

Asia Pac Earnings Revision Ratio

Australia up, India down

APxJ Earnings Revision Ratio moderated in February

The Asia Pac ex-Japan Earnings Revision Ratio moderated from 0.63 to 0.60 in February as a fall in the <u>India</u> Ratio outweighed a jump in the <u>Australia</u> Ratio. The APxJ Ratio has remained in a range (0.50 to 0.70) for the last 12 months and may require an improving <u>China</u> Ratio to persistently trend higher. Equity market valuations <u>tend to move</u> with the Earnings Revision Ratio, so markets in Asia may not re-rate until a broader uptick in earnings expectations eventuates.

Australia Ratio is up, India Ratio fell, China Ratio is low

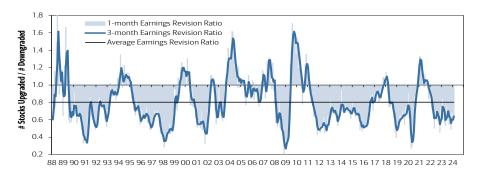
In February, the Earnings Revision Ratio improved in <u>Australia</u> from 1.06 with a Ratio now at or above 1.00 in all sectors except Energy and Materials. In contrast, the <u>India</u> Ratio fell from 1.15 to the lowest level in seven months (0.88). The <u>China</u> Ratio remains low and was unchanged at 0.57. The Ratio is now highest in <u>Singapore</u> (1.27), <u>New Zealand</u> (1.25), <u>Australia</u> (1.24), and <u>Philippines</u> (1.20), and lowest in <u>Thailand</u> (0.24), <u>Korea</u> (0.34), and <u>Hong Kong</u> (0.33).

The Ratio is highest for Telecom, lowest for Insurance

The Ratio remains below 1.00 for all <u>sectors</u> in Asia Pac ex-Japan. The Ratio is highest for <u>Telecom</u> (0.79), <u>Health Care</u> (0.78), and <u>Energy</u> (0.76), and lowest for <u>Insurance</u> (0.35), <u>Consumer Staples</u> (0.43), and <u>Real Estate</u> (0.46).

Chart 1: Trend in Asia Pacific ex-Japan Earnings Expectations

The APxJ Earnings Revision Ratio fell from 0.63 to 0.60 last month



Source: BofA Asia Pacific Quantitative Strategy, MSCI, IBES

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Refer to important disclosures on page 28 to 30.

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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.



Asia Pac ex-Japan Earnings Expectations

Chart 2: APxJ: YoY Market Perf vs Earnings Revisions Ratio

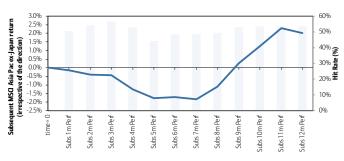
YoY APxJ Equity Market Performance vs APxJ ERR has correlation of 0.67



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES, Exshare

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Chart 4: Subs 12m MSCI APxJ perf for the current 3m ERR range Subs 12m MSCI APxJ perf for the current 3m ERR range of 0.60-0.70 is 2%

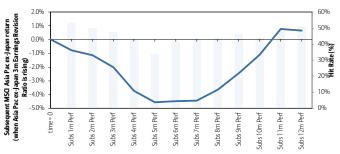


Subs 12m MSCI APxJ perf for the current 3m ERR range of 0.60 – 0.70 is 2%

Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 6: Subs 12m APxJ perf for the current 3m ERR range & rising Subs 12m MSCI APxJ perf for the current 3m ERR range of 0.60-0.70 and rising is 1%



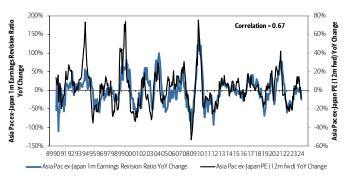
Subs 12m MSCI APxJ perf for the current 3m ERR range of 0.60 – 0.70 and rising is 1%

Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 3: APxJ: YoY change in ERR vs YoY change in Forward PE

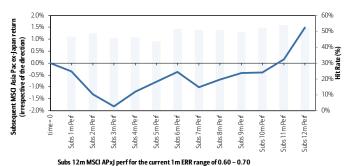
YoY change in APxJ ERR vs YoY change in Asia Pac ex-Japan PE has correlation of 0.67



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES, Exshare

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Chart 5: Subs 12m MSCI APxJ perf for the current 1m ERR range Subs 12m MSCI APxJ perf for the current 1m ERR range of 0.60-0.70 is 1%

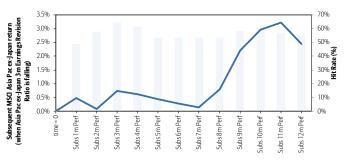


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Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 7: Subs 12m APxJ perf for the current 3m ERR range & falling Subs 12m MSCI APxJ perf for the current 3m ERR range of 0.60-0.70 and falling is 2%



Subs 12m MSCI APxJ perf for the current 3m ERR range of 0.60 – 0.70 and falling is 2%

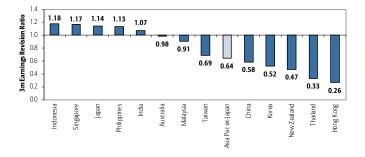
Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES



Asia Pac ex-Japan Countries Earnings Revision Ratio

Chart 8: Earnings Revision Ratio By Country - Last 3 Months

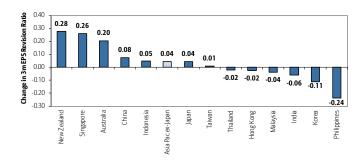
Indonesia has the highest 3-month ERR among countries



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 9: 1-month change in three-Month Earnings Revision RatioNew Zealand 3-month ERR improved the most



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Table 1: Asia Pac ex-Japan Country Earnings Revision Ratios

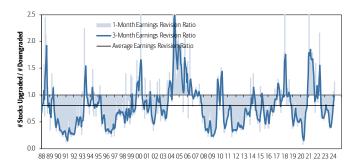
Indonesia has the highest 3-month ERR among countries

Country	Dec-23	Jan-24	Feb-24	Last 3 Months
Australia	0.72	1.06	1.24	0.98
China	0.63	0.56	0.57	0.58
Hong Kong	0.31	0.16	0.33	0.26
India	1.26	1.15	0.88	1.07
Indonesia	1.17	1.58	0.88	1.18
Japan	1.25	0.99	1.18	1.14
Korea	0.78	0.51	0.34	0.52
Malaysia	0.69	1.85	0.63	0.91
New Zealand	0.14	0.25	1.25	0.47
Philippines	1.63	0.77	1.20	1.13
Singapore	1.38	0.90	1.27	1.17
Taiwan	0.69	0.67	0.72	0.69
Thailand	0.35	0.41	0.24	0.33
Asia Pac ex-Japan	0.69	0.63	0.60	0.64

Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

Chart 10: AUSTRALIA Earnings Revision Ratio

Earnings revisions improved in Australia last month



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 11: CHINA Earnings Revision Ratio

Earnings revisions improved in China last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 12: CHINA - A Earnings Revision Ratio

Earnings revisions improved in China-A last month

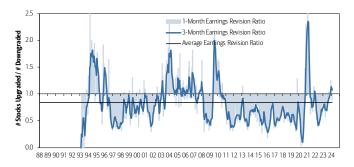


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 14: INDIA Earnings Revision Ratio

Earnings revisions fell in India last month



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 16: JAPAN Earnings Revision Ratio

Earnings revisions improved in Japan last month

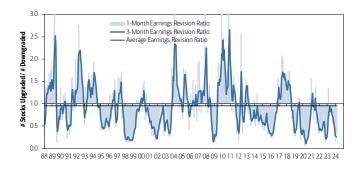


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 13: HONG KONG Earnings Revision Ratio

Earnings revisions improved in Hong Kong last month

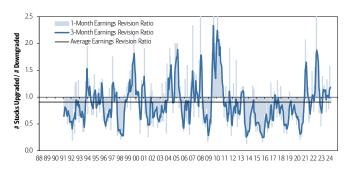


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 15: INDONESIA Earnings Revision Ratio

Earnings revisions fell in Indonesia last month

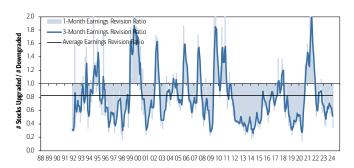


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 17: KOREA Earnings Revision Ratio

ERR fell in Korea last month and the trend moderated

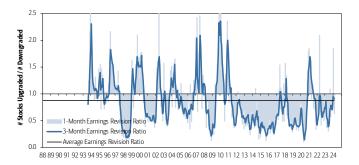


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 18: MALAYSIA Earnings Revision Ratio

Earnings revisions fell in Malaysia last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 20: PHILIPPINES Earnings Revision Ratio

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

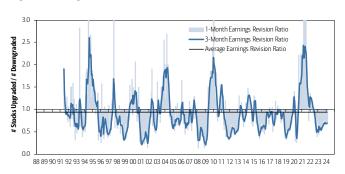


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \mathsf{IBES}$

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Chart 22: TAIWAN Earnings Revision Ratio

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

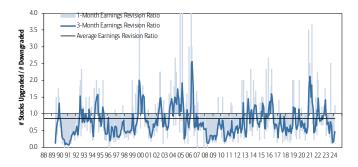


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \ \mathsf{IBES}$

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Chart 19: NEW ZEALAND Earnings Revision Ratio

Earnings trend improved in New Zealand in the last three months

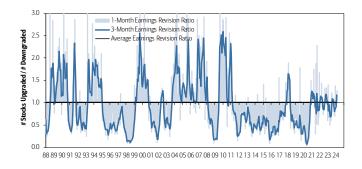


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 21: SINGAPORE Earnings Revision Ratio

Earnings revisions improved in Singapore last month

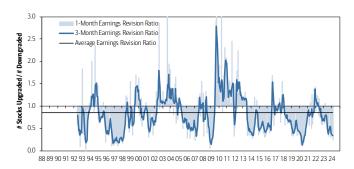


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 23: THAILAND Earnings Revision Ratio

Earnings revisions fell in Thailand last month



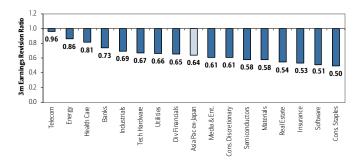
Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Asia Pac ex-Japan Sectors Earnings Revisions Ratio

Chart 24: 3-month Earnings Revision Ratio by APxJ Sectors

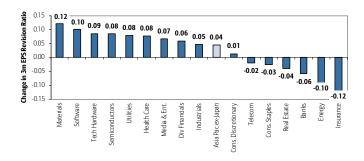
Telecom has the highest 3-month ERR among sectors



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 25: 1m change in 3m Earnings Revision Ratio by APxJ SectorsMaterials 3-month ERR improved the most



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Table 2: Asia Pac ex-Japan Sector Earnings Revision Ratios

Telecom has the highest 3-month ERR among sectors

				Last 3	
Sector	Dec-23	Jan-24	Feb-24	Months	
Energy	0.88	0.97	0.76	0.86	
Materials	0.65	0.51	0.56	0.58	
Industrials	0.76	0.67	0.67	0.69	
Cons. Discretionary	0.61	0.62	0.59	0.61	
Cons. Staples	0.66	0.43	0.43	0.50	
Health Care	0.86	0.80	0.78	0.81	
Banks	0.88	0.75	0.59	0.73	
Div Financials	0.73	0.67	0.56	0.65	
Insurance	0.93	0.42	0.35	0.53	
Software	0.49	0.53	0.51	0.51	
Tech Hardware	0.61	0.69	0.70	0.67	
Semiconductors	0.69	0.48	0.59	0.58	
Telecom	0.80	1.50	0.79	0.96	
Media & Ent.	0.54	0.67	0.62	0.61	
Utilities	0.63	0.72	0.64	0.66	
Real Estate	0.56	0.63	0.46	0.54	
Asia Pac ex-Japan	0.69	0.63	0.60	0.64	

Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 26: APxJ Banks Earnings Revision Ratio

ERR fell in Banks last month and the trend moderated



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 28: APxJ Consumer Staples Earnings Revision Ratio

 $\ensuremath{\mathsf{ERR}}$ fell in Cons. Staples last month and the trend moderated



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 30: APxJ Energy Earnings Revision Ratio

ERR fell in Energy last month and the trend moderated



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 27: APxJ Consumer Discretionary Earnings Revision Ratio

Earnings revisions fell in Cons. Discretionary last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 29: APxJ Diversified Financials Earnings Revision Ratio

Earnings revisions fell in Div Financials last month

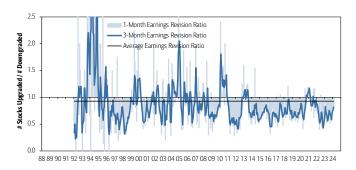


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 31: APxJ Health Care Earnings Revision Ratio

Earnings revisions fell in Health Care last month, but the trend remains strong



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 32: APxJ Industrials Earnings Revision Ratio

Earnings revisions improved in Industrials last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 34: APxJ Materials Earnings Revision Ratio

Earnings revisions improved in Materialslast month

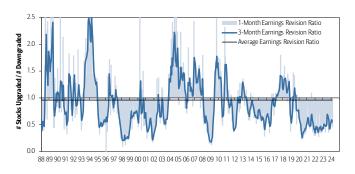


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 36: APxJ Real Estate Earnings Revision Ratio

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

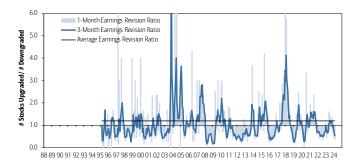


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 33: APxJ Insurance Earnings Revision Ratio

Earnings revisions fell in Insurance last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 35: APxJ Media & Ent. Earnings Revision Ratio

Earnings revisions fell in Media & Ent. last month, but the trend remains strong

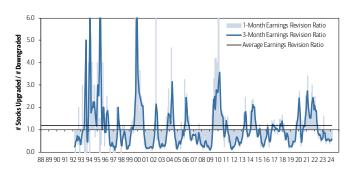


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 37: APxJ Semiconductors Earnings Revision Ratio

Earnings trend improved in Semiconductors in the last three months



 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \ \mathsf{IBES}$



Chart 38: APxJ Software Earnings Revision Ratio

Earnings revisions fell in Software last month, but the trend remains strong $\,$

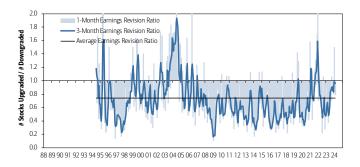


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 40: APxJ Telecom Earnings Revision Ratio

ERR fell in Telecom last month and the trend moderated



 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \mathsf{IBES}$

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Chart 39: APxJ Tech Hardware Earnings Revision Ratio

Earnings trend improved in Tech Hardware in the last three months

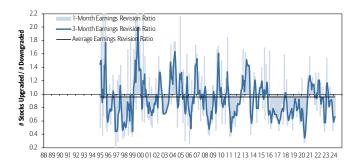


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 41: APxJ Utilities Earnings Revision Ratio

Earnings revisions fell in Utilities last month



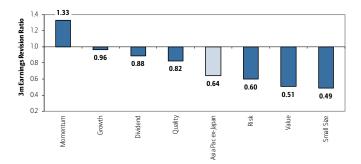
Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Earnings Revision Ratio: Quantessential Styles

Chart 42: 3m Earnings Revision Ratio by Asia Pac ex-Japan Styles

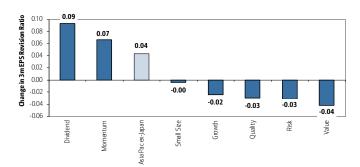
Among Styles, Momentum has the highest 3-month ERR



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES, Exshare

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Chart 43: 1m change in 3m Earnings Revision Ratio by APxJ StylesDividend 3-month ERR improved the most



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES, Exshare

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Table 3: Asia Pac ex-Japan Style Earnings Revision Ratio

Among Styles, Momentum has the highest 3-month ERR

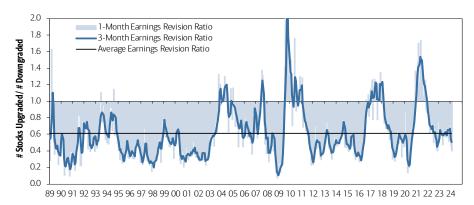
			Last 3
Dec-23	Jan-24	Feb-24	Months
0.71	0.45	0.40	0.51
0.97	1.22	0.74	0.96
1.06	0.71	0.73	0.82
0.64	0.59	0.57	0.60
1.25	1.44	1.30	1.33
0.88	0.81	0.98	0.88
0.43	0.57	0.46	0.49
0.69	0.63	0.60	0.64
	0.71 0.97 1.06 0.64 1.25 0.88 0.43	0.71 0.45 0.97 1.22 1.06 0.71 0.64 0.59 1.25 1.44 0.88 0.81 0.43 0.57	0.71 0.45 0.40 0.97 1.22 0.74 1.06 0.71 0.73 0.64 0.59 0.57 1.25 1.44 1.30 0.88 0.81 0.98 0.43 0.57 0.46

Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES, ExShare

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Chart 44: Quantessential Value: Earnings Revision Ratio

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



Source: BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare

Chart 45: Quantessential Growth: Earnings Revision Ratio

Earnings revisions fell in Growth last month

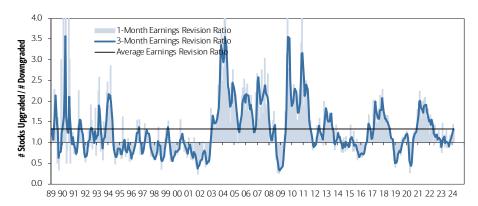


Source : BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare

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Chart 46: Quantessential Momentum: Earnings Revision Ratio

Earning revisions fell in Momentum last month but remains above 1.0



Source: BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare

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Chart 47: Quantessential Risk: Earnings Revision Ratio

ERR fell in Risk last month and the trend moderated

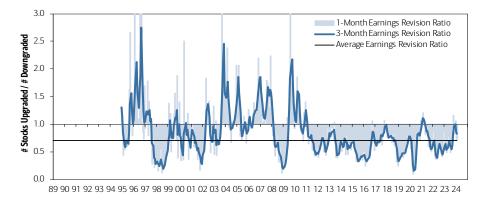


Source : BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare



Chart 48: Quantessential Quality: Earnings Revision Ratio

Earnings revisions improved in Quality last month



Source: BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare

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Chart 49: Quantessential Dividends: Earnings Revision Ratio

Earnings revisions improved in Dividend last month



Source: BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare

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Chart 50: Quantessential Small Size: Earnings Revision Ratio

ERR fell in Small Size last month and the trend moderated



Source : BofA Asia Pac Quantitative Strategy, IBES, MSCI, Exshare



Sales Revision Ratio

Sales Revision Ratio: Asia Pac ex-Japan Countries

Chart 51: Sales Revision Ratio - Asia Pac ex-Japan

Sales revisions improved in Asia Pac ex-Japan last month but remains below long term average



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 52: Sales Revisions Ratio vs. YoY Market Perf

YoY APxJ Equity Market Performance vs APxJ SRR has correlation of 0.68



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES, Exshare

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Table 4: Sales Revision Ratio - Asia Pac ex-Japan Countries

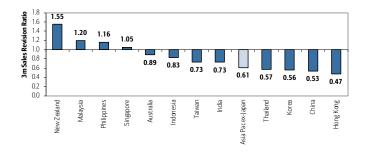
Among countries, New Zealand has the highest 3-month SRR

	Dec-23	Jan-24	Feb-24	Last 3 Months
Australia	0.84	0.88	0.93	0.89
China	0.60	0.48	0.52	0.53
Hong Kong	0.51	0.41	0.50	0.47
India	0.96	0.64	0.65	0.73
Indonesia	0.85	0.67	1.00	0.83
Korea	0.70	0.47	0.52	0.56
Malaysia	1.23	1.31	1.05	1.20
New Zealand	0.67	1.33	4.50	1.55
Philippines	1.00	1.30	1.20	1.16
Singapore	1.36	1.00	0.88	1.05
Taiwan	0.86	0.67	0.68	0.73
Thailand	0.78	0.45	0.51	0.57
Asia Pac ex-Japan	0.70	0.55	0.60	0.61

Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

Chart 53: Sales Revision Ratio by Asia Pac ex-Japan Countries - Last

Among countries, New Zealand has the highest 3-month SRR



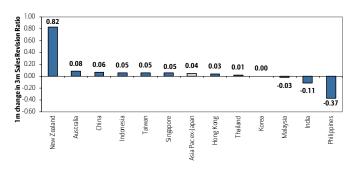
Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 54: 1-month change in three-month Sales Revision Ratio by Asia Pac ex-Japan Countries

New Zealand 3-month SRR improved the most



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 55: Sales Revision Ratio - Australia

Sales trend improved in Australia in the last three months

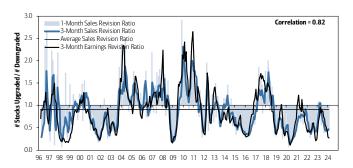


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 57: Sales Revision Ratio - Hong Kong

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

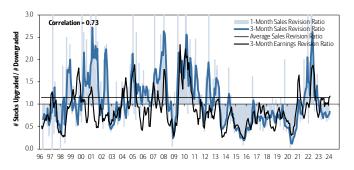


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 59: Sales Revision Ratio - Indonesia

Sales trend improved in Indonesia in the last three months

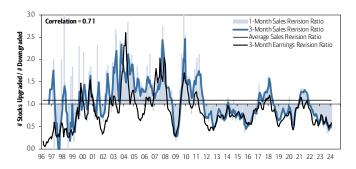


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 56: Sales Revision Ratio - China

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

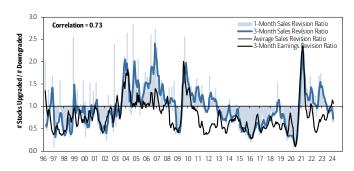


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 58: Sales Revision Ratio - India

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

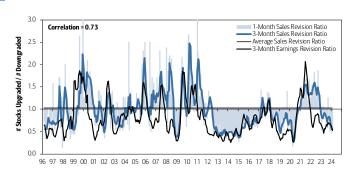


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 60: Sales Revision Ratio - Korea

Sales trend improved in Korea in the last three months

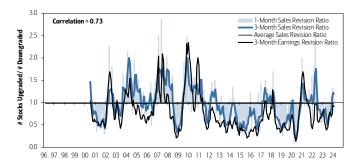


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 61: Sales Revision Ratio - Malaysia

Sales revisions fell in Malaysia last month, but remains above 1.0

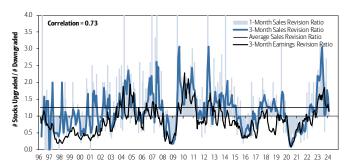


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 63: Sales Revision Ratio - Philippines

SRR fell in Philippines last month and the trend moderated

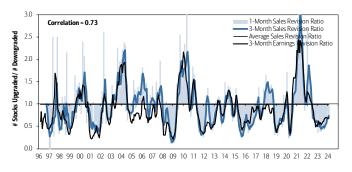


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \mathsf{IBES}$

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Chart 65: Sales Revision Ratio - Taiwan

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

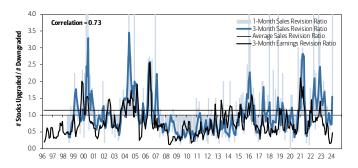


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 62: Sales Revision Ratio - New Zealand

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

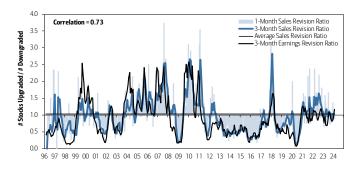


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 64: Sales Revision Ratio - Singapore

Sales revisions fell in Singapore last month, but the trend remains strong

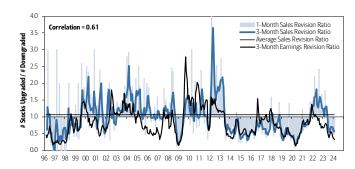


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 66: Sales Revision Ratio - Thailand

Sales trend improved in Thailand in the last three months



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

Sales Revision Ratio: Asia Pac ex-Japan Sectors

Table 5: Sales Revision Ratio - Asia Pac ex-Japan Sectors

Among sectors, Telecom has the highest 3-month SRR

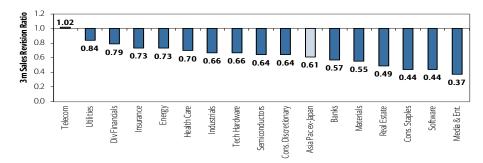
	Dec-23	Jan-24	Feb-24	Last 3 Months
Energy	0.77	0.41	1.15	0.73
Materials	0.67	0.50	0.51	0.55
Industrials	0.74	0.57	0.70	0.66
Cons. Discretionary	0.73	0.60	0.60	0.64
Cons. Staples	0.65	0.31	0.40	0.44
Health Care	0.75	0.60	0.76	0.70
Banks	0.70	0.63	0.40	0.57
Div Financials	0.89	0.64	0.85	0.79
Insurance	0.62	0.56	1.08	0.73
Software	0.36	0.45	0.50	0.44
Tech Hardware	0.72	0.65	0.60	0.66
Semiconductors	0.79	0.64	0.53	0.64
Telecom	1.20	1.06	0.84	1.02
Media & Ent.	0.33	0.44	0.35	0.37
Utilities	0.81	0.91	0.80	0.84
Real Estate	0.76	0.38	0.41	0.49
Asia Pac ex-Japan	0.70	0.55	0.60	0.61

 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \ \mathsf{IBES}$

BofA GLOBAL RESEARCH

Chart 67: Sales Revision Ratio by Asia Pac ex-Japan Sectors - Last 3 months

Among sectors, Telecom has the highest 3-month SRR

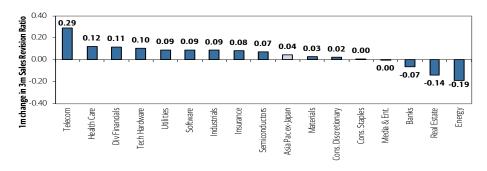


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 68: Sales Revision Ratio by Asia Pac ex-Japan Sectors - 1-month change in 3-month Ratio

Telecom 3-month SRR improved the most

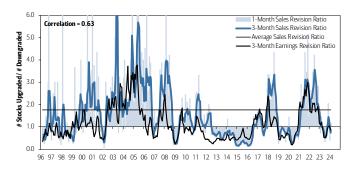


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 69: Sales Revision Ratio - Energy

Sales revisions improved in Energy last month

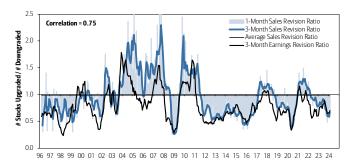


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 71: Sales Revision Ratio - Industrials

Sales trend improved in Industrials in the last three months

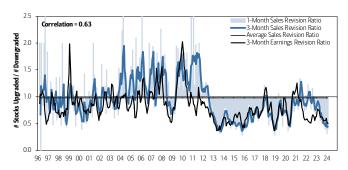


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 73: Sales Revision Ratio - Consumer Staples

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

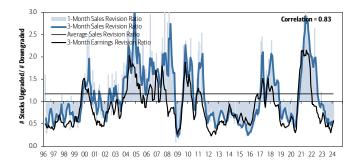


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 70: Sales Revision Ratio - Materials

Sales revisions improved in Materials last month



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 72: Sales Revision Ratio - Consumer Discretionary

Sales trend improved in Cons. Discretionary in the last three months

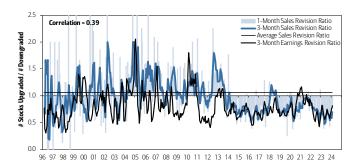


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 74: Sales Revision Ratio - Health Care

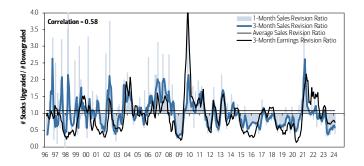
Sales revisions improved in Health Care last month but remains below long term average



Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

Chart 75: Sales Revision Ratio - Banks

Sales revisions for Banks fell last month and remains below long term trend $% \left(1\right) =\left(1\right) +\left(1\right)$

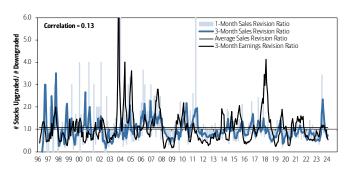


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 77: Sales Revision Ratio - Insurance

Sales trend improved in Insurance in the last three months

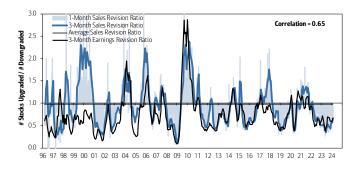


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \mathsf{IBES}$

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Chart 79: Sales Revision Ratio - Tech Hardware

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

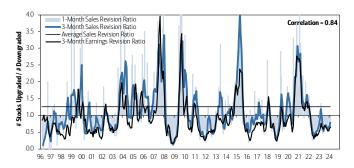


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

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Chart 76: Sales Revision Ratio - Diversified Financials

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

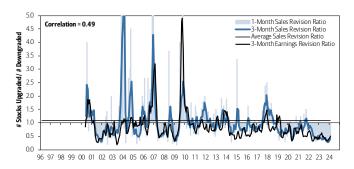


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 78: Sales Revision Ratio - Software

Sales trend improved in Software in the last three months

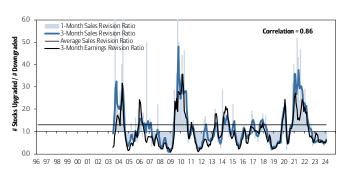


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 80: Sales Revision Ratio - Semiconductors

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



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Chart 81: Sales Revision Ratio - Telecom

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

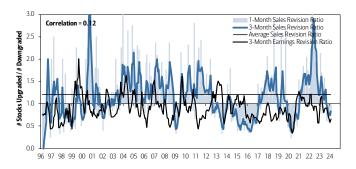


Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 83: Sales Revision Ratio - Utilities

Sales revisions fell in Utilities last month, but the trend remains strong

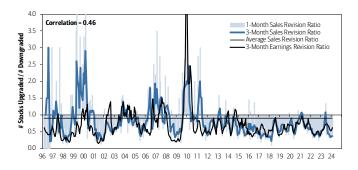


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Asia} \ \mathsf{Pac} \ \mathsf{Quantitative} \ \mathsf{Strategy}, \ \mathsf{MSCI}, \mathsf{IBES}$

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Chart 82: Sales Revision Ratio - Media & Entertainment

Sales revisions for Media $\&\, \text{Ent.}$ fell last month and remains below long term trend

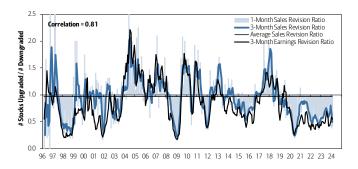


Source: BofA Asia Pac Quantitative Strategy, MSCI, IBES

BofA GLOBAL RESEARCH

Chart 84: Sales Revision Ratio - Real Estate

Sales revisions improved in Real Estate last month



Source : BofA Asia Pac Quantitative Strategy, MSCI, IBES



Appendix A: Country-Sector Earnings Revision Ratio Matrix

Table 6: Asia Pac ex-Japan Country-Sector 1-month Earnings Revision Ratios

Majority of APxJ country-sector 1-month Earnings Revision Ratio below 1.0

	rgy	Materials	Industrials	s. Discretionary	s. Staples	Ith Care	ks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	lia & Ent.	Utilities	Real Estate	Country
	Energy	Mat	ם	Cons.	Cons.	Health (Banks	Div	<u>Insu</u>	Soft	Tect	Sem	Tele	Media	ij Š	Real	Com
Australia	0.67	0.58	3.00	1.67	5.00	1.50	1.00	1.33	2.00	1.00	-	-	-	1.00	-	1.33	1.24
China	0.35	0.65	0.63	0.49	0.37	0.78	0.30	0.82	0.14	0.37	0.81	0.54	1.50	0.69	0.48	0.33	0.57
Hong Kong	-	-	0.17	0.67	0.50	-	-	-	-	-	-	-	-	-	0.67	0.40	0.33
India	8.00	0.41	1.15	1.31	0.36	1.67	1.14	0.55	0.33	1.25	-	-	0.67	0.50	0.75	1.00	0.88
Indonesia	1.00	1.50	-	3.00	0.50	-	1.00	-	-	-	-	-	0.50	1.00	-	3.00	0.88
Korea	0.50	0.07	0.44	0.20	0.18	0.25	1.00	0.33	0.50	2.00	0.14	2.00	-	0.30	1.00	-	0.34
Malaysia	1.00	-	0.67	1.00	0.60	-	1.00	-	-	-	-	-	0.50	-	1.00	-	0.63
New Zealand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.25
Philippines	-	-	4.00	1.00	-	-	2.00	-	-	-	-	-	-	-	-	0.50	1.20
Singapore	-	-	3.50	-	1.00	-	2.00	-	-	-	-	-	-	-	-	0.20	1.27
Taiwan	-	1.00	0.56	0.57	-	-	0.50	-	-	-	0.94	0.71	0.50	-	-	-	0.72
Thailand	0.50	0.17	0.67	0.13	0.33	1.00	0.17	-	-	-	-	-	2.00	-	0.20	-	0.24
Asia Pac ex-Japan	0.76	0.56	0.67	0.59	0.43	0.78	0.59	0.56	0.35	0.51	0.70	0.59	0.79	0.62	0.64	0.46	

Key:

1-month Earnings Revision Ratio greater than 1.00

Source : BofA Asia Pac Quantitative Strategy, IBES, MSCI

Table 7: Asia Pac ex-Japan Country-Sector 3-month Earnings Revision RatiosMajority of APxJ country-sector 3-month Earnings Revision Ratio below 1.0

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Australia	0.55	0.93	0.92	0.91	1.29	0.88	2.20	0.80	2.00	0.50	-	-	0.50	0.50	1.67	1.43	0.98
China	0.66	0.56	0.61	0.59	0.41	0.76	0.53	0.68	0.26	0.44	0.71	0.49	1.80	0.65	0.60	0.46	0.58
Hong Kong	-	-	0.47	0.28	0.25	-	0.29	0.20	-	-	-	2.00	0.25	-	0.40	0.11	0.26
India	3.17	0.73	1.64	1.13	0.87	1.76	0.78	0.79	0.71	0.59	1.00	-	1.17	0.80	1.44	1.67	1.07
Indonesia	1.40	0.78	0.50	3.00	0.80	-	1.25	-	-	-	-	-	1.00	2.00	-	5.00	1.18
Korea	0.50	0.20	0.56	0.42	0.39	0.72	0.71	0.60	1.00	3.50	0.20	0.80	0.60	0.50	1.00	-	0.52
Malaysia	1.00	0.17	1.29	1.00	0.82	1.00	1.43	-	-	-	-	0.25	0.83	-	0.60	2.00	0.91
New Zealand	-	1.00	-	-	-	0.50	-	-	1.00	-	-	-	-	-	1.00	-	0.47
Philippines	1.00	-	4.00	1.50	0.11	-	0.83	-	-	-	-	-	3.00	-	0.25	1.50	1.13
Singapore	-	-	5.00	-	0.67	-	1.25	0.50	-	-	1.00	-	-	0.50	-	0.29	1.17
Taiwan	-	0.68	0.68	0.44	1.00	0.33	0.73	0.50	0.11	-	0.82	0.84	0.80	-	-	-	0.69
Thailand	0.64	0.40	0.45	0.08	0.50	2.00	0.40	0.29	0.50	-	-	-	0.29	-	0.12	0.60	0.33
Asia Pac ex-Japan	0.86	0.58	0.69	0.61	0.50	0.81	0.73	0.65	0.53	0.51	0.67	0.58	0.96	0.61	0.66	0.54	

Key:

3-month Earnings Revision Ratio greater than 1.00

Source : BofA Asia Pac Quantitative Strategy, IBES, MSCI



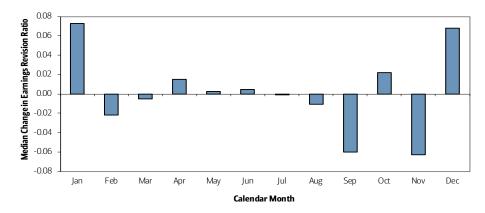
Table 8: Asia Pac ex-Japan Country-Sector - Earnings Upgrades / DowngradesMajority of APxJ country-sectors' downgrades outnumber upgrades

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Australia	2/3	7 / 12	6/2	5/3	5/1	3/2	3/3	4/3	2/1	1/1	0/0	0/0	0/1	2/2	2/0	4/3	46/37
China	6/17	58 / 89	80 / 128	42 / 85	23 / 62	56 / 72	7 / 23	14/17	1/7	13 / 35	35 / 43	25 / 46	3/2	18 / 26	11 / 23	11/33	403 / 708
Hong Kong	0/0	0/0	1/6	4/6	1/2	0/0	0/3	0/2	0/1	0/0	0/1	0/1	0/1	0/0	2/3	4/10	12/36
India	8/1	9/22	15/13	17 / 13	4/11	10/6	8/7	6/11	1/3	5/4	0/2	0/0	2/3	1/2	3/4	3/3	92 / 105
Indonesia	4/4	3/2	0/2	3/1	3/6	0/2	3/3	0/0	0/0	0/0	0/0	0/0	2/4	1/1	1/0	3/1	23 / 26
Korea	1/2	1/14	14/32	3/15	2/11	2/8	4/4	2/6	2/4	2/1	1/7	2/1	0/3	3/10	1/1	0/0	40 / 119
Malaysia	1/1	0/2	2/3	1/1	3/5	0/2	1/1	1/0	0/0	0/0	0/0	0/1	1/2	0/0	1/1	1/0	12 / 19
New Zealand	0/0	1/0	0/2	0/0	0/0	0/1	0/0	0/0	1/0	0/0	0/0	0/0	1/0	0/0	2/0	0/1	5/4
Philippines	1/0	0/0	4/1	1/1	0/3	0/0	2/1	0/0	0/0	0/0	0/0	0/0	3/0	0/0	0/2	1/2	12/10
Singapore	0/0	0/0	7/2	1/0	1/1	0/0	2/1	0/1	0/0	0/0	0/1	0/0	0/0	1/0	1/0	1/5	14/11
Taiwan	0/1	5/5	5/9	4/7	2/0	1/0	2/4	0/2	0/3	0/0	16 / 17	12 / 17	1/2	0/0	0/0	0/0	48 / 67
Thailand	2/4	1/6	2/3	1/8	2/6	1/1	1/6	0/6	0/1	0/0	0/3	0/0	2/1	0/1	1/5	0/3	13 / 54
Asia Pac ex-Japan	25 / 33	85 / 152	136 / 203	82 / 140	46 / 108	73 / 94	33 / 56	27 / 48	7/20	21 / 41	52 / 74	39 / 66	15/19	26 / 42	25/39	28/61	

Source : BofA Asia Pac Quantitative Strategy, IBES, MSCI

Chart 85: Seasonality of Asia Pac ex-Japan Earnings Revision Ratio

Median change in ERR the highest in January

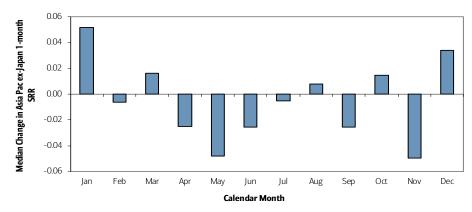


Source: BofA Asia Pac Quantitative Strategy, IBES, MSCI

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Chart 86: Seasonality of Asia Pac ex-Japan Sales Revision Ratio

Median change in SRR the highest in January



Source: BofA Asia Pac Quantitative Strategy, IBES, MSCI

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 <u>Global Positioning in Stocks</u> and <u>Pacific Positioning</u>.



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 <u>Global Earnings</u> <u>Revision Ratio</u> and <u>Asia Pac ex-Japan Earnings Revision Ratio</u>.

Weekly: <u>High Frequency Monitor</u>

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%

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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