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

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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

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



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

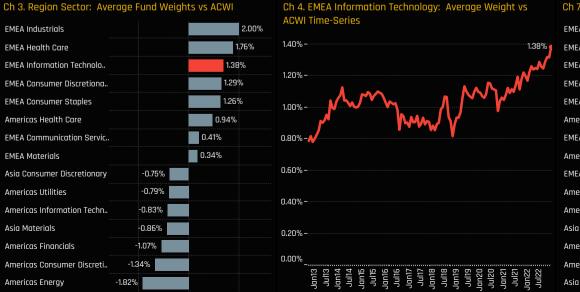
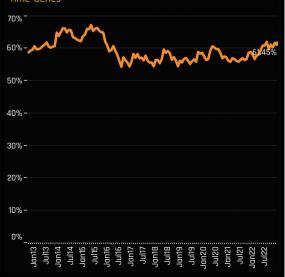


Chart 7. The percentage of active Global funds who are overweight the SPDR MSCI ACWI UCITS ETF weight, by Region Sector Chart 8. The time series of Funds Overweight % for EMEA Information Technology stocks

Ch 7. Region Sector: Funds Overweight %

69.27% **EMEA** Industrials 68.99% EMEA Health Care EMEA Information Technolo. 61.45% **EMEA Consumer Staples** 60.61% EMEA Consumer Discretiona. 60.61% Americas Health Care 58.66% 46.65% EMEA Materials 45.25% Americas Information Techn. EMEA Communication Servic. 42.74% Americas Financials 38.83% 31.84% Americas Consumer Discreti. Asia Consumer Discretionary 24,58% 23.74% Americas Utilities 19.27% Americas Energy Asia Materials 14.53%

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



Fund Holdings



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.

4%-4.5%

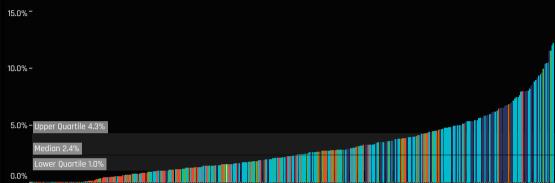
4.5%-5% 5%-5.5% 5.5%-6% 5%-6.5%

3.5%-4%



%-10.5% 1.5%-12% 2%-12.5% 4.5%-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 2. EMEA Information Technology: Top Fund Holdings, %

2%-2.5% 2.5%-3% 3%-3.5%

1.5%-2%

40 -

30 -

20-

10 -

0%-0.5% 0.5%-1% 1%-1.5%

Fund Name Baron Global Advantage Fund Invesco Global Invt. Ser. - Global Focus Fund (UK) Sands Capital Funds Plc - Global Growth Fund BNY Mellon Investment Fds. - Global Opportunities Fund Baillie Gifford Investment Funds ICVC - Long Term Global Gr. Allianz Global Investors Fund - Global Equity Growth Baillie Gifford Investment Funds ICVC - Positive Change Fund ASN Beleggingsfondsen UCITS NV - Duurzaam Aandelenfonds S&W Aubrey Capital Mgmt. Invt. Funds - Global Conviction Fund Scottish Mortgage Investment Trust Plc Virtus NFJ Global Sustainability Fund Frontier MFG Global Plus Fund MainFirst SICAV - Global Equities Fund NN (L) - Global Equity Impact Opportunities AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund Swedbank Robur Allemansfond Komplett AB SICAV I - Concentrated Global Equity Portfolio First Sentier Investors ICVC - Stewart Inv. Worldwide Sus. Delaware Global Equity Fund Janus Henderson Sustainable/Responsible Funds-Global Sus Eq. Alger Global Focus Fund Eaton Vance Focused Global Opportunities Fund Morgan Stanley Invt. Fds. - Global Brands Fund Schoellerbank Aktienfonds Value SEB Aktiesparfond Swedbank Robur Kapitalinvest **BNP Paribas OBAM NV** Chautauaua Global Growth Fund

AB Sustainable Global Thematic Fund

DNB Global (IV)

Style	
GARP	14.64%
Aggressive Growth	12.25%
Growth	12.20%
Growth	12.04%
GARP	11.57%
Aggressive Growth	11.53%
Growth	10.47%
Growth	10.45%
Aggressive Growth	10.37%
GARP	9.93%
Aggressive Growth	9.61%
Growth	9.49%
Growth	9.36%
Aggressive Growth	9.20%
Growth	8.91%
Growth	8.81%
Aggressive Growth	8.64%
Aggressive Growth	8.45%
Growth	8.24%
Growth	8.05%
Aggressive Growth	8.02%
Aggressive Growth	7.99%
Aggressive Growth	7.98%
Value	7.98%
Growth	7.95%
Growth	7.65%
Growth	7.44%
Growth	7.42%
Growth	7.31%
Growth	7.15%

3.5%-9% %-9.5% .5%-10%

.5%-8% 3%-8.5%

5.5%-7% %5'L-%

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

Fund Name	Style	
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 Invt. 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 Komplett	Growth	\$661.60M
American Funds New Economy Fund	Growth	\$597.67M
Ninety One Glb. 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
Folksams 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
PGIM 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

Aggregate Ownership Changes



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

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

EMEA Financials	0.46%	C
EMEA Consumer Discretionary	0.35%	
Asia Financials	0.32%	A
EMEA Industrials	0.26%	E
EMEA Materials	0.19%	A
EMEA Information Technology	0.18%	E
Americas Financials	0.15%	A
Americas Energy	0.13%	A
Americas Utilities	-0.11%	E
Americas Real Estate	-0.13%	A
Americas Consumer Staples	-0.15%	A
Americas Consumer Discretionary	-0.23%	A
Americas Health Care	-0.26%	E
Americas Communication Services	-0.58%	E
Americas Information Technology	-1.13%	A

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

		· <u>······</u> :
Americas Consumer Discretionary		0.57%
Americas Information Technology		0.29%
EMEA Consumer Staples		0.12%
Cash & Other Products Cash & Other Pro		0.10%
EMEA Information Technology		0.09%
EMEA Health Care		0.08%
Asia Financials		0.07%
EMEA Materials		0.06%
Americas Consumer Staples	-0.10%	
Asia Communication Services	-0.15%	
Americas Communication Services	-0.15%	
Americas Energy	-0.17%	
Americas Financials	-0.22%	
Americas Health Care	-0.25%	
Americas Industrials	-0.29%	

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

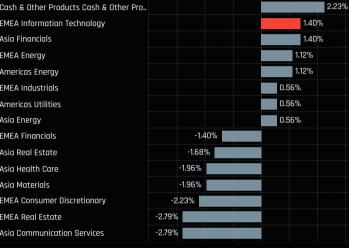


Chart 4. Measures the largest changes in the percentage of funds overweight each Region Sector compared to the SPDR MSCI ACWI UCITS ETF between 7/31/2022 and 1/31/2023. An increasing figure would indicate more funds are positioning themselves overweight over the period.

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

					6.70%
				2.79%	
				2.51%	
				2.23%	
			1	.68%	
			1	.68%	
			1.4	10%	
			0.569	%	
	-2.79%				
	-2.79%				
-3.6	53%				
-3.9	1%				
-4.19	%				
-4.19	%				
-4.75%					
	-3.6 -3.9 -4.19 -4.19	-2.79% -2.79% -3.63% -3.91% -4.19% -4.19%	-2.79%	-2.79%2.79\%2.	2.51% 2.23% 2.23% 1.68% 1.68% 1.68% 1.40% 0.56% -2.79% -2.79% -2.79% -2.79% -3.63% -3.91% -3.91% -4.19%

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

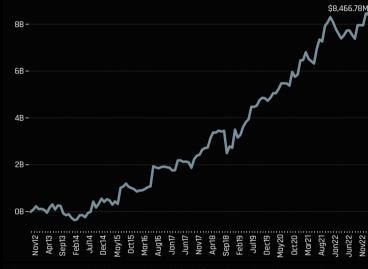


Chart 6. Measures the largest estimated fund flows for each Region Sector between 7/31/2022 and 1/31/2023.

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

EMEA Health Care		\$3,282.71M
EMEA Energy		\$2,101.11M
EMEA Information Technology		\$906.64M
Americas Utilities		\$689.00M
EMEA Consumer Staples		\$485.98M
EMEA Industrials		\$440.91M
EMEA Communication Services		\$349.72M
Asia Materials		\$285.16M
Americas Consumer Staples	(\$1,154.38M)	
Cash & Other Products Cash & Other Pro	(\$1,458.07M)	
Asia Information Technology	(\$1,904.40M)	
Americas Communication Services	(\$2,850.41M)	
Americas Financials	(\$2,939.62M)	
Americas Information Technology	(\$3,576.49M)	
Americas Consumer Discretionary	(\$5,038.97M)	

Fund Holding Changes



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 Invt. 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 Invt. Fds Global Brands Fund		7.98%	1.77%
Invesco Global Growth Fund		4.43%	1.70%
Hermes Invt. Funds Plc - Impact Opportunities Equity Fund	New	1.68%	1.68%
Baron Global Advantage Fund			14.64%
Russell Invt. Co. Plc - Acadian Global Managed Volatility Eq.		1.76%	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, %

					- I.V.
Fund Name	New or Close.	Latest W		Weight Change	Fund No
GAMCO Global Growth Fund			7.04%	-3.91%	Americo
Swedbank Robur Kapitalinvest			7.65%	-3.03%	Swedbo
Swedbank Robur Allemansfond Komplett			8.81	% -2.79%	Swedbo
GAM Funds - Disruptive Growth		4	1.02%	-2.61%	Swedbo
BL - Global Equities	Close	0.00%		-2.29%	PGIM Je
Pax Global Environmental Markets Fund			4.63%	-2.11%	Scottish
Invesco Global Invt. Ser Global Equity Income Fund (UK)		3.1	5%	-1.99%	Pax Glol
LO Funds - Golden Age	Close	0.00%		-1.98%	Franklin
PGIM Jennison Global Opportunities Fund			5.84%	-1.74%	Robeco
BNP Paribas Funds - Sustainable Global Low Vol Equity		2.83	3%	-1.65%	Fidelity
Russell Invt. Co. Plc - Acadian Global Equity Fund		0.31%		-1.56%	Baillie G
Nationwide Global Sustainable Equity Fund		1.24%		-1.54%	BNY Me
GAM Star Fund Plc - Worldwide Equity			4.92%	-1.41%	Janus H
Skagen Focus			4.36%	-1.41%	BlackRo
Russell Invt. Co. Plc - Acadian Sustainable Glb. Equity UCITS		0.73%		-1.38%	BNP Par
Artisan Global Opportunities Fund			5.94%	-1.27%	Invesco
Swedbank Robur Globalfond	Close	0.00%		-1.23%	JPMorg
LF Liontrust Investment Funds III - Global Focus Fund		0.50%		-1.19%	BNY Me
JPMorgan Funds - Global Growth Fund		3	.93%	-1.11%	Baillie G
UBS (Lux) Equity SICAV - Global High Dividend Sust. (USD)	Close	0.00%		-0.96%	ASN Bel

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, \$

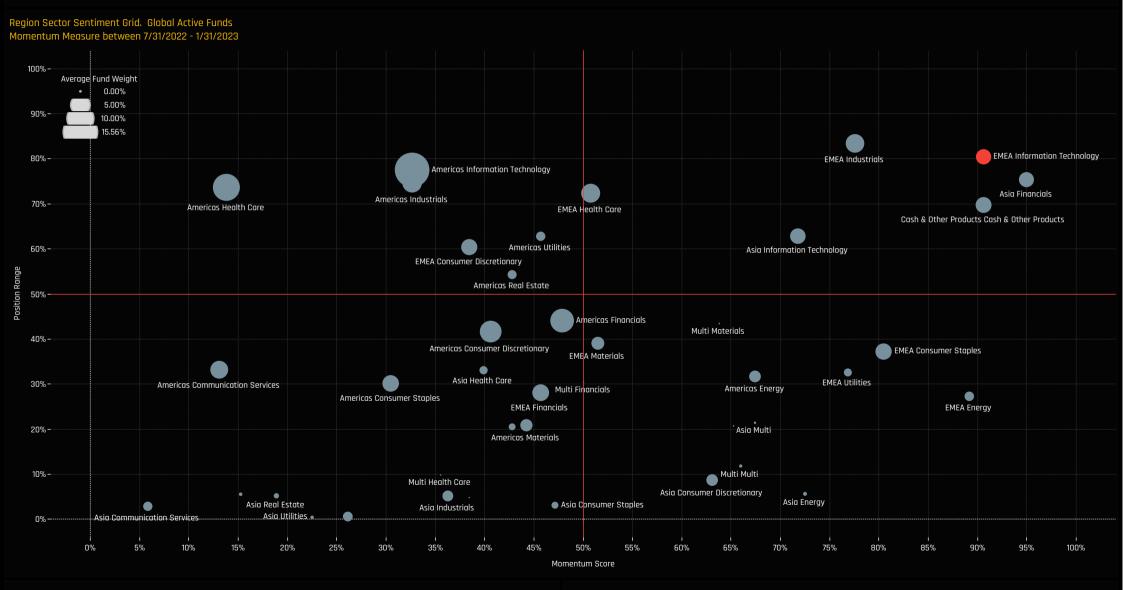
Fund Name	New or Close	Latest AUM, \$	Fund Flows, \$
American Funds Capital World Growth & Income Fund		\$3,398.82M	\$429.02M
UniFavorit: Aktien		\$465.27M	\$300.84M
American Funds New Economy Fund		\$597.67M	\$225.80M
St. James's Place Unit Trust - Global Value		\$207.58M	\$160.56M
Fidelity Funds SICAV - Global Dividend Fund		\$783.87M	\$154.91M
Morgan Stanley Invt. 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 Invt. 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		\$5,425.15	5M (\$304.07M)
Swedbank Robur Allemansfond Komplett		\$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.		\$326.16M	(\$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 Invt. 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.



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)

Aggregate Country Ownership

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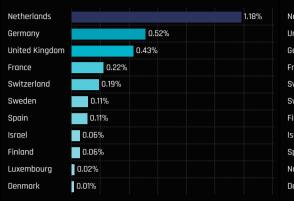


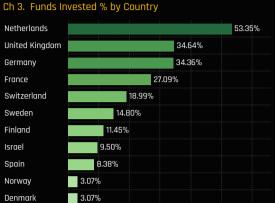
Chart 1-5. EMEA Information Technology: Key ownership statistics by Country. As of 1/31/2023

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

0.11%

Ch 1. Average Country Weights

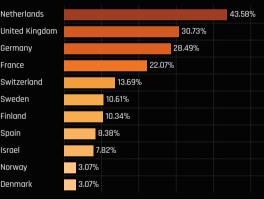




Ch 2. Average Country Weights vs ACWI

Netherlands				0.55%
United Kingdom			0.29%	
Germany			0.24%	
Spain		0.06%		
France		0.06%		
South Africa		0.00%		
Portugal		0.00%		
Poland	0.00%			
Saudi Arabia	0.00%			
Italy	-0.01%			

Ch 4. Funds 0/W % by Country



Ch 7. Average Country Weight vs ACWI Chang

	, ,	2	
Netherlands			0.07%
Germany		0.03%	
Spain		0.01%	
Finland		0.01%	
Luxembourg		0.01%	
United Kingdom		0.01%	
Czech Republic	0.00%		
Saudi Arabia	0.00%		
Sweden	0.00%		
Denmark	-0.01%		
Switzerland	-0.01%		
Italy	-0.01%		

Ch 10. Combined Fund Flows \$ by Country

France				 \$614M
Finland			\$199M	
Netherlands		\$134M		
Israel		\$124M		
Spain		\$102M		
Germany		\$94M		
Czech Republic	(\$3	M)		
Luxembourg	(\$8N	1)		
Italy	(\$63M)			
Denmark	(\$66M)			
Sweden	(\$129M)			
Switzerland	(\$152M)			

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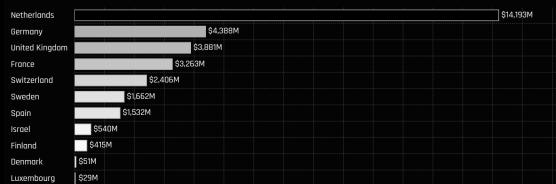
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Ch 5. Combined Fund AUM by Country



Netherlands 0.09% Germany

Ch 6. Average Country Weight Change

pain		0.01%		Un
rael		0.01%		Au
ixembourg		0.01%		Sa
nland		0.00%		Be
nited Kingdom	0.00%			Lu
vitzerland	-0.01%			Cz
enmark	-0.01%			De
ıly	-0.01%			lta
ance	-0.01%			Ge
veden	-0.02%			Fro

Ch 8. Funds Invested % by Country Change



Ch 9. Funds O/W % by Country Change

nland						2.51%
ited Kingdom					1.12%	
therlands					1.12%	
stria				0.56	5%	
ain				0.56	5%	
udi Arabia			0.	28%		
nmark		-0.56%				
rmany		-0.56%				
ly		-0.84%				
vitzerland		-1.12%				
veden	-1.96%					
ince	-2.51%					



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

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

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

on a cmcA information rechnology. Top runa level	Country Holuli
Baillie Gifford Investment Funds ICVC - Positive Change Fund	Netherlands
Sands Capital Funds Plc - Global Growth Fund	Netherlands
Allianz Global Investors Fund - Global Equity Growth	Netherlands
Scottish Mortgage Investment Trust Plc	Netherlands
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	Netherlands
Ninety One Glb. Strat. Fd Global Franchise Fund	Netherlands
Baron Global Advantage Fund	United Kingdom
Ninety One Glb. Strat. Fd Global Quality Equity Fund	Netherlands
Alger Global Focus Fund	Netherlands
Invesco Global Invt. Ser Global Focus Fund (UK)	Netherlands
Schoellerbank Aktienfonds Value	Germany
PGIM Jennison Global Opportunities Fund	Netherlands
JPMorgan Funds - Global Focus Fund	Netherlands
Morgan Stanley Invt. Fds Global Brands Fund	Germany
Comgest Monde	Netherlands
Comgest Growth Plc - Global Flex	Netherlands
GAMCO Global Growth Fund	Netherlands
Baron Global Advantage Fund	Netherlands
Ninety One Glb. Strat. Fd Global Quality Dividend Growth	Netherlands
Loomis Sayles Global Growth Fund	Netherlands
Chautauqua Global Growth Fund	Netherlands
NN (L) - Global Equity Impact Opportunities	United Kingdom
Polen Global Growth Fund	Germany
Calamos Global Equity Fund	Netherlands
JPMorgan Investment Funds - Global Select Equity Fund	Netherlands
Liontrust Sustainable Future ICVC - Global Growth Fund	Netherlands
MainFirst SICAV - Global Equities Fund	Netherlands
Morgan Stanley Invt. Fds Global Quality Fund	Germany
Janus Henderson Global Equity Fund	United Kingdom
Sanlam Universal Fds. Plc - Global High Quality Fund	Germany
Aberdeen Std. OEIC II - ASI Global Uncon. Equity Fund	Luxembourg
DPAM B - Equities World Sustainable	Netherlands
BNY Mellon Global Equity Income Fund	United Kingdom
AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund	Germany
BNY Mellon Investment Fds Global Income Fund	United Kingdom
Frontier MFG Global Plus Fund	Netherlands
Delaware Global Equity Fund	Spain
AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund	Switzerland
Virtus NFJ Global Sustainability Fund	Netherlands
Fidelity Funds SICAV - Global Dividend Fund	United Kingdom

inds		9.84%
inds		9.69%
inds		.98%
Inds	8.54	%
inds	8.30%	
Inds	6.74%	
ingdom	6.55%	
inds	6.44%	
Inds	6.27%	
inds	6.26%	
/	6.03%	
inds	5.84%	
inds	5,66%	
/	5.56%	
, inds	5.37%	
inds	5.37%	
inds	5.33%	
inds	5.14%	
inds	5.14%	
inds	5.14%	
inds	5.13%	
ingdom	5.04%	
/	5.03%	
inds	5.02%	
inds	4.99%	
inds	4.93%	
inds	4.35 %	
/	4.84%	
ingdom	4.79%	
	4.70%	
	4.65%	
burg	4.63%	
inds	÷	
ingdom	4.59%	
/	4.58%	
ingdom	4.55%	
inds	4.50%	
	4.44%	
and and	4.34%	
inds	4.25%	
ingdom	4.22%	

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

4%	Fund Name	Split Level Filter2	2	
1%	American Funds New Perspective Fund	Netherlands	\$2,540).64M
	American Funds Capital World Growth & Income Fund	Netherlands	\$2,090.50M	
	Scottish Mortgage Investment Trust Plc	Netherlands	\$1,514.97M	
	Morgan Stanley Invt. Fds Global Brands Fund	Germany	\$1,194.96M	
	American Funds New Perspective Fund	Switzerland	\$1,116.40M	
	American Funds Capital World Growth & Income Fund	France	\$797.30M	
	Fundsmith Equity Fund	Spain	\$791.10M	
	Ninety One Glb. Strat. Fd Global Franchise Fund	Netherlands	\$565.30M	
	Morgan Stanley Invt. Fds Global Brands Fund	United Kingdom	\$519.02M	
	American Funds New Perspective Fund	Germany	\$502.83M	
	Fidelity Funds SICAV - Global Dividend Fund	United Kingdom	\$483.46M	
	Sands Capital Funds Plc - Global Growth Fund	Netherlands	\$390.57M	
	American Funds New Economy Fund	Netherlands	\$332.98M	
	Baillie Gifford Investment Funds ICVC - Positive Change	Netherlands	\$327.27M	
	Old Westbury Large Cap Strategies Fund	Netherlands	\$319.31M	
	American Funds New Perspective Fund	United Kingdom	\$315.24M	
	SJP Global Quality Fund	Netherlands	\$310.30M	
	Fidelity Funds SICAV - Global Dividend Fund	France	\$30D.40M	
	American Funds New Perspective Fund	Spain	\$297.37M	
	American Funds New Perspective Fund	France	\$288.88M	
	Swedbank Robur Allemansfond Komplett	Sweden	\$286.87M	
	PGIM Jennison Global Opportunities Fund	Netherlands	\$273.11M	
	Scottish Mortgage Investment Trust Plc	United Kingdom	\$247.51M	
	American Funds Capital World Growth & Income Fund	United Kingdom	\$237.42M	
	Baillie Gifford Investment Funds ICVC - Long Term Global	Netherlands	\$234.D5M	
	Swedbank Robur Aktiefond Pension	Sweden	\$216.26M	
	UniGlobal	Netherlands	\$205.38M	
	UniFavorit: Aktien	France	\$204.28M	
	American Funds New Perspective Fund	Sweden	\$203.69M	
	Swedbank Robur Kapitalinvest	Sweden	\$201.93M	
	BNY Mellon Investment Fds Global Income Fund	United Kingdom	\$201.05M	
	Templeton Growth Fund Inc.	Germany	\$199.76M	
	American Funds Capital World Growth & Income Fund	Sweden	\$175.47M	
	FTIF SICAV - Growth (Euro) Fund	Germany	\$174.86M	
	American Funds Global Insight Fund	Netherlands	\$174.22M	
	First Eagle Global Fund	France	\$173.45M	
	St. James's Place Unit Trust - Global Value	Finland	\$165.08M	
	JPMorgan Funds - Global Focus Fund	Netherlands	\$161.65M	
	American Funds New Perspective Fund	Israel	\$160.11M	
	Franklin Mutual Ser. Fds Global Discovery Fund	France	\$159.57M	
	Value Yield			

Growth Fund Style 📃 Aggressive Growth

GARP



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, %

			Latest Weight
Fidelity Advisor Global Capital Appreciation Fund	Netherlands		3.75%
SEB Aktiesparfond	Netherlands	New	3.11%
Columbia Select Global Equity Fund	Netherlands	New	2.24%
Quilter Investors Series I - Global Unconstrained	France	New	2.17%
Vanguard Global ESG Select Stock Fund	Netherlands	New	2.13%
SEB Aktiesparfond	Germany	New	2.03%
Virtus NFJ Global Sustainability Fund	France	New	1.87%
Morgan Stanley Invt. Fds Global Brands Fund	Germany		
Hermes Invt. Funds Plc - Impact Opportunities Eq.	Switzerland	New	1.68%
DWS Concept DJE Globale Aktien	Netherlands	New	1.57%
Sanlam Universal Fds. Plc - Global High Quality F	Germany		4.
Virtus NFJ Global Sustainability Fund	Denmark	New	1.54%
Russell Invt. Co. Plc - Acadian Global Managed Vo.	United Kingdom		1.60%
Franklin Mutual Ser. Fds Quest Fund	Israel		2.79%
Danske Invest Global Sustainable Future - Akku	Netherlands		3.54%
UniFavorit: Aktien	Netherlands		1.79%
UniFavorit: Aktien	France		2.45%
Fidelity Advisor Global Capital Appreciation Fund	Spain	New	1.38%
Invesco Global Invt. Ser Global Equity Fund (UK)	Netherlands	New	1.37%
Uni 21. Jahrhundert -net-	Netherlands	New	1.37%

Latest Weight		Weight Change		
3.75%	6		3.13%	
3.11%			3.11%	
2.24%		2.24%		
2.17%		2.17%		
2.13%		2.13%		
2.03%		2.03%		
1.87%		1.87%		
	5.56%	1.75%		
1.68%		1.68%		
1.57%		1.57%		
	4.70%	1.54%		
1.54%		1.54%		
1.60%		1.49%		
2.79%		1.47%		
3.54%		1.42%		
1.79%		1.41%		
2.45%		1.38%		
1.38%		1.38%		
1.37%		1.37%		
1.37%		1.37%		

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

			Latest Weig	Jht	Weight Chai
GAMCO Global Growth Fund	Netherlands			5.33% -3.23%	
S&W Aubrey Capital Mgmt. Invt. Funds - Global C	Italy	Close	0.00%	-3.17%	
Invesco Global Invt. Ser Global Equity Income F	United Kingdom	Close	0.00%	-	2.31%
LO Funds - Golden Age	Denmark	Close	0.00%		-1.98%
Swedbank Robur Allemansfond Komplett	Sweden		3.82	2%	-1.82%
Skagen Focus	France		1.44%		-1.78%
PGIM Jennison Global Opportunities Fund	Netherlands			5.84%	-1.74%
Touchstone Strategic Trust - Non-US ESG Equity	Switzerland	Close	0.00%		-1.57%
GAM Funds - Disruptive Growth	Germany	Close	0.00%		-1.42%
Pax Global Environmental Markets Fund	Germany	Close	0.00%		-1.35%
LF Liontrust Investment Funds III - Global Focus	Netherlands	Close	0.00%		-1.23%
BL - Global Equities	France	Close	0.00%		-1.19%
JPMorgan Investment Funds - Global Select Equi	France	Close	0.00%		-1.19%
GAM Funds - Disruptive Growth	Netherlands		2.38%		-1.18%
Swedbank Robur Kapitalinvest	Netherlands		1.50%		-1.18%
JPMorgan Funds - Global Focus Fund	France	Close	0.00%		-1.15%
Swedbank Robur Kapitalinvest	Denmark	Close	0.00%		-1.12%
JPMorgan Funds - Global Growth Fund	Netherlands		3.9	3%	-1.11%
SEB Aktiesparfond	France	Close	0.00%		-1.10%
BL - Global Equities	Germany	Close	0.00%		-1.10%

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.

New

New

New

Inm

Close

Close

Close

Close

Close

Close Close Close

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

American Funds Capital World Growth & Income Fu	France
St. James's Place Unit Trust - Global Value	Finland
UniFavorit: Aktien	France
Morgan Stanley Invt. Fds Global Brands Fund	Germany
Fidelity Funds SICAV - Global Dividend Fund	France
UniFavorit: Aktien	Sweden
American Funds New Economy Fund	Netherlands
UniFavorit: Aktien	Netherlands
American Funds New Perspective Fund	Spain
American Funds New Perspective Fund	France
American Funds Capital World Growth & Income Fu	Netherlands
UniGlobal	Netherlands
Vanguard Global Equity Fund	Finland
Fidelity Funds SICAV - Global Dividend Fund	United Kingdon
American Funds New Economy Fund	Switzerland
FTIF SICAV - Growth (Euro) Fund	Germany
Deka - DividendenStrategie	Switzerland
Franklin Mutual Ser. Fds Quest Fund	Israel
PGIM Jennison Global Opportunities Fund	United Kingdon
American Funds New Economy Fund	Spain

Lutest Aum, a		Fullu Flows, 5		
\$797M			\$385M	
\$165M		\$127M		
\$204M		\$117M		
\$1,195N	1	\$113M		
\$300M		\$105M		
\$112M		\$101M		
\$333M		\$98M		
\$149M		\$83M		
\$297M		\$82M		
\$289M		\$76M		
	\$2,090M	\$71M		
\$206M		\$67M		
\$51M		\$54M		
\$483M		\$50M		
\$49M		\$48M		
\$175M		\$45M		
\$158M		\$43M		
\$61M		\$41M		
		\$40M		
\$73M		\$40M		

atoct AUM

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

American Funds New Perspective Fund	Switzerland
Swedbank Robur Allemansfond Komplett	Sweden
PGIM Jennison Global Opportunities Fund	Netherlands
American Funds New Perspective Fund	United Kingo
American Funds New Perspective Fund	Sweden
Swedbank Robur Globalfond	Germany
Swedbank Robur Kapitalinvest	Netherlands
American Funds New Perspective Fund	Netherlands
Scottish Mortgage Investment Trust Plc	Netherlands
Swedbank Robur Kapitalinvest	Denmark
American Funds New Perspective Fund	Italy
Swedbank Robur Allemansfond Komplett	Switzerland
Swedbank Robur Allemansfond Komplett	Germany
T Rowe Price Global Stock Fund	Spain
Baillie Gifford Investment Funds ICVC - Long Term G	Netherlands
Pax Global Environmental Markets Fund	Germany
Franklin Mutual Ser. Fds Beacon Fund	Netherlands
Swedbank Robur Globalfond	Netherlands
JPMorgan Funds - Global Focus Fund	France
JPMorgan Investment Funds - Global Select Equity	France

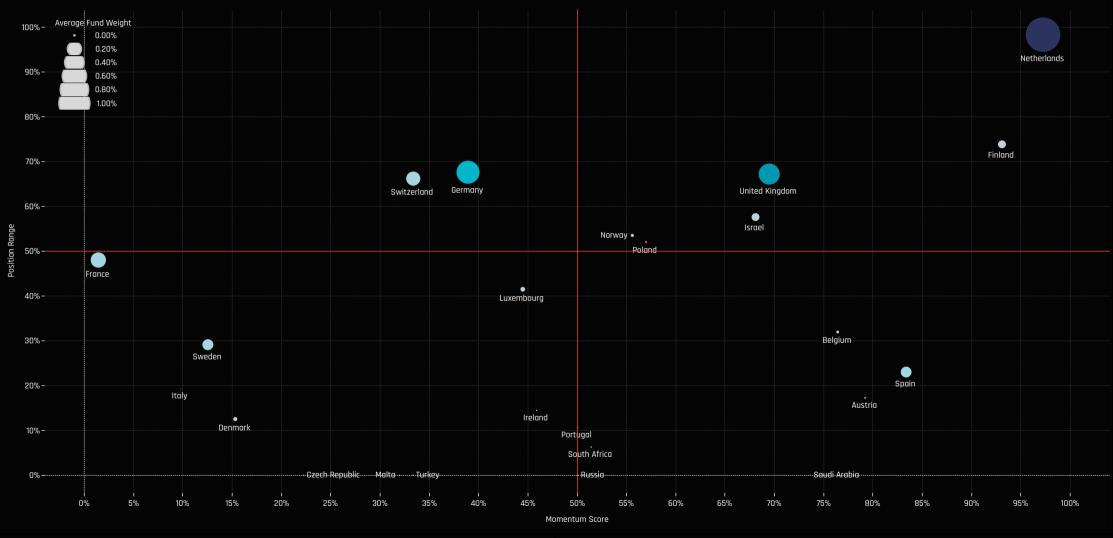
Late	est AUM, S	\$		Fund Flows, \$
\$1	,116M		(\$165M)	
\$287M			(\$12	23M)
\$273M			(\$	116M)
\$315M				(\$96M)
\$204M				(\$94M)
				(\$71M)
\$76M				(\$58M)
		\$2,541M		(\$58M)
	\$1,515M			(\$56M)
				(\$56M)
				(\$54M)
				(\$50M)
\$102M				(\$47M)
\$103M				(\$37M)
\$234M				(\$30M)
				(\$30M)
\$104M				(\$28M)
				(\$28M)
				(\$28M)
				(\$25M)

Country Sentiment Grid



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.





Position Range: Average of: Z-Score Average Weight vs history Z-Score Funds Invested % vs history Z-Score Funds 0/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)

Aggregate Stock Holdings



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).

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	0.8	31% 27.4	4% 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 2. EMEA Information Technology: Aggregate Stock Holdings Data, Ranked by Most Widely Held.

Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$	Ticke
ASML-NL	ASML Holding NV	40.50%	0.81%	0.35%	\$11,356.35M	ASML
SAP-DE	SAP SE	20.95%	0.31%	0.12%	\$3,347.12M	SAP-I
REL-GB	RELX PLC	17.60%	0.22%	0.12%	\$2,490.28M	REL-0
NXPI-US	NXP Semiconductors NV	13.97%	0.11%	0.04%	\$771.93M	ADYE
IFX-DE	Infineon Technologies AG	13.69%	0.17%	0.09%	\$932.26M	IFX-D
CAP-FR	Capgemini SE	11.73%	0.10%	0.05%	\$1,700.94M	AMS-
ADYEN-NL	Adyen NV	11.73%	0.15%	0.10%	\$1,291.47M	TEAM
TEL-US	TE Connectivity Ltd.	11.17%	0.11%	0.03%	\$1,588.88M	CAP-I
NOKIA-FI	Nokia Oyj	9.78%	0.05%	0.00%	\$410.55M	NXPI-
AMS-ES	Amadeus IT Group SA Class A	8.38%	0.11%	0.06%	\$1,531.38M	TEL-L
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	Ch 5
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	Ticke
SGE-GB	Sage Group plc	6.15%	0.04%	0.02%	\$200.74M	WLN-
UMG-NL	Universal Music Group N.V.	5.31%	0.07%	0.02%	\$513.24M	NEXI-
TEAM-US	Atlassian Corp Class A	5.31%	0.05%	0.05%	\$489.72M	CDR-I
NICE-IL	NICE Ltd. (Israel)	5.03%	0.02%	0.00%	\$236.92M	7203-
HLMA-GB	Halma plc	3.91%	0.05%	0.03%	\$257.54M	7202-
ST-US	Sensata Technologies Holding PLC	3.35%	0.04%	0.03%	\$257.55M	STM-
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	

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 3. EMEA Information Technology.

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



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

cker	Stock Name	Vs Benchmark	Average Weight	Funds Invested %	Fund AUM, \$
SML-NL	ASML Holding NV	0.35%	0.81%	40.50%	\$11,356.35M
AP-DE	SAP SE	0.12%	0.31%	20.95%	\$3,347.12M
EL-GB	RELX PLC	0.12%	0.22%	17.60%	\$2,490.28M
DYEN-NL	Adyen NV	0.10%	0.15%	11.73%	\$1,291.47M
X-DE	Infineon Technologies AG	0.09%	0.17%	13.69%	\$932.26M
4S-ES	Amadeus IT Group SA Class A	0.06%	0.11%	8.38%	\$1,531.38M
AM-US	Atlassian Corp Class A	0.05%	0.05%	5.31%	\$489.72M
AP-FR	Capgemini SE	0.05%	0.10%	11.73%	\$1,700.94M
KPI-US	NXP Semiconductors NV	0.04%	0.11%	13.97%	\$771.93M
L-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

ker	Stock Name	Vs Benchmark	Average Weight	Funds Invested %	Fund AUM, \$
N-FR	Worldline SA		0.00%	1.68%	\$349.28M
XI-IT	Nexi S.p.A.		0.00%	0.28%	\$0.48M
R-PL	CD Projekt S.A.		0.00%	0.28%	\$9.25M
03-SA	Elm Company		0.00%	0.00%	\$0.05M
02-SA	Arabian Internet and Communications Servi		0.00%	0.28%	\$0.06M
M-FR	STMicroelectronics NV		0.05%	8.10%	\$779.86M

Fund Ame Ame Scot Morg Fund Amer Nine Ame Morg Ame Ame Fide Ame Bail Fide Amer SJP Scot Scot ٥ld ۱ Sand Ame Ame UniG Ame PGIN Ame Ame First Swee St. . Ame Fran Temp Folks Folks Ame Ame



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

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

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

Fund Name	Ticker	Stoc
Baillie Gifford Investment Funds ICVC - Positive Change Fund	ASML-NL	ASM
Scottish Mortgage Investment Trust Plc	ASML-NL	ASM
Allianz Global Investors Fund - Global Equity Growth	ASML-NL	ASM
Ninety One Glb. Strat. Fd Global Franchise Fund	ASML-NL	ASM
Baron Global Advantage Fund	DAVA-US	Enda
Ninety One Glb. Strat. Fd Global Quality Equity Fund	ASML-NL	ASM
Sands Capital Funds Plc - Global Growth Fund	ASML-NL	ASM
Schoellerbank Aktienfonds Value	SAP-DE	SAP
Morgan Stanley Invt. Fds Global Brands Fund	SAP-DE	SAP
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	ASML-NL	ASM
Ninety One Glb. Strat. Fd Global Quality Dividend Growth	ASML-NL	ASM
Polen Global Growth Fund	SAP-DE	SAP
MainFirst SICAV - Global Equities Fund	ASML-NL	ASM
Morgan Stanley Invt. Fds Global Quality Fund	SAP-DE	SAP
Sanlam Universal Fds. Plc - Global High Quality Fund	SAP-DE	SAP
Aberdeen Std. OEIC II - ASI Global Uncon. Equity Fund	INPST-NL	InPo
AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund	SAP-DE	SAP
Frontier MFG Global Plus Fund	ASML-NL	ASM
Delaware Global Equity Fund	AMS-ES	Ama
AIM Fds. Grp. (IFG) - Invesco Global Core Equity Fund	TEMN-CH	Teme
PGIM Jennison Global Opportunities Fund	ASML-NL	ASM
Virtus NFJ Global Sustainability Fund	ASML-NL	ASM
Fidelity Funds SICAV - Global Dividend Fund	REL-GB	RELX
C Worldwide - Global Equities Ethical	ASML-NL	ASM
Comgest Monde	ASML-NL	ASM
Comgest Growth Plc - Global Flex	ASML-NL	ASM
Alger Global Focus Fund	ASML-NL	ASM
Calamos Global Equity Fund	ASML-NL	ASM
Delaware Global Equity Fund	SAP-DE	SAP
Delaware Global Value Equity Fund	AMS-ES	Ama
Invesco Global Invt. Ser Global Focus Fund (UK)	ADYEN-NL	Adye
C Worldwide - Global Equities	ASML-NL	ASM
Sands Capital Funds Plc - Global Growth Fund	ADYEN-NL	Adye
S&W Aubrey Capital Mgmt. Invt. Funds - Global Conviction Fu	TPE-DE	PVA
Waverton Invt. Fds. Plc - Global Equity Fund	TEL-US	TE Co
Danske Invest Global Sustainable Future - Akkumulerende	ASML-NL	ASM
Vontobel Fund - Global Equity	REL-GB	RELX
S&W Aubrey Capital Mgmt. Invt. Funds - Global Conviction Fu	IFCN-CH	INFIC
NN (L) - Global Equity Impact Opportunities	HLMA-GB	Halm
M&G Investment Funds (1) OEIC - Global Themes Fund	IFX-DE	Infin

ime				
olding NV		9.84%		
olding NV	7.12%			
olding NV	6.96%			
olding NV	6.74%			
Plc Sponsored ADR	6.55%			
olding NV	6.44%			
olding NV	6.07%			
	6.03%			
	5.56%			
olding NV	5.30%			
olding NV	5.14%			
	5.03%			
olding NV	4.89%			
	4.84%			
	4.70%			
.A.	4.65%			
	4.58%			
olding NV	4.50%			
s IT Group SA Class A	4.44%			
s AG	4.34%			
olding NV	4.31%			
olding NV	4.26%			
C	4.22%			
olding NV	4.16%			
olding NV	4.05%			
olding NV	4.05%			
olding NV	4.03%			
olding NV	3.97%			
	3.80%			
s IT Group SA Class A	3.78%			
V	3.74%			
olding NV	3.69%			
V	3.62%			
la AG	3.55%			
ectivity Ltd.	3.54%			
olding NV	3.54%			
C	3.51%			
Holding AG	3.48%			
	3.42%			
Technologies AG	3.42%			

Ch 2		Information	Technology:	Top Fund	Holdings ¢
112,	CIMEA	IIIIOIIIIuuuuii	rechnology.	τυμ καιτα	Hululiys, ə

d Name	Ticker	Stock Name	
erican Funds New Perspective Fund	ASML-NL	ASML Holding NV	\$2,409.00M
erican Funds Capital World Growth & Income Fund	ASML-NL	ASML Holding NV	\$1,869.37M
ttish Mortgage Investment Trust Plc	ASML-NL	ASML Holding NV	\$1,264.32M
gan Stanley Invt. Fds Global Brands Fund	SAP-DE	SAP SE	\$1,194.96M
dsmith Equity Fund	AMS-ES	Amadeus IT Group SA Class A	\$791.10M
erican Funds New Perspective Fund	TEL-US	TE Connectivity Ltd.	\$598.28M
ety One Glb. Strat. Fd Global Franchise Fund	ASML-NL	ASML Holding NV	\$565.30M
erican Funds Capital World Growth & Income Fund	CAP-FR	Capgemini SE	\$528.41M
gan Stanley Invt. Fds Global Brands Fund	REL-GB	RELX PLC	\$519.02M
erican Funds New Perspective Fund	STM-FR	STMicroelectronics NV	\$518.12M
erican Funds New Perspective Fund	SAP-DE	SAP SE	\$502.83M
lity Funds SICAV - Global Dividend Fund	REL-GB	RELX PLC	\$483.46M
erican Funds New Economy Fund	ASML-NL	ASML Holding NV	\$332.98M
lie Gifford Investment Funds ICVC - Positive Change	ASML-NL	ASML Holding NV	\$327.27M
lity Funds SICAV - Global Dividend Fund	LR-FR	Legrand SA	\$300.40M
erican Funds New Perspective Fund	AMS-ES	Amadeus IT Group SA Class A	\$297.37M
Global Quality Fund	ASML-NL	ASML Holding NV	\$269.79M
ttish Mortgage Investment Trust Plc	ADYEN-NL	Adyen NV	\$250.65M
ttish Mortgage Investment Trust Plc	WISE-GB	Wise PLC Class A	\$247.51M
Westbury Large Cap Strategies Fund	ASML-NL	ASML Holding NV	\$245.35M
ds Capital Funds Plc - Global Growth Fund	ASML-NL	ASML Holding NV	\$244.82M
erican Funds Capital World Growth & Income Fund	UMG-NL	Universal Music Group N.V.	\$221.13M
erican Funds Capital World Growth & Income Fund	REL-GB	RELX PLC	\$211.87M
Global	ASML-NL	ASML Holding NV	\$206.38M
erican Funds New Perspective Fund	REL-GB	RELX PLC	\$202.58M
1 Jennison Global Opportunities Fund	ASML-NL	ASML Holding NV	\$201.80M
erican Funds Capital World Growth & Income Fund	HEXA.B-SE	Hexagon AB Class B	\$175.47M
erican Funds Global Insight Fund	ASML-NL	ASML Holding NV	\$ 174.22M
t Eagle Global Fund	LR-FR	Legrand SA	\$ 173.45M
dbank Robur Allemansfond Komplett	HEXA.B-SE	Hexagon AB Class B	\$ 170.85M
James's Place Unit Trust - Global Value	NOKIA-FI	Nokia Oyj	\$165.08M
erican Funds New Perspective Fund	NICE-IL	NICE Ltd. (Israel)	\$ 160.11M
ıklin Mutual Ser. Fds Global Discovery Fund	CAP-FR	Capgemini SE	\$ 159.57M
pleton Growth Fund Inc.	IFX-DE	Infineon Technologies AG	\$157.69M
sams LO Varlden	ASML-NL	ASML Holding NV	\$ 157.07M
sams LO Varlden	SAP-DE	SAP SE	\$ 153.02M
erican Funds Capital World Growth & Income Fund	LR-FR	Legrand SA	\$152.58M
erican Funds New Perspective Fund	CAP-FR	Capgemini SE	\$ 150.89M
lie Gifford Investment Funds ICVC - Long Term Global	ASML-NL	ASML Holding NV	\$149.37M
avorit: Aktien	ASML-NL	ASML Holding NV	\$ 149.03M
Value Yield			

Fund Style 📃 Aggressive Growt.. 🧧 Growth

CON

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UniF

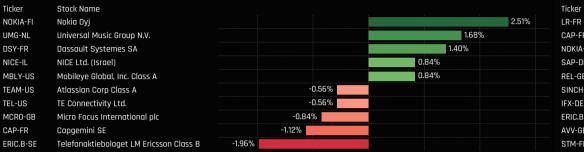
GARP



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.

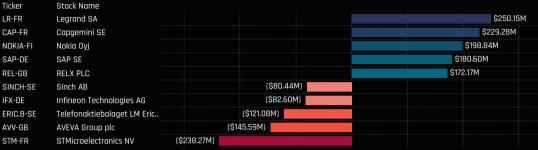
Ch 1. EMEA Information Technology: Largest Changes in Funds Invested %



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

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



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

T:-!		Funds Invested %	Average Weight Δ	Average Wgt vs Benchmark Δ		T:-!	04	Funds Invested % $oldsymbol{\Delta}$	Average Weight Δ	Average Wgt vs Benchmark $oldsymbol{\Delta}$	
Ticker NOKIA-FI	Stock Name Nokia Oyj	Funds Invested % Δ 2.51%	Average weight Δ 0.00%	0.01%	Fund Flows, \$ \$198.84M	Ticker ERIC.B-SE	Stock Name Telefonaktiebolaget LM Ericsson Class B	Funds invested $\% \Delta$			Fund Flows, \$
							-	-1.30%		0.00%	
UMG-NL	Universal Music Group N.V.	1.68%	0.02%	0.01%	\$58.92M	CAP-FR	Capgemini SE				\$229.28M
DSY-FR	Dassault Systemes SA	1.40%	0.00%	0.01%	\$91.71M	MCRO-GB	Micro Focus International plc	-0.84%			(\$1.66M)
NICE-IL	NICE Ltd. (Israel)	0.84%	0.00%	0.00%	\$2.14M	TEL-US	TE Connectivity Ltd.				\$79.43M
MBLY-US	Mobileye Global, Inc. Class A	0.84%	0.00%	0.00%	\$6.25M	TEAM-US	Atlassian Corp Class A				\$12.04M
ATS-AT	AT & S Austria Technologie & Systemtechnik	0.84%	0.00%	0.00%	\$1.71M	AVST-GB	Avast Plc				
ASML-NL	ASML Holding NV	0.84%	0.13%	0.08%	\$124.20M	SCT-GB	Softcat Plc				
REL-GB	RELX PLC	0.56%	0.01%	0.01%	\$172.17M	SINCH-SE	Sinch AB				
NCC-GB	NCC Group plc	0.56%	0.00%	0.00%	\$3.04M	SOP-FR	Sopra Steria Group SA				
UBXN-CH	u-blox Holding AG	0.56%	0.00%	0.00%	\$0.59M	SWP-FR	Sword Group SE				
AMS-ES	Amadeus IT Group SA Class A	0.56%	0.01%	0.01%	\$101.63M	AVV-GB	AVEVA Group plc		0.00%	0.01%	
TEMN-CH	Temenos AG	0.28%	0.00%	0.00%	\$7.11M	FDM-GB	FDM Group (Holdings) plc				
ST-US	Sensata Technologies Holding PLC	0.28%			\$13.57M	NETC-DK	Netcompany Group A/S				
SPT-GB	Spirent Communications plc	0.28%	0.00%	0.00%	\$2.02M	NEXI-IT	Nexi S.p.A.				
TRUE.B-SE	Truecaller AB Class B	0.28%	0.00%	0.00%	\$0.29M	ADYEN-NL	Adyen NV				
TOM2-NL	TomTom NV	0.28%				IFX-DE	Infineon Technologies AG		0.03%	0.02%	
MOON-GB	Moonpig Group Plc	0.28%	0.00%	0.00%	\$0.09M	ADDT.B-SE	Addtech AB Class B				
MNDY-US	monday.com Ltd.	0.28%	0.00%	0.00%	\$32.01M	AMS-CH	ams-OSRAM AG		0.00%	0.00%	\$0.44M
HMS-SE	HMS Networks AB	0.28%	0.00%	0.00%	\$0.12M	NOD-NO	Nordic Semiconductor ASA				
GFT-DE	GFT Technologies SE	0.28%	0.00%	0.00%	\$0.07M	UBI-FR	Ubisoft Entertainment SA				
ERIC.A-SE	Telefonaktiebolaget LM Ericsson Class A	0.28%	0.00%	0.00%	\$0.29M	WAF-DE	Siltronic AG				
7202-SA	Arabian Internet and Communications Servi	0.28%	0.00%		\$0.06M	WLN-FR	Worldline SA				\$74.02M
WIX-US	Wix.com Ltd.	0.28%	0.00%			AIXA-DE	AIXTRON SE		0.00%	0.00%	\$0.25M
WISE-GB	Wise PLC Class A	0.28%	0.00%	0.00%	\$3.94M	ALHF-FR	HF Co. SA				
SOI-FR	Soitec SA	0.28%			\$0.00M	CGM-FR	Cegedim SA				

ige 3.11%

2.51% 24%



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
SEB Aktiesparfond	UMG-NL	Universal Music Group
Fidelity Advisor Global Capital Appreciation Fund	ASML-NL	ASML Holding NV
Columbia Select Global Equity Fund	ASML-NL	ASML Holding NV
Quilter Investors Series I - Global Unconstrained	LR-FR	Legrand SA
Vanguard Global ESG Select Stock Fund	ASML-NL	ASML Holding NV
SEB Aktiesparfond	SAP-DE	SAP SE
Virtus NFJ Global Sustainability Fund	DSY-FR	Dassault Systemes S
UniFavorit: Aktien	ASML-NL	ASML Holding NV
Morgan Stanley Invt. Fds Global Brands Fund	SAP-DE	SAP SE
Hermes Invt. Funds Plc - Impact Opportunities Eq	STM-FR	STMicroelectronics NV
DWS Concept DJE Globale Aktien	ASML-NL	ASML Holding NV
Sanlam Universal Fds. Plc - Global High Quality F	SAP-DE	SAP SE
Virtus NFJ Global Sustainability Fund	GN-DK	GN Store Nord A/S
Franklin Mutual Ser. Fds Quest Fund	TSEM-US	Tower Semiconductor
Uni 21. Jahrhundert -net-	SAP-DE	SAP SE
Danske Invest Global Sustainable Future - Akku	ASML-NL	ASML Holding NV
Fidelity Advisor Global Capital Appreciation Fund	AMS-ES	Amadeus IT Group SA
Invesco Global Invt. Ser Global Equity Fund (UK)	ASML-NL	ASML Holding NV
Uni 21. Jahrhundert -net-	ASML-NL	ASML Holding NV
UniFavorit: Aktien	HEXA.B-SE	Hexagon AB Class B

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

Fund Name

Skagen Focus

S&W Aubrey Capital Mgmt.

Invesco Global Invt. Ser. - Glo

GAMCO Global Growth Fund LO Funds - Golden Age

PGIM Jennison Global Opport

Swedbank Robur Allemansfo

Touchstone Strategic Trust

GAM Funds - Disruptive Grow

Pax Global Environmental Ma

JPMorgan Funds - Global Gra LF Liontrust Investment Fun

JPMorgan Investment Funds GAM Funds - Disruptive Grow

JPMorgan Funds - Global Foc

GAMCO Global Growth Fund

Swedbank Robur Kapitalinve

BL - Global Equities

SEB Aktiesparfond

BL - Global Equities

	New or Close	Latest Weight		Weight Cha
0 N.V.	New	3.119	%	
	New	2.51%		2
	New	2.24%		2.2
	New	2.17%		2.1
	New	2.13%		2.1
	New	2.03%		2.03
A	New	1.87%		1.879
	New	1.79%		1.79%
			5.56%	1.75%
V	New	1.68%		1.68%
	New	1.57%		1.57%
			4.70%	1.54%
	New	1.54%		1.54%
r Ltd		2.799	6	1.47%
	New	1.43%		1.43%
		3.5	4%	1.42%
Class	New	1.38%		1.38%
	New	1.37%		1.37%
	New	1.37%		1.37%
	New	1.35%		1.35%

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 Invt. 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 Komplett	ADYEN-NL	Adyen NV	New	\$45M	\$45M
Franklin Mutual Ser. Fds Quest Fund	TSEM-US	Tower Semiconductor Ltd		\$61M	\$41M
PGIM Jennison Global Opportunities Fund	TEAM-US	Atlassian Corp Class A			\$40M

Stock Nan

STMicroe

AVEVA Gr Telefonal

ASML Hol

Adyen NV Sinch AB

Infineon

Netcomp

Nexi S.p./

STMicroel ASML Hol

SAP SE

Amadeus

NXP Semi

ASML Ho

ASML Ho

SAP SE

ASML Hol

Sensata

Adyen NV

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

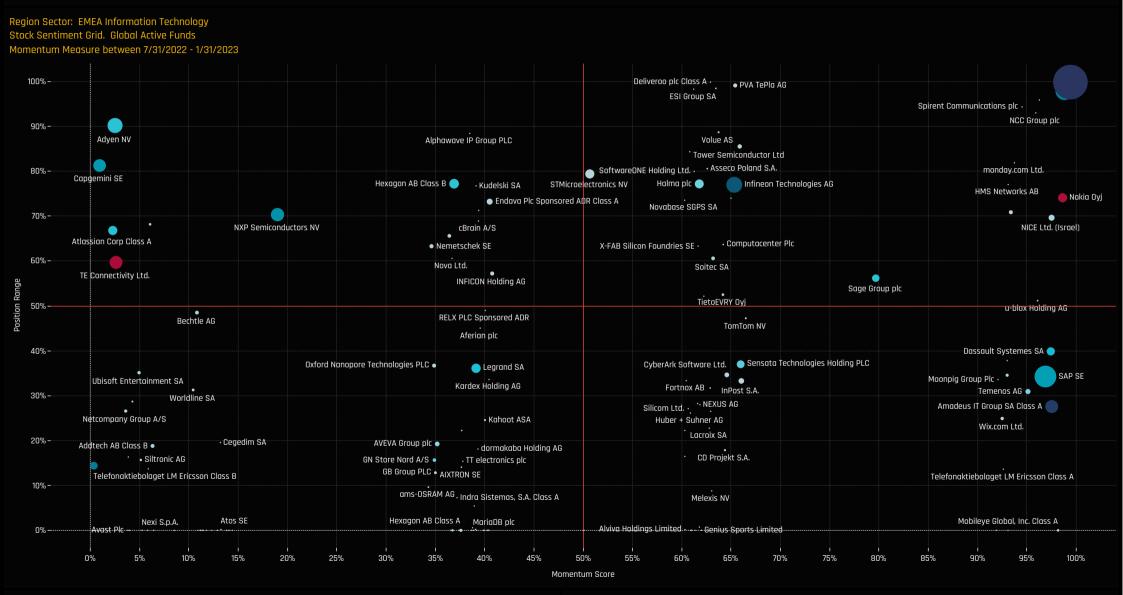
	Ticker	Stock Name	New or Close	Latest	Weight	Weight Change
Invt. Funds - Global C	SES-IT	SeSa S.p.A.	Close	0.00%		-3.17%
obal Equity Income F	REL-GB	RELX PLC	Close	0.00%		-2.31%
	ADYEN-NL	Adyen NV			3.09%	-2.10%
	GN-DK	GN Store Nord A/S	Close	0.00%		-1.98%
tunities Fund	ADYEN-NL	Adyen NV		1.5	52%	-1.88%
	UBI-FR	Ubisoft Entertainment SA		1.4	4%	-1.78%
ond Komplett	ERIC.B-SE	Telefonaktiebolaget LM Eric	Close	0.00%		-1.59%
- Non-US ESG Equity	TEL-US	TE Connectivity Ltd.	Close	0.00%		-1.57%
vth	WAF-DE	Siltronic AG	Close	0.00%		-1.42%
arkets Fund	SAP-DE	SAP SE	Close	0.00%		-1.35%
owth Fund	ADYEN-NL	Adyen NV	Close	0.00%		-1.29%
nds III - Global Focus	NXPI-US	NXP Semiconductors NV	Close	0.00%		-1.23%
	LR-FR	Legrand SA	Close	0.00%		-1.19%
s - Global Select Equi	CAP-FR	Capgemini SE	Close	0.00%		-1.19%
vth	ST-US	Sensata Technologies Holdi			2.38%	-1.18%
cus Fund	CAP-FR	Capgemini SE	Close	0.00%		-1.15%
	ASML-NL	ASML Holding NV			2.24%	-1.14%
est	NETC-DK	Netcompany Group A/S	Close	0.00%		-1.12%
	CAP-FR	Capgemini SE	Close	0.00%		-1.10%
	SAP-DE	SAP SE	Close	0.00%		-1.10%

Fund Name	Fund Name	Ticker
American Fu	American Funds New Perspective Fu	STM-FR
American Fu	American Funds New Perspective Fu	AVV-GB
Swedbank R	Swedbank Robur Allemansfond Ko	ERIC.B-SE
Scottish Mor	Scottish Mortgage Investment Trust	ASML-NL
PGIM Jennis	PGIM Jennison Global Opportunities	ADYEN-NL
American Fu	American Funds New Perspective Fu	SINCH-SE
Swedbank R	Swedbank Robur Globalfond	IFX-DE
Swedbank R	Swedbank Robur Kapitalinvest	NETC-DK
American Fu	American Funds New Perspective Fu	NEXI-IT
Swedbank R	Swedbank Robur Allemansfond Ko	STM-FR
American Fu	American Funds New Perspective Fu	ASML-NL
Swedbank R	Swedbank Robur Allemansfond Ko	SAP-DE
T Rowe Price	T Rowe Price Global Stock Fund	AMS-ES
Swedbank R	Swedbank Robur Allemansfond Ko	NXPI-US
Swedbank R	Swedbank Robur Kapitalinvest	ASML-NL
PGIM Jennis	PGIM Jennison Global Opportunities	ASML-NL
Pax Global E	Pax Global Environmental Markets F	SAP-DE
Baillie Giffor	Baillie Gifford Investment Funds ICV	ASML-NL
Franklin Mut	Franklin Mutual Ser. Fds Beacon F	ST-US
UniFavorit: A	UniFavorit: Aktien	ADYEN-NL

ne	New or Close	Latest AUM, \$		Fund Flows, \$	
ectronics NV		\$518M		(\$197M)	
oup plc	Close			(\$142M)	
tiebolaget LM Eric	Close			(\$117M)	
ding NV		\$1,2	264M	(\$93M)	
		\$71M		(\$82M)	
		\$65M		(\$78M)	
echnologies AG	Close			(\$71M)	
iny Group A/S	Close			(\$56M)	ľ
	Close			(\$54M)	ľ
ectronics NV	Close			(\$50M)	I
ding NV			\$2,409M	(\$48M)	I
		\$59M		(\$39M)	
IT Group SA Class A		\$103M		(\$37M))
conductors NV	Close			(\$37M))
ding NV		\$46M		(\$34M)
ding NV		\$202M		(\$34M)
	Close			(\$30M)
ding NV		\$149M		(\$30M)
echnologies Holdi		\$104M		(\$28M)
	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.



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)

Average Weight per Style

1.17%

Style

Growth

GARP

Yield

Value

0.00%

Aggressive Growth

Holdings by Fund Style



95.079

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.

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

3.39%

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

4.53%

-0.38%

Average Weight vs ACWI per Style

0.87%

0.48%

1.84%

2.97%

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.

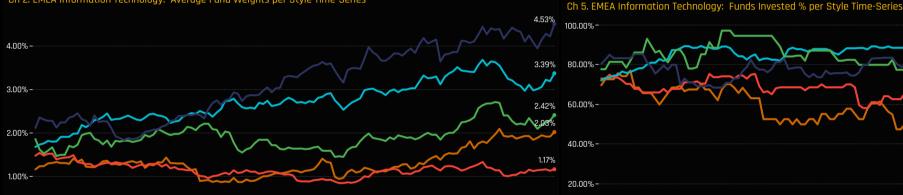
Ch 4. EMEA Information Technology: Funds Invested % / Funds Overweight %, per fund Style group.



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

2.42%

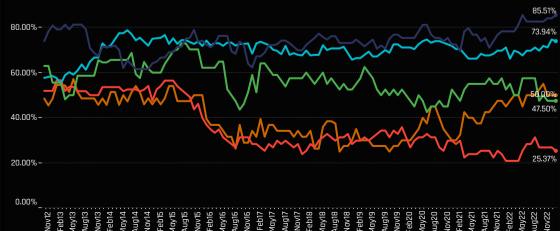
2.03%





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





Novr2 Febr3 Mary13 Novr3 Aug14 Novr4 Aug15 Aug15 Mary15 Febr5 Novr15 Febr3 Novr16 Febr3 Novr18 Novr18 Febr3 Mary18 Novr18 Febr3 Mary18 Novr20 Novr20

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.

Funds

54.23

25.3

Ave. Wgt 0.94%

0.35%

0.22%

0.18%

0.17%

0.15%

0.14%

0.10%

0.07% 0.07%

EMEA Information Technology Top Holders: Aggressive Growth

EMEA Information Technology

Stock Name

ASML Holding

Infineon Tech

Amadeus IT

TE Connectivi RELX PLC

Halma plc

Dassault Sys

Hexagon AB

Adyen NV

SAP SE

Fund Name	
Invesco Global Invt. Ser Global	12.1
Allianz Global Investors Fund - G	11.53
S&W Aubrey Capital Mgmt. Invt	10.379
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 Invt. Fds Glob	7.98%
GAMCO Global Growth Fund	7.04%

Most Widely Held Stocks: Aggressive Growth

EMEA Information Technology Top Holders: Growth

Fund Name	
Sands Capital Funds Plc - Global	12.2
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 Most Widely Held Stocks: Growth

		Funds Inv.	
	Ave. Wgt	%	Stock Name
J NV	1.64%	56.52%	ASML Holding NV
	0.35%	18.84%	SAP SE
	0.44%	17.39%	RELX PLC
inologies AG	0.34%	15.94%	Infineon Technologies AG
Group SA Class A	0.20%	11.59%	NXP Semiconductors NV
ity Ltd.	0.24%	10.14%	Adyen NV
	0.24%	10.14%	Capgemini SE
	0.21%	10.14%	TE Connectivity Ltd.
temes SA	0.10%	10.14%	STMicroelectronics NV
Class B	0.11%	7.25%	Legrand SA

26%

EMEA Information Technology Top Over/Underweights: Aggressive Growth

Stock Name 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	
ASML Holding NV	0.4
SAP SE	0.1
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 Holders: GARP

Fund Name			
Baron Global Advantage Fund		14.64	4%
Baillie Gifford Investment Funds		11.57%	
Scottish Mortgage Investment Tr		9.93%	
DWS Concept DJE Globale Aktien	4.45%	0	
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 Invt. Funds - Global Equi	2.88%		
Jupiter Asset Mgmt. Series plc	2.85%		
BNP Paribas Funds - Sustainable	2.83%		

EMEA Information Technology Most Widely Held Stocks: GARP

nds Inv.		
%	Stock Name	Ave. W
54.23%	ASML Holding NV	0.72
25.35%	SAP SE	0.16
21.13%	NXP Semiconductors NV	0.13
19.01%	Capgemini SE	0.09
17.61%	Nokia Oyj	0.02
15.49%	Infineon Technologies AG	0.14
13.38%	Adyen NV	0.19
12.68%	Telefonaktiebolaget LM Ericsson	0.06
11.27%	STMicroelectronics NV	0.03
11.27%	RELX PLC	0.07

EMEA Information Technology Top Over/Underweights: GARP

Stock Name		
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 Holders: Value

Fund Name	
Schoellerbank Aktienfonds Value	7.9
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 Most Widely Held Stocks: Value

Funds Inv.			Funds Inv.
%	Stock Name	Ave. Wgt	%
40.00%	Nokia Oyj	0.13%	20.90%
22.50%	NXP Semiconductors NV	0.09%	17.91%
22.50%	Capgemini SE	0.09%	14.93%
17.50%	TE Connectivity Ltd.	0.06%	13.43%
15.00%	SAP SE	0.19%	10.45%
15.00%	RELX PLC	0.07%	10.45%
15.00%	ASML Holding NV	0.03%	10.45%
12.50%	Telefonaktiebolaget LM Ericsson	0.02%	8.96%
12.50%	STMicroelectronics NV	0.08%	8.96%
12.50%	Sensata Technologies Holding PL	0.09%	8.96%

EMEA Information Technology Top Over/Underweights: Value

	Stock Name		
, 0	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%	
	ASML Holding NV	-0.42%	

EMEA Information Technology Top Holders: Yield

Fund Name

Fidelity Funds SICAV - Global Divi	6.84
Delaware Global Value Equity Fu	6.43%
Ninety One Glb. 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 Invt. Ser Global	3.15%

EMEA Information Technology Most Widely Held Stocks: Yield

		Funds Inv.
Stock Name	Ave. Wgt	%
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 Dyj	0.02%	7.50%
Legrand SA	0.07%	7.50%

EMEA Information Technology Top Over/Underweights: Yield

tock Name				
ELX PLC			0.46%	
madeus IT Group SA Class A			0.17%	
AP SE			0.14%	
age Group plc			0.08%	
elefonaktiebolaget LM Ericsson			0.07%	
TMicroelectronics NV	-0.04	%		
assault Systemes SA	-0.04	%		
dyen NV	-0.05	%		
fineon Technologies AG	-0.08%	6		
SML 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 <u>download sloping red line means</u> existing investors are closing out positions, a rising red line means previous investors are buying back in.

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.

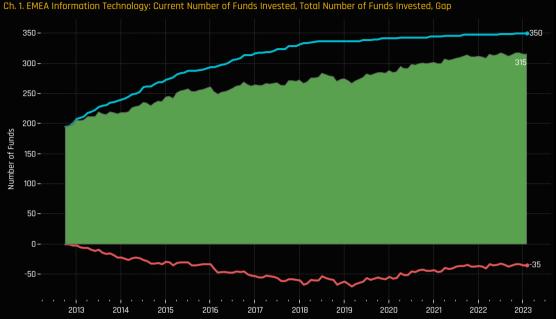
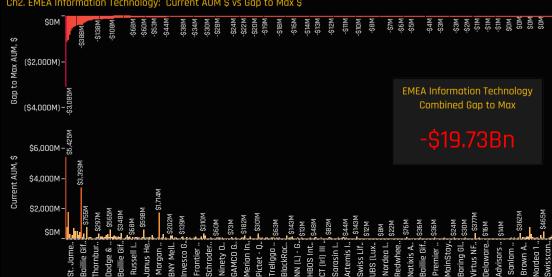


Chart 2: The orange lines show the current AUM in EMEA Information Technology stocks for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.



Ch2. EMEA Information Technology: Current AUM \$ vs Gap to Max \$

100% 80% – Upper Quartile 78% 60% Z-Score Median 46% 40% Lower Quartile 21% 20% **N**% /a. 61.

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.

Ch4. EMEA Information Technology: Current Weights % vs Gap to Max %

Ch. 3: EMEA Information Technology: Portfolio Weight Z-Score

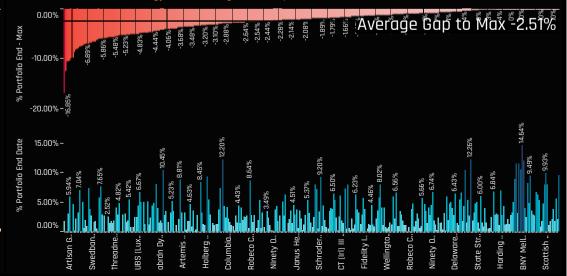




Chart 1: Current fund weight, maximum fund weight and difference for EMEA Information Technology stocks. Chart 2: Current fund AUM, maximum fund AUM and \$ difference for EMEA Information Technology stocks

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 Invt. Funds Plc - Impact Opportunities Equity Fund	1.68%	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	3.26%	11.19%	-7.93%
GAMCO Global Growth Fund	7.04%	14.51%	-7.57%
BL - Global Equities	0.00%	7.44%	-7.44%
Rolinco NV	4.92%	12.28%	-7.36%
Morgan Stanley Invt. 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. 2: EMEA Information Technology: Largest Gap to Max (\$

on 2. EMEA information recimology, Eurgest oup				on 4. EMEA Information recimology. Fighest owne	
Fund Name	Latest AUM, \$	Max AUM, \$	Difference	Fund Name	La
American Funds New Perspective Fund	\$5,425M	\$8	3,510M -\$3,085M	UniNachhaltig Aktien Global	
Fundsmith Equity Fund	\$791M	\$1,902M	-\$1,111M	SEI Institutional Managed Trust - Global Managed Vol. Fund	\$15
Scottish Mortgage Investment Trust Plc	\$1,762M	\$2,795M	-\$1,033M	SEB Aktiesparfond	ę,
PGIM Jennison Global Opportunities Fund	\$273M	\$1,111M	-\$838M	Waverton Invt. Fds. Plc - Global Equity Fund	\$14
St. James's Place International Equity Unit Trust		\$666M	-\$666M	Vanguard Global ESG Select Stock Fund	\$18
Franklin Mutual Ser. Fds Global Discovery Fund	\$248M	\$788M	-\$541M	UniFavorit: Aktien	
Swedbank Robur Allemansfond Komplett	\$662M	\$1,128M	-\$467M	Swisscanto (CH) IPF I - Equity Fund World Enhanced	\$3
Old Westbury Large Cap Strategies Fund	\$504M	\$952M	-\$447M	SWIP Overseas Growth ICVC - Global Growth Fund	\$2
Sands Capital Funds Plc - Global Growth Fund	\$492M	\$903M	-\$411M	St. James's Place Unit Trust - Global Value	
Artisan Global Opportunities Fund	\$227M	\$624M	-\$397M	Russell Invt. Co. Plc - Acadian Global Managed Volatility Eq.	\$21
Swedbank Robur Kapitalinvest	\$389M	\$782M	-\$393M	Robeco Capital Gr. Fds Sustainable Global Stars Equities	\$3
American Funds Capital World Growth & Income Fund	\$3,399M	\$3,790M	-\$391M	Nordea 1 - Global Stars Equity Fund	\$4
Wellington Mgmt. Fds. (LU) - Global Quality Growth Fund	\$85M	\$474M	-\$388M	Mundoval Fund	\$0M
Baillie Gifford Investment Funds ICVC - Long Term Global Gr.	\$326M	\$664M	-\$338M	Multicooperation SICAV - Julius Baer Equity Fund Special Value	\$4
JOHCM Umbrella Fund Plc - Global Select Fund		\$265M	-\$265M	M&G Investment Funds (1) OEIC - Global Themes Fund	
SJP Global Quality Fund	\$755M	\$985M	-\$229M	JPMorgan Investment Funds - Global Dividend Fund	\$
Fidelity Series Intrinsic Opportunities Fund	\$22M	\$243M	-\$221M	FTIF SICAV - Growth (Euro) Fund	
Fidelity Invt. Funds - Global Special Situations Fund	\$103M	\$292M	-\$189M	Fidelity Funds SICAV - Global Dividend Fund	
Skagen Global	\$106M	\$276M	-\$171M	Deka - GlobalChampions CF/TF	9
Artemis Global Income Fund		\$167M	-\$167M	Comgest Monde	

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.	3.86%	3.86%	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 Invt. Co. Plc - Acadian Global Managed Volatility Eq.	1.76%	1.76%	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. 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 Invt. 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%
1	Russell Invt. Co. Plc - Acadian Global Managed Volatility Eq.	\$21M	\$21M		100.00%
1	Robeco Capital Gr. Fds Sustainable Global Stars Equities	\$34M	\$34M		100.00%
1	Nordea 1 - Global Stars Equity Fund	\$41M	\$41M		100.00%
1	Mundoval Fund	\$0M	\$0M		100.00%
1	Multicooperation SICAV - Julius Baer Equity Fund Special Value	\$45M	\$45M		100.00%
М	M&G Investment Funds (1) OEIC - Global Themes Fund	\$189M	\$189M		100.00%
М	JPMorgan Investment Funds - Global Dividend Fund	\$96M	\$96M		100.00%
М	FTIF SICAV - Growth (Euro) Fund	\$266M	\$266M		100.00%
М	Fidelity Funds SICAV - Global Dividend Fund	\$78	84M \$784	М	100.00%
М	Deka - GlobalChampions CF/TF	\$115M	\$115M		100.00%
M	Comgest Monde	\$123M	\$123M		100.00%



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 Invt. 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%	\$OM
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 Ec	a. 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%	\$16
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 Invt. Co. Plc - World Equity Fund II (The)	\$6M	\$62M	-\$56M	\$1M
Hermes Invt. Funds Plc - Impact Opportunities Equity Fund	\$8M	\$59M	-\$51M	\$6M
Nordea Invest Portefolje Aktier	\$64M	\$114M	-\$50M	\$2M
Morgan Stanley Invt. 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 Invt. 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. Invt. 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	6.56%	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. S		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%	(\$10N	1)
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		7	71.34%		(\$2M)
T Rowe Price Global Stock Fund		\$276M		\$393M	E	59.48%		(\$5M)
Fidelity Inv. Trust - Global Equity Income Fund	\$6M		\$9M		E	58.96%		(\$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





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