

European Beat Factor

Out-of-consensus stocks under BofA **Global Research coverage**

Industrials dominate the Beat factor screens in February

Industrials feature prominently in both the Beat Factor Top 10 (i.e. the stocks on which our sector analysts are most positive versus consensus) and the Bottom 10 (i.e. the stocks on which our sector analysts are most negative versus consensus) in February. Four industrial stocks feature in the Top 10 (Spirax Sarco, Airbus, Bureau Veritas and Kingspan), while three industrials feature in the Bottom 10 (Alfa Laval, Schneider, Schindler). Apart from industrials, the Top 10 is broad based, including one stock from each of consumer discretionary (Hermes), materials (Antofagasta), financials (Erste), tech (ASMI), healthcare (Novo Nordisk) and energy (TotalEnergies). The Bottom 10 includes two stocks from energy (Galp Energia and OMV) and consumer discretionary (Kering and H&M), and one from healthcare (GSK), materials (Yara) and communication services (**Swisscom**). The new entries into the Top 10 this month are Hermes, Spirax Sarco, Bureau Veritas, Erste, ASMI, Novo Nordisk and TotalEnergies, while the new entries in the Bottom 10 are Kering, GSK, H&M and Swisscom.

Hermes tops the Beat factor score this month

Hermes has the highest Beat Factor score for this month, with our analysts' price objective tracking 49% above consensus and EPS estimates for 2024 and 2025 that are 8% and 10% above consensus, respectively. Alfa Laval and Galp Energia are the stocks with the lowest Beat Factor score this month, with the BofA Global Research price objective for Alfa Laval being 27% below consensus, as well as 2024 and 2025 EPS estimates that are 12% and 10% below consensus, while the price objective for Galp Energia is 41% below consensus with 2023 and 2024 EPS estimates that are 10% and 32% below consensus, respectively.

Our analysts are most positive on tech and discretionary

Our sector analysts' bottom-up projections imply 15% upside in aggregate for the European stocks under BofA Global Research coverage over the coming twelve months, slightly above bottom-up consensus expectations at 13%. Over the coming year, our analysts see the most upside potential relative to consensus for tech (+16% versus consensus at +3%) and discretionary (+14% versus +9%), while they are most negative relative to consensus on energy (+20% versus +25%) and utilities (+22% versus +24%). BofA analysts expect nearly 8% EPS growth for the European companies under coverage in 2024, while bottom-up consensus expectations point to just under 4% growth, with financials accounting for most of the gap.

Top vs Bottom 10 outperformance at 9% over six months

The Beat Factor Top 10 performed in line with the Bottom 10 over the past month, leaving the outperformance at 9% over the past six months and 47% since inception.

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

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Equity Strategy Europe

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Exhibit 1: Top 10 Beat Factor screen of out-ofconsensus European stocks covered by BofA

Top 10 Beat Factor stocks

Beat	Factor Top 10	Beat Factor
BBG Code	Name	(100=Most Upbeat)
RMS FP	Hermès	100
SPX LN	Spirax-Sarco	99
ANTO LN	Antofagasta	98
AIR FP	Airbus	97
BVI FP	Bureau Veritas	96
EBS AV	Erste Bank	96
ASM NA	ASMI	93
NOVOB DC	Novo Nordisk	93
TTE FP	TotalEnergies	93
KSP ID	Kingspan Group	91

Source: BofA European Equity Quant Strategy, iQdatabase, BBG, IBES, Refinitiv (as of Feb 12, 2024) BofA GLOBAL RESEARCH

Beat Factor in a nutshell

Beat Factor identifies the most out-ofconsensus stocks within BofA Global Research coverage of Eurofirst 300 companies. It compares our analysts' price objectives and earnings estimates from our proprietary iQdatabase with sell-side consensus estimates.

European Beat Factor: Top 10 & Bottom 10 stocks

Our Top 10 Beat Factor screen of out-of-consensus European stocks covered by BofA Global Research analysts in February has four industrial companies (**Spirax Sarco**, **Airbus**, **Bureau Veritas** and **Kingspan**) and one stock from each of consumer discretionary (**Hermes**), materials (**Antofagasta**), financials (**Erste Bank**), information technology (**ASMI**), health care (**Novo Nordisk**) and energy (**TotalEnergies**). The stock with the highest Beat Factor score is **Hermes**, which has a BofA Global Research price objective that is 49% above consensus and EPS estimates for 2024 and 2025 that are 8% and 10% above consensus, respectively.

Exhibit 2: European Beat Factor Top 10 stocks

Details of Top 10 Beat Factor stocks

			Market	Beat	BofA estimates versus								Consensus Rating				
Name	Sector	Industry group	Сар	Factor	consen	ısus (% abov	e / below)	EPS	EPS	-FY1	EPS-	FY2		(%)			
			Eur bn	(100=Upbeat)	PO	FY1 EPS	FY2 EPS	Cur	BofA	Cons	BofA	Cons	Buy	Hold	Sell		
Hermès	Cons. Discretionary	Cons. Durables & Apparel	227.0	100	49%	8%	10%	EUR	45.7	42.3	52.0	47.2	43	52	4		
Spirax-Sarco	Industrials	Capital Goods	8.5	99	25%	3%	4%	GBP	3.2	3.1	3.6	3.4	33	40	33		
Antofagasta	Materials	Materials	18.7	98	18%	16%	30%	USD	8.0	0.7	1.0	0.7	28	39	33		
Airbus	Industrials	Capital Goods	116.2	97	27%	9%	3%	EUR	5.9	5.4	6.9	6.7	75	17	8		
Bureau Veritas	Industrials	Comm. & Prof. Services	11.2	96	12%	4%	4%	EUR	1.3	1.2	1.3	1.3	47	41	12		
Erste Bank	Financials	Banks	16.4	96	8%	6%	10%	EUR	7.3	6.9	7.0	6.3	78	17	6		
ASMI	Info. Tech	Semicon & Semicon Equip	27.5	93	24%	2%	12%	EUR	12.6	12.4	15.2	13.5	59	36	5		
Novo Nordisk	Health Care	Pharma Biotech & Life Sciences	444.9	93	11%	11%	11%	DKK	25.2	22.6	30.5	27.5	54	35	8		
TotalEnergies	Energy	Energy	149.2	93	7%	23%	26%	USD	11.2	9.1	11.6	9.3	72	28	0		
Kingspan Group	Industrials	Capital Goods	13.7	91	12%	5%	4%	EUR	3.8	3.6	3.8	3.6	39	50	11		

Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, IBES, Refinitiv (as of Feb 12, 2024). The Stock Beat screens are not a recommended list, either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decisions. The screens 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. The screen was not created to act as a benchmark. The companies highlighted in blue (Hermes, Spirax-Sarco, Antofagasta, Bureau Veritas, Kingspan Group) are the ones where the BofA Global Research rating is Buy and the percentage of consensus Strong Buy/Buy estimates is less than 50%.

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Our Bottom 10 Beat Factor screen of out-of-consensus European stocks covered by BofA Global Research analysts features three capital goods companies (Alfa Laval, Schneider, Schindler), two each from energy (Galp Energia and OMV) and consumer discretionary (Kering and H&M) and one each from health care (GSK), materials (Yara) and communication services (Swisscom). Alfa Laval and Galp Energia are the stocks with the lowest Beat Factor score this month, with the BofA Global Research price objective for Alfa Laval being 27% below consensus, as well as 2024 and 2025 EPS estimates that are 12% and 10% below consensus, while the price objective for Galp Energia is 41% below consensus with 2023 and 2024 EPS estimates that are 10% and 32% below consensus, respectively.

Exhibit 3: European Beat Factor Bottom 10 stocks

Details of Bottom 10 Beat Factor stocks

			Market	Beat	BofA esti	mates versu	s consensus						Cons	ensus R	ating
Name	Sector	Industry group	Сар	Factor	(% above / below)		EPS	EPS	-FY1	EPS-FY2			(%)		
			Eur bn	(-100=Downbeat)	PO	FY1 EPS	FY2 EPS	Cur	BofA	Cons	BofA	Cons	Buy	Hold	Sell
Alfa Laval	Industrials	Capital Goods	13.6	-100	-27%	-12%	-10%	SEK	17.0	19.2	18.4	20.5	26	53	21
Galp Energia	Energy	Energy	10.9	-100	-41%	-10%	-32%	EUR	1.0	1.1	0.9	1.2	32	50	18
OMV	Energy	Energy	13.6	-97	-28%	-18%	-13%	EUR	5.1	6.2	5.5	6.3	44	22	33
Schneider	Industrials	Capital Goods	101.9	-97	-14%	-10%	-11%	EUR	6.9	7.6	7.5	8.4	64	24	12
Kering	Cons. Discretionary	Cons. Durables & Apparel	51.3	-96	-17%	-19%	-20%	EUR	20.3	25.0	22.5	28.1	22	70	7
GSK	Health Care	Pharma Biotech & Life Sciences	73.0	-94	-19%	-5%	-6%	GBP	1.5	1.6	1.7	1.8	44	44	12
Yara	Materials	Materials	8.0	-93	-21%	-28%	-23%	USD	2.0	2.8	2.8	3.6	35	40	25
Schindler	Industrials	Capital Goods	23.9	-91	-12%	-6%	-8%	CHF	7.8	8.3	8.0	8.7	39	50	11
H&M	Cons. Discretionary	Distribution & Retail	21.6	-90	-19%	-9%	-16%	SEK	7.8	8.6	8.0	9.5	27	40	33
Swisscom	Communication Svs	Telecommunication Services	27.3	-89	-9%	-7%	-6%	CHF	30.9	33.1	31.0	33.1	39	28	33

Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, IBES, Refinitiv (as of Feb 12, 2024). The Stock Beat screens are not a recommended list, either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decisions. The companies highlighted in red (Schneider) are the ones where the BofA Global Research rating is Underperform and the percentage of consensus Strong Buy/Buy estimates is greater than 50%.

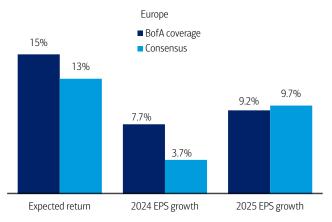


European Beat Factor: market & sectors

Our sector analysts' bottom-up projections imply 15% upside potential in aggregate for the European stocks under BofA Global Research coverage over the coming twelve months, mildly above the bottom-up consensus estimate of 13%. BofA analysts expect 7.7% EPS growth for the European companies under their coverage in 2024 (versus consensus at 3.7%, with financials accounting for most of the difference) and 9.2% EPS growth in 2025 (versus consensus at +9.7%, with discretionary and industrials accounting for most of the gap).

Our analysts' views on technology and discretionary are the most positive relative to consensus, with their bottom-up projections pointing to 16% and 14% upside potential for the two sectors over the coming twelve months, respectively, while consensus sees upside potential of 3% and 9%, respectively. Our analysts are most negative relative to consensus on energy and utilities, expecting 20% and 22% upside potential, respectively over the coming year, below consensus at 25% and 24% upside, respectively.

Exhibit 4: BofA vs consensus – BofA coverage of European companies Expected return and 2024 & 2025 EPS growth (%)



Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024) Note: EPS growth is calculated in EUR terms

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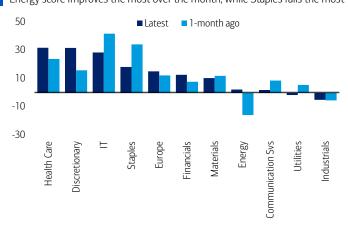
Exhibit 6: BofA vs consensus: expected return for European sectorsBofA Global Research analysts are most positive versus consensus on tech and discretionary, while they are most negative versus consensus on energy and utilities



Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024)

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Exhibit 5: Beat Factor score per sector – change over the monthEnergy score improves the most over the month, while Staples falls the most

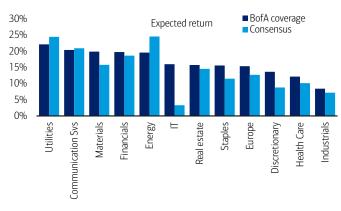


Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, IBES, (as of Feb 12, 2024)

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Exhibit 7: BofA vs consensus: expected return for European sectors

Among European sectors, BofA Global Research analysts see the most upside potential for utilities and communication services over the coming twelve months, while they see the least upside potential for industrials and health care

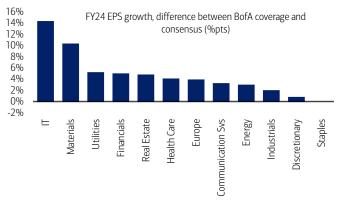


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024)

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Exhibit 8: BofA vs consensus: sector 2024 EPS growth estimates

Our analysts project 2024 EPS growth for technology that is 14 percentage points (ppts) above that projected by consensus, while they expect materials to see EPS growth that is 10ppts above that expected by consensus

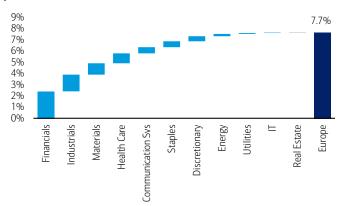


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024). Note: EPS growth is calculated in EUR terms

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Exhibit 10: Sector contribution to 2024 BofA EPS growth projected for European stocks under BofA Global Research coverage

Financials and industrials are the main contributors to the 7.7% EPS growth projected by BofA analysts for the European stocks under their coverage this year

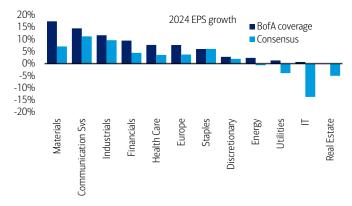


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024). Note: EPS growth is calculated in EUR terms

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Exhibit 9: BofA vs consensus: sector 2024 EPS growth estimates

BofA Global Research analysts expect materials to see the strongest EPS growth in 2024 among European sectors, while real estate and technology are the sectors projected to see the weakest growth

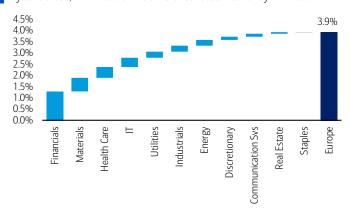


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024) Note: EPS growth is calculated in EUR terms

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Exhibit 11: Sector contribution to the difference in 2024 EPS growth projected by BofA Global Research analysts and consensus

BofA Global Research analysts are projecting EPS growth this year for the European stocks under their coverage that is 4ppts lower than that projected by consensus, with most of the difference accounted for by financials

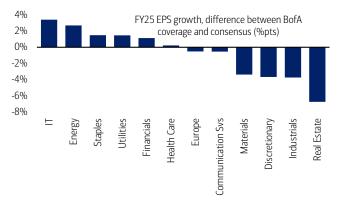


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024). Note: EPS growth is calculated in EUR terms



Exhibit 12: BofA vs consensus: sector 2025 EPS growth estimates

BofA Global Research analysts project 2025 EPS growth for technology that is 3ppts above that expected by consensus, while they expect real estate to see EPS growth next year that is 7ppts below that expected by consensus

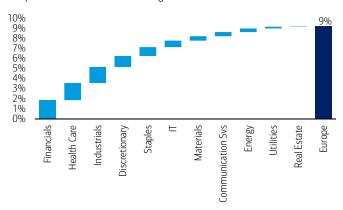


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12 2024). Note: EPS growth is calculated in EUR terms

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Exhibit 14: Sector contribution to 2025 BofA EPS growth projected for European stocks under BofA Global Research coverage

Financials, health care and industrials are the largest positive contributors to the 9% EPS growth projected by BofA Global Research analysts for the European stocks under their coverage in 2025

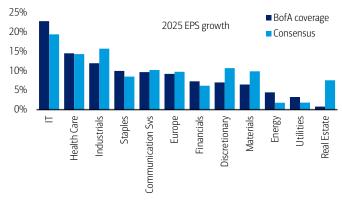


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024). Note: EPS growth is calculated in EUR terms

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Exhibit 13: BofA vs consensus: sector 2025 EPS growth estimates

BofA Global Research analysts expect technology to see the strongest EPS growth in 2025, while real estate is expected to see the weakest growth

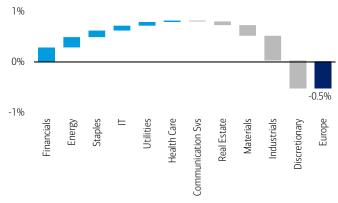


Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024) Note: EPS growth is calculated in EUR terms

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Exhibit 15: Sector contribution to the difference in 2025 EPS growth projected by BofA Global Research analysts and consensus

BofA Global Research analysts are projecting EPS growth next year for the European stocks under their coverage that is 0.5ppts below that expected by consensus, with most of the gap accounted for by discretionary and industrials



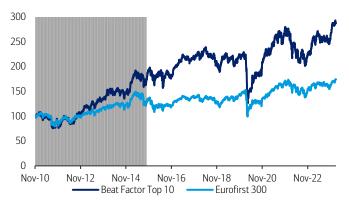
Source: BofA European Equity Quant Strategy, iQdatabase, IBES, Refinitiv (as of Feb 12, 2024). Note: EPS growth is calculated in EUR terms



European Beat Factor performance

Exhibit 16: Beat Factor Top 10 performance vs Eurofirst 300 index

Absolute performance (EUR, equally weighted)



Source: BofA European Equity Quant Strategy, iQdatabase, Factset. The shaded area on the chart above shows backtested results during the period from Nov-10 to Sep-15. The performance data for the months between April to November 2021 depends on monthly screens that were not published at the time. Please see European Beat Factor, 14 Dec 2021 for details. Past performance should not be viewed as an indicator of future performance. This performance 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.

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Exhibit 17: Beat Factor Bottom 10 performance vs Eurofirst 300 index Absolute performance (EUR, equally weighted)

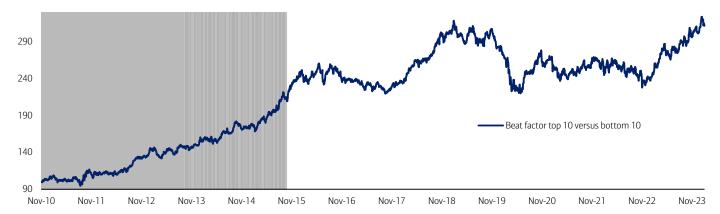


Source: BofA European Equity Quant Strategy, iQdatabase, Factset. The shaded area on the chart above shows backtested results during the period from Nov-10 to Sep-15. The performance data for the months between April to November 2021 depends on monthly screens that were not published at the time. Please see European Beat Factor, 14 Dec 2021 for details. Past performance should not be viewed as an indicator of future performance. This performance 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.

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Exhibit 18: Beat Factor Top 10 vs Bottom 10 actual and backtested performance

Relative performance (EUR, equally weighted)



Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, IBES. The shaded area on the chart above shows backtested results during the period from Nov-10 to Sep-15. The performance data for the months between April to November 2021 depends on monthly screens that were not published at the time. Please see <u>European Beat Factor, 14 Dec 2021</u> for details. Past performance should not be viewed as an indicator of future performance. This performance 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.

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Exhibit 19: Beat Factor relative and absolute performance

Price returns in EUR, %, equally weighted

Relative Price Returns (%) in EUR							Absolute Price Returns (%) in EUR							
	1M	3M	6M	12M	Since Incept.		1M	3M	6M	12M	Since Incept.			
Top 10/FTSEurofirst 300	-0.4	3.2	7.2	6.2	11.8	Top 10	1.6	12.7	10.5	11.7	64.7			
Bottom 10/FTSEurofirst 300	-0.4	-0.3	-1.5	-8.8	-23.8	Bottom 10	1.6	8.9	1.5	-4.2	12.3			
Top 10/Bottom 10	0.0	3.5	8.9	16.5	46.7	FTSEurofirst 300	2.0	9.2	3.1	5.1	47.3			

Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, Inception = Oct 2015. Past performance should not be viewed as an indicator of future performance. The performance data for the months between April to November 2021 depends on monthly screens that were not published at the time. Please see <u>European Beat Factor, 14 Dec 2021</u> for details.



European SMID Beat Factor: Top 10 & Bottom 10 stocks

Exhibit 20: European Beat Factor Top 10 stocks within SMID universe

Details of Top 10 Beat Factor stocks within the SMID universe

			Market	Beat	BofA estimates versus consensus								Cons	ensus R	ating
Name	Sector	Industry group	Сар	Factor	(% above / bel	ow)	EPS	EPS-FY1		EPS-FY2		(%)		
			Eur bn	(100=Upbeat)	PO	FY1 EPS	FY2 EPS	Cur	BofA	Cons	BofA	Cons	Buy	Hold	Sell
AAK	Cons. Staples	Food Beverage & Tobacco	5.4	100	35%	10%	16%	SEK	12.2	11.2	13.6	11.8	56	11	33
JCDecaux	Communication Svs	Media & Entertainment	3.8	100	9%	32%	30%	EUR	0.9	0.7	1.3	1.0	38	54	8
Auto Trader	Communication Svs	Media & Entertainment	7.5	99	14%	8%	8%	GBP	0.3	0.3	0.3	0.3	47	42	11
Hexpol	Materials	Materials	3.7	97	12%	7%	8%	SEK	8.2	7.6	8.7	8.0	43	57	0
Spirax-Sarco	Industrials	Capital Goods	8.5	97	25%	3%	4%	GBP	3.2	3.1	3.6	3.4	33	40	33
OCI Global	Materials	Materials	4.5	94	23%	-178%	82%	USD	0.4	-0.5	1.7	0.9	67	33	0
Bureau Veritas	Industrials	Comm. & Prof. Services	11.2	93	12%	4%	4%	EUR	1.3	1.2	1.3	1.3	47	41	12
Interpublic Group	Communication Svs	Media & Entertainment	11.3	92	8%	3%	5%	USD	3.0	2.9	3.2	3.1	38	62	0
Smurfit Kappa	Materials	Materials	8.8	91	6%	14%	13%	EUR	3.6	3.2	4.0	3.5	86	14	0
Thyssenkrupp	Materials	Materials	3.8	91	32%	29%	32%	EUR	1.0	8.0	1.3	1.0	33	58	8

Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, IBES, Refinitiv (as of Feb 12, 2024). The Stock Beat screens are not a recommended list, either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decisions. The screens 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. The screen was not created to act as a benchmark. The companies highlighted in blue (JCDecaux, Auto Trader, Hexpol, Spirax-Sarco, Bureau-Veritas, Interpublic-Group, Thyssenkrupp) are the ones where the BofA Global Research rating is Buy and the percentage of consensus Strong Buy/Buy estimates is less than 50%.

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Exhibit 21: European Beat Factor Bottom 10 Stocks within SMID universe

Details of Bottom 10 Beat Factor stocks within the SMID universe

			Market	Beat	BofA esti	mates versu	s consensus						Cons	ensus R	ating
Name	Sector	Industry group	Сар	Factor	(% above / below)		EPS	EPS-	-FY1	EPS-FY2		(9			
			Eur bn	(-100=Downbeat)	PO	FY1 EPS	FY2 EPS	Cur	BofA	Cons	BofA	Cons	Buy	Hold	Sell
Darktrace	Info. Tech	Software & Services	3.0	-98	-46%	-43%	-47%	USD	0.1	0.1	0.1	0.1	71	18	12
Nokian Tyres	Cons. Discretionary	Autos & Components	1.1	-97	-25%	-47%	-48%	EUR	0.2	0.4	0.3	0.6	20	47	33
Siltronic AG	Info. Tech	Semicon & Semicon Equip	2.5	-97	-36%	-6%	-44%	EUR	5.5	5.9	1.1	1.9	64	9	27
Metso Corporation	Industrials	Capital Goods	7.5	-96	-24%	-7%	-13%	EUR	0.6	0.7	0.6	0.7	72	17	11
Virgin Money UK	Financials	Banks	2.6	-96	-24%	-14%	-18%	GBP	0.3	0.3	0.3	0.4	56	33	11
SSAB	Materials	Materials	7.4	-94	-40%	-22%	-17%	SEK	6.5	8.4	6.6	8.0	65	24	12
Aurubis	Materials	Materials	2.8	-93	-25%	-5%	-10%	EUR	7.2	7.5	7.6	8.5	33	58	8
Yara	Materials	Materials	8.0	-93	-21%	-28%	-23%	USD	2.0	2.8	2.8	3.6	35	40	25
Schaeffler AG	Cons. Discretionary	Autos & Components	3.6	-92	-25%	-11%	-13%	EUR	8.0	0.9	1.0	1.1	62	23	15
Fever-Tree	Cons. Staples	Food Beverage & Tobacco	1.4	-90	-20%	-26%	-8%	GBP	0.1	0.1	0.3	0.3	37	47	16

Source: BofA European Equity Quant Strategy, iQdatabase, Bloomberg, IBES, Refinitiv (as of Feb 12, 2024). The Stock Beat screens are not a recommended list, either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decisions. The companies highlighted in red (Darktrace, Siltronic, Metso corp., Virgin Money UK, SSAB, Schaeffler) are the ones where the BofA Global Research rating is Underperform and the percentage of consensus Strong Buy/Buy estimates is greater than 50%.



Appendix: Beat Factor Overview

Beat Factor identifies BofA research analysts' most out-of-consensus stock ideas within the FTSE Eurofirst 300 universe, using a purely quantitative approach based on price objectives and earnings estimates. In addition to highlighting stock-level views, the framework also finds sectors where our analysts are most upbeat or downbeat versus consensus by aggregating bottom-up estimates of our developed Europe coverage, as well as showing our bottom-up Pan-European market view. BofA estimates come from our proprietary iQdatabase®, while consensus numbers are based on I/B/E/S estimates from Factset.

The Beat Factor score is an equal-weighted measure based on our analysts' price objectives, FY1 earnings and FY2 earnings estimates relative to consensus. We compare both FY1 and FY2 earnings to avoid any single period bias. Scores are standardised to minimise any cyclical / defensive or high Risk / low Risk bias. The score is used to rank stocks from -100 (most downbeat) to +100 (most upbeat), which in turn, is used to create the 'PO Beat Factor', 'Earnings Beat Factor', and composite 'Beat Factor'. Please see the Beat Factor Methodology section below for more details.

Beat Factor Methodology

Filtering the universe

- Select all stocks that are both within BofA's current coverage and within the FTSE Eurofirst 300 universe as of the tenth day of the month. The report will be published within two business days of the cut-off date.
- 2. Exclude stocks for which BofA does not have price objectives or earnings estimates.
- 3. Exclude stocks which are on BofA's restricted list or which have no rating, including those under review or under extended review.
- 4. Exclude stocks where the BofA's price objective was approved/validated more than six months ago.
- 5. Both BofA and IBES consensus price objectives are 12-month horizon data
- 6. Verify that the earnings estimate year for consensus is the same as for iQdatabase estimates to ensure that earnings estimates are comparable.
- 7. Convert consensus data into BofA estimates currency using BofA forecasts
- 8. Exclude stocks with fewer than five consensus estimates for each of FY1 earnings, FY2 earnings and price objective. We do not adjust the consensus number to exclude the BofA price objective and earnings estimates.
- 9. Exclude stocks with zero standard deviation of consensus estimates.
- 10. Adjust estimates for any corporate actions (e.g. stocks split and bonus shares) in the back testing period.

Calculating ranks

- Convert consensus price objective and earnings estimates to BofA pricing currency.
- 2. Calculate a Z-score for each of the estimates, price objective, FY1 earnings and FY2 earnings individually using the below formula



(BofA Estimate – I/B/E/S Mean Estimate)

Z-Score = ------

Standard Deviation of I/B/E/S Estimate

Using Z-scores, standardises stocks to prevent any cyclical/defensive bias in our universe.

3. Exclude stocks with FY1 or FY2 earnings Z-score outside the range of ±5.



Calculating 'PO Beat Factor' and 'Earnings Beat Factor'

1. Rank stocks' Z-scores from -100 (worst) to +100 (best) for each of the price objective, FY1 and FY2 earnings.

Calculating 'Beat Factor'

- 1. Calculate an equal-weighted average of 'PO Beat Factor', 'FY1 Earnings Beat Factor', and 'FY2 Earnings Beat Factor'.
- 2. Rank the average score from +100 to -100 to arrive at the 'Beat Factor'. The maximum positive average score is ranked as +100 and the maximum negative average score is ranked as -100.
- 3. We intend to publish the Top 10 and Bottom 10 Beat Factor screens each month.

Expected Return

'Expected Return' is calculated as the difference between the close share price prior to the update day of the Beat Factor and the share price objective of the BofA analyst as of the day of the update and the close share price prior to the update day. The Expected Return does not take into account total return.

Upside Rank

The expected return is ranked from +100 (most upside) to 0 (least upside).

Top and Bottom Stock Beat Screen

Stocks with BofA 'Buy' rating, positive expected return and positive Beat Factor are placed in the 'Top Stock Beat' screen.

Stocks with BofA 'Underperform' rating, negative expected return and negative Beat Factor are placed in the 'Bottom Stock Beat' screen.

SMID Beat Factor Methodology

SMID Beat Factor screen for Top 10 and Bottom 10 stocks

1. For the European SMID screens, we filter for European stocks under BofA coverage that have a market cap between EUR1bn and EUR12bn.



- 2. Exclude stocks if the covering BofA analyst has not published a dedicated report on the stock over last three months.
- 3. Stocks with BofA 'Buy' rating, positive expected return and positive Beat Factor are placed in the 'Top Stock Beat' screen.
- 4. Stocks with BofA 'Underperform' rating, negative expected return and negative Beat Factor are placed in the 'Bottom Stock Beat' screen.
- 5. If the expected return criterion results in the Beat Factor screens having less than 10 stocks, stocks with slightly negative expected returns may be included in the Top 10 screen and stocks with slightly positive expected returns included in the Bottom 10 screen.
- 6. If the Beat Factor screens contain less than 10 stocks because of the dedicated report criterion (i.e., only including stocks in the screens that have a dedicated report published over the last three months), the screens may include stocks for which a dedicated report was published over the last six months.
- 7. If the above criterions lead to less than 10 stocks being included in the Top or Bottom screens, the lists may have less than 10 stocks for that month.

Sector Beat & Market Beat Methodology

To calculate 'Sector Beat' and 'Market Beat', we aggregate stock-level data of all BofA covered stocks in the Pan-European market (i.e. we no longer restrict ourselves to stocks in the FTSE Eurofirst 300 index). However, we apply all the other screening criteria as in the methodology discussed above.

The sector and market level data aggregation (except FY1 EPSG and FY2 EPSG) is market cap-weighted, while FY1 EPSG and FY2 EPSG are net income-weighted.

The Pan-European market in Europe includes: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK. From December 2010 to December 2015, the average universe size was 464 stocks

Performance Calculation Methodology

The performance is computed for an equally weighted top 10 and bottom 10 beat screens published each month. For a detailed definition of the top and bottom stock beat screen, see the "Top and Bottom Stock Beat Screen" of this report.

Performance is calculated on price returns, in EUR and in Local CCY, and is presented on an absolute basis as well as relative to FTSE Eurofirst 300. We also present performance of top screens relative to bottom screens. For example, performance of the top 10 screen relative to FTSE Eurofirst 300 is computed using the formula: (1+returns of top10)/(1+returns of FTSE Eurofirst 300)-1. Note that Top screen implies a list of long stocks and bottom screen implies a list of short stocks.

The performance does not reflect transaction costs, taxes or advisory fees. If such costs were reflected the performance would have been lower.



Changes to the Beat Factor and accompanying lists are announced via a published research report on a monthly basis (please see <u>European Beat Factor</u>, 14 <u>Dec 2021</u> for the Beat Factor screens for the months between April and November 2021, during which the report was not published). For the purposes of calculating performance, the addition or removal of a stock will be on the closing prices on the day the change is announced if the research report is published before 12 pm London local time, or the closing price on the following trading day if the report is published after 12 pm London local time. All prices are and will be converted to EUR using the exchange rate on the pricing date. Backtested performance was calculated on a monthly basis using the closing prices on the 12th of each month for the backtested period and converted to EUR as described above.

The analysis in this report is backtested and does not represent the actual performance of any account or fund. Backtested performance depicts the hypothetical backtested performance of a particular strategy over the time period indicated. In future periods, market and economic conditions will differ and the same strategy will not necessarily produce the same results. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. In fact, there are frequently sharp differences between backtested returns and the actual results realized in the actual management of a portfolio. Backtested performance results are created by applying an investment strategy or methodology to historical data and attempts to give an indication as to how a strategy might have performed during a certain period in the past if the product had been in existence during such time. Backtested results have inherent limitations including the fact that they are calculated with the full benefit of hindsight, which allows the security selection methodology to be adjusted to maximize the returns. Further, the results shown do not reflect actual trading or the impact that material economic and market factors might have had on a portfolio manager's decision-making under actual circumstances. Backtested returns do not reflect advisory fees, trading costs, or other fees or expenses. The data displayed in Exhibits 12, 13, 14 and 15 for the months between April and November 2021 depends in part on monthly screens that were not published at the time. Please see European Beat Factor, 14 Dec 2021 for details.

Past performance should not and cannot be viewed as an indicator of future performance. A complete performance record is available upon request.

Please note that the numbers used in the calculation for the Beat Factor are rounded. Such rounding could influence the final results.

For details on back-testing of this framework, please refer to our <u>European Beat Factor</u>, <u>14 Dec 2021</u>.



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Important Disclosures

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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}
D	> 100/	. 700/

Buy	≥ 10%	≤ /0%
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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