

Style Cycle

Bouncing in 'Recession'

Quantitative Strategy

Style Cycle remains in the 'Recession' phase for now

The European Composite Macro Indicator (CMI) bounced in February, but the 'Style Cycle' remains in the 'Recession' phase for the 9th month, as we require two consecutive improvements for change in phase. We continue to prefer High Quality, Low Risk, Large Caps and Value over Growth. In January, the top Style Cycle stocks outperformed the bottom stocks by 2.1% (16.1% over the past 12m) and outperformed in 17 out of 20 sectors and 6 of 8 countries. For the latest 'Recession' screens see Exhibit 40 and Appendix: additional screens.

Rises in bond yield and GDP forecasts pull indicator up

The European CMI increased in February driven by a 12-month change in the European bond yield to back above 0 and a small rise in GDP forecasts. The fading BofA Leading Indicator, which remains positive, and deteriorating German IFO, PPI and Global EPS Revision Ratio were not enough to offset the positive impact of European bond yield.

Third bounce in CMI in the current 'Recession' phase

This month marks the 3rd attempt to break out of the ongoing 'Recession' phase, an unprecedented situation – two has been the maximum in other 'Recession' episodes. The previous 2 tries in the current episode were unsuccessful as in the following respective month German IFO was weaker and bond yield fell. While there is no consensus estimate for the former, the expectations for the latter indicate a positive impact on the CMI for the next 4 months (Exhibit 9).

Exhibit 2: The European Composite Macro Indicator (CMI) up in February

European Composite Macro Indicator (CMI) and its monthly changes



Source: BofA European Equity Quant Strategy – Based on BY, GDP Forecasts, OECD, IFO Survey, PPI & EPS Revs. The sentiment indicator identified as European Composite Macro 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 Global Research.

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15 February 2024

Quant Strategy Europe

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The European 'Style Cycle' marries phases of the economic cycle with investment style returns.

Exhibit 1: Summary of Europe's macro

2 out of 6 inputs are rising

Inputs of EU Composite Macro Indicator BofA Europe Leading Indicator German IFO Indicator

Direction **FALLING FALLING RISING** 12mth Change in Pan EU BY Producer Price Inflation **FALLING** Pan Europe. Cons. GDP Forecasts **RISING** Global EPS Revision Ratio **FALLING**

Source: BofA European Equity Quant Strategy BofA GLOBAL RESEARCH

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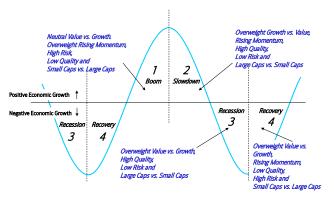
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Timestamp: 15 February 2024 12:30AM EST

Summary - European Style Cycle

Exhibit 3: European Style Cycle framework

Style Cycle is currently in the 'Recession' phase



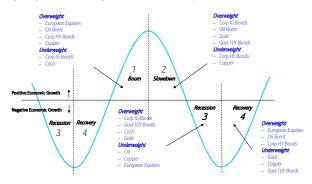
<u>Phase 1</u>- Rising & Accelerating; <u>Phase 2</u>- Rising & Decelerating; <u>Phase 3</u>- Falling & Decelerating; <u>Phase 4</u>- Falling & Accelerating; <u>Phase 4</u>- Falling & Accelerating; <u>Phase 4</u>- Falling & Decelerating; <u>Phase 4</u>- Falling

Source: BofA European Equity Quant Strategy

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Exhibit 4: Suggested European cross-asset allocations in respective phases of the Style Cycle

Style Cycle is currently in the 'Recession' phase



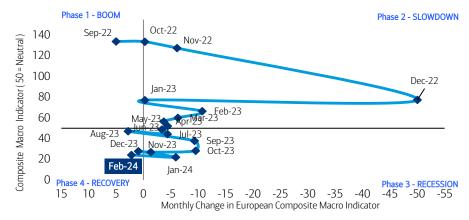
<u>Phase 1</u>- Rising & Accelerating; <u>Phase 2</u>- Rising & Decelerating; <u>Phase 3</u>- Falling & Decelerating; <u>Phase 4</u>- Falling & Accelerating

Source: BofA European Equity Quant Strategy

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Exhibit 5: Economic signals generated over the past 18m from the EU Composite Macro Indicator

Style Cycle is currently in the 'Recession' phase



Source: BofA European Equity Quant Strategy – Based on BY, GDP Forecasts, BofA Europe LI, IFO Survey, PPI & EPS Revision Ratio.

Macro signals were up over the month.

This month 2 out of 6 indicators are rising and 4 are falling.

Our European Composite Macro Indicator (CMI) is a composite index based on 6 variables:

- 1) 12m change in European bond yields,
- 2) 12m forward consensus GDP forecasts,
- 3) 12m change in BofA Europe Leading Indicator
- 4) Germany's IFO Survey,
- 5) 12m change in European PPI and
- 6) Global consensus EPS Revision Ratio

See Exhibit 61 for a complete list of the historical phases of the economic cycle according to the Composite Macro Indicator (CMI).

Exhibit 6: Style Cycle 'Recession' preference and styles' exposures by country

As of the end of the last month

Style Cycle Value Rank Growth Rank

Name	Style Cycle Preference (100-Top)	Value Rank (100=Cheap)	Growth Rank (100=High)	Momentum Rank (100=Rising)	Quality Rank (100=High)	Risk Rank (100=High)	Size Rank (100=High)
Denmark	60	17	75	75	72	34	52
Finland	55	62	39	45	50	48	42
Switzerland	54	35	40	34	60	38	54
UK	53	60	42	49	49	42	50
Spain	51	70	65	76	29	58	49
Norway	51	75	34	59	53	53	34
France	49	46	46	41	48	46	53
Italy	48	77	62	71	40	65	46
Netherlands	48	27	66	53	64	73	52
Sweden	43	43	56	61	53	53	39
Germany	43	61	52	50	39	65	50

Source: BofA European Equity Quant Strategy. Note: The exposure/preference are market cap weighted average Styles ranks /Style Cycle Rank aggregated from the stock level, 100 indicates the highest exposure to the Style/Style Cycle phase, 50 is equal to market cap weighted average, while 1 indicates the lowest exposure to the Style/Style Cycle phase



Exhibit 7: Style Cycle 'Recession' preference and styles' exposures by sector

As of the end of the last month

Name	Style Cycle Preference (100- Top)	Value Rank (100=Cheap)	Growth Rank (100=High)	Momentum Rank (100=Rising)	Quality Rank (100=High)	Risk Rank (100=High)	Size Rank (100=High)
PCDG Stores (S600PDP)	62	48	41	40	54	9	50
Health Care (SXDP)	60	31	53	50	65	24	54
Utilities (SX6P)	59	76	48	77	23	33	47
Media (SXMP)	58	25	59	58	65	23	50
Food, Bev & Tobacco (S600FOP)	57	37	31	17	54	22	53
Basic Resources (SXPP)	54	79	15	52	66	78	47
Energy (S600ENP)	53	94	15	39	45	72	54
Autos (SXAP)	53	89	45	56	55	84	49
Retail (SXRP)	51	42	64	69	64	51	40
Consumer Pdts and Svs (S600CPP)	49	22	51	34	70	47	52
Telecoms (SXKP)	48	73	33	38	22	41	46
Insurance (SXIP)	48	80	54	47	31	56	50
Construction (SXOP)	47	52	56	60	44	56	48
Industrial Gds & Svs (SXNP)	46	37	58	58	56	57	46
Technology (SX8P)	45	14	66	54	70	74	54
Chemicals (SX4P)	42	41	37	34	46	50	46
Banks (SX7P)	41	99	71	65	14	69	50
Financial Svs (SXFP)	38	42	45	56	40	68	47
Real Estate (SX86P)	33	46	30	70	19	48	26
Travel & Leisure (SXTP)	28	39	78	49	38	64	41

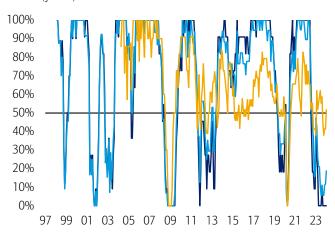
Source: BofA European Equity Quant Strategy. Note: The exposure/preference are market cap weighted average Styles ranks /Style Cycle Rank aggregated from the stock level, 100 indicates the highest exposure to the Style/Style Cycle phase, 50 is equal to market cap weighted average, while 1 indicates the lowest exposure to the Style/Style Cycle phase

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Charts of the month

Exhibit 8: Europe remains the only region without a single country with PMI manufacturing in expansion

% of countries with PMI Mfg/Whole Economy readings above 50 in Developed Europe (dark blue), Developed Markets (light blue) and Emerging Markets (yellow)

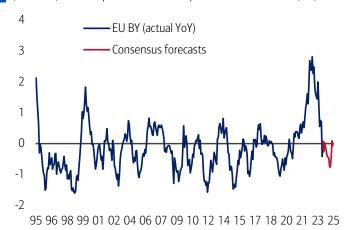


Source: BofA European Equity Quant Strategy, Refinitiv, S&P. PMI surveys conducted by the S&P/Markit.

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Exhibit 9: YoY change in European 10BY is expected to remain volatile in H1 '24, before systematically falling in H2 '24 and returning to neutral level at the end of 2024

12m change in 10Y European Bond Yield (average of Germany, France, UK) (dark blue) and its expected evolution as per consensus forecasts (red)



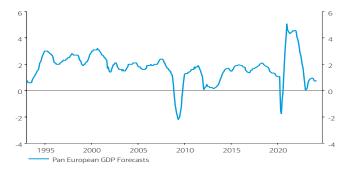
Source: BofA European Equity Quant Strategy, Refinitiv, Oxford Economics



European Composite Macro Indicator (CMI) - RISING - inputs overview

Exhibit 10: Input is RISING, z-score went up to -0.89, increasing for the second consecutive month to the highest level since Oct '23

Pan Europe – Economists' 12m fwd GDP forecasts

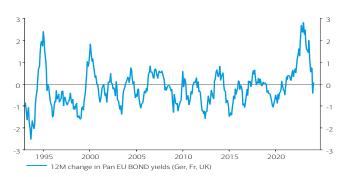


Source: BofA European Equity Quant Strategy, Consensus Economics

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Exhibit 12: Input is RISING, z-score grew to 0.29, bouncing back into positive territory after one month below

12m change in 10Y European Bond Yield (average of Germany, France, UK)



Source: BofA European Equity Quant Strategy, Refinitiv

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Exhibit 14: Input is FALLING, z-score dropped to -1.57, falling for the first time in last 3 months

Pan European Inflation (PPI) - 12m change



Source: BofA European Equity Quant Strategy, Refinitiv

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Exhibit 11: Input is FALLING, z-score fell to 0.22, the lowest reading since Aug '23

BofA Europe Leading Indicator 12m change



Source: BofA European Equity Quant Strategy, OECD

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Exhibit 13: Input is FALLING, z-score declined further to -1.54, the lowest reading since Jun '20

German IFO Indicator



Source: BofA European Equity Quant Strategy, IFO Institute

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Exhibit 15: Input is FALLING, z-score decreased to -0.44, decreasing for the fourth time in last 5 months

Global EPS Revision Ratio (>1 = net EPS upgrades)

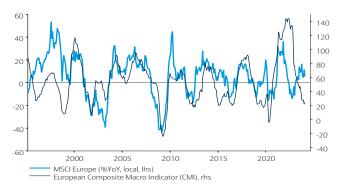


Source: BofA European Equity Quant Strategy, IBES, MSCI



Key Charts

Exhibit 16: European equities are sensitive to moves in the CMI European CMI versus MSCI Europe performance (%YoY)



Source: BofA European Equity Quant Strategy, Refinitiv

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Exhibit 18: Typically, beta of best performing stocks moves in-line with CMI

European CMI versus beta of the best performing stocks over past 12m

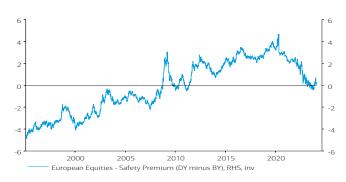


Source: BofA European Equity Quant Strategy

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Exhibit 20: European equities' lower risk premium is improving as the bond yield declines sharply

European equities lower risk premium (lower risk premium = dividend yield minus European 10Y bond yield)



Source: BofA European Equity Quant Strategy, Refinitiv. Note: European bond yield is average of UK, France and Germany 10Y bond yields

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Exhibit 17: European equities vs bonds performance is sensitive to moves in the CMI

European CMI versus European equities to bonds performance (%YoY)



Source: BofA European Equity Quant Strategy, Refinitiv, ICE

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Exhibit 19: Low versus High Quality style performance is sensitive to moves in the CMI

European CMI versus Low vs High Quality performance (%YoY)



Source: BofA European Equity Quant Strategy

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Exhibit 21: Typically, European lower risk premium moves in-line with CMI

European CMI versus actual yearly change in European equities lower risk premium (lower risk premium = dividend yield minus European 10Y bond yield)



Source: BofA European Equity Quant Strategy. Note: European bond yield is average of UK, France and Germany 10Y bond yields



Exhibit 22: European 12m fwd P/E is sensitive to moves in the CMI European CMI versus MSCI Europe's 12m fwd P/E

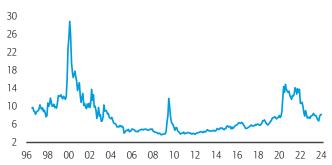


Source: BofA European Equity Quant Strategy, Refinitiv

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Exhibit 24: The current P/E dispersion stands at 8.2

European stocks - standard deviation of 12m Fwd P/E excluding 1% of top and bottom extreme readings

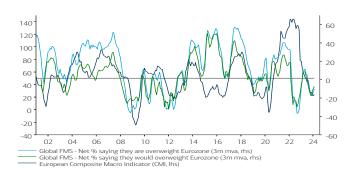


Source: BofA European Equity Quant Strategy, MSCI, I/B/E/S

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Exhibit 26: Net 10% of global investors say they are underweight Europe in February and a net 9% of them intend to underweight the region over the next 12 months

Please indicate for each of the following equity markets, how overweight or underweight you consider your position to be relative to your internal benchmark:



Source: BofA European Equity Quant Strategy, BofA Global Fund Manager Survey

Exhibit 23: Typically, European YoY change in 12m fwd P/E moves in-line with CMI

European CMI versus MSCI Europe's 12m fwd P/E YoY change

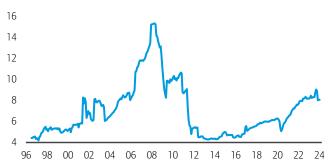


Source: BofA European Equity Quant Strategy, Refinitiv

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Exhibit 25: The current 12m Fwd EPS dispersion stands at 8.1

European stocks - standard deviation of 12m Fwd EPS excluding 1% of top and bottom extreme readings



Source: BofA European Equity Quant Strategy, MSCI, I/B/E/S

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Exhibit 27: Investors cut their underweight in the cyclical and financial sectors, while increasing overweight in defensive sectors in February

Please indicate for each of the following European sectors, whether you consider your position to be overweight, underweight or neutral relative to your internal benchmark



Source: BofA European Equity Quant Strategy, BofA European Fund Manager Survey. Note: The positioning is a difference between average positioning in cyclical and financial sectors (Autos, Basic Resources, Chemicals, Construction, Consumer Pds&Svs, Industrial Gds&Svs, Media, Retail, Technology, Travel&Leisure, Banks, Financial Svs, Insurance, Real Estate) and defensive sectors (Food&Beverages, Pharma/Healthcare, Telecoms, Utilities, PCDG Stores).



Exhibit 28: Value vs Growth screens attractively in 'Recession' phase, while being disliked by both buy- and sell-side

Style Cycle 'Recession' style preferences (green: top, grey: neutral, red: bottom) versus sell-side and buy-side stance

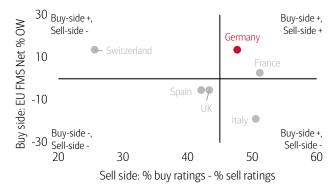


Source: BofA European Equity Quant Strategy, European Fund Manager Survey, IBES

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Exhibit 29: Germany screens unattractively in the 'Recession' phase, while being popular with both buy- and sell-side

Style Cycle 'Recession' country preferences (green: top, grey: neutral, red: bottom) versus sell-side and buy-side stance

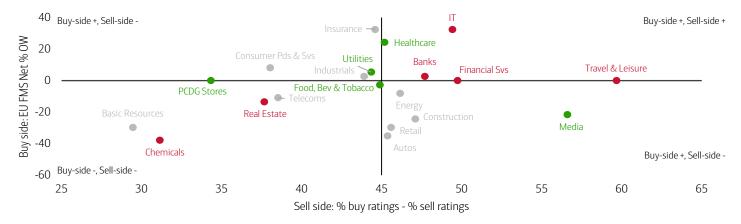


Source: BofA European Equity Quant Strategy, European Fund Manager Survey, IBES

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Exhibit 30: Food, Beverages & Tobacco screens as attractive in 'Recession' phase while being commonly disliked, IT and Banks screen as unattractive while being popular by both buy- and sell-side

Style Cycle 'Recession' sectors preferences (green: top, grey: neutral, red: bottom) versus sell-side and buy-side stance



Source: BofA European Equity Quant Strategy, European Fund Manager Survey, IBES

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Exhibit 31: Our CMI points to further outflows from European equities

European Composite Macro Indicator (light blue line, rhs) vs rolling 8w flows into Europe-focused equity funds as % of mcap (dark blue line, lhs)



Source: BofA European Equity Quant Strategy, EPFR Global

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Exhibit 32: Flows increased for Quality the most over the past 4w, while declined the most for Size

Rolling 8w flows into European styles (I/s) this year



Source: BofA European Equity Quant Strategy, EPFR Global



European Style Cycle - performance

Style Cycle: The European 'Style Cycle' links phases of the economic cycle with performance of investment style. Stocks are screened based on their equal weighted rank of Value, Growth, Momentum, Quality, Risk and Size.

Exhibit 33: Top & Bottom Style Cycle relative price performance

Relative price performance to largest 250 European stocks (price, EUR, equally weighted)



Source: BofA European Equity Quant Strategy, FactSet. The shaded area on the chart above shows back-tested results during the period from Mar-95 to Dec-03. The un-shaded portion represents actual performance since Jan-04. The Style Cycle back-testing is a rolling monthly performance based on the changing phases of the Style Cycle. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. The data displayed in this exhibit depends in part on certain monthly screens and other data that were not previously published. Please see Style Cycle: 'Boom' persists 30 June 2021 for details and relevant data.

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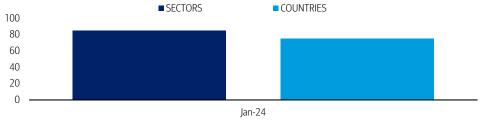
Exhibit 34: Last month Top stocks have outperformed Bottom stocks by 2.1% Excess Price Returns (%)

	1M	3M	6M	12M	YTD	3 Yrs	5 Yrs	Incept.
Top Style Cycle	0.5	-4.8	0.0	6.9	0.5	12.2	2.7	97.1
Bottom Style Cycle	-1.5	3.3	-1.4	-7.9	-1.5	-10.0	5.5	-52.1
Top vs Bottom Style Cycle	2.1	-7.8	1.4	16.1	2.1	24.7	-2.6	311.5

Source: BofA European Equity Quant Strategy, FactSet. * - Inception = January 2004. Note: Month end data used for performance of stock screen. Performance based on equal weight portfolios, monthly rebalanced, no transaction costs are included, and performances based on price returns and not total returns (dividends are not included). Performance is shown not as a guide to any past recommendation, but as confirmation of each phase's characteristics

Exhibit 35: Top vs Bottom Recession stocks outperformed in 17 out of 20 sectors and in 6 out of 8 countries in Jan-24

% of SXXP supersectors and countries where the Recession top vs bottom stocks are outperforming



BofA European Equity Quant Strategy, FactSet. Note: countries included: France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland $and \ UK. \ Performances \ are \ based \ on \ the \ top \ / \ bottom \ quintile/or \ minimum \ 5 \ stocks \ in \ each \ group \ of \ stocks \ ranked \ by \ the \ Recession \ ranks$ or in sectors/countries.

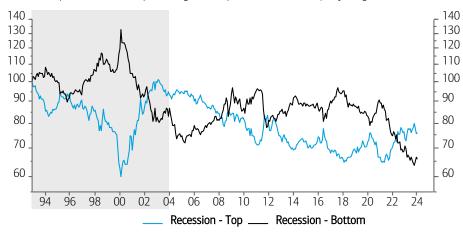


Style Cycle - Recession

Style Cycle - Recession: The European 'Style Cycle' links phases of the economic cycle with performance of investment style. The stocks below are screened by the characteristics of the 'Recession' phase. Stocks are screened on their equal-weighted rank of Value, Growth, Momentum, Quality, Risk and Size.

Exhibit 36: Top & Bottom Recession relative price performance

Price relative performance vs top 250 largest European stocks (EUR, equally weighted)



Source: BofA European Equity Quant Strategy, FactSet. Inception – January 2004. The shaded area shows back-tested results during the period from Dec-92 to Dec-03. The unshaded portion represents actual performance since Jan-04. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. The data displayed in this exhibit depends in part on certain monthly screens and other data that were not previously published. Please see Style Cycle: 'Boom' persists 30 June 2021 for details and relevant data. BofA GLOBAL RESEARCH

Exhibit 37: Top Recession stocks outperformed Bottom Recession stocks by 2.1% last month Excess Price Returns (%)

								Since
	1M	3M	6M	12M	YTD	3 Yrs	5 Yrs	Incept.
Top Recession	0.5	-4.8	0.0	3.7	0.5	14.5	10.8	-19.8
Bottom Recession	-1.5	3.3	-1.4	-7.3	-1.5	-26.3	-25.0	-20.8
Ton vs Bottom Recession	21	-7.8	14	11.8	21	55.4	47.6	13

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Source: BofA European Equity Quant Strategy, FactSet. * - Inception = January 2004

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Exhibit 38: Median Top Recession

Latest valuations for Top Recession stocks

	Fwd P/E	DY	RoE	ERR	Size	Beta
Top	14.4	3.8	26.3	2.7	74.9	0.8
LT Avg	13.0	3.8	21.2	0.6	44.4	0.7
EU Market	15.2	2.6	15.2	0.7	21.4	1.1

Source: BofA European Equity Quant Strategy, FactSet

Exhibit 39: Median Bottom Recession

Latest valuations for Bottom Recession stocks

	Fwd P/E	DY	RoE	ERR	Size	Beta
Bottom	15.8	2.8	9.0	0.2	10.8	1.4
LT Avg	17.9	1.6	6.4	0.8	8.4	1.3
EU Market	15.2	2.6	15.2	0.7	21.4	1.1

Exhibit 40: Style Cycle - Recession screens for Feb '24 (data as of 31/01/2024)

Top and Bottom Style Cycle Recession stocks

Тор	Stocks (Good Va	lue, Low Risk	, High (Quality &	Large	Size)		Bottom Stocks (Poor Value, High Risk, Low Quality & Small Size)							
BBG Ticker	Name	Recession Rank	Value Rank	Size	Beta	RoE	Price	BBG Ticker	Name	Recession Rank	Value Rank	Size	Beta	RoE	Price
GSK LN	GSK	100	61	81768	0.7	52.0	15.7	AKZA NA	Akzo Nobel	1	55	13201	1.3	12.4	71.2
RIO LN	Rio Tinto	100	71	78908	0.9	21.9	55.0	CON GR	Continental	1	75	9105	1.6	9.5	76.2
NOVN SW	Novartis	99	47	213611	0.6	26.9	89.4	1COV GR	Covestro	1	35	10312	1.4	-8.4	49.1
ROG SW	Roche	99	42	202370	0.4	52.1	247.1	ANTO LN	Antofagasta	2	32	8713	1.4	8.0	17.4
NG/LN	National Grid	98	66	49550	0.6	7.6	10.6	NIBEB SS	NIBE Industrier	2	20	9202	1.5	16.6	62.7
NOVOB DC	Novo Nordisk	98	7	368484	0.4	82.2	774.8	EQT SS	EQT	3	19	9706	1.5	9.4	282.0
ULVR LN	Unilever	98	41	122494	0.5	35.4	38.5	HMB SS	H&M Hennes & Mauritz	3	59	9219	1.5	9.8	147.5
BNZL LN	Bunzl	97	40	13837	8.0	24.0	32.2	VWS DC	Vestas Wind Systems	3	5	28943	1.3	-22.1	196.7
IBE SM	Iberdrola	96	64	74493	0.8	11.5	11.2	STAN LN	Standard Chartered	4	91	17475	1.2	7.3	6.0
ITX SM	Inditex	96	34	47053	1.3	30.2	39.7	UU/ LN	United Utilities	4	33	9261	0.7	4.3	10.7
KNIN SW	Kuehne Nagel	96	38	18610	1.0	50.9	293.8	FER SM	Ferrovial	5	8	19722	1.1	4.6	35.4
NDA FH	Nordea Bank Abp	96	84	39745	1.0	18.0	11.4	FLTR LN	Flutter Entertainment	5	18	36638	1.1	1.3	162.9
ENEL IM	Enel	95	76	56022	1.2	10.6	6.3	SVT LN	Severn Trent	5	43	8904	0.7	9.0	26.0
RACE IM	Ferrari	95	4	44322	0.8	41.6	323.7	GLE FP	SocieteGenerale	6	99	19225	1.7	7.3	24.0
RKT LN	Reckitt Benckiser	94	36	52162	0.4	26.3	57.1	WTB LN	Whitbread	6	53	8850	1.3	10.0	36.0
REL LN	RELX	94	11	78485	0.8	64.2	32.6	AGN NA	Aegon	7	85	9638	1.4	-6.4	5.5
ZURN SW	Zurich Insurance	94	65	74914	0.7	18.1	439.1	BIRG ID	Bank of Ireland	7	87	9793	1.4	12.9	8.5
MUV2 GR	Munich Re	93	71	58436	1.0	17.8	394.2	MTX GR	MTU Aero Engines	7	34	12494	1.6	-11.0	213.7
SAN FP	Sanofi	93	59	115436	0.7	10.9	93.4	BAER SW	Julius Baer	8	71	11358	1.4	17.4	47.3
AZN LN	AstraZeneca	92	39	207241	0.5	30.4	105.0	NWG LN	NatWest	8	98	16520	1.5	10.3	2.3
EQNR NO	Equinor	92	79	26076	0.8	33.9	302.7	ACS SM	ACS Actividades	9	69	8388	1.2	4.8	36.6
OR FP	L'Oreal	92	5	116512	0.9	21.7	444.7	PRY IM	Prysmian	9	54	11693	1.2	18.7	41.0
NESN SW	Nestle	91	29	306761	0.5	33.0	98.6	SLHN SW	Swiss Life	9	65	21382	1.2	15.9	621.4
SHEL LN	Shell	91	87	206201	0.9	17.7	24.5	BARC LN	Barclays	10	97	28551	1.6	10.3	1.5

Source: BofA European Equity Quant Strategy, FactSet, Price in Local Currency. Companies listed represent the top and bottom 10% of the largest 250 European stocks. The screen identified as Style Cycle – Recession 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.

ORSTED DC Orsted

2.9

BofA GLOBAL RESEARCH

-5.0

391.5

Recession characteristics

Exhibit 41: There are 2 stocks from Top Recession list which are unpopular with investors

90

73

25936

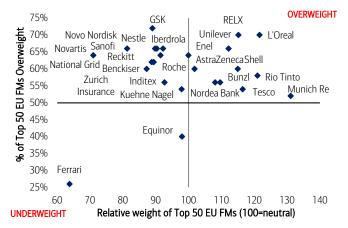
0.9

14.0

Top Recession stocks ownership

Tesco

TSCO LN



Source: BofA European Equity Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 42: There are 8 stocks from Bottom Recession list which are highly popular with investors

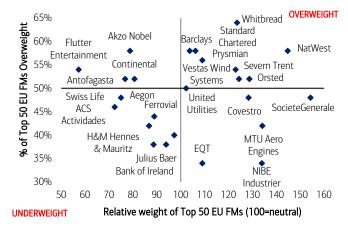
10

44

10793

0.8

Bottom Recession stocks ownership



Source: BofA European Equity Quant Strategy

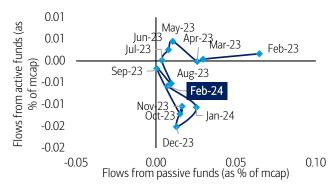
BofA GLOBAL RESEARCH



10

Exhibit 43: So far in February, Top Recession stocks saw \$0.15bn outflows from the active funds and \$0.19bn inflows from passive funds

Top Recession stocks flows over the past 12 months as % of mcap

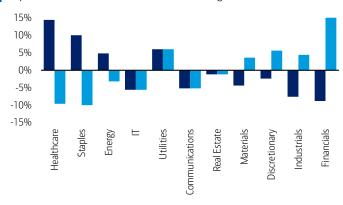


Source: BofA European Equity Quant Strategy, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 45: Top Recession stocks are most OW Healthcare, while bottom stocks are most OW Financials

Top and bottom Recession relative sector weights

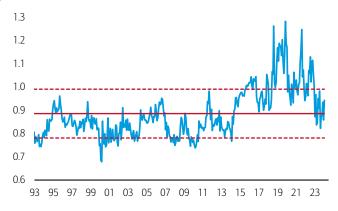


Source: BofA European Equity Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 47: Top Recession stocks trade at a 6% P/E premium to the market relative to the long term average

Top Recession stocks P/E relative to market

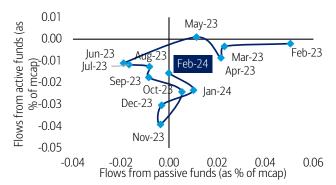


Source: BofA European Equity Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 44: So far in February, Bottom Recession stocks saw \$0.06bn outflows from the active funds and \$0.00bn outflows from passive funds

Bottom Recession stocks flows over the past 12 months as % of mcap

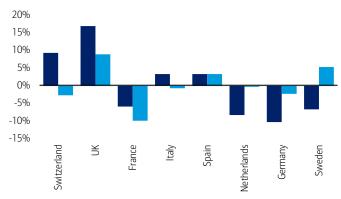


Source: BofA European Equity Quant Strategy, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 46: Top Recession as well as bottom Recession stocks are most OW the UK

Top and bottom Recession relative country weights



Source: BofA European Equity Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 48: Bottom Recession stocks trade at a 9% P/E discount to the market relative to the long term average

Bottom Recession stocks P/E relative to market



Source: BofA European Equity Quant Strategy



Appendix: additional screens

Style Cycle screen for European SMIDs

Exhibit 49: Style Cycle SMID - Recession screens for Feb '24 (data as of 31/01/2024)

Top and Bottom Style Cycle SMID Recession stocks

Top Stocks (Good Value, Low Risk, High Quality & Large Size)

Bottom Stocks (Poor Value, High Risk, Low Quality & Small Size)

BBG Ticker	Name	Recession Rank	Value Rank	Size (EUR bn)	Beta	RoE	Price	BBG Ticker	Name	Recession Rank	Value Rank	Size (EUR bn)	Beta	RoE	Price
ELISA FH	Elisa	100	32	6	0.3	32.0	42.3	AF FP	Air France	1	79	1	2.3	N/A	11.9
FORTUM FH	Fortum	100	91	6	1.0	135.8	12.7	BFIT NA	Basic-Fit	1	32	1	2.1	5.5	26.9
IPN FP	lpsen	100	46	4	0.8	15.7	107.0	BORR NO	Borr Drilling	1	28	1	3.2	-0.2	65.5
KESKOB FH	Kesko	100	64	5	0.8	20.2	18.1	ROO LN	Deliveroo	1	22	1	1.6	-32.2	1.2
RS1 LN	RS	99	47	4	1.2	22.4	7.9	IWG LN	IWG	1	35	2	2.4	-57.2	1.9
HWDN LN	Howden Joinery	99	38	5	1.2	40.6	8.0	SPM IM	Saipem	1	52	2	1.8	-7.9	1.3
MNDI LN	Mondi	99	63	7	1.0	18.4	14.1	ARYN SW	Aryzta	2	47	2	2.0	5.3	1.6
NZYMB DC	Novonesis	99	7	10	0.6	22.2	354.3	CCL LN	Carnival	2	19	2	3.0	-31.8	12.0
SKG ID	Smurfit Kappa	99	81	9	1.1	20.3	34.6	ONT LN	Oxford Nanopore Tech	2	5	1	1.7	-20.5	1.6
ITRK LN	Intertek	98	25	9	8.0	29.0	44.9	RDC GR	Redcare Pharmacy	2	10	2	8.0	-2.5	129.9
ORNBV FH	Orion	98	15	5	0.4	20.6	42.7	VGP BB	VGP	2	25	1	1.1	-3.9	109.2
RED SM	Redeia	98	61	6	0.5	12.5	15.4	VITR SS	Vitrolife	2	9	1	1.9	2.4	172.4
WPP LN	WPP	98	83	10	1.5	29.6	7.7	EZJ LN	easyJet	3	75	2	3.1	-1.6	5.6
DCC LN	DCC	97	73	7	1.0	12.2	57.6	EVT GR	Evotec	3	3	2	1.2	-4.8	14.3
IGG LN	IG	97	78	3	0.7	19.2	7.1	SHC LN	Shaftesbury Capital	3	17	2	1.3	1.3	1.3
EMG LN	Man	97	65	3	1.0	25.8	2.4	TRN LN	Trainline	3	13	2	2.1	12.8	3.3
RAND NA	Randstad	97	71	6	1.5	19.1	52.8	ZEAL DC	Zealand Pharma	3	1	3	0.9	-41.6	472.2
BUCN SW	Bucher Industries	96	68	3	1.1	21.9	366.8	FRA GR	Fraport	4	66	2	2.2	9.1	54.8
BRBY LN	Burberry	96	51	6	1.5	40.0	13.1	IVG IM	lveco	4	99	2	1.4	7.9	9.9
CNA LN	Centrica	96	90	9	1.2	60.9	1.4	TKWY NA	Just Eat Takeaway.com	4	44	3	1.3	-13.5	14.2
EMSN SW	EMS-CHEMIE	96	5	5	8.0	24.2	655.5	NEOEN FP	Neoen	4	11	2	8.0	6.3	27.0
TEL2B SS	Tele2	96	60	4	0.4	17.7	88.9	SCYR SM	Sacyr	4	72	1	1.8	21.6	3.1
TEL NO	Telenor	96	55	6	0.2	8.6	116.7	SINCH SS	Sinch	4	35	2	2.2	0.0	32.4
HIK LN	Hikma Pharma	95	60	4	0.4	15.6	19.3	BUR LN	Burford Capital	5	36	3	1.1	1.8	12.0
YAR NO	Yara	95	78	5	0.7	11.7	349.4	OCDO LN	Ocado	5	7	4	1.6	-29.5	5.5

Source: BofA European Equity Quant Strategy, FactSet, Price in Local Currency. Companies listed represent the top and bottom 25 stocks within European SMIDs (companies with market cap less than 10bn EUR). The screen identified as Style Cycle SMID - Recession 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.



Exhibit 50: Style Cycle Europe Stoxx 600 supersectors - Recession screens for Feb '24 (data as of 31/01/2024) Top and Bottom Style Cycle Recession stocks by Europe Stoxx 600 supersectors

		Recession						Recession			
BBG		Rank			Recession Rank			Rank			Recession Rank
Ticker	Name	(100=Top)	BBG Ticker	Name	(1=Bottom)	BBG Ticker	Name	(100=Top)	BBG Ticker	Name	(1=Bottom)
			tomobiles and	Parts		TW/ LN	Taylor Wimpey	85	ADE NO	Adevinta	5
RACE IM	Ferrari	98	FRVIA FP	Forvia	1	MC FP	LVMH	72	WOSG LN	Watches of Switzerland	11
STLA US	Stellantis	90	FR FP	Valeo	2			En	ergy		
BMW GR	BMW	88	VOLCARB SS	Volvo Car	4	EQNR NO	Equinor	100	ENR GR	Siemens Energy	5
ML FP	Michelin	88	CON GR	Continental	18	GTT FP	Gaztransport & Technigaz	92	SUBC NO	Subsea 7	5
MBG GR	Mercedes-Benz	70	RNO FP	Renault	22	TTE FP	TotalEnergies	92	VK FP	Vallourec	6
			Banks			REP SM	Repsol	90	VWS DC	Vestas Wind Systems	6
DNB NO	DNB Bank	89	VMUK LN	Virgin Money UK	3	ENI IM	Eni	84	HBR LN	Harbour Energy	16
SEBA SS	SEB	87	STAN LN	Standard Chartered	13				I Services		
NDA FH	Nordea Bank	86	GLE FP	SocieteGenerale	14	III LN	3i	93	ALLFG NA	Allfunds	5
CABK SM	CaixaBank	79	NWG LN	NatWest	16	DB1 GR	Deutsche Boerse	81	GBLB BB	Bruxelles Lambert	9
BBVA SM	BBVA	78	JYSK DC	Jyske Bank	17	IGG LN	IG	80	ICP LN	Intermediate Capital	11
SAN SM	Banco Santander	77	SPL PW	Santander Bank Polska	17	EXO NA	EXOR	68	RF FP	Eurazeo	12
SHBA SS	Svenska	76	ABN NA	ABN AMRO Bank DR	20	ENX FP	Euronext	67	SQN SW	Swissquote	22
HSBA LN	HSBC	74	BCP PL	Banco Comercial Portugues	25			Food Beverag	ge and Tobaco	:0	
EBS AV	Erste Bank	65	AIBG ID	AIB	34	IMB LN	Imperial Brands	96	CPR IM	Davide Campari-Milano	20
			Basic Resourc	es		BATS LN	British American Tobacco	94	RCO FP	Remy Cointreau	25
RIO LN	Rio Tinto	100	ANTO LN	Antofagasta	11	BN FP	Danone	93	JDEP NA	JDE Peet's	26
UPM FH	UPM-Kymmene	97	NDA GR	Aurubis	15	CWK LN	Cranswick	90	BAKKA NO	Bakkafrost	29
MT NA	ArcelorMittal	78	VOE AV	voestalpine	21	ORK NO	Orkla	88	SALM NO	Salmar	43
GLEN LN	Glencore	75	KGH PW	KGHM .	24	MOWI NO	Mowi	76	HEIA NA	Heineken	68
AAL LN	Anglo American	71	SCAB SS	Svenska Cellulosa	44			Healt	th Care		
			Chemicals			GSK LN	GSK	100	EVT GR	Evotec	1
BNR GR	Brenntag	83	1COV GR	Covestro	3	NOVN SW	Novartis	99	ZEAL DC	Zealand Pharma	1
GIVN SW	Givaudan	80	LXS GR	LANXESS	3	NOVOB DC	Novo Nordisk	99	INDV LN	Indivior	3
FPE GR	FUCHS	79	AKZA NA	Akzo Nobel	10	NZYMB DC	Novonesis	99	GRF SM	Grifols	7
AI FP	Air Liquide	77	OCI NA	OCI	12	ROG SW	Roche	99	GN DC	GN Store Nord	8
CRDA LN	Croda	54	WCH GR	Wacker Chemie	19	SAN FP	Sanofi	95	GXI GR	Gerresheimer	9
		Cons	truction and M	laterials		HIK LN	Hikma Pharmaceuticals	94	AMBUB DC	Ambu	10
CRH US	CRH	94	FER SM	Ferrovial	9	AZN LN	AstraZeneca	92	AMP IM	Amplifon	12
GEBN SW	Geberit	93	NIBEB SS	NIBE Industrier	13	ORNBV FH	Orion	88	BANB SW	Bachem	15
DG FP	VINCI	92	SKAB SS	Skanska B	23	HLN LN	Haleon	81	EKTAB SS	Elekta	16
BBY LN	Balfour Beatty	91	HOT GR	HOCHTIEF	25			Industrial Goo	ds and Servic	es	
SIKA SW	Sika	64	EN FP	Bouygues	31	BNZL LN	Bunzl	100	ADP FP	Aeroports de Paris	2
		Consum	er Products ar	nd Services		KNIN SW	Kuehne Nagel	99	KGX GR	KION	2
OR FP	L'Oreal	95	ELUXB SS	Electrolux	1	EXPN LN	Experian	97	IDS LN	Intl. Distri. Svs	2
HEN3 GR	Henkel Vz	92	DHER GR	Delivery Hero	2	VOLVB SS	Volvo	97	ALO FP	Alstom	4
BKG LN	Berkeley	91	ALE PW	Allegro.eu	3	ATCOA SS	Atlas Copco	96	WLN FP	Worldline	4
RMS FP	Hermes	88	UBI FP	Ubisoft	3	SKG ID	Smurfit Kappa	96	ISS DC	ISS	6
PSN LN	Persimmon	85	HUSQB SS	Husqvarna	4	DCC LN	DCC	95	AZE BB	Azelis	7
			-	•							

Source: BofA European Equity Quant Strategy, FactSet. Companies listed represent the top and bottom quintile stocks (or minimum 5 stocks) within Europe Stoxx 600 supersectors. The screens identified as Europe Stoxx 600 supersectors - Recession above are 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. These screens were not created to act as benchmarks.

Exhibit 51: Style Cycle Europe Stoxx 600 supersectors - Recession screens for Feb '24 (data as of 31/01/2024)
Top and Bottom Style Cycle Recession stocks by Europe Stoxx 600 supersectors

		Recession			Recession Rank			Recession			Recession
		Rank			(1=Bottom			Rank	BBG		Rank
BBG Ticker	Name	,)	Ticker	Name	(100=Top)		Name	(1=Bottom)
	Mondi	95	TOM NO	TOMRA Systems	7	COFB BB	Cofinimmo	50	SAFE LN	Safestore	25
	BAE Systems	94	BEIJB SS	Beijer Ref	8				tail		
HLMA LN	Halma	91	FHZN SW	Flughafen Zuerich	8	ITX SM	Inditex	98	ZAL GR	Zalando	1
	Teleperformance	91	TKA GR	thyssenkrupp	8	NXT LN	Next	98	AVOL SW	Avolta	4
	Huhtamaki	90	GET FP	Getlink	9		Howden Joinery	70			6
DHL GR	Deutsche Post	89	METSO FH	Metso	9	BME LN	B&M European Value Retail	69	HMB SS	H&M	13
ABBN SW	ABB	88	NKT DC	NKT	9	RUI FP	Rubis	48	JD/ LN	JD Sports Fashion	24
	Diploma	88	SIGN SW	SIG	11				nology		
KNEBV FH	Kone	86	TPK LN	Travis Perkins	11	LOGN SW	Logitech	98	TKWY NA	Just Eat Takeaway.com	4
	DSV	82	NEX FP	Nexans	12	DSY FP	Dassault Systemes	97	FNOX SS	Fortnox	7
SGSN SW	SGS	82	INPST NA	InPost	13	AUTO LN	Auto Trader	93	SOI FP	Soitec	10
ITRK LN	Intertek	79	VRLA FP	Verallia	14	CCC LN	Computacenter	84	SOP FP	Sopra Steria	14
MAERSKB DC	A.P. Moller - Maersk	75	ELIS FP	Elis	15	NEM GR	Nemetschek	70	AIXA GR	AIXTRON	18
IMI LN	IMI	74	KCR FH	Konecranes	18	SCT LN	Softcat	67	TIETO FH	TietoEVRY	35
ſ		Insur	ance					Telecomm	unications		
MUV2 GR	Munich Re	97	DLG LN	Direct Line Insurance	16	ERICB SS	LM Ericsson	93	TIT IM	Telecom Italia	5
SAMPO FH	Sampo	94	STB NO	Storebrand	16	SCMN SW	Swisscom	87	TIGO US	Millicom	6
ZURN SW	Zurich Insurance	93	SCR FP	SCOR	18	BT/A LN	BT	86	SESG FP	SES	8
ADM LN	Admiral	90	HSX LN	Hiscox	21	TEL NO	Telenor	86	INW IM	Infrastrutture Wireless	12
AGS BB	ageas	84	SLHN SW	Swiss Life	26	ORA FP	Orange	77	CLNX SM	Cellnex Telecom	20
	PZU	84	HELN SW	Helvetia	31			Travel an	nd Leisure		
		Me	dia			FDJ FP	La Francaise des Jeux	92	SSPG LN	SSP	1
REL LN	RELX	96	ITV LN	ITV	30	EVO SS	Evolution	75	FLTR LN	Flutter Entertainment	11
PUB FP	Publicis	87	WPP LN	WPP	37	IHG LN	IHG	72	IAG LN	IAG	15
WKL NA	Wolters Kluwer	84	VIV FP	Vivendi	56	RYA ID	Ryanair	52	TUI1 GR	TUI	15
PSON LN	Pearson	69	EVD GR	CTS Eventim	64	SW FP	Sodexo	28	LHA GR	Deutsche Lufthansa	23
	Universal Music	61	INF LN	Informa	70				ities		
		nal Care Drug	and Grocery S			NG/ LN	National Grid	99	ECV GR	Encavis	4
TSCO LN	Tesco	100	OCDO LN	Ocado	2	SSE LN	SSE	98	PNN LN	Pennon	8
	Unilever	98	HFG GR	HelloFresh	20	IBE SM	Iberdrola	97	UU/ LN	United Utilities	12
	Galenica	88	MKS LN	Marks & Spencer	56	ENEL IM	Enel	96	SVT LN	Severn Trent	15
AD NA	Ahold Delhaize	88	DNP PW	Dino Polska	59	RWE GR	RWE	96	EDPR PL	EDP Renovaveis	19
RKT LN	Reckitt Benckiser	85	ESSITYB SS	Essity B	61	RED SM	Redeia Corporacion	84	VIE FP	Veolia Environnement	38
INIT EN	Neckitt Benekiser	Real E		Essity B	01	INED SIVI	redela corporación	01	VILII	Veolia Environnement	50
RMV LN	Rightmove	86	COLSM	Inmobiliaria Colonial	7						
	Aedifica	63	WIHL SS	Wihlborgs Fastigheter	7						
	PSP Swiss Property	62	BALDB SS	Fastighets Balder	9						
LAND LN	Land Securities	61	TEG GR	TAG Immobilien	15						
BYG LN	Big Yellow	60	FABG SS	Fabege	19						
	8			O .			icks) within Furone Stoxx 600 sun				

Source: BofA European Equity Quant Strategy, FactSet. Companies listed represent the top and bottom quintile stocks (or minimum 5 stocks) within Europe Stoxx 600 supersectors. The screens identified as Europe Stoxx 600 supersectors - Recession above are 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. These screens were not created to act as benchmarks.



Exhibit 52: Style Cycle Europe Stoxx 600 countries - Recession screens for Feb '24 (data as of 31/01/2024) Top and Bottom Style Cycle Recession stocks by Europe Stoxx 600 countries

BBG Ticker	Name	Recession Rank (100=Top)	BBG Ticker	Name	Recession Rank (1=Bottom)	BBG Ticker	Name	Recession Rank (100=Top)	BBG Ticker	Name	Recession Rank (1=Bottom)
DSY FP	December Customes	97	ance FRVIA FP	Forvia	1	AD NA	Ahold Delhaize	88	Netherlands TKWY NA	lust Fat Taleanus as ma	4
OR FP	Dassault Systemes L'Oreal	97 95	ADP FP	Aeroports de Paris	2	KPN NA	Royal KPN	86	ALLEG NA	Just Eat Takeaway.com Allfunds	5
SAN FP	Sanofi	95 95	FR FP	Valeo	2	WKL NA	Wolters Kluwer	84	AKZA NA	Alifulius Akzo Nobel	10
BN FP	Danone	93	UBI FP	Ubisoft Entertainment	3	ADYEN NA	Adyen	75	OCI NA	OCI	12
GTT FP	Gaztransport & Technigaz	93 92	ALO FP	Alstom	3 4	ASML NA	ASML	73 74	INPST NA	InPost	13
FDJ FP	La Francaise des Jeux	92	WLN FP	Worldline	4	PRX NA	Prosus	74	ABN NA	ABN AMRO Bank	20
TTE FP	TotalEnergies	92 92	VK FP	Vallourec	6	PRA NA	PIUSUS	7 1	Spain	ADIN AIVIRO DAI IK	20
DG FP	VINCI	92 92	GET FP	Getlink	9	ITX SM	Inditex	98	GRF SM	Grifols	7
TEP FP	Teleperformance	92 91	SOI FP	Soitec	10	IBE SM	Iberdrola	96 97	COL SM	Inmobiliaria Colonial	7
RMS FP	Hermes	88	RF FP	Furazeo	12	REP SM	Repsol	90	FER SM	Ferrovial	9
ML FP	Michelin	88	NEX FP	Nexans	12	RED SM	Redeia	90 84	ANA SM	Acciona	20
PUB FP	Publicis	87	GLE FP	SocieteGenerale	14	CABK SM	CaixaBank	79	CLNX SM	Cellnex Telecom	20
CS FP	AXA	84	SOP FP	Sopra Steria	14	CADIN SIVI	Calxabalik	73	Sweden	Cellilex Telecolli	20
ENGI FP	ENGIE	82	VRLA FP	Verallia	14	VOLVB SS	Volvo	97	ELUXB SS	Electrolux	1
IPN FP	Ipsen	62 77	ELIS FP	Elis SA	15	ATCOA SS	Atlas Copco	96	HUSQB SS	Husqvarna	4
IFINIF	ipseii		many	LIIS JA	13	ERICB SS	LM Ericsson	93	VOLCARB SS	Volvo Car	4
MUV2 GR	Munich Re	97	EVT GR	Evotec	1	HOLMB SS	Holmen	93	TIGO US	Millicom	6
RWE GR	RWE	96	ZAL GR	Zalando	1	SEBA SS	SEB	93 87	FNOX SS	Fortnox	7
EOAN GR	E ON	94	DHER GR	Delivery Hero	2	GETIB SS	Getinge	80	WIHL SS	Wihlborgs Fastigheter	7
HEN3 GR	Henkel	92	KGX GR	KION	2	AXFO SS	Axfood	79	BEIJB SS	Beijer	8
DHL GR	Deutsche Post	89	1COV GR	Covestro	3	SHBA SS	Svenska	76	BALDB SS	Fastighets Balder	9
BMW GR	BMW	88	LXS GR	LANXESS	3	ASSAB SS	ASSA ABLOY	75	HMB SS	H&M	13
BNR GR	Brenntag	83	ECV GR	Encavis	4	EVO SS	Evolution	75 75	NIBEB SS	NIBE Industrier	13
G24 GR	Scout24	82	ENR GR	Siemens Energy	5	HPOLB SS	HEXPOL	73 72	SAGAB SS	Sagax	13
DB1 GR	Deutsche Boerse	81	TKA GR	thyssenkrupp	8	TII OLD 33	TILXI OL		Switzerland	Jagax	15
RHM GR	Rheinmetall	81	GXI GR	Gerresheimer	9	KNIN SW	Kuehne Nagel	99	AVOL SW	Avolta	4
FPE GR	FUCHS	79	NDA GR	Aurubis	15	NOVN SW	Novartis	99	FHZN SW	Flughafen Zuerich	8
HNR1 GR	Hannover Rueck	78	TEG GR	TAG Immobilien	15	ROG SW	Roche	99	SIGN SW	SIG	11
DTE GR	Deutsche Telekom	70 77	PUM GR	PUMA	16	LOGN SW	Logitech	98	BANB SW	Bachem	15
SIE GR	Siemens	74	EVK GR	Evonik Industries	17	GEBN SW	Geberit	93	SON SW	Swissquote	22
JIL UIV	Sicilicits		taly	Evoriik iridustries	17	ZURN SW	Zurich Insurance	93	BAER SW	Julius Baer	26
RACE IM	Ferrari	98	TIT IM	Telecom Italia	5	ABBN SW	ABB	88	SLHN SW	Swiss Life	26
ENEL IM	Enel	96	AMP IM	Amplifon	12	GALE SW	Galenica	88	CMBN SW	Cembra Money Bank	29
STLA US	Stellantis	90	INW IM	Infrastrutture Wireless	12	SCMN SW	Swisscom	87	SFSN SW	SFS	29
TRN IM	TERNA	88	BMPS IM	Banca MPS	18	NESN SW	Nestle	85	TECN SW	Tecan	30
ENI IM	Eni	84	CPR IM	Davide Campari-Milano	20	INCOIN ON	INCOLIC		nited Kingdom	recall	30
SRG IM	SNAM	84	IP IM	Interpump	24	BNZL LN	Bunzl	100	SSPG LN	SSP	1
PST IM	Poste Italiane	74	DIA IM	DiaSorin	26	GSK LN	GSK	100	OCDO LN	Ocado	2
LOLLIN	I USLE ILAHAHE	/4	DIA IIVI	ווווטכמוע	20	USI/ LIV	/ICD	100	OCDO LIN	Ocado	∠

Source: BofA European Equity Quant Strategy, FactSet. Companies listed represent the top and bottom quintile stocks (or minimum 5 stocks) within 8 Europe Stoxx 600 countries. The screens identified as Europe Stoxx 600 countries. 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. These screens were not created to act as benchmarks

Exhibit 53: Style Cycle Europe Stoxx 600 countries - Recession screens for Feb '24 (data as of 31/01/2024) Top and Bottom Style Cycle Recession stocks by Europe Stoxx 600 countries

								Recession			Recession
BBG		Recession Rank			Recession Rank			Rank			Rank
Ticker	Name	(100=Top)	Ticker	Name	(1=Bottom)	BBG Ticker	Name	(100=Top)	BBG Ticker	Name	(1=Bottom)
RIO LN	Rio Tinto	100	IDS LN	Intl. Distri. Svs	2						
TSCO LN	Tesco	100	INDV LN	Indivior	3						
NG/ LN	National Grid	99	VMUK LN	Virgin Money UK	3						
NXT LN	Next	98	SMWH LN	WH Smith	6						
SSE LN	SSE	98	PNN LN	Pennon	8						
ULVR LN	Unilever	98	ENT LN	Entain	10						
EXPN LN	Experian	97	ANTO LN	Antofagasta	11						
IMB LN	Imperial Brands	96	FLTR LN	Flutter Entertainment	11						
REL LN	RELX	96	ICP LN	Intermediate Capital	11						
DCC LN	DCC	95	TPK LN	Travis Perkins	11						
MNDI LN	Mondi	95	WOSG LN	Watches of Switzerland	11						
BA/ LN	BAE Systems	94	DRX LN	Drax	12						
BATS LN	British American Tobacco	94	UU/LN	United Utilities	12						
CRH US	CRH	94	STAN LN	Standard Chartered	13						
HIK LN	Hikma Pharmaceuticals	94	ABDN LN	Abrdn	14						
III LN	3i	93	IAG LN	IAG	15						
AUTO LN	Auto Trader	93	SVT LN	Severn Trent	15						
AZN LN	AstraZeneca	92	TUI1 GR	TUI	15						
BBY LN	Balfour Beatty	91	DLG LN	Direct Line Insurance	16						
BKG LN	Berkeley	91	HBR LN	Harbour Energy	16						
HLMA LN	Halma	91	NWG LN	NatWest	16						
SGE LN	Sage	91	BARC LN	Barclays	18						
ADM LN	Admiral	90	BEZ LN	Beazley	19						
CWK LN	Cranswick	90	HSX LN	Hiscox	21						
SBRY LN	J Sainsbury	90	MNG LN	M&G	22						
DPLM LN	Diploma	88	GFTU LN	Grafton	23						

Source: BofA European Equity Quant Strategy, FactSet. Companies listed represent the top and bottom quintile stocks (or minimum 5 stocks) within 8 Europe Stoxx 600 countries. The screens identified as Europe Stoxx 600 countries. are 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. These screens were not created to act as benchmarks.



Explaining the European Style Cycle

Style cycle: the relationship between the economic cycle and investment style

- We draw on the back-testing results first presented in February 2004, using data (since January 1992) on investment style price returns and the economic cycle to create the European 'Style Cycle'.
- The European 'Style Cycle' aims to offer what we believe are two vital components for investing across the cycle. These are: a) timing, and b) rotation.
- Investment styles with potential for success are based on favourable positioning within the cycle. Highlighted investment styles are expected to outperform the MSCI European equal-weight price index.
- We identify investment styles that we believe have the characteristics to underperform the MSCI European equal-weight price index, based on the unfavourable positioning within the cycle at a particular point in time. The screens resulting from the investment styles 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 decision.

We observe the year on year changes for signals of economic expansion or contraction, and analyse monthly changes in the index for indications of peaks and troughs in macro data. The combination helps investors navigate the economic cycle, acting as a timing indicator for style rotation.

We show the relationship between the European economic cycle and price performance of various investment styles in the chart below. The four phases of the economic cycle are dictated by changes in the European CMI. The style preferences in each phase are based on the back-testing results of average monthly price returns from following individual investment styles during the changing conditions in the economic cycle

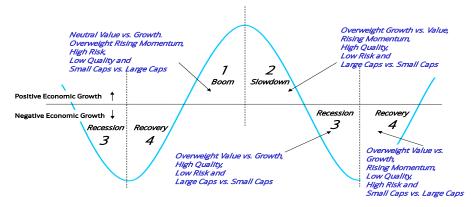
As a reminder, the CMI is an equal-weighted composite indicator of 6 inputs:

- Pan European GDP forecasts 12m fwd forecasted GDP growth for the Developed European countries
- BofA Europe Leading Indicator 12m change in BofA Europe Leading Indicator which indicates an acceleration (deceleration) in anticipated GDP growth, above (below) long-term GDP growth for Europe
- European 10Y bond yield 12m actual change in average of 10Y bond yields of Germany, UK and France
- German IFO level of indicator as published by the IFO institute for the Trade and Industry (Excluding Services) survey
- European PPI Eurozone Producer Price inflation (expressed as 12m change) ex Construction, SRWG, Waste Management and Remediation Activities
- Global EPS Revision Ratio ratio between the number of companies in the MSCI ACWI index for which Refinitiv consensus earnings estimates have been raised versus those that have been lowered



We take each one of the six variables as they existed at month end and record the data, then using z-scores to normalise the data (some are percentages, some are levels and others are ratios). Using a percentile rank methodology of each variable can achieve the same outcome. We then aggregate the individual data series by using an equal-weight average. The sum of the individual data or aggregate macro series is referred to as the European Composite Macro Index (CMI).

Exhibit 54: Phases of the Economic Cycle* & Investment Style Preferences – 'Style Cycle' Style Cycle framework



<u>Phase 1</u>- Rising & Accelerating; <u>Phase 2</u>- Rising & Decelerating; <u>Phase 3</u>- Falling & Decelerating; <u>Phase 4</u>- Falling & Accelerating.
*Frongeric Cycle based on the ML Composite Macro Indicator.

Source: BofA European Equity Quant Strategy

Back testing period from Dec 1992 to Dec 2003. Actual Performance Jan 2004.

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Back testing - European Style Cycle

Back-testing the cycle with investment style

The table below includes the average excess price returns (monthly) for individual investment styles at each phase of the economic cycle. Style performance is versus MSCI Europe equal weight Price Index.

Exhibit 55: Monthly excess returns by investment style and phases of the economic cycle Backtesting results (based on period from Dec '92 to Dec '03)

				Quality	Risk	Size
Economic cycle	Value	Growth	Momentum	hi-lo	high	(large-small)
Phase 1 - 'Boom' rising accelerating	1.10	0.78	0.97	-1.34	0.65	-0.75
Phase 2- 'Slowdown' rising decelerating	0.00	0.44	0.89	0.52	0.07	0.25
Phase 3 - 'Recession' falling decelerating	-0.70	-1.91	-0.81	6.37	-2.85	1.10
Phase 4 - 'Recovery' falling accelerating	2.47	1.31	0.10	-3.00	2.66	-2.05
Cycle average	0.72	0.15	0.29	0.64	0.13	-0.36

Source: BofA European Equity Quant Strategy/ Refinitiv/ OECD/ MSCI; Back testing period Dec 1992 to Dec 2003. Performance based on equal weight portfolios, monthly rebalanced, no transaction costs are included, and performances based on price returns in EUR and not total returns (dividends are not included).

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Summarising the results - we draw the following conclusions:

Phase 1 'Boom' - investors have benefited most by being overweight Momentum (Rising Price & EPS), High Risk (High Beta & High Estimate Dispersion), Small Caps vs Large Caps and being Neutral on Value vs Growth. Phase 2 'Slow-down' - investors have benefited most by overweighting Growth vs Value, Momentum (Rising Price & EPS), High Quality (Strong Balance Sheet indicators), Low Risk (Low Beta & Low Estimate Dispersion) and Large Caps vs Small Caps. Phase 3 'Recession' – overweight Value vs



Growth, High Quality (Strong Balance Sheet indicators), Low Risk (Low Beta & Low Estimate Dispersion) and Large Caps vs Small Caps. Phase 4 'Recovery' – overweight Value vs Growth, Momentum (Rising Price & EPS), Low Quality (Weak Balance Sheet indicators), High Risk and Small vs Large Caps.

The back-testing results illustrate how certain investment styles work well compared to others, depending on the economic conditions and ultimately where we are in the cycle. The data presented above looks at all periods since 1992, including 5 complete cycles.

For the purpose of the historical back-testing, we calculate price returns in our analysis, not total returns. Dividends are not re-invested and performance does not include tax withholdings or any investment advisory fees. We do not include transaction costs, and we not do include implementation costs or borrowing costs in the absolute 'Style Cycle' price returns.

Price returns are based on month end data, meaning we use closing stock prices for the last trading day of the calendar month. All screens are based on month end data and it is assumed on the 1st business day of the new month our screens would have been available to the market. We calculate the profit or loss for a particular month based on the month end data from one period to the month end data of the next period.

Screens are determined at the end of each month using month-end data. Price performance is calculated as the simple average performance of the stocks within the screen. In order that we compare like with like, screen performance is compared to an equal-weighted average performance of all stocks in the universe. In this way, we remove any size bias from the analysis, and thereby test whether the factors on which we are focused predict price performance. It is noteworthy that BofA restricted stocks have not been excluded from any part of the historical monthly screens as defined as the back-test period.

Back-tested performance is hypothetical in nature and reflects application of the screen prior to its introduction and is not intended to be indicative of future performance.

Definitions

Investment styles

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

 $\textbf{Momentum:} \ \, \textbf{Equal weighted combination of factors - 3m EPS Change, EPS Revision}$

Ratio, Sales Revision Ratio, 1m Price Change and 12m Price Change

Quality: Equal weighted combination of factors - Return on Assets, Return on Capital,

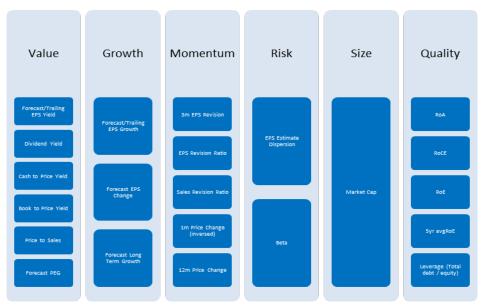
Return on Equity, 5yr Return on Equity and Leverage

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



Exhibit 56: Style components

Individual factors that are used for style composites



Source: BofA European Equity Quant Strategy

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Multi factor models

STYLE CYCLE: The European 'Style Cycle' links phases of the economic cycle with the performance of investment style. Stocks are screened based on their equal weighted rank of Value, Growth, Momentum, Quality and Risk.

Absolute return

Absolute return is calculated based on monthly returns and reflects simple price appreciation (depreciation) over the stated period of the screened stocks. For purposes of this calculation, the stocks in the screen are assumed to be equally weighted. Returns do not reflect dividend or costs.

Relative return

Relative return is calculated based on monthly returns and reflects simple price appreciation (depreciation) over the stated period of the screened stocks minus the return for our Equal weighted European Universe. Returns do not reflect dividend or sects.

Performances of phases

Exhibit 57: European Absolute factor returns by Style Cycle phase (%) Prices as of end of last month

Style	Factor Name	1M	3M	6M	12M	YTD	3YR	5YR	Since Incpt.*
Multi-factor	Style Cycle - Top	1.1	7.2	2.1	12.6	1.1	32.5	35.6	394.1
Multi-factor	Style Cycle - Bottom	-0.9	16.3	0.7	-3.0	-0.9	6.3	39.3	20.1
Multi-factor	Style Cycle - BOOM - Top	1.6	12.5	5.2	3.8	1.6	39.2	46.1	211.6
Multi-factor	Style Cycle - BOOM - Bottom	0.8	13.1	-1.1	4.1	8.0	11.8	41.8	209.7
Multi-factor	Style Cycle - SLOWDOWN - Top	3.7	15.1	6.8	16.7	3.7	19.8	48.3	471.2
Multi-factor	Style Cycle - SLOWDOWN - Bottom	-0.8	11.1	0.4	-4.3	-0.8	11.6	-2.3	0.5
Multi-factor	Style Cycle - RECESSION - Top	1.1	7.2	2.1	9.2	1.1	35.2	46.2	101.1
Multi-factor	Style Cycle - RECESSION - Bottom	-0.9	16.3	0.7	-2.3	-0.9	-13.0	-1.0	98.6
Multi-factor	Style Cycle - RECOVERY - Top	0.4	9.9	2.3	-3.8	0.4	42.6	51.0	182.7
Multi-factor	Style Cycle - RECOVERY - Bottom	2.8	14.2	3.2	12.1	2.8	26.8	61.6	267.2
Market	European Market (abs)	0.6	12.5	2.1	5.3	0.6	18.1	32.0	150.7

Source: BofA European Equity Quant Strategy, FactSet. *Inception – January 2003.



Exhibit 58: European Relative factor returns by Style Cycle phase (%) Prices as of end of last month

Style	Factor Name	1M	3M	6M	12M	YTD	3YR	5YR	Since Incpt.*
Multi-factor	Style Cycle - Top	0.5	-4.8	0.0	6.9	0.5	12.2	2.7	97.1
Multi-factor	Style Cycle - Bottom	-1.5	3.3	-1.4	-7.9	-1.5	-10.0	5.5	-52.1
Multi-factor	Style Cycle - BOOM - Top	1.0	0.0	3.1	-1.5	1.0	17.9	10.7	24.3
Multi-factor	Style Cycle - BOOM - Bottom	0.2	0.5	-3.2	-1.1	0.2	-5.3	7.4	23.5
Multi-factor	Style Cycle - SLOWDOWN - Top	3.1	2.2	4.6	10.8	3.1	1.5	12.3	127.9
Multi-factor	Style Cycle - SLOWDOWN - Bottom	-1.4	-1.3	-1.7	-9.2	-1.4	-5.5	-26.0	-59.9
Multi-factor	Style Cycle - RECESSION - Top	0.5	-4.8	0.0	3.7	0.5	14.5	10.8	-19.8
Multi-factor	Style Cycle - RECESSION - Bottom	-1.5	3.3	-1.4	-7.3	-1.5	-26.3	-25.0	-20.8
Multi-factor	Style Cycle - RECOVERY - Top	-0.2	-2.4	0.1	-8.7	-0.2	20.8	14.4	12.8
Multi-factor	Style Cycle - RECOVERY - Bottom	2.2	1.4	1.1	6.5	2.2	7.4	22.4	46.5

Source: BofA European Equity Quant Strategy, FactSet. *Inception – January 2003.

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Exhibit 59: European Style Cycle advancersNumber of companies which saw their price up over the last month

Factor Name	1M	3M	6M	12M	YTD	3YR	5YR	Since Incpt.*
Style Cycle - Top	16	52	81	181	16	484	815	3454
Style Cycle - Bottom	12	51	73	146	12	479	828	3335
Style Cycle - BOOM - Top	15	55	81	161	15	503	818	3462
Style Cycle - BOOM - Bottom	17	59	77	158	17	486	843	3460
Style Cycle - SLOWDOWN - Top	19	60	83	180	19	486	834	3491
Style Cycle - SLOWDOWN - Bottom	14	54	80	156	14	476	777	3322
Style Cycle - RECESSION - Top	16	52	81	172	16	505	849	3440
Style Cycle - RECESSION - Bottom	12	51	73	152	12	443	776	3377
Style Cycle - RECOVERY - Top	12	49	77	148	12	506	819	3426
Style Cycle - RECOVERY - Bottom	20	63	87	175	20	499	861	3466
Market	138	533	765	1603	138	4753	8100	12522

Source: BofA European Equity Quant Strategy, FactSet. *Inception – January 2003.

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Exhibit 60: European Style Cycle declinersNumber of companies which saw their price down over the last month

Factor Name	1M	3M	6M	12M	YTD	3YR	5YR	Since Incpt.*
Style Cycle - Top	9	23	69	119	9	415	675	2892
Style Cycle - Bottom	13	24	77	154	13	421	658	3007
Style Cycle - BOOM - Top	10	20	69	139	10	397	672	2880
Style Cycle - BOOM - Bottom	8	16	73	142	8	413	647	2885
Style Cycle - SLOWDOWN - Top	6	15	67	120	6	413	658	2855
Style Cycle - SLOWDOWN - Bottom	11	21	70	144	11	424	712	3018
Style Cycle - RECESSION - Top	9	23	69	128	9	394	640	2903
Style Cycle - RECESSION - Bottom	13	24	77	148	13	457	711	2959
Style Cycle - RECOVERY - Top	13	25	72	151	13	393	667	2914
Style Cycle - RECOVERY - Bottom	5	12	63	125	5	401	632	2879
Market	112	216	734	1396	112	4241	6773	10950

Source: BofA European Equity Quant Strategy, FactSet. *Inception – January 2003.



Historical phases of the 'Style Cycle'

Exhibit 61: Style Cycle – historical phases February 1995 to date

February 1995 to dat										
Month CMI phase	Month	CMI phase	Month	CMI phase	Month	CMI phase	Month	CMI phase	Month	CMI phase
Feb-95 Slowdown Mar-95 Slowdown		00 Boom 00 Boom		05 Slowdown 05 Slowdown		0 Boom		15 Recession 15 Recession		20 Recovery
						0 Slowdown				20 Recovery
Apr-95 Slowdown		00 Slowdown		05 Slowdown		0 Slowdown 0 Slowdown	•	15 Recovery		20 Recession
May-95 Slowdown		00 Slowdown		05 Slowdown				15 Recovery		20 Recession
Jun-95 Slowdown		00 Slowdown	,	05 Slowdown	,	0 Slowdown		15 Recovery	,	20 Recession
Jul-95 Slowdown	,	00 Slowdown	,	05 Slowdown	,	0 Slowdown		15 Recovery	•	20 Recovery
Aug-95 Slowdown		00 Slowdown	•	05 Boom		0 Slowdown	_	15 Recovery		20 Recovery
Sep-95 Slowdown		00 Slowdown		05 Boom	,	0 Slowdown		15 Recovery		20 Recovery
Oct-95 Recession		00 Slowdown		05 Boom		0 Slowdown		15 Recovery		20 Boom
Nov-95 Recession		00 Slowdown		05 Boom		0 Slowdown		15 Recovery		20 Boom
Dec-95 Recession		00 Slowdown		05 Boom		0 Boom		15 Recovery		20 Boom
Jan-96 Recession	,	01 Slowdown		06 Boom		1 Boom		16 Recovery	,	21 Boom
Feb-96 Recovery		01 Recession		06 Boom		1 Boom		16 Recovery		21 Boom
Mar-96 Recovery		01 Recession		06 Boom		1 Boom		16 Recession		21 Boom
Apr-96 Recovery		01 Recession		06 Boom		1 Slowdown		16 Recession		21 Boom
May-96 Recovery		01 Recession		06 Boom		1 Slowdown		16 Recession		21 Boom
Jun-96 Recovery		01 Recession	,	06 Boom	,	1 Slowdown		16 Recession	,	21 Boom
Jul-96 Recovery		01 Recession	,	06 Boom	,	1 Slowdown	,	16 Recession	•	21 Slowdown
Aug-96 Recovery	Aug-(01 Recession		06 Slowdown	_	1 Slowdown	Aug-	16 Recession		21 Slowdown
Sep-96 Recovery	Sep-0	01 Recession	Sep-	06 Slowdown	Sep-	1 Recession	Sep-	16 Recession	Sep-2	21 Slowdown
Oct-96 Recovery	Oct-0	01 Recession	Oct-	06 Slowdown		1 Recession	Oct-1	16 Recovery	Oct-2	21 Slowdown
Nov-96 Recovery	Nov-0	01 Recession	Nov-	06 Slowdown	Nov-	1 Recession	Nov-	16 Recovery	Nov-2	21 Boom
Dec-96 Recovery	Dec-0	01 Recession	Dec-	06 Slowdown	Dec-	1 Recession	Dec-	16 Recovery	Dec-2	21 Boom
Jan-97 Boom	Jan-(02 Recovery	Jan-	07 Slowdown	Jan-	2 Recession	Jan-	17 Recovery	Jan-:	22 Boom
Feb-97 Boom	Feb-0	02 Recovery	Feb-	07 Slowdown	Feb-	2 Recession	Feb-1	17 Boom	Feb-	22 Boom
Mar-97 Boom	Mar-0	02 Recovery	Mar-	07 Slowdown	Mar-	2 Recession	Mar-	17 Boom	Mar-:	22 Boom
Apr-97 Boom	Apr-0	02 Boom	Apr-	07 Slowdown	Apr-	2 Recovery	Apr-	17 Boom	Apr-2	22 Slowdown
May-97 Boom	May-0	02 Slowdown	May-	07 Slowdown	May-	2 Recovery	May-	17 Boom	May-1	22 Slowdown
Jun-97 Boom	Jun-(02 Slowdown		07 Slowdown	Jun-	2 Recovery	Jun-	17 Boom	-	22 Slowdown
Jul-97 Boom	Jul-(02 Slowdown	Jul-	07 Slowdown	Jul-	2 Recovery	Jul-	17 Boom	Jul-:	22 Slowdown
Aug-97 Boom		02 Slowdown	,	07 Slowdown		2 Recovery	,	17 Boom		22 Slowdown
Sep-97 Boom		02 Slowdown		07 Slowdown		2 Recovery	_	17 Boom		22 Slowdown
Oct-97 Boom		02 Slowdown		07 Slowdown		2 Recovery		17 Boom		22 Slowdown
Nov-97 Boom		02 Slowdown		07 Slowdown		2 Recovery		17 Boom		22 Slowdown
Dec-97 Boom		02 Slowdown		07 Slowdown		2 Recovery		17 Boom		22 Slowdown
Jan-98 Slowdown		03 Recession		08 Slowdown		3 Recovery		18 Boom		23 Slowdown
Feb-98 Slowdown		03 Recession	,	08 Slowdown		3 Recovery		18 Boom		23 Slowdown
Mar-98 Slowdown		03 Recession		08 Slowdown		3 Recovery		18 Boom		23 Slowdown
Apr-98 Recession		03 Recession		08 Slowdown		3 Recovery		18 Slowdown		23 Slowdown
May-98 Recession		03 Recession		08 Slowdown		3 Recovery	•	18 Slowdown		23 Slowdown
Jun-98 Recession		03 Recovery		08 Slowdown		3 Boom	-	18 Slowdown	-	23 Recession
Jul-98 Recession	-	03 Recovery	•	08 Slowdown	•	3 Boom	,	18 Slowdown	•	23 Recession
Aug-98 Recession	,	03 Recovery		08 Slowdown		3 Boom		18 Slowdown		23 Recession
Sep-98 Recession	_	03 Boom	_	08 Recession	_	3 Boom		18 Slowdown		23 Recession
Oct-98 Recession	•	03 Boom		08 Recession		3 Boom		18 Recession		23 Recession
Nov-98 Recession		03 Boom		08 Recession		3 Slowdown		18 Recession		23 Recession
Dec-98 Recession		03 Boom		08 Recession		3 Slowdown		18 Recession		23 Recession
Jan-99 Recession		04 Boom		09 Recession		4 Slowdown		19 Recession		24 Recession
Feb-99 Recovery		04 Boom	, .	09 Recession	,	4 Slowdown	, .	19 Recession		24 Recession
Mar-99 Recovery		04 Boom		09 Recession		4 Slowdown		19 Recession	reu-2	A Mecession
Apr-99 Recovery		04 Boom				4 Slowdown				
1				09 Recession			•	19 Recovery		
May-99 Recovery		04 Boom		09 Recession	,	4 Slowdown		19 Recovery		
Jun-99 Recovery		04 Boom	-	09 Recovery		4 Slowdown		19 Recovery		
Jul-99 Boom		04 Boom		09 Recovery	,	4 Slowdown		19 Recovery		
Aug-99 Boom	U	04 Slowdown	_	09 Recovery	_	4 Slowdown	-	19 Recession		
Sep-99 Boom		04 Slowdown		09 Recovery	•	4 Recession		19 Recession		
Oct-99 Boom		04 Slowdown		09 Recovery		4 Recession		19 Recession		
Nov-99 Boom		04 Slowdown		09 Boom		4 Recession		19 Recession		
Dec-99 Boom		04 Slowdown		09 Boom		4 Recession		19 Recovery		
Jan-00 Boom	lan-(05 Slowdown	lan-	10 Boom	lan-	5 Recession	Jan-2	20 Recovery		

Source: BofA European Equity Quant Strategy



Disclosures

Important Disclosures

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

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