

EMEA Information Technology
Active Global Fund Ownership Report
1/31/2023

EMEA Information Technology Active Global Fund Ownership Report 1/31/2023

Introduction

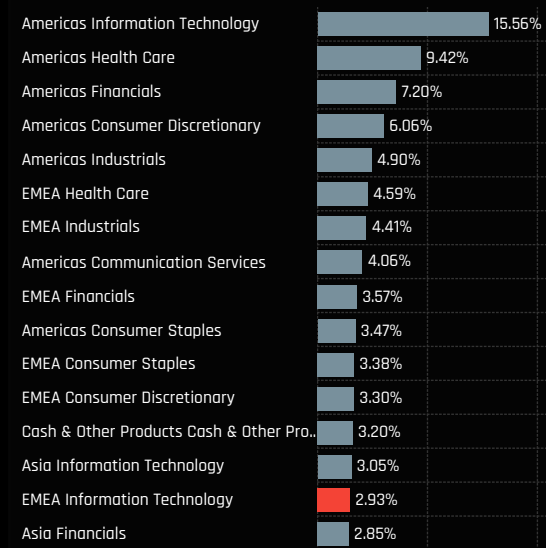
In this data report, we analyse EMEA Information Technology holdings among active Global Equity Funds. We analyse the latest published filings for all funds and aggregate together as of 1/31/2023. We show the most recent snapshot in positioning, time series data going back to 9/30/2012 and recent allocation shifts by the managers in our analysis. The current fund sample spans 358 active funds with a combined AUM of \$968.20Bn.

For benchmark comparisons, we use the SPDR MSCI ACWI UCITS ETF, proportionally adjusted to remove any cash holdings. All Cash Flow calculations are on a best estimates basis. We use monthly position changes and month end prices to estimate the net buying and selling value for each stock within each fund in our analysis.

For further information on the calculation methodology that we use in the analysis and the classification of fund Styles, please view the Glossary on page 22.

Chart 1. The equally weighted average fund weight, among active Global managers by Region Sector
 Chart 2. The time series of average fund weight for EMEA Information Technology stocks

Ch 1. Region Sector: Average Fund Weights



Ch 2. EMEA Information Technology: Average Fund Weight Time-Series

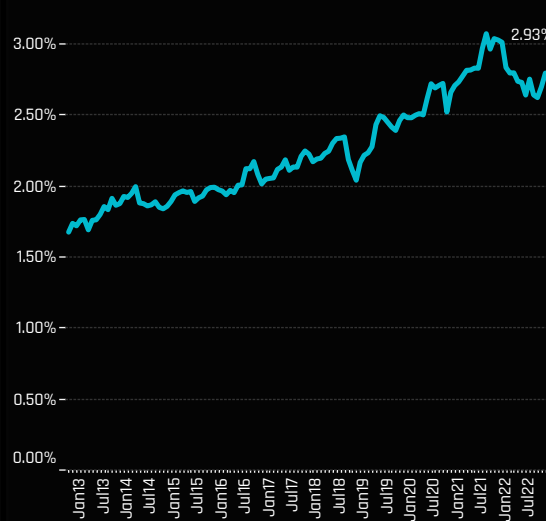
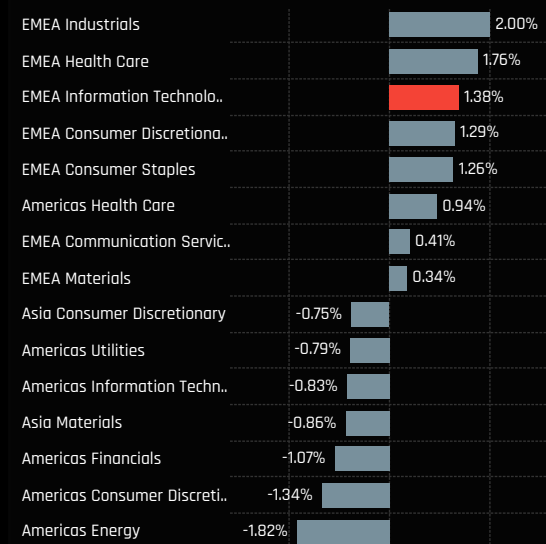


Chart 3. The average fund weight minus the weight in the SPDR MSCI ACWI UCITS ETF, by Region Sector. A positive value represents an 'overweight' position on average, a negative value represents an 'underweight'.

Chart 4. The time series of average fund weight minus benchmark for EMEA Information Technology stocks

Ch 3. Region Sector: Average Fund Weights vs ACWI



Ch 4. EMEA Information Technology: Average Weight vs ACWI Time-Series

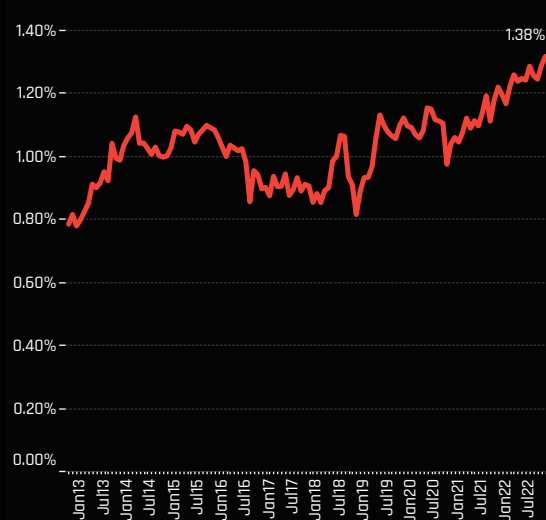
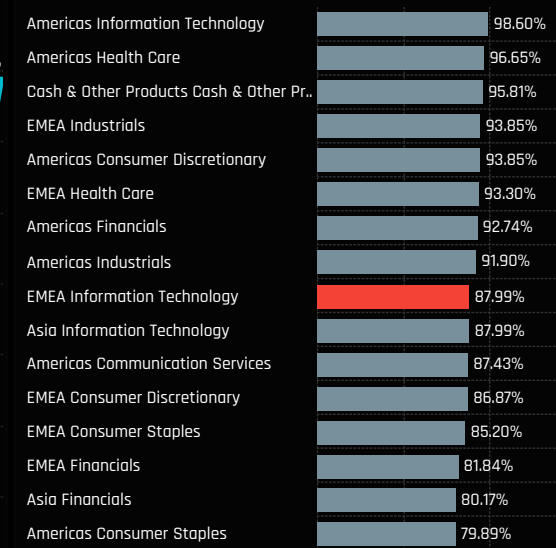


Chart 5. The 'Funds Invested %' measures the percentage of active Global funds with exposure to each Region Sector. A figure of 100% means that every fund in our analysis has some exposure to that Region Sector

Chart 6. The time series of funds invested % for EMEA Information Technology stocks

Ch 5. Region Sector: Funds Invested %



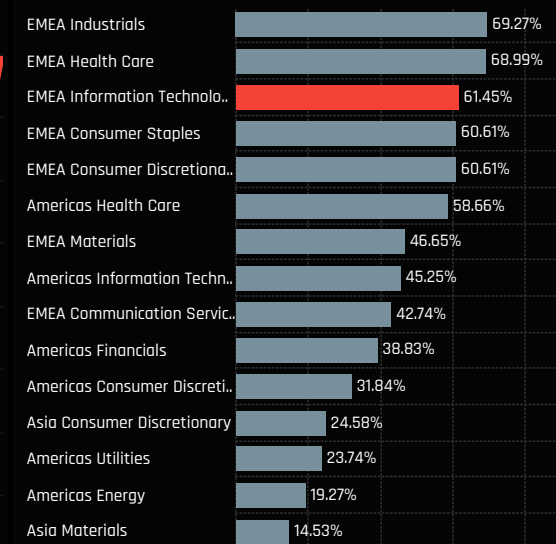
Ch 6. EMEA Information Technology: Funds Invested % Time-Series



Chart 7. The percentage of active Global funds who are overweight the SPDR MSCI ACWI UCITS ETF weight, by Region Sector

Chart 8. The time series of Funds Overweight % for EMEA Information Technology stocks

Ch 7. Region Sector: Funds Overweight %



Ch 8. EMEA Information Technology: Funds Overweight % Time-Series

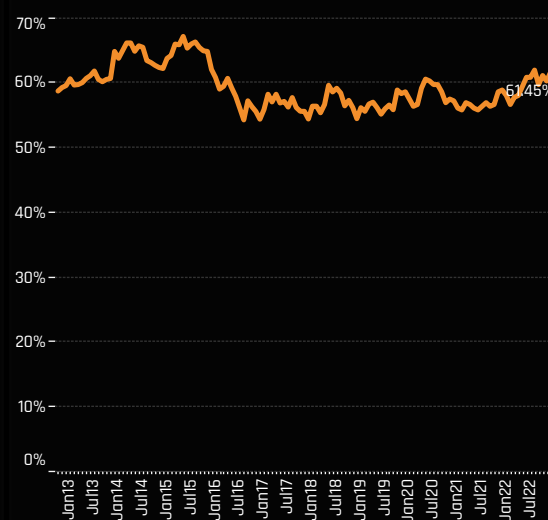
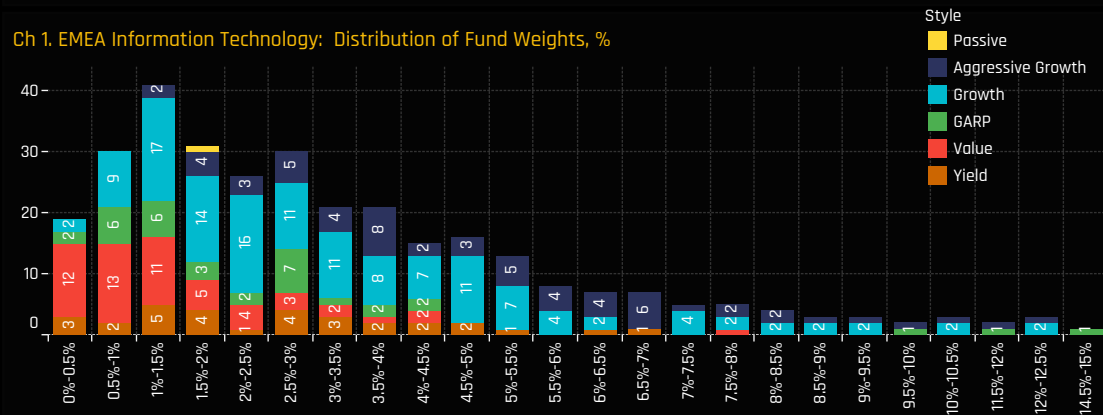


Chart 1. The distribution of EMEA Information Technology weights among the 358 active Global funds in our analysis, broken down by fund Style.

Chart 2. The largest 30 EMEA Information Technology holders in our analysis, on a portfolio weight basis.

Ch 1. EMEA Information Technology: Distribution of Fund Weights, %



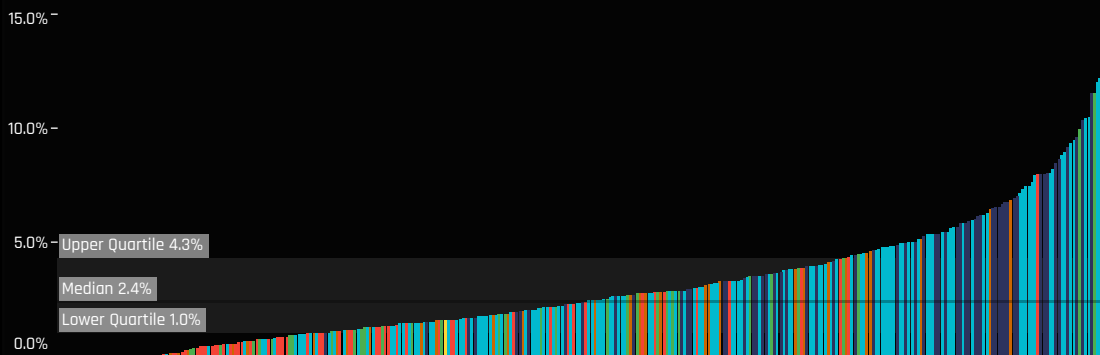
Ch 2. EMEA Information Technology: Top Fund Holdings, %

Fund Name	Style	Weight (%)
Baron Global Advantage Fund	GARP	14.64%
Invesco Global Inv. Ser. - Global Focus Fund (UK)	Aggressive Growth	12.26%
Sands Capital Funds Plc - Global Growth Fund	Growth	12.20%
BNY Mellon Investment Fds. - Global Opportunities Fund	Growth	12.04%
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	GARP	11.57%
Allianz Global Investors Fund - Global Equity Growth	Aggressive Growth	11.53%
Baillie Gifford Investment Funds ICVC - Positive Change Fund	Growth	10.47%
ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds	Growth	10.45%
S&W Aubrey Capital Mgmt. Inv. Funds - Global Conviction Fund	Aggressive Growth	10.37%
Scottish Mortgage Investment Trust Plc	GARP	9.93%
Virtus NFJ Global Sustainability Fund	Aggressive Growth	9.61%
Frontier MFG Global Plus Fund	Growth	9.49%
MainFirst SICAV - Global Equities Fund	Growth	9.35%
NN (L) - Global Equity Impact Opportunities	Aggressive Growth	9.20%
AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund	Growth	8.91%
Swedbank Robur Allemansfond Komplet	Growth	8.81%
AB SICAV I - Concentrated Global Equity Portfolio	Aggressive Growth	8.64%
First Sentier Investors ICVC - Stewart Inv. Worldwide Sus.	Aggressive Growth	8.45%
Delaware Global Equity Fund	Growth	8.24%
Janus Henderson Sustainable/Responsible Funds-Global Sus Eq.	Growth	8.05%
Alger Global Focus Fund	Aggressive Growth	8.02%
Eaton Vance Focused Global Opportunities Fund	Aggressive Growth	7.99%
Morgan Stanley Inv. Fds. - Global Brands Fund	Aggressive Growth	7.98%
Schoellerbank Aktienfonds Value	Value	7.98%
SEB Aktiesparfond	Growth	7.95%
Swedbank Robur Kapitalinvest	Growth	7.65%
BNP Paribas OBAM NV	Growth	7.44%
Chautauqua Global Growth Fund	Growth	7.42%
AB Sustainable Global Thematic Fund	Growth	7.31%
DNB Global (IV)	Growth	7.15%

Chart 3. The individual EMEA Information Technology fund weights funds in our analysis, ranked by allocation size with Median and Quartiles.

Chart 4. The largest 30 EMEA Information Technology holders in our analysis, on an \$ AUM basis.

Ch 3. EMEA Information Technology: Fund Weights, %



Ch 4. EMEA Information Technology: Top Fund Holdings, \$

Fund Name	Style	AUM (\$)
American Funds New Perspective Fund	Growth	\$5,425.15M
American Funds Capital World Growth & Income Fund	Yield	\$3,398.82M
Scottish Mortgage Investment Trust Plc	GARP	\$1,762.48M
Morgan Stanley Inv. Fds. - Global Brands Fund	Aggressive Growth	\$1,713.98M
Fundsmith Equity Fund	Aggressive Growth	\$791.10M
Fidelity Funds SICAV - Global Dividend Fund	Yield	\$783.87M
SJP Global Quality Fund	Growth	\$755.28M
Swedbank Robur Allemansfond Komplet	Growth	\$661.60M
American Funds New Economy Fund	Growth	\$597.67M
Ninety One Glob. Strat. Fd. - Global Franchise Fund	Aggressive Growth	\$565.30M
Old Westbury Large Cap Strategies Fund	Growth	\$504.35M
Sands Capital Funds Plc - Global Growth Fund	Growth	\$491.53M
UniFavorit: Aktien	Growth	\$465.27M
Swedbank Robur Kapitalinvest	Growth	\$389.09M
Deka - DividendenStrategie	Yield	\$377.33M
American Funds Global Insight Fund	Growth	\$362.46M
Baillie Gifford Investment Funds ICVC - Positive Change Fund	Growth	\$348.48M
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	GARP	\$326.16M
Falksams LO Varlden	Growth	\$310.09M
Templeton Growth Fund Inc.	GARP	\$301.22M
UniGlobal	Growth	\$297.39M
T Rowe Price Global Stock Fund	Growth	\$275.78M
Swedbank Robur Aktiefond Pension	GARP	\$274.34M
PBIM Jennison Global Opportunities Fund	Aggressive Growth	\$273.11M
FTIF SICAV - Growth (Euro) Fund	GARP	\$266.25M
Franklin Mutual Ser. Fds. - Global Discovery Fund	Value	\$247.66M
DNB Global (IV)	Growth	\$240.29M
Artisan Global Opportunities Fund	Growth	\$227.35M
UBS (Lux) Equity SICAV - Long Term Themes (USD)	Growth	\$226.07M
St. James's Place Unit Trust - Global Value	Value	\$207.58M

Chart 1. Measures the largest changes in average Region Sector weight between 7/31/2022 and 1/31/2023.

Ch 1. Region Sector: Change in Average Weight 7/31/2022 - 1/31/2023

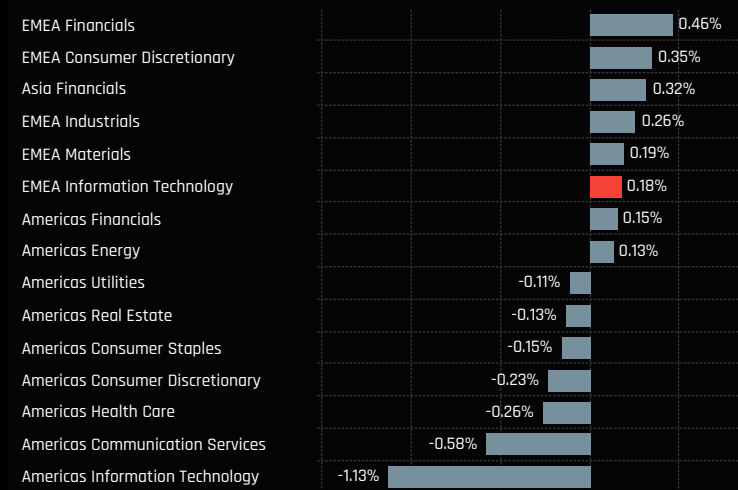


Chart 2. Measures the largest changes in the average Region Sector weight vs ACWI between 7/31/2022 and 1/31/2023. An increasing figure would indicate an increasing overweight or decreasing underweight.

Ch 2. Region Sector: Change in Average Fund Weight vs ACWI

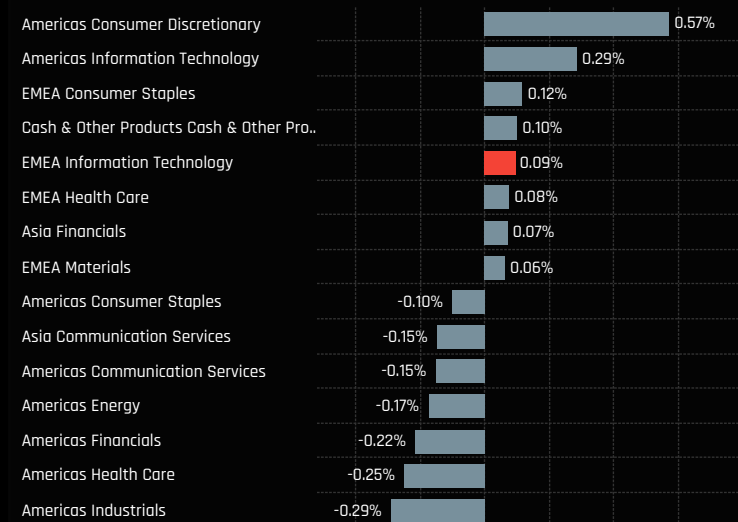


Chart 3. Measures the largest changes in the percentage of funds invested in each Region Sector between 7/31/2022 and 1/31/2023.

Ch 3. Region Sector: Change in Funds Invested % 7/31/2022 - 1/31/2023

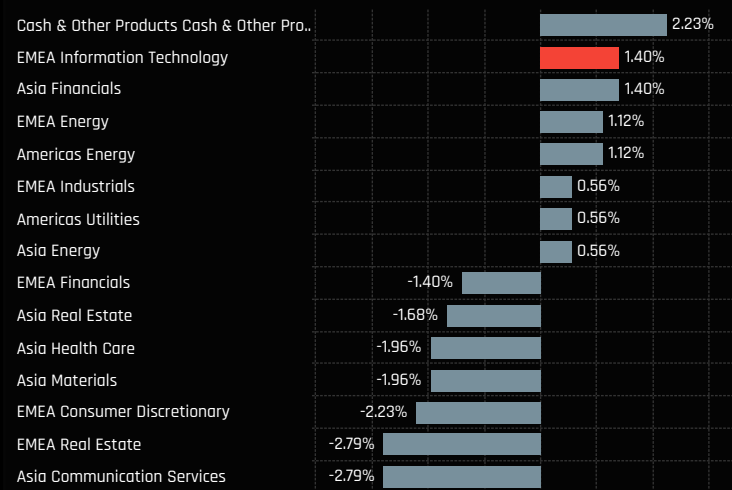


Chart 4. Measures the largest changes in the percentage of funds overweight each Region Sector compared to the SPDR MSCI ACWI UCITS ETF between 7/31/2022 and 1/31/2023. An increasing figure would indicate more funds are positioning themselves overweight over the period.

Ch 4. Region Sector: Change in the Funds Overweight % 7/31/2022 - 1/31/2023

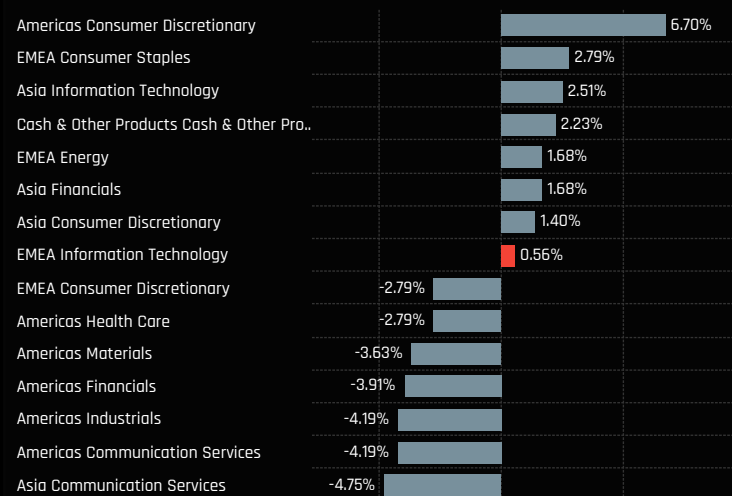


Chart 5. Shows the cumulative fund flows for EMEA Information Technology stocks among the 358 active Global funds in our analysis. Monthly fund flows are estimated by multiplying the monthly change in stock position by the stock price for every position in every fund in our analysis.

Ch 5. EMEA Information Technology: Cumulative Fund Flows, \$

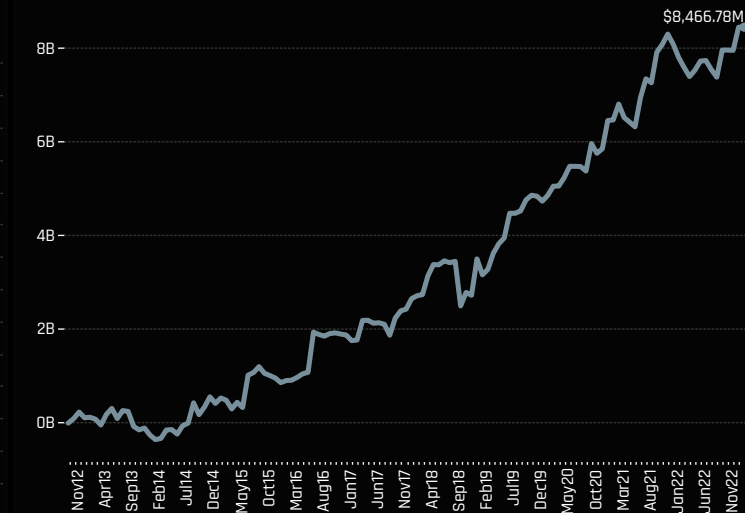


Chart 6. Measures the largest estimated fund flows for each Region Sector between 7/31/2022 and 1/31/2023.

Ch 6. Region Sector: Largest Fund Flows per Region Sector 7/31/2022 - 1/31/2023

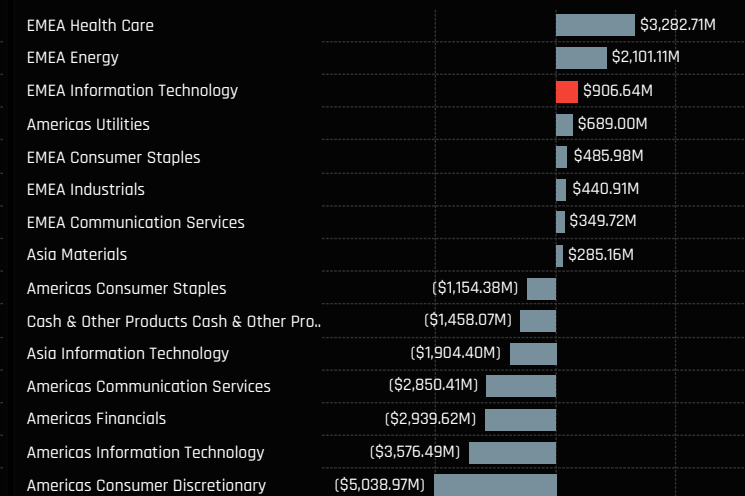


Chart 1. The largest fund weight increases in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023.
 Chart 2. The largest fund weight decreases in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023
 Both charts show the current weight and whether the weight change represented a new or closed position.

Ch 1. EMEA Information Technology: Largest Increases in Position, %

Fund Name	New or Close..	Latest Weight	Weight Change
SEB Aktiesparfond		7.95%	5.02%
Fidelity Advisor Global Capital Appreciation Fund		6.23%	4.42%
Virtus NFJ Global Sustainability Fund		9.61%	4.24%
UniFavorit: Aktien		5.59%	4.14%
Uni 21. Jahrhundert -net-		3.78%	2.44%
Invesco Global Inv. Ser. - Global Equity Fund (UK)		4.46%	2.36%
Frontier MFG Global Plus Fund		9.49%	2.30%
Columbia Select Global Equity Fund	New	2.24%	2.24%
Quilter Investors Series I - Global Unconstrained Equity Fund	New	2.17%	2.17%
Vanguard Global ESG Select Stock Fund	New	2.13%	2.13%
DWS Global Growth		4.07%	2.07%
DWS Concept DJE Globale Aktien		4.45%	1.89%
Morgan Stanley Inv. Fds. - Global Brands Fund		7.98%	1.77%
Invesco Global Growth Fund		4.43%	1.70%
Hermes Inv. Funds Plc - Impact Opportunities Equity Fund	New	1.68%	1.68%
Baron Global Advantage Fund		14.64%	1.59%
Russell Inv. Co. Plc - Acadian Global Managed Volatility Eq.		1.75%	1.57%
Liontrust Investment Funds I - Global Innovation Fund		4.23%	1.57%
Fidelity Funds SICAV - Global Demographics Fund		4.89%	1.57%
Sanlam Universal Fds. Plc - Global High Quality Fund		4.70%	1.54%

Ch 2. EMEA Information Technology: Largest Decreases in Position, %

Fund Name	New or Close..	Latest Weight	Weight Change
GAMCO Global Growth Fund		7.04%	-3.91%
Swedbank Robur Kapitalinvest		7.65%	-3.03%
Swedbank Robur Allemansfond Komplet		8.81%	-2.79%
GAM Funds - Disruptive Growth		4.02%	-2.61%
BL - Global Equities	Close	0.00%	-2.29%
Pax Global Environmental Markets Fund		4.63%	-2.11%
Invesco Global Inv. Ser. - Global Equity Income Fund (UK)		3.15%	-1.99%
LO Funds - Golden Age	Close	0.00%	-1.98%
PGIM Jennison Global Opportunities Fund		5.84%	-1.74%
BNP Paribas Funds - Sustainable Global Low Vol Equity		2.83%	-1.65%
Russell Inv. Co. Plc - Acadian Global Equity Fund		0.31%	-1.56%
Nationwide Global Sustainable Equity Fund		1.24%	-1.54%
GAM Star Fund Plc - Worldwide Equity		4.92%	-1.41%
Skagen Focus		4.36%	-1.41%
Russell Inv. Co. Plc - Acadian Sustainable Glob. Equity UCITS		0.73%	-1.38%
Artisan Global Opportunities Fund		5.94%	-1.27%
Swedbank Robur Globalfond	Close	0.00%	-1.23%
LF Liontrust Investment Funds III - Global Focus Fund		0.50%	-1.19%
JPMorgan Funds - Global Growth Fund		3.93%	-1.11%
UBS (Lux) Equity SICAV - Global High Dividend Sust. (USD)	Close	0.00%	-0.96%

Chart 3. The largest buyers in US dollar terms in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023.
 Chart 4. The largest sellers in US dollar terms in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023
 Both charts show the current AUM and whether the fund flow represented a new or closed position.

Ch 3. EMEA Information Technology: Largest Fund Inflows, \$

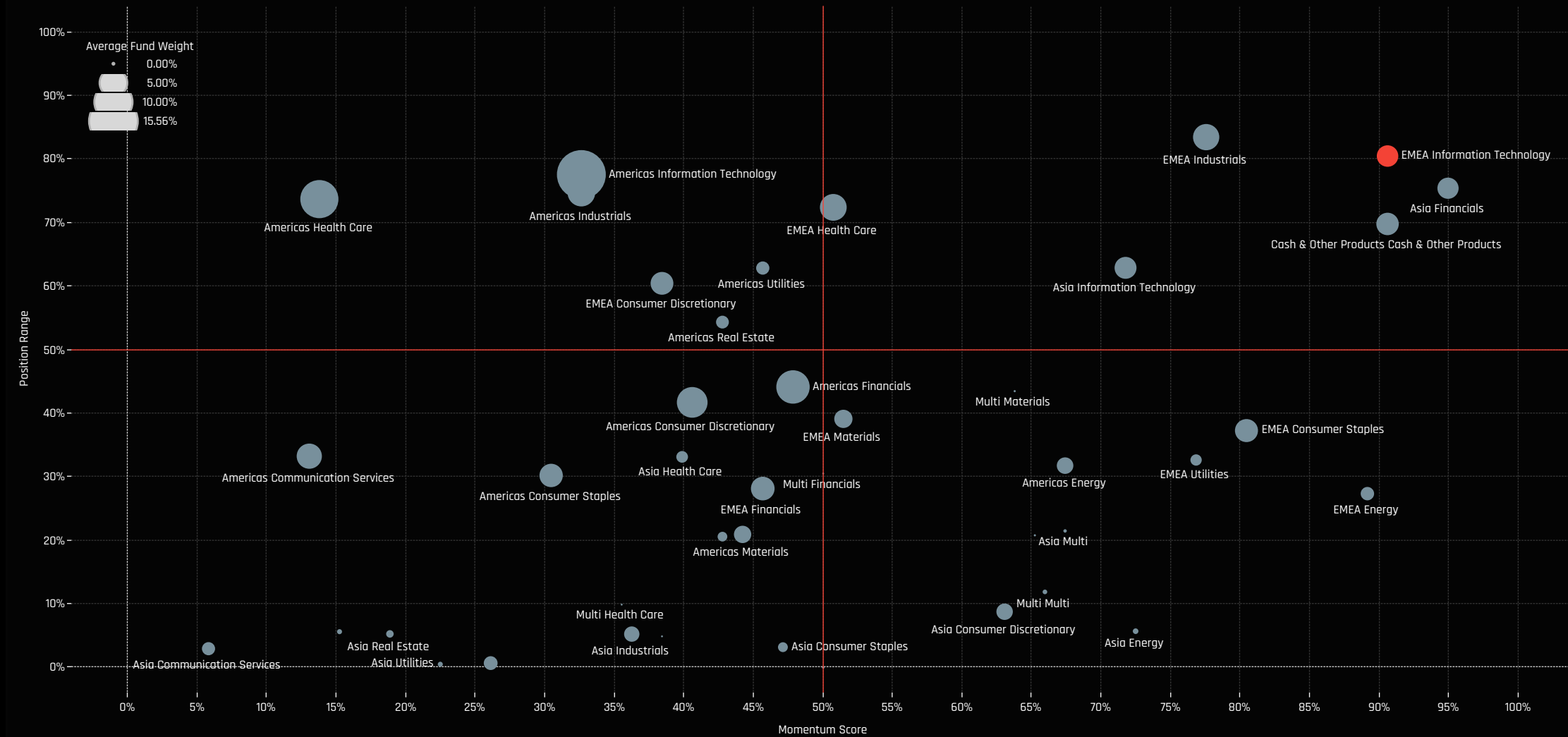
Fund Name	New or Close..	Latest AUM, \$	Fund Flows, \$
American Funds Capital World Growth & Income Fund		\$3,398.82M	\$429.02M
UniFavorit: Aktien		\$465.27M	\$300.84M
American Funds New Economy Fund		\$597.67M	\$225.80M
St. James's Place Unit Trust - Global Value		\$207.58M	\$160.56M
Fidelity Funds SICAV - Global Dividend Fund		\$783.87M	\$154.91M
Morgan Stanley Inv. Fds. - Global Brands Fund		\$1,713.98M	\$119.01M
UniGlobal		\$297.39M	\$59.75M
SEB Aktiesparfond		\$111.40M	\$57.50M
FTIF SICAV - Growth (Euro) Fund		\$266.25M	\$43.24M
Deka - DividendenStrategie		\$377.33M	\$42.60M
JPMorgan Investment Funds - Global Dividend Fund		\$96.07M	\$41.22M
American Funds Global Insight Fund		\$362.46M	\$38.24M
St. James's Place Unit Trust - Global	New	\$45.45M	\$36.37M
Invesco Global Inv. Ser. - Global Equity Fund (UK)		\$72.79M	\$34.72M
Swedbank Robur Aktiefond Pension		\$274.34M	\$34.58M
Templeton Growth Fund Inc.		\$301.22M	\$34.44M
Franklin Mutual Ser. Fds. - Global Discovery Fund		\$247.66M	\$33.56M
Vanguard Global Equity Fund		\$79.13M	\$32.29M
Franklin Mutual Ser. Fds. - Quest Fund		\$61.32M	\$31.74M
UniNachhaltig Aktien Global		\$168.05M	\$31.12M

Ch 4. EMEA Information Technology: Largest Fund Outflows, \$

Fund Name	New or Close..	Latest AUM, \$	Fund Flows, \$
American Funds New Perspective Fund		\$5,425.15M	(\$304.07M)
Swedbank Robur Allemansfond Komplet		\$661.60M	(\$209.40M)
Swedbank Robur Kapitalinvest		\$389.09M	(\$127.79M)
Swedbank Robur Globalfond	Close		(\$98.73M)
PGIM Jennison Global Opportunities Fund		\$273.11M	(\$75.80M)
Scottish Mortgage Investment Trust Plc		\$1,762.48M	(\$55.72M)
Pax Global Environmental Markets Fund		\$115.84M	(\$42.47M)
Franklin Mutual Ser. Fds. - Beacon Fund		\$104.31M	(\$27.93M)
Robeco Capital Gr. Fds. - BP Global Premium Equities		\$149.37M	(\$24.31M)
Fidelity Series Intrinsic Opportunities Fund		\$22.20M	(\$24.15M)
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.		\$325.16M	(\$21.96M)
BNY Mellon Investment Fds. - Global Equity Fund		\$71.59M	(\$19.92M)
Janus Henderson Global Research Fund		\$109.98M	(\$19.53M)
BlackRock Global Funds - Systematic Global Equity High Income		\$11.09M	(\$18.58M)
BNP Paribas Funds - Sustainable Global Low Vol Equity		\$25.75M	(\$14.77M)
Invesco Global Inv. Ser. - Global Equity Income Fund (UK)		\$21.68M	(\$13.76M)
JPMorgan Funds - Global Focus Fund		\$161.65M	(\$13.49M)
BNY Mellon Investment Fds. - Global Income Fund		\$201.05M	(\$13.33M)
Baillie Gifford UK & Bal. Fds. - Global Alpha Growth		\$21.92M	(\$12.89M)
ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds		\$182.18M	(\$11.99M)

calculate the Z-Score of today's average weight, funds invested % and funds o/w % relative to all monthly observations in our fund history (going back to 9/30/2012). A figure close to 100% would indicate today's positioning is close to its maximum ever level, a figure close to zero, the lowest. The X-axis provides a measure of short-term fund activity, or 'Momentum', by looking at the changes in average weight, funds invested % and funds o/w % between 7/31/2022 and 1/31/2023, relative to each Region Sector. A figure above 50% means a Region Sector has seen relative increases in ownership, a figure below 50% indicates a relative decrease in positioning. The size of the bubble represents the average weight of each Region Sector.

Region Sector Sentiment Grid. Global Active Funds
Momentum Measure between 7/31/2022 - 1/31/2023

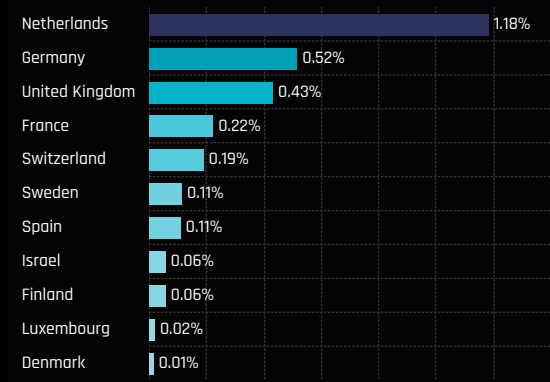


Position Range: Average of:
Z-Score Average Weight vs history
Z-Score Funds Invested % vs history
Z-Score Funds O/W % vs history

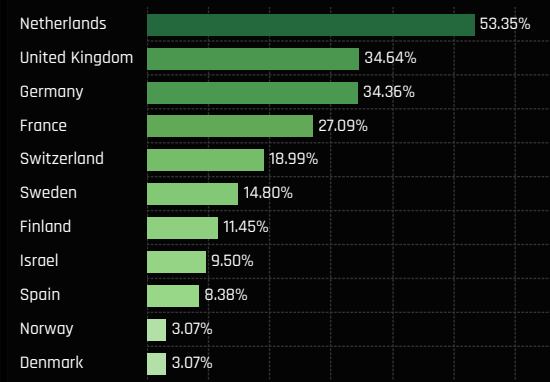
Momentum Score: Average of:
Change in Average Weight (Percentile vs Peers)
Change in Funds Invested % (Percentile vs Peers)
Change in Funds O/W % (Percentile vs Peers)

Chart 1-5. EMEA Information Technology: Key ownership statistics by Country. As of **1/31/2023**

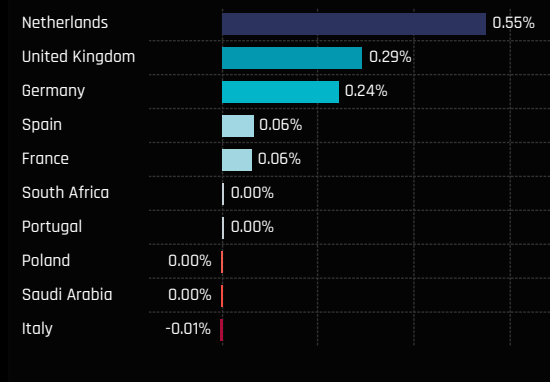
Ch 1. Average Country Weights



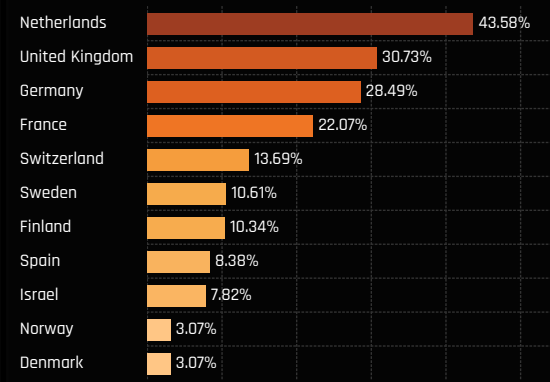
Ch 3. Funds Invested % by Country



Ch 2. Average Country Weights vs ACWI



Ch 4. Funds O/W % by Country

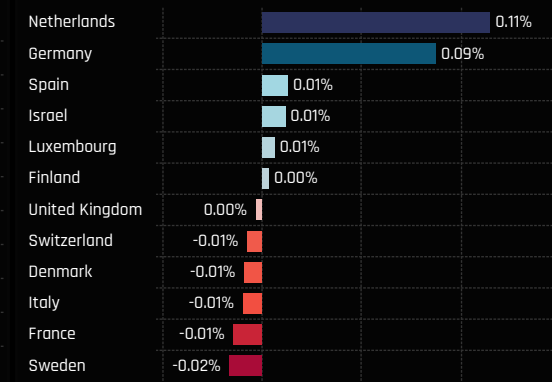


Ch 5. Combined Fund AUM by Country

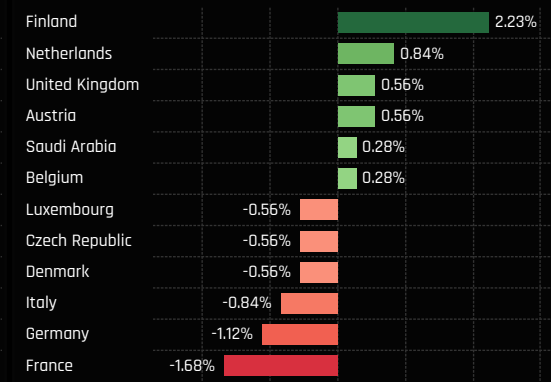


Chart 6-10. EMEA Information Technology: Key ownership activity statistics by Country between **7/31/2022 - 1/31/2023**

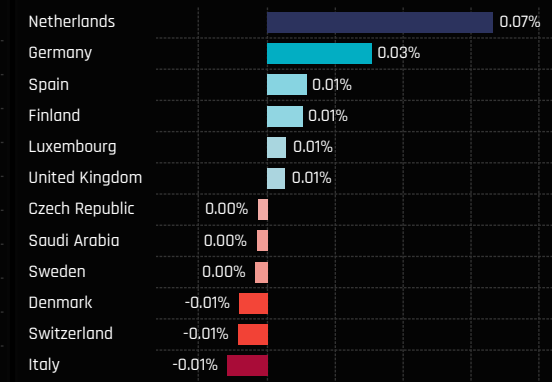
Ch 6. Average Country Weight Change



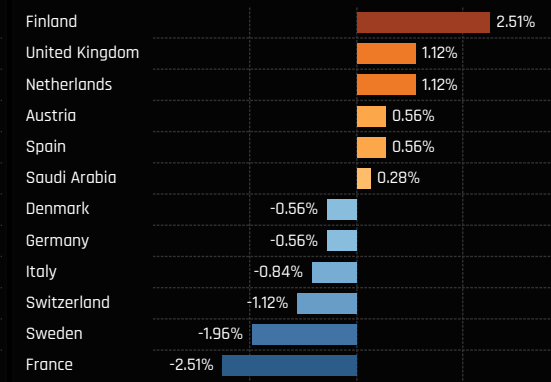
Ch 8. Funds Invested % by Country Change



Ch 7. Average Country Weight vs ACWI Change



Ch 9. Funds O/W % by Country Change



Ch 10. Combined Fund Flows \$ by Country

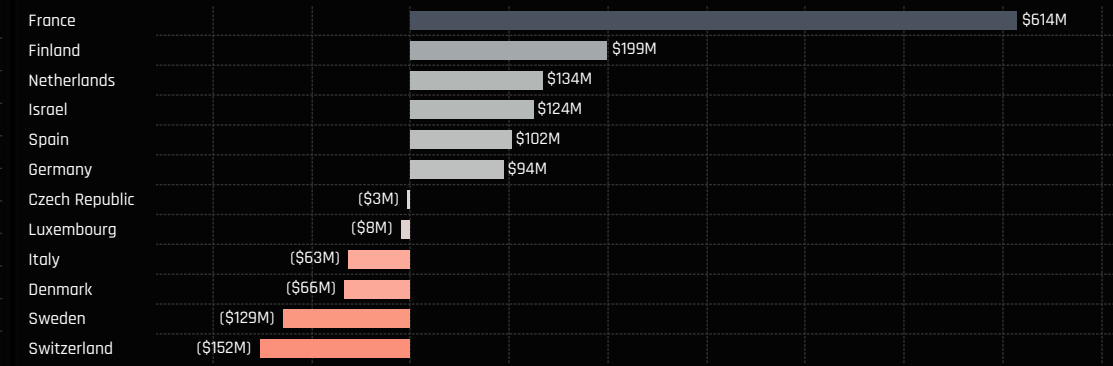
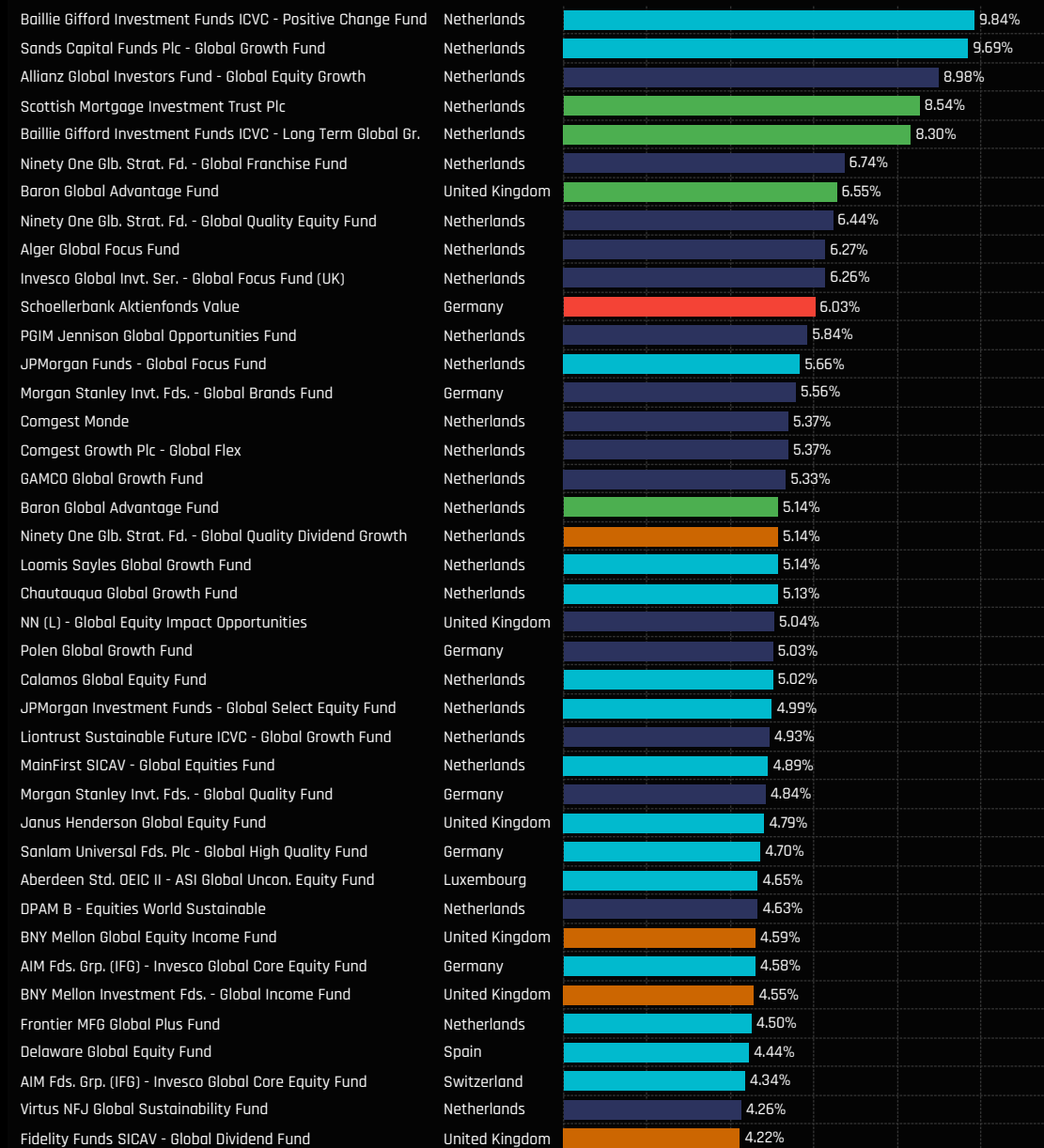


Chart 1. EMEA Information Technology: The largest individual fund level Country holdings by fund weight, coloured by fund Style.

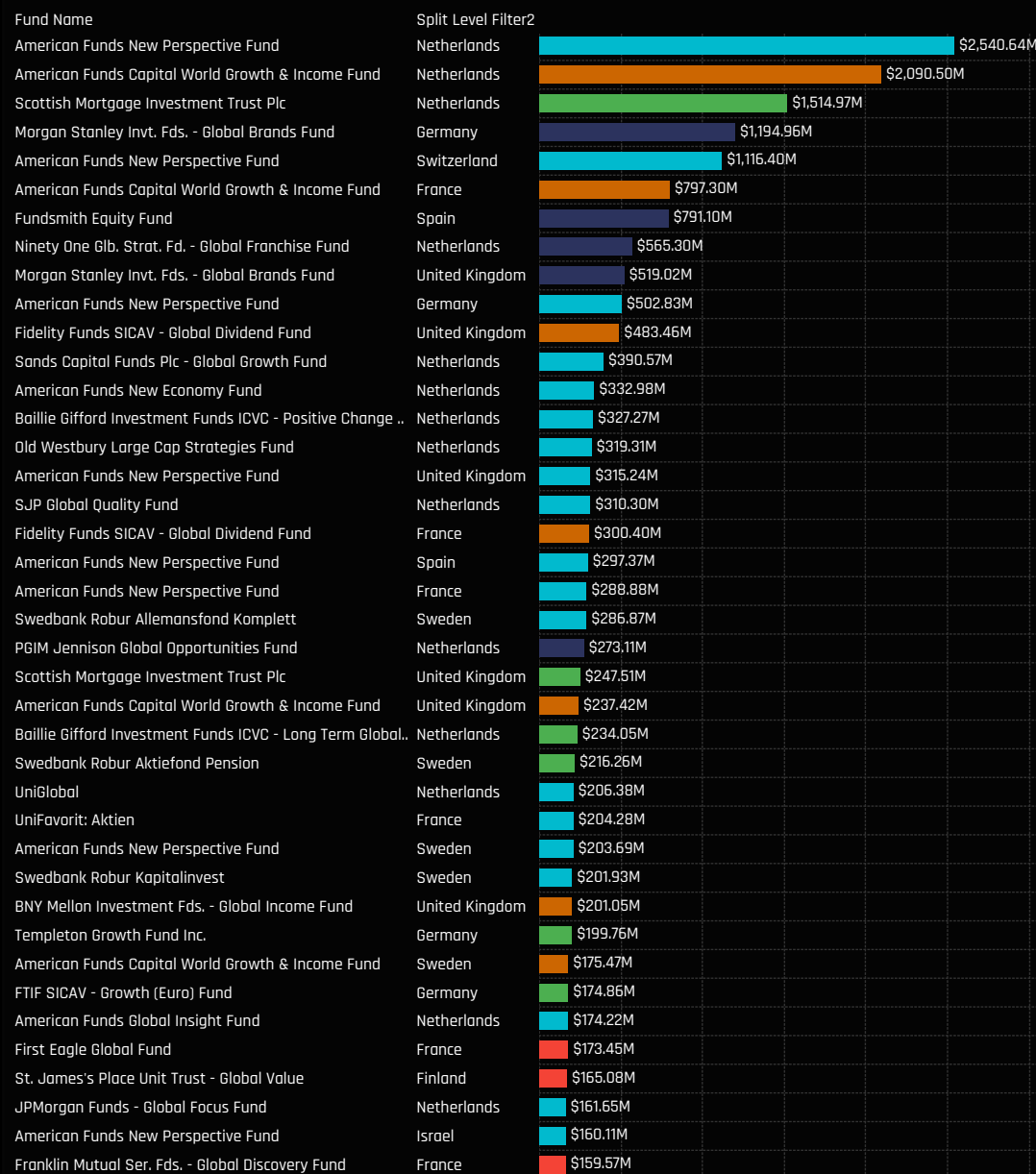
Ch 1. EMEA Information Technology: Top Fund level Country Holdings, %



Fund Style Aggressive Growth Growth GARP Value Yield

Chart 2. EMEA Information Technology: The largest individual fund level Country holdings by \$ AUM, coloured by fund Style.

Ch 4. EMEA Information Technology: Top Fund level Country Holdings, \$

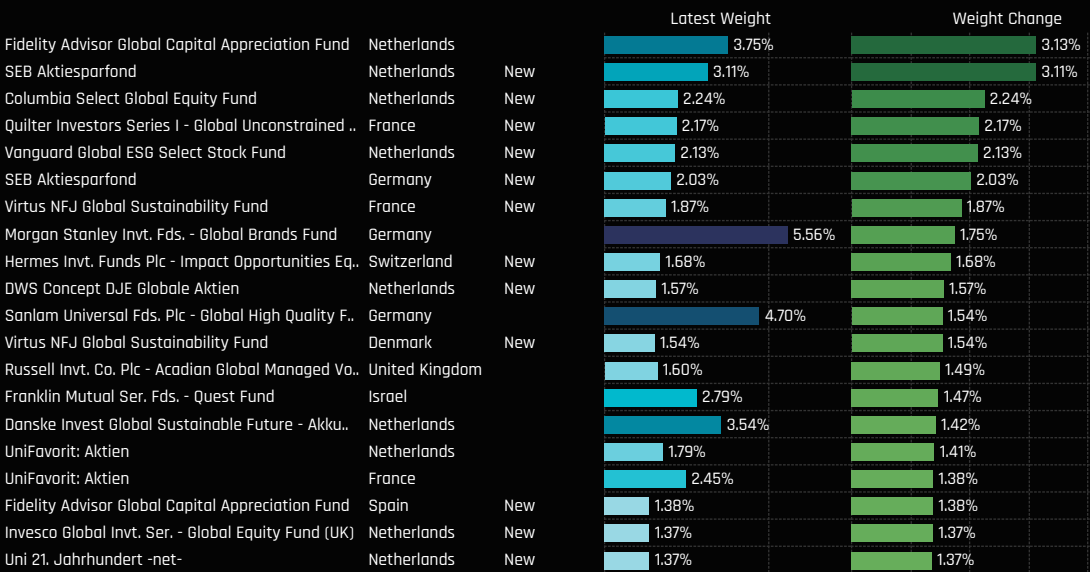


EMEA Information Technology

Fund Level Country Changes

Chart 1. The largest Country level weight increases in EMEA Information Technology between 7/31/2022 - 1/31/2023.
 Chart 2. The largest Country level weight decreases in EMEA Information Technology between 7/31/2022 - 1/31/2023.
 Both charts show the current weight and whether the weight change represented a new or closed position.

Ch 1. EMEA Information Technology: Largest Increases in Country Position, %



Ch 2. EMEA Information Technology: Largest Decreases in Country Position, %

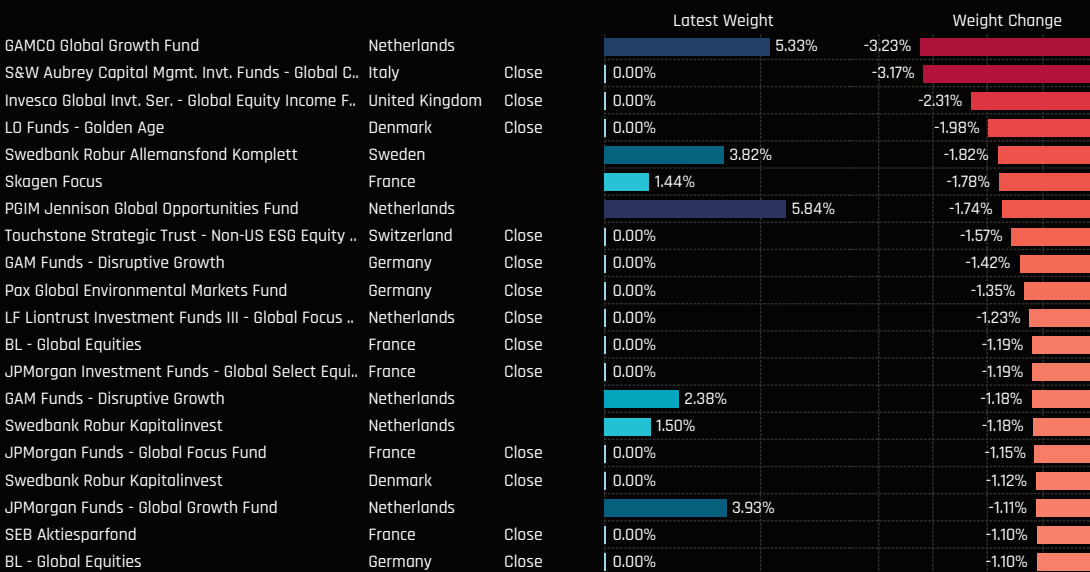
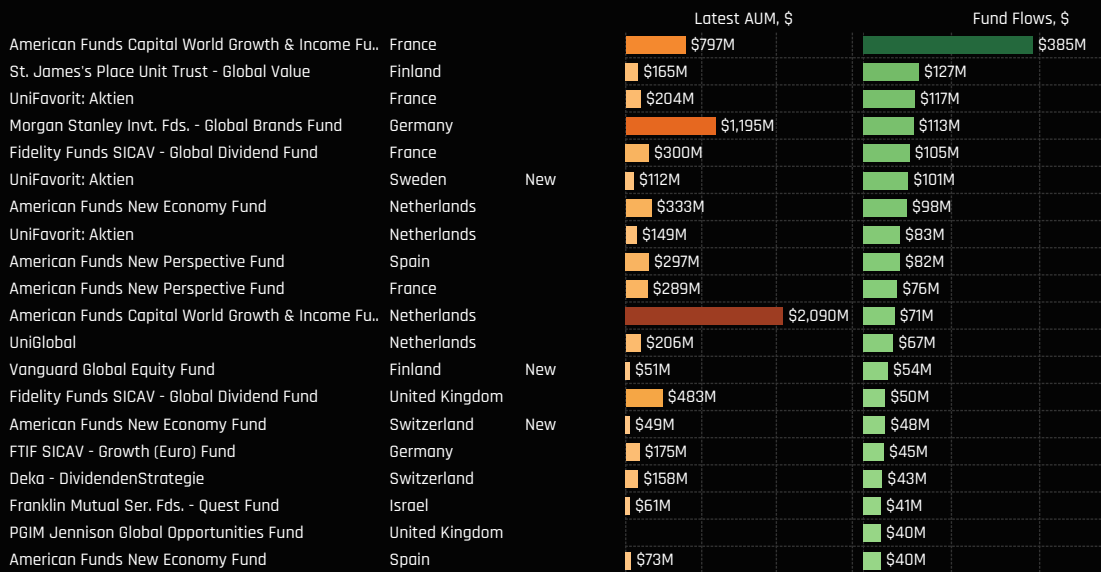
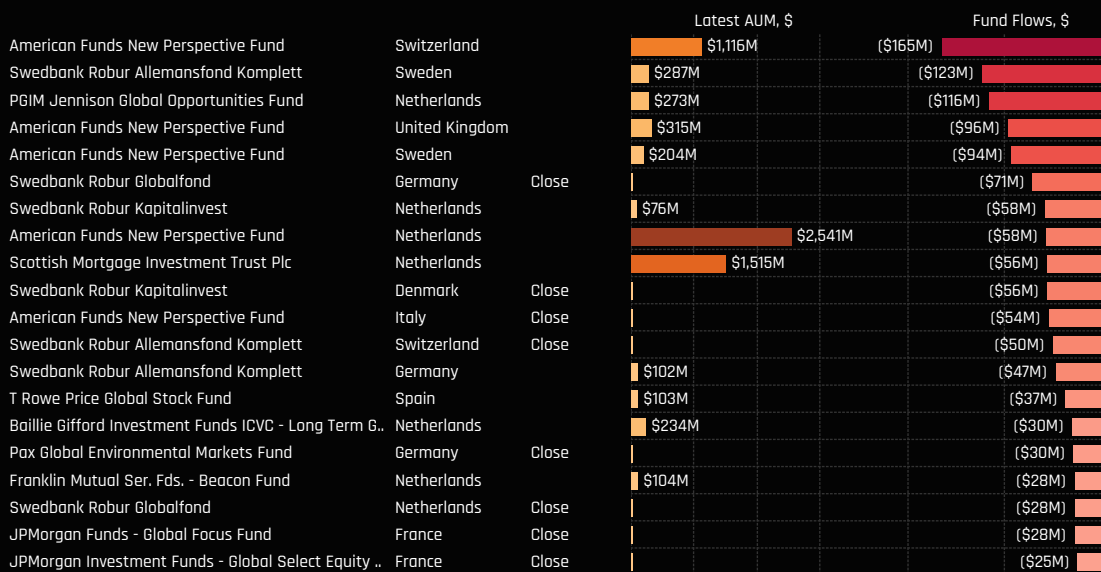


Chart 3. The largest Country level fund inflows in EMEA Information Technology between 7/31/2022 - 1/31/2023.
 Chart 4. The largest Country level fund outflows in EMEA Information Technology between 7/31/2022 - 1/31/2023.
 Both charts show the current AUM and whether the fund flow represented a new or closed position.

Ch 3. EMEA Information Technology: Largest Country Fund Inflows, \$

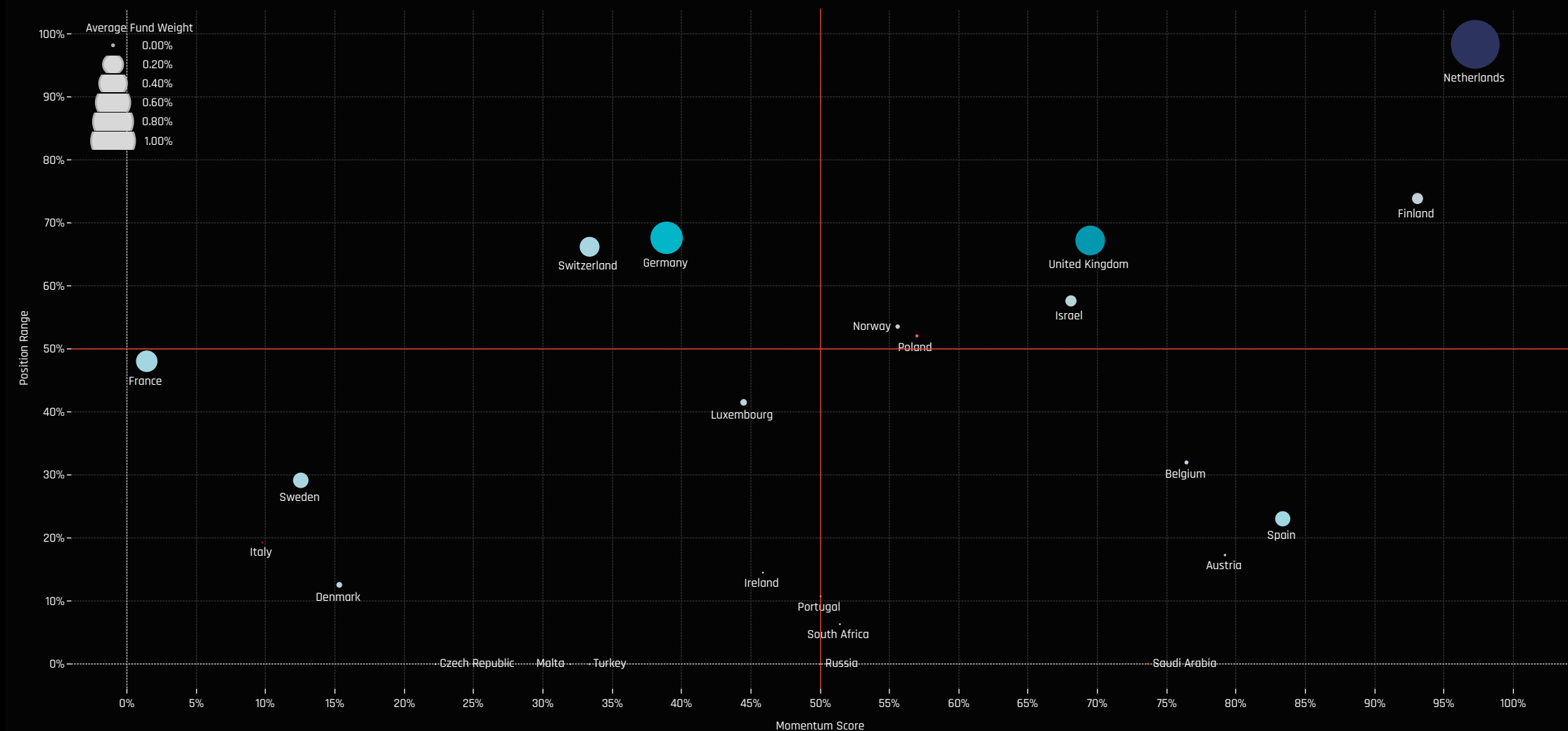


Ch 4. EMEA Information Technology: Largest Country Fund Outflows, \$



Sentiment Grid: EMEA Information Technology. We combine the latest Country positioning, long-term positioning and short-term fund activity in the 'Sentiment Grid', below. The Y-Axis measures where today's ownership levels in each Country sit relative to the long-term range. We calculate the Z-Score of today's average weight, funds invested % and funds o/w % relative to all monthly observations in our fund history (going back to 9/30/2012). A figure close to 100% would indicate today's positioning is close to its maximum ever level, a figure close to zero, the lowest. The X-axis provides a measure of short-term fund activity, or 'Momentum', by looking at the changes in average weight, funds invested % and funds o/w % between 7/31/2022 and 1/31/2023, relative to each Country. A figure above 50% means a Country has seen relative increases in ownership, a figure below 50% indicates a relative decrease in positioning. The size of the bubble represents the average weight of each Country. The colour represents if the Country is held overweight (blue) or underweight (red) on average.

EMEA Information Technology: Country Sentiment Grid. Global Active Funds
Momentum Measure between 7/31/2022 - 1/31/2023



Position Range: Average of:
Z-Score Average Weight vs history
Z-Score Funds Invested % vs history
Z-Score Funds O/W % vs history

Momentum Score: Average of:
Change in Average Weight (Percentile vs Peers)
Change in Funds Invested % (Percentile vs Peers)
Change in Funds O/W % (Percentile vs Peers)

Chart 1. The largest 10 stock holdings in EMEA Information Technology, by Average Weight. The chart also shows the average weight as a percentage of the total EMEA Information Technology weight, and the cumulative total.
 Chart 2. Shows aggregate stock holdings data for EMEA Information Technology stocks, ranked by Funds Invested % (most widely held).

Chart 3. Top 5 overweight and underweight EMEA Information Technology stock positions / as a percentage of the total EMEA Information Technology weight relative to benchmark.
 Charts 4&5. The largest overweight and underweight stock holdings, plus associated aggregate holdings data.

Ch 1. EMEA Information Technology. Top 10 Stock Weights, Percentage of EMEA Information Technology Total, Cumulative Percentage Total.

Ticker	Stock Name	Average Weight	Percentage of Total	Cumulative Percentage Total
ASML-NL	ASML Holding NV	0.81%	27.44%	27.44%
SAP-DE	SAP SE	0.31%	10.70%	38.14%
REL-GB	RELX PLC	0.22%	7.36%	45.50%
IFX-DE	Infineon Technologies AG	0.17%	5.67%	51.17%
ADYEN-NL	Adyen NV	0.15%	5.05%	56.23%
NXPI-US	NXP Semiconductors NV	0.11%	3.89%	60.12%
AMS-ES	Amadeus IT Group SA Class A	0.11%	3.74%	63.86%
TEL-US	TE Connectivity Ltd.	0.11%	3.71%	67.57%
CAP-FR	Capgemini SE	0.10%	3.55%	71.13%
UMG-NL	Universal Music Group N.V.	0.07%	2.49%	73.62%

Ch 3. EMEA Information Technology. Top 5 overweight and underweight positions in EMEA Information Technology, percentage of total.

Ticker	Stock Name	Average Weight vs ACWI	Percentage of Total
ASML-NL	ASML Holding NV	0.35%	25.63%
SAP-DE	SAP SE	0.12%	8.73%
REL-GB	RELX PLC	0.12%	8.36%
ADYEN-NL	Adyen NV	0.10%	7.30%
IFX-DE	Infineon Technologies AG	0.09%	6.43%
7202-SA	Arabian Internet and Comm..	0.00%	-0.08%
7203-SA	Elm Company	0.00%	-0.14%
CDR-PL	CD Projekt S.A.	0.00%	-0.26%
NEXI-IT	Nexi S.p.A.	-0.01%	-0.37%
WLN-FR	Worldline SA	-0.02%	-1.36%

Ch 2. EMEA Information Technology: Aggregate Stock Holdings Data, Ranked by Most Widely Held.

Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
ASML-NL	ASML Holding NV	40.50%	0.81%	0.35%	\$11,356.35M
SAP-DE	SAP SE	20.95%	0.31%	0.12%	\$3,347.12M
REL-GB	RELX PLC	17.60%	0.22%	0.12%	\$2,490.28M
NXPI-US	NXP Semiconductors NV	13.97%	0.11%	0.04%	\$771.93M
IFX-DE	Infineon Technologies AG	13.69%	0.17%	0.09%	\$932.26M
CAP-FR	Capgemini SE	11.73%	0.10%	0.05%	\$1,700.94M
ADYEN-NL	Adyen NV	11.73%	0.15%	0.10%	\$1,291.47M
TEL-US	TE Connectivity Ltd.	11.17%	0.11%	0.03%	\$1,588.88M
NOKIA-FI	Nokia Oyj	9.78%	0.05%	0.00%	\$410.55M
AMS-ES	Amadeus IT Group SA Class A	8.38%	0.11%	0.06%	\$1,531.38M
STM-FR	STMicroelectronics NV	8.10%	0.05%	0.00%	\$779.86M
LR-FR	Legrand SA	8.10%	0.06%	0.01%	\$944.98M
ERIC.B-SE	Telefonaktiebolaget LM Ericsson Class B	7.26%	0.04%	0.01%	\$308.26M
DSY-FR	Dassault Systemes SA	7.26%	0.04%	0.00%	\$211.20M
HEXA.B-SE	Hexagon AB Class B	6.42%	0.06%	0.03%	\$999.54M
SGE-GB	Sage Group plc	6.15%	0.04%	0.02%	\$200.74M
UMG-NL	Universal Music Group N.V.	5.31%	0.07%	0.02%	\$513.24M
TEAM-US	Atlassian Corp Class A	5.31%	0.05%	0.05%	\$489.72M
NICE-IL	NICE Ltd. (Israel)	5.03%	0.02%	0.00%	\$236.92M
HLMA-GB	Halma plc	3.91%	0.05%	0.03%	\$257.54M
ST-US	Sensata Technologies Holding PLC	3.35%	0.04%	0.03%	\$257.55M
UBI-FR	Ubisoft Entertainment SA	2.23%	0.01%	0.01%	\$25.05M
TEMN-CH	Temenos AG	2.23%	0.02%	0.01%	\$33.11M
GN-DK	GN Store Nord A/S	2.23%	0.01%	0.01%	\$26.26M
TIETO-FI	TietoEVRY Oyj	1.96%	0.00%	0.00%	\$4.48M

Ch 4. EMEA Information Technology: Aggregate Stock Holdings Data, Largest Overweight Holdings

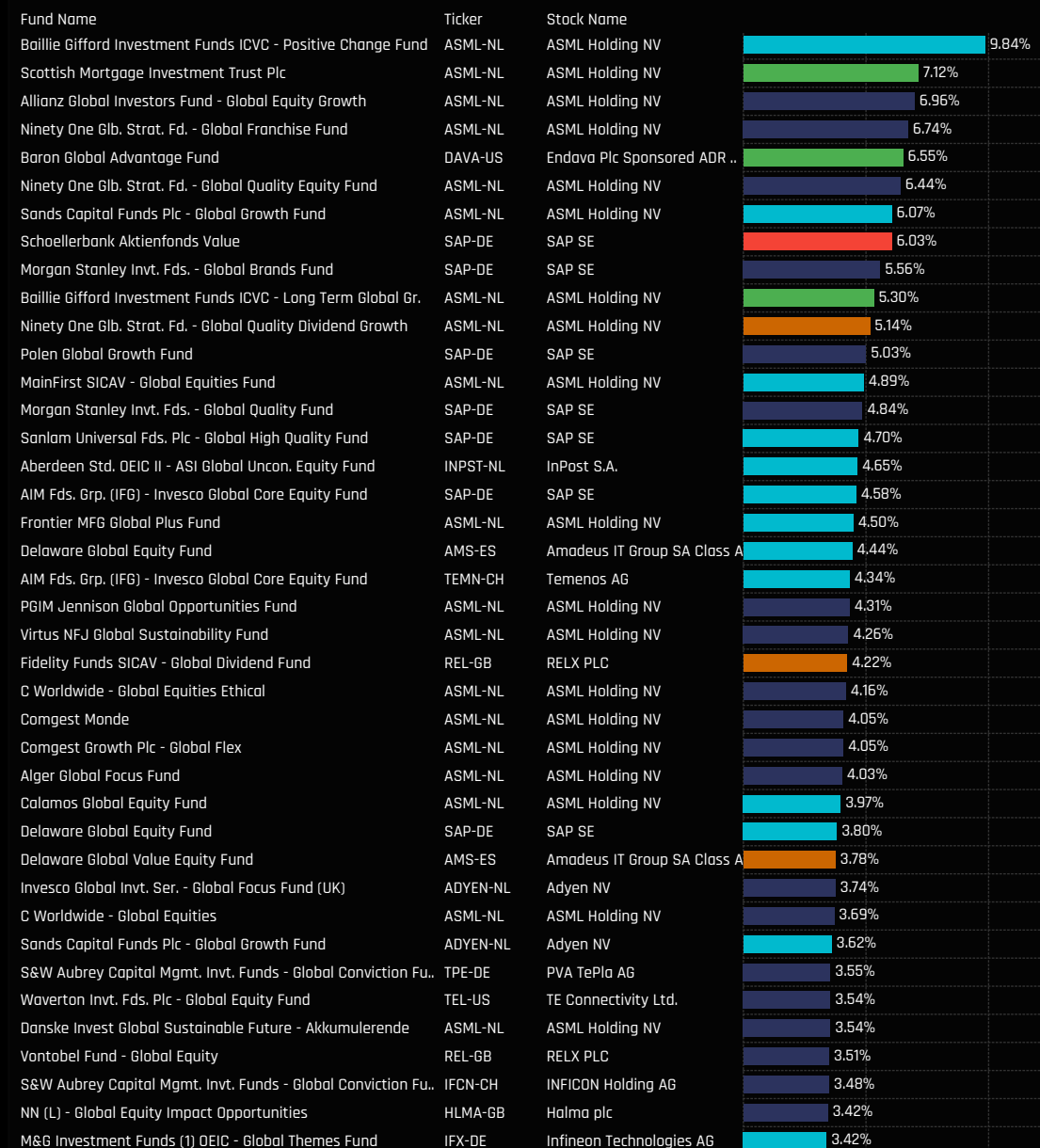
Ticker	Stock Name	Vs Benchmark	Average Weight	Funds Invested %	Fund AUM, \$
ASML-NL	ASML Holding NV	0.35%	0.81%	40.50%	\$11,356.35M
SAP-DE	SAP SE	0.12%	0.31%	20.95%	\$3,347.12M
REL-GB	RELX PLC	0.12%	0.22%	17.60%	\$2,490.28M
ADYEN-NL	Adyen NV	0.10%	0.15%	11.73%	\$1,291.47M
IFX-DE	Infineon Technologies AG	0.09%	0.17%	13.69%	\$932.26M
AMS-ES	Amadeus IT Group SA Class A	0.06%	0.11%	8.38%	\$1,531.38M
TEAM-US	Atlassian Corp Class A	0.05%	0.05%	5.31%	\$489.72M
CAP-FR	Capgemini SE	0.05%	0.10%	11.73%	\$1,700.94M
NXPI-US	NXP Semiconductors NV	0.04%	0.11%	13.97%	\$771.93M
TEL-US	TE Connectivity Ltd.	0.03%	0.11%	11.17%	\$1,588.88M

Ch 5. EMEA Information Technology: Aggregate Stock Holdings Data, Largest Underweight Holdings

Ticker	Stock Name	Vs Benchmark	Average Weight	Funds Invested %	Fund AUM, \$
WLN-FR	Worldline SA	-0.02%	0.00%	1.68%	\$349.28M
NEXI-IT	Nexi S.p.A.	-0.01%	0.00%	0.28%	\$0.48M
CDR-PL	CD Projekt S.A.	0.00%	0.00%	0.28%	\$9.25M
7203-SA	Elm Company	0.00%	0.00%	0.00%	\$0.05M
7202-SA	Arabian Internet and Communications Servi..	0.00%	0.00%	0.28%	\$0.06M
STM-FR	STMicroelectronics NV	0.00%	0.05%	8.10%	\$779.86M

Chart 1. EMEA Information Technology: The largest individual fund level stock holdings by fund weight, coloured by fund Style.

Ch 1. EMEA Information Technology: Top Fund Holdings, %



Fund Style Aggressive Growt. Growth GARP Value Yield

Chart 2. EMEA Information Technology: The largest individual fund level stock holdings by \$ AUM, coloured by fund Style.

Ch 2. EMEA Information Technology: Top Fund Holdings, \$

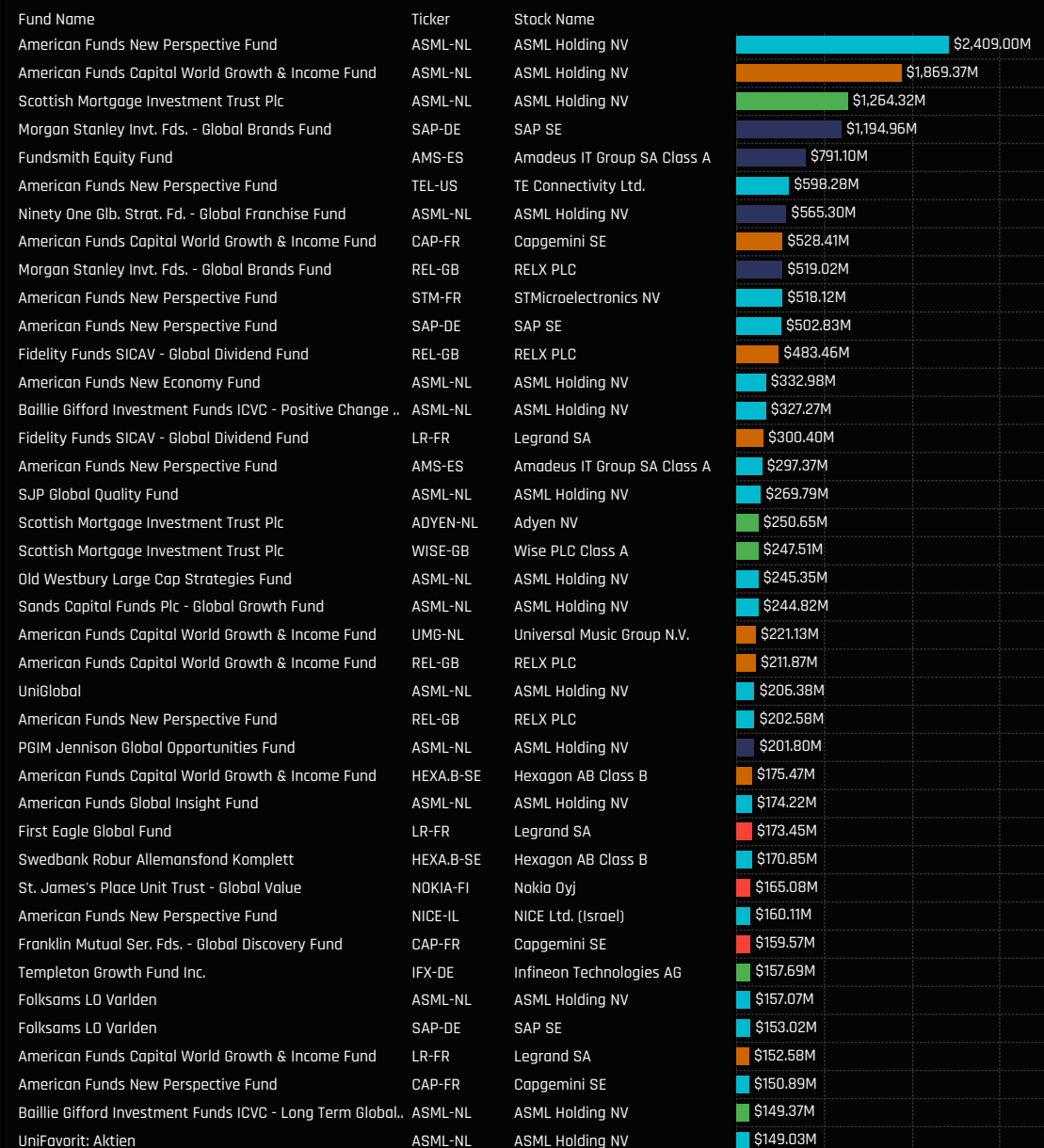
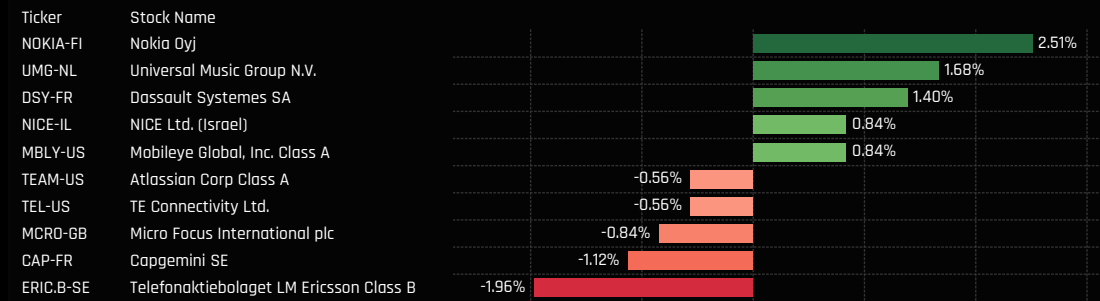


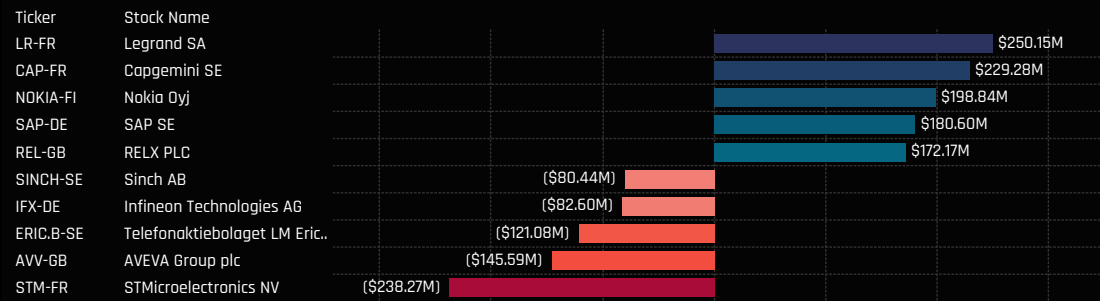
Chart 1. The 10 EMEA Information Technology stocks seeing the largest changes in funds invested % between 7/31/2022 - 1/31/2023. A positive figure shows more funds buying in to the stock, a negative figure funds closing out.
 Chart 2. The largest increases in funds invested %, together with average weight changes, relative to benchmark changes and combined fund flows.

Chart 3. The 10 EMEA Information Technology stocks seeing the largest USD fund flows between 7/31/2022 - 1/31/2023.
 Chart 4. The largest decreases in funds invested %, together with average weight changes, relative to benchmark changes and combined fund flows.

Ch 1. EMEA Information Technology: Largest Changes in Funds Invested %



Ch 3 EMEA Information Technology: Largest Combined Fund Flows in USD.



Ch 2. EMEA Information Technology: Aggregate Stock Holdings Changes - Largest Increases in Funds Invested %.

Ticker	Stock Name	Funds Invested % Δ	Average Weight Δ	Average Wgt vs Benchmark Δ	Fund Flows, \$
NOKIA-FI	Nokia Oyj	2.51%	0.00%	0.01%	\$198.84M
UMG-NL	Universal Music Group N.V.	1.68%	0.02%	0.01%	\$58.92M
DSY-FR	Dassault Systemes SA	1.40%	0.00%	0.01%	\$91.71M
NICE-IL	NICE Ltd. (Israel)	0.84%	0.00%	0.00%	\$2.14M
MBLY-US	Mobilye Global, Inc. Class A	0.84%	0.00%	0.00%	\$6.25M
ATS-AT	AT & S Austria Technologie & Systemtechnik..	0.84%	0.00%	0.00%	\$1.71M
ASML-NL	ASML Holding NV	0.84%	0.13%	0.08%	\$124.20M
REL-GB	RELX PLC	0.56%	0.01%	0.01%	\$172.17M
NCC-GB	NCC Group plc	0.56%	0.00%	0.00%	\$3.04M
UBXN-CH	u-blox Holding AG	0.56%	0.00%	0.00%	\$0.59M
AMS-ES	Amadeus IT Group SA Class A	0.56%	0.01%	0.01%	\$101.63M
TEMN-CH	Temenos AG	0.28%	0.00%	0.00%	\$7.11M
ST-US	Sensata Technologies Holding PLC	0.28%	0.00%	0.00%	\$13.57M
SPT-GB	Spirent Communications plc	0.28%	0.00%	0.00%	\$2.02M
TRUE.B-SE	Truecaller AB Class B	0.28%	0.00%	0.00%	\$0.29M
TOM2-NL	TomTom NV	0.28%	0.00%	0.00%	(\$0.09M)
MOON-GB	Moonpig Group Plc	0.28%	0.00%	0.00%	\$0.09M
MNDY-US	monday.com Ltd.	0.28%	0.00%	0.00%	\$32.01M
HMS-SE	HMS Networks AB	0.28%	0.00%	0.00%	\$0.12M
GFT-DE	GFT Technologies SE	0.28%	0.00%	0.00%	\$0.07M
ERIC.A-SE	Telefonaktiebolaget LM Ericsson Class A	0.28%	0.00%	0.00%	\$0.29M
7202-SA	Arabian Internet and Communications Servi..	0.28%	0.00%	0.00%	\$0.06M
WIX-US	Wix.com Ltd.	0.28%	0.00%	0.00%	(\$2.72M)
WISE-GB	Wise PLC Class A	0.28%	0.00%	0.00%	\$3.94M
SDI-FR	Soitec SA	0.28%	0.00%	0.00%	\$0.00M

Ch 4. EMEA Information Technology: Aggregate Stock Holdings Changes - Largest Decreases in Funds Invested %.

Ticker	Stock Name	Funds Invested % Δ	Average Weight Δ	Average Wgt vs Benchmark Δ	Fund Flows, \$
ERIC.B-SE	Telefonaktiebolaget LM Ericsson Class B	-1.96%	-0.01%	0.00%	(\$121.08M)
CAP-FR	Cappgemini SE	-1.12%	-0.01%	-0.01%	\$229.28M
MCR0-GB	Micro Focus International plc	-0.84%	0.00%	0.00%	(\$1.66M)
TEL-US	TE Connectivity Ltd.	-0.56%	-0.02%	-0.01%	\$79.43M
TEAM-US	Atlassian Corp Class A	-0.56%	-0.02%	-0.02%	\$12.04M
AVST-GB	Avast Plc	-0.56%	0.00%	0.00%	(\$3.28M)
SCT-GB	Softcat Plc	-0.56%	0.00%	0.00%	(\$0.85M)
SINCH-SE	Sinch AB	-0.56%	0.00%	0.00%	(\$80.44M)
SOP-FR	Sopra Steria Group SA	-0.56%	0.00%	0.00%	(\$19.97M)
SWP-FR	Sword Group SE	-0.56%	0.00%	0.00%	(\$0.07M)
AVV-GB	AVEVA Group plc	-0.56%	0.00%	0.01%	(\$145.59M)
FDM-GB	FDM Group (Holdings) plc	-0.56%	0.00%	0.00%	(\$0.99M)
NETC-DK	Netcompany Group A/S	-0.56%	-0.01%	-0.01%	(\$55.18M)
NEXI-IT	Nexi S.p.A.	-0.56%	0.00%	0.00%	(\$61.10M)
ADYEN-NL	Adyen NV	-0.56%	-0.03%	-0.02%	(\$31.61M)
IFX-DE	Infineon Technologies AG	-0.56%	0.03%	0.02%	(\$82.60M)
ADDT.B-SE	Addtech AB Class B	-0.28%	0.00%	0.00%	(\$7.53M)
AMS-CH	ams-OSRAM AG	-0.28%	0.00%	0.00%	\$0.44M
NOD-NO	Nordic Semiconductor ASA	-0.28%	0.00%	0.00%	(\$2.19M)
UBI-FR	Ubisoft Entertainment SA	-0.28%	-0.01%	0.00%	(\$1.94M)
WAF-DE	Siltronic AG	-0.28%	-0.01%	-0.01%	(\$1.67M)
WLN-FR	Worldline SA	-0.28%	0.00%	0.00%	\$74.02M
AIXA-DE	AIXTRON SE	-0.28%	0.00%	0.00%	\$0.25M
ALHF-FR	HF Co. SA	-0.28%	0.00%	0.00%	(\$0.25M)
CGM-FR	Cegedim SA	-0.28%	0.00%	0.00%	(\$0.02M)

Chart 1. The largest fund weight increases in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023.
 Chart 2. The largest fund weight decreases in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023
 Both charts show the current weight and whether the weight change represented a new or closed position.

Ch 1. EMEA Information Technology: Largest Increases in Position, %

Fund Name	Ticker	Stock Name	New or Close..	Latest Weight	Weight Change
SEB Aktiesparfond	UMG-NL	Universal Music Group N.V.	New	3.11%	3.11%
Fidelity Advisor Global Capital Appreciation Fund	ASML-NL	ASML Holding NV	New	2.51%	2.51%
Columbia Select Global Equity Fund	ASML-NL	ASML Holding NV	New	2.24%	2.24%
Quilter Investors Series I - Global Unconstrained ..	LR-FR	Legrand SA	New	2.17%	2.17%
Vanguard Global ESG Select Stock Fund	ASML-NL	ASML Holding NV	New	2.13%	2.13%
SEB Aktiesparfond	SAP-DE	SAP SE	New	2.03%	2.03%
Virtus NFJ Global Sustainability Fund	DSY-FR	Dassault Systemes SA	New	1.87%	1.87%
UniFavorit: Aktien	ASML-NL	ASML Holding NV	New	1.79%	1.79%
Morgan Stanley Invst. Fds. - Global Brands Fund	SAP-DE	SAP SE		5.56%	1.75%
Hermes Invst. Funds Plc - Impact Opportunities Eq..	STM-FR	STMicroelectronics NV	New	1.68%	1.68%
DWS Concept DJE Globale Aktien	ASML-NL	ASML Holding NV	New	1.57%	1.57%
Sanlam Universal Fds. Plc - Global High Quality F..	SAP-DE	SAP SE		4.70%	1.54%
Virtus NFJ Global Sustainability Fund	GN-DK	GN Store Nord A/S	New	1.54%	1.54%
Franklin Mutual Ser. Fds. - Quest Fund	TSEM-US	Tower Semiconductor Ltd		2.79%	1.47%
Uni 21. Jahrhundert -net-	SAP-DE	SAP SE	New	1.43%	1.43%
Danske Invest Global Sustainable Future - Akku..	ASML-NL	ASML Holding NV		3.54%	1.42%
Fidelity Advisor Global Capital Appreciation Fund	AMS-ES	Amadeus IT Group SA Class..	New	1.38%	1.38%
Invesco Global Invst. Ser. - Global Equity Fund (UK)	ASML-NL	ASML Holding NV	New	1.37%	1.37%
Uni 21. Jahrhundert -net-	ASML-NL	ASML Holding NV	New	1.37%	1.37%
UniFavorit: Aktien	HEXA.B-SE	Hexagon AB Class B	New	1.35%	1.35%

Ch 2. EMEA Information Technology: Largest Decreases in Position, %

Fund Name	Ticker	Stock Name	New or Close..	Latest Weight	Weight Change
S&W Aubrey Capital Mgmt. Invst. Funds - Global C..	SES-IT	SeSa S.p.A.	Close	0.00%	-3.17%
Invesco Global Invst. Ser. - Global Equity Income F..	REL-GB	RELX PLC	Close	0.00%	-2.31%
GAMCO Global Growth Fund	ADYEN-NL	Adyen NV		3.09%	-2.10%
LO Funds - Golden Age	GN-DK	GN Store Nord A/S	Close	0.00%	-1.98%
PGIM Jennison Global Opportunities Fund	ADYEN-NL	Adyen NV		1.52%	-1.88%
Skagen Focus	UBI-FR	Ubisoft Entertainment SA		1.44%	-1.78%
Swedbank Robur Allemansfond Komplet	ERIC.B-SE	Telefonaktiebolaget LM Eric..	Close	0.00%	-1.59%
Touchstone Strategic Trust - Non-US ESG Equity ..	TEL-US	TE Connectivity Ltd.	Close	0.00%	-1.57%
GAM Funds - Disruptive Growth	WAF-DE	Siltronic AG	Close	0.00%	-1.42%
Pax Global Environmental Markets Fund	SAP-DE	SAP SE	Close	0.00%	-1.35%
JPMorgan Funds - Global Growth Fund	ADYEN-NL	Adyen NV	Close	0.00%	-1.29%
LF Liontrust Investment Funds III - Global Focus ..	NXPI-US	NXP Semiconductors NV	Close	0.00%	-1.23%
BL - Global Equities	LR-FR	Legrand SA	Close	0.00%	-1.19%
JPMorgan Investment Funds - Global Select Equi..	CAP-FR	Capgemini SE	Close	0.00%	-1.19%
GAM Funds - Disruptive Growth	ST-US	Sensata Technologies Holdi..		2.38%	-1.18%
JPMorgan Funds - Global Focus Fund	CAP-FR	Capgemini SE	Close	0.00%	-1.15%
GAMCO Global Growth Fund	ASML-NL	ASML Holding NV		2.24%	-1.14%
Swedbank Robur Kapitalinvest	NETC-DK	Netcompany Group A/S	Close	0.00%	-1.12%
SEB Aktiesparfond	CAP-FR	Capgemini SE	Close	0.00%	-1.10%
BL - Global Equities	SAP-DE	SAP SE	Close	0.00%	-1.10%

Chart 3. The largest buyers in US dollar terms in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023.
 Chart 4. The largest sellers in US dollar terms in EMEA Information Technology stocks between 7/31/2022 - 1/31/2023
 Both charts show the current AUM and whether the fund flow represented a new or closed position.

Ch 3. EMEA Information Technology: Largest Fund Inflows, \$

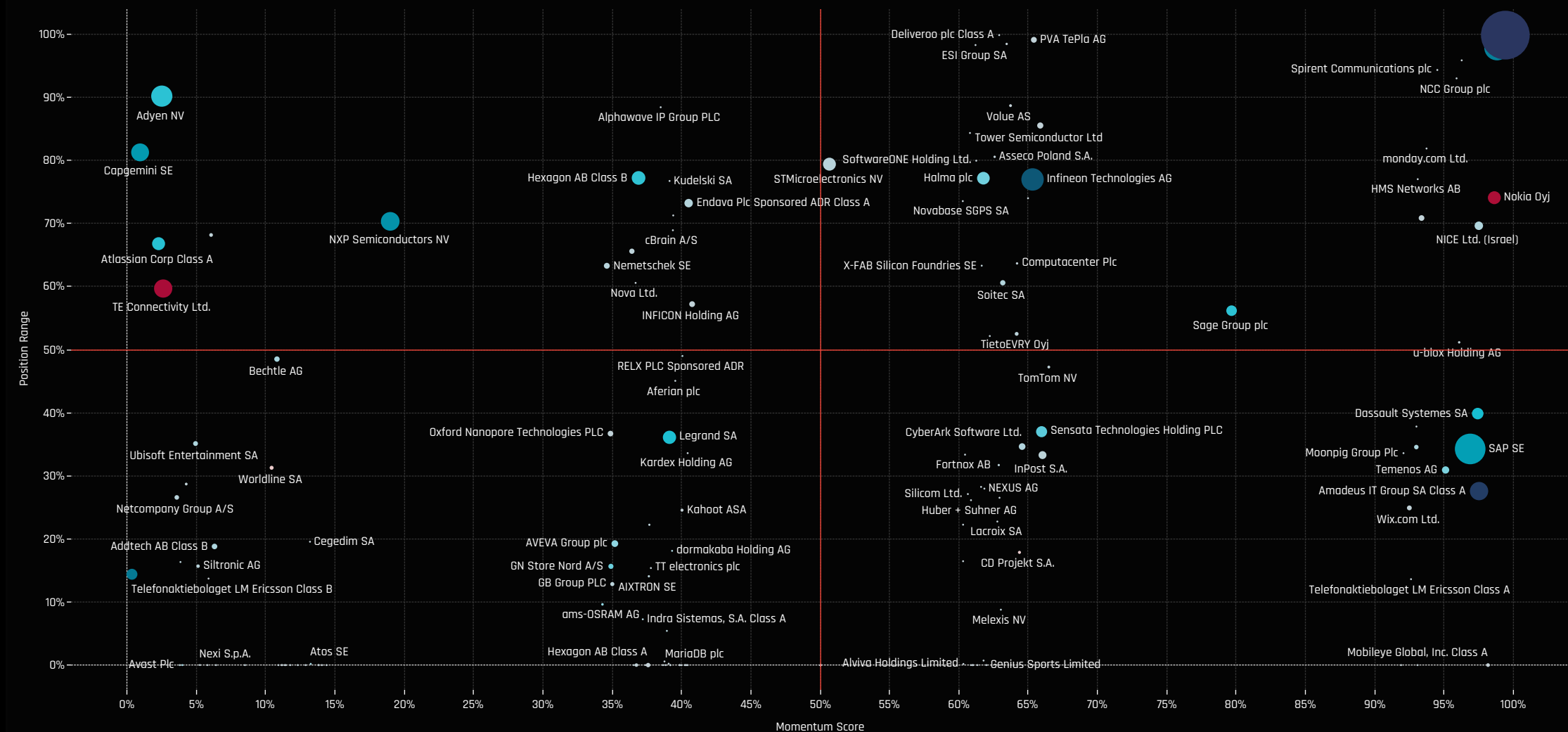
Fund Name	Ticker	Stock Name	New or Close..	Latest AUM, \$	Fund Flows, \$
American Funds Capital World Growth & Income Fu..	CAP-FR	Capgemini SE		\$528M	\$248M
American Funds Capital World Growth & Income Fu..	LR-FR	Legrand SA	New	\$153M	\$137M
St. James's Place Unit Trust - Global Value	NOKIA-FI	Nokia Oyj		\$165M	\$127M
Morgan Stanley Invst. Fds. - Global Brands Fund	SAP-DE	SAP SE		\$1,195M	\$113M
UniFavorit: Aktien	ASML-NL	ASML Holding NV	New	\$149M	\$111M
Fidelity Funds SICAV - Global Dividend Fund	LR-FR	Legrand SA		\$300M	\$105M
UniFavorit: Aktien	HEXA.B-SE	Hexagon AB Class B	New	\$112M	\$101M
American Funds New Economy Fund	ASML-NL	ASML Holding NV		\$333M	\$98M
UniFavorit: Aktien	DSY-FR	Dassault Systemes SA	New	\$82M	\$86M
American Funds New Perspective Fund	AMS-ES	Amadeus IT Group SA Class A		\$297M	\$82M
American Funds New Perspective Fund	WLN-FR	Worldline SA		\$118M	\$76M
UniGlobal	ASML-NL	ASML Holding NV		\$206M	\$67M
American Funds Capital World Growth & Income Fu..	ASML-NL	ASML Holding NV		\$1,869M	\$63M
Vanguard Global Equity Fund	NOKIA-FI	Nokia Oyj	New	\$51M	\$54M
Fidelity Funds SICAV - Global Dividend Fund	REL-GB	RELX PLC		\$483M	\$50M
American Funds New Economy Fund	TEL-US	TE Connectivity Ltd.	New	\$49M	\$48M
American Funds New Perspective Fund	REL-GB	RELX PLC		\$203M	\$46M
Swedbank Robur Allemansfond Komplet	ADYEN-NL	Adyen NV	New	\$45M	\$45M
Franklin Mutual Ser. Fds. - Quest Fund	TSEM-US	Tower Semiconductor Ltd		\$51M	\$41M
PGIM Jennison Global Opportunities Fund	TEAM-US	Atlassian Corp Class A			\$40M

Ch 4. EMEA Information Technology: Largest Fund Outflows, \$

Fund Name ..	Fund Name	Ticker	Stock Name	New or Close..	Latest AUM, \$	Fund Flows, \$
American Fu..	American Funds New Perspective Fu..	STM-FR	STMicroelectronics NV		\$518M	(\$197M)
American Fu..	American Funds New Perspective Fu..	AVV-GB	AVEVA Group plc	Close		(\$142M)
Swedbank R..	Swedbank Robur Allemansfond Ko..	ERIC.B-SE	Telefonaktiebolaget LM Eric..	Close		(\$117M)
Scottish Mor..	Scottish Mortgage Investment Trust..	ASML-NL	ASML Holding NV		\$1,264M	(\$93M)
PGIM Jennis..	PGIM Jennison Global Opportunities..	ADYEN-NL	Adyen NV		\$71M	(\$82M)
American Fu..	American Funds New Perspective Fu..	SINCH-SE	Sinch AB		\$65M	(\$78M)
Swedbank R..	Swedbank Robur Globalfond	IFX-DE	Infineon Technologies AG	Close		(\$71M)
Swedbank R..	Swedbank Robur Kapitalinvest	NETC-DK	Netcompany Group A/S	Close		(\$56M)
American Fu..	American Funds New Perspective Fu..	NEXI-IT	Nexi S.p.A.	Close		(\$54M)
Swedbank R..	Swedbank Robur Allemansfond Ko..	STM-FR	STMicroelectronics NV	Close		(\$50M)
American Fu..	American Funds New Perspective Fu..	ASML-NL	ASML Holding NV		\$2,409M	(\$48M)
Swedbank R..	Swedbank Robur Allemansfond Ko..	SAP-DE	SAP SE		\$59M	(\$39M)
T Rowe Price ..	T Rowe Price Global Stock Fund	AMS-ES	Amadeus IT Group SA Class A		\$103M	(\$37M)
Swedbank R..	Swedbank Robur Allemansfond Ko..	NXPI-US	NXP Semiconductors NV	Close		(\$37M)
Swedbank R..	Swedbank Robur Kapitalinvest	ASML-NL	ASML Holding NV		\$46M	(\$34M)
PGIM Jennis..	PGIM Jennison Global Opportunities..	ASML-NL	ASML Holding NV		\$202M	(\$34M)
Pax Global E..	Pax Global Environmental Markets F..	SAP-DE	SAP SE	Close		(\$30M)
Baillie Giffor..	Baillie Gifford Investment Funds ICV..	ASML-NL	ASML Holding NV		\$149M	(\$30M)
Franklin Mut..	Franklin Mutual Ser. Fds. - Beacon F..	ST-US	Sensata Technologies Holdi..		\$104M	(\$28M)
UniFavorit: A..	UniFavorit: Aktien	ADYEN-NL	Adyen NV	Close		(\$28M)

the Z-Score of today's average weight, funds invested % and funds o/w % relative to all monthly observations in our fund history (going back to 9/30/2012). A figure close to 100% would indicate today's positioning is close to its maximum ever level, a figure close to zero, the lowest. The X-axis provides a measure of short-term fund activity, or 'Momentum', by looking at the changes in average weight, funds invested % and funds o/w % between 7/31/2022 and 1/31/2023, relative to each stock. A figure above 50% means a stock has seen relative increases in ownership, a figure below 50% indicates a relative decrease in positioning. The size of the bubble represents the average weight of each stock. The colour represents if the stock is held overweight (blue) or underweight (red) on average.

Region Sector: EMEA Information Technology
 Stock Sentiment Grid. Global Active Funds
 Momentum Measure between 7/31/2022 - 1/31/2023



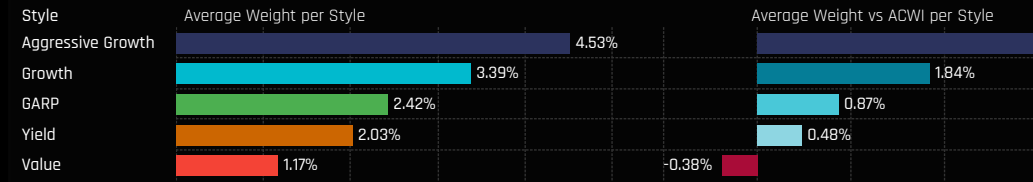
Position Range: Average of:
 Z-Score Average Weight vs history
 Z-Score Funds Invested % vs history
 Z-Score Funds O/W % vs history

Momentum Score: Average of:
 Change in Average Weight (Percentile vs Peers)
 Change in Funds Invested % (Percentile vs Peers)
 Change in Funds O/W % (Percentile vs Peers)

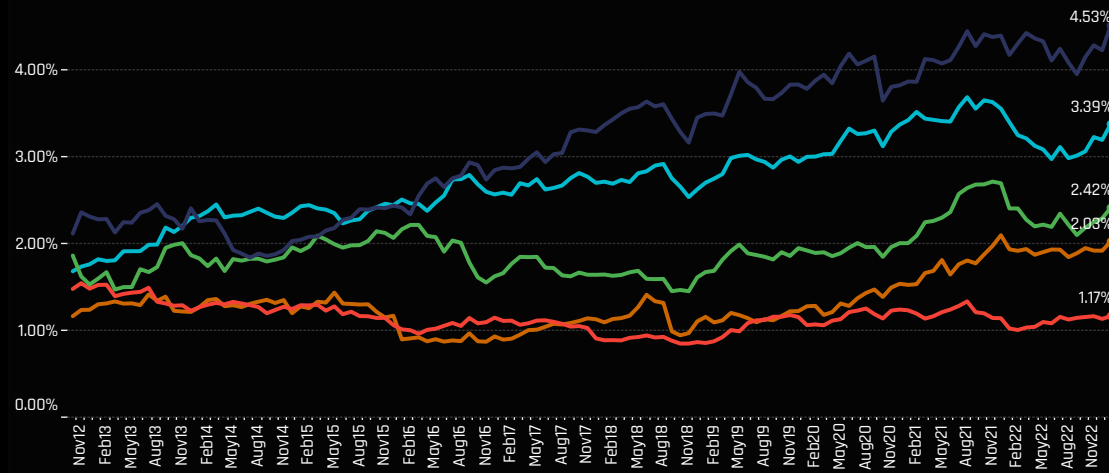
Chart 1. The average weights in EMEA Information Technology stocks and the average weights vs the SPDR MSCI ACWI UCITS ETF, split by fund Style.

Charts 2&3. The time series of average fund weights in EMEA Information Technology stocks and average weights vs SPDR MSCI AC.

Ch 1. EMEA Information Technology: Average Fund Weight / Average Fund Weight vs ACWI, per fund Style group.



Ch 2. EMEA Information Technology: Average Fund Weights per Style Time-Series



Ch 3. EMEA Information Technology: Average Fund Weight vs ACWI per Style Time-Series

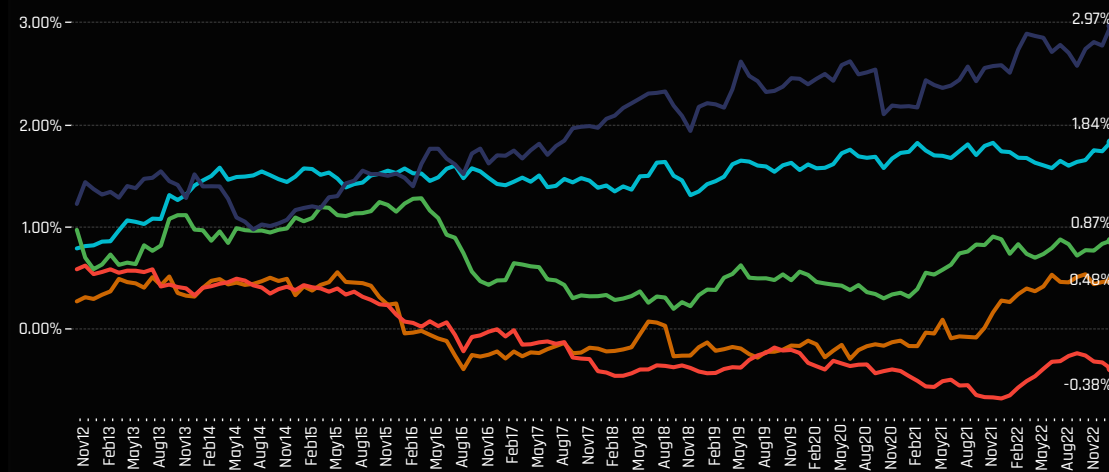
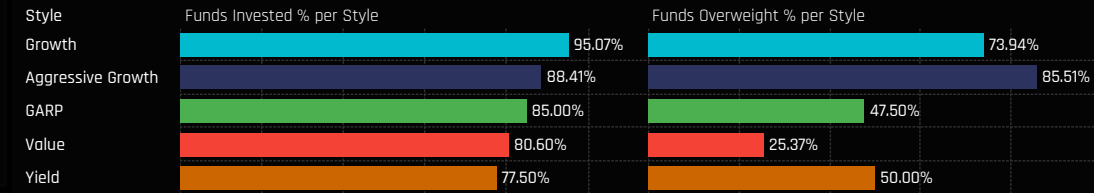


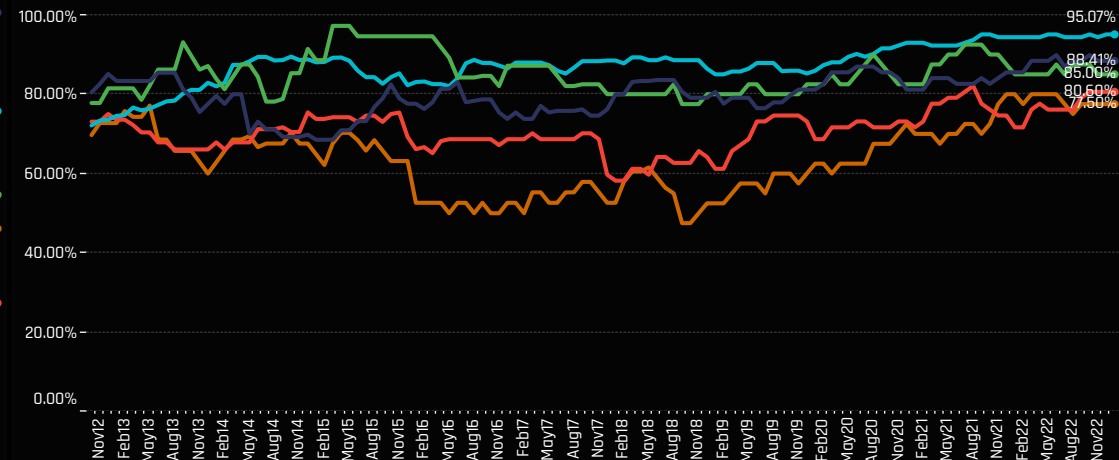
Chart 4. The percentage of funds invested in EMEA Information Technology stocks and the percentage of funds overweight, split by fund Style.

Charts 5&6. The time series of the percentage of funds invested in EMEA Information Technology stocks and the percentage of fund.

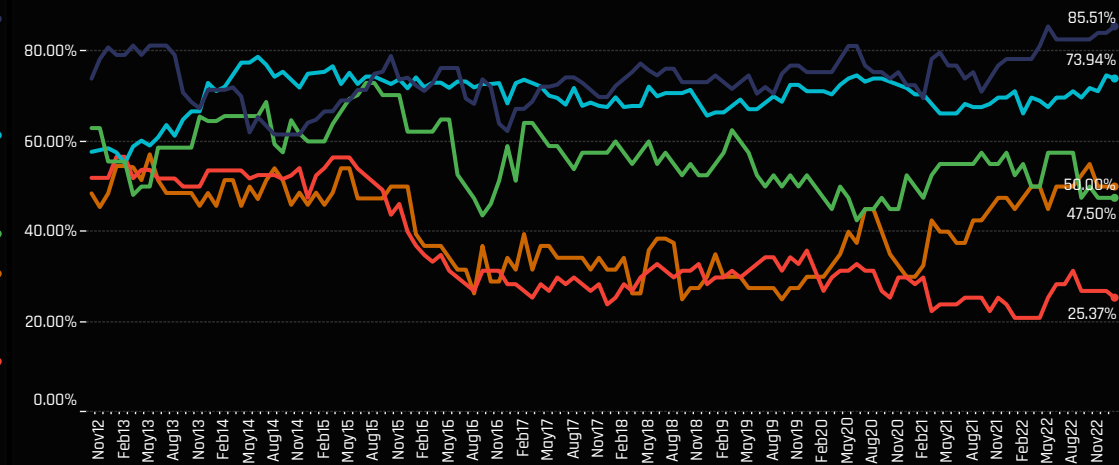
Ch 4. EMEA Information Technology: Funds Invested % / Funds Overweight %, per fund Style group.



Ch 5. EMEA Information Technology: Funds Invested % per Style Time-Series



Ch 6. EMEA Information Technology: Funds Overweight % per Style Time-Series



Top Row: For each Style category, each chart shows the largest holders in the EMEA Information Technology Region Sector group.

Middle Row: For each Style category, each chart shows the most widely held stocks and the corresponding average fund weights in the EMEA Information Technology Region Sector group.

Bottom Row: For each Style category, each chart shows the largest stock overweights and underweights in the EMEA Information Technology Region Sector group.

EMEA Information Technology Top Holders: Aggressive Growth

Fund Name	Weight
Invesco Global Invnt. Ser. - Global..	12.26%
Allianz Global Investors Fund - G..	11.53%
S&W Aubrey Capital Mgmt. Invnt...	10.37%
Virtus NFJ Global Sustainability ..	9.61%
NN (L) - Global Equity Impact Op..	9.20%
AB SICAV I - Concentrated Globa..	8.64%
First Sentier Investors ICVC - St..	8.45%
Alger Global Focus Fund	8.02%
Eaton Vance Focused Global Op..	7.99%
Morgan Stanley Invnt. Fds. - Glob..	7.98%
GAMCO Global Growth Fund	7.04%

EMEA Information Technology Top Holders: Growth

Fund Name	Weight
Sands Capital Funds Plc - Global..	12.20%
BNY Mellon Investment Fds. - Gl..	12.04%
Baillie Gifford Investment Funds..	10.47%
ASN Beleggingsfondsen UCITS N..	10.45%
Frontier MFG Global Plus Fund	9.49%
MainFirst SICAV - Global Equitie..	9.36%
AIM Fds. Grp. (IFG) - Invesco Glo..	8.91%
Swedbank Robur Allemansfond ..	8.81%
Delaware Global Equity Fund	8.24%
Janus Henderson Sustainable/R..	8.05%
SEB Aktiesparfond	7.95%

EMEA Information Technology Top Holders: GARP

Fund Name	Weight
Baron Global Advantage Fund	14.64%
Baillie Gifford Investment Funds ..	11.57%
Scottish Mortgage Investment Tr..	9.93%
DWS Concept DJE Globale Aktien	4.45%
Swedbank Robur Aktiefond Pens..	4.31%
Templeton Growth Fund Inc.	3.86%
FTIF SICAV - Growth (Euro) Fund	3.59%
Redwheel Funds SICAV - Global ..	3.49%
Hermes Invnt. Funds - Global Equi..	2.88%
Jupiter Asset Mgmt. Series plc - ..	2.85%
BNP Paribas Funds - Sustainable..	2.83%

EMEA Information Technology Top Holders: Value

Fund Name	Weight
Schoellerbank Aktienfonds Value	7.98%
Skagen Focus	4.36%
FTIF SICAV - Global Climate Chan..	4.24%
Causeway Global Value Fund	3.87%
Franklin Mutual Ser. Fds. - Beaco..	3.29%
Multicooperation SICAV - Julius ..	3.01%
Robeco Capital Gr. Fds. - BP Glob..	2.82%
Franklin Mutual Ser. Fds. - Quest ..	2.79%
Franklin Mutual Ser. Fds. - Global..	2.74%
Value Square Fund - Equity World	2.39%
Thornburg Global Opportunities F..	2.29%

EMEA Information Technology Top Holders: Yield

Fund Name	Weight
Fidelity Funds SICAV - Global Divi..	6.84%
Delaware Global Value Equity Fu..	6.43%
Ninety One Glob. Strat. Fd. - Globa..	5.14%
BNY Mellon Global Equity Income..	4.59%
BNY Mellon Investment Fds. - Glo..	4.55%
BlackRock Global Dividend Portfo..	4.32%
Flossbach von Storch - Dividend	4.10%
JPMorgan Investment Funds - Gl..	3.88%
Fidelity Inv. Trust - Global Equity ..	3.83%
Liontrust Global Income Fund	3.26%
Invesco Global Invnt. Ser. - Global ..	3.15%

EMEA Information Technology Most Widely Held Stocks: Aggressive Growth

Stock Name	Ave. Wgt	Funds Inv. %
ASML Holding NV	1.64%	56.52%
Adyen NV	0.35%	18.84%
SAP SE	0.44%	17.39%
Infineon Technologies AG	0.34%	15.94%
Amadeus IT Group SA Class A	0.20%	11.59%
TE Connectivity Ltd.	0.24%	10.14%
RELX PLC	0.24%	10.14%
Halma plc	0.21%	10.14%
Dassault Systemes SA	0.10%	10.14%
Hexagon AB Class B	0.11%	7.25%

EMEA Information Technology Most Widely Held Stocks: Growth

Stock Name	Ave. Wgt	Funds Inv. %
ASML Holding NV	0.94%	54.23%
SAP SE	0.35%	25.35%
RELX PLC	0.22%	21.13%
Infineon Technologies AG	0.18%	19.01%
NXP Semiconductors NV	0.17%	17.61%
Adyen NV	0.15%	15.49%
Capgemini SE	0.14%	13.38%
TE Connectivity Ltd.	0.10%	12.68%
STMicroelectronics NV	0.07%	11.27%
Legrand SA	0.07%	11.27%

EMEA Information Technology Most Widely Held Stocks: GARP

Stock Name	Ave. Wgt	Funds Inv. %
ASML Holding NV	0.72%	40.00%
SAP SE	0.16%	22.50%
NXP Semiconductors NV	0.13%	22.50%
Capgemini SE	0.09%	17.50%
Nokia Oyj	0.02%	15.00%
Infineon Technologies AG	0.14%	15.00%
Adyen NV	0.19%	15.00%
Telefonaktiebolaget LM Ericsson ..	0.06%	12.50%
STMicroelectronics NV	0.03%	12.50%
RELX PLC	0.07%	12.50%

EMEA Information Technology Most Widely Held Stocks: Value

Stock Name	Ave. Wgt	Funds Inv. %
Nokia Oyj	0.13%	20.90%
NXP Semiconductors NV	0.09%	17.91%
Capgemini SE	0.09%	14.93%
TE Connectivity Ltd.	0.06%	13.43%
SAP SE	0.19%	10.45%
RELX PLC	0.07%	10.45%
ASML Holding NV	0.03%	10.45%
Telefonaktiebolaget LM Ericsson ..	0.02%	8.96%
STMicroelectronics NV	0.08%	8.96%
Sensata Technologies Holding PL..	0.09%	8.96%

EMEA Information Technology Most Widely Held Stocks: Yield

Stock Name	Ave. Wgt	Funds Inv. %
RELX PLC	0.56%	35.00%
SAP SE	0.33%	27.50%
Sage Group plc	0.09%	15.00%
ASML Holding NV	0.27%	15.00%
Amadeus IT Group SA Class A	0.22%	12.50%
TE Connectivity Ltd.	0.09%	10.00%
Capgemini SE	0.09%	10.00%
Telefonaktiebolaget LM Ericsson ..	0.10%	7.50%
Nokia Oyj	0.02%	7.50%
Legrand SA	0.07%	7.50%

EMEA Information Technology Top Over/Underweights: Aggressive Growth

Stock Name	Over/Underweight
ASML Holding NV	1.19%
Adyen NV	0.30%
Infineon Technologies AG	0.26%
SAP SE	0.24%
Halma plc	0.19%
Worldline SA	-0.02%
NXP Semiconductors NV	-0.03%
STMicroelectronics NV	-0.03%
Telefonaktiebolaget LM Ericsson ..	-0.03%
Nokia Oyj	-0.05%

EMEA Information Technology Top Over/Underweights: Growth

Stock Name	Over/Underweight
ASML Holding NV	0.49%
SAP SE	0.16%
RELX PLC	0.12%
Infineon Technologies AG	0.10%
Adyen NV	0.10%
Tower Semiconductor Ltd	0.00%
Wix.com Ltd.	0.00%
Nexi S.p.A.	-0.01%
CD Projekt S.A.	-0.01%
Worldline SA	-0.01%

EMEA Information Technology Top Over/Underweights: GARP

Stock Name	Over/Underweight
ASML Holding NV	0.27%
Endava Plc Sponsored ADR Class..	0.16%
Adyen NV	0.14%
Atlassian Corp Class A	0.10%
Infineon Technologies AG	0.07%
Nokia Oyj	-0.03%
SAP SE	-0.03%
Dassault Systemes SA	-0.04%
Universal Music Group N.V.	-0.05%
TE Connectivity Ltd.	-0.06%

EMEA Information Technology Top Over/Underweights: Value

Stock Name	Over/Underweight
Nokia Oyj	0.08%
Sensata Technologies Holding PL..	0.08%
Tower Semiconductor Ltd	0.05%
Capgemini SE	0.04%
STMicroelectronics NV	0.03%
Universal Music Group N.V.	-0.04%
Amadeus IT Group SA Class A	-0.04%
Dassault Systemes SA	-0.04%
Adyen NV	-0.04%
ASML Holding NV	-0.42%

EMEA Information Technology Top Over/Underweights: Yield

Stock Name	Over/Underweight
RELX PLC	0.46%
Amadeus IT Group SA Class A	0.17%
SAP SE	0.14%
Sage Group plc	0.08%
Telefonaktiebolaget LM Ericsson ..	0.07%
STMicroelectronics NV	-0.04%
Dassault Systemes SA	-0.04%
Adyen NV	-0.05%
Infineon Technologies AG	-0.08%
ASML Holding NV	-0.18%

Ch1. The blue line shows the total number of funds (out of 358) who have ever owned EMEA Information Technology stocks. The green area shows the number of funds invested at any one time and the red line the difference. A downward sloping red line means existing investors are closing out positions, a rising red line means previous investors are buying back in.

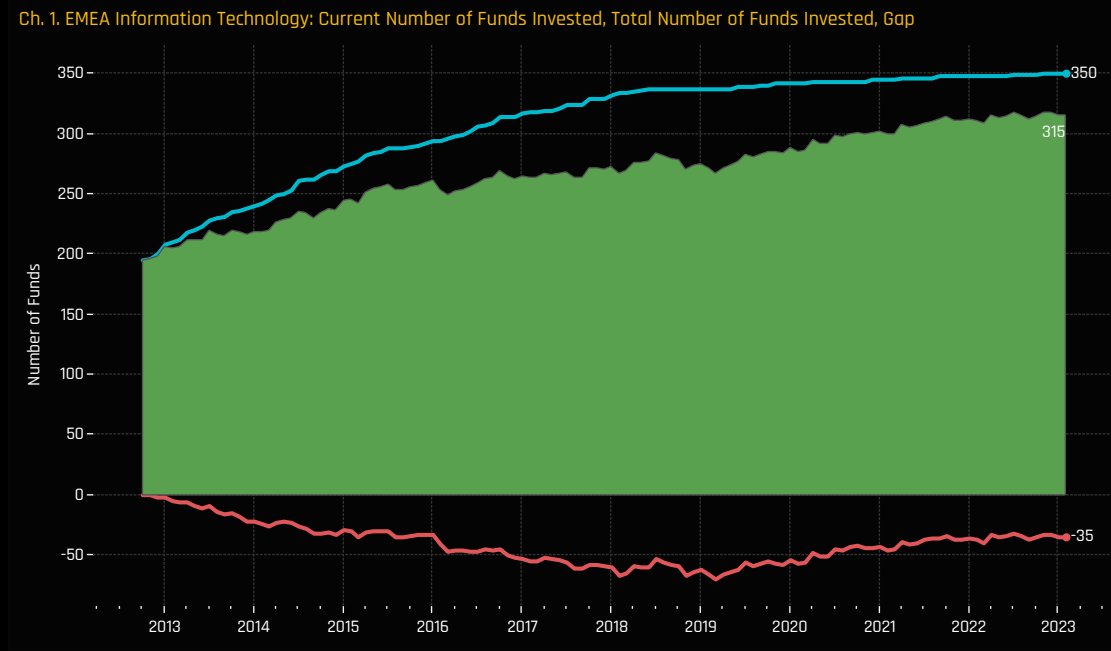


Chart 2: The orange lines show the current AUM in EMEA Information Technology stocks for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.

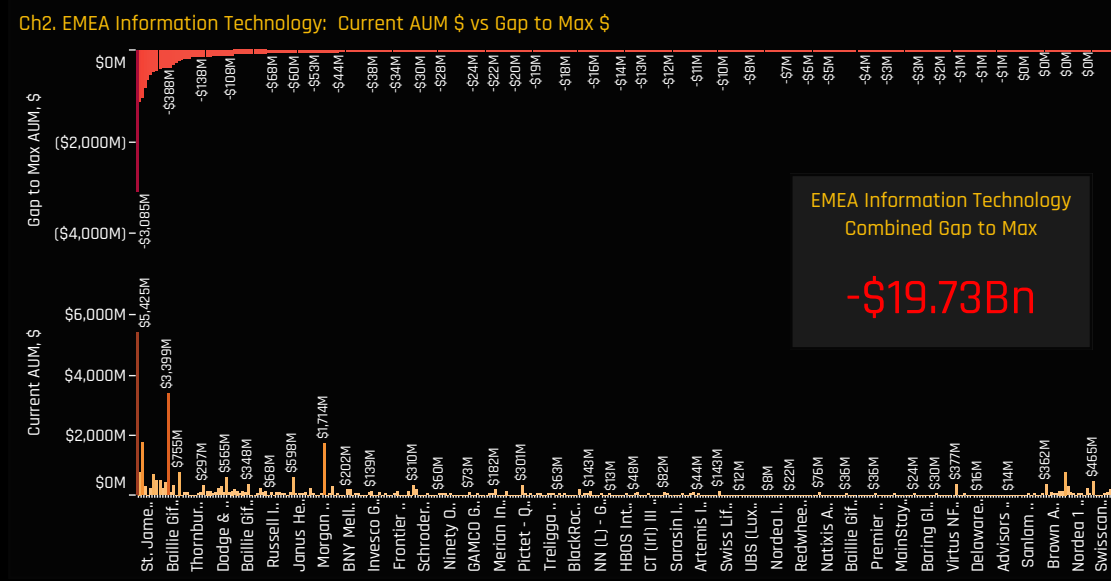


Chart 3: The Z-Score of current weights versus history for all current and previous holders of EMEA Information Technology stocks. A value of 100% means today's weight is the highest on record for that fund, zero the lowest.

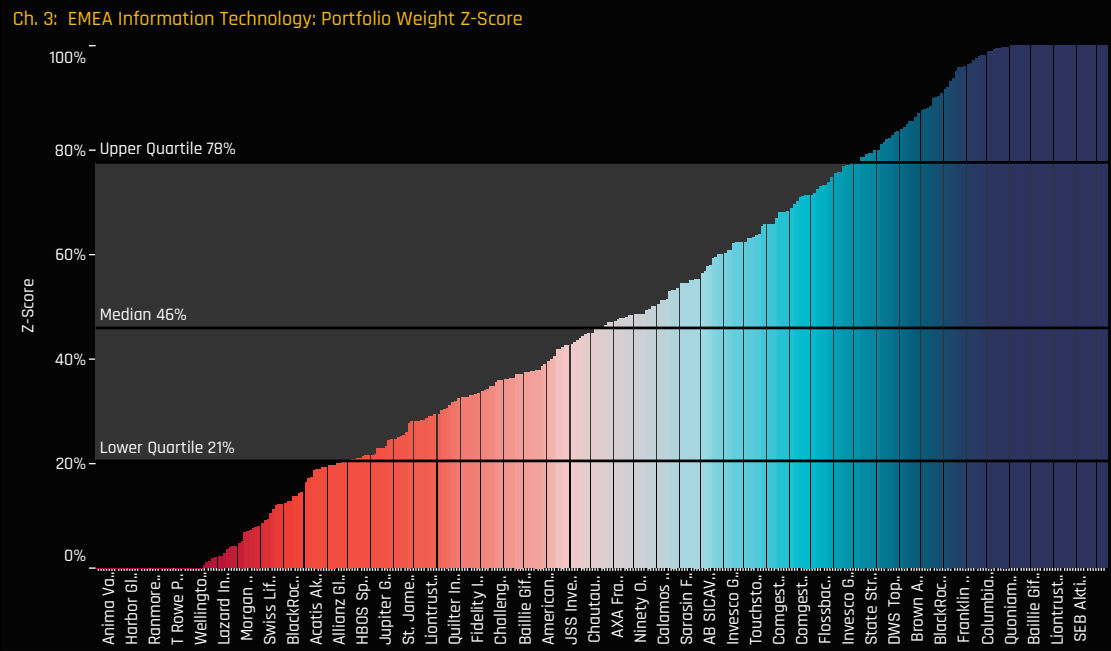


Chart 4: Blue lines show the current weight in EMEA Information Technology stocks for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.

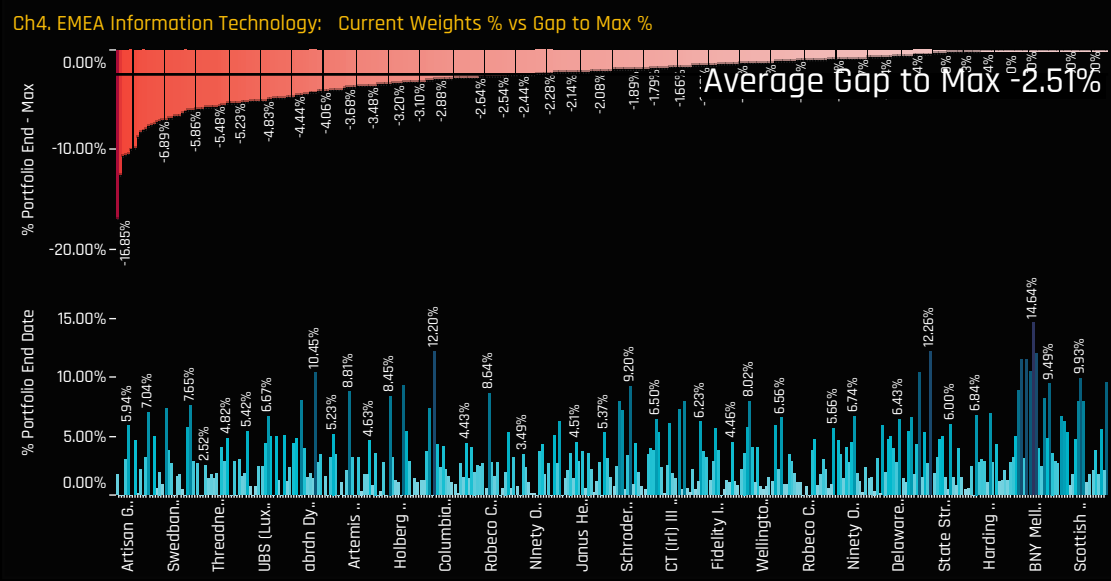


Chart 1: Current fund weight, maximum fund weight and difference for EMEA Information Technology stocks.
 Chart 2: Current fund AUM, maximum fund AUM and \$ difference for EMEA Information Technology stocks

Chart 3: Current fund weight, maximum fund weight and Z-Score for EMEA Information Technology stocks, ranked by Z-Score
 Chart 4: Current fund AUM, maximum AUM and Z-Score for EMEA Information Technology stocks, ranked by Z-Score.

Ch. 1: EMEA Information Technology: Largest Gap to Max (%)

Fund Name	Latest Weight	Max Weight	Difference
Hermes Inv. Funds Plc - Impact Opportunities Equity Fund	1.58%	18.54%	-16.85%
JOHCM Umbrella Fund Plc - Global Opportunities Fund	0.00%	12.51%	-12.51%
JOHCM Umbrella Fund Plc - Global Select Fund	0.00%	10.59%	-10.59%
Artisan Global Discovery Fund	3.01%	13.47%	-10.45%
Artisan Global Opportunities Fund	5.94%	16.23%	-10.29%
Harbor Global Leaders Fund	0.00%	9.96%	-9.96%
Aberdeen Std. OEIC II - ASI Global Uncon. Equity Fund	4.65%	14.47%	-9.82%
HSBC GIF - Global Equity Volatility Focused	0.12%	8.89%	-8.77%
Quilter Investors Series I - Global Unconstrained Equity Fund	2.17%	10.29%	-8.12%
Aberdeen Standard SICAV II - Global Equities Fund	0.00%	7.98%	-7.98%
Liontrust Global Income Fund	3.25%	11.19%	-7.93%
GAMCO Global Growth Fund	7.04%	14.61%	-7.57%
BL - Global Equities	0.00%	7.44%	-7.44%
Rolinco NV	4.92%	12.28%	-7.36%
Morgan Stanley Inv. Fds. - Global Opportunity Fund	0.54%	7.71%	-7.18%
AZ Fund 1 - Equity - Global Growth	1.95%	9.07%	-7.11%
Artisan Global Equity Fund	0.96%	7.93%	-6.97%
Chautauqua Global Growth Fund	7.42%	14.31%	-6.89%
Uni 21. Jahrhundert -net-	3.78%	10.60%	-6.82%
Fundsmith Equity Fund	2.63%	9.41%	-6.77%

Ch. 3: EMEA Information Technology: Highest Ownership Z-Score (%)

Fund Name	Latest Weight	Max Weight	Z-Score
Fidelity Funds SICAV - Global Thematic Opportunities Fund	4.85%	4.85%	100.00%
Templeton Growth Fund Inc.	3.85%	3.85%	100.00%
BNY Mellon Investment Fds. - Global Opportunities Fund	12.04%	12.04%	100.00%
Virtus NFJ Global Sustainability Fund	9.61%	9.61%	100.00%
Vanguard Global ESG Select Stock Fund	2.13%	2.13%	100.00%
UniFavorit: Aktien	5.59%	5.59%	100.00%
UNI-GLOBAL - Equities World	1.79%	1.79%	100.00%
SWIP Overseas Growth ICVC - Global Growth Fund	2.08%	2.08%	100.00%
SEI Institutional Managed Trust - Global Managed Vol. Fund	1.72%	1.72%	100.00%
SEB Aktiesparfond	7.95%	7.95%	100.00%
Scottish Mortgage Investment Trust Plc	9.93%	9.93%	100.00%
Schoellerbank Aktienfonds Value	7.98%	7.98%	100.00%
Sanlam Universal Fds. Plc - Global High Quality Fund	4.70%	4.70%	100.00%
Russell Inv. Co. Plc - Acadian Global Managed Volatility Eq.	1.75%	1.75%	100.00%
Mundoval Fund	0.79%	0.79%	100.00%
M&G Investment Funds (1) OEIC - Global Themes Fund	6.22%	6.22%	100.00%
Liontrust Sustainable Future ICVC - Global Growth Fund	6.72%	6.72%	100.00%
Jupiter Asset Mgmt. Series plc - Merian World Equity Fund	2.85%	2.85%	100.00%
FTIF SICAV - Growth (Euro) Fund	3.59%	3.59%	100.00%
Frontier MFG Global Plus Fund	9.49%	9.49%	100.00%

Ch. 2: EMEA Information Technology: Largest Gap to Max (\$)

Fund Name	Latest AUM, \$	Max AUM, \$	Difference
American Funds New Perspective Fund	\$5,425M	\$8,510M	-\$3,085M
Fundsmith Equity Fund	\$791M	\$1,902M	-\$1,111M
Scottish Mortgage Investment Trust Plc	\$1,752M	\$2,795M	-\$1,033M
PGIM Jennison Global Opportunities Fund	\$273M	\$1,111M	-\$838M
St. James's Place International Equity Unit Trust		\$665M	-\$665M
Franklin Mutual Ser. Fds. - Global Discovery Fund	\$248M	\$788M	-\$541M
Swedbank Robur Allemansfond Komplet	\$662M	\$1,128M	-\$467M
Old Westbury Large Cap Strategies Fund	\$504M	\$952M	-\$447M
Sands Capital Funds Plc - Global Growth Fund	\$492M	\$903M	-\$411M
Artisan Global Opportunities Fund	\$227M	\$624M	-\$397M
Swedbank Robur Kapitalinvest	\$389M	\$782M	-\$393M
American Funds Capital World Growth & Income Fund	\$3,399M	\$3,790M	-\$391M
Wellington Mgmt. Fds. (LU) - Global Quality Growth Fund	\$85M	\$474M	-\$388M
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	\$325M	\$654M	-\$338M
JOHCM Umbrella Fund Plc - Global Select Fund		\$265M	-\$265M
SJP Global Quality Fund	\$755M	\$985M	-\$229M
Fidelity Series Intrinsic Opportunities Fund	\$22M	\$243M	-\$221M
Fidelity Inv. Funds - Global Special Situations Fund	\$103M	\$292M	-\$189M
Skagen Global	\$106M	\$275M	-\$171M
Artemis Global Income Fund		\$167M	-\$167M

Ch. 4: EMEA Information Technology: Highest Ownership Z-Score (\$)

Fund Name	Latest AUM, \$	Max AUM, \$	Z-Score
UniNachhaltig Aktien Global	\$168M	\$168M	100.00%
SEI Institutional Managed Trust - Global Managed Vol. Fund	\$15M	\$15M	100.00%
SEB Aktiesparfond	\$111M	\$111M	100.00%
Waverton Inv. Fds. Plc - Global Equity Fund	\$14M	\$14M	100.00%
Vanguard Global ESG Select Stock Fund	\$18M	\$18M	100.00%
UniFavorit: Aktien	\$465M	\$465M	100.00%
Swisscanto (CH) IPF I - Equity Fund World Enhanced	\$36M	\$36M	100.00%
SWIP Overseas Growth ICVC - Global Growth Fund	\$25M	\$25M	100.00%
St. James's Place Unit Trust - Global Value	\$208M	\$208M	100.00%
Russell Inv. Co. Plc - Acadian Global Managed Volatility Eq.	\$21M	\$21M	100.00%
Robeco Capital Gr. Fds. - Sustainable Global Stars Equities	\$34M	\$34M	100.00%
Nordea 1 - Global Stars Equity Fund	\$41M	\$41M	100.00%
Mundoval Fund	\$0M	\$0M	100.00%
Multicooperation SICAV - Julius Baer Equity Fund Special Value	\$45M	\$45M	100.00%
M&G Investment Funds (1) OEIC - Global Themes Fund	\$189M	\$189M	100.00%
JPMorgan Investment Funds - Global Dividend Fund	\$95M	\$95M	100.00%
FTIF SICAV - Growth (Euro) Fund	\$266M	\$266M	100.00%
Fidelity Funds SICAV - Global Dividend Fund	\$784M	\$784M	100.00%
Deka - GlobalChampions CF/TF	\$115M	\$115M	100.00%
Camgest Monde	\$123M	\$123M	100.00%

EMEA Information Technology

Flow Potential

Chart 1: Current fund weight, maximum fund weight and the difference for EMEA Information Technology stocks. Filtered for funds that have bought in to EMEA Information Technology between 7/31/2022 - 1/31/2023

Chart 2: Current fund AUM, maximum fund AUM and the USD difference for EMEA Information Technology stocks. Filtered for funds that have bought in to EMEA Information Technology between 7/31/2022 - 1/31/2023

Ch. 1: EMEA Information Technology: Largest Gap to Max (%) and Buying between 7/31/2022 - 1/31/2023

Fund Name	Latest Weight	Max Weight	Difference	Fund Flows, \$
Hermes Inv. Funds Plc - Impact Opportunities Equity Fund	1.68%	18.54%	-16.85%	\$6M
HSBC GIF - Global Equity Volatility Focused	0.12%	8.89%	-8.77%	\$0M
Quilter Investors Series I - Global Unconstrained Equity Fund	2.17%	10.29%	-8.12%	\$3M
Chautauqua Global Growth Fund	7.42%	14.31%	-6.89%	\$2M
Uni 21. Jahrhundert -net-	3.78%	10.60%	-6.82%	\$10M
Jupiter Global Fund (The) - Global Value Fund	1.57%	8.13%	-6.55%	\$1M
Aviva Invs. - Global Equity Endurance Fund	2.92%	8.27%	-5.35%	\$5M
Invesco Funds - Sustainable Global Structured Equity Fund	0.64%	5.74%	-5.10%	\$1M
Value Square Fund - Equity World	2.39%	7.41%	-5.02%	\$2M
DPAM B - Equities World Sustainable	6.67%	11.59%	-4.92%	\$1M
Calamos Global Equity Fund	5.02%	9.80%	-4.79%	\$0M
Ninety One Glb. Strat. Fd. - Global Quality Dividend Growth	5.14%	9.85%	-4.71%	\$2M
Fidelity Funds SICAV - Global Demographics Fund	4.89%	9.36%	-4.48%	\$9M
Janus Henderson Sustainable/Responsible Funds-Global Sus Eq.	8.05%	12.49%	-4.44%	\$13M
Aristotle/Saul Global Equity Fund	1.51%	5.89%	-4.38%	\$0M
St. James's Place Unit Trust - Global Value	1.57%	5.64%	-4.07%	\$161M
Sarasin Funds ICVC - Thematic Global Equity	2.12%	5.85%	-3.73%	\$0M
Fidelity Funds SICAV - Global Focus Fund	1.77%	5.33%	-3.56%	\$3M
American Century Focused Global Growth Fund	2.76%	6.14%	-3.38%	\$1M
RBC Global Opportunities Fund	1.06%	4.30%	-3.25%	\$0M

Ch. 2: EMEA Information Technology: Largest Gap to Max (\$) and Buying between 7/31/2022 - 1/31/2023

Fund Name	Latest AUM, \$	Max AUM, \$	Difference	Fund Flows, \$
Franklin Mutual Ser. Fds. - Global Discovery Fund	\$248M	\$788M	-\$541M	\$34M
American Funds Capital World Growth & Income Fund	\$3,399M	\$3,790M	-\$391M	\$429M
UniGlobal	\$297M	\$435M	-\$138M	\$60M
DPAM B - Equities World Sustainable	\$140M	\$275M	-\$135M	\$1M
St. James's Place Unit Trust - Global	\$45M	\$177M	-\$131M	\$36M
DNB Global (IV)	\$240M	\$364M	-\$124M	\$16M
Dodge & Cox Global Stock Fund	\$78M	\$194M	-\$116M	\$12M
Artisan Global Value Fund	\$29M	\$125M	-\$96M	\$4M
Vontobel Fund - Global Equity	\$112M	\$205M	-\$93M	\$30M
Schroder QEP Global Active Value Fund	\$3M	\$86M	-\$83M	\$1M
Russell Investment Company II Plc - World Equity Fund (The)	\$21M	\$90M	-\$68M	\$4M
American Funds New Economy Fund	\$598M	\$659M	-\$61M	\$226M
Janus Henderson Global Select Fund	\$61M	\$120M	-\$59M	\$2M
Vanguard Global Equity Fund	\$79M	\$137M	-\$58M	\$32M
Russell Invst. Co. Plc - World Equity Fund II (The)	\$6M	\$62M	-\$56M	\$1M
Hermes Inv. Funds Plc - Impact Opportunities Equity Fund	\$8M	\$59M	-\$51M	\$6M
Nordea Invest Portefolje Aktier	\$64M	\$114M	-\$50M	\$2M
Morgan Stanley Inv. Fds. - Global Brands Fund	\$1,714M	\$1,763M	-\$49M	\$119M
Swedbank Robur Aktiefond Pension	\$274M	\$320M	-\$45M	\$35M
Sparinvest Value Aktier	\$18M	\$63M	-\$45M	\$1M

Chart 3: Current fund weight, maximum fund weight and Z-Score for EMEA Information Technology stocks, ranked by Z-Score. Filtered for funds that have sold EMEA Information Technology between 7/31/2022 - 1/31/2023 and have a % Z-Score of above 50%.

Chart 4: Current fund AUM, maximum AUM and Z-Score for EMEA Information Technology stocks, ranked by Z-Score. Filtered for funds that have sold EMEA Information Technology between 7/31/2022 - 1/31/2023 and have a \$ Z-Score of above 50%.

Ch. 3: EMEA Information Technology: Z-Score (%) > 50% and selling between 7/31/2022 - 1/31/2023

Fund Name	Latest Weight	Max Weight	Z-Score	Fund Flows, \$
Frontier MFG Global Plus Fund	9.49%	9.49%	100.00%	\$0M
Baron Global Advantage Fund	14.64%	14.64%	100.00%	(\$7M)
Scottish Mortgage Investment Trust Plc	9.93%	9.93%	100.00%	(\$56M)
Delaware Global Equity Fund	8.24%	8.24%	100.00%	(\$1M)
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	11.57%	11.57%	100.00%	(\$22M)
BNY Mellon Investment Fds. - Global Opportunities Fund	12.04%	12.04%	100.00%	(\$2M)
Liontrust Sustainable Future ICVC - Global Growth Fund	6.72%	6.72%	100.00%	(\$5M)
Brown Advisory Funds Plc - Global Leaders	2.91%	2.96%	98.27%	(\$5M)
Invesco Global Invst. Ser. - Global Focus Fund (UK)	12.26%	12.63%	97.08%	\$0M
FP WHEB Asset Mgmt. Fds. - Sustainability Fund	6.00%	6.18%	96.58%	(\$10M)
S&W Aubrey Capital Mgmt. Invst. Funds - Global Conviction Fund	10.37%	10.82%	95.90%	(\$2M)
Polen Global Growth Fund	5.03%	5.29%	95.09%	(\$2M)
Lazard Global Equity Select Portfolio	5.44%	5.93%	90.17%	\$0M
Janus Henderson Global Equity Fund	4.79%	5.43%	88.23%	(\$2M)
Alger Global Focus Fund	8.02%	9.27%	86.14%	\$0M
William Blair Global Leaders Fund	6.55%	7.68%	85.41%	\$0M
JPMorgan Funds - Global Focus Fund	5.66%	6.53%	85.37%	(\$13M)
BNY Mellon Investment Fds. - Global Income Fund	4.55%	5.37%	84.81%	(\$13M)
AB Sustainable Global Thematic Fund	7.31%	8.98%	79.37%	(\$1M)
American Funds New Perspective Fund	4.77%	5.70%	77.77%	(\$304M)

Ch. 4: EMEA Information Technology: Z-Score (\$) > 50% and selling between 7/31/2022 - 1/31/2023

Fund Name	Latest AUM, \$	Max AUM, \$	Z-Score	Fund Flows, \$
Brown Advisory Funds Plc - Global Leaders	\$71M	\$71M	100.00%	(\$5M)
Delaware Global Equity Fund	\$16M	\$17M	92.59%	(\$1M)
JPMorgan Funds - Global Focus Fund	\$162M	\$179M	89.83%	(\$13M)
Liontrust Sustainable Future ICVC - Global Growth Fund	\$143M	\$159M	89.66%	(\$5M)
Polen Global Growth Fund	\$24M	\$27M	89.36%	(\$2M)
ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds	\$182M	\$204M	87.80%	(\$12M)
Raiffeisen Nachhaltigkeitsfonds Aktien	\$89M	\$102M	87.01%	(\$1M)
Lazard Global Equity Select Portfolio	\$5M	\$7M	81.61%	\$0M
Schroder Global Equity Fund	\$49M	\$60M	80.60%	(\$4M)
BNY Mellon Investment Fds. - Global Income Fund	\$201M	\$244M	78.86%	(\$13M)
St. James's Place Unit Trust - Sust. & Responsible Eq.	\$206M	\$261M	78.45%	(\$3M)
LSV Global Value Fund	\$1M	\$1M	78.22%	\$0M
FP WHEB Asset Mgmt. Fds. - Sustainability Fund	\$63M	\$81M	77.32%	(\$10M)
MFS Global Growth Fund	\$7M	\$10M	74.28%	\$0M
UBS (Lux) Equity SICAV - Long Term Themes (USD)	\$226M	\$302M	74.19%	(\$3M)
GAMAX Funds - Junior	\$11M	\$14M	73.80%	(\$1M)
Baillie Gifford UK & Bal. Fds. - Global Income Growth	\$14M	\$18M	72.10%	(\$3M)
Janus Henderson Global Equity Fund	\$41M	\$56M	71.34%	(\$2M)
T Rowe Price Global Stock Fund	\$276M	\$393M	69.48%	(\$5M)
Fidelity Inv. Trust - Global Equity Income Fund	\$6M	\$9M	68.96%	(\$2M)

Style Classifications

Each fund is split into a Style category based on the P/E and P/B ratios of their portfolio compared to the benchmark

Aggressive Growth: At least 70% of the portfolio in stocks with a higher P/E than the SPDR MSCI ACWI UCITS ETF average, and at least 70% with a higher P/B ratio.

Growth: At least 50% of the portfolio in stocks with a higher P/E than the SPDR MSCI ACWI UCITS ETF average, and at least 50% with a higher P/B ratio.

Value: Either by the fund description, or at least 50% of the portfolio in stocks with a lower P/E ratio than the SPDR MSCI ACWI UCITS ETF average, and at least 50% with a lower P/B ratio

Yield: As per the fund description only (i.e Yield, Dividend, Income funds).

GARP: All other iterations that do not fit under the above classifications.

Ownership Calculations

We track Global Fund ownership across sectors, industries and stocks using a variety of calculations. They are listed below:

Average Weight: The sum of all fund weights in any measure (region, country, sector, industry, stock) divided by the total number of funds (358) in the analysis.

Average Weight vs ACWI: The average weight minus the weight in the SPDR MSCI ACWI UCITS ETF (cash removed and weights adjusted).

Funds Invested %: The total number of funds with any exposure to a measure divided by the total number of funds (358) in the analysis.

Funds O/W: The total number of funds overweight a measure versus the ACWI, divided by the total number of funds (358) in the analysis.

AUM, \$: The combined AUM allocated to a particular measure across the 358 active Global funds in our analysis, in US Dollars



DISCLAIMER

This report is published by, and remains the copyright of, Copley Fund Research Limited. Unless otherwise agreed with Copley Fund Research Limited, this report may only be used by the permitted recipients and shall not be provided to any third parties. Receipt of this report should not be taken as permission to reproduce, copy or use any of the charts or data in internal or external presentations. To do so requires separate permission from Copley Fund Research Limited.

Copley Fund Research Limited uses reasonable efforts to obtain information from reliable sources, but all Publications are provided on an "as is" basis without representation or warranty of any kind (neither express nor implied) and Copley Fund Research disclaims liability for any Publication not being complete, accurate, suitable and relevant for the recipient.

The comments in this publication are for general information purposes only and do not constitute personalised financial advice. No consideration has been taken of your personal financial situation or investment goals in preparing this publication and the distribution of this publication is not a personalised service under the Financial Advisers Act 2008. If you wish to receive personalised financial advice, please contact your Investment Advisor.

Further, nothing in this report shall constitute or be deemed to constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument. Should you undertake any such activity based on information contained in this report, you do so entirely at your own risk and Copley Fund Research shall have no liability whatsoever for any loss, damage, costs or expenses incurred or suffered by you as a result.

For US Investors this report is solely for Institutional use – not for public distribution.

For Canadian investors this report is solely for use by accredited investors.