



Dino Polska SA
Active GEM Fund Ownership Report
12/31/2022



Dino Polska SA Active GEM Fund Ownership Report 12/31/2022

In this data report, we analyse Dino Polska SA 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 270 active funds with a combined AUM of \$333.04Bn.

We analyse the latest published filings for all funds and aggregate together as of 12/31/2022. 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.

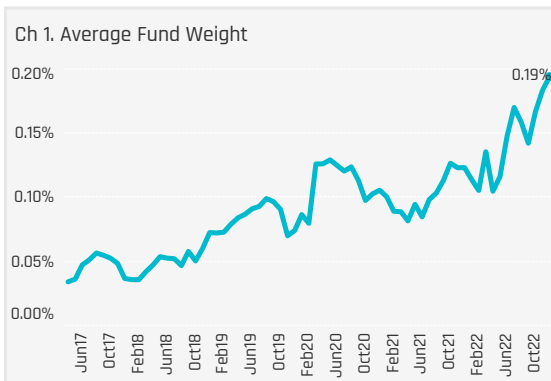
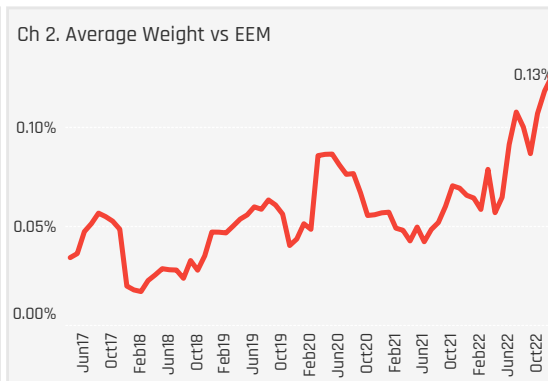
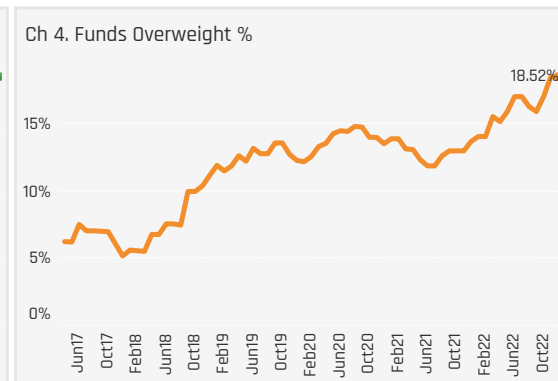
Chart 1 The time series of average fund weight for Dino Polska SA

Chart 2 The time series of average fund weight minus the benchmark EEM weight for Dino Polska SA

Chart 3 The time series of funds invested % for Dino Polska SA

Chart 4 The time series of Funds Overweight the EEM % for Dino Polska SA

Chart 5 Aggregated fund ownership data among active GEM funds, ranked by the most widely held stocks. Filtered for Poland stocks only, Dino Polska SA highlighted in red.

Ch 5. Poland Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.

Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
DNP-PL	Dino Polska SA	19.26%	0.19%	0.13%	\$446.05M
PEO-PL	BANK POLSKA KASA OPIEKI SA	13.70%	0.06%	0.00%	\$148.00M
PKN-PL	Polski Koncern Naftowy ORLEN S.A.	10.74%	0.05%	-0.09%	\$79.64M
KGH-PL	KGHM Polska Miedz S.A.	10.74%	0.04%	-0.02%	\$115.45M
PZU-PL	Powszechny Zaklad Ubezpieczen Spolka Akc..	9.63%	0.06%	-0.02%	\$167.24M
PKO-PL	PKO Bank Polski S.A.	7.41%	0.03%	-0.07%	\$101.82M
LPP-PL	LPP S.A.	5.56%	0.02%	-0.03%	\$28.50M
SPL-PL	Santander Bank Polska SA	5.19%	0.01%	-0.03%	\$15.72M
OPL-PL	Orange Polska S.A.	4.81%	0.01%	0.01%	\$7.07M
CDR-PL	CD Projekt S.A.	4.81%	0.02%	-0.01%	\$127.80M
CPS-PL	Cyfrowy Polsat SA	3.70%	0.01%	-0.01%	\$8.15M
ACP-PL	Asseco Poland S.A.	2.96%	0.01%	0.01%	\$6.64M
PGE-PL	PGE Polska Grupa Energetyczna S.A.	2.59%	0.00%	-0.02%	\$10.75M
MBK-PL	mBank SA	2.22%	0.00%	-0.01%	\$4.80M
TPE-PL	TAURON Polska Energia S.A.	1.85%	0.00%	0.00%	\$2.42M
BHW-PL	Bank Handlowy w Warszawie S.A.	1.48%	0.00%	0.00%	\$0.58M
KRU-PL	KRUK S.A.	1.11%	0.01%	0.01%	\$19.61M
JSW-PL	Jastrzebska Spolka Weglowa S.A.	1.11%	0.00%	0.00%	\$3.14M
BDX-PL	Budimex SA	1.11%	0.00%	0.00%	\$1.10M
ATT-PL	Grupa Azoty Spolka Akcyjna	1.11%	0.00%	0.00%	\$0.30M
WLT-PL	Wielton S.A.	0.74%	0.00%	0.00%	\$0.04M
UNT-PL	UNIMOT SA	0.74%	0.00%	0.00%	\$0.05M
LWB-PL	Lubelski Wegiel BOGDANKA SA	0.74%	0.00%	0.00%	\$0.08M
LVC-PL	LIVECHAT Software S.A.	0.74%	0.00%	0.00%	\$0.36M
GPW-PL	Warsaw Stock Exchange	0.74%	0.00%	0.00%	\$0.20M

Chart 6 Aggregated fund ownership data among active GEM funds, ranked by most widely held stocks. Filtered for Consumer Staples stocks only, Dino Polska SA highlighted in red.

Ch 6. Consumer Staples Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.

Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
600519-CN	Kweichow Moutai Co., Ltd. Class A	23.70%	0.32%	0.02%	\$2,240.16M
2319-HK	China Mengniu Dairy Co., Ltd.	23.70%	0.35%	0.12%	\$1,024.14M
AC-MX	Arca Continental SAB de CV	22.22%	0.17%	0.11%	\$328.01M
CLS-ZA	Clicks Group Limited	21.85%	0.21%	0.14%	\$503.77M
RADL3-BR	Raia Dragasil S.A.	21.48%	0.23%	0.16%	\$775.70M
FEMSAUBD-MX	Fomento Economico Mexicano SAB de CV Un..	20.37%	0.33%	0.09%	\$881.11M
500696-IN	Hindustan Unilever Limited	19.63%	0.24%	-0.16%	\$660.52M
DNP-PL	Dino Polska SA	19.26%	0.19%	0.13%	\$446.05M
ABEV3-BR	Ambev SA	19.26%	0.19%	-0.02%	\$1,121.33M
051900-KR	LG H&H Co., Ltd.	14.44%	0.16%	0.07%	\$446.96M
000858-CN	Wuliangye Yibin Co., Ltd. Class A	14.44%	0.20%	0.10%	\$674.25M
500875-IN	ITC Limited	13.33%	0.14%	-0.04%	\$1,234.22M
600887-CN	Inner Mongolia Yili Industrial Group Co., Ltd. ...	12.96%	0.15%	0.12%	\$508.86M
BIMAS.E-TR	BIM Biresik Magazalar A.S.	12.59%	0.06%	0.01%	\$260.23M
531642-IN	Marico Limited	12.22%	0.11%	0.06%	\$123.47M
322-HK	Tingyi (Cayman Islands) Holding Corp.	12.22%	0.09%	0.03%	\$235.27M
1216-TW	Uni-President Enterprises Corp.	12.22%	0.12%	-0.05%	\$413.56M
SHP-ZA	Shoprite Holdings Limited	11.85%	0.08%	-0.02%	\$286.71M
JBSS3-BR	JBS S.A.	11.85%	0.07%	0.01%	\$98.13M
603288-CN	Foshan Haitian Flavouring & Food Co., Ltd. C..	11.85%	0.12%	0.08%	\$479.73M
2912-TW	President Chain Store Corporation	11.85%	0.13%	0.05%	\$305.88M
168-HK	Tsingtao Brewery Co., Ltd. Class H	11.11%	0.10%	0.01%	\$571.01M
UNVR-ID	PT Unilever Indonesia Tbk	10.74%	0.03%	0.00%	\$42.97M
9633-HK	Nongfu Spring Co., Ltd. Class H	10.74%	0.06%	-0.10%	\$103.98M
540180-IN	Varun Beverages Ltd.	10.74%	0.14%	0.09%	\$330.37M

Chart 1 The distribution of Dino Polska SA weights among the 270 active GEM funds in our analysis, broken down by fund Style.

Chart 2 The largest Dino Polska SA holders in our analysis, on a portfolio weight basis.

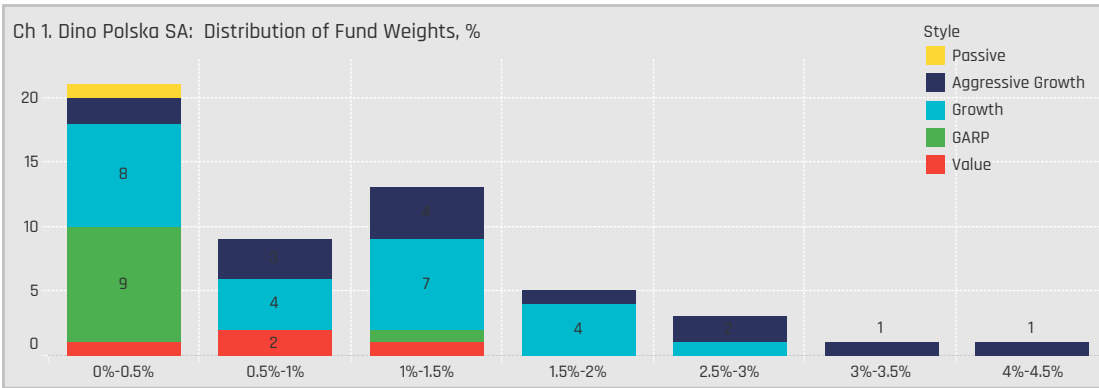
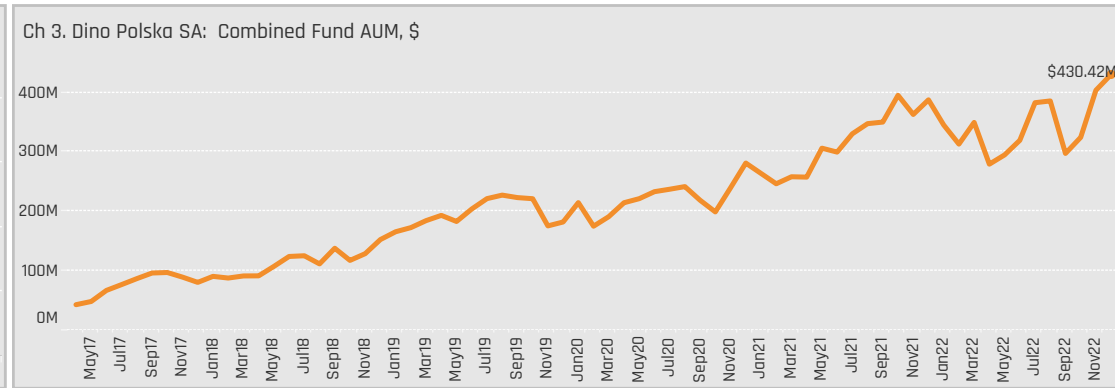
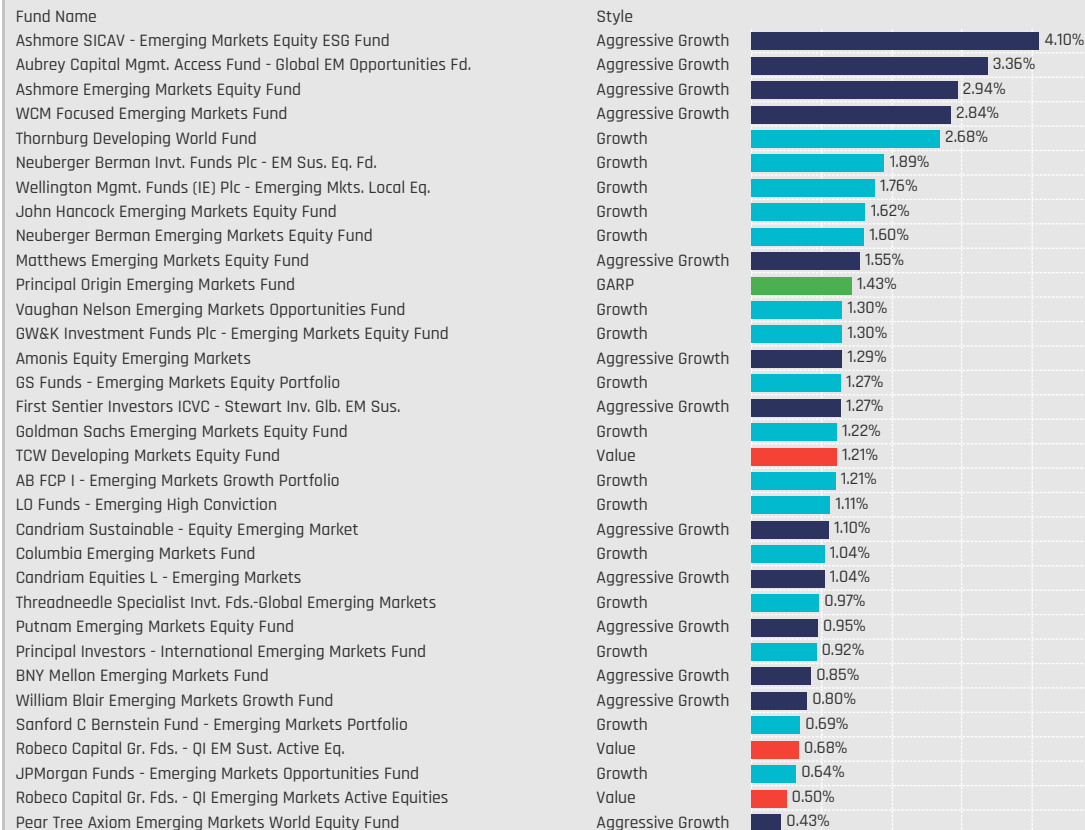


Chart 3 The time-series of combined fund AUM in Dino Polska SA stocks out of the \$333.04Bn in total active AUM in our analysis.

Chart 4 The largest Dino Polska SA holders in our analysis, on an \$ AUM basis.



Ch 2. Dino Polska SA: Top Fund Holdings, %



Ch 4. Dino Polska SA: Top Fund Holdings, \$

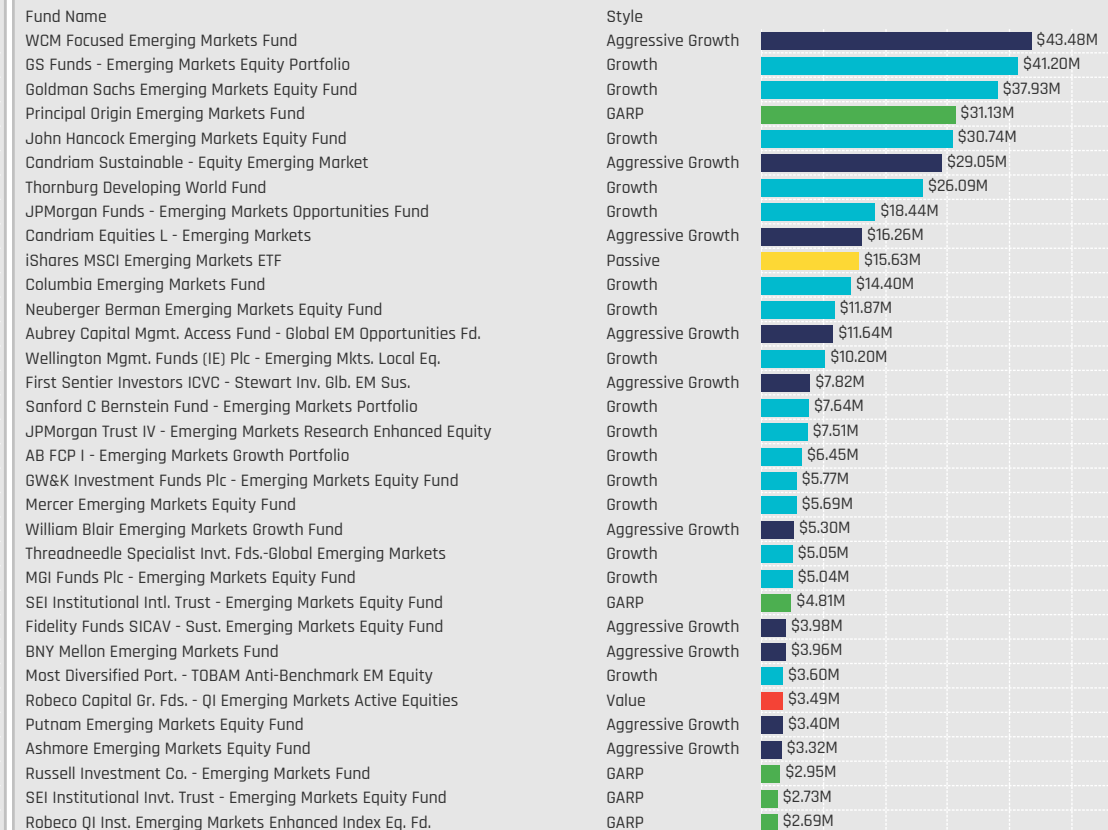


Chart 1 The largest changes in average Stock weight between 6/30/2022 and 12/31/2022. Dino Polska SA highlighted in red.

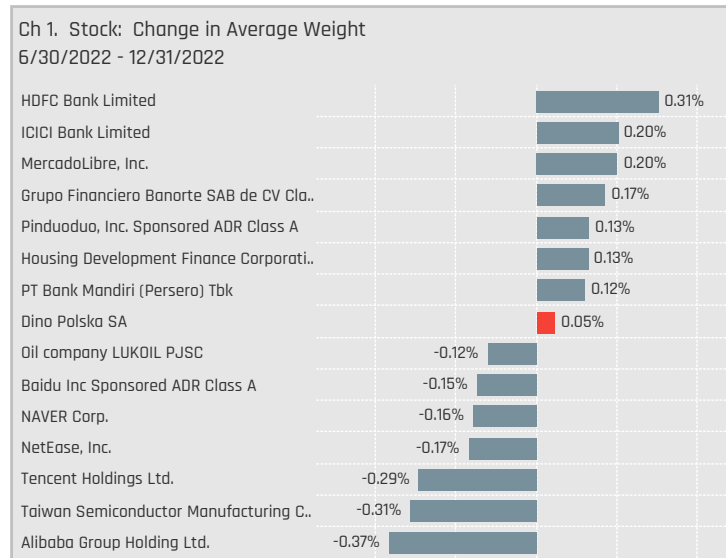


Chart 3 Measures the largest changes in the percentage of funds invested in each Stock between 6/30/2022 and 12/31/2022. , Dino Polska SA highlighted in red.

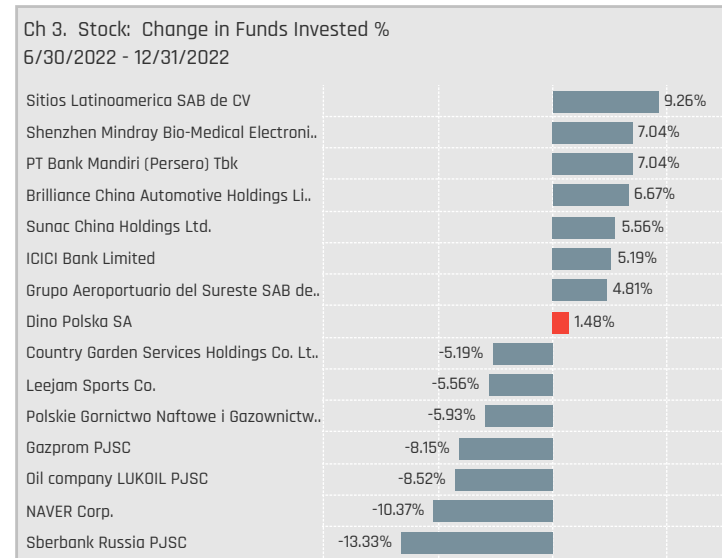


Chart 5 Shows the cumulative fund flows for Dino Polska SA stocks among the 270 active GEM funds in our analysis. Monthly fund flows are estimated by multiplying the monthly change in stock position by the stock price for every position in every fund in our analysis.

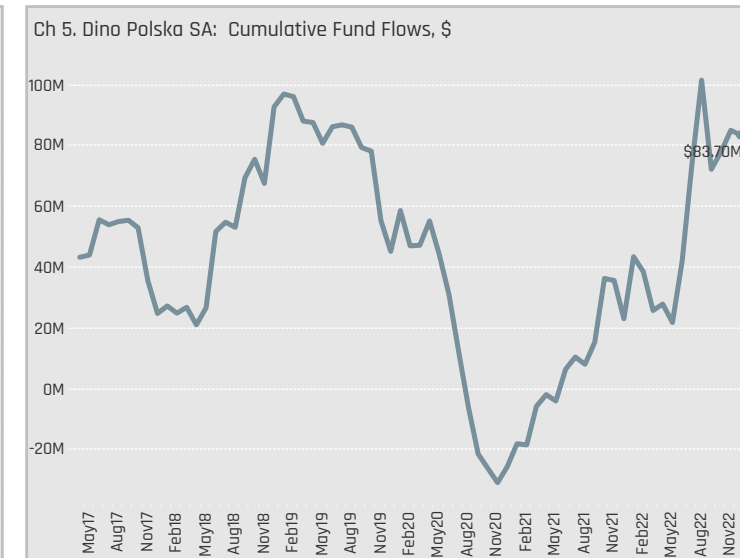


Chart 2 Measures the largest changes in the average Stock weight vs EEM between 6/30/2022 and 12/31/2022. An increasing figure would indicate an increasing overweight or decreasing underweight. Dino Polska SA highlighted in red.

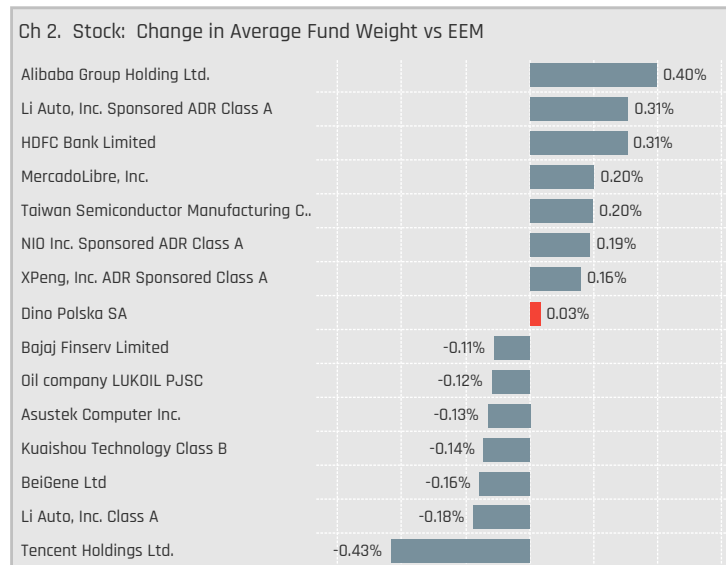


Chart 4 Measures the largest changes in the percentage of funds overweight each Stock compared to the iShares MSCI Emerging Markets ETF between 6/30/2022 and 12/31/2022. Dino Polska SA highlighted in red.

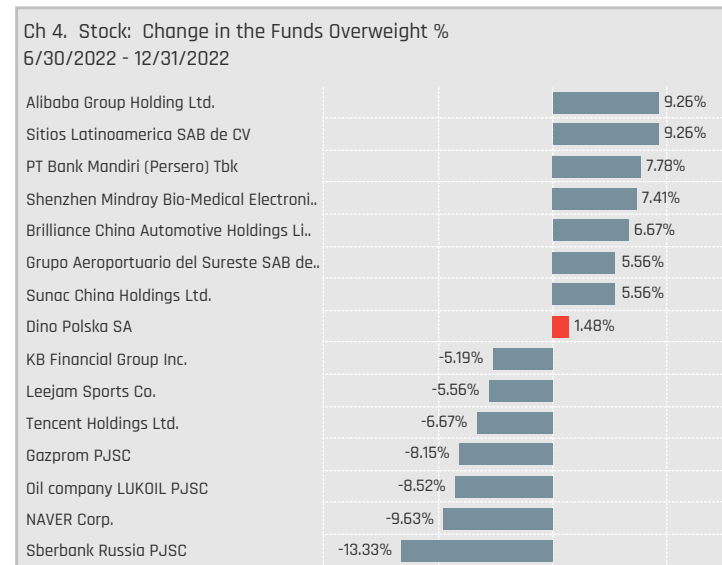


Chart 6 Measures the largest estimated fund flows for each Stock between 6/30/2022 and 12/31/2022. Dino Polska SA highlighted in red.

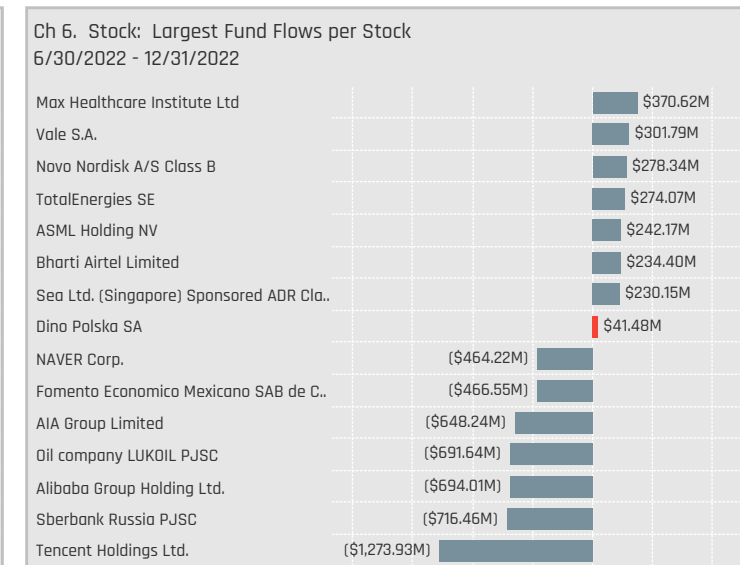


Chart 1 The largest fund weight increases between 6/30/2022 - 12/31/2022.

Chart 2 The largest fund weight decreases between 6/30/2022 - 12/31/2022

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

Ch 1. Dino Polska SA: Largest Increases in Position, %

Fund Name	New or Close..	Latest Weight	Weight Change
WCM Focused Emerging Markets Fund		2.84%	1.34%
Vaughan Nelson Emerging Markets Opportunities Fund	New	1.30%	1.30%
BNY Mellon Emerging Markets Fund	New	0.85%	0.85%
Matthews Emerging Markets Equity Fund		1.55%	0.74%
Aubrey Capital Mgmt. Access Fund - Global EM Opportunities Fd.		3.36%	0.69%
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	New	0.68%	0.68%
Ashmore SICAV - Emerging Markets Equity ESG Fund		4.10%	0.66%
JPMorgan Funds - Emerging Markets Opportunities Fund	New	0.64%	0.64%
Amonis Equity Emerging Markets		1.29%	0.63%
Candriam Equities L - Emerging Markets		1.04%	0.59%
John Hancock Emerging Markets Equity Fund		1.62%	0.59%
Candriam Sustainable - Equity Emerging Market		1.10%	0.57%
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	New	0.50%	0.50%
Thornburg Developing World Fund		2.68%	0.48%
Ashmore Emerging Markets Equity Fund		2.94%	0.41%
William Blair Emerging Markets Growth Fund		0.80%	0.39%
Neuberger Berman Invst. Funds Plc - EM Sus. Eq. Fd.		1.89%	0.36%
Fidelity Funds SICAV - Sust. Emerging Markets Equity Fund	New	0.35%	0.35%
Goldman Sachs Emerging Markets Equity Fund		1.22%	0.34%
Threadneedle Specialist Invst. Fds.-Global Emerging Markets		0.97%	0.33%

Ch 2. Dino Polska SA: Largest Decreases in Position, %

Fund Name	New or Close..	Latest Weight	Weight Change
Janus Henderson Emerging Markets Fund	Close	0.00%	-1.22%
Virtus NFJ Emerging Markets Value Fund	Close	0.00%	-0.71%
Morgan Stanley Instl. Fund - Emerging Markets Portfolio	Close	0.00%	-0.56%
Putnam Emerging Markets Equity Fund		0.95%	-0.36%
AB FCP I - Emerging Markets Growth Portfolio		1.21%	-0.28%
BlackRock Emerging Markets Fund Inc.	Close	0.00%	-0.17%
Sanford C Bernstein Fund - Emerging Markets Portfolio		0.69%	-0.17%
LO Funds - Emerging High Conviction		1.11%	-0.11%
Schroder ISF - QEP Global Emerging Markets		0.25%	-0.06%

Chart 3 The largest buyers in US dollar terms between 6/30/2022 - 12/31/2022.

Chart 4 The largest sellers in US dollar terms between 6/30/2022 - 12/31/2022

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

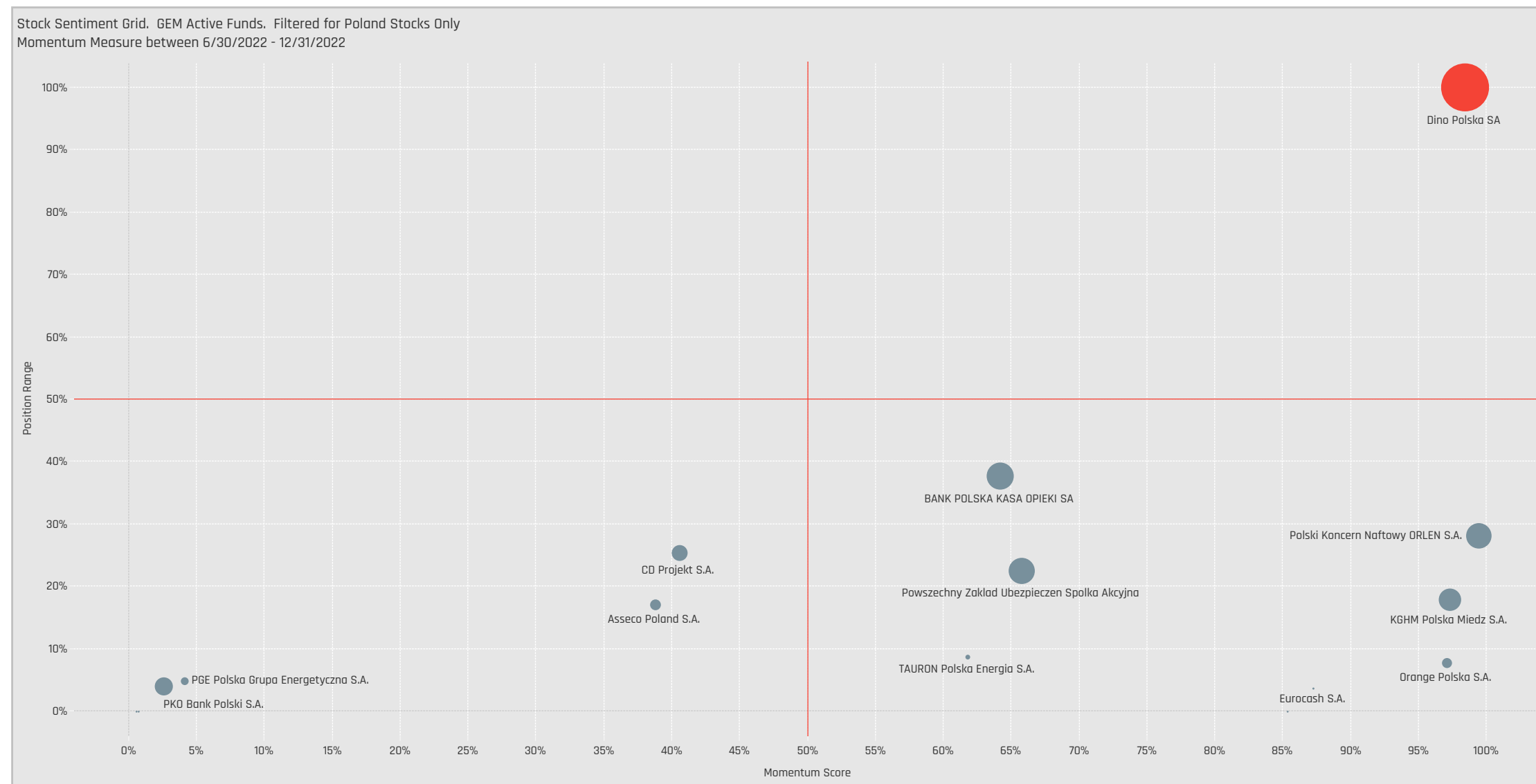
Ch 3. Dino Polska SA: Largest Fund Inflows, \$

Fund Name	New or Close..	Latest AUM, \$	Fund Flows, \$
JPMorgan Funds - Emerging Markets Opportunities Fund	New	\$18.44M	\$16.79M
WCM Focused Emerging Markets Fund		\$43.48M	\$11.65M
Candriam Sustainable - Equity Emerging Market		\$29.05M	\$10.33M
John Hancock Emerging Markets Equity Fund		\$30.74M	\$7.44M
Candriam Equities L - Emerging Markets		\$16.26M	\$6.70M
Fidelity Funds SICAV - Sust. Emerging Markets Equity Fund	New	\$3.98M	\$3.73M
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	New	\$3.49M	\$3.27M
BNY Mellon Emerging Markets Fund	New	\$3.96M	\$2.99M
Robeco QI Inst. Emerging Markets Enhanced Index Eq. Fd.	New	\$2.69M	\$2.33M
Goldman Sachs Emerging Markets Equity Insights Fund	New	\$2.31M	\$1.77M
Thornburg Developing World Fund		\$26.09M	\$1.69M
William Blair Emerging Markets Growth Fund		\$5.30M	\$1.49M
Mercer Emerging Markets Equity Fund		\$5.69M	\$1.33M
Goldman Sachs Emerging Markets Equity Fund		\$37.93M	\$1.01M
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	New	\$0.64M	\$0.59M
Threadneedle Specialist Invst. Fds.-Global Emerging Markets		\$5.05M	\$0.56M
Vaughan Nelson Emerging Markets Opportunities Fund	New	\$0.39M	\$0.30M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund		\$4.81M	\$0.27M
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.		\$0.38M	\$0.24M
Matthews Emerging Markets Equity Fund		\$0.52M	\$0.13M

Ch 4. Dino Polska SA: Largest Fund Outflows, \$

Fund Name	New or Close..	Latest AUM, \$	Fund Flows, \$
BlackRock Emerging Markets Fund Inc.	Close		(\$7.26M)
GS Funds - Emerging Markets Equity Portfolio		\$41.20M	(\$4.90M)
Sanford C Bernstein Fund - Emerging Markets Portfolio		\$7.64M	(\$4.15M)
Principal Origin Emerging Markets Fund		\$31.13M	(\$2.77M)
Neuberger Berman Emerging Markets Equity Fund		\$11.87M	(\$2.74M)
Putnam Emerging Markets Equity Fund		\$3.40M	(\$2.69M)
Morgan Stanley Instl. Fund - Emerging Markets Portfolio	Close		(\$2.68M)
AB FCP I - Emerging Markets Growth Portfolio		\$6.45M	(\$2.59M)
LO Funds - Emerging High Conviction		\$2.07M	(\$1.13M)
Janus Henderson Emerging Markets Fund	Close		(\$0.95M)
Virtus NFJ Emerging Markets Value Fund	Close		(\$0.78M)
Russell Investment Co. - Emerging Markets Fund		\$2.95M	(\$0.38M)
iShares MSCI Emerging Markets ETF		\$15.63M	(\$0.25M)
Schroder ISF - QEP Global Emerging Markets		\$0.28M	(\$0.18M)
Northern Active M Emerging Markets Equity Fund		\$0.29M	(\$0.03M)

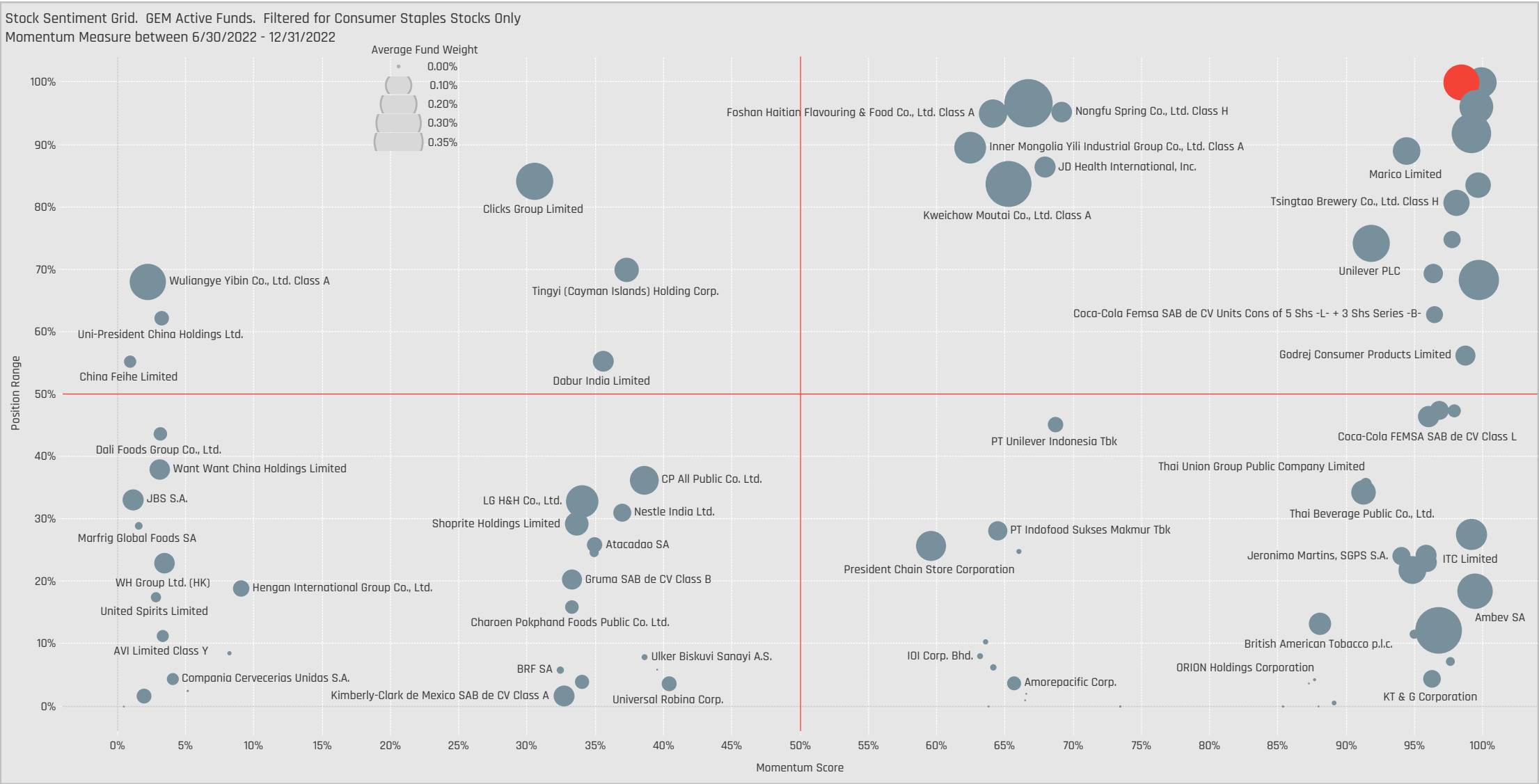
Sentiment Grid: We combine the latest Stock positioning, long-term positioning and short-term fund activity in the 'Sentiment Grid', below. The Y-Axis measures where today's ownership levels in each Stock sit relative to the long-term range. We calculate the Z-Score of today's average weight, funds invested % 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 6/30/2022 and 12/31/2022, 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 Grid is filtered for Poland stocks only.



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)

Sentiment Grid: We combine the latest Stock 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 Stock 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 6/30/2022 and 12/31/2022, 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 Grid is filtered for Consumer Staples stocks only.



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

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

Chart 1 The average weights in Dino Polska SA stock and the average weights vs the iShares MSCI Emerging Markets ETF, split by fund Style.

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

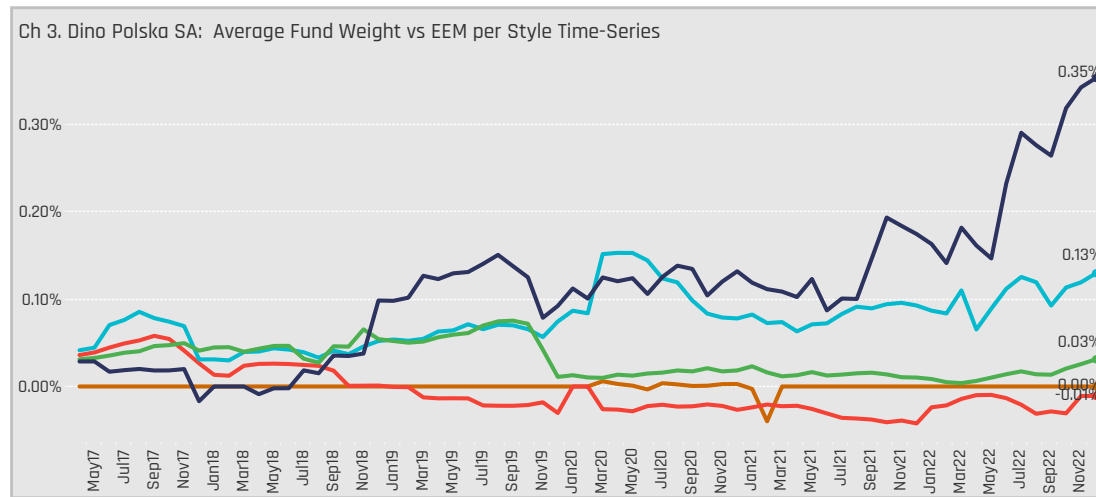
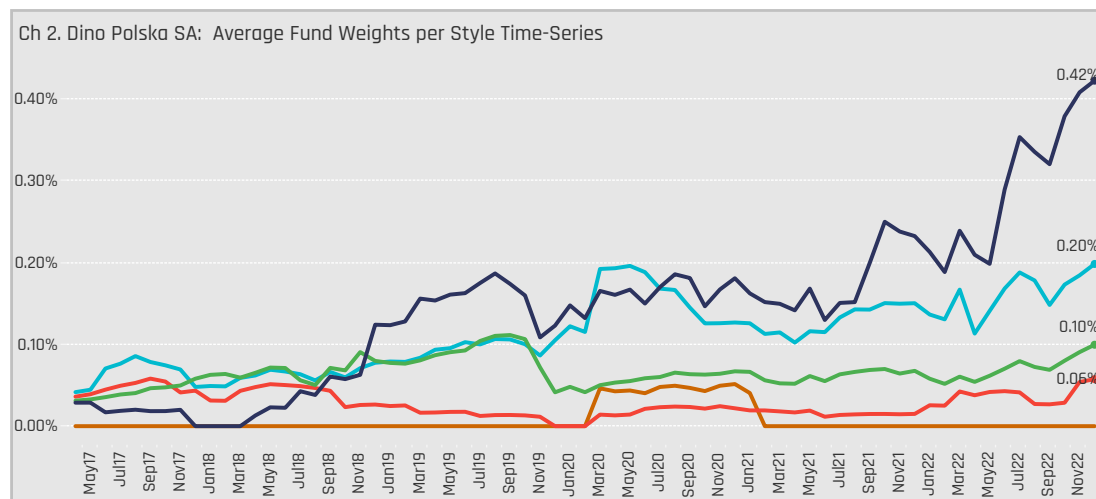
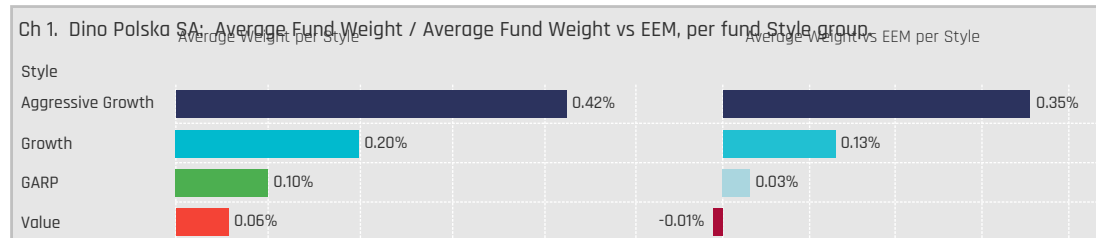
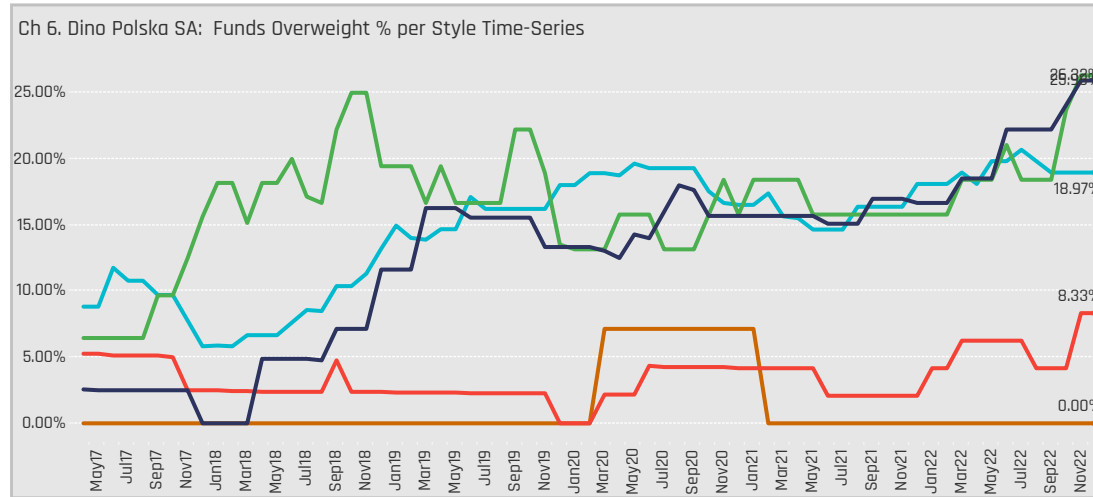
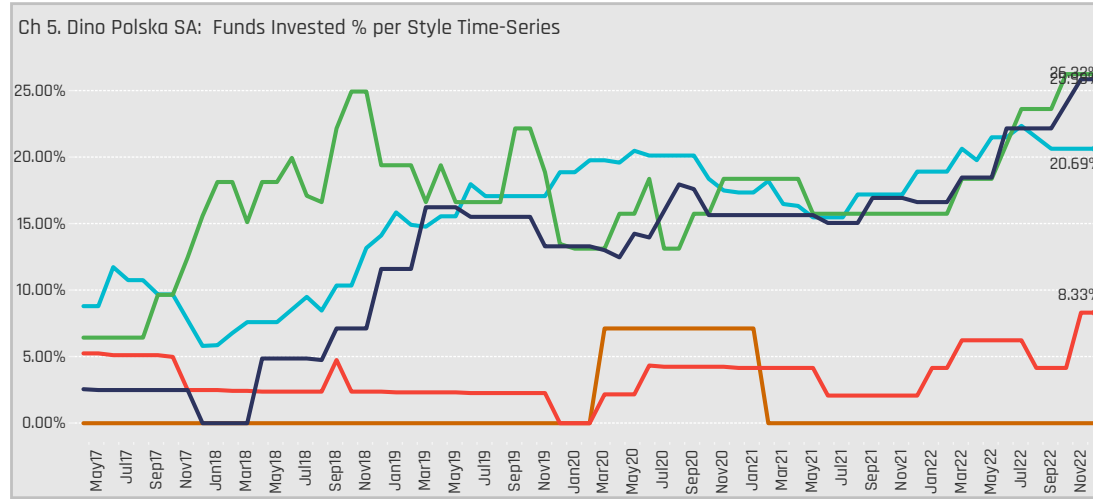
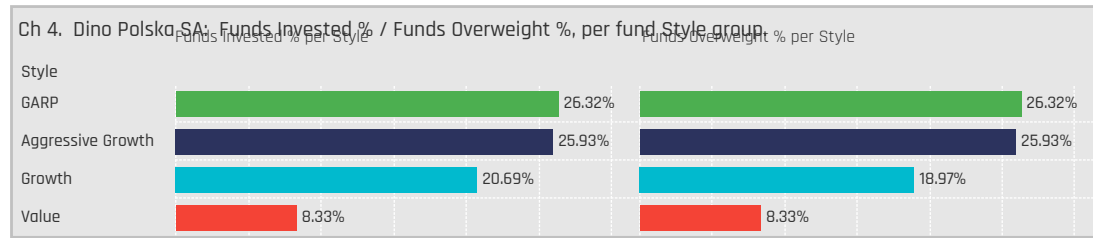


Chart 4 The percentage of funds invested in Dino Polska SA stocks and the percentage of funds overweight, split by fund Style.

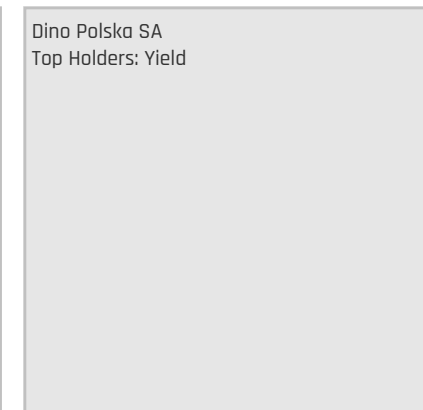
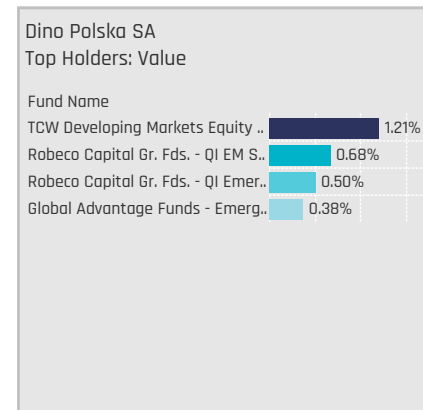
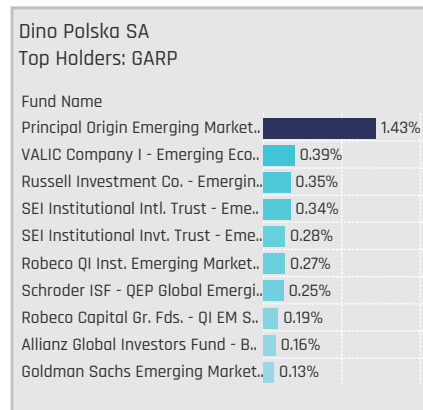
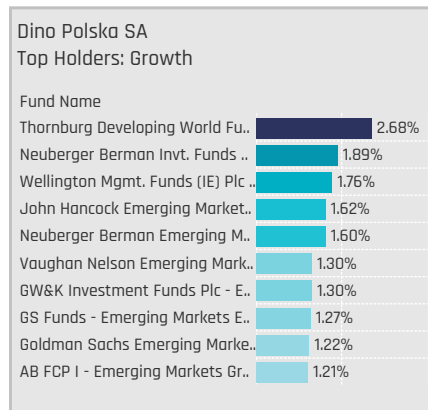
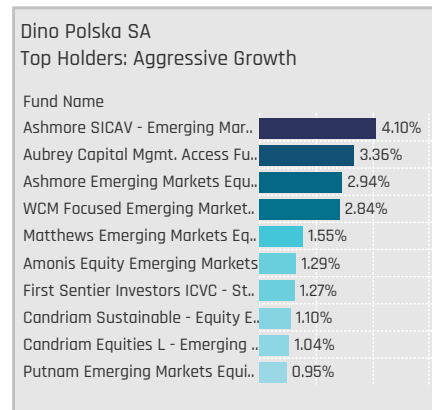
Chart 5 & 6 The time series of the percentage of funds invested in Dino Polska SA stocks and the percentage of funds overweight, split by fund Style.



Top Row: For each Style category, each chart shows the largest holders in Dino Polska SA

Middle Row: For each Style category, each chart shows the most widely held stocks and the corresponding average fund weights, with Dino Polska SA highlighted in red.

Bottom Row: For each Style category, each chart shows the largest stock overweights and underweights, with Dino Polska SA highlighted in red.



Dino Polska SA Most Widely Held Stocks: Aggressive Growth

Stock Name	Ave. Wgt	Funds In..
Taiwan Semiconductor Manufact..	5.31%	85.19%
Tencent Holdings Ltd.	3.51%	77.78%
MercadoLibre, Inc.	1.64%	74.07%
PT Bank Central Asia Tbk	1.65%	66.67%
HDFC Bank Limited	2.63%	64.81%
JD.com, Inc. Sponsored ADR Clas..	1.53%	62.96%
AIA Group Limited	2.32%	62.96%
Alibaba Group Holding Ltd.	1.76%	59.26%
Housing Development Finance C..	1.64%	51.85%
Globant SA	0.78%	51.85%
Dino Polska SA	0.42%	25.93%

Dino Polska SA Most Widely Held Stocks: Growth

Stock Name	Ave. Wgt	Funds In..
Taiwan Semiconductor Manufact..	5.82%	92.24%
Tencent Holdings Ltd.	3.48%	84.48%
Alibaba Group Holding Ltd.	2.49%	81.03%
Samsung Electronics Co., Ltd.	3.23%	78.45%
JD.com, Inc. Sponsored ADR Clas..	1.19%	71.55%
Meituan Class B	1.32%	62.07%
MediaTek Inc	0.75%	62.07%
HDFC Bank Limited	1.56%	62.07%
Infosys Limited	1.01%	60.34%
Wal-Mart de Mexico SAB de CV	0.74%	57.76%
Dino Polska SA	0.20%	20.69%

Dino Polska SA Most Widely Held Stocks: GARP

Stock Name	Ave. Wgt	Funds In..
Samsung Electronics Co., Ltd.	3.21%	92.11%
Taiwan Semiconductor Manufact..	4.87%	89.47%
Tencent Holdings Ltd.	2.82%	81.58%
Alibaba Group Holding Ltd.	2.14%	81.58%
Grupo Financiero Banorte SAB d..	1.06%	78.95%
JD.com, Inc. Sponsored ADR Clas..	1.14%	73.68%
Meituan Class B	0.97%	71.05%
Infosys Limited	0.71%	71.05%
PT Bank Mandiri (Persero) Tbk	0.61%	68.42%
NetEase, Inc.	0.70%	68.42%
Dino Polska SA	0.10%	26.32%

Dino Polska SA Most Widely Held Stocks: Value

Stock Name	Ave. Wgt	Funds In..
Samsung Electronics Co., Ltd.	2.59%	77.08%
Taiwan Semiconductor Manufact..	3.59%	75.00%
Alibaba Group Holding Ltd.	2.19%	75.00%
China Construction Bank Corpor..	1.12%	58.33%
Hon Hai Precision Industry Co., Lt..	0.88%	54.17%
KB Financial Group Inc.	0.65%	52.08%
Ping An Insurance (Group) Comp..	1.18%	47.92%
Lenovo Group Limited	0.45%	47.92%
Kia Corp.	0.46%	45.83%
Hana Financial Group Inc.	0.70%	45.83%
Dino Polska SA	0.06%	8.33%

Dino Polska SA Most Widely Held Stocks: Yield

Stock Name	Ave. Wgt	Funds Inv. %
Taiwan Semiconductor Manufact..	5.12%	92.86%
Samsung Electronics Co., Ltd.	1.89%	64.29%
MediaTek Inc	0.47%	64.29%
China Construction Bank Corpor..	1.09%	64.29%
Alibaba Group Holding Ltd.	1.89%	64.29%
Samsung Electronics Co Ltd Pfd ..	1.95%	57.14%
Ping An Insurance (Group) Comp..	1.14%	57.14%
Tingyi (Cayman Islands) Holding ..	0.48%	50.00%
Petroleo Brasileiro SA Pfd	0.62%	50.00%
NetEase, Inc.	0.70%	50.00%

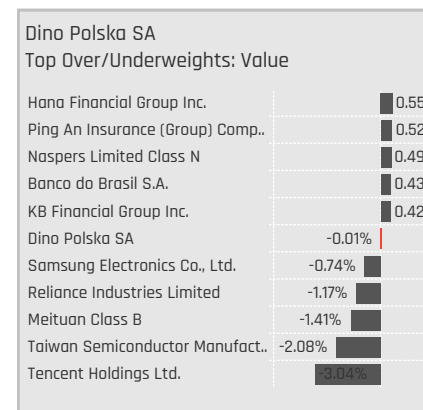
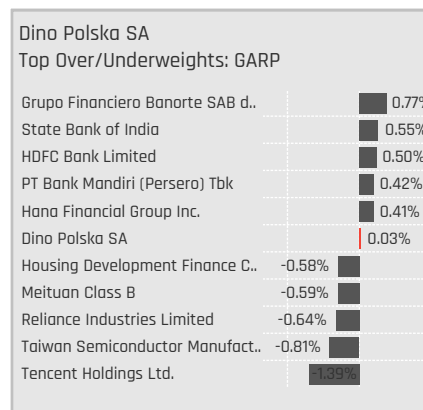
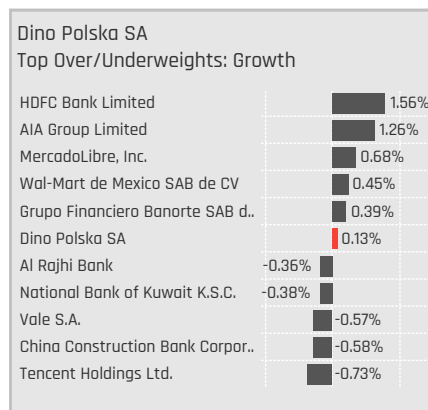


Chart 1 The blue line shows the total number of funds (out of 270) who have ever owned Dino Polska SA stock. The green area shows the number of funds invested at any one time and the red line the difference. A downward sloping red line means existing investors are closing out positions, a rising red line means previous investors are buying back in.

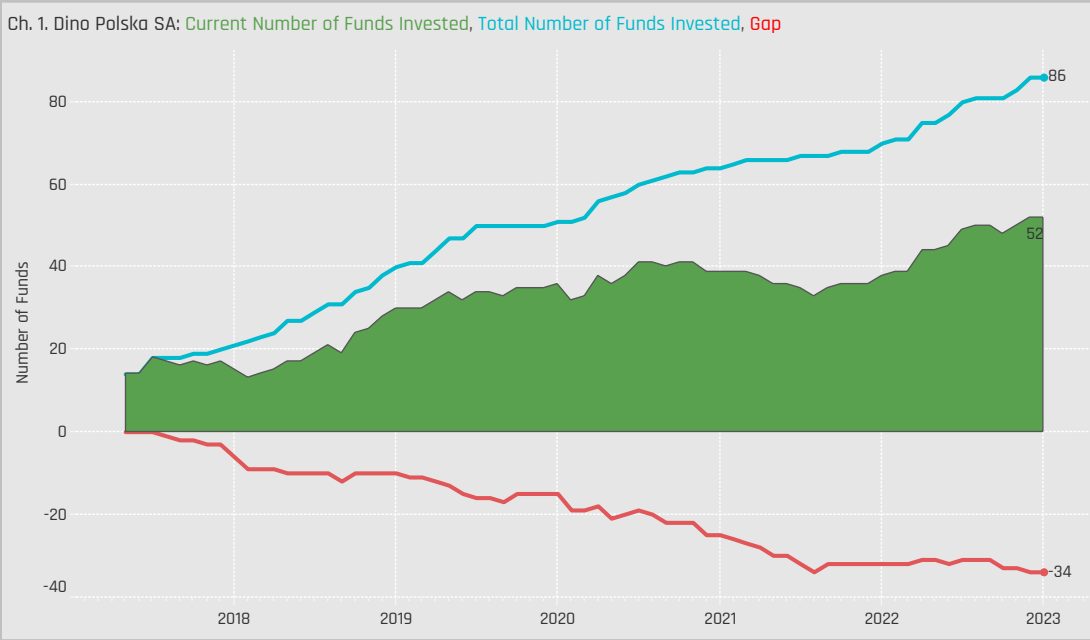


Chart 3 The Z-Score of current weights versus history for all current and previous holders of Dino Polska SA. A value of 100% means today's weight is the highest on record for that fund, zero the lowest.



Chart 2 The orange lines show the current AUM in Dino Polska SA for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.

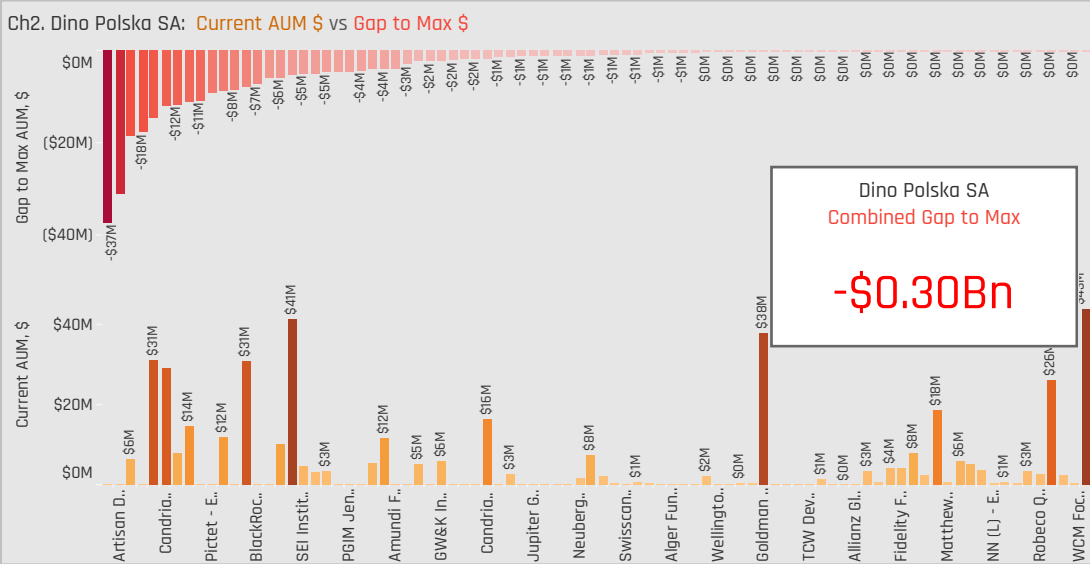


Chart 4 Blue lines show the current weight in Dino Polska SA for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.

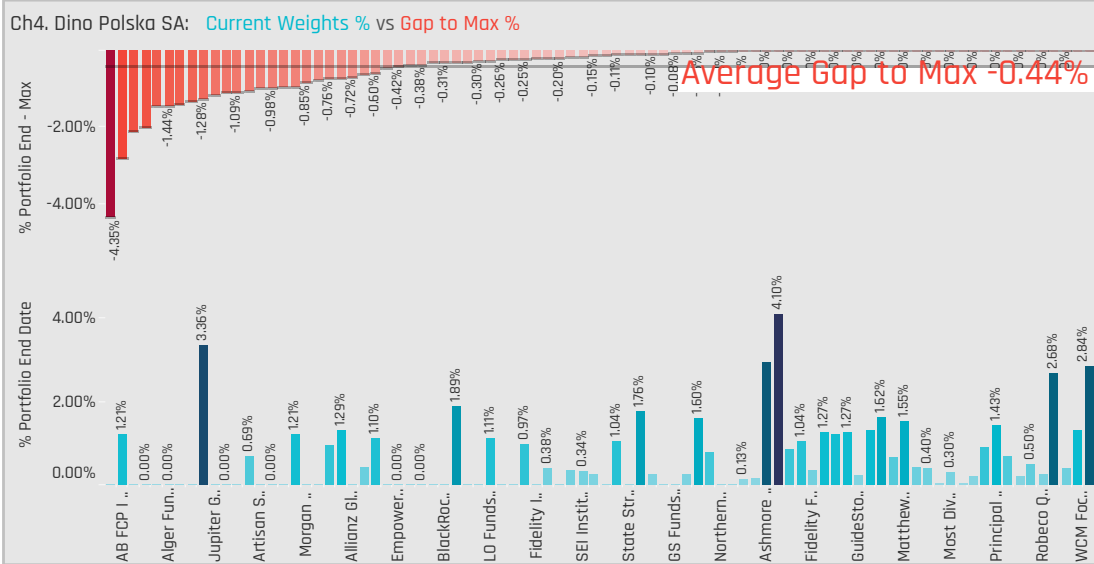


Chart 1 Current fund weight, maximum fund weight and difference for Dino Polska SA stocks.

Chart 2 Current fund AUM, maximum fund AUM and \$ difference for Dino Polska SA stocks

Chart 3 Current fund weight, maximum fund weight and Z-Score for Dino Polska SA stocks, ranked by Z-Score

Chart 4 Current fund AUM, maximum AUM and Z-Score for Dino Polska SA stocks, ranked by Z-Score.

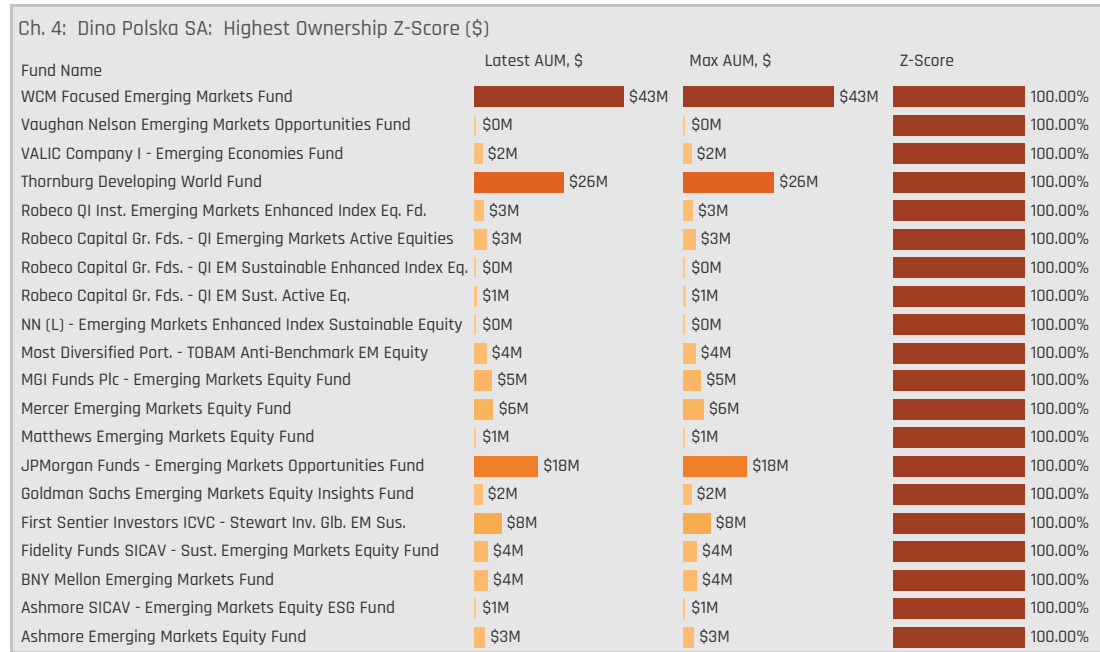
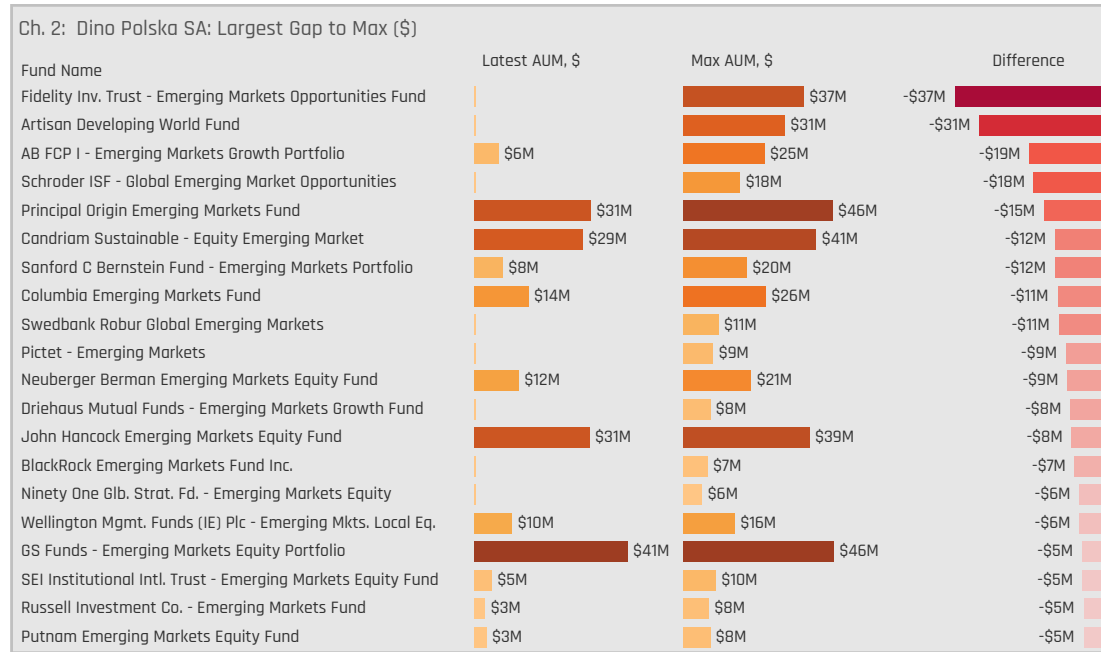
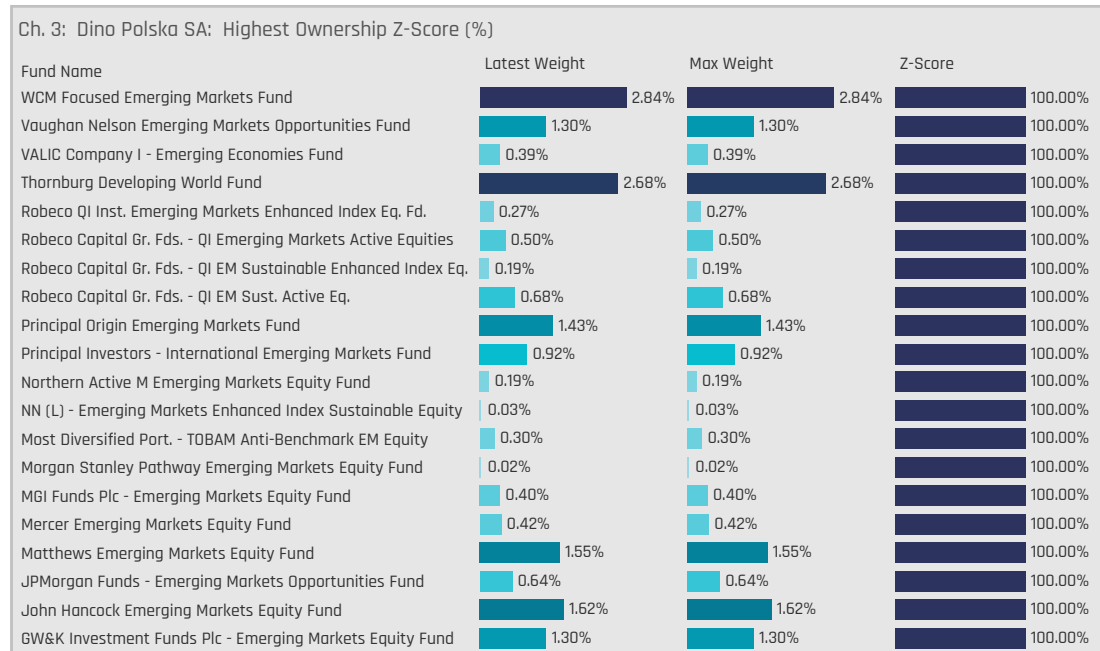
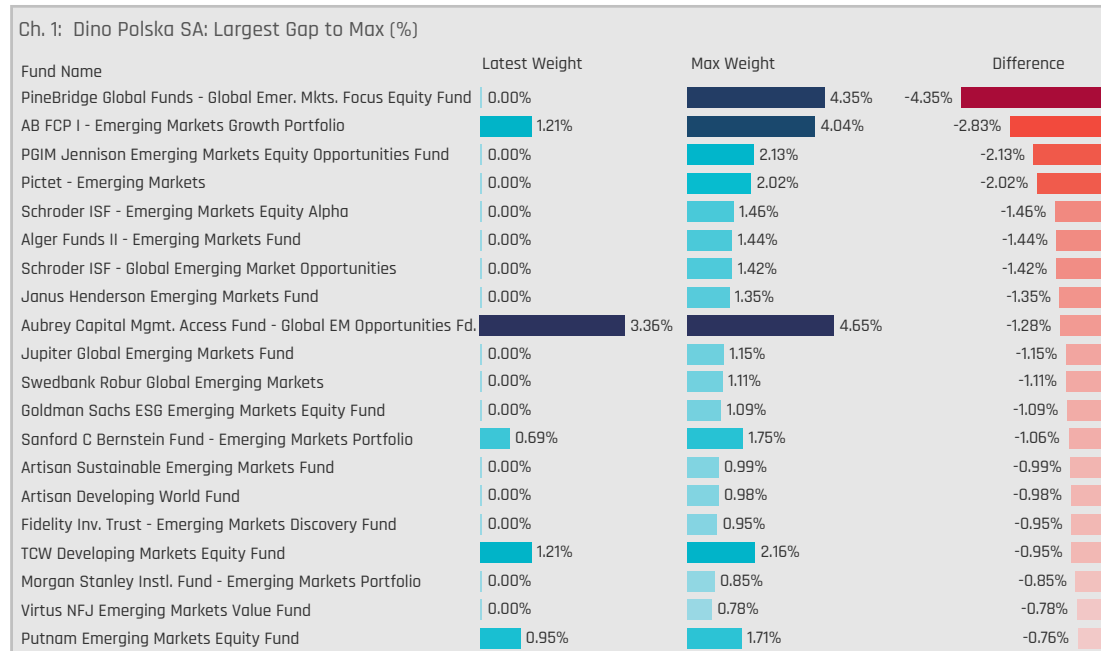


Chart 1 Current fund weight, maximum fund weight and the difference for Dino Polska SA stocks. Filtered for funds that have bought in to Dino Polska SA between 6/30/2022 - 12/31/2022

Chart 2 Current fund AUM, maximum fund AUM and the USD difference for Dino Polska SA stocks. Filtered for funds that have bought in to Dino Polska SA between 6/30/2022 - 12/31/2022

Ch. 1: Dino Polska SA: Largest Gap to Max (%) and Buying between 6/30/2022 - 12/31/2022

Fund Name	Latest Weight	Max Weight	Difference	Fund Flows, \$
Amonis Equity Emerging Markets	1.29%	2.04%	-0.75%	\$0M
Pear Tree Axiom Emerging Markets World Equity Fund	0.43%	1.08%	-0.65%	\$0M
Candriam Sustainable - Equity Emerging Market	1.10%	1.70%	-0.60%	\$10M
Threadneedle Specialist Inv. Fds.-Global Emerging Markets	0.97%	1.21%	-0.25%	\$1M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund	0.34%	0.51%	-0.17%	\$0M
William Blair Emerging Markets Growth Fund	0.80%	0.84%	-0.04%	\$1M
Goldman Sachs Emerging Markets Equity Insights Fund	0.13%	0.14%	0.00%	\$2M
Ashmore Emerging Markets Equity Fund	2.94%	2.94%	0.00%	\$0M
BNY Mellon Emerging Markets Fund	0.85%	0.85%	0.00%	\$3M
Candriam Equities L - Emerging Markets	1.04%	1.04%	0.00%	\$7M
Fidelity Funds SICAV - Sust. Emerging Markets Equity Fund	0.35%	0.35%	0.00%	\$4M
Goldman Sachs Emerging Markets Equity Fund	1.22%	1.22%	0.00%	\$1M
GuideStone Emerging Markets Equity Fund	0.22%	0.22%	0.00%	\$0M
John Hancock Emerging Markets Equity Fund	1.62%	1.62%	0.00%	\$7M
JPMorgan Funds - Emerging Markets Opportunities Fund	0.64%	0.64%	0.00%	\$17M
Matthews Emerging Markets Equity Fund	1.55%	1.55%	0.00%	\$0M
Mercer Emerging Markets Equity Fund	0.42%	0.42%	0.00%	\$1M
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	0.68%	0.68%	0.00%	\$1M
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.	0.19%	0.19%	0.00%	\$0M
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	0.50%	0.50%	0.00%	\$3M

Ch. 2: Dino Polska SA: Largest Gap to Max (\$) and Buying between 6/30/2022 - 12/31/2022

Fund Name	Latest AUM, \$	Max AUM, \$	Difference	Fund Flows, \$
Candriam Sustainable - Equity Emerging Market	\$29M	\$41M	-\$12M	\$10M
John Hancock Emerging Markets Equity Fund	\$31M	\$39M	-\$8M	\$7M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund	\$5M	\$10M	-\$5M	\$0M
William Blair Emerging Markets Growth Fund	\$5M	\$10M	-\$4M	\$1M
Threadneedle Specialist Inv. Fds.-Global Emerging Markets	\$5M	\$7M	-\$2M	\$1M
Candriam Equities L - Emerging Markets	\$16M	\$18M	-\$2M	\$7M
Pear Tree Axiom Emerging Markets World Equity Fund	\$0M	\$1M	-\$1M	\$0M
Amonis Equity Emerging Markets	\$1M	\$2M	-\$1M	\$0M
Goldman Sachs Emerging Markets Equity Fund	\$38M	\$38M	\$0M	\$1M
GuideStone Emerging Markets Equity Fund	\$1M	\$2M	\$0M	\$0M
Ashmore Emerging Markets Equity Fund	\$3M	\$3M	\$0M	\$0M
BNY Mellon Emerging Markets Fund	\$4M	\$4M	\$0M	\$3M
Fidelity Funds SICAV - Sust. Emerging Markets Equity Fund	\$4M	\$4M	\$0M	\$4M
Goldman Sachs Emerging Markets Equity Insights Fund	\$2M	\$2M	\$0M	\$2M
JPMorgan Funds - Emerging Markets Opportunities Fund	\$18M	\$18M	\$0M	\$17M
Matthews Emerging Markets Equity Fund	\$1M	\$1M	\$0M	\$0M
Mercer Emerging Markets Equity Fund	\$6M	\$6M	\$0M	\$1M
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	\$1M	\$1M	\$0M	\$1M
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.	\$0M	\$0M	\$0M	\$0M
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	\$3M	\$3M	\$0M	\$3M

Chart 3 Current fund weight, maximum fund weight and Z-Score for Dino Polska SA stocks, ranked by Z-Score. Filtered for funds that have sold Dino Polska SA between 6/30/2022 - 12/31/2022 and have a % Z-Score of above 50%.

Chart 4 Current fund AUM, maximum AUM and Z-Score for Dino Polska SA stocks, ranked by Z-Score. Filtered for funds that have sold Dino Polska SA between 6/30/2022 - 12/31/2022 and have a \$ Z-Score of above 50%.

Ch. 3: Dino Polska SA: Z-Score (%) > 50% and selling between 6/30/2022 - 12/31/2022

Fund Name	Latest Weight	Max Weight	Z-Score	Fund Flows, \$
Principal Origin Emerging Markets Fund	1.43%	1.43%	100.00%	(\$3M)
Northern Active M Emerging Markets Equity Fund	0.19%	0.19%	100.00%	\$0M
GS Funds - Emerging Markets Equity Portfolio	1.27%	1.27%	100.00%	(\$5M)
Neuberger Berman Emerging Markets Equity Fund	1.60%	1.66%	93.32%	(\$3M)
Russell Investment Co. - Emerging Markets Fund	0.35%	0.54%	65.32%	\$0M
Schroder ISF - QEP Global Emerging Markets	0.25%	0.40%	60.85%	\$0M
Putnam Emerging Markets Equity Fund	0.95%	1.71%	55.68%	(\$3M)

Ch. 4: Dino Polska SA: Z-Score (\$) > 50% and selling between 6/30/2022 - 12/31/2022

Fund Name	Latest AUM, \$	Max AUM, \$	Z-Score	Fund Flows, \$
GS Funds - Emerging Markets Equity Portfolio	\$41M	\$46M	87.27%	(\$5M)
Principal Origin Emerging Markets Fund	\$31M	\$46M	66.04%	(\$3M)

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 Measures

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 (270) 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 (270) in the analysis.

Funds O/W: The total number of funds overweight a measure versus the EEM, divided by the total number of funds (270) in the analysis.

AUM, \$: The combined AUM allocated to a particular measure across the 270 active GEM funds in our analysis, in US Dollars

Disclaimer

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

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

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

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

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

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