





In this data report, we analyse National Bank of Greece S.A. 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.



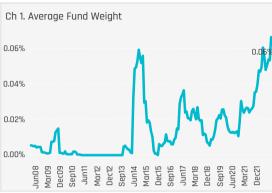
# Peer Group and Time-Series Ownership Data

ETE-GR

National Bank of Greece S.A.



**Chart 1** The time series of average fund weight for National Bank of Greece S.A.



**Chart 2** The time series of average fund weight minus the benchmark EEM weight for National Bank of Greece S.A.



**Chart 3** The time series of funds invested % for National Bank of Greece S.A.



 ${f Chart}$  4 The time series of Funds Overweight the EEM % for National Bank of Greece S.A.



**Chart 5** Aggregated fund ownership data among active GEM funds, ranked by the most widely held stocks. Filtered for Greece stocks only, National Bank of Greece S.A. highlighted in red.

**Chart 6** Aggregated fund ownership data among active GEM funds, ranked by most widely held stocks. Filtered for Financials stocks only, National Bank of Greece S.A. highlighted in red.

Ch 5. Greece Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.						C
Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$	T
HTO-GR	Hellenic Telecommunications Organization SA	12.96%	0.06%	0.01%	\$141.58M	C
BELA-GR	Jumbo S.A.	11.48%	0.09%	0.06%	\$179.43M	5
OPAP-GR	Greek Organisation of Football Prognostics	11.11%	0.06%	0.02%	\$98.37M	5
ETE-GR	National Bank of Greece S.A.	10.00%	0.06%	0.03%	\$136.49M	E
ALPHA-GR	Alpha Services & Holdings SA	8.89%	0.06%	0.02%	\$264.43M	2
EUROB-GR	Eurobank Ergasias Services & Holdings SA	7.78%	0.04%	-0.01%	\$159.78M	1
MYTIL-GR	MYTILINEOS S.A.	6.30%	0.03%	-0.01%	\$29.37M	E
MOH-GR	MOTOR OIL (HELLAS) CORINTH REFINERIES S	2.59%	0.01%	0.01%	\$20.60M	5
TPEIR-GR	Piraeus Financial Holdings S.A.	1.85%	0.01%	0.01%	\$35.81M	Ċ
SAR-GR	GR. SARANTIS S.A.	1.48%	0.01%	0.01%	\$41.55M	ľ
TELL-GR	Bank of Greece SA	1.11%	0.00%	0.00%	\$0.33M	E
EXAE-GR	Hellenic Exchanges - Athens Stock Exchange	1.11%	0.00%	0.00%	\$9.99M	1
DAC-US	Danaos Corporation	1.11%	0.00%	0.00%	\$1.54M	E
TENERGY-GR	Terna Energy S.A.	0.74%	0.02%	0.01%	\$6.77M	3
SBLK-US	Star Bulk Carriers Corp.	0.74%	0.00%	0.00%	\$2.83M	C
FOYRK-GR	FOURLIS HOLDINGS S.A.	0.74%	0.00%	0.00%	\$0.10M	E
FFGRP-GR	Folli Follie S.A.	0.74%	0.00%	0.00%	\$0.24M	E
ELPE-GR	HELLENIQ ENERGY Holdings S.A.	0.74%	0.00%	0.00%	\$0.17M	E
PPC-GR	Public Power Corporation S.A.	0.37%	0.00%	-0.02%	\$5.69M	k
PLAT-GR	Thrace Plastics Holding and Commercial S.A.	0.37%	0.00%	0.00%	\$0.01M	5
OTOEL-GR	Autohellas SA	0.37%	0.00%	0.00%	\$0.01M	F
LAMDA-GR	LAMDA Development S.A.	0.37%	0.00%	0.00%	\$0.03M	C
INLOT-GR	INTRALOT S.A Integrated Lottery Systems	0.37%	0.00%	0.00%	\$0.00M	C
EYDAP-GR	Athens Water Supply and Sewerage Compa			0.00%		3
						E

Ticker         Stock Name         Funds Invested %         Average Weight         Vs Benchmark         Fund AUM, \$           GFNORTEO-MX         Grupo Financiero Banorte SAB de CV Class D         48.52%         0.67%         0.38%         \$2,060.57M           500180-IN         HDFC Bank Limited         47.78%         1.31%         1.31%         \$4,773.92M           532174-IN         ICICI Bank Limited         46.30%         0.93%         0.05%         \$2,632.69M           BBCA-ID         PT Bank Central Asia Tbk         45.19%         0.73%         0.25%         \$2,711.43M           2318-HK         Ping An Insurance (Group) Company of Chin         42.96%         0.77%         0.11%         \$2,260.31M           1299-HK         AIA Group Limited         39.63%         1.09%         1.09%         \$4,568.62M           BBRI-ID         PT Bank Rakyat Indonesia (Persero) Tbk Clas         38.15%         0.62%         0.27%         \$2,099.77M           500010-IN         Housing Development Finance Corporation L         37.78%         0.91%         0.04%         \$5,424.93M           939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%	Ch 6. Financials Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.						
500180-IN         HDFC Bank Limited         47.78%         1.31%         1.31%         \$4,773.92M           532174-IN         ICICI Bank Limited         46.30%         0.93%         0.05%         \$2,632.69M           BBCA-ID         PT Bank Central Asia Tbk         45.19%         0.73%         0.25%         \$2,711.43M           2318-HK         Ping An Insurance (Group) Company of Chin.         42.96%         0.77%         0.11%         \$2,260.31M           1299-HK         AIA Group Limited         39.63%         1.09%         1.09%         \$4,568.62M           BBRI-ID         PT Bank Rakyat Indonesia (Persero) Tbk Clas         38.15%         0.62%         0.27%         \$2,099.77M           500010-IN         Housing Development Finance Corporation L         37.78%         0.91%         0.04%         \$5,424.93M           939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,79.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%	Ticker	Vs Benchmark	Fund AUM, \$				
532174-IN         ICICI Bank Limited         46.30%         0.93%         0.05%         \$2,632.69M           BBCA-ID         PT Bank Central Asia Tbk         45.19%         0.73%         0.25%         \$2,711.43M           2318-HK         Ping An Insurance (Group) Company of Chin         42.96%         0.77%         0.11%         \$2,260.31M           1299-HK         AIA Group Limited         39.63%         1.09%         1.09%         \$4,568.62M           BBRI-ID         PT Bank Rakyat Indonesia (Persero) Tbk Clas         38.15%         0.62%         0.27%         \$2,099.77M           500010-IN         Housing Development Finance Corporation L         37.78%         0.91%         0.04%         \$5,424.93M           939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,79.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persera) Tbk         32.96%         0.36%         0.1	GFNORTEO-MX	C Grupo Financiero Banorte SAB de CV Class O	48.52%	0.67%	0.38%	\$2,060.57M	
BBCA-ID         PT Bank Central Asia Tbk         45.19%         0.73%         0.25%         \$2,711.43M           2318-HK         Ping An Insurance (Group) Company of Chin.         42.96%         0.77%         0.11%         \$2,260.31M           1299-HK         AIA Group Limited         39.63%         1.09%         1.09%         \$4,568.62M           BBRI-ID         PT Bank Rakyat Indonesia (Persero) Tbk Clas.         38.15%         0.62%         0.27%         \$2,099.77M           500010-IN         Housing Development Finance Corporation L.         37.78%         0.91%         0.04%         \$5,424.93M           939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,79.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%	500180-IN	HDFC Bank Limited	47.78%	1.31%	1.31%	\$4,773.92M	
2318-HK         Ping An Insurance (Group) Company of Chin.         42.96%         0.77%         0.11%         \$2,250.31M           1299-HK         AIA Group Limited         39.63%         1.09%         1.09%         \$4,568.62M           BBRI-ID         PT Bank Rakyat Indonesia (Persero) Tbk Clas         38.15%         0.62%         0.27%         \$2,099.77M           500010-IN         Housing Development Finance Corporation L         37.78%         0.91%         0.04%         \$5,424.93M           939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,79.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	532174-IN	ICICI Bank Limited	46.30%	0.93%	0.05%	\$2,632.69M	
1299-HK         AIA Group Limited         39.63%         1.09%         1.09%         \$4,568.62M           BBRI-ID         PT Bank Rakyat Indonesia (Persero) Tbk Clas         38.15%         0.62%         0.27%         \$2,099.77M           500010-IN         Housing Development Finance Corporation L         37.78%         0.91%         0.04%         \$5,424.93M           939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,179.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	BBCA-ID	PT Bank Central Asia Tbk	45.19%	0.73%	0.25%	\$2,711.43M	
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939-HK         China Construction Bank Corporation Class H         35.56%         0.54%         -0.41%         \$1,852.30M           ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,179.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	BBRI-ID	PT Bank Rakyat Indonesia (Persero) Tbk Clas	38.15%	0.62%	0.27%	\$2,099.77M	
ITUB4-BR         Itau Unibanco Holding SA Pfd         34.81%         0.39%         0.03%         \$1,147.04M           BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,179.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	500010-IN	Housing Development Finance Corporation L	37.78%	0.91%	0.04%	\$5,424.93M	
BAP-US         Credicorp Ltd.         34.07%         0.35%         0.20%         \$1,179.58M           105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	939-HK	China Construction Bank Corporation Class H	35.56%	0.54%	-0.41%	\$1,852.30M	
105560-KR         KB Financial Group Inc.         33.70%         0.35%         0.12%         \$978.48M           BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	ITUB4-BR	Itau Unibanco Holding SA Pfd	34.81%	0.39%	0.03%	\$1,147.04M	
BMRI-ID         PT Bank Mandiri (Persero) Tbk         32.96%         0.36%         0.18%         \$935.66M           3968-HK         China Merchants Bank Co., Ltd. Class H         32.22%         0.37%         0.03%         \$1,184.48M	BAP-US	Credicorp Ltd.	34.07%	0.35%	0.20%	\$1,179.58M	
3968-HK China Merchants Bank Co., Ltd. Class H 32.22% 0.37% 0.03% \$1,184.48M	105560-KR	KB Financial Group Inc.	33.70%	0.35%	0.12%	\$978.48M	
	BMRI-ID	PT Bank Mandiri (Persero) Tbk	32.96%	0.36%	0.18%	\$935.66M	
086790-KR Hana Financial Group Inc. 30.37% 0.31% 0.16% \$608.16M	3968-HK	China Merchants Bank Co., Ltd. Class H	32.22%	0.37%	0.03%	\$1,184.48M	
	086790-KR	Hana Financial Group Inc.	30.37%	0.31%	0.16%	\$608.16M	
BBDC4-BR         Banco Bradesco SA Pfd         28.15%         0.25%         0.00%         \$1,110.31M	BBDC4-BR	Banco Bradesco SA Pfd	28.15%	0.25%	0.00%	\$1,110.31M	
B3SA3-BR B3 SA - Brasil, Bolsa, Balcao 28.15% 0.29% 0.05% \$1,289.19M	B3SA3-BR	B3 SA - Brasil, Bolsa, Balcao	28.15%	0.29%	0.05%	\$1,289.19M	
BBAS3-BR         Banco do Brasil S.A.         26.30%         0.21%         0.12%         \$418.66M	BBAS3-BR	Banco do Brasil S.A.	26.30%	0.21%	0.12%	\$418.66M	
KBANK-TH         Kasikornbank Public Co. Ltd.         25.93%         0.22%         0.18%         \$639.07M	KBANK-TH	Kasikornbank Public Co. Ltd.	25.93%	0.22%	0.18%	\$639.07M	
532215-IN Axis Bank Limited 24.81% 0.28% -0.12% \$638.60M	532215-IN	Axis Bank Limited	24.81%	0.28%	-0.12%	\$638.60M	
FSR-ZA FirstRand Limited 24.44% 0.23% -0.06% \$1,265.20M	FSR-ZA	FirstRand Limited	24.44%	0.23%	-0.06%	\$1,265.20M	
055550-KR         Shinhan Financial Group Co., Ltd.         22.96%         0.20%         0.00%         \$410.84M	055550-KR	Shinhan Financial Group Co., Ltd.	22.96%	0.20%	0.00%	\$410.84M	
CPI-ZA         Capitec Bank Holdings Limited         22.59%         0.22%         0.07%         \$1,143.59M	CPI-ZA	Capitec Bank Holdings Limited	22.59%	0.22%	0.07%	\$1,143.59M	
388-HK Hong Kong Exchanges & Clearing Ltd. 22.22% 0.30% 0.30% \$981.59M	388-HK	Hong Kong Exchanges & Clearing Ltd.	22.22%	0.30%	0.30%	\$981.59M	

10.00%

0.06%

0.03%

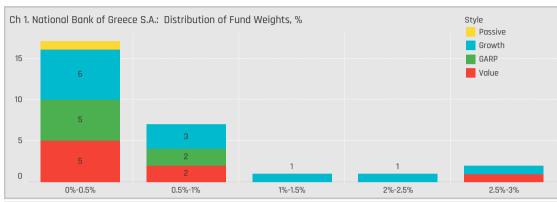
\$136,49M

## Fund Holdings



**Chart 1** The distribution of National Bank of Greece S.A. weights among the 270 active GEM funds in our analysis, broken down by fund Style.

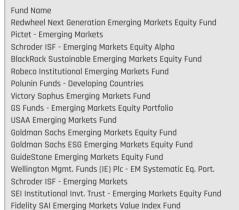
Chart 2 The largest National Bank of Greece S.A. holders in our analysis, on a portfolio weight basis.



**Chart 3** The time-series of combined fund AUM in National Bank of Greece S.A. stocks out of the \$333.04Bn in total active AUM in our analysis.

**Chart 4** The largest National Bank of Greece S.A. holders in our analysis, on an \$ AUM basis.





Advisors Inner Circle - Acadian Emergina Markets Portfolio

Allianz Intl. Invt. Fds. - Emerging Markets Equity Fund

Allianz Global Investors Fund - Best Styles EM Equity

Fonditalia - Equity Global Emerging Markets

SPP Emerging Markets SRI

SPP Emerging Markets Plus

SA Emerging Markets Value Fund

American Funds New World Fund

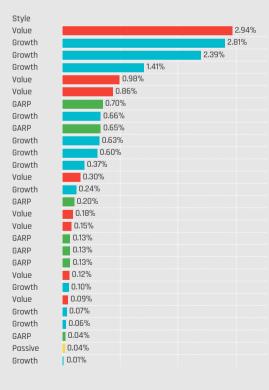
iShares MSCI Emerging Markets ETF

Allianz Global Investors Fund - Emerging Mkts Eq. Oppo

SEI Institutional Intl. Trust - Emerging Markets Equity Fund

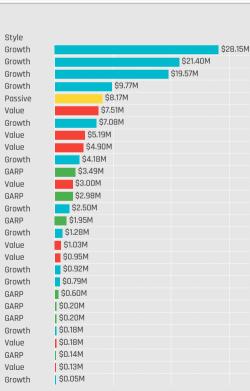
Morgan Stanley Pathway Emerging Markets Equity Fund

Ch 2. National Bank of Greece S.A.: Top Fund Holdings, %



### Fund Name American Funds New World Fund GS Funds - Emerging Markets Equity Portfolio Goldman Sachs Emerging Markets Equity Fund Schroder ISF - Emerging Markets iShares MSCI Emerging Markets ETF Robeco Institutional Emerging Markets Fund Pictet - Emerging Markets Polunin Funds - Developing Countries Fidelity SAI Emerging Markets Value Index Fund Schroder ISF - Emerging Markets Equity Alpha **USAA Emerging Markets Fund** Redwheel Next Generation Emerging Markets Equity Fund Victory Sophus Emerging Markets Fund GuideStone Emerging Markets Equity Fund SEI Institutional Invt. Trust - Emerging Markets Equity Fund BlackRock Sustainable Emerging Markets Equity Fund Fonditalia - Eauity Global Emergina Markets Advisors Inner Circle - Acadian Emerging Markets Portfolio SPP Emerging Markets SRI SPP Emerging Markets Plus SEI Institutional Intl. Trust - Emerging Markets Equity Fund Allianz Global Investors Fund - Emerging Mkts Eq. Oppo. Allianz Intl. Invt. Fds. - Emerging Markets Equity Fund Goldman Sachs ESG Emerging Markets Equity Fund SA Emerging Markets Value Fund Allianz Global Investors Fund - Best Styles EM Equity Wellington Mgmt. Funds (IE) Plc - EM Systematic Eq. Port. Morgan Stanley Pathway Emerging Markets Equity Fund

Ch 4. National Bank of Greece S.A.: Top Fund Holdings, \$



# Aggregate Ownership Changes

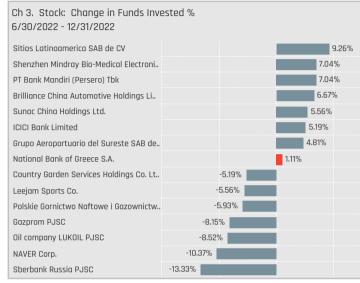


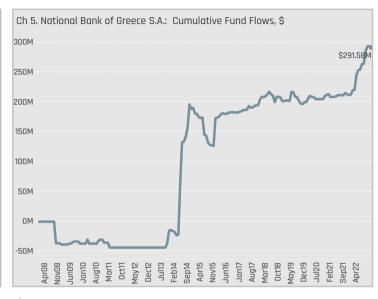
**Chart 1** The largest changes in average Stock weight between 6/30/2022 and 12/31/2022. National Bank of Greece S.A. highlighted in red.

**Chart 3** Measures the largest changes in the percentage of funds invested in each Stock between 6/30/2022 and 12/31/2022. , National Bank of Greece S.A. highlighted in red.

**Chart 5** Shows the cumulative fund flows for National Bank of Greece S.A. 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.



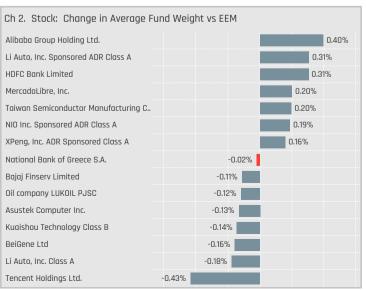




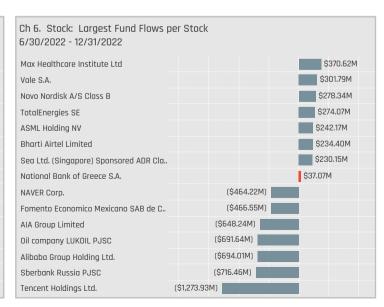
**Chart 2** Measures the largest changes in the average Stock weight vs EEM between 6/30/2022 and 12/31/2022. An increasing figure would indicate an increasing overweight or decreasing underweight. National Bank of Greece S.A. highlighted in red.

**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, National Bank of Greece S.A. highlighted in red.

**Chart 6** Measures the largest estimated fund flows for each Stock between 6/30/2022 and 12/31/2022, National Bank of Greece S.A. highlighted in red.







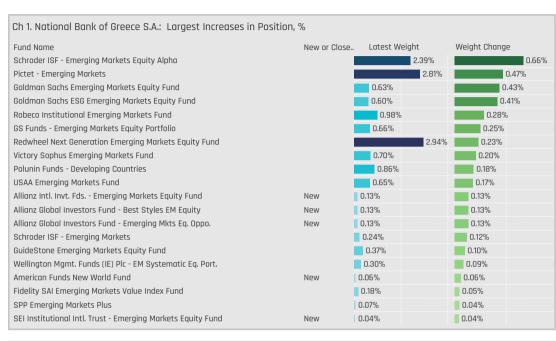
# Fund Holding Changes

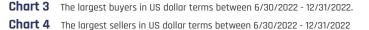


Chart 1 The largest fund weight increases between 6/30/2022 - 12/31/2022.

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.

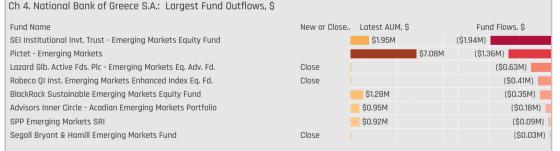




Both charts show the current AUM and whether the fund flow represented a new or closed position.

Fund Name	New or Close	Latest AUM, \$	Fund Flows, \$
American Funds New World Fund	New	\$28.15M	\$22.81M
Goldman Sachs Emerging Markets Equity Fund		\$19.57M	\$7.97M
Shares MSCI Emerging Markets ETF		\$8.17M	\$7.42M
Schroder ISF - Emerging Markets		\$9.77M	\$2.08M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund	New	\$0.60M	\$0.45M
SPP Emerging Markets Plus		\$0.79M	\$0.35M
Fidelity SAI Emerging Markets Value Index Fund		\$4.90M	\$0.33M
Allianz Global Investors Fund - Emerging Mkts Eq. Oppo.	New	\$0.20M	\$0.16M
Allianz Intl. Invt. Fds Emerging Markets Equity Fund	New	\$0.20M	\$0.16M
Allianz Global Investors Fund - Best Styles EM Equity	New	\$0.14M	\$0.12M
GuideStone Emerging Markets Equity Fund		\$2.50M	\$0.11M
Goldman Sachs ESG Emerging Markets Equity Fund		\$0.18M	\$0.05M
Morgan Stanley Pathway Emerging Markets Equity Fund	New	\$0.05M	\$0.04M
Wellington Mgmt. Funds (IE) Plc - EM Systematic Eq. Port.		\$0.13M	\$0.00M
Victory Sophus Emerging Markets Fund		\$2.98M	\$0.00M
USAA Emerging Markets Fund		\$3.49M	\$0.00M
Schroder ISF - Emerging Markets Equity Alpha		\$4.18M	\$0.00M
SA Emerging Markets Value Fund		\$0.18M	\$0.00M
Robeco Institutional Emerging Markets Fund		\$7.51M	\$0.00M
Redwheel Next Generation Emerging Markets Equity Fund		\$3.00M	\$0.00M

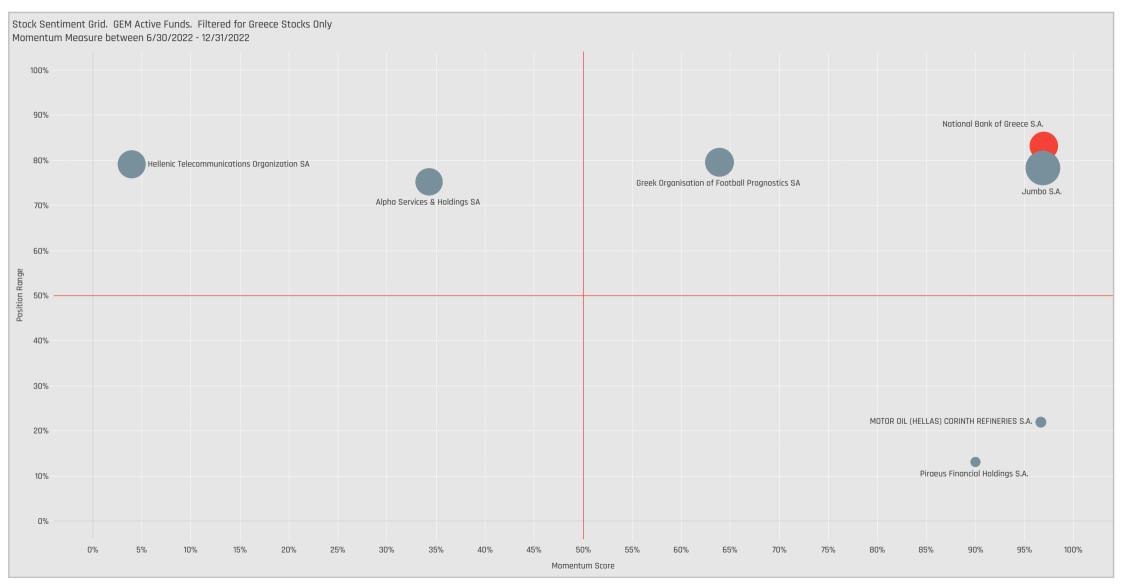




# Stock Sentiment Grid [Country]



**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 Greece stocks only.

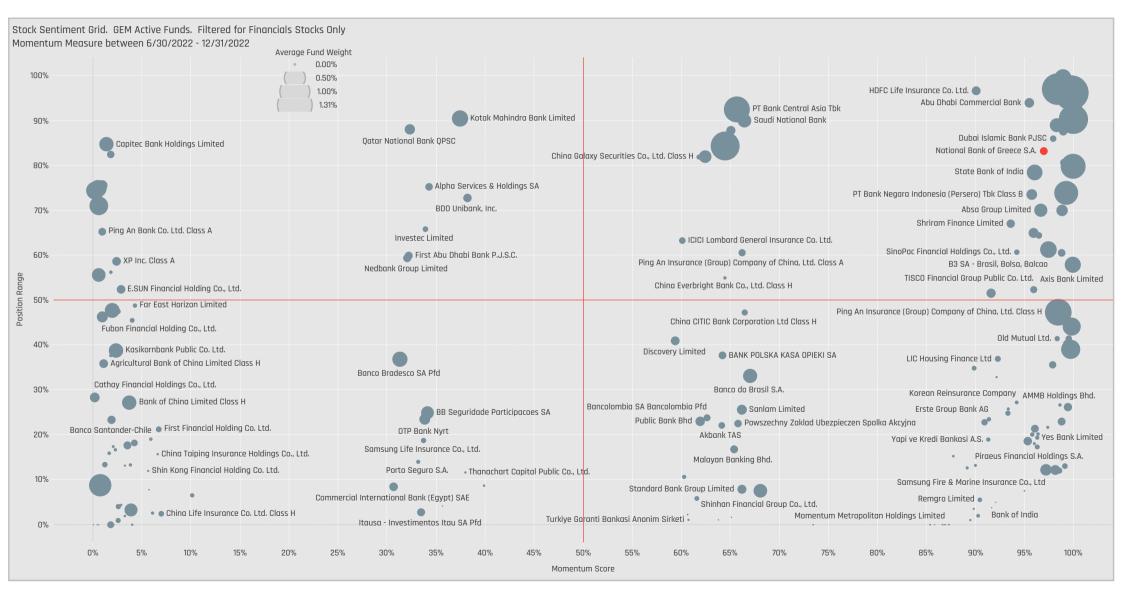


Position Range: Average of: Z-Score Average Weight vs history Z-Score Funds Invested % vs history Z-Score Funds O/W % vs history Momentum Score: Average of: Change in Average Weight (Percentile vs Peers) Change in Funds Invested % (Percentile vs Peers) Change in Funds O/W % (Percentile vs Peers)

# Stock Sentiment Grid [Sector]



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 Financials 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)

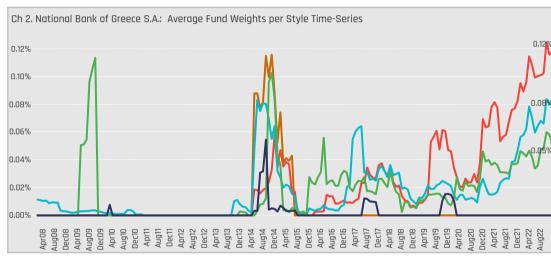
# Holdings by Fund Style

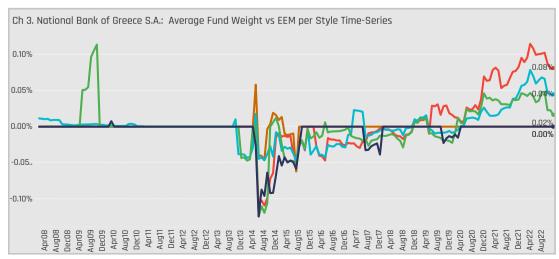


**Chart 1** The average weights in National Bank of Greece S.A. stock and the average weights vs the iShares MSCI Emerging Markets ETF, split by fund Style.

**Charts 2 & 3** The time series of average fund weights in National Bank of Greece S.A. stock and average weights vs iShares MSCI Emerging Markets ETF, split by fund Style.



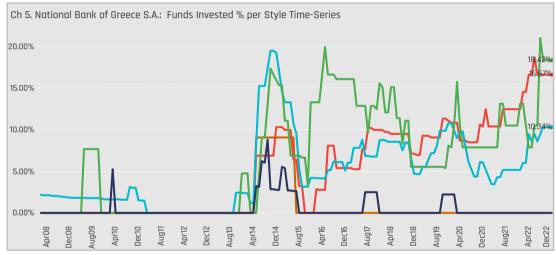


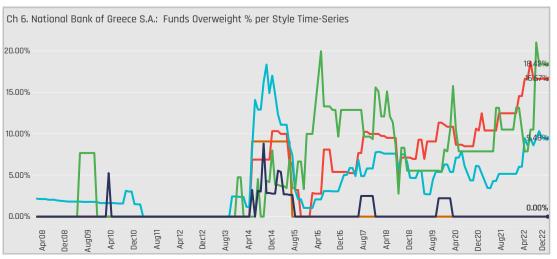


**Chart 4** The percentage of funds invested in National Bank of Greece S.A. stocks and the percentage of funds overweight, split by fund Style.

**Chart 5 & 6** The time series of the percentage of funds invested in National Bank of Greece S.A. stocks and the percentage of funds overweight, split by fund Style.







# Holdings by Fund Style

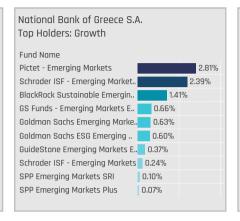


Top Row: For each Style category, each chart shows the largest holders in National Bank of Greece S.A.

Middle Row: For each Style category, each chart shows the most widely held stocks and the corresponding average fund weights, with National Bank of Greece S.A. highlighted in red.

Bottom Row: For each Style category, each chart shows the largest stock overweights and underweights, with National Bank of Greece S.A. highlighted in red.

National Bank of Greece S.A. Top Holders: Aggressive Growth







National Bank of Greece S.A. Top Holders: Yield

National Bank of Greece S.A. Most Widely Held Stocks: Aggressive Growth

		Funds Inv
Stock Name	Ave. Wgt	%
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%

National Bank of Greece S.A.
Most Widely Held Stocks: Growtl

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%
National Bank of Greece S.A.	0.08%	10.34%

National Bank of Greece S.A.	
Most Widely Held Stocks: GARI	P

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%
National Bank of Greece S.A.	0.05%	18.42%

### National Bank of Greece S.A. Most Widely Held Stocks: Value

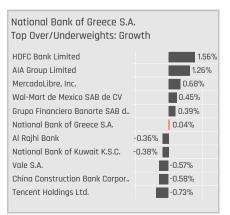
Stock Name Samsung Electronics Co., Ltd. Taiwan Semiconductor Manufact Alibaba Group Holding Ltd. China Construction Bank Corpor Hon Hai Precision Industry Co., Lt KB Financial Group Inc. Ping An Insurance (Group) Comp Lenovo Group Limited Kia Corp. Hana Financial Group Inc. O.45%  Variable 45.83% Hana Financial Group Inc. O.45%  Variable 45.83% Hana Financial Group Inc. O.70% Variable 45.83% National Bank of Greece S.A. O.12% Variable 77.08% Var			
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%	Stock Name	Ave. Wgt	Funds In
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%	Samsung Electronics Co., Ltd.	2.59%	77.08%
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%	Taiwan Semiconductor Manufact	3.59%	75.00%
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%	Alibaba Group Holding Ltd.	2.19%	75.00%
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%	China Construction Bank Corpor	1.12%	58.33%
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%	Hon Hai Precision Industry Co., Lt	0.88%	54.17%
Lenovo Group Limited         0.45%         47.92%           Kia Corp.         0.46%         45.83%           Hana Financial Group Inc.         0.70%         45.83%	KB Financial Group Inc.	0.65%	52.08%
Kia Corp. 0.46% 45.83% Hana Financial Group Inc. 0.70% 45.83%	Ping An Insurance (Group) Comp	1.18%	47.92%
Hana Financial Group Inc. 0.70% 45.83%	Lenovo Group Limited	0.45%	47.92%
Transit interior or out interior	Kia Corp.	0.46%	45.83%
National Bank of Greece S.A. 0.12% 16.67%	Hana Financial Group Inc.	0.70%	45.83%
	National Bank of Greece S.A.	0.12%	16.67%

National Bank of Greece S.A.		
Most Widely Held Stocks: Yield		

			Funds Inv.
	Stock Name	Ave. Wgt	%
	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%
ľ			

### National Bank of Greece S.A. Top Over/Underweights: Aggressive Growth







# National Bank of Greece S.A.

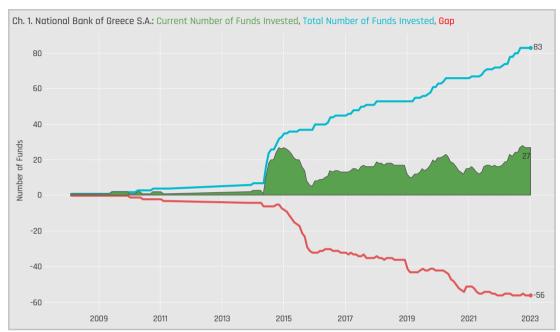


# National Bank of Greece S.A.

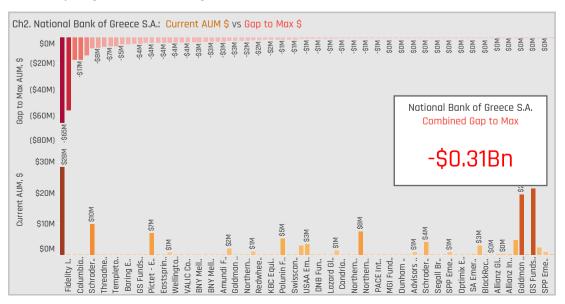




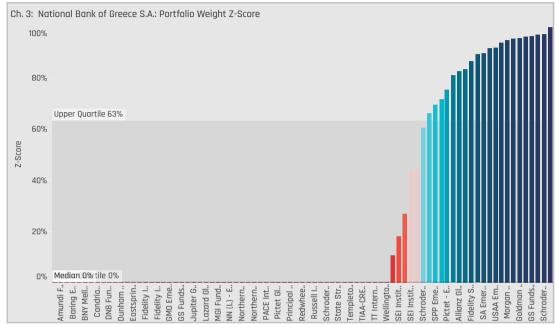
**Chart 1** The blue line shows the total number of funds (out of 270) who have ever owned National Bank of Greece S.A. stock. The green area shows the number of funds invested at any one time and the red line the difference. A download sloping red line means existing investors are closing out positions,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



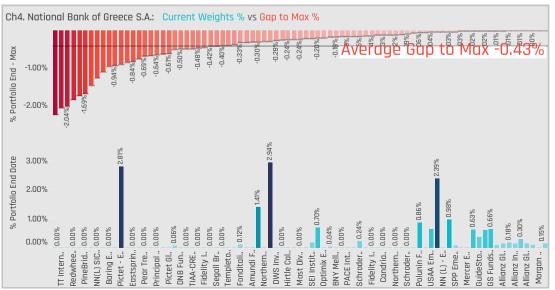
**Chart 2** The orange lines show the current AUM in National Bank of Greece S.A. for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.



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



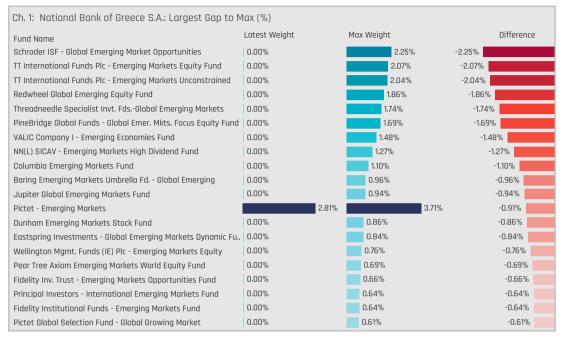
**Chart 4** Blue lines show the current weight in National Bank of Greece S.A. for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.



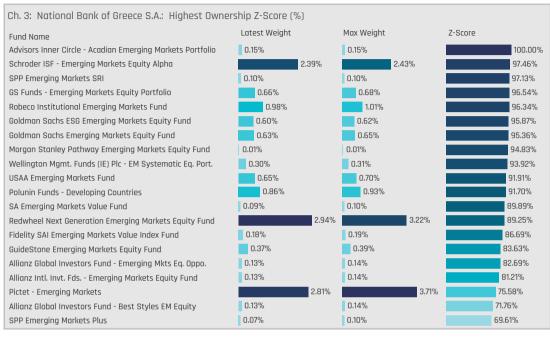
# Fund Level Gap Analysis

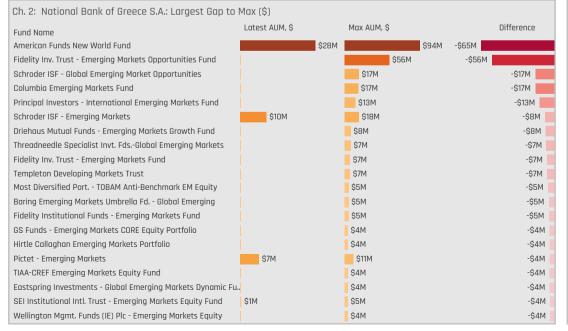


**Chart 1** Current fund weight, maximum fund weight and difference for National Bank of Greece S.A. stocks. **Chart 2** Current fund ALIM maximum fund ALIM and S difference for National Bank of Greece S.A. stocks.



**Chart 3** Current fund weight, maximum fund weight and Z-Score for National Bank of Greece S.A. stocks, ranked by Z-Score **Chart 4** Current fund AUM, maximum AUM and Z-Score for National Bank of Greece S.A. stocks, ranked by Z-Score.



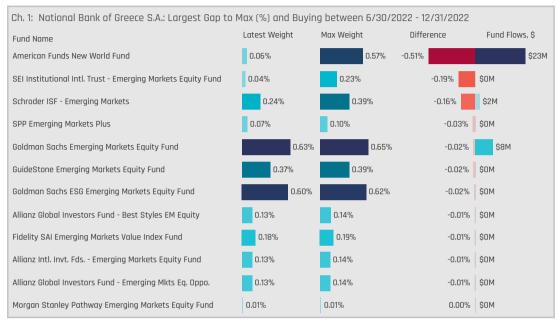


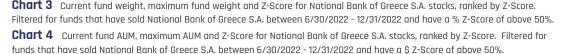


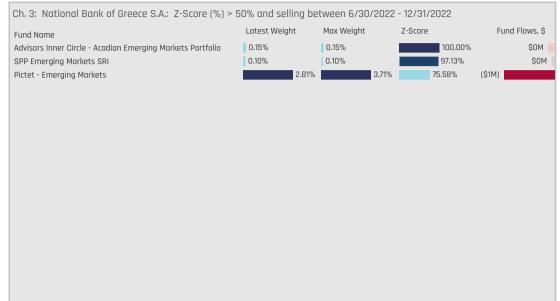


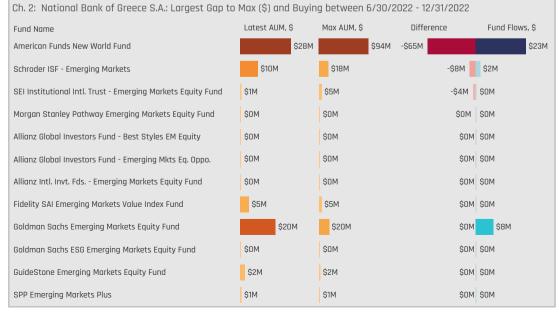
**Chart 1** Current fund weight, maximum fund weight and the difference for National Bank of Greece S.A. stocks. Filtered for funds that have bought in to National Bank of Greece S.A. between 6/30/2022 - 12/31/2022

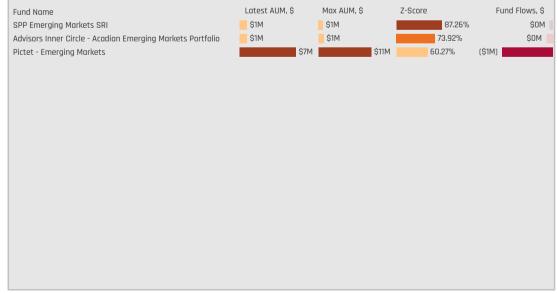
**Chart 2** Current fund AUM, maximum fund AUM and the USD difference for National Bank of Greece S.A. stocks. Filtered for funds that have bought in to National Bank of Greece S.A. between 6/30/2022 - 12/31/2022











Ch. 4: National Bank of Greece S.A.: Z-Score (\$) > 50% and selling between 6/30/2022 - 12/31/2022



### **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 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



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