chart 57: Global Media & Entertainment Sector vs The World
Earnings trend improved in Media & Ent. in the last three months



Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 58: Global Media & Entertainment Sector by Region
Earnings trend improved in Media & Ent. in the last three months

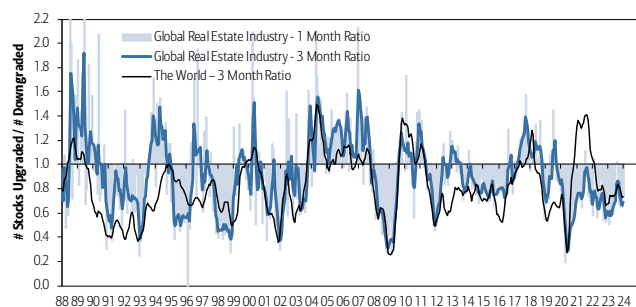


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Real Estate

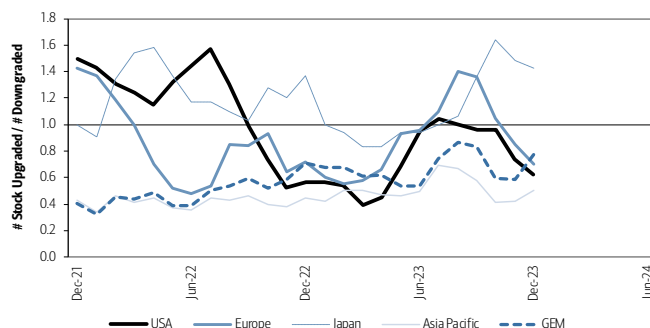
Chart 59: Global Real Estate Sector vs The World
Earnings revisions improved in Real Estate last month but remains below long term average



Source : BofA Global Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 60: Global Real Estate Sector by Region
Earnings revisions improved in Real Estate last month but remains below long term average

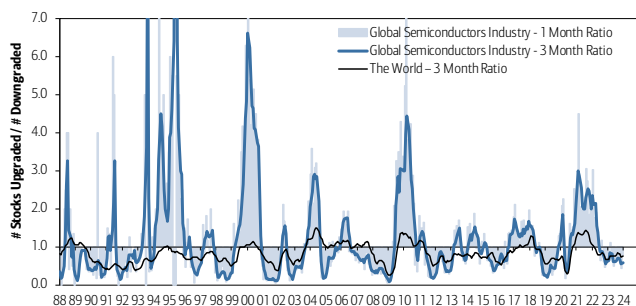


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Semiconductors

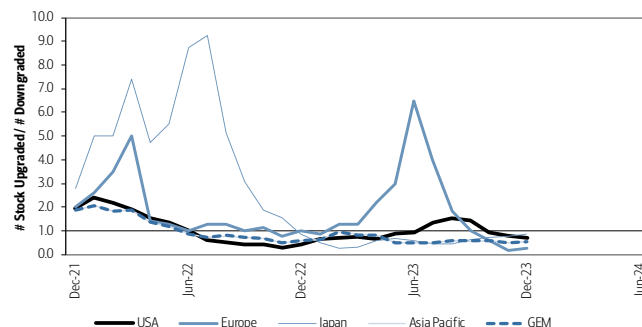
Chart 61: Global Semiconductors Sector vs The World
Earnings revisions improved in Semiconductors last month but remains below long term average



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 62: Global Semiconductors Sector by Region
Earnings revisions improved in Semiconductors last month but remains below long term average



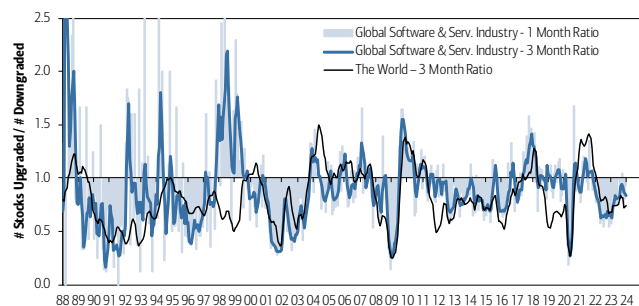
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Software

Chart 63: Global Software Sector vs The World

Earnings revisions improved in Software last month

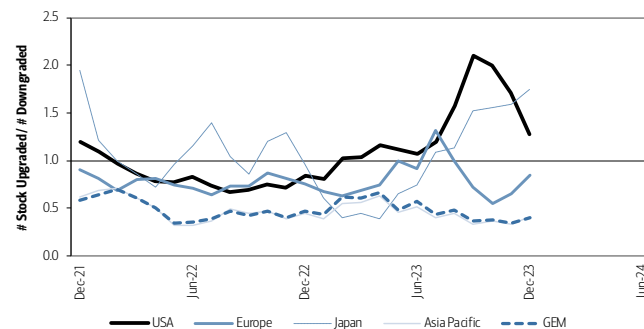


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 64: Global Software Sector by Region

Earnings revisions improved in Software last month



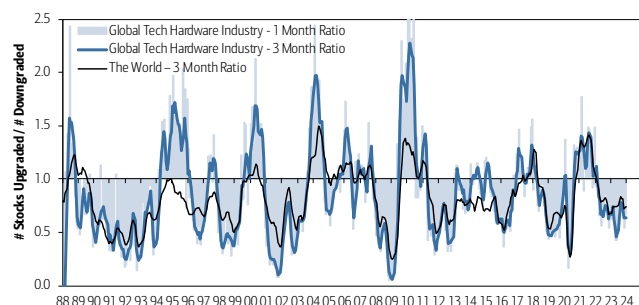
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Tech Hardware

Chart 65: Global Tech Hardware Sector vs The World

The trend is weak but earnings revisions improved in Tech Hardware last month

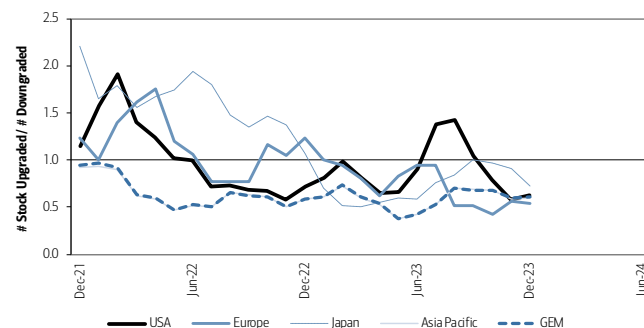


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 66: Global Tech Hardware Sector by Region

The trend is weak but earnings revisions improved in Tech Hardware last month



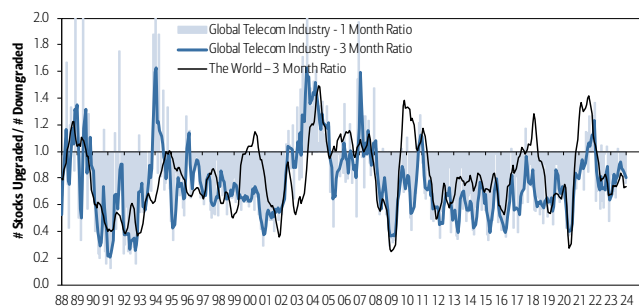
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Telecom

Chart 67: Global Telecom Sector vs The World

ERR fell in Telecom last month and the trend moderated

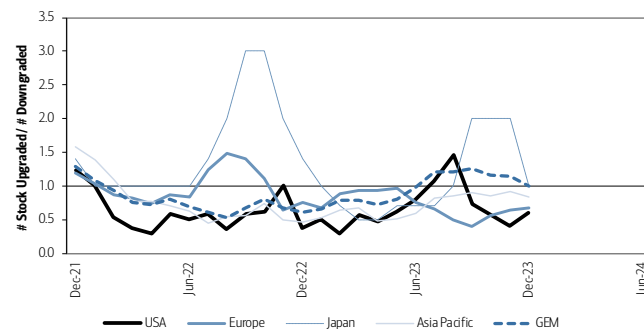


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 68: Global Telecom Sector by Region

ERR fell in Telecom last month and the trend moderated



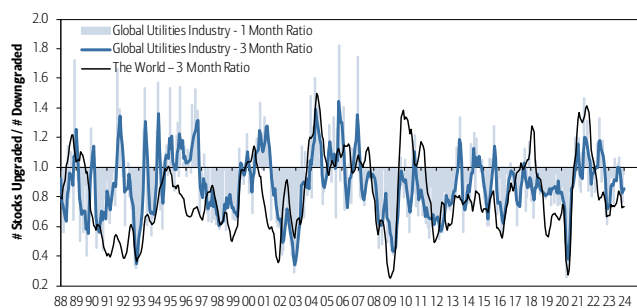
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Utilities

Chart 69: Global Utilities Sector vs The World

Earnings revisions improved for Utilities last month and remains above long-term average

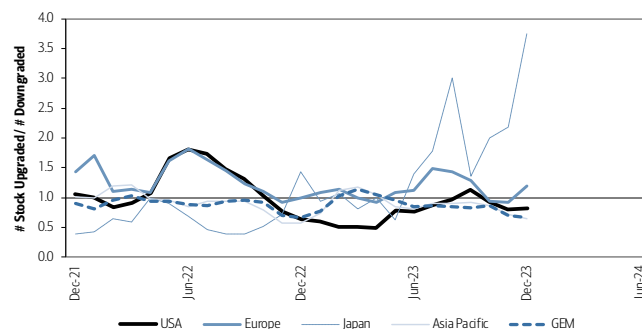


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 70: Global Utilities Sector by Region

Earnings revisions improved for Utilities last month and remains above long-term average



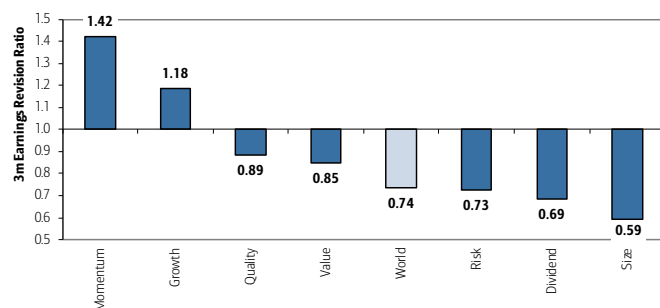
Source : BofA Global Quantitative Strategy, MSCI, IBES

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Earnings Revision Ratio: Quantessential Styles

Chart 71: 3-Month Earnings Revision Ratio by Global Styles

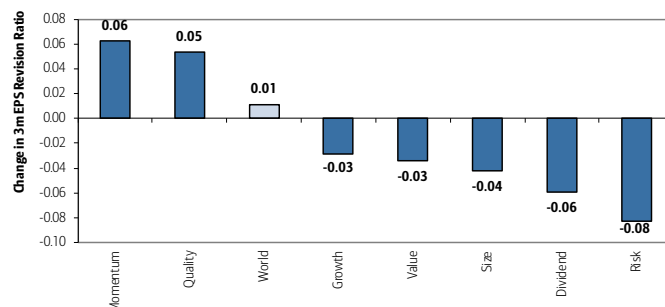
Among Styles, Momentum has the highest 3-month ERR



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare
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Chart 72: 1-month change in three-Month Earnings Revision Ratio by Global Styles

Momentum 3-month ERR improved the most



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare
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Table 4: Global Style Earnings Revision Ratio

Among Styles, Momentum has the highest 3-month ERR

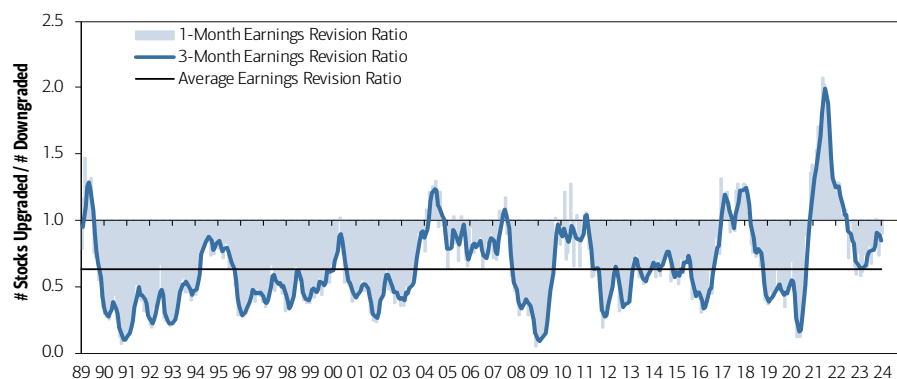
Style	Oct-23	Nov-23	Dec-23	Last 3 Months
Value	0.93	0.73	0.90	0.85
Growth	1.23	1.13	1.19	1.18
Quality	0.82	0.77	1.11	0.89
Risk	0.74	0.70	0.74	0.73
Momentum	1.29	1.42	1.56	1.42
Dividend	0.73	0.64	0.69	0.69
Size	0.55	0.56	0.67	0.59
World	0.74	0.66	0.82	0.74

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

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Chart 73: Quantessential Value: Earnings Revision Ratio

Earnings revisions improved in Value last month

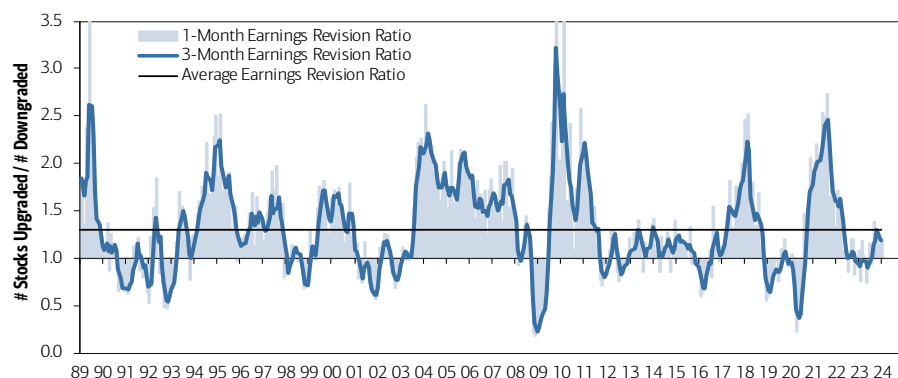


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 74: Quantessential Growth: Earnings Revision Ratio

Earnings revisions improved in Growth last month but remains below long term average

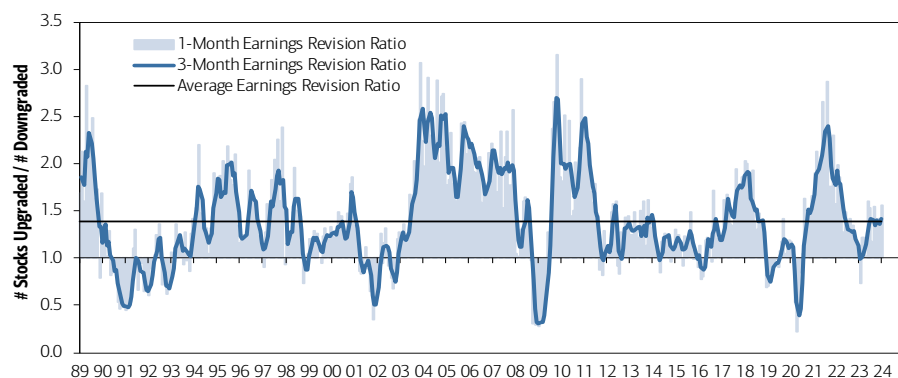


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 75: Quantessential Momentum: Earnings Revision Ratio

Earnings revisions improved for Momentum last month and remains above long-term average

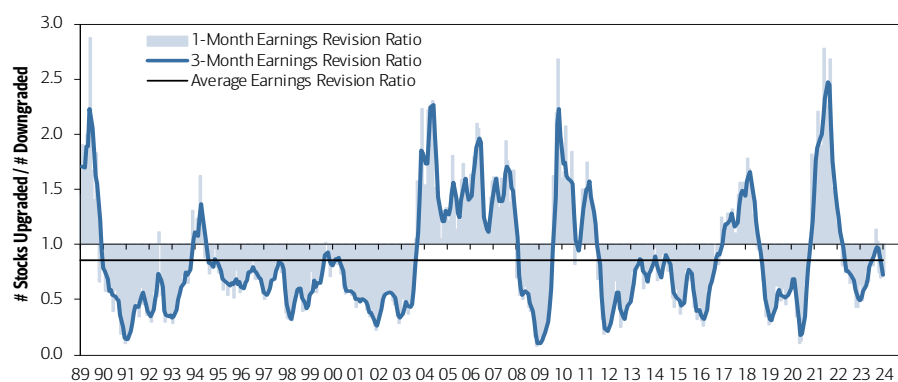


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 76: Quantessential Risk: Earnings Revision Ratio

Earnings revisions improved in Risk last month

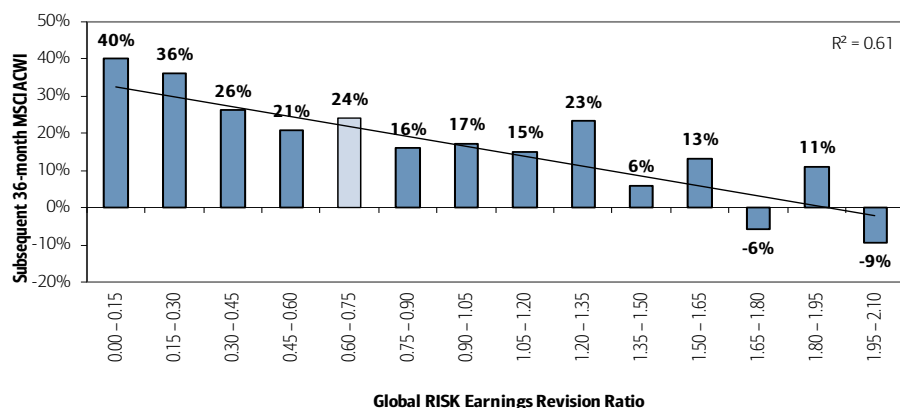


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 77: Risk Earnings Revision Ratio Levels and Subsequent 36m returns in ACWI

For the current Risk ERR Levels and Subsequent 36m perf of ACWI is 11%

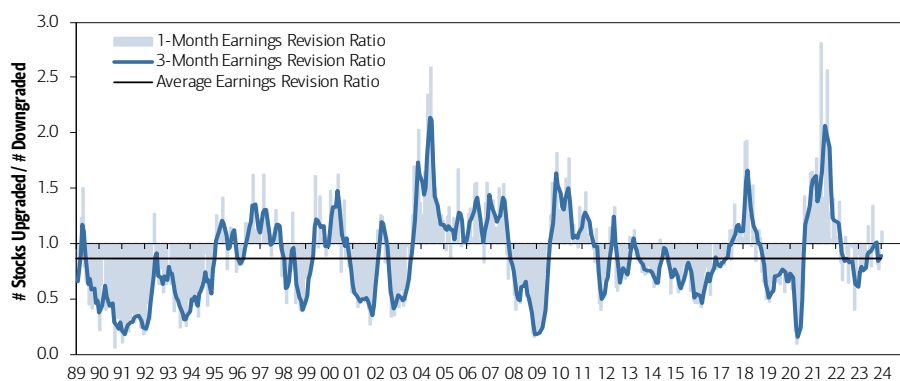


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 78: Quantessential Quality: Earnings Revision Ratio

Earnings revisions improved for Quality last month and remains above long-term average

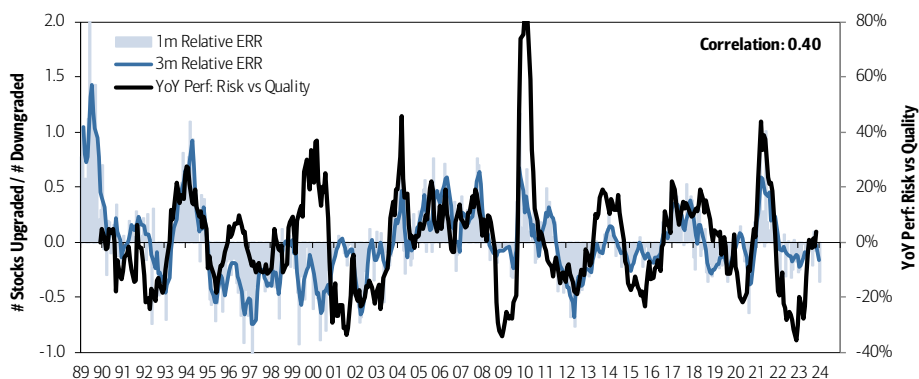


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 79: Risk vs Quality: Relative Earnings Revisions vs Relative Performance

Risk vs Quality - Relative Earnings Revisions vs. Performance has correlation of 0.40

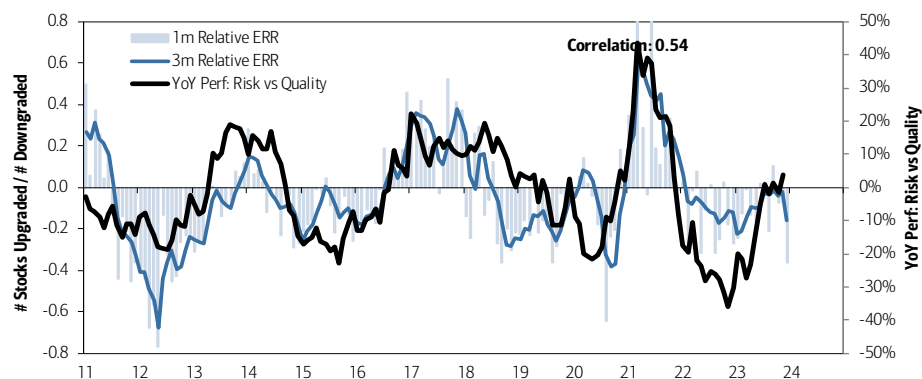


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 80: Risk vs Quality: Relative Earnings Revisions vs Relative Performance

Risk vs Quality (last 10 years) - Relative Earnings Revisions vs. Performance has correlation of 0.54

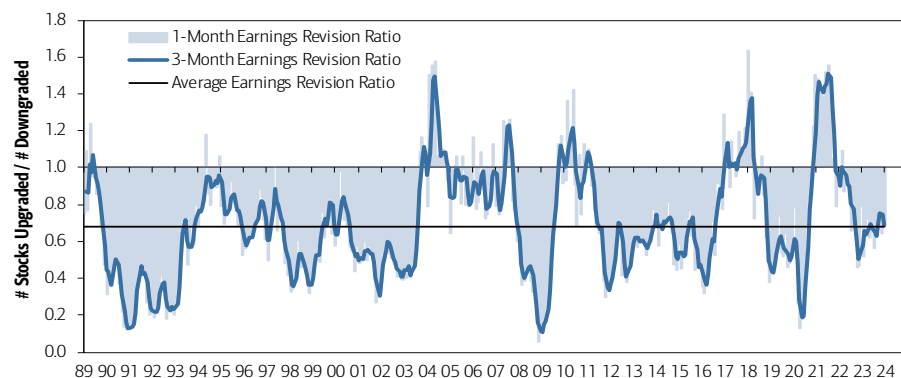


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 81: Quantessential Dividends: Earnings Revision Ratio

Earnings revisions improved in Dividend last month

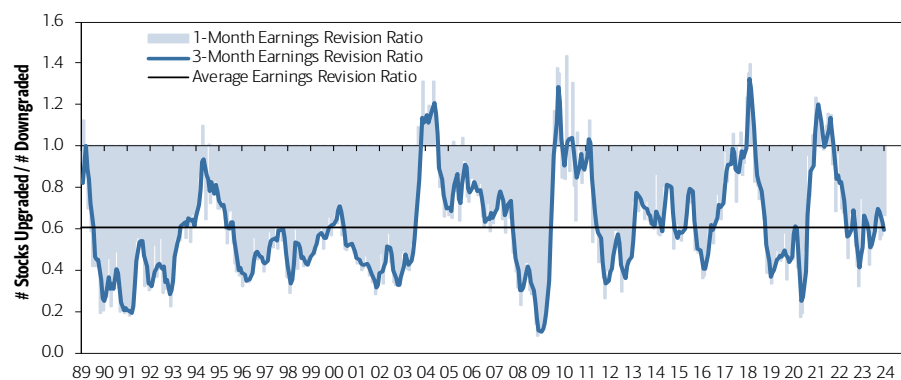


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Bloomberg, Worldscope, ExShare

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Chart 82: Quantessential Small Size: Earnings Revision Ratio

Earnings revisions improved in Small last month



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

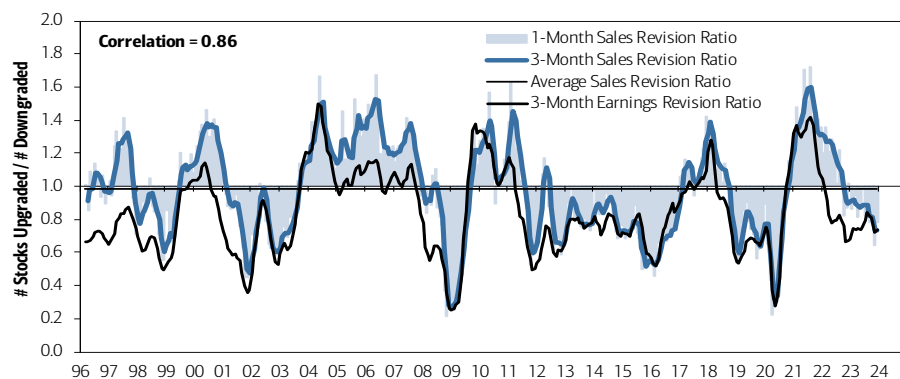
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Sales Revision Ratio

Sales Revision Ratio: Global Regions

Chart 83: Sales Revision Ratio - Global

Sales revisions improved in World last month but remains below long term average



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Table 5: Sales Revision Ratio - Global Regions

Among regions, Japan has the highest 3-month SRR

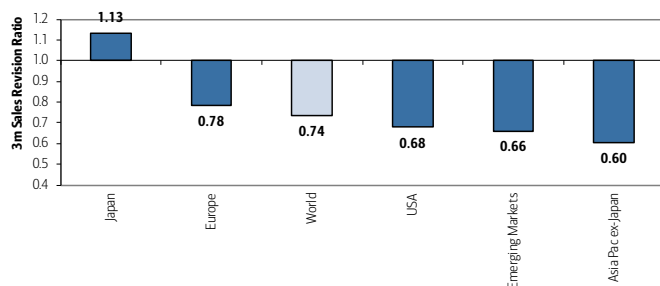
	Oct-23	Nov-23	Dec-23	Last 3 Months
World	0.80	0.64	0.78	0.74
USA	0.64	0.61	0.80	0.68
Europe	1.06	0.70	0.64	0.78
Japan	1.24	1.21	0.97	1.13
Asia Pac ex-Japan	0.65	0.49	0.70	0.60
Emerging Markets	0.70	0.54	0.77	0.66

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 84: Sales Revision Ratio by Global Regions - Last 3 months

Among regions, Japan has the highest 3-month SRR

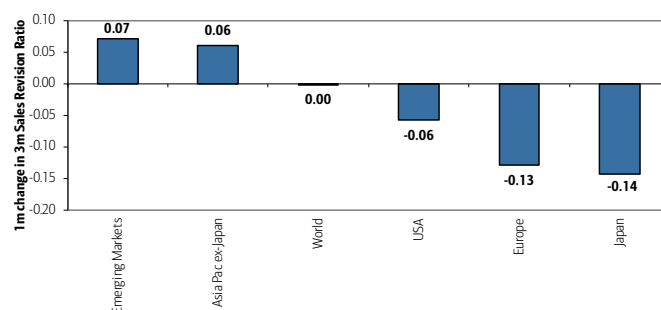


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 85: 1-month change in three-month Sales Revision Ratio by Global Regions

Emerging Markets 3-month SRR improved the most

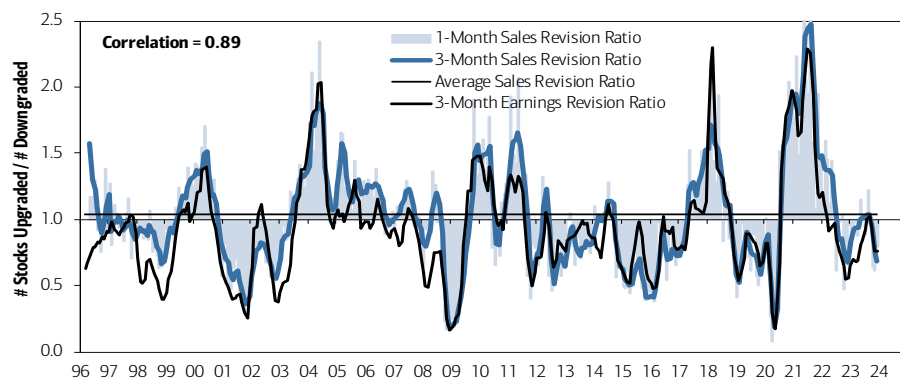


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 86: Sales Revision Ratio - USA

Sales revisions improved in USA last month but remains below long term average

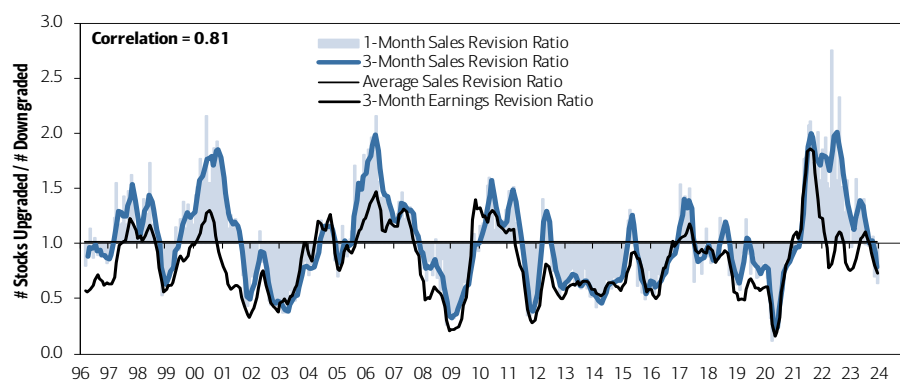


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 87: Sales Revision Ratio - Europe

SRR fell in Europe last month and the trend moderated

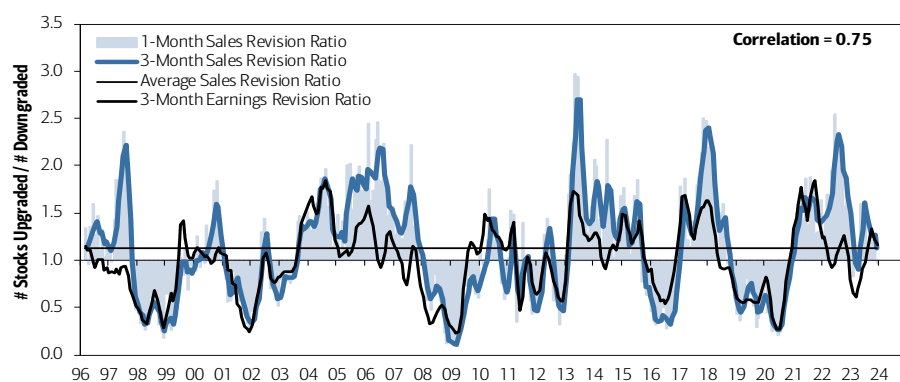


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 88: Sales Revision Ratio - Japan

SRR fell in Japan last month and the trend moderated

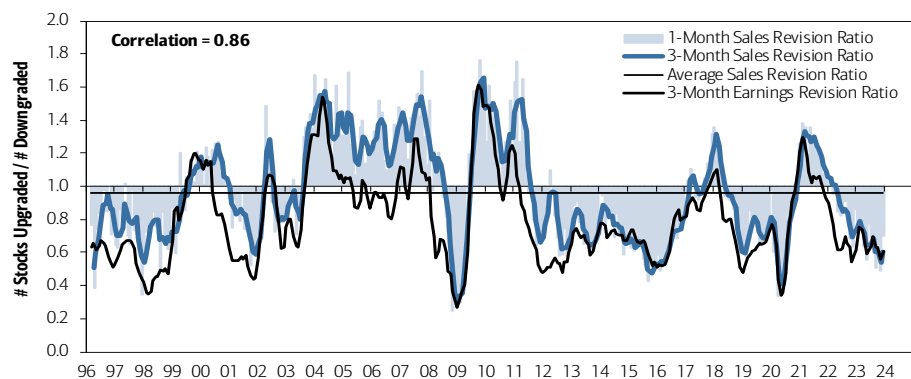


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 89: Sales Revision Ratio - Asia Pac ex-Japan

Sales trend improved in Asia Pac ex-Japan in the last three months

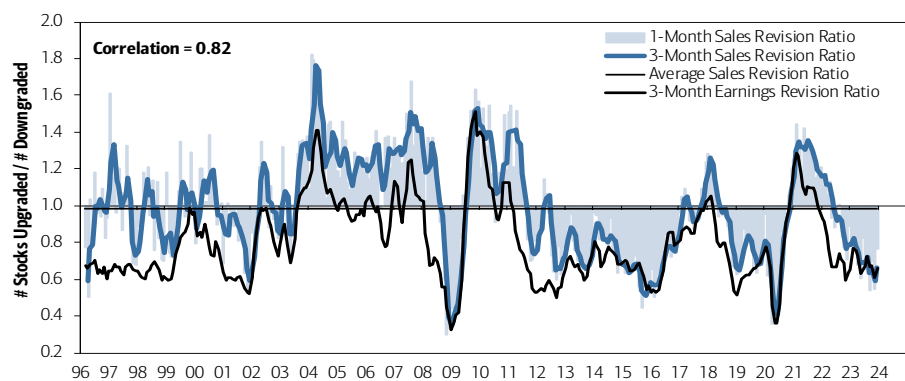


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 90: Sales Revision Ratio - Emerging Markets

Sales trend improved in Emerging Markets in the last three months



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Sales Revision Ratio: Global Sectors

Table 6: Sales Revision Ratio - Global Sectors

Among sectors, Energy has the highest 3-month SRR

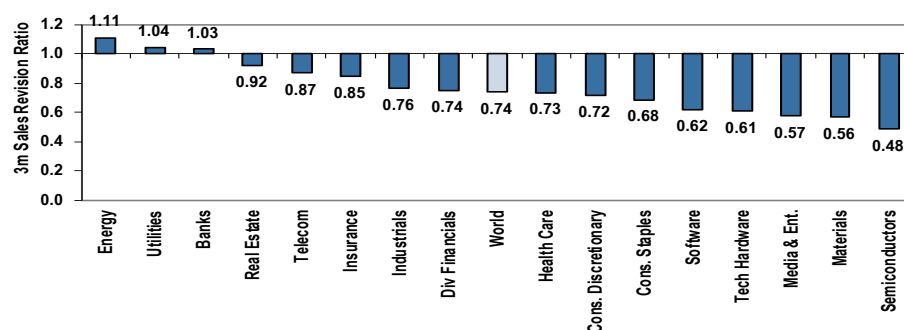
	Oct-23	Nov-23	Dec-23	Last 3 Months
Energy	1.44	1.57	0.58	1.11
Materials	0.67	0.41	0.65	0.56
Industrials	0.88	0.67	0.76	0.76
Cons. Discretionary	0.76	0.63	0.76	0.72
Cons. Staples	0.81	0.53	0.74	0.68
Health Care	0.81	0.59	0.81	0.73
Banks	1.09	0.94	1.07	1.03
Div Financials	0.60	0.70	0.99	0.74
Insurance	0.82	1.04	0.70	0.85
Software	0.58	0.56	0.73	0.62
Tech Hardware	0.64	0.44	0.79	0.61
Semiconductors	0.48	0.32	0.71	0.48
Telecom	1.00	0.59	1.09	0.87
Media & Ent.	0.67	0.54	0.53	0.57
Utilities	1.04	1.01	1.08	1.04
Real Estate	0.95	0.91	0.92	0.92
World	0.80	0.64	0.78	0.74

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 91: Sales Revision Ratio by Global Sectors - Last 3 months

Among sectors, Energy has the highest 3-month SRR

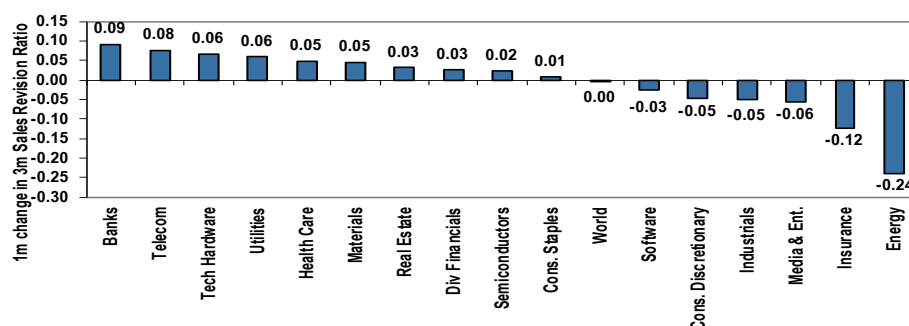


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 92: Sales Revision Ratio by Global Sectors - 1-month change in 3-month Ratio

Banks 3-month SRR improved the most

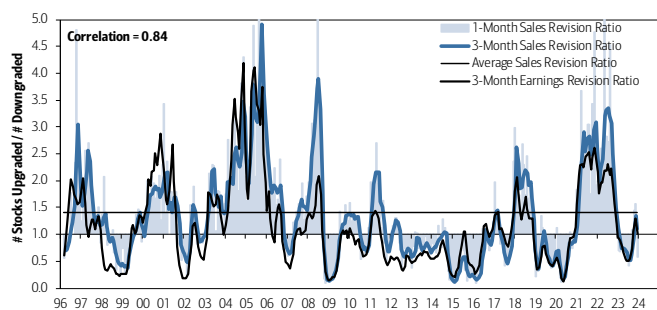


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 93: Sales Revision Ratio - Energy

Sales revisions for Energy fell last month and remains below long term trend

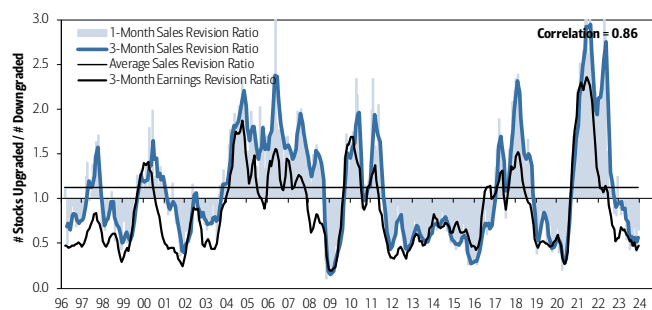


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 94: Sales Revision Ratio - Materials

Sales revisions improved in Materials last month but remains below long term average

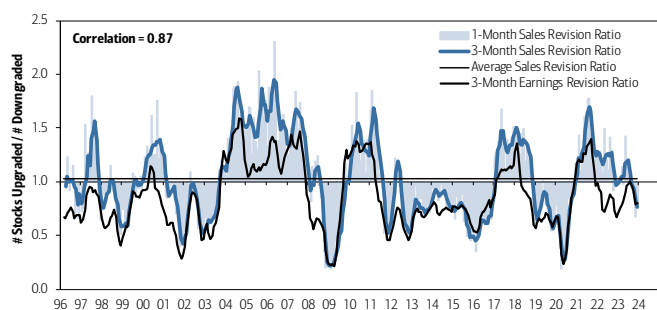


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 95: Sales Revision Ratio - Industrials

The trend is weak but Sales revisions improved in Industrials last month

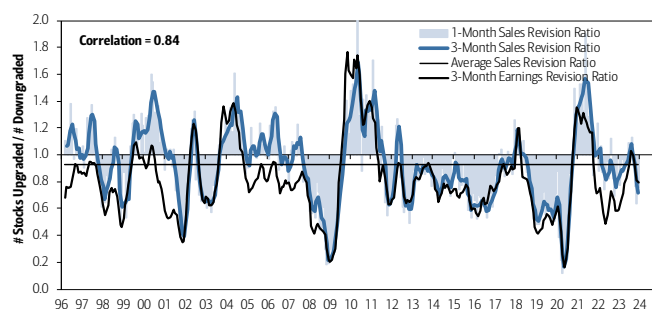


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 96: Sales Revision Ratio - Consumer Discretionary

Sales revisions improved in Cons. Discretionary last month but remains below long term average

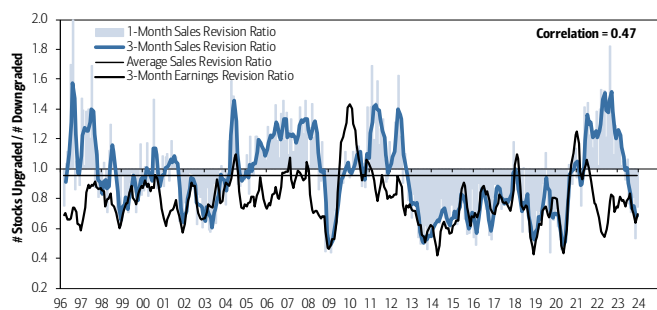


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 97: Sales Revision Ratio - Consumer Staples

Sales revisions improved in Cons. Staples last month

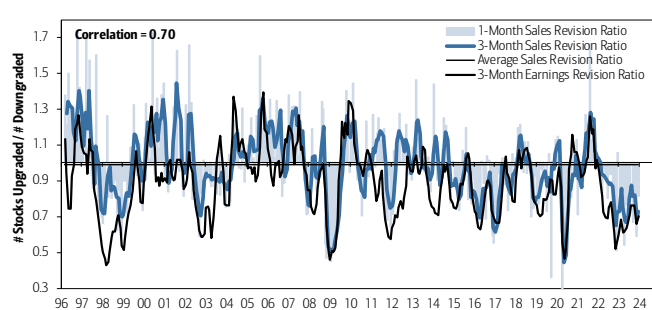


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 98: Sales Revision Ratio - Health Care

Sales trend improved in Health Care in the last three months

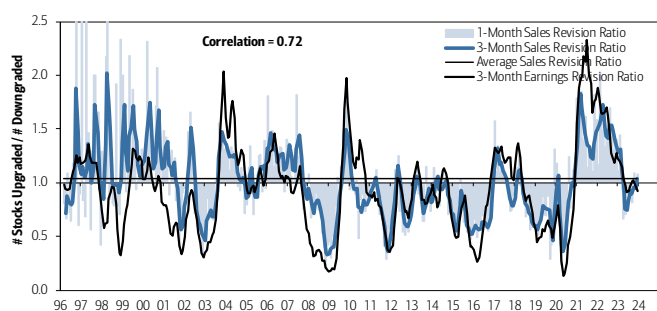


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 99: Sales Revision Ratio - Banks

Sales revisions improved for Banks last month and remains above long-term average

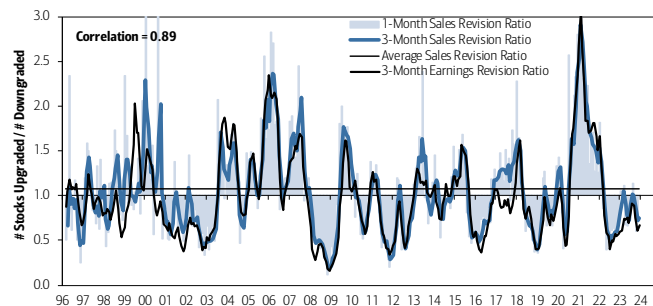


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 100: Sales Revision Ratio - Diversified Financials

Sales revisions improved in Div Financials last month

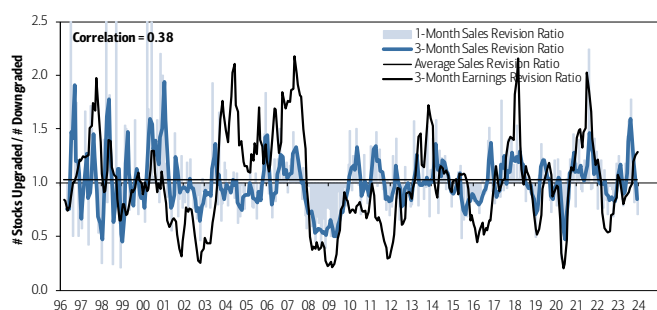


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 101: Sales Revision Ratio - Insurance

Sales revisions for Insurance fell last month and remains below long term trend

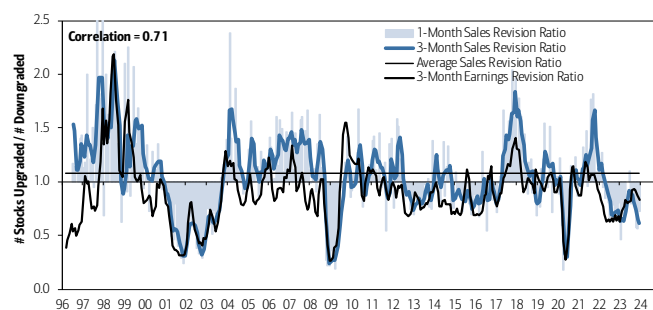


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 102: Sales Revision Ratio - Software

Sales revisions improved in Software last month

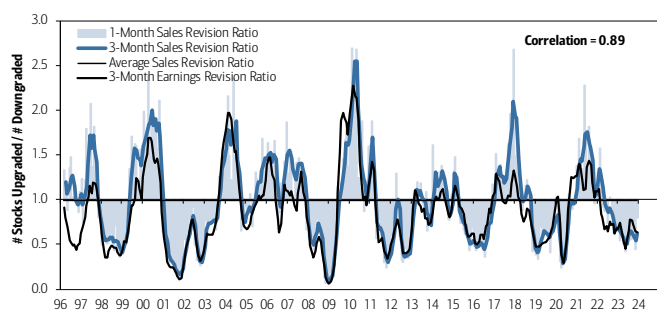


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 103: Sales Revision Ratio - Tech Hardware

Sales revisions improved in Tech Hardware last month but remains below long term average

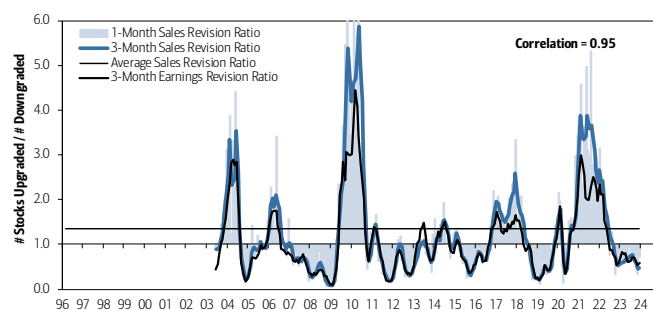


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 104: Sales Revision Ratio - Semiconductors

Sales revisions improved in Semiconductors last month but remains below long term average

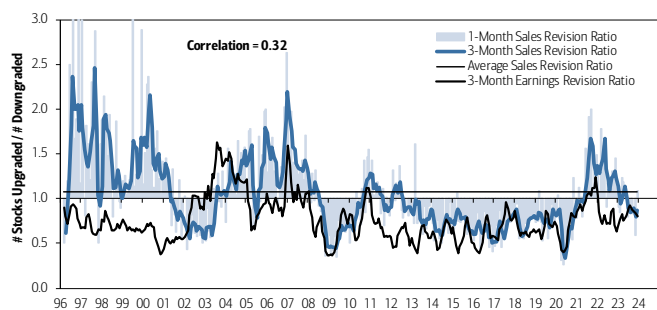


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 105: Sales Revision Ratio - Telecom

Sales revisions improved for Telecom last month and remains above long-term average

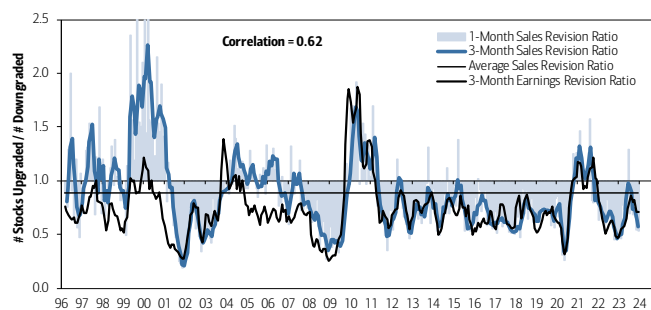


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 106: Sales Revision Ratio - Media & Entertainment

Sales revisions for Media & Ent. fell last month and remains below long term trend

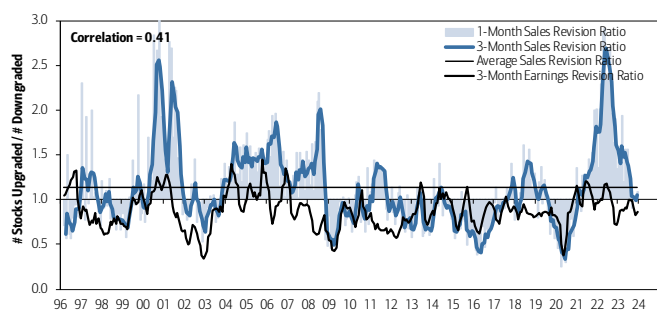


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 107: Sales Revision Ratio - Utilities

Sales trend improved in Utilities in the last three months

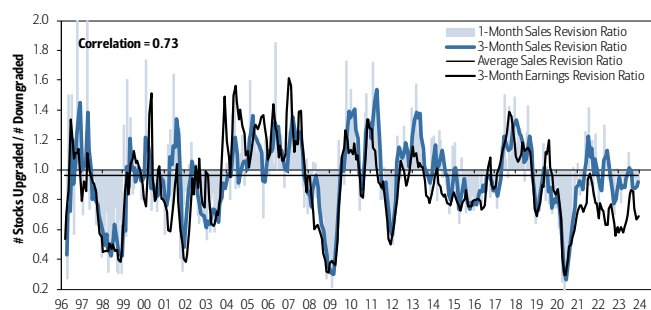


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 108: Sales Revision Ratio - Real Estate

Sales trend improved in Real Estate in the last three months



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Appendix A: Region-Sector Earnings Revision Ratio Matrix

Table 7: Regional-Sectors 1-month Earnings Revision Ratio

Majority of region-sector 1-month ERR remains below 1.0

1m Ratio	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate
World	0.59	0.66	0.90	0.82	0.75	0.81	1.03	1.11	1.16	0.93	0.67	0.79	0.76	0.76	0.95	0.73
USA	0.15	0.70	1.39	0.94	0.77	0.92	0.87	1.46	0.86	1.37	0.89	0.88	0.33	1.40	1.13	0.50
Europe	0.50	0.38	0.69	0.68	0.43	0.51	1.11	1.75	0.88	1.00	1.00	0.75	0.62	0.73	1.91	0.45
Japan	-	0.97	1.08	1.86	1.40	0.94	1.63	0.78	2.50	3.00	0.55	1.80	0.33	0.80	5.50	1.88
Asia Pac ex-Japan	0.88	0.65	0.76	0.61	0.66	0.86	0.88	0.73	0.93	0.49	0.61	0.69	0.80	0.54	0.63	0.56
Emerging Markets	0.85	0.58	0.77	0.64	0.76	0.86	1.15	0.84	1.33	0.45	0.62	0.68	0.92	0.58	0.66	1.10

Key:

1-month Earnings Revision Ratio greater than 1.00

Source : BofA Global Quantitative Strategy, MSCI, IBES

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Table 8: Regional-Sectors 3-month Earnings Revision Ratio

Majority of region-sector 3-month ERR remains below 1.0

3m Ratio	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate
World	1.01	0.48	0.80	0.80	0.70	0.70	0.92	0.66	1.29	0.83	0.63	0.58	0.81	0.71	0.86	0.68
USA	0.74	0.43	0.92	0.70	0.62	0.68	0.48	0.65	1.67	1.27	0.63	0.72	0.60	0.98	0.82	0.62
Europe	0.96	0.43	0.70	0.75	0.65	0.55	1.49	0.88	0.88	0.85	0.54	0.25	0.68	0.79	1.19	0.70
Japan	2.00	0.89	1.01	1.74	1.27	1.26	0.97	0.92	1.63	1.75	0.72	0.87	1.00	1.05	3.75	1.43
Asia Pac ex-Japan	1.05	0.43	0.66	0.66	0.60	0.69	0.77	0.53	0.95	0.41	0.60	0.54	0.83	0.52	0.65	0.50
Emerging Markets	1.16	0.40	0.71	0.68	0.66	0.69	1.01	0.62	1.21	0.40	0.60	0.54	1.00	0.54	0.66	0.78

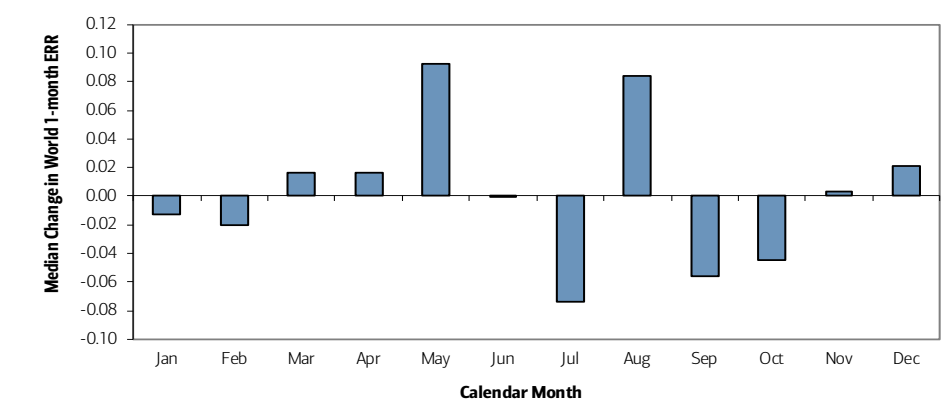
Key:

3-month Earnings Revision Ratio greater than 1.00

Source : BofA Global Quantitative Strategy, MSCI, IBES

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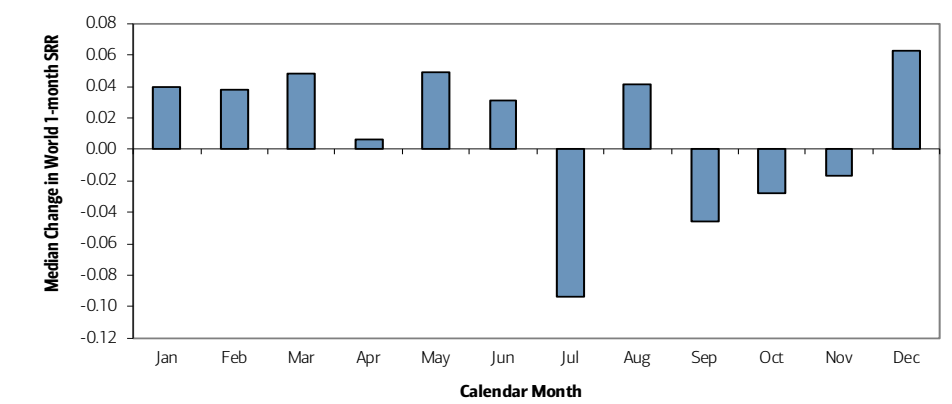
Chart 109: Seasonality of Global Earnings Revision Ratio
Median change in ERR the highest in May



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 110: Seasonality of Global Sales Revision Ratio
Median change in SRR the lowest in July



Source : BofA Global Quantitative Strategy, MSCI, IBES

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Global Quant Publications

Monthly reports schedule

Day 1: Contenders & Defenders

A popular visual 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 and Defenders, 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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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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