

European Snapshot

Who has the highest buyback yield for the next 12 months?

Quantitative Strategy

Screen of the Week: the largest 12m fwd buyback yield

Ninety companies that are part of Europe Stoxx 600 have announced new buybacks thus far this year, of which 61 were announced in the last month (see Exhibit 57 in [European Snapshot: First signs of bottoming revisions 06 March 2024](#) for the full list). The expected 12m fwd buyback yield stands at 1.5%, a typical level over the past decade. Three sectors lead the expectations for high buybacks in the next three years: Energy, Telecoms and Financials (mainly Banks). In our Screen of the Week, we show the 50 companies with the highest expected 12m fwd buyback yield (Exhibit 6).

10th consecutive outflow from Europe-focused funds

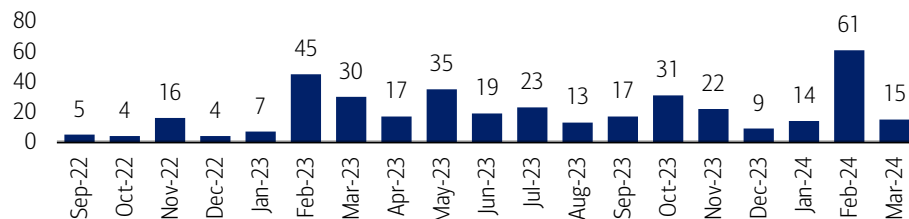
Europe-focused equity funds recorded their 10th consecutive weekly outflow of \$1.16bn, with a net -27.6% seeing net inflows. Outflows amounted to \$2.4bn from active funds and \$1.24bn of inflows moved into passive funds. Europe-focused funds have seen \$10.56bn of outflows YTD: \$15.98bn of outflows from active funds and \$5.42bn of inflows into passive funds. Switzerland (\$0.84bn) and Quality stocks (\$0.35bn) noted the largest inflows last week, while the UK (\$0.85bn), Value stocks (\$0.27bn) and Financials (\$0.27bn) posted the largest outflows. No sector recorded inflows.

BofA ERR: small declines globally, except EM

The Global BofA 4-week EPS Revision Ratio decreased to 0.83, driven by declines in all regions except EM (Exhibit 41). The European ratio decreased the most over the week to 0.78 (the lowest amongst the regions) on the back of declines in Industrials, Spain and Rising Momentum. The largest increases in Europe were in Energy, France and High Quality.

Exhibit 1: Last month 61 companies announced new buyback programs, the highest number since we started tracking new announcements in September 2022

Europe Stoxx 600: number of new buyback programs announcements



Source: BofA Global Research, FactSet, Bloomberg, Refinitiv, company filings

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14 March 2024

Quant Strategy
Europe

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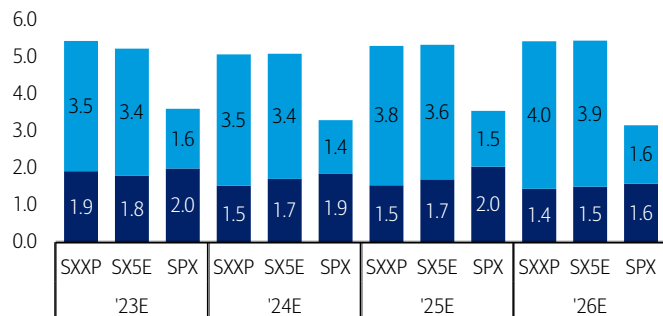
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Timestamp: 14 March 2024 01:30AM EDT

Screen of the week

Exhibit 2: Cash yield is expected to remain higher in Europe compared to the USA, but buyback yield is expected to decline in the next 3 years

Buyback (dark blue) and dividend yield (light blue) for selected indices



Source: BofA Global Research, FactSet. Note: cash yield is sum of buyback yield and dividend yield
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Exhibit 3: Energy, Telecoms and Financials (mainly Banks) are expected to deliver the highest buyback yield in the next 3 years

Consensus expectations for buyback yield by industry in SXXP index (%)

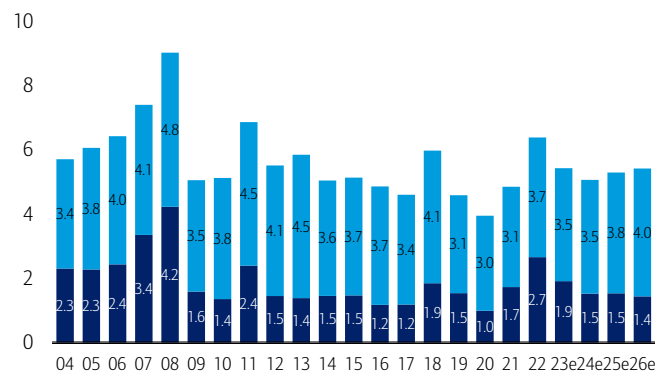
	23E	24E	25E	26E
Energy	6.33	5.62	5.15	4.51
Telecoms	1.08	4.14	5.07	4.85
Financials	3.55	2.99	2.92	2.80
Staples	1.62	1.48	1.88	1.87
Real Estate	0.11	0.92	0.13	0.14
Industrials	1.25	0.87	0.79	0.81
Technology	0.66	0.77	0.91	0.58
Health Care	1.13	0.71	0.77	0.66
Discretionary	1.23	0.56	0.62	0.71
Basic Materials	1.07	0.35	0.09	0.11
Utilities	1.60	0.25	0.16	0.00

Source: BofA Global Research, FactSet

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Exhibit 4: Consensus expectations suggest a return over the next 3 years to yields typical of those over the last decade

Buyback (dark blue) and dividend yield (light blue) for Europe Stoxx 600 index

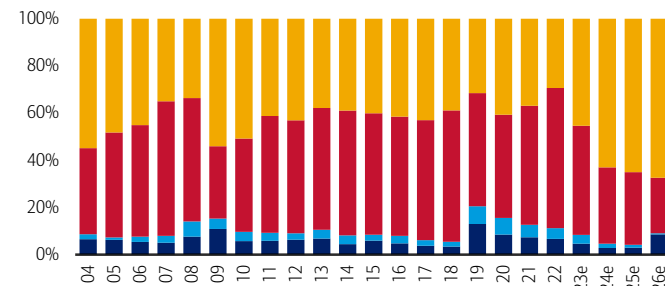


Source: BofA Global Research, FactSet

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Exhibit 5: On average in the last 20 years, 48% of SXXP companies paid both buybacks and dividends; this is expected to fall to only 30% in the next 3 years

% of companies in SXXP that: had no buyback/dividend (dark blue), paid only buybacks (light blue), paid buybacks and dividends (red), paid only dividends (yellow)



Source: BofA Global Research, FactSet

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Exhibit 6: Four companies show 12m fwd buyback yields above 10%

50 European companies which a) are part of the Europe Stoxx 600 index and b) show the highest 12m fwd buyback yield

BBG Ticker	Name	Country	Supersector	Market cap (free float, EUR bn)	12m fwd buyback yield (%)
DTE GR	Deutsche Telekom	Germany	Telecoms	76.0	13.32
AIBG ID	AIB	Ireland	Banks	6.9	10.86
CBK GR	Commerzbank	Germany	Banks	11.6	10.52
UCG IM	UniCredit	Italy	Banks	54.9	10.11
INGA NA	ING	Netherlands	Banks	46.4	9.51
TEN IM	Tenaris	Italy	Energy	8.1	9.27
NWG LN	NatWest	United Kingdom	Banks	16.3	8.97
STAN LN	Standard Chartered	United Kingdom	Banks	16.9	8.70
RF FP	Eurazeo	France	Financial Svs	3.8	8.35
AGN NA	Aegon	Netherlands	Insurance	7.8	8.24
ABN NA	ABN AMRO	Netherlands	Banks	6.5	8.24
IMB LN	Imperial Brands	United Kingdom	Food, Bev, Tobacco	16.6	8.09
JYSK DC	Jyske	Denmark	Banks	3.5	8.00
NEXI IM	Nexi	Italy	Industrial Gds & Svs	3.8	7.49
PRX NA	Prosus	Netherlands	Technology	41.0	7.43
BARC LN	Barclays	United Kingdom	Banks	28.5	7.40

Exhibit 6: Four companies show 12m fwd buyback yields above 10%

50 European companies which a) are part of the Europe Stoxx 600 index and b) show the highest 12m fwd buyback yield

BBG Ticker	Name	Country	Supersector	Market cap (free float, EUR bn)	12m fwd buyback yield (%)
EQNR NO	Equinor	Norway	Energy	23.6	7.33
VMUK LN	Virgin Money UK	United Kingdom	Banks	2.9	7.31
BEZ LN	Beazley	United Kingdom	Insurance	5.1	7.26
CA FP	Carrefour	France	PCDG Stores	8.4	7.17
BP/ LN	BP	United Kingdom	Energy	94.1	7.05
DEMANT DC	Demant	Denmark	Health Care	4.2	6.96
ISS DC	ISS	Denmark	Industrial Gds & Svs	2.5	6.91
REP SM	Repsol	Spain	Energy	18.4	6.76
ITV LN	ITV	United Kingdom	Media	3.0	6.69
LLOY LN	Lloyds Banking	United Kingdom	Banks	36.3	6.68
VOD LN	Vodafone	United Kingdom	Telecoms	19.4	6.58
SHEL LN	Shell	United Kingdom	Energy	192.8	6.55
BIRG ID	Bank of Ireland	Ireland	Banks	9.2	6.11
CABK SM	CaixaBank	Spain	Banks	16.5	6.06
HSBA LN	HSBC	United Kingdom	Banks	132.1	5.79
MBG GR	Mercedes-Benz	Germany	Autos & Parts	58.0	5.69
ABF LN	Associated British Foods	United Kingdom	Food, Bev, Tobacco	8.8	5.56
DANSKE DC	Danske Bank	Denmark	Banks	18.7	5.52
TTE FP	TotalEnergies	France	Energy	144.9	5.43
MRO LN	Melrose Industries	United Kingdom	Industrial Gds & Svs	9.0	5.31
EBS AV	Erste	Austria	Banks	12.2	4.92
CARLB DC	Carlsberg	Denmark	Food, Bev, Tobacco	12.3	4.77
SYDB DC	Sydbank	Denmark	Banks	2.8	4.77
KGF LN	Kingfisher	United Kingdom	Retail	5.0	4.74
DBK GR	Deutsche Bank	Germany	Banks	26.1	4.65
SAN SM	Banco Santander	Spain	Banks	64.6	4.58
SAB SM	Banco de Sabadell	Spain	Banks	7.3	4.57
TRELB SS	Trelleborg	Sweden	Industrial Gds & Svs	7.8	4.56
GALP PL	Galp Energia	Portugal	Energy	6.9	4.47
TKWY NA	Just Eat Takeaway.com	Netherlands	Technology	2.5	4.45
IHG LN	InterContinental Hotels	United Kingdom	Travel & Leisure	16.6	4.34
BBY LN	Balfour Beatty	United Kingdom	Construction & Materials	2.2	4.20
PNDORA DC	Pandora	Denmark	Consumer Pds & Svs	12.8	4.17
KBC BB	KBC	Belgium	Banks	16.6	3.93

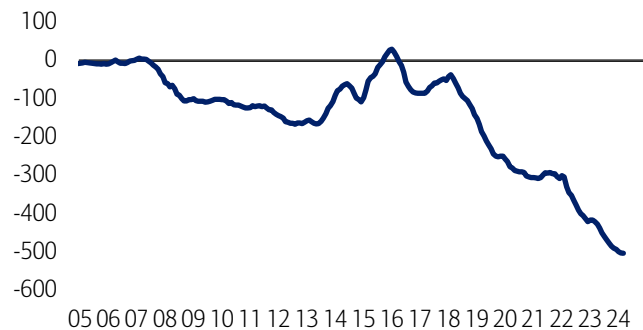
Source: BofA Global Research, FactSet, BofA iQ Database. Disclaimer: The screen above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This screen was not created to act as a benchmark.

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Flows

Exhibit 7: Europe-focused equity funds have seen \$496bn of outflows since 2005 (active funds: -\$627bn, passive funds: \$131bn)

Long-term cumulative flows into Europe-focused equity funds (\$bn)

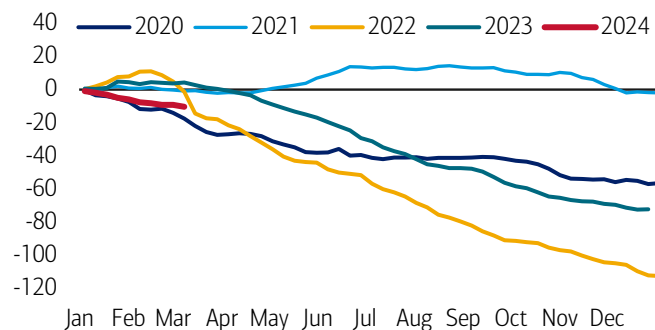


Source: BofA Global Research, EPFR Global

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Exhibit 9: Europe-focused equity funds have seen \$10.56bn of outflows YTD, with \$11.52bn of outflows from European-domiciled funds and \$0.99bn of inflows into US-domiciled funds

Cumulative annual flows into Europe-focused equity funds (\$bn)

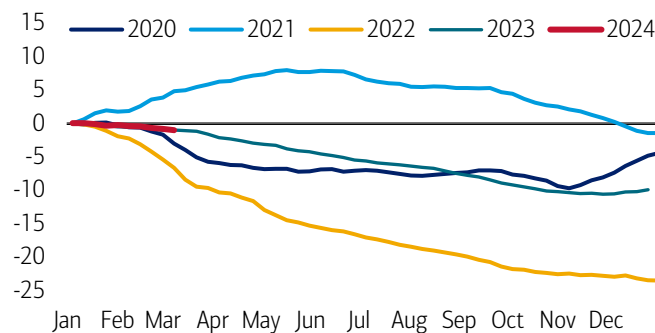


Source: BofA Global Research, EPFR Global

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Exhibit 11: SMID focused European equity funds have seen \$1.01bn of outflows YTD, \$1.26bn of outflows from active funds and \$0.24bn of inflows into passive funds

Cumulative annual flows into SMID-focused European equity funds (\$bn)

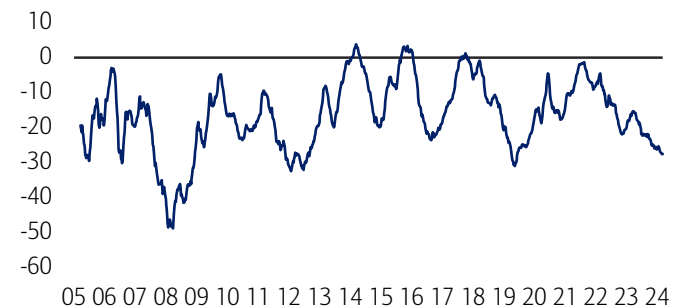


Source: BofA Global Research, EPFR Global

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Exhibit 8: A net -27.6% of Europe-focused funds saw inflows last week, the first improvement in 7 weeks

Net % of Europe-focused equity funds seeing inflows on weekly basis (12w mva)

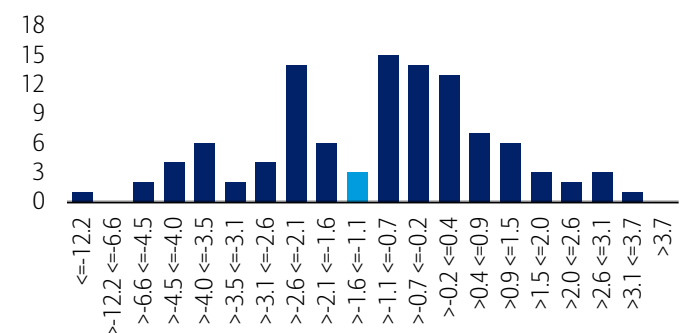


Source: BofA Global Research, EPFR Global. Note: Net % calculated as % of funds that saw inflows minus % of funds that saw outflows

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Exhibit 10: Europe-focused equity funds saw \$1.16bn of outflows last week, the 10th consecutive weekly outflow and the largest in last 4 weeks

Distribution of weekly flows into Europe-focused equity funds over the last two years (\$bn)

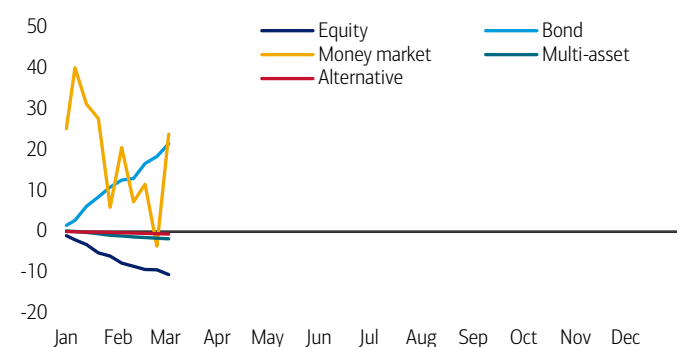


Source: BofA Global Research, EPFR Global

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Exhibit 12: Equity funds have seen the largest outflows YTD (\$10.6bn), while Money market funds have seen the largest inflows (\$23.9bn)

YTD cumulative flows into Europe-focused funds by asset-class (\$bn)

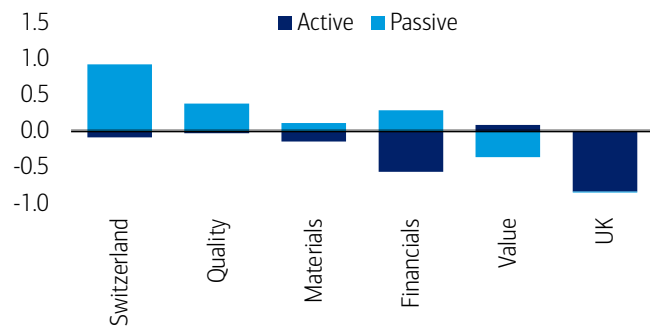


Source: BofA Global Research, EPFR Global

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Exhibit 13: Switzerland recorded the largest inflows (\$0.84bn), while the UK noted the largest outflows (\$0.85bn) last week

Top and bottom inflows/outflows last week into Europe-focused equity funds/stocks by country, sector, style split into active and passive (\$bn)

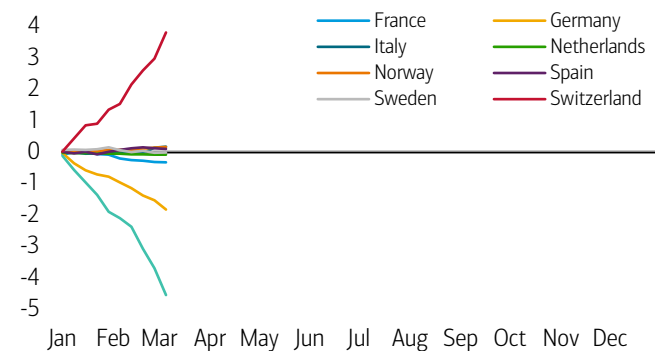


Source: BofA Global Research, EPFR Global. Note: flows into styles are aggregated from stock level data

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Exhibit 15: Switzerland noted the largest inflows YTD (\$3.8bn), while the UK recorded the largest outflows (\$4.5bn)

YTD cumulative flows into Europe-focused equity funds by country (\$bn)

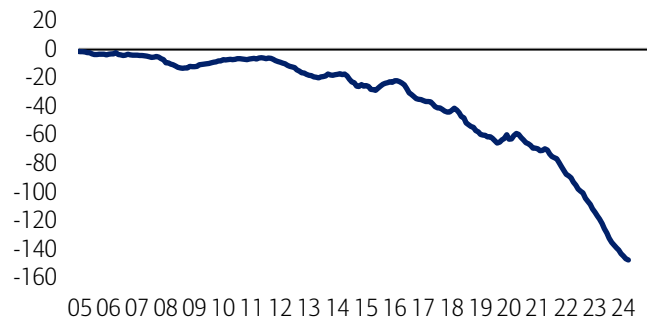


Source: BofA Global Research, EPFR Global.

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Exhibit 17: UK-focused equity funds have seen \$146bn of outflows since 2005 (active funds: \$-164bn, passive funds: \$18bn)

Long-term cumulative flows into UK-focused equity funds (\$bn)

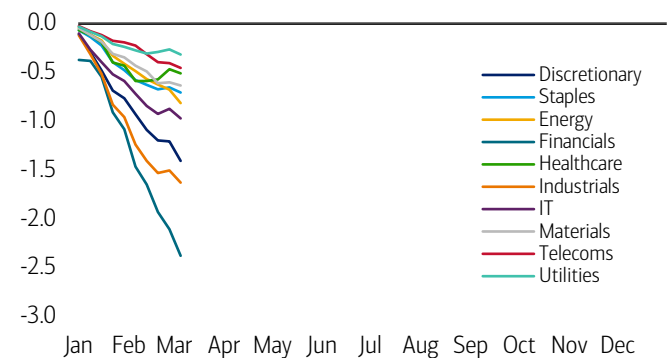


Source: BofA Global Research, EPFR Global

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Exhibit 14: Utilities noted the smallest outflows YTD (\$0.3bn), while Financials recorded the largest outflows (\$2.4bn)

YTD cumulative flows into Europe-focused equity funds by sector (\$bn)

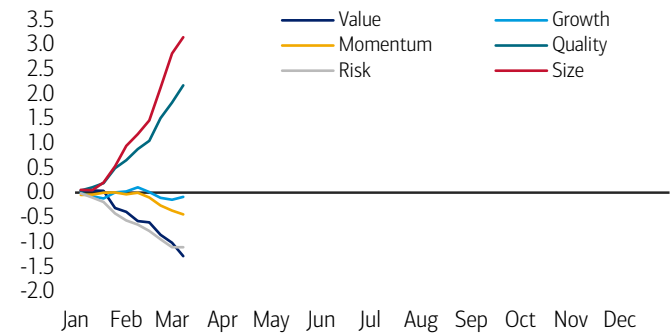


Source: BofA Global Research, EPFR Global

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Exhibit 16: Size has seen the largest inflows YTD (\$3.1bn), while Value has recorded the largest outflows (\$1.3bn)

YTD cumulative flows into European equities by style (long-short, \$bn)

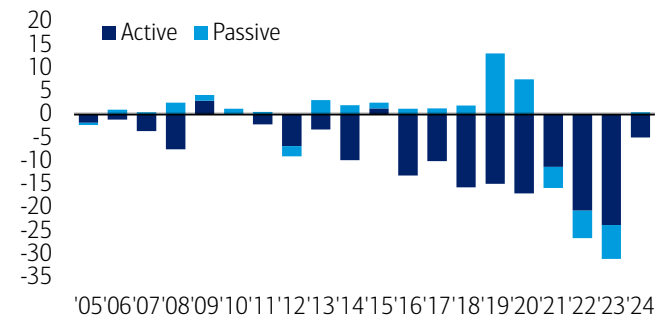


Source: BofA Global Research, EPFR Global. Note: flows into styles are aggregated from stock level data

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Exhibit 18: YTD UK-focused equity active funds have seen \$5bn of outflows, while passive funds recorded \$0.4bn of inflows

Yearly flows into UK-focused equity funds (\$bn) split between active and passive funds

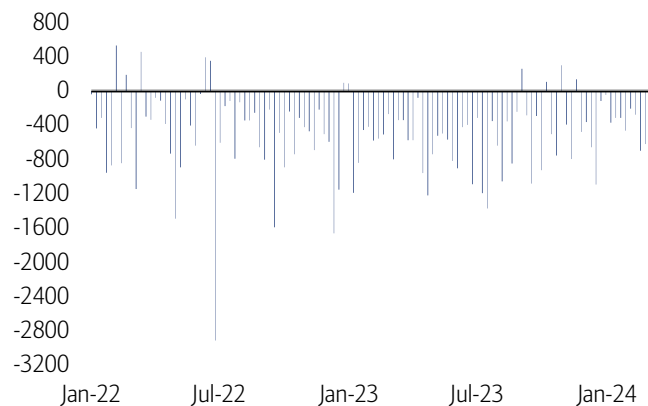


Source: BofA Global Research, EPFR Global

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Exhibit 19: UK-focused equity funds saw \$0.85bn of outflows last week, the 15th consecutive weekly outflow and largest in 2024

UK-focused equity funds weekly flows (\$mn)

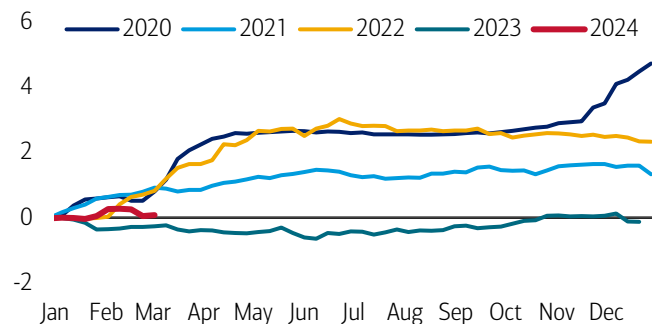


Source: BofA Global Research, EPFR Global.

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Exhibit 21: UK-focused equity funds benchmarked to FTSE 100 have seen \$0.07bn of inflows YTD

Cumulative annual flows into UK-focused equity funds benchmarked to FTSE 100 index (\$bn)

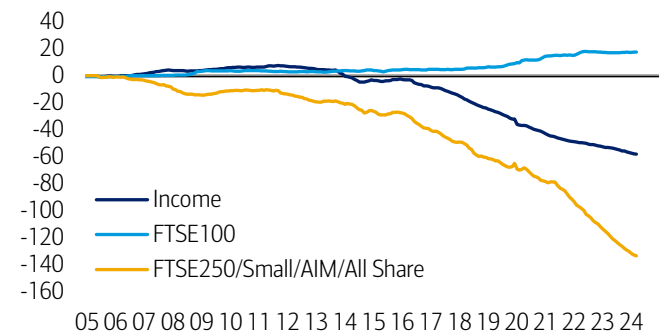


Source: BofA Global Research, EPFR Global

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Exhibit 20: Since 2005, UK equity-focused income funds saw \$58bn of outflows, \$18bn of inflows into FTSE100 benchmarked funds and \$133bn of outflows from FTSE250/AIM/All Share/Small caps

Long-term cumulative flows into UK-focused equity funds (\$bn) split by focus

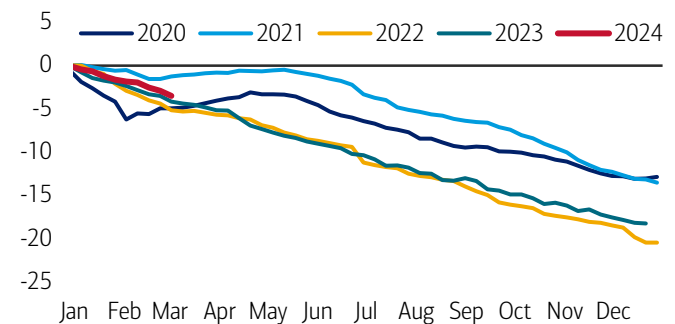


Source: BofA Global Research, EPFR Global.

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Exhibit 22: UK-focused equity funds benchmarked to FTSE 250/Small/AIM/All Share indices have seen \$3.52bn of outflows YTD

Cumulative annual flows into UK-focused equity funds benchmarked to FTSE 250/AIM/Small/ALL Share indices (\$bn)



Source: BofA Global Research, EPFR Global

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Exhibit 23: Tecan has seen the largest inflows last week as % of mcap, while Rs Group largest outflows across funds

Top 5 and bottom 5 European companies that are part of Europe Stoxx 600 index and saw the largest inflow/outflow from different types of funds last week as % of market capitalisation

Stocks that saw the highest inflows last week

BBG Ticker	Name	Sector	Country	Flow as % of	
				mcap	Group
SMWH LN	New Wh Smith	Retail	UK	0.11	Active
WOSG LN	Watches Of Switzerland	Consumer Pds & Svs	UK	0.05	Active
BYG LN	Big Yellow	Real Estate	UK	0.04	Active
ADM LN	Admiral	Insurance	UK	0.03	Active
SESG FP	Ses	Telecomms	Luxembourg	0.03	Active
TECN SW	Tecan	Health Care	Switzerland	0.28	Passive
VOLCARB SS	Volvo Car	Autos & Parts	Sweden	0.09	Passive
TEMN SW	Temenos	IT	Switzerland	0.08	Passive
ORSTED DC	Orsted	Utilities	Denmark	0.08	Passive
MAERSKB DC	A.P. Moller-Maersk	Industrial Gds & Svs	Denmark	0.07	Passive

Stocks that saw the highest outflows last week

BBG Ticker Name	Sector	Country	Flow as % of	
			mcap	Group
RS1 LN	Rs	Industrial Gds & Svs	-0.24	Active
TPK LN	Travis Perkins	Industrial Gds & Svs	-0.20	Active
ITV LN	ITV	Media	-0.13	Active
JMAT LN	Johnson Matthey	Chemicals	-0.13	Active
ECV GR	Encavis	Utilities	-0.08	Passive
Tieto FH	Tietoevry	IT	-0.07	Passive
SYDB DC	Sydbank	Banks	-0.06	Passive
ORNBV FH	Orion B	Health Care	-0.06	Passive
ELISA FH	Elisa Corporation	Telecomms	-0.05	Passive

Source: BofA Global Research, EPFR Global. Disclaimer: The screen 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 screen was not created to act as a benchmark.

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Performances

Exhibit 24: The SXXP index typically registers a 1.4% gain in Q1, while the current quarter-to-date return stands at a 5.92% gain
Historical average performance of Europe Stoxx 600 index (EUR, price return)



Source: BofA Global Research, Refinitiv. Note: historical average performance calculated over 1992-2023

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Exhibit 25: Q1 '24 so far notes stronger gains in Netherlands, IT and Growth compared to historical trends

Current QTD and YTD performance in comparison with historical average relative performance of MSCI sectors/countries indices (vs MSCI Europe, local currency, price return) and styles (long/short, EUR, price return)

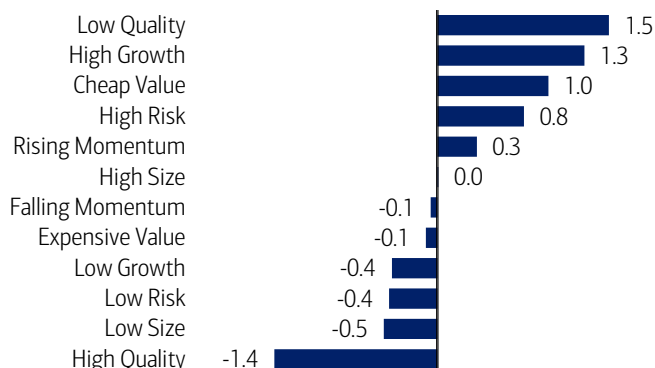
	QTD (%)	Diff vs historical	YTD (%)	Diff vs historical
Germany	0.7	0.7	0.7	0.7
France	0.6	-0.4	0.6	-0.4
Italy	5.3	4.7	5.3	4.7
Netherlands	9.4	8.9	9.4	8.9
Spain	-2.5	-3.5	-2.5	-3.5
Sweden	0.5	-4.1	0.5	-4.1
Switzerland	-0.9	0.1	-0.9	0.1
UK	-5.4	-4.1	-5.4	-4.1
Materials	-5.7	-6.3	-5.7	-6.3
Communication Svs	-4.3	-4.2	-4.3	-4.2
Discretionary	5.3	3.9	5.3	3.9
Staples	-6.3	-5.8	-6.3	-5.8
Energy	-7.7	-7.6	-7.7	-7.6
Financials	1.2	3.0	1.2	3.0
Healthcare	3.1	4.2	3.1	4.2
Industrials	1.7	-0.3	1.7	-0.3
IT	12.1	10.0	12.1	10.0
Utilities	-13.4	-12.1	-13.4	-12.1
Real Estate	-10.5	-7.9	-10.5	-7.9
Value	-1.7	0.0	-1.7	0.0
Growth	14.0	9.2	14.0	9.2
Momentum	6.0	3.0	6.0	3.0
Quality	0.5	2.0	0.5	2.0
Risk	-2.2	-3.5	-2.2	-3.5
Size	-7.2	-10.9	-7.2	-10.9

Source: BofA Global Research, Refinitiv, MSCI. Note: historical average performance calculated over 1993-2023

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Exhibit 26: March sees largest gains in Low Quality so far, while High Quality experiences the largest losses

% MTD returns for styles in the largest 250 European stocks (relative price return equally weighted in EUR)

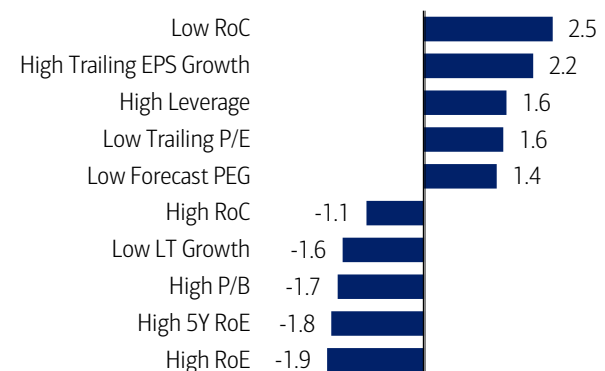


Source: BofA Global Research, FactSet

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Exhibit 27: Low RoC have seen the strongest gains MTD, while High RoE records the largest losses

% MTD best and worst factor in styles in the largest 250 European stocks (relative price return equally weighted in EUR)

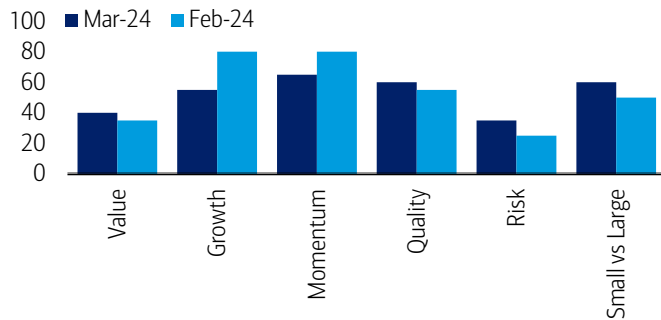


Source: BofA Global Research, FactSet

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Exhibit 28: Momentum has outperformed in 13 out of 20 sectors so far in March

% of SXXP index super-sectors in which styles (L/S) are outperforming in Mar

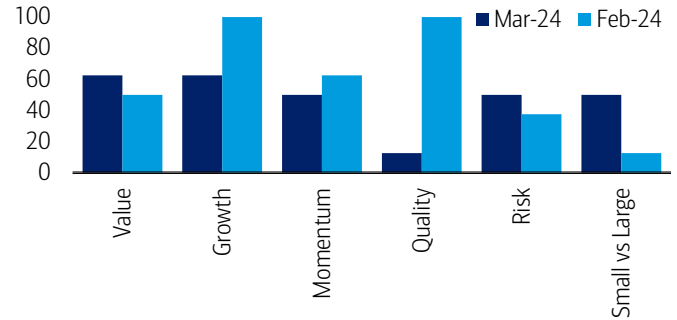


Source: BofA Global Research, FactSet

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Exhibit 29: Value and Growth have outperformed in 5 out of 8 countries so far in March

% of SXXP index countries* in which styles (L/S) are outperforming in Mar

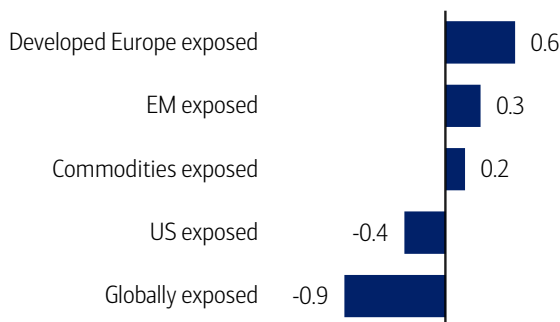


Source: BofA Global Research, FactSet. Note: * countries included: France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland, UK

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Exhibit 30: Developed Europe exposed stocks have gained the most MTD, while Globally exposed stocks have noted the largest losses

% MTD returns for revenue exposure baskets (relative price return equally weighted in EUR)

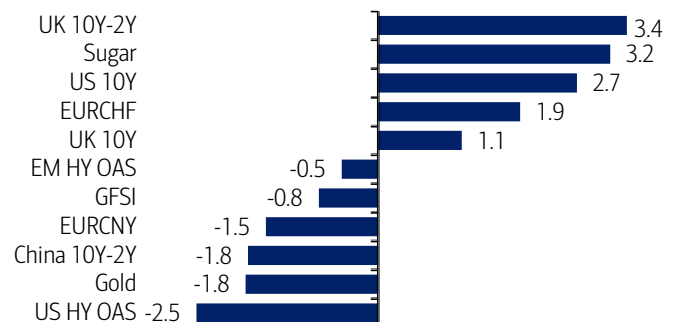


Source: BofA Global Research, FactSet

BofA GLOBAL RESEARCH

Exhibit 31: Stocks sensitive to rising UK 10Y-2Y have gained the most MTD, while these sensitive to rising US HY OAS lost the most

% MTD returns for stocks with specific cross-asset sensitivities (relative price return equally weighted in EUR)



Source: BofA Global Research, FactSet

BofA GLOBAL RESEARCH

Exhibit 32: Q1 has been historically the strongest for Sweden, IT and Low vs High Size

Historical average returns for countries, sectors, styles (L/S) in each quarter

Quarter	Germany	France	Italy	Netherlands	Spain	Sweden	Switzerland	UK				
Q1	-0.1%	1.8%	1.5%	1.5%	0.6%	3.2%	-0.3%	-2.0%				
Q2	0.2%	-0.1%	-2.3%	1.2%	0.2%	0.9%	1.1%	-0.3%				
Q3	-2.3%	-1.2%	-0.1%	-0.6%	0.1%	1.0%	0.5%	0.9%				
Q4	2.5%	0.2%	-1.0%	0.8%	0.7%	0.7%	-0.3%	-1.0%				
Quarter	Materials	Communication Svs	Discretionary	Staples	Energy	Financials	Healthcare	Industrials	IT	Utilities	Real Estate	
Q1	0.9%	-1.0%	1.5%	0.8%	0.8%	-2.4%	-0.7%	1.7%	2.3%	-0.7%	-7.4%	
Q2	0.6%	-4.0%	-0.4%	1.8%	2.2%	-1.4%	2.8%	0.2%	-0.4%	0.6%	-6.5%	
Q3	-2.2%	-0.4%	-1.8%	2.2%	-0.3%	0.2%	2.9%	-1.0%	-1.2%	0.8%	-1.8%	
Q4	1.6%	2.1%	1.2%	-2.1%	-2.4%	0.2%	-2.4%	0.8%	2.0%	-0.7%	3.2%	
Quarter	Value	Growth	Momentum	Quality	Risk	Size (Low vs High)						
Q1	-1.1%	3.4%	3.1%	-0.2%	0.0%	4.5%						
Q2	-1.3%	0.7%	5.9%	2.1%	-2.5%	0.0%						
Q3	0.7%	0.5%	5.1%	2.4%	-3.6%	0.8%						
Q4	0.2%	0.4%	1.6%	0.9%	3.3%	0.1%						

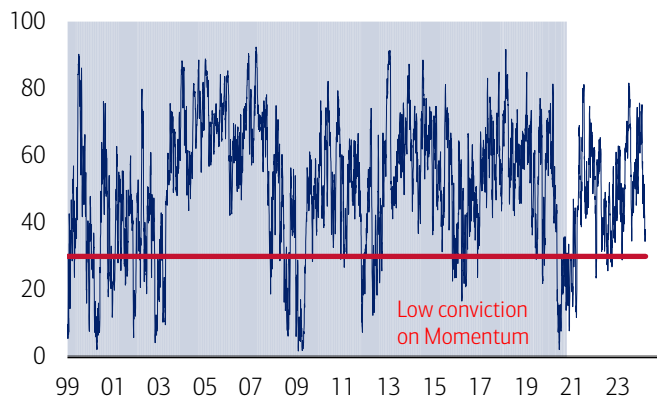
Source: BofA Global Research, Refinitiv, MSCI. Note: historical average performance calculated over 1993-2023

BofA GLOBAL RESEARCH

European Momentum Conviction Indicator

Exhibit 33: BofA European Momentum Conviction Indicator (MCI) stands at 37, above the threshold of 30 which signals a potential crash in the Momentum style

BofA European Momentum Conviction Indicator (100=High, 0 = Low)

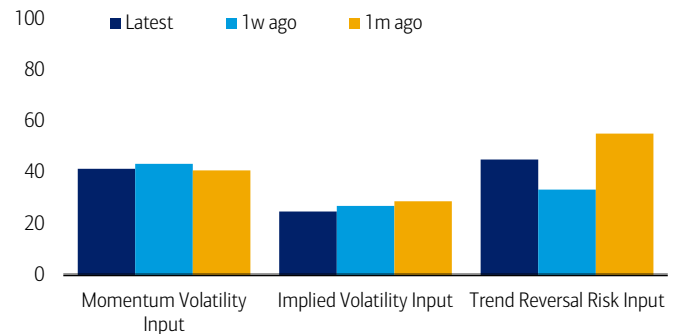


Source: BofA Global Research, FactSet. Disclaimer: Performance through 06 October 2020 (shaded on the chart above) is backtested and does not represent the actual performance of any account or fund. Backtested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. The indicator identified as the BofA European Conviction Momentum Indicator 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 European Equity Quant Strategy. This indicator was not created to act as a benchmark

BofA GLOBAL RESEARCH

Exhibit 34: Increase in Trend Reversal Risk inputs pushed the indicator up by 3 points over the week

BofA European Momentum Conviction Indicator's inputs latest readings (100=High, 0=Low)



Source: BofA Global Research, FactSet. For definitions of the inputs please see European Momentum Conviction Indicator

BofA GLOBAL RESEARCH

Valuations

Exhibit 35: The most attractive multiple on z-score is 12m fwd Buyback yield at 1.5%, while the least attractive is 12m fwd DY at 3.8% MSCI Europe valuation multiples

Market	Latest Value	Historical Z-Score	2-Year Z-Score	5-Year Z-Score	10-Year Z-Score	Historical Average	2-Year Average	5-Year Average	10-Year Average
12m trailing P/B	2.0	0.3	1.3	0.8	1.2	1.8	1.9	1.9	1.8
Shiller P/E	25.0	0.2	1.4	1.3	1.9	23.6	23.7	21.8	20.2
12m trailing P/E	14.7	-0.1	0.2	-0.6	-1.0	15.3	14.5	16.8	17.7
12m fwd P/E	12.5	0.0	2.3	-0.1	0.0	12.4	11.6	12.7	12.6
12m trailing EV/EBITDA	8.0	-0.1	-0.4	-0.9	-0.8	8.0	8.2	8.9	8.7
12m fwd EV/EBITDA	8.2	0.7	1.2	-0.2	0.0	7.5	7.8	8.3	8.2
12m trailing Net Debt/EBITDA	1.3	-0.6	1.4	-0.7	-1.0	1.4	1.3	1.5	1.5
12m fwd Net Debt/EBITDA	1.2	-0.2	2.2	-0.4	-0.6	1.3	1.1	1.3	1.3
12m trailing Interest Coverage	8.4	-0.5	1.9	0.3	-0.3	7.5	10.6	9.0	7.9
12m fwd Interest Coverage	9.1	-0.4	1.5	0.3	-0.2	8.4	10.8	9.7	8.8
12m trailing DY	3.1	0.6	0.5	0.0	0.4	3.7	3.2	3.1	3.2
12m fwd DY	3.8	0.9	0.7	0.4	0.9	4.7	3.9	3.9	4.2
12m trailing ROE	14.0	-0.9	-2.0	-1.5	-2.1	12.0	13.1	11.5	10.6
12m fwd ROE	14.0	-0.4	0.2	-0.9	-1.5	13.2	14.0	12.6	12.2
12m trailing Buyback yield	1.7	-1.1	1.0	-0.8	-	1.1	1.9	1.3	-
12m fwd Buyback yield	1.5	-1.6	-1.2	0.8	-	1.1	1.7	1.2	-
12m trailing Cash Yield	5.1	-0.8	0.8	-0.5	-	4.5	5.3	4.7	-
12m fwd Cash Yield	5.1	-0.8	0.7	-0.6	-	4.7	5.3	4.8	-
12m trailing FCF Yield	5.1	0.1	1.8	0.2	-0.3	5.1	6.0	5.2	4.9
12m fwd FCF Yield	5.4	0.5	1.8	0.5	0.1	5.9	6.4	5.8	5.5

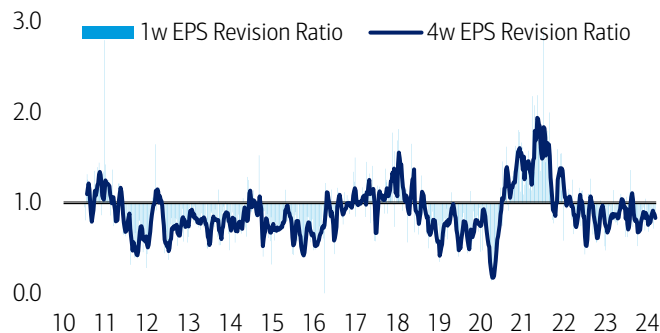
Source: BofA Global Research, Refinitiv DataStream, IBES. Note: Z-scores have been inversed for 12m Trailing and Forward Return on Equity, Dividend Yield, Interest Coverage, FCF Yield, Buyback Yield, and Cash Yield. Consequently, for Dividend Yield a Z-score of -0.8 implies that the current level is 0.8 standard deviations higher than the historical average, while for the P/E ratio a Z-score of -0.8 implies that the current level is 0.8 standard deviations below the historical average.

BofA GLOBAL RESEARCH

Revisions

Exhibit 36: Global 4-week EPS Revision Ratio stands at 0.83, down from last week

Ratio of BofA analysts' EPS upgrades to downgrades

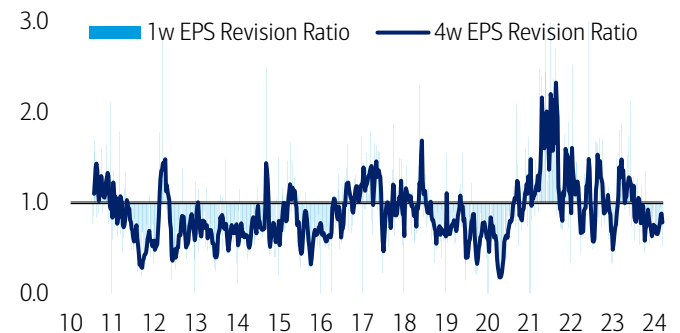


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 37: European 4-week EPS Revision Ratio stands at 0.78, down from last week

Ratio of BofA analysts' EPS upgrades to downgrades

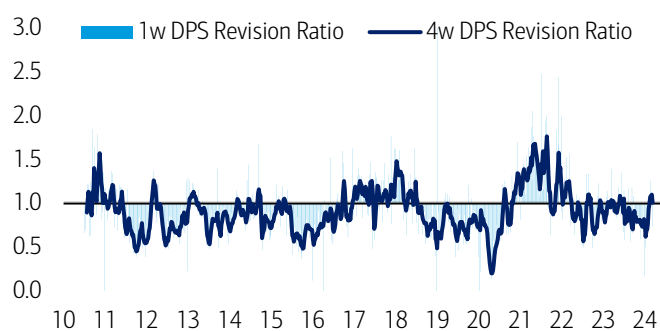


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 38: Global 4-week DPS Revision Ratio stands at 1.01, down from last week

Ratio of BofA analysts' DPS upgrades to downgrades

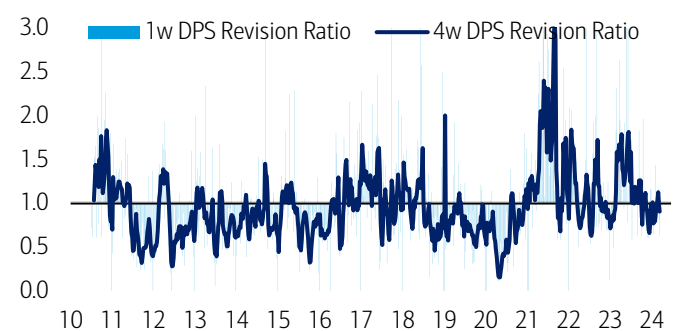


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 39: European 4-week DPS Revision Ratio stands at 0.90, down from last week

Ratio of BofA analysts' DPS upgrades to downgrades

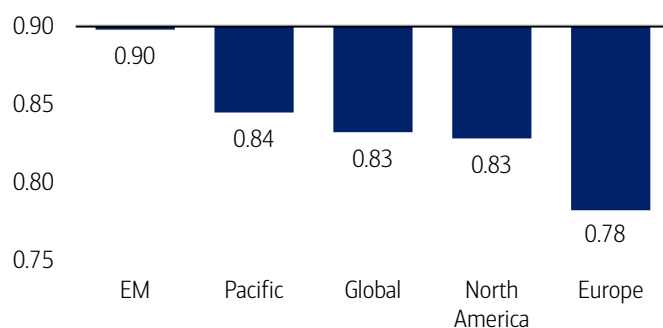


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 40: Currently, the 4-week EPS Revision Ratio is the strongest in EM, while it is the weakest in Europe

BofA 4w EPS Revision Ratio by region

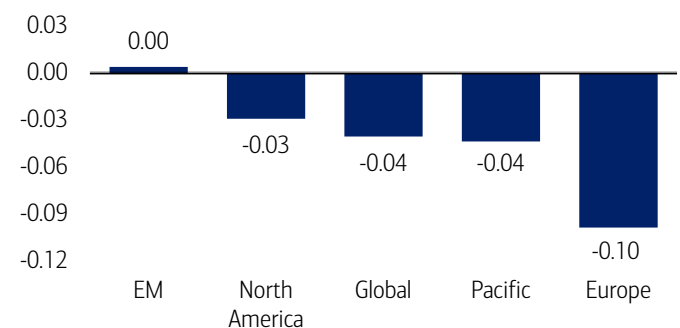


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 41: Over the past week, the 4-week EPS Revision Ratio improved only in EM, while it deteriorated the most in Europe

1w change in 4w BofA EPS Revision Ratio by region

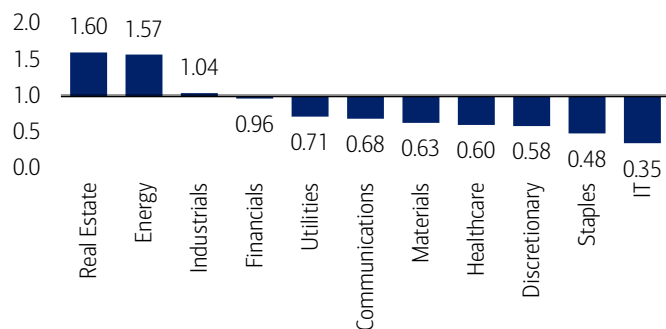


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 42: Currently, the 4-week EPS Revision Ratio is the strongest in Real Estate, while it is the weakest in IT

BofA 4w European EPS Revision Ratio by sector

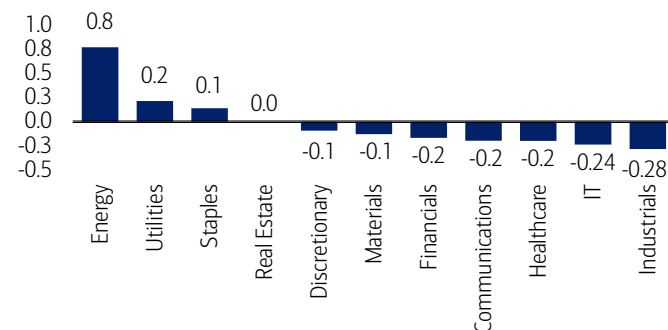


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 43: Over the past week, 4-week EPS Revision Ratio improved the most in Energy, while it deteriorated the most in Industrials

1w change in 4w BofA European EPS Revision Ratio by sector

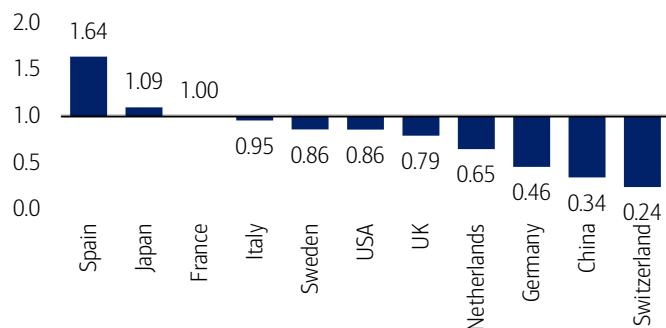


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 44: Currently, the 4-week EPS Revision Ratio is the strongest in Spain, while it is the weakest in Switzerland

BofA 4w EPS Revision Ratio by country

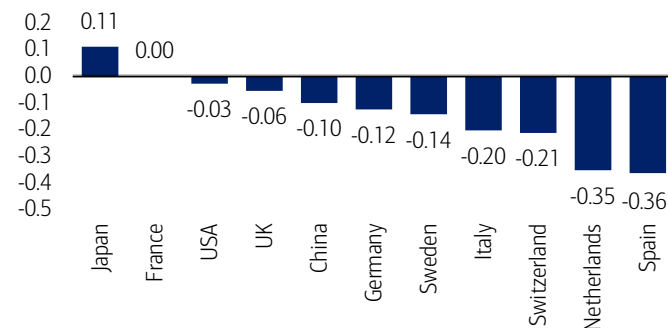


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 45: Over the past week, the 4-week EPS Revision Ratio improved the most in Japan, while it deteriorated the most in Spain

1w change in 4w BofA EPS Revision Ratio by country

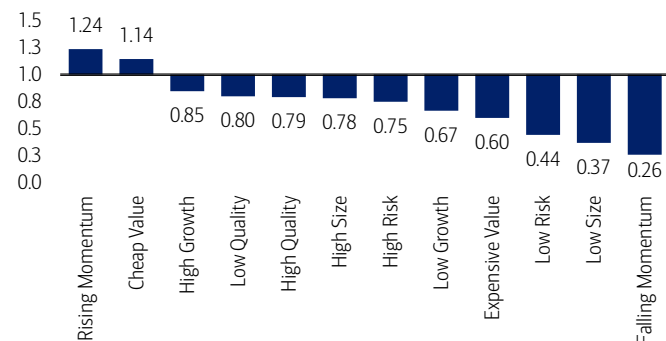


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 46: Currently, the 4-week EPS Revision Ratio is the strongest in Rising Momentum, while it is the weakest in Falling Momentum

BofA 4w European EPS Revision Ratio by style

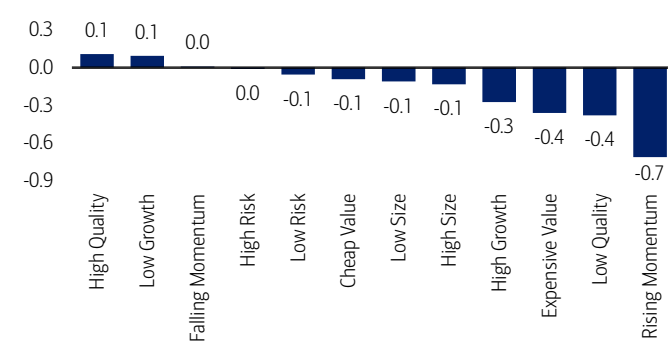


Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 47: Over the past week, 4-week EPS Revision Ratio improved the most in High Quality, while it deteriorated the most in Rising Momentum

1w change in 4w BofA European EPS Revision Ratio by style



Source: BofA Global Research, iQDatabase

BofA GLOBAL RESEARCH

Exhibit 48: Top 5 and bottom 5 stocks with the largest upgrades in BofA FY1 EPS over last week

BofA European covered stocks with Buy/Underperform rating that saw the largest increase/decrease in BofA FY1 EPS forecast over the past week

Top 5 stocks with the highest upgrade in FY1 EPS

BBG				MCap FY1 FY2 FY3				ChgDate	BBG Ticker
				(bn)	Chg	Chg	Chg		
Ticker	Name	Country	Sector	bn	Chg	Chg	Chg	ChgDate	BBG Ticker
SPM IM	Saipem	Italy	Energy	4.0	116%	46%	45%	08/03/2024	SUBC NO
ASRNL NA	ASR Nederland	Netherlands	Financials	9.0	26%	-2%	-2%	04/03/2024	TPK LN
DTG GR	Daimler Truck	Germany	Industrials	35.8	21%	14%	10%	04/03/2024	CLN SW
VIV FP	Vivendi	France	Communication Services	10.1	19%	-15%	-16%	08/03/2024	FRES LN
AV/ LN	Aviva plc	UK	Financials	15.1	13%	18%	17%	08/03/2024	EVK GR

Source: iQDatabase

Bottom 5 stocks with the highest downgrade in FY1 EPS

				MCap FY1 FY2 FY3				ChgDate	
				(bn)	Chg	Chg	Chg		
Name	Country	Sector	bn	Chg	Chg	Chg	Chg	ChgDate	
Subsea 7 SA	UK	Energy	4.2	-85%	-16%	-4%		08/03/2024	
Travis Perkins	UK	Industrials	1.8	-25%	-20%	0%		06/03/2024	
Clariant	Switzerland	Materials	4.0	-19%	-12%	0%		05/03/2024	
Fresnillo plc	UK	Materials	4.0	-13%	-9%	-7%		06/03/2024	
Evonik	Germany	Materials	7.9	-9%	-4%	0%		05/03/2024	

BofA GLOBAL RESEARCH

European Momentum Conviction Indicator

We launched our European Momentum Conviction Indicator on 06 October 2020. This indicator aims to identify episodes where volatility of a cross-sectional approach to Momentum investing is too high to support consistent returns or when trends might break. We use three inputs to construct the indicator, these inputs are equally weighted and form an indicator scaled from 0-100 (100 = highest conviction in positive Momentum performance, 0 = lowest conviction):

- Momentum Volatility Risk:** Volatility of Momentum performance for risk-management is crucial as uncertainty on the economic cycle rises. High levels of volatility can compromise Momentum's performance. Since the strategy's volatility tends to be clustered, we use a GARCH (1, 1) model to forecast 1-step-ahead volatility levels and adjust the exposure to Momentum accordingly (high volatility levels = low confidence in Momentum).
- Implied Volatility for Equities:** Large Momentum drawdowns tend to occur following turning points in market cycles. We use a combination of fast- and slow- moving averages of implied volatility in European markets to detect volatility shocks and retracement. A warning signal against Momentum is given when implied volatility retraces following a volatility shock. This often corresponds to the start of a recovery phase following a recessionary episode.
- Trend Reversal Risk:** This is a contrarian signal monitoring the 2nd derivative of Momentum's short-term performance. This input identifies episodes where Momentum's performance has accelerated near term – signalling the formation of a potential "Momentum bubble" or an episode of potential profit booking. We estimate the risk of trend reversal using the month-on-month difference in trends of the Momentum strategy.

We define a Momentum crash as a drawdown of the 12m price momentum long-short strategy exceeding 10% over 20 trading days. Since the performance of the strategy is computed on a daily basis, we define unique drawdown events as the maximum drawdown of the strategy over a 2-month window (1 month look-back, 1 month look forward). Following this methodology, we identify 30 Momentum crashes from January 1999 to September 2020. A Momentum crash is said to be correctly predicted if any of the input of the European Momentum Conviction Indicator is less than 50 (bearish signal on Momentum) 20 days prior to the drawdown event.

Using the definitions above, our backtested results suggest that the inputs of the European Momentum Conviction Indicator would have correctly identified 28 of these 30 drawdowns (i.e., sending a bearish signal 20 trading days prior to the event).

Exhibit 49: Backtested (shaded) and live results of the European Momentum Conviction Indicator

Momentum Conviction Indicator and its inputs readings 1, 4, 8 weeks before the momentum crashes

1 Week Before the Crash (defined as local minimum of 4W performance)						4 Weeks Before the Crash						8 Weeks Before the Crash (defined as local minimum of 4W performance)					
					1W Forward Momentum						4W Forward Momentum						8W Forward Momentum
Date	Momentum Volatility	Implied Volatility	Trend Reversal	EMCI	Returns	Date	Momentum Volatility	Implied Volatility	Trend Reversal	EMCI	Returns	Date	Momentum Volatility	Implied Volatility	Trend Reversal	EMCI	Returns
10-Feb-99	37	1	7	15	-3%	20-Jan-99	17	1	6	8	-20%	04-Jan-99		7	38	22	-12%
29-Apr-99	71	12	51	45	-4%	08-Apr-99	96	3	47	49	-12%	11-Mar-99	98	1	5	35	-14%
28-Mar-00	2	12	13	9	-26%	07-Mar-00	8	15	4	9	-49%	08-Feb-00	0	73	1	24	-31%
04-Aug-00	42	89	27	53	1%	14-Jul-00	38	95	61	65	-14%	16-Jun-00	17	86	43	48	-7%
11-Oct-00	37	6	25	23	0%	20-Sep-00	34	51	95	60	-16%	23-Aug-00	52	83	95	77	-9%
06-Dec-00	23	32	13	23	-6%	15-Nov-00	34	15	40	30	-26%	18-Oct-00	36	35	37	36	-29%
25-Apr-01	10	55	53	39	-9%	03-Apr-01	27	94	38	53	-24%	06-Mar-01	39	36	59	44	-7%
12-Nov-01	13	38	46	33	-15%	22-Oct-01	12	98	32	47	-26%	24-Sep-01	30	100	35	55	-36%
29-Oct-02	5	3	11	6	-10%	08-Oct-02	5	96	58	53	-25%	10-Sep-02	17	91	52	53	-4%
23-Apr-03	28	93	36	52	-6%	01-Apr-03	21	16	32	23	-25%	04-Mar-03	19	2	18	13	-22%

Exhibit 49: Backtested (shaded) and live results of the European Momentum Conviction Indicator

Momentum Conviction Indicator and its inputs readings 1, 4, 8 weeks before the momentum crashes

1 Week Before the Crash (defined as local minimum of 4W performance)						4 Weeks Before the Crash						8 Weeks Before the Crash (defined as local minimum of 4W performance)					
Date	Momentum		Trend		1W Forward Momentum	Date	Momentum		Trend		4W Forward Momentum	Date	Momentum		Trend		8W Forward Momentum
	Volatility	Implied Volatility	Reversal	EMCI	Returns		Volatility	Implied Volatility	Reversal	EMCI	Returns		Volatility	Implied Volatility	Reversal	EMCI	Returns
11-Jun-03	47	94	29	56	0%	21-May-03	37	95	38	57	-16%	23-Apr-03	28	93	36	52	-25%
25-Jul-03	79	76	78	78	-4%	04-Jul-03	67	92	25	61	-11%	06-Jun-03	51	94	29	58	-9%
01-Jun-06	31	95	83	70	-7%	11-May-06	71	35	85	64	-13%	12-Apr-06	77	41	76	65	-10%
05-Aug-08	5	9	37	17	-8%	15-Jul-08	19	28	56	34	-36%	17-Jun-08	31	8	57	32	-24%
11-Dec-08	3	79	53	45	4%	20-Nov-08	5	99	13	39	-20%	23-Oct-08	6	100	6	37	-2%
30-Mar-09	2	3	12	6	-16%	09-Mar-09	1	1	23	8	-51%	09-Feb-09	2	0	24	9	-28%
30-Jul-09	49	85	51	62	-7%	09-Jul-09	47	59	53	53	-18%	11-Jun-09	41	92	39	57	-8%
01-Feb-11	28	40	41	36	0%	11-Jan-11	57	29	52	46	-16%	14-Dec-10	30	29	77	45	-8%
03-Oct-11	12	97	36	48	-7%	12-Sep-11	38	98	21	52	-25%	15-Aug-11	17	98	58	58	-8%
27-Jan-12	27	87	24	46	-1%	06-Jan-12	44	23	47	38	-18%	08-Dec-11	23	2	57	27	-9%
14-Aug-12	26	35	34	32	-5%	24-Jul-12	35	67	46	49	-19%	26-Jun-12	27	13	44	28	-14%
08-Apr-14	50	47	81	59	-6%	18-Mar-14	65	68	86	73	-10%	18-Feb-14	76	60	89	75	-9%
19-Oct-15	23	22	48	31	2%	28-Sep-15	49	89	33	57	-12%	31-Aug-15	41	91	67	67	1%
24-Feb-16	16	89	73	59	-9%	03-Feb-16	33	77	61	57	-15%	06-Jan-16	46	10	38	31	-10%
15-Apr-16	11	37	27	25	-7%	24-Mar-16	31	58	66	51	-12%	25-Feb-16	14	88	74	59	-21%
07-Nov-16	49	19	64	44	-5%	17-Oct-16	50	22	67	46	-11%	19-Sep-16	38	38	69	48	-11%
19-Dec-16	35	66	23	41	0%	28-Nov-16	50	9	57	39	-13%	31-Oct-16	50	34	58	48	-14%
12-Apr-19	48	34	55	46	-4%	22-Mar-19	58	59	70	62	-11%	22-Feb-19	46	65	74	62	-9%
09-Sep-19	29	62	59	50	-6%	19-Aug-19	44	89	50	61	-14%	22-Jul-19	70	67	66	68	-10%
01-Jun-20	2	0	49	17	-21%	11-May-20	11	2	48	20	-27%	13-Apr-20	8	99	13	40	-12%
17-Nov-20	2	22	4	9	-8%	27-Oct-20	17	5	19	14	-32%	29-Sep-20	17	3	19	13	-33%
01-Mar-21	14	14	17	15	-9%	08-Feb-21	23	10	46	26	-18%	11-Jan-21	13	15	47	25	-16%
18-Jan-22	28	14	29	24	-1%	28-Dec-21	34	62	65	54	-10%	30-Nov-21	28	83	60	57	-13%
22-Jul-22	35	8	34	26	0%	01-Jul-22	43	5	54	34	-8%	03-Jun-22	43	10	53	35	-8%
04-Nov-22	18	45	56	40	-15%	14-Oct-22	24	70	72	55	-17%	16-Sep-22	28	12	70	36	-13%
26-Jan-23	33	83	67	61	-7%	05-Jan-23	24	81	55	53	-11%	08-Dec-22	20	91	30	47	-13%

Source: BofA Global Research. 12m Momentum performance is computed from January 1999 using daily price returns in Euro, assuming daily rebalancing and excluding transaction costs. This performance is backtested (shaded) and does not represent the actual performance of any account or fund. Backtested (shaded) performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. The strategy indicated 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 strategy was not created to act as a benchmark.

BofA GLOBAL RESEARCH

Definitions

Value: Equal weighted combination of factors - Forecast/Trailing EPS Yield, Dividend Yield, Cash to Price Yield, Book to Price Yield, Price to Sales and Forecast PEG.

Growth: Equal weighted combination of factors - Forecast/Trailing EPS Growth, Forecast EPS Change and Forecast Long Term Growth.

Momentum: Equal weighted combination of factors - 3m EPS Change, EPS Revision Ratio, Sales Revision Ratio, 1m Price Change and 12m Price Change.

Quality: Equal weighted combination of factors - Return on Assets, Return on Capital, Return on Equity, 5yr Return on Equity and Leverage.

Risk: Equal weighted combination of factors - EPS Estimate Dispersion and Beta.

Size: Month end market capitalisation.

Value Factors

Forecast Earnings Yield: I/B/E/S next twelve month EPS divided by month end Price.

Trailing Earnings Yield: Trailing twelve month EPS divided by month end Price.

Dividend Yield: Trailing twelve month Dividend per share divided by month end Price.

Cash to Price: Trailing 12 month cash earnings per share divided by month end price. Cash Earnings are defined as earnings plus depreciation on fixed assets. (i.e. –not free cash flow).

Book to Price: Trailing twelve month Book Value per share divided by month end price.

Price to Sales: Month End Price divided by last reported Sales per share figure.

Forecast PEG: I/B/E/S FY1 P/E divided by I/B/E/S Long Term Growth Estimate.

Other valuations:

Free Cash Flow Yield: Trailing twelve month difference between operating cash flow and capital expenditures net of fixed assets disposals divided by the month end price

EV/EBITDA: Latest reported divided EV (market capitalisation plus total debt minus cash and cash equivalents) divided by the trailing twelve month EBITDA

Growth Factors

Forecast Earnings Growth: (I/B/E/S FY2 Mean EPS Est. less latest reported EPS) divided by the latest reported EPS.

Trailing Earnings Growth: Difference between Trailing Twelve Month EPS and Trailing Twelve Month EPS a year prior divided by absolute value of Trailing Twelve Month EPS a year prior.

Forecast EPS Change: Difference between I/B/E/S Forecast Twelve Month EPS and I/B/E/S Forecast Twelve Month EPS a year prior divided by I/B/E/S Forecast Twelve Month EPS a year prior.

Long Term Mean EPS Growth: I/B/E/S Mean Long Term Growth Estimate (+5years).

Momentum Factors

3 Month Change in Mean EPS: Difference between I/B/E/S FY1 mean EPS and I/B/E/S FY1 mean EPS 3 months prior, divided by absolute value of I/B/E/S FY1 mean EPS 3 months prior.

Earnings Revision Ratio: ((# of FY1 and FY2 upward EPS revisions over last 3 months)-(# of FY1 and FY2 downward EPS revisions over last 3 months))/ # of FY1 and FY2 estimates over last 3 months.

Sales Revision Ratio: ((# of FY1 and FY2 upward Sales revisions over last 3 months)-(# of FY1 and FY2 downward Sales revisions over last 3 months))/ # of FY1 and FY2 estimates over last 3 months.

1m Price Momentum: Latest month-end price / 1-month ago price.

12m Price Momentum: Latest month-end price / 12-months ago price.

Risk Factors

Beta: Calculated using regression analysis on 60 months of price performance versus the benchmark. High beta stocks have a high correlation to the market, whilst low beta stocks have a low correlation to market movements.

EPS Estimate Dispersion: Coefficient of variation of I/B/E/S FY2 EPS estimates. The coefficient of variation is defined as the Standard Deviation of Estimates divided by the absolute value of the Mean Estimate.

Quality Factors

Return on Assets: Annual Earnings divided by Total Assets.

Return on Capital: Annual Earnings divided by Total Capital.



Return on Equity – 1yr: Trailing Twelve Month EPS divided by Trailing Twelve Month Book value per Share.

Return on Equity – 5yrs: Average RoE over the last 5 years.

Leverage: Annual Long Term Debt/(Annual Long Term Debt +Annual Book Value).

Ownership

Top 50 European Fund Managers Weight: Relative weight of the Top 50 European fund managers in the stock vs their European market holdings. 100=neutral, >100 is overweight and <100 is underweight

% Top 50 European Fund Managers Weight: Based on the above we calculate the percentage of fund managers who are underweight.

Dividend Factors

12m Fwd dividend yield: 12m fwd DPS per share estimate from I/B/E/S divided by month end price

5 Year Dividend Growth: CAGR of trailing FY0, FY1 and FY2 and forecast FY1 and FY2 DPS growth.

Dividend Revision Ratio: ((# of FY1 and FY2 upward DPS revisions over last 3 months)-(# of FY1 and FY2 downward DPS revisions over last 3 months))/ # of FY1 and FY2 estimates over last 3 months.

DPS Estimate Dispersion: Coefficient of variation of I/B/E/S FY2 DPS estimates. The coefficient of variation is defined as the Standard Deviation of Estimates divided by the absolute value of the Mean Estimate.

Payout Ratio: prospective FY1 DPS divided by the prospective FY1 EPS.

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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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