





In this data report, we analyse Poland holdings among active GEM Funds. For benchmark comparisons, we use the iShares MSCI Emerging Markets ETF, proportionally adjusted to remove any cash holdings. The current fund sample spans 278 active funds with a combined AUM of \$354.61Bn.

We analyse the latest published filings for all funds and aggregate together as of 8/31/2022. We show the most recent snapshot in positioning, time series data going back to 1/31/2008 and recent allocation shifts by the managers in our analysis.

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.

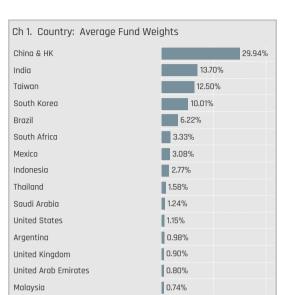


Poland

Peer Group and Time-Series Ownership Data



Chart 1. The equally weighted average fund weight, among active GEM managers by Country Chart 2. The time series of average fund weight for Poland stocks



0.37%

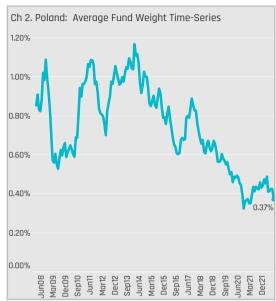


Chart 5. The 'Funds Invested %' measures the percentage of active GEM funds with exposure to each Country. A figure of 100% means that every fund in our analysis has some exposure to that Country Chart 6. The time series of funds invested % for Poland stocks

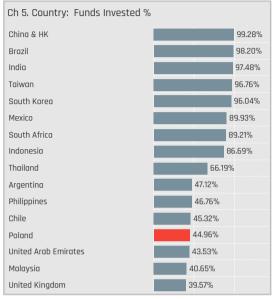
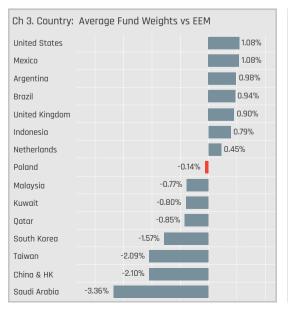




Chart 3. The average fund weight minus the weight in the iShares MSCI Emerging Markets ETF, by Country. A positive value represents an 'overweight' position on average, a negative value represents an 'underweight'.

Chart 4. The time series of average fund weight minus benchmark for Poland stocks



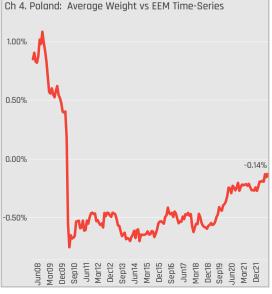
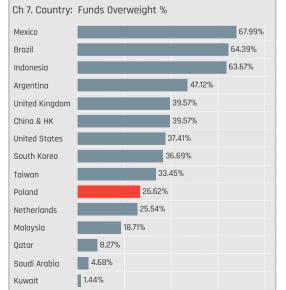


Chart 7. The percentage of active GEM funds who are overweight the iShares MSCI Emerging Markets ETF weight, by Country Chart 8. The time series of Funds Overweight % for Poland stocks





Fund Holdings



Chart 1. The distribution of Poland weights among the 278 active GEM funds in our analysis, broken down by fund Style. Chart 2. The largest 30 Poland holders in our analysis, on a portfolio weight basis.

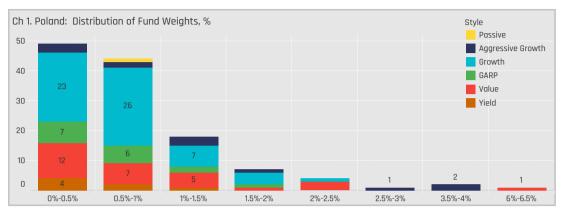
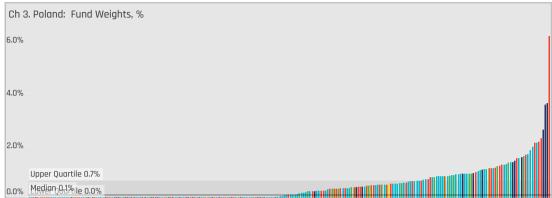
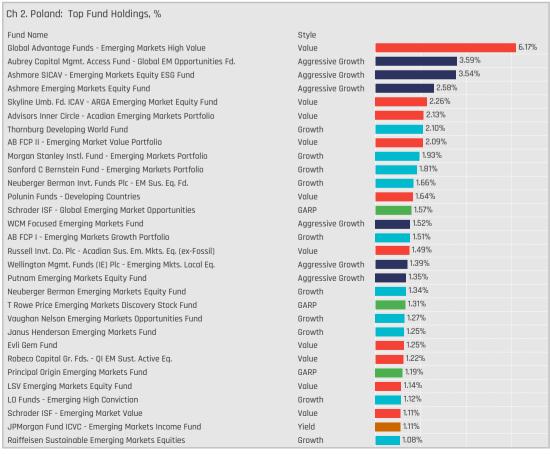
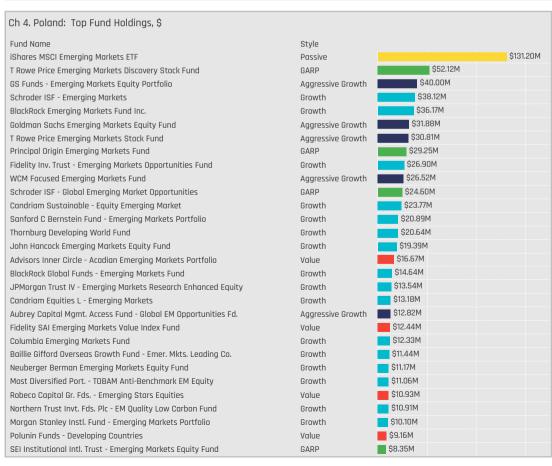


Chart 3. The individual Poland fund weights funds in our analysis, ranked by allocation size with Median and Quartiles. Chart 4. The largest 30 Poland holders in our analysis, on an \$ AUM basis.







Aggregate Ownership Changes



Chart 1. Measures the largest changes in average Country weight between 2/28/2022 and 8/31/2022.

Chart 3. Measures the largest changes in the percentage of funds invested in each Country between 2/28/2022 and 8/31/2022.

Chart 5. Shows the cumulative fund flows for Poland stocks among the 278 active GEM 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.

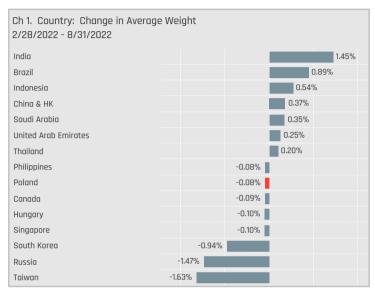


Chart 2. Measures the largest changes in the average Country weight vs EEM between 2/28/2022 and 8/31/2022. An increasing figure would indicate an increasing overweight or decreasing underweight.

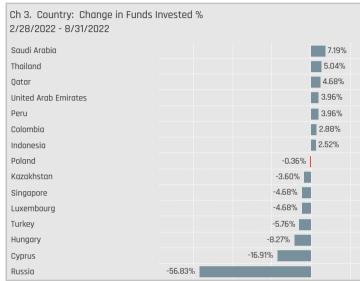


Chart 4. Measures the largest changes in the percentage of funds overweight each Country compared to the iShares MSCI Emerging Markets ETF between 2/28/2022 and 8/31/2022. An increasing figure would indicate more funds are positioning themselves overweight over the period.

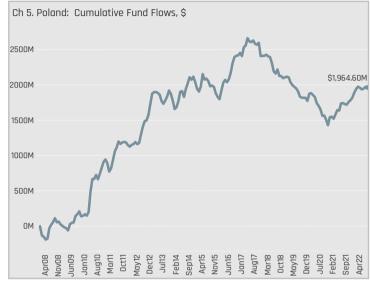
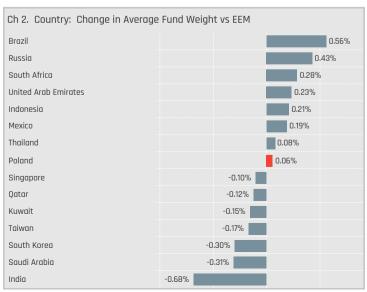
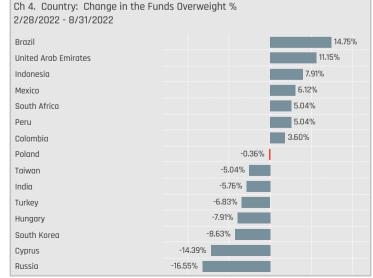
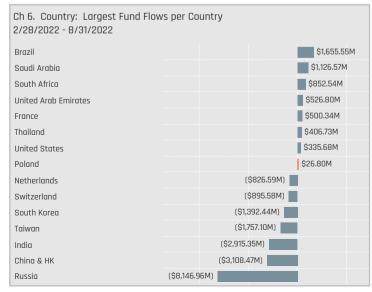


Chart 6. Measures the largest estimated fund flows for each Country between 2/28/2022 and 8/31/2022.







Fund Holding Changes



Chart 1. The largest fund weight increases in Poland stocks between 2/28/2022 - 8/31/2022.

Chart 2. The largest fund weight decreases in Poland stocks between 2/28/2022 - 8/31/2022

Both charts show the current weight and whether the weight change represented a new or closed position.

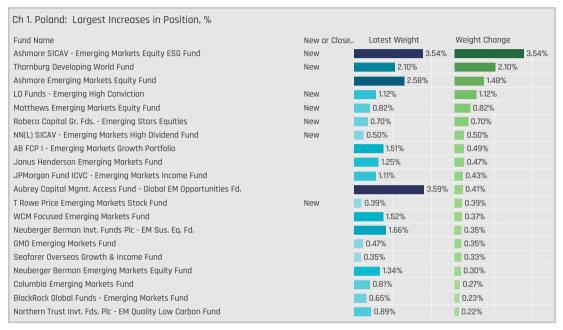


Chart 3. The largest buyers in US dollar terms in Poland stocks between 2/28/2022 - 8/31/2022. Chart 4. The largest sellers in US dollar terms in Poland stocks between 2/28/2022 - 8/31/2022 Both charts show the current AUM and whether the fund flow represented a new or closed position.

Fund Name	New or Close	Latest AUM, \$	Fund Flows, \$
T Rowe Price Emerging Markets Stock Fund	New	\$30.81M	\$58.23M
iShares MSCI Emerging Markets ETF		\$131.20M	\$22.52M
Thornburg Developing World Fund	New	\$20.64M	\$21.62M
Robeco Capital Gr. Fds Emerging Stars Equities	New	\$10.93M	\$19.72M
BlackRock Global Funds - Emerging Markets Fund		\$14.64M	\$17.20M
T Rowe Price Emerging Markets Discovery Stock Fund		\$52.12M	\$15.86M
Seafarer Overseas Growth & Income Fund		\$6.01M	\$13.70M
Schroder ISF - Emerging Markets		\$38.12M	\$9.60M
Fidelity Inv. Trust - Emerging Markets Opportunities Fund		\$26.90M	\$8.95M
BlackRock Emerging Markets Fund Inc.		\$36.17M	\$7.75M
GMO Emerging Markets Fund		\$6.95M	\$6.43M
Northern Trust Invt. Fds. Plc - EM Quality Low Carbon Fund		\$10.91M	\$6.32M
GS Funds - Emerging Markets CORE Equity Portfolio		\$7.93M	\$5.06M
Ninety One Glb. Strat. Fd Emerging Markets Equity		\$4.40M	\$4.52M
JPMorgan Fund ICVC - Emerging Markets Income Fund		\$7.76M	\$4.23M
JPMorgan Trust IV - Emerging Markets Research Enhanced Equity		\$13.54M	\$3.77M
Sanford C Bernstein Fund - Emerging Markets Portfolio		\$20.89M	\$3.56M
Goldman Sachs Emerging Markets Equity Insights Fund		\$6.07M	\$3.50M
Advisors Inner Circle - Acadian Emerging Markets Portfolio		\$16.67M	\$3.48M
Fisher Invts. Instl. Fds. Plc - Emerging Markets Equity Fund	New	\$1.58M	\$2.86M

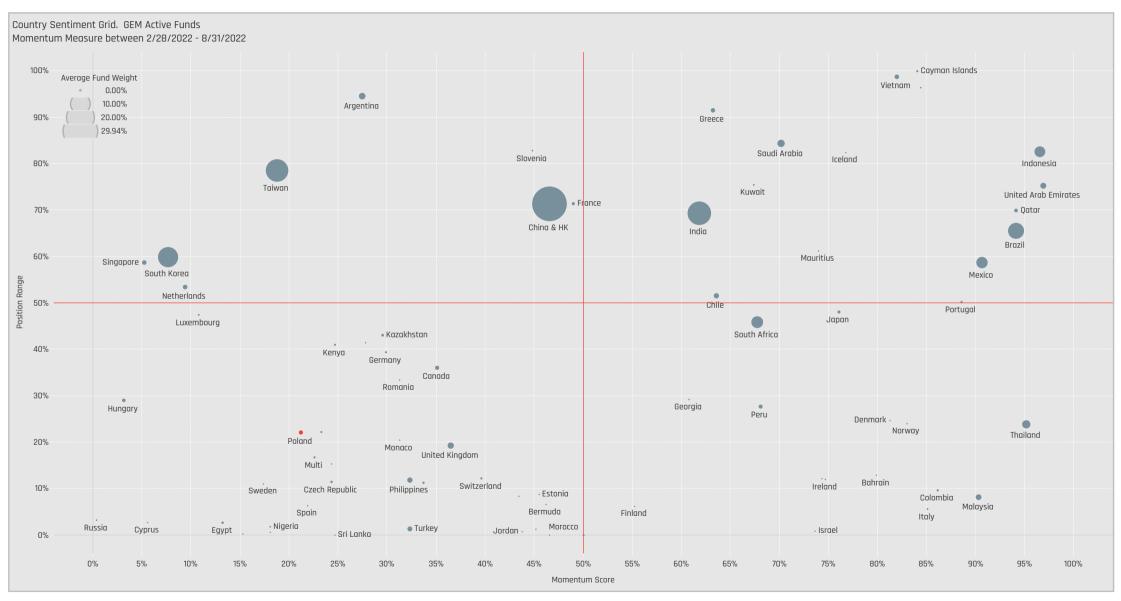
Fund Name	New or Close	Latest Weight	Weight (Change
PineBridge Global Funds - Global Emer. Mkts. Focus Equity Fund	Close	0.00%	-3.56%	
Candriam Sustainable - Equity Emerging Market		0.81%	-2	2.45%
Amonis Equity Emerging Markets		0.90%		-2.06%
BlackRock Sustainable Emerging Markets Equity Fund	Close	0.00%		-1.79%
Wellington Mgmt. Funds (IE) Plc - Emerging Markets Equity		0.91%		-1.78%
AB FCP II - Emerging Market Value Portfolio		2.09%		-1.14%
Allianz Global Investors Fund - Best Styles EM Equity SRI		0.26%		-1.08%
Allspring (Lux) Ww. Fd EM Equity Income Fund	Close	0.00%		-0.99%
Old Mut. MultiManager TrQuil. Invtrs. Em. Mrkts. Eq. In. Fd.	Close	0.00%		-0.95%
Magna Umbrella Fund Plc - Emerging Markets Dividend Fund		0.46%		-0.93%
idelity Inv. Trust - Emerging Markets Discovery Fund	Close	0.00%		-0.82%
Schroder ISF - Emerging Market Value		1.11%		-0.77%
Baillie Gifford Overseas Growth Fund - Emer. Mkts. Leading Co.		1.04%		-0.76%
Soldman Sachs ESG Emerging Markets Equity Fund	Close	0.00%		-0.74%
aughan Nelson Emerging Markets Opportunities Fund		1.27%		-0.73%
GuideStone Emerging Markets Equity Fund		0.56%		-0.70%
Global Advantage Funds - Emerging Markets High Value		6	.17%	-0.56%
Causeway Emerging Markets Fund		0.10%		-0.55%
viva Invs Global Emerging Markets Equity Unconstrained Fd.		0.83%		-0.54%
Northern Trust Invt. Fds. Plc - EM Multifactor ESG Fund		0.70%		-0.54%

Ch 4. Poland: Largest Fund Outflows, \$			
Fund Name	New or Close	Latest AUM, \$	Fund Flows, \$
Candriam Sustainable - Equity Emerging Market		\$23.77M	(\$61.42M)
GS Funds - Emerging Markets Equity Portfolio		\$40.00M	(\$36.53M)
Goldman Sachs Emerging Markets Equity Fund		\$31.88M	(\$27.53M)
Principal Origin Emerging Markets Fund		\$29.25M	(\$20.02M)
Candriam Equities L - Emerging Markets		\$13.18M	(\$11.37M)
Causeway Emerging Markets Fund		\$1.46M	(\$10.90M)
Polunin Funds - Developing Countries		\$9.16M	(\$7.46M)
PGIM Jennison Emerging Markets Equity Opportunities Fund	Close		(\$5.87M)
GuideStone Emerging Markets Equity Fund		\$3.49M	(\$5.36M)
Harding Loevner Institutional Emerging Markets Portfolio		\$7.93M	(\$4.67M)
William Blair Emerging Markets Growth Fund		\$3.04M	(\$4.43M)
PineBridge Global Funds - Global Emer. Mkts. Focus Equity Fund	Close		(\$3.91M)
Swisscanto Sammelstiftung Emerging Market Equity Fund		\$1.60M	(\$3.83M)
Northern Trust Invt. Fds. Plc - EM Multifactor ESG Fund		\$0.82M	(\$2.83M)
Fidelity Inv. Trust - Emerging Markets Discovery Fund	Close		(\$2.82M)
Morgan Stanley Instl. Fund - Emerging Markets Portfolio		\$10.10M	(\$2.39M)
SPP Emerging Markets Plus		\$7.07M	(\$2.30M)
Allspring (Lux) Ww. Fd EM Equity Income Fund	Close		(\$2.13M)
Robeco Capital Gr. Fds QI Emerging Markets Active Equities		\$2.23M	(\$2.13M)
BlackRock Sustainable Emerging Markets Equity Fund	Close		(\$2.04M)

Country Sentiment Grid



Sentiment Grid: 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 1/31/2008). 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 2/28/2022 and 8/31/2022, 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.



Position Range: Average of:

Z-Score Average Weight vs history

Z-Score Funds Invested % vs history

Z-Score Funds O/W % vs history

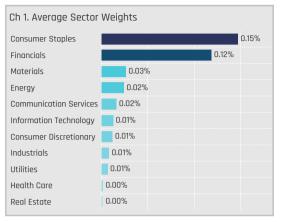
Momentum Score: Average of: Change in Average Weight (Percentile vs Peers) Change in Funds Invested % (Percentile vs Peers) Change in Funds O/W % (Percentile vs Peers)

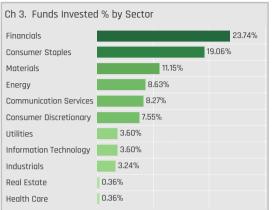
Aggregate Sector Ownership



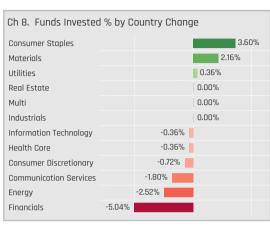
Chart 1-5. Poland: Key ownership statistics by Sector. As of 8/31/2022

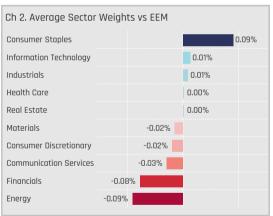


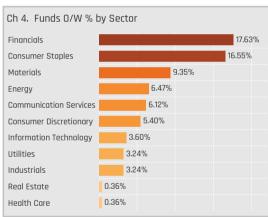


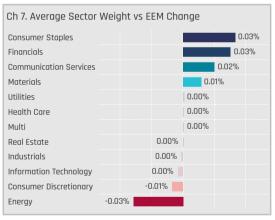


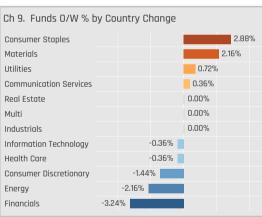


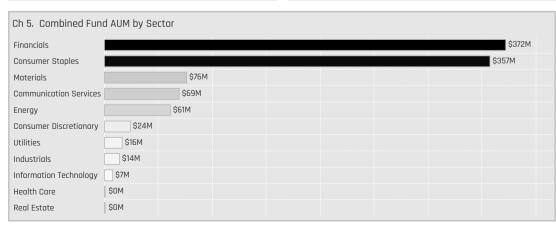


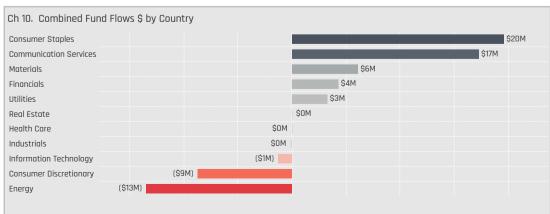










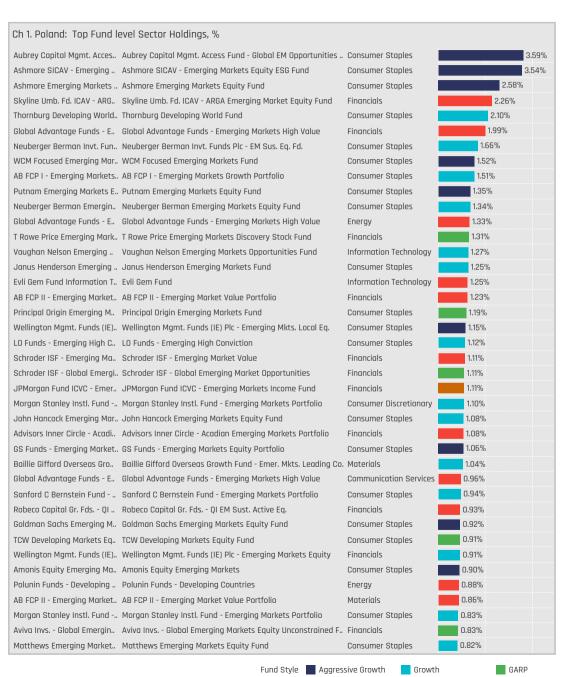


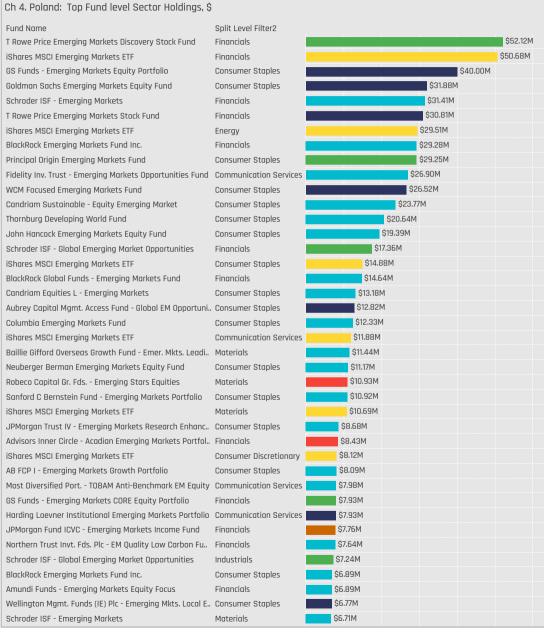
Fund Level Sector Holdings



Chart 1. Poland: The largest individual fund level Sector holdings by fund weight, coloured by fund Style,

Chart 2. Poland: The largest individual fund level Sector holdings by \$ AUM. coloured by fund Style.





Yield

Value

Fund Level Sector Changes



Chart 1. The largest Sector level weight increases in Poland between 2/28/2022 - 8/31/2022.

Chart 2. The largest Sector level weight decreases in Poland between 2/28/2022 - 8/31/2022.

Both charts show the current weight and whether the weight change represented a new or closed position.

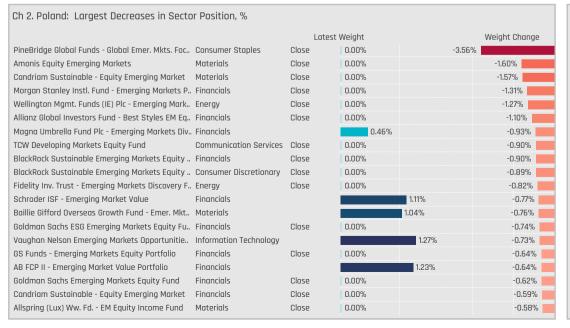


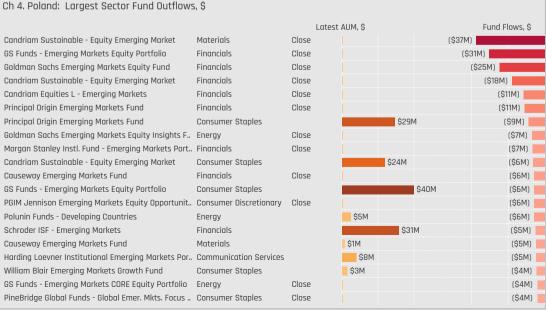
Chart 3. The largest Sector level fund inflows in Poland between 2/28/2022 - 8/31/2022.

Chart 4. The largest Sector level fund outflows in Poland between 2/28/2022 - 8/31/2022.

Both charts show the current AUM and whether the fund flow represented a new or closed position.

			Latest AUM, \$	Fund Flows, \$
T Rowe Price Emerging Markets Stock Fund	Financials	New	\$31M	\$58M
Thornburg Developing World Fund	Consumer Staples	New	\$21M	\$22M
Robeco Capital Gr. Fds Emerging Stars Equities	Materials	New	\$11M	\$20M
BlackRock Global Funds - Emerging Markets Fund	Financials		\$15M	\$17M
T Rowe Price Emerging Markets Discovery Stock Fu	Financials		\$52M	\$16M
Schroder ISF - Emerging Markets	Materials	New	\$7M	\$15M
Seafarer Overseas Growth & Income Fund	Communication Services		\$6M	\$14M
Goldman Sachs Emerging Markets Equity Insights F	Financials		\$6M	\$10M
GS Funds - Emerging Markets CORE Equity Portfolio	Financials		\$8M	\$10M
Shares MSCI Emerging Markets ETF	Energy		\$30M	\$10M
Fidelity Inv. Trust - Emerging Markets Opportunities	Communication Services		\$27M	\$9M
BlackRock Emerging Markets Fund Inc.	Consumer Staples	New	\$7M	\$7M
Shares MSCI Emerging Markets ETF	Financials		\$51M	\$6M
Advisors Inner Circle - Acadian Emerging Markets P	Materials		■ \$3M	\$5M
Ninety One Glb. Strat. Fd Emerging Markets Equity	Financials		\$4M	\$5M
Morgan Stanley Instl. Fund - Emerging Markets Por	Consumer Staples	New	\$4M	\$4M
Northern Trust Invt. Fds. Plc - EM Quality Low Carbo	Financials		\$8M	\$4M
GMO Emerging Markets Fund	Energy		\$3M	\$4M
JPMorgan Fund ICVC - Emerging Markets Income F	Financials		\$8M	\$4M
Fidelity SAI Emerging Markets Value Index Fund	Utilities	New	\$3M	\$4M

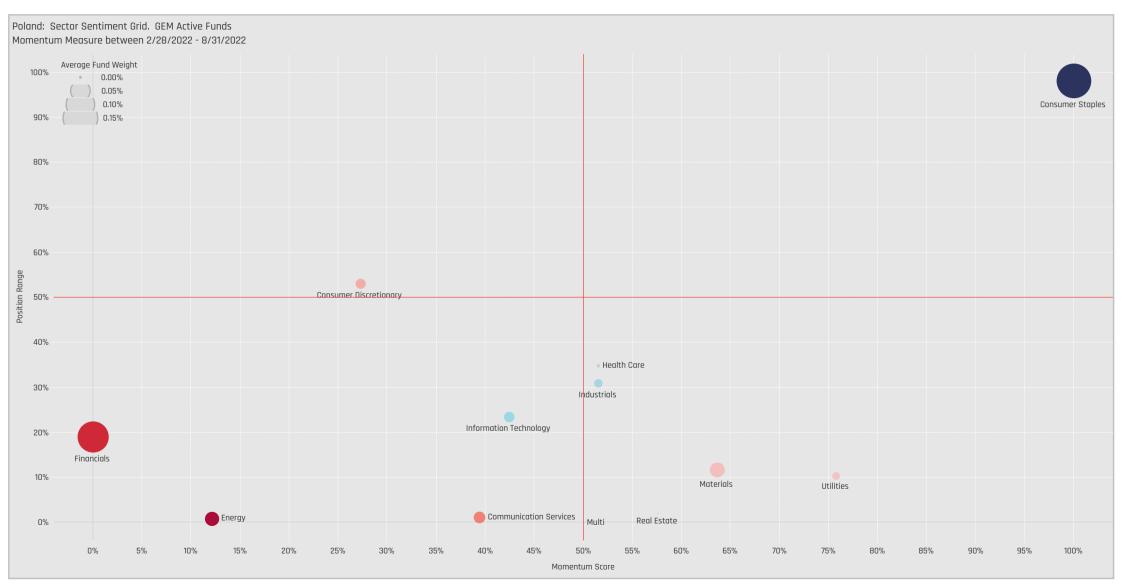




Sector Sentiment Grid



Sentiment Grid: Poland. We combine the latest Sector 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 Sector 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 1/31/2008). 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 2/28/2022 and 8/31/2022, relative to each Sector. A figure above 50% means a 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 Sector. The colour represents if the Sector 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)

Aggregate Stock Holdings



Chart 1. The largest 10 stock holdings in Poland, by Average Weight. The chart also shows the average weight as a percentage of the total Poland weight, and the cumulative total.

Chart 2. Shows aggregate stock holdings data for Poland stocks, ranked by Funds Invested % (most widely held).



Chart 3. Top 5 overweight and underweight Poland stock positions / as a percentage of the total Poland weight relative to benchmark.

Charts 4&5. The largest overweight and underweight stock holdings, plus associated aggregate holdings data.

Ch 4. Poland: Aggregate Stock Holdings Data. Largest Overweight Holdings



Ch 2. Pola	nd: Aggregate Stock Holdings Data, Rank	ked by Most Widely	Held.		
Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
DNP-PL	Dino Polska SA	17.99%	0.15%	0.09%	\$356.01M
PEO-PL	BANK POLSKA KASA OPIEKI SA	14.03%	0.04%	0.00%	\$96.07M
PKO-PL	Powszechna Kasa Oszczednosci Bank Polski	10.79%	0.03%	-0.04%	\$112.85M
PZU-PL	Powszechny Zaklad Ubezpieczen Spolka Akc	10.43%	0.04%	-0.02%	\$124.26M
KGH-PL	KGHM Polska Miedz S.A.	10.43%	0.02%	-0.02%	\$73.73M
PKN-PL	Polski Koncern Naftowy ORLEN S.A.	6.83%	0.02%	-0.07%	\$41.91M
LPP-PL	LPP S.A.	6.12%	0.01%	-0.02%	\$22.62M
SPL-PL	Santander Bank Polska SA	5.40%	0.01%	-0.02%	\$14.77M
PGN-PL	Polskie Gornictwo Naftowe i Gazownictwo SA	5.40%	0.01%	-0.02%	\$18.91M
CPS-PL	Cyfrowy Polsat SA	4.68%	0.00%	-0.01%	\$9.06M
CDR-PL	CD Projekt S.A.	4.68%	0.01%	-0.01%	\$52.29M
ACP-PL	Asseco Poland S.A.	2.88%	0.01%	0.01%	\$6.44M
PGE-PL	PGE Polska Grupa Energetyczna S.A.	2.52%	0.00%	-0.02%	\$13.35M
OPL-PL	Orange Polska S.A.	2.16%	0.00%	-0.01%	\$7.70M
MBK-PL	mBank SA	2.16%	0.00%	-0.01%	\$3.70M
TPE-PL	TAURON Polska Energia S.A.	1.80%	0.00%	0.00%	\$2.58M
KRU-PL	KRUK S.A.	1.80%	0.01%	0.01%	\$18.82M
BDX-PL	Budimex SA	1.80%	0.00%	0.00%	\$3.09M
BHW-PL	Bank Handlowy w Warszawie S.A.	1.44%	0.00%	0.00%	\$0.24M
JSW-PL	Jastrzebska Spolka Weglowa S.A.	1.08%	0.00%	0.00%	\$2.40M
CCC-PL	CCC SA	1.08%	0.00%	0.00%	\$1.19M
ALR-PL	Alior Bank SA	1.08%	0.00%	0.00%	\$0.21M
UNT-PL	UNIMOT SA	0.72%	0.00%	0.00%	\$0.03M
LWB-PL	Lubelski Wegiel BOGDANKA SA	0.72%	0.00%	0.00%	\$0.08M
LVC-PL	LIVECHAT Software S.A.	0.72%	0.00%	0.00%	\$0.39M

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Ticker	Stock Name	Vs Benchmark	Average Weight	Funds Invested %	Fund AUM, \$
DNP-PL	Dino Polska SA	0.09%	0.15%	17.99%	\$356.01M
ACP-PL	Asseco Poland S.A.	0.01%	0.01%	2.88%	\$6.44M
KRU-PL	KRUK S.A.	0.01%	0.01%	1.80%	\$18.82M
LVC-PL	LIVECHAT Software S.A.	0.00%	0.00%	0.72%	\$0.39M
GPP-PL	Grupa Pracuj spolka akcyjna	0.00%	0.00%	0.72%	\$8.60M
MBR-PL	Mo-BRUK S.A.	0.00%	0.00%	0.36%	\$1.95M
TPE-PL	TAURON Polska Energia S.A.	0.00%	0.00%	1.80%	\$2.58M
JSW-PL	Jastrzebska Spolka Weglowa S.A.	0.00%	0.00%	1.08%	\$2.40M
NEU-PL	NEUCA S.A.	0.00%	0.00%	0.36%	\$0.13M
KER-PL	Kernel Holding S.A.	0.00%	0.00%	0.36%	\$1.13M

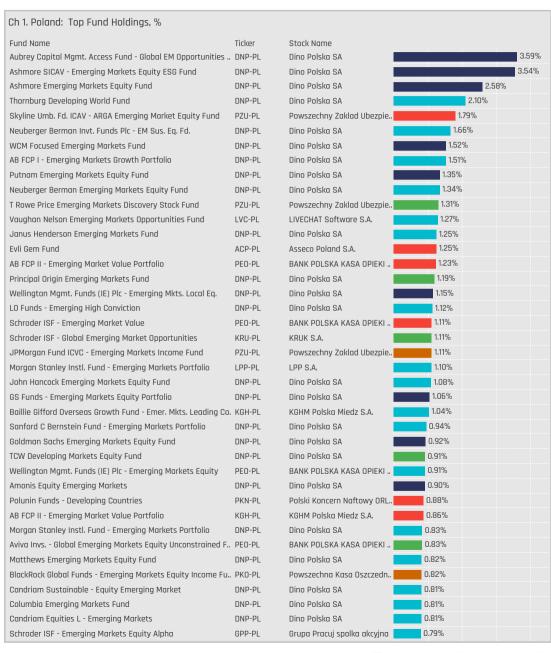
Ch 5. Polar	nd: Aggregate Stock Holdings Data, Larges	st Underweight Ho	oldings		
Ticker	Stock Name	Vs Benchmark	Average Weight	Funds Invested %	Fund AUM, \$
PKN-PL	Polski Koncern Naftowy ORLEN S.A.	-0.07%	0.02%	6.83%	\$41.91M
PKO-PL	Powszechna Kasa Oszczednosci Bank Polski	-0.04%	0.03%	10.79%	\$112.85M
PGN-PL	Polskie Gornictwo Naftowe i Gazownictwo SA	-0.02%	0.01%	5.40%	\$18.91M
LPP-PL	LPP S.A.	-0.02%	0.01%	6.12%	\$22.62M
SPL-PL	Santander Bank Polska SA	-0.02%	0.01%	5.40%	\$14.77M
KGH-PL	KGHM Polska Miedz S.A.	-0.02%	0.02%	10.43%	\$73.73M
PZU-PL	Powszechny Zaklad Ubezpieczen Spolka Akc	-0.02%	0.04%	10.43%	\$124.26M
PGE-PL	PGE Polska Grupa Energetyczna S.A.	-0.02%	0.00%	2.52%	\$13.35M
CDR-PL	CD Projekt S.A.	-0.01%	0.01%	4.68%	\$52.29M
CPS-PL	Cyfrowy Polsat SA	-0.01%	0.00%	4.68%	\$9.06M

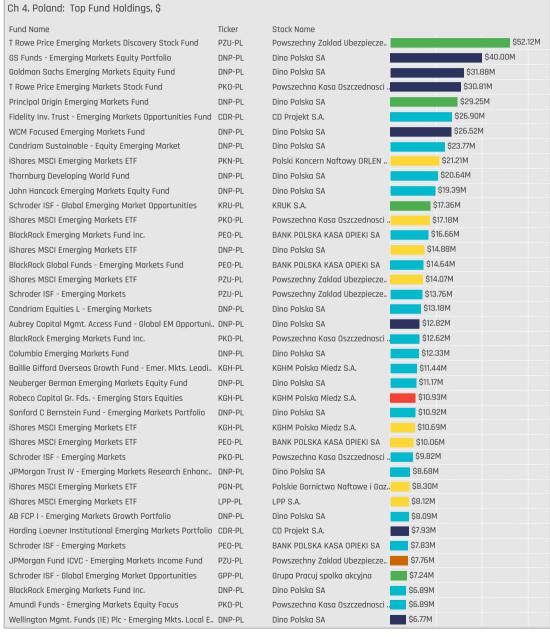
Fund Level Stock Holdings



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

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





Aggregate Stock Holding Changes



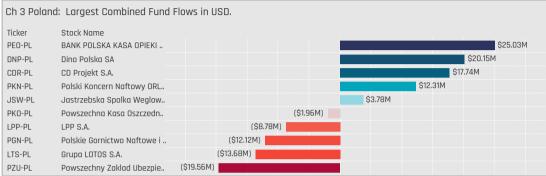
Chart 1. The 10 Poland stocks seeing the largest changes in funds invested % between 2/28/2022 - 8/31/2022. A positive figure shows more funds buying in to the stock, a negative figure funds closing out.

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 Poland stocks seeing the largest USD fund flows between 2/28/2022 - 8/31/2022.

Chart 4. The largest decreases in funds invested %, together with average weight changes, relative to benchmark changes and combined fund flows.





Ch 2. Polan	d: Aggregate Stock Holdings Changes	- Largest Increases	in Funds Invested	1 %.	
Ticker	Stock Name	Funds Invested % Δ	Average Weight Δ	Average Wgt vs Ben	Fund Flows, \$
DNP-PL	Dino Polska SA	4.32%	0.04%	0.03%	\$20.15M
KGH-PL	KGHM Polska Miedz S.A.	2.16%	-0.02%	0.01%	\$2.35M
SPL-PL	Santander Bank Polska SA	1.08%	0.00%	0.01%	\$2.42M
JSW-PL	Jastrzebska Spolka Weglowa S.A.	0.72%	0.00%	0.00%	\$3.78M
TPE-PL	TAURON Polska Energia S.A.	0.72%	0.00%	0.00%	\$0.72M
PXM-PL	Polimex-Mostostal S.A.	0.36%	0.00%	0.00%	\$0.01M
PCR-PL	PCC Rokita SA	0.36%	0.00%	0.00%	\$0.02M
LWB-PL	Lubelski Wegiel BOGDANKA SA	0.36%	0.00%	0.00%	\$0.02M
ZEP-PL	Zespol Elektrowni Patnow Adamow Konin SA	0.00%	0.00%	0.00%	
ZAP-PL	Grupa Azoty Zaklady Azotowe Pulawy SA	0.00%	0.00%	0.00%	
WWL-PL	Zaklady Przemyslu Cukierniczego Wawel S.A.	0.00%	0.00%	0.00%	
VRG-PL	VRG S.A.	0.00%	0.00%	0.00%	
UNT-PL	UNIMOT SA	0.00%	0.00%	0.00%	(\$0.01M)
TVN-PL	TVN S.A.	0.00%	0.00%	0.00%	
TRK-PL	Trakcja Spolka Akcyjna	0.00%	0.00%	0.00%	
TOR-PL	TORPOL S.A.	0.00%	0.00%	0.00%	\$0.00M
TIM-PL	TIM SA	0.00%	0.00%	0.00%	\$0.00M
STX-PL	Stalexport Autostrady S.A.	0.00%	0.00%	0.00%	\$0.00M
STP-PL	Stalprodukt S.A.	0.00%	0.00%	0.00%	\$0.00M
SOL-PL	Solar Company SA	0.00%	0.00%	0.00%	
SNS-PL	Synthos S.A.	0.00%	0.00%	0.00%	
SHO-PL	Shoper Spolka Akcyjna	0.00%	0.00%	0.00%	(\$0.27M)
RSE-PL	Rovese SA	0.00%	0.00%	0.00%	
RFK-PL	RAFAKO S.A.	0.00%	0.00%	0.00%	
PTH-PL	PRIMETECH Spolka Akcyjna	0.00%	0.00%	0.00%	

Ch 4. Polan	d: Aggregate Stock Holdings Changes	- Largest Decreases	s in Funds Investe	ed %.	
Ticker	Stock Name	Funds Invested % Δ	Average Weight Δ	Average Wgt vs Ben	Fund Flows, \$
PZU-PL	Powszechny Zaklad Ubezpieczen Spolka Akc	-2.88%	-0.01%	-0.01%	(\$19.56M)
PKO-PL	Powszechna Kasa Oszczednosci Bank Polski	-2.52%	-0.03%	0.02%	(\$1.96M)
LTS-PL	Grupa LOTOS S.A.	-2.52%	-0.01%	-0.01%	(\$13.68M)
PGN-PL	Polskie Gornictwo Naftowe i Gazownictwo SA	-1.44%	0.00%	0.00%	(\$12.12M)
ALR-PL	Alior Bank SA	-1.08%	0.00%	0.00%	(\$0.56M)
OPL-PL	Orange Polska S.A.	-1.08%	0.00%	0.00%	(\$0.30M)
LPP-PL	LPP S.A.	-0.72%	-0.01%	-0.01%	(\$8.78M)
GPW-PL	Warsaw Stock Exchange	-0.72%	0.00%	0.00%	(\$0.23M)
KER-PL	Kernel Holding S.A.	-0.72%	0.00%	0.00%	(\$0.60M)
MBK-PL	mBank SA	-0.72%	0.00%	0.01%	\$0.45M
ACP-PL	Asseco Poland S.A.	-0.72%	0.00%	0.00%	(\$0.94M)
CDR-PL	CD Projekt S.A.	-0.72%	0.00%	0.01%	\$17.74M
PKN-PL	Polski Koncern Naftowy ORLEN S.A.	-0.72%	0.00%	-0.02%	\$12.31M
PEO-PL	BANK POLSKA KASA OPIEKI SA	-0.36%	-0.03%	0.00%	\$25.03M
KRU-PL	KRUK S.A.	-0.36%	0.00%	0.00%	(\$0.17M)
PGE-PL	PGE Polska Grupa Energetyczna S.A.	-0.36%	0.00%	0.00%	\$2.56M
DOM-PL	Dom Development S.A.	-0.36%	0.00%	0.00%	(\$0.02M)
ING-PL	ING Bank Slaski S.A.	-0.36%	0.00%	0.00%	(\$0.11M)
KTY-PL	Grupa KETY S.A.	-0.36%	0.00%	0.00%	(\$0.06M)
NEU-PL	NEUCA S.A.	-0.36%	0.00%	0.00%	\$0.00M
PKP-PL	PKP Cargo SA	-0.36%	0.00%	0.00%	(\$0.02M)
STH-PL	STS Holding S.A	-0.36%	0.00%	0.00%	(\$1.04M)
TEN-PL	Ten Square Games SA	-0.36%	0.00%	0.00%	(\$0.23M)
WLT-PL	Wielton S.A.	-0.36%	0.00%	0.00%	(\$0.01M)
WPL-PL	Wirtualna Polska Holding SA	-0.36%	0.00%	0.00%	\$0.00M

Fund Level Stock Holding Changes



Chart 1. The largest fund weight increases in Poland stocks between 2/28/2022 - 8/31/2022.

Chart 2. The largest fund weight decreases in Poland stocks between 2/28/2022 - 8/31/2022

Both charts show the current weight and whether the weight change represented a new or closed position.

Ch 1. Poland: Largest Increases in Position	on, %				
Fund Name	Ticker	Stock Name	New or Close	Latest Weight	Weight Change
Ashmore SICAV - Emerging Markets Equity ESG F	DNP-PL	Dino Polska SA	New	3.54%	3.54%
Thornburg Developing World Fund	DNP-PL	Dino Polska SA	New	2.10%	2.10%
Ashmore Emerging Markets Equity Fund	DNP-PL	Dino Polska SA		2.58%	1.48%
LO Funds - Emerging High Conviction	DNP-PL	Dino Polska SA	New	1.12%	1.12%
TCW Developing Markets Equity Fund	DNP-PL	Dino Polska SA	New	0.91%	0.91%
Morgan Stanley Instl. Fund - Emerging Markets P.,	DNP-PL	Dino Polska SA	New	0.83%	0.83%
Matthews Emerging Markets Equity Fund	DNP-PL	Dino Polska SA	New	0.82%	0.82%
Robeco Capital Gr. Fds Emerging Stars Equities	KGH-PL	KGHM Polska Miedz S.A.	New	0.70%	0.70%
AB FCP I - Emerging Markets Growth Portfolio	DNP-PL	Dino Polska SA		1.51%	0.49%
Janus Henderson Emerging Markets Fund	DNP-PL	Dino Polska SA		1.25%	0.47%
JPMorgan Fund ICVC - Emerging Markets Income	PZU-PL	Powszechny Zaklad Ubezpi		1.11%	0.43%
Aubrey Capital Mgmt. Access Fund - Global EM O	DNP-PL	Dino Polska SA		3.59%	0.41%
T Rowe Price Emerging Markets Stock Fund	PKO-PL	Powszechna Kasa Oszczedn	New	0.39%	0.39%
WCM Focused Emerging Markets Fund	DNP-PL	Dino Polska SA		1.52%	0.37%
Neuberger Berman Invt. Funds Plc - EM Sus. Eq. F.	DNP-PL	Dino Polska SA		1.66%	0.35%
Seafarer Overseas Growth & Income Fund	CDR-PL	CD Projekt S.A.		0.35%	0.33%
VALIC Company I - Emerging Economies Fund	DNP-PL	Dino Polska SA	New	0.33%	0.33%
NN(L) SICAV - Emerging Markets High Dividend F	PKN-PL	Polski Koncern Naftowy OR	New	0.32%	0.32%
Neuberger Berman Emerging Markets Equity Fun	DNP-PL	Dino Polska SA		1.34%	0.30%
Advisors Inner Circle - Acadian Emerging Markets	JSW-PL	Jastrzebska Spolka Weglo	New	0.30%	0.30%

Chart 3. The largest buyers in US dollar terms in Poland stocks between 2/28/2022 - 8/31/2022. Chart 4. The largest sellers in US dollar terms in Poland stocks between 2/28/2022 - 8/31/2022 Both charts show the current AUM and whether the fund flow represented a new or closed position.

Ch 3. Poland: Largest Fund Inflows, \$						
Fund Name	Ticker	Stock Name	New or Close	Latest AUM, \$	Fund Flow	/s, \$
T Rowe Price Emerging Markets Stock Fund	PKO-PL	Powszechna Kasa Oszczedn	New	\$31M		\$58M
Thornburg Developing World Fund	DNP-PL	Dino Polska SA	New	\$21M	\$22M	
Robeco Capital Gr. Fds Emerging Stars Equities	KGH-PL	KGHM Polska Miedz S.A.	New	\$11M	\$20M	
BlackRock Global Funds - Emerging Markets Fund	PEO-PL	BANK POLSKA KASA OPIEKI		\$15M	\$17M	
T Rowe Price Emerging Markets Discovery Stock Fu	PZU-PL	Powszechny Zaklad Ubezpie		\$5	2M \$16M	
Schroder ISF - Emerging Markets	KGH-PL	KGHM Polska Miedz S.A.	New	\$7M	\$15M	
Seafarer Overseas Growth & Income Fund	CDR-PL	CD Projekt S.A.		\$6M	\$14M	
iShares MSCI Emerging Markets ETF	PKN-PL	Polski Koncern Naftowy ORL		\$21M	\$9M	
Fidelity Inv. Trust - Emerging Markets Opportunities	CDR-PL	CD Projekt S.A.		\$27M	\$9M	
GS Funds - Emerging Markets CORE Equity Portfolio	PKO-PL	Powszechna Kasa Oszczedn	New	\$4M	\$7M	
BlackRock Emerging Markets Fund Inc.	DNP-PL	Dino Polska SA	New	\$7M	\$7M	
Ninety One Glb. Strat. Fd Emerging Markets Equity	PKO-PL	Powszechna Kasa Oszczedn		\$4M	\$5M	
Goldman Sachs Emerging Markets Equity Insights F	PKO-PL	Powszechna Kasa Oszczedn	New	\$2M	\$4M	
GMO Emerging Markets Fund	PKN-PL	Polski Koncern Naftowy ORL	New	\$3M	\$4M	
Morgan Stanley Instl. Fund - Emerging Markets Por	DNP-PL	Dino Polska SA	New	\$4M	\$4M	
JPMorgan Fund ICVC - Emerging Markets Income F	PZU-PL	Powszechny Zaklad Ubezpie		\$8M	\$4M	
Goldman Sachs Emerging Markets Equity Insights F	PEO-PL	BANK POLSKA KASA OPIEKI	New	\$2M	\$4M	
Northern Trust Invt. Fds. Plc - EM Quality Low Carbo	PKO-PL	Powszechna Kasa Oszczedn		\$4M	\$4M	
Schroder ISF - Emerging Markets	PEO-PL	BANK POLSKA KASA OPIEKI		\$8M	\$4M	
Advisors Inner Circle - Acadian Emerging Markets P	JSW-PL	Jastrzebska Spolka Weglow	New	\$2M	\$4M	

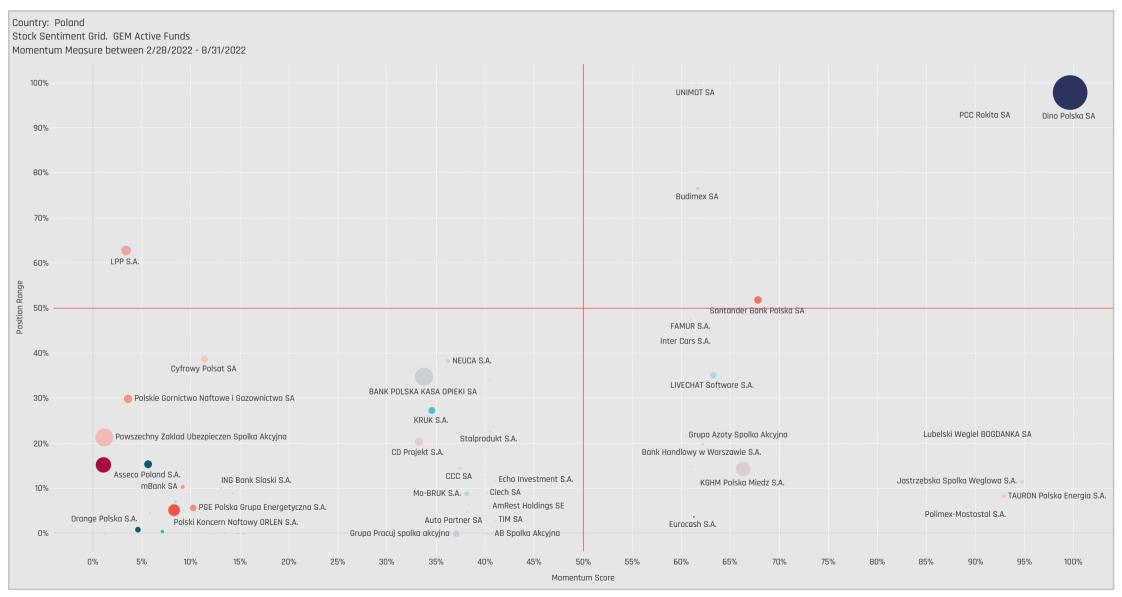
Fund Name	Ticker	Stock Name	New or Close	Latest We	eight	Weight Change
PineBridge Global Funds - Global Emer. Mkts. Foc	DNP-PL	Dino Polska SA	Close	0.00%		-3.56%
Amonis Equity Emerging Markets	KGH-PL	KGHM Polska Miedz S.A.	Close	0.00%		-1.60%
Candriam Sustainable - Equity Emerging Market	KGH-PL	KGHM Polska Miedz S.A.	Close	0.00%		-1.57%
Morgan Stanley Instl. Fund - Emerging Markets P	PEO-PL	BANK POLSKA KASA OPIEKI	Close	0.00%		-1.31%
Wellington Mgmt. Funds (IE) Plc - Emerging Mark	LTS-PL	Grupa LOTOS S.A.	Close	0.00%		-1.27%
Allianz Global Investors Fund - Best Styles EM Eq	PKO-PL	Powszechna Kasa Oszczedn	Close	0.00%		-1.10%
Magna Umbrella Fund Plc - Emerging Markets Div	PKO-PL	Powszechna Kasa Oszczedn		0.46%	6	-0.93%
Vaughan Nelson Emerging Markets Opportunitie	ACP-PL	Asseco Poland S.A.	Close	0.00%		-0.91%
TCW Developing Markets Equity Fund	OPL-PL	Orange Polska S.A.	Close	0.00%		-0.90%
BlackRock Sustainable Emerging Markets Equity	PEO-PL	BANK POLSKA KASA OPIEKI	Close	0.00%		-0.90%
BlackRock Sustainable Emerging Markets Equity	LPP-PL	LPP S.A.	Close	0.00%		-0.89%
Fidelity Inv. Trust - Emerging Markets Discovery F	LTS-PL	Grupa LOTOS S.A.	Close	0.00%		-0.82%
Schroder ISF - Emerging Market Value	PEO-PL	BANK POLSKA KASA OPIEKI			1.11%	-0.77%
Baillie Gifford Overseas Growth Fund - Emer. Mkt	KGH-PL	KGHM Polska Miedz S.A.			1.04%	-0.76%
Goldman Sachs ESG Emerging Markets Equity Fu	PKO-PL	Powszechna Kasa Oszczedn	Close	0.00%		-0.74%
GS Funds - Emerging Markets Equity Portfolio	PKO-PL	Powszechna Kasa Oszczedn	Close	0.00%		-0.64%
AB FCP II - Emerging Market Value Portfolio	PEO-PL	BANK POLSKA KASA OPIEKI			1.23%	-0.64%
Goldman Sachs Emerging Markets Equity Fund	PKO-PL	Powszechna Kasa Oszczedn	Close	0.00%		-0.62%
Candriam Sustainable - Equity Emerging Market	PZU-PL	Powszechny Zaklad Ubezpie	Close	0.00%		-0.59%
Allspring (Lux) Ww. Fd EM Equity Income Fund	KGH-PL	KGHM Polska Miedz S.A.	Close	0.00%		-0.58%

Ch 4. Poland: Largest Fund Outflows, \$					
Fund Name Fund Name	Ticker	Stock Name	New or Close	Latest AUM, \$	Fund Flows, \$
Candriam Su Candriam Sustainable - Equity Eme	KGH-PL	KGHM Polska Miedz S.A.	Close		(\$37M)
GS Funds - E GS Funds - Emerging Markets Equit	PKO-PL	Powszechna Kasa Oszczedn	Close		(\$31M)
Goldman Sac Goldman Sachs Emerging Markets E	PKO-PL	Powszechna Kasa Oszczedn	Close		(\$25M)
Candriam Su Candriam Sustainable - Equity Eme	PZU-PL	Powszechny Zaklad Ubezpie	Close		(\$18M)
Candriam Eq., Candriam Equities L - Emerging Mar.,	PZU-PL	Powszechny Zaklad Ubezpie	Close		(\$11M)
Principal Orig Principal Origin Emerging Markets F	PKO-PL	Powszechna Kasa Oszczedn	Close		(\$11M)
Schroder ISF Schroder ISF - Emerging Markets	PKO-PL	Powszechna Kasa Oszczedn		\$10M	(\$9M)
Principal Orig Principal Origin Emerging Markets F	DNP-PL	Dino Polska SA		\$29M	(\$9M)
Morgan Stan Morgan Stanley Instl. Fund - Emergi	PEO-PL	BANK POLSKA KASA OPIEKI	Close		(\$7M)
Candriam Su Candriam Sustainable - Equity Eme	DNP-PL	Dino Polska SA		\$24M	(\$6M)
Causeway E Causeway Emerging Markets Fund	PZU-PL	Powszechny Zaklad Ubezpie	Close		(\$6M)
GS Funds - E GS Funds - Emerging Markets Equit	DNP-PL	Dino Polska SA		\$40M	(\$6M)
PGIM Jennis PGIM Jennison Emerging Markets E	LPP-PL	LPP S.A.	Close		(\$6M)
Polunin Fund Polunin Funds - Developing Countri	LTS-PL	Grupa LOTOS S.A.	Close		(\$6M)
Goldman Sac Goldman Sachs Emerging Markets E	PGN-PL	Polskie Gornictwo Naftowe i	Close		(\$5M)
Causeway E Causeway Emerging Markets Fund	KGH-PL	KGHM Polska Miedz S.A.		\$1M	(\$5M)
Harding Loev Harding Loevner Institutional Emer	CDR-PL	CD Projekt S.A.		\$8M	(\$5M)
William Blair William Blair Emerging Markets Gro	DNP-PL	Dino Polska SA		\$3M	(\$4M)
PineBridge Gl PineBridge Global Funds - Global Em	DNP-PL	Dino Polska SA	Close		(\$4M)
GuideStone GuideStone Emerging Markets Equit	LTS-PL	Grupa LOTOS S.A.	Close		(\$3M)

Stock Sentiment Grid



Stock Sentiment Grid: We combine current positioning, long-term positioning and short-term fund activity for Poland stocks in the chart below. The Y-Axis measures where today's ownership levels 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 1/31/2008). 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 2/28/2022 and 8/31/2022, 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)

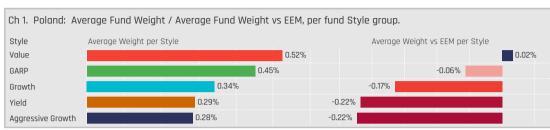
Holdings by Fund Style



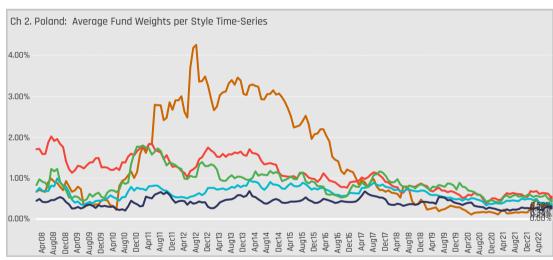
Chart 1. The average weights in Poland stocks and the average weights vs the iShares MSCI Emerging Markets ETF, split by fund

Charts 2&3. The time series of average fund weights in Poland stocks and average weights vs iShares MSCI Emerging Markets ETF, split by fund Style.

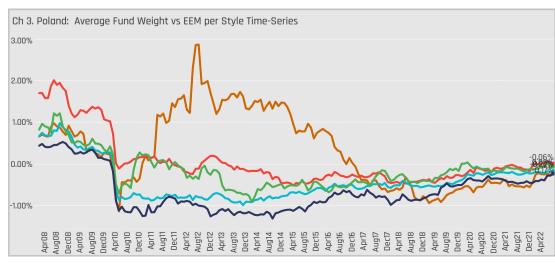
Chart 4. The percentage of funds invested in Poland stocks and the percentage of funds overweight, split by fund Style. Charts 5&6. The time series of the percentage of funds invested in Poland stocks and the percentage of funds overweight, split by fund Style.

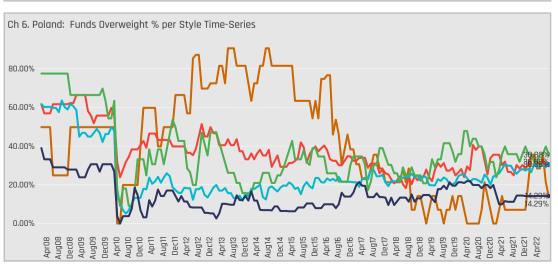












Holdings by Fund Style



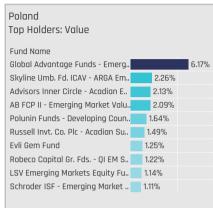
Top Row. For each Style category, each chart shows the largest holders in the Poland Country group.

Middle Row: For each Style category, each chart shows the most widely held stocks and the corresponding average fund weights in the Poland Country group. Bottom Row: For each Style category, each chart shows the largest stock overweights and underweights in the Poland Country group.









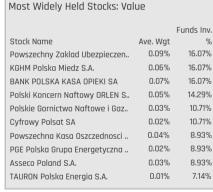


Poland Most Widely Held Stocks: Aggressive Growth						
		Funds Inv				
Stock Name	Ave. Wgt	%				
Dino Polska SA	0.27%	15.87%				
Powszechna Kasa Oszczedności	0.01%	1.59%				
CD Projekt S.A.	0.00%	1.59%				
BANK POLSKA KASA OPIEKI SA	0.00%	1.59%				



i olullu				
Most Widely Held Stocks: GARP				
		Funds Inv.		
Stock Name	Ave. Wgt	%		
BANK POLSKA KASA OPIEKI SA	0.09%	40.00%		
Dino Polska SA	0.14%	32.00%		
Powszechna Kasa Oszczedności	0.03%	24.00%		
KGHM Polska Miedz S.A.	0.03%	24.00%		
Powszechny Zaklad Ubezpieczen	0.07%	20.00%		
Santander Bank Polska SA	0.00%	12.00%		
Polski Koncern Naftowy ORLEN S	0.01%	12.00%		
KRUK S.A.	0.05%	12.00%		
Asseco Poland S.A.	0.01%	12.00%		
Polskie Gornictwo Naftowe i Gaz	0.00%	8.00%		

Poland



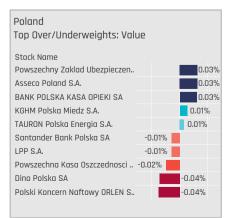
Poland

Poland	I.J	
Most Widely Held Stocks: Yie	lu	
		Funds Inv.
Stock Name	Ave. Wgt	%
Powszechna Kasa Oszczedności	0.09%	14.29%
BANK POLSKA KASA OPIEKI SA	0.04%	14.29%
Powszechny Zaklad Ubezpieczen	0.08%	7.14%
Polskie Gornictwo Naftowe i Gaz	0.01%	7.14%
Polski Koncern Naftowy ORLEN S	0.02%	7.14%
Orange Polska S.A.	0.02%	7.14%
CD Projekt S.A.	0.02%	7.14%













Ch1. The blue line shows the total number of funds (out of 278) who have ever owned Poland stocks. The green area shows the number of funds invested at any one time and the red line the difference. A download sloping red line means 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 Poland stocks. A value of 100% means today's weight is the highest on record for that fund, zero the lowest.

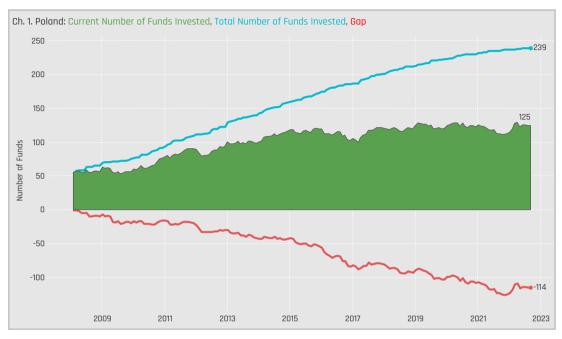
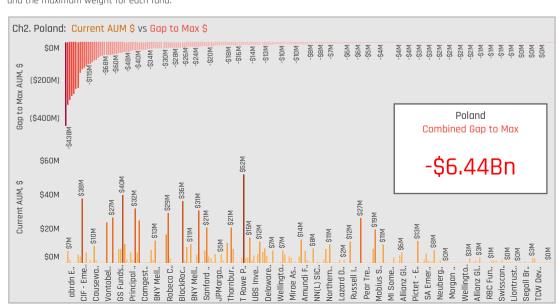


Chart 2: The orange lines show the current AUM in Poland stocks for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.



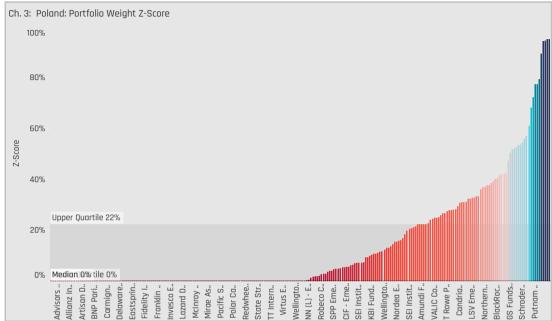
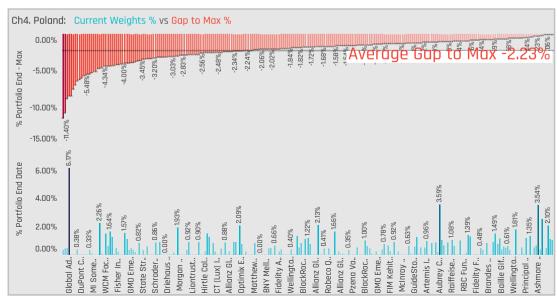


Chart 4. Blue lines show the current weight in Poland stocks for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.



Fund Level Gap Analysis



Chart 1: Current fund weight, maximum fund weight and difference for Poland stocks.

Chart 2: Current fund AUM, maximum fund AUM and \$ difference for Poland stocks.

Skyline Umb. Fd. ICAV - ARGA Emerging Market Equity Fund

Causeway Emerging Markets Fund

Ch. 1: Poland: Largest Gap to Max (%) Latest Weight Max Weight Difference Fund Name Seafarer Overseas Growth & Income Fund 0.35% 11.75% -11,40% 0.46% 11.19% -10.74% Magna Umbrella Fund Plc - Emerging Markets Dividend Fund 9.29% Comgest Growth Plc - GEM Promising Companies 0.49% -8.80% Global Advantage Funds - Emerging Markets High Value 6.17% 14,59% -8.43% 0.00% 8,41% -8,41% Mobius SICAV - Emerging Markets Fund Cullen Emerging Markets High Dividend Fund 0.00% 7.50% -7.50% Brown Advisory Emerging Markets Select Fund 0.00% 6.93% -6.93% Goldman Sachs Emerging Markets Equity Insights Fund 0.38% 6.75% -6.37% -6.14% MI Somerset Cap. Mamt. Invt. Fds. ICVC - Gbl. Emer. Mkts. Fd. 0.00% 6.14% 0.00% 5.97% -5.97% DuPont Capital Emerging Markets Fund UNI-GLOBAL - Equities Emerging Markets 0.00% 5.62% -5.62% St. James's Place Unit Trust - Global Emerging Markets 0.00% 5.58% -5.58% Dunham Emerging Markets Stock Fund -5.48% 0.00% 5.48% GS Funds - Emerging Markets CORE Equity Portfolio 0.33% 5.74% -5.40% SEB Emerging Marketsfond 0.11% 5.39% -5.28% MI Somerset Cap. Mamt. Invt. Fds. ICVC - Gbl. EM Screened Fund 0.00% 5.10% -5.10% 5.10% 0.00% -5.10% Pictet Global Selection Fund - Global High Yield Emerg. Eq. VP Bank Risk Optimised ESG Eq. Fd. - Emerging Markets Equities 0.00% 4,70% -4,70%

2.26%

0.10%

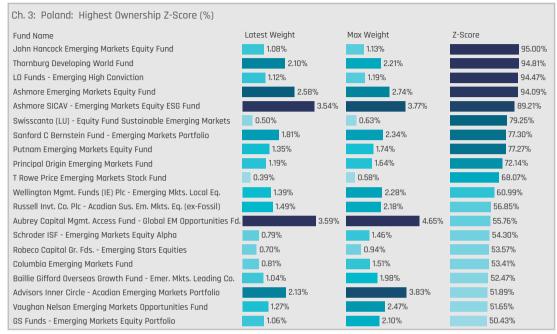
6 92%

4.61%

-4.65%

-4.51%

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





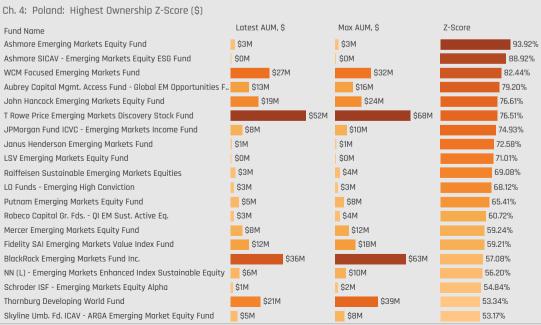


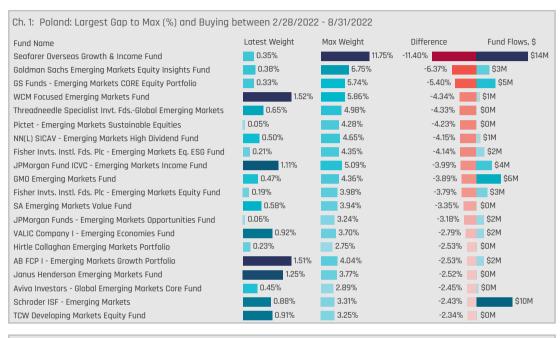


Chart 1: Current fund weight, maximum fund weight and the difference for Poland stocks. Filtered for funds that have bought in to Poland between 2/28/2022 - 8/31/2022

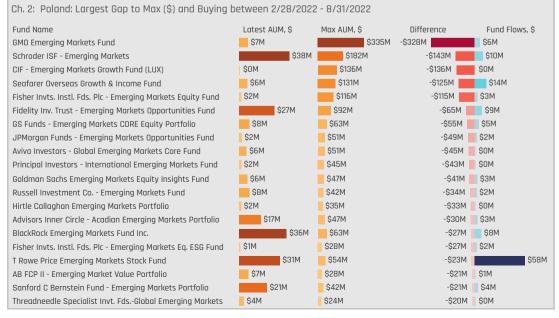
Chart 2: Current fund AUM, maximum fund AUM and the USD difference for Poland stocks. Filtered for funds that have bought in to Poland between 2/28/2022 - 8/31/2022

Chart 3: Current fund weight, maximum fund weight and Z-Score for Poland stocks, ranked by Z-Score. Filtered for funds that have sold Poland between 2/28/2022 - 8/31/2022 and have a % Z-Score of above 50%.

Chart 4: Current fund AUM, maximum AUM and Z-Score for Poland stocks, ranked by Z-Score. Filtered for funds that have sold Poland between 2/28/2022 - 8/31/2022 and have a \$ Z-Score of above 50%.









Ch. 4: Poland: Z-Score (\$) > 50% and selling between 2/28/2022 - 8/31/2022



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 iShares MSCI Emerging Markets 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 iShares MSCI Emerging Markets 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 iShares MSCI Emerging Markets 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 GEM 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 (278) in the analysis.

Average Weight vs EEM: The average weight minus the weight in the iShares MSCI Emerging Markets 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 (278) in the analysis.

Funds O/W: The total number of funds overweight a measure versus the EEM, divided by the total number of funds (278) in the analysis.

AUM, \$: The combined AUM allocated to a particular measure across the 278 active GEM funds in our analysis, in US Dollars



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