





In this data report, we analyse Saudi Arabian Oil Company (Saudi Aramco) 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



Chart 1 The time series of average fund weight for Saudi Arabian Oil Company (Saudi Aramco)











Chart 4 The time series of Funds Overweight the EEM % for Saudi Arabian Oil Company (Saudi Aramco)





Chart 5 Aggregated fund ownership data among active GEM funds, ranked by the most widely held stocks. Filtered for Saudi Arabia stocks only, Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.

Chart 6 Aggregated fund ownership data among active GEM funds, ranked by most widely held stocks. Filtered for Energy stocks only, Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.

Ch 5. Saudi Arabia Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.				Ch 6. Energy	Stocks. Aggregate Holdings Data, Ranke	ed by Most Widely	Held.		
Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$	Ticker	Stock Name	Funds Invested %	Ave
1180-SA	Saudi National Bank	21.85%	0.20%	-0.27%	\$852.12M	500325-IN	Reliance Industries Limited	44.07%	
1120-SA	Al Rajhi Bank	16.30%	0.17%	-0.46%	\$798.75M	PETR4-BR	Petroleo Brasileiro SA Pfd	25.93%	
1150-SA	Alinma Bank	14.81%	0.10%	-0.04%	\$382.07M	PETR3-BR	Petroleo Brasileiro SA	22.22%	
2222-SA	Saudi Arabian Oil Company (Saudi Aramco)	14.07%	0.09%	-0.24%	\$393.00M	PTTEP-TH	PTT Exploration & Production Plc	21.85%	
7010-SA	Saudi Telecom Co.	12.59%	0.08%	-0.15%	\$220.90M	857-HK	PetroChina Company Limited Class H	15.19%	
2020-SA	SABIC Agri-Nutrients Co.	12.59%	0.05%	-0.09%	\$181.38M	386-HK	China Petroleum & Chemical Corporation Cl	15.19%	
2310-SA	Sahara International Petrochemical Compan	10.74%	0.03%	-0.02%	\$70.20M	2222-SA	Saudi Arabian Oil Company (Saudi Aramco)	14.07%	
7020-SA	Etihad Etisalat Co.	8.89%	0.03%	-0.03%	\$101.27M	MOL-HU	MOL Hungarian Oil & Gas Plc Class A	13.33%	
1111-SA	Saudi Tadawul Group Holding Company	7.41%	0.04%	0.00%	\$183.96M	532522-IN	Petronet Lng Limited	11.85%	
2010-SA	Saudi Basic Industries Corp.	7.04%	0.04%	-0.30%	\$150.26M	500312-IN	Oil & Natural Gas Corp. Ltd.	11.48%	
1080-SA	Arab National Bank	7.04%	0.03%	-0.06%	\$43.52M	PKN-PL	Polski Koncern Naftowy ORLEN S.A.	10.74%	
1050-SA	Banque Saudi Fransi	7.04%	0.01%	-0.09%	\$48.71M	KCHOL.E-TR	Koc Holding A.S.	10.74%	
4013-SA	Dr. Sulaiman Al-Habib Medical Services Grou	6.67%	0.02%	-0.06%	\$92.13M	078930-KR	GS Holdings Corp.	10.00%	
1010-SA	Riyad Bank	6.30%	0.01%	-0.17%	\$95.78M	PRIO3-BR	Petro Rio SA	9.63%	
4190-SA	Jarir Marketing Co.	5.56%	0.01%	-0.02%	\$50.32M	392-HK	Beijing Enterprises Holdings Limited	9.26%	
1060-SA	Saudi British Bank	5.56%	0.02%	-0.13%	\$131.41M	PTT-TH	PTT Public Co., Ltd.	8.89%	
5110-SA	Saudi Electricity Co.	5.19%	0.01%	-0.07%	\$49.22M	2883-HK	China Oilfield Services Limited Class H	8.89%	
2280-SA	Almarai Co. Ltd.	5.19%	0.01%	-0.04%	\$37.45M	UNTR-ID	PT United Tractors Tbk	8.15%	
1211-SA	Saudi Arabian Mining Co.	4.44%	0.01%	-0.22%	\$86.70M	ECOPETROL-CO	Ecopetrol SA	8.15%	
1030-SA	Saudi Investment Bank	3.70%	0.01%	-0.03%	\$14.76M	010950-KR	S-Oil Corporation	8.15%	
1020-SA	Bank Aljazira	3.70%	0.01%	-0.03%	\$14.08M	1088-HK	China Shenhua Energy Co. Ltd. Class H	7.78%	
2050-SA	Savola Group	3.33%	0.00%	-0.02%	\$13.33M	ACEN-PH	AC Energy Corp.	6.67%	
4210-SA	Saudi Research & Marketing Group	2.96%	0.00%	-0.02%	\$14.36M	PTTGC-TH	PTT Global Chemical Public Company Limited	5.93%	
4164-SA	Nahdi Medical Company	2.96%	0.02%	0.00%	\$108.49M	EXX-ZA	Exxaro Resources Limited	5.56%	
7202-SA	Arabian Internet and Communications Servi	2.59%	0.01%	-0.01%	\$59.79M	CSAN3-BR	Cosan S.A.	5.56%	

Ch 6. Energy Stocks. Aggregate Holaings Data, Rankea by Most Widely Hela.					
Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
500325-IN	Reliance Industries Limited	44.07%	0.94%	-0.55%	\$4,978.29M
PETR4-BR	Petroleo Brasileiro SA Pfd	25.93%	0.25%	-0.10%	\$961.07M
PETR3-BR	Petroleo Brasileiro SA	22.22%	0.27%	-0.05%	\$1,153.12M
PTTEP-TH	PTT Exploration & Production Plc	21.85%	0.16%	0.04%	\$469.04M
857-HK	PetroChina Company Limited Class H	15.19%	0.14%	0.00%	\$395.66M
386-HK	China Petroleum & Chemical Corporation Cl	15.19%	0.13%	-0.07%	\$420.70M
2222-SA	Saudi Arabian Oil Company (Saudi Aramco)	14.07%	0.09%	-0.24%	\$393.00M
MOL-HU	MOL Hungarian Oil & Gas Plc Class A	13.33%	0.04%	0.00%	\$108.93M
532522-IN	Petronet Lng Limited	11.85%	0.06%	0.02%	\$245.38M
500312-IN	Oil & Natural Gas Corp. Ltd.	11.48%	0.07%	0.00%	\$201.47M
PKN-PL	Polski Koncern Naftowy ORLEN S.A.	10.74%	0.05%	-0.09%	\$79.64M
KCHOL.E-TR	Koc Holding A.S.	10.74%	0.06%	0.00%	\$181.08M
078930-KR	GS Holdings Corp.	10.00%	0.03%	0.00%	\$44.64M
PRIO3-BR	Petro Rio SA	9.63%	0.07%	-0.01%	\$243.61M
392-HK	Beijing Enterprises Holdings Limited	9.26%	0.02%	-0.01%	\$33.71M
PTT-TH	PTT Public Co., Ltd.	8.89%	0.05%	-0.10%	\$173.85M
2883-HK	China Oilfield Services Limited Class H	8.89%	0.06%	0.02%	\$118.53M
UNTR-ID	PT United Tractors Tbk	8.15%	0.03%	-0.02%	\$159.20M
ECOPETROL-CO	Ecopetrol SA	8.15%	0.04%	0.04%	\$34.04M
010950-KR	S-Oil Corporation	8.15%	0.04%	-0.01%	\$153.04M
1088-HK	China Shenhua Energy Co. Ltd. Class H	7.78%	0.04%	-0.11%	\$130.40M
ACEN-PH	AC Energy Corp.	6.67%	0.00%	-0.02%	\$5.68M
PTTGC-TH	PTT Global Chemical Public Company Limited	5.93%	0.01%	-0.03%	\$163.81M
EXX-ZA	Exxaro Resources Limited	5.56%	0.02%	-0.04%	\$50.91M
CSAN3-BR	Cosan S.A.	5.56%	0.03%	-0.03%	\$98.15M

Fund Holdings



Chart 1 The distribution of Saudi Arabian Oil Company (Saudi Aramco) weights among the 270 active GEM funds in our analysis, broken down by fund Style.

Chart 2 The largest Saudi Arabian Oil Company (Saudi Aramco) holders in our analysis, on a portfolio weight basis.

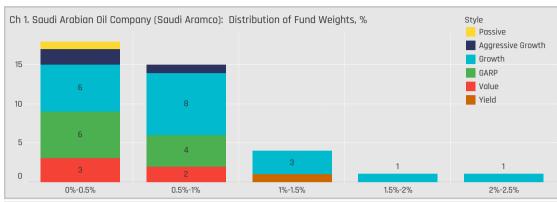
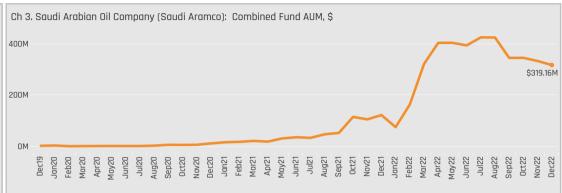
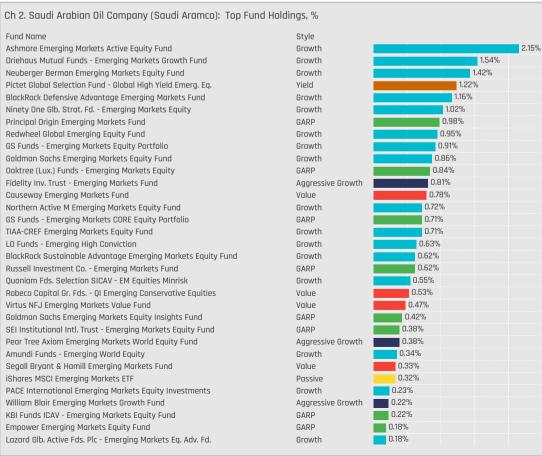
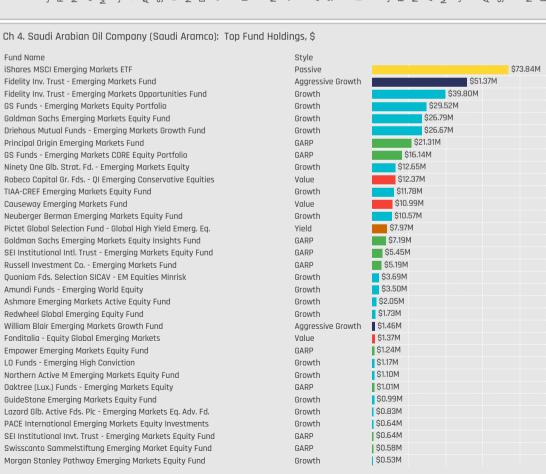


Chart 3 The time-series of combined fund AUM in Saudi Arabian Oil Company (Saudi Aramco) stocks out of the \$333.04Bn in total active AUM in our analysis.

Chart 4 The largest Saudi Arabian Oil Company (Saudi Aramco) holders in our analysis, on an \$ AUM basis.







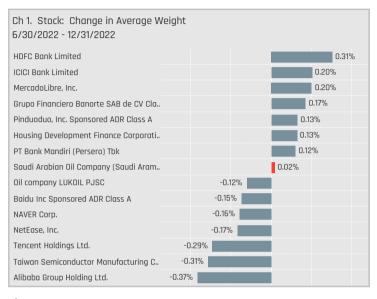
Aggregate Ownership Changes



Chart 1 The largest changes in average Stock weight between 6/30/2022 and 12/31/2022. Saudi Arabian Oil Company (Saudi Aramco) 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. , Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.





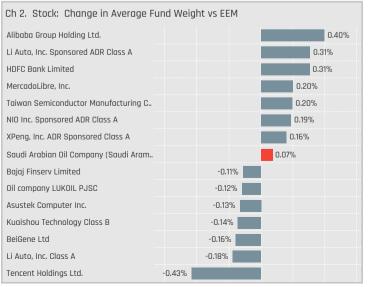
Ch 3. Stock: Change in Funds Invested % 6/30/2022 - 12/31/2022 Sitios Latinoamerica SAB de CV 9.26% Shenzhen Mindray Bio-Medical Electroni.. 7.04% 7.04% PT Bank Mandiri (Persero) Tbk 6.67% Brilliance China Automotive Holdings Li., Sunac China Holdings Ltd. 5.56% ICICI Bank Limited 5,19% 4.81% Grupo Aeroportuario del Sureste SAB de.. Saudi Arabian Oil Company (Saudi Aram., 3.70% Country Garden Services Holdings Co. Lt.. -5.19% -5.56% Leeiam Sports Co. Polskie Gornictwo Naftowe i Gazownictw.. Goznrom P.ISC Oil company LUKOIL PJSC NAVER Corp. -13,33% Sberbank Russia PJSC

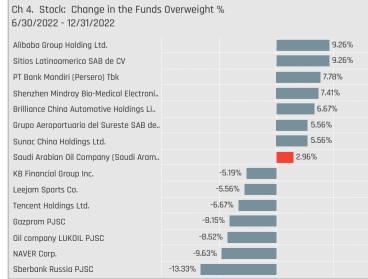


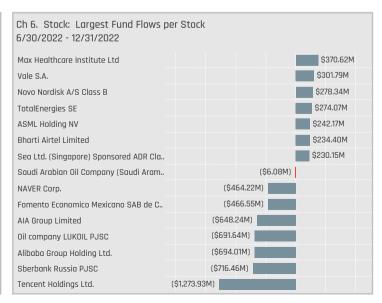
Chart 2 Measures the largest changes in the average Stock weight vs EEM between 6/30/2022 and 12/31/2022. An increasing figure would indicate an increasing overweight or decreasing underweight. Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.

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, Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.

Chart 6 Measures the largest estimated fund flows for each Stock between 6/30/2022 and 12/31/2022, Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.







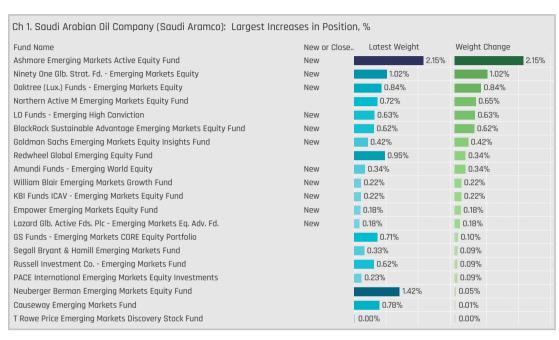
Fund Holding Changes

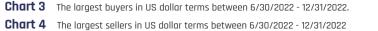


Chart 1 The largest fund weight increases between 6/30/2022 - 12/31/2022.

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

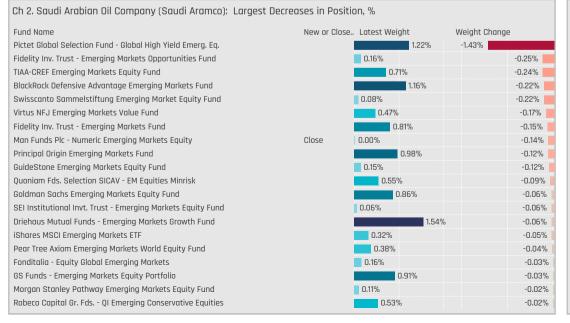
Both charts show the current weight and whether the weight change represented a new or closed position.





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, \$
Ninety One Glb. Strat. Fd Emerging Markets Equity	New	\$12.65M	\$15.45M
Goldman Sachs Emerging Markets Equity Insights Fund	New	\$7.19M	\$9.08M
GS Funds - Emerging Markets CORE Equity Portfolio		\$16.14M	\$5.64M
Driehaus Mutual Funds - Emerging Markets Growth Fund		\$26.67M	\$5.03M
Amundi Funds - Emerging World Equity	New	\$3.50M	\$4.09M
Ashmore Emerging Markets Active Equity Fund	New	\$2.05M	\$2.40M
Robeco Capital Gr. Fds QI Emerging Conservative Equities		\$12.37M	\$1.98M
William Blair Emerging Markets Growth Fund	New	\$1.46M	\$1.71M
Causeway Emerging Markets Fund		\$10.99M	\$1.66M
Empower Emerging Markets Equity Fund	New	\$1.24M	\$1.45M
LO Funds - Emerging High Conviction	New	\$1.17M	\$1.28M
Northern Active M Emerging Markets Equity Fund		\$1.10M	\$1.20M
TIAA-CREF Emerging Markets Equity Fund		\$11.78M	\$1.19M
Oaktree (Lux.) Funds - Emerging Markets Equity	New	\$1.01M	\$1.14M
Lazard Glb. Active Fds. Plc - Emerging Markets Eq. Adv. Fd.	New	\$0.83M	\$1.02M
Russell Investment Co Emerging Markets Fund		\$5.19M	\$0.86M
Redwheel Global Emerging Equity Fund		\$1.73M	\$0.72M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund		\$5.45M	\$0.70M
iShares MSCI Emerging Markets ETF		\$73.84M	\$0.46M
PACE International Emerging Markets Equity Investments		\$0.64M	\$0.32M

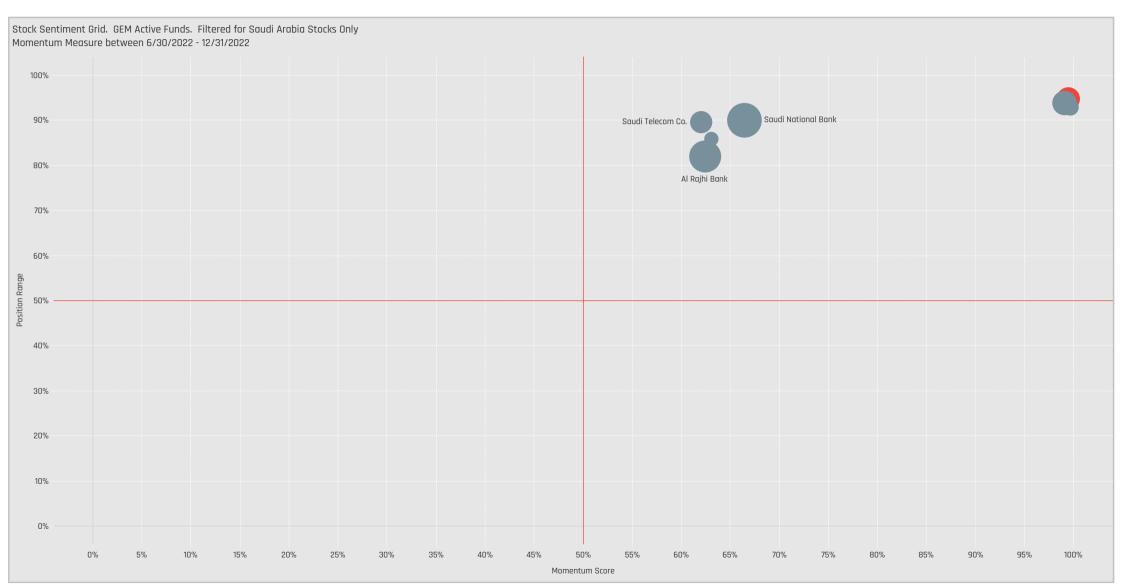




Stock Sentiment Grid [Country]



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 Saudi Arabia stocks only.



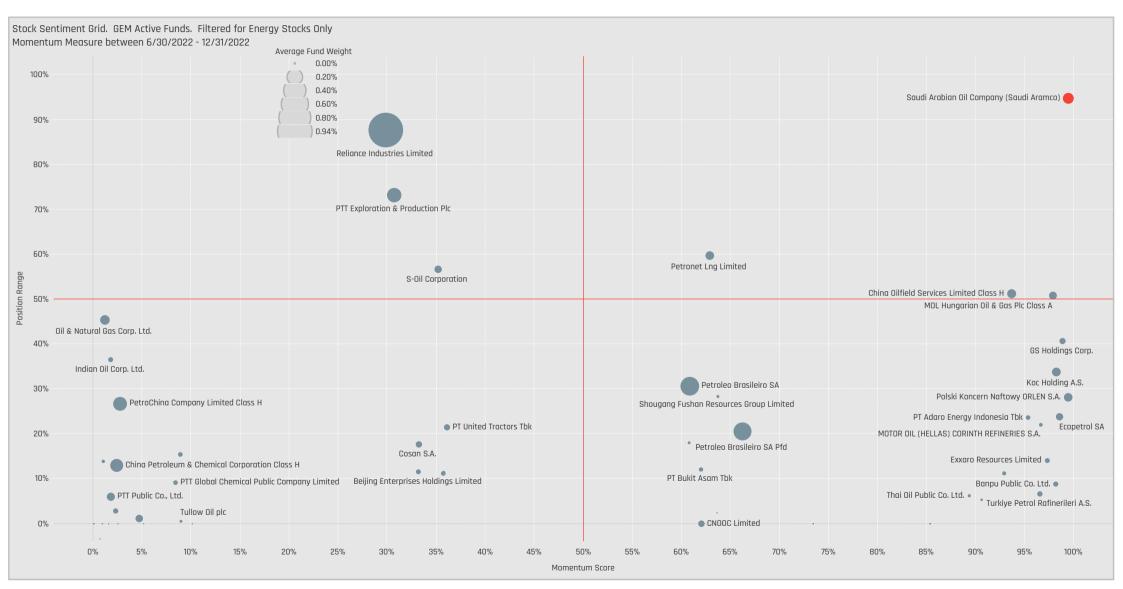
Position Range: Average of: Z-Score Average Weight vs history Z-Score Funds Invested % vs history Z-Score Funds O/W % vs history

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 Energy stocks only.



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

Z-Score Funds Invested % vs history Z-Score Funds O/W % vs history

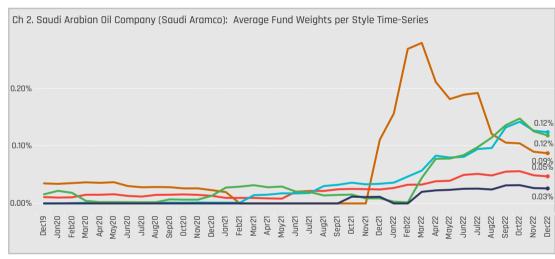
Holdings by Fund Style



Chart 1 The average weights in Saudi Arabian Oil Company (Saudi Aramco) stock and the average weights vs the iShares MSCI Emeraina Markets ETF, split by fund Style.

Charts 2 & 3 The time series of average fund weights in Saudi Arabian Oil Company (Saudi Aramco) stock and average weights vs iShares MSCI Emerging Markets ETF, split by fund Style.





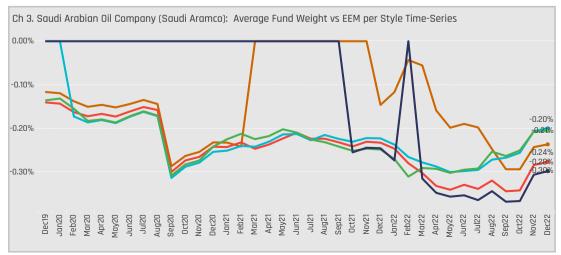
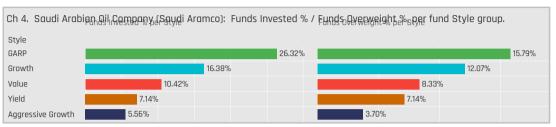
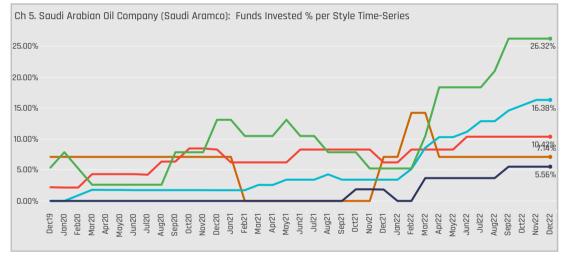
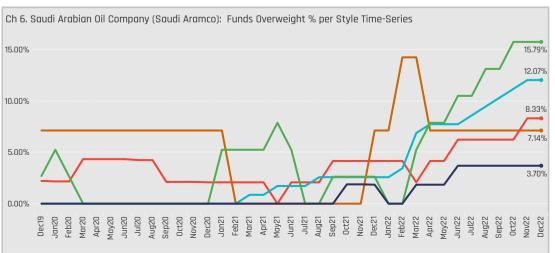


Chart 4 The percentage of funds invested in Saudi Arabian Oil Company (Saudi Aramco) stocks and the percentage of funds overweight, split by fund Style.

Chart 5 & 6 The time series of the percentage of funds invested in Saudi Arabian Oil Company (Saudi Aramco) stocks and the percentage of funds overweight, split by fund Style.







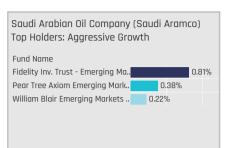
Holdings by Fund Style



Top Row: For each Style category, each chart shows the largest holders in Saudi Arabian Oil Company (Saudi Aramco)

Middle Row: For each Style category, each chart shows the most widely held stocks and the corresponding average fund weights, with Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.

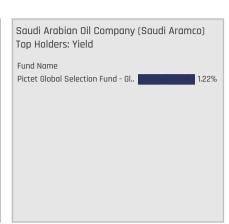
Bottom Row: For each Style category, each chart shows the largest stock overweights and underweights, with Saudi Arabian Oil Company (Saudi Aramco) highlighted in red.











Saudi Arabian Oil Company (Saudi Aramco) Most Widely Held Stocks: Aggressive Growth

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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%
Saudi Arabian Oil Company (Sau	0.03%	5.56%

Saudi Arabian Oil Company (Saudi Aramco) 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%
Saudi Arabian Oil Company (Sau	0.12%	16.38%

Saudi Arabian Oil Company (Saudi Aramco) 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%
Saudi Arabian Oil Company (Sau	0.12%	26.32%

Saudi Arabian Oil Company (Saudi Aramco) Most Widely Held Stocks: Value

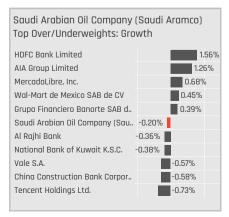
Stock Name	Ave. Wgt	Funds In.
Samsung Electronics Co., Ltd.	2.59%	77.08%
Taiwan Semiconductor Manufact	3.59%	75.00%
Alibaba Group Holding Ltd.	2.19%	75.00%
China Construction Bank Corpor	1.12%	58.33%
Hon Hai Precision Industry Co., Lt	0.88%	54.17%
KB Financial Group Inc.	0.65%	52.08%
Ping An Insurance (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%
Saudi Arabian Oil Company (Sau	0.05%	10.42%

Saudi Arabian Oil Company (Saudi Aramco) Most Widely Held Stocks: Yield

Stock Name	Ave. Wgt	Funds In.
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%
Saudi Arabian Oil Company (Sau	0.09%	7.14%

Saudi Arabian Oil Company (Saudi Aramco) Top Over/Underweights: Aggressive Growth





Saudi Arabian Oil Company (Saudi Aramco) Top Over/Underweights: GARP

' '		
Grupo Financiero Banorte SAB d		0.77%
State Bank of India		0.55%
HDFC Bank Limited		0.50%
PT Bank Mandiri (Persero) Tbk		0.42%
Hana Financial Group Inc.		0.41%
Saudi Arabian Oil Company (Sau	-0.21%	
Housing Development Finance C	-0.58%	
Meituan Class B	-0.59%	
Reliance Industries Limited	-0.64%	
Taiwan Semiconductor Manufact	-0.81%	
Tencent Holdings Ltd.	-1.39%	

Saudi Arabian Oil Company (Saudi Aramco)

rop over/underweights: valu	ie ar	
Hana Financial Group Inc.		0.55%
Ping An Insurance (Group) Comp		0.52%
Naspers Limited Class N		0.49%
Banco do Brasil S.A.		0.43%
KB Financial Group Inc.		0.42%
Saudi Arabian Oil Company (Sau	-0.28%	
Samsung Electronics Co., Ltd.	-0.74%	
Reliance Industries Limited	-1.17%	
Meituan Class B	-1.41%	
Taiwan Semiconductor Manufact	-2.08%	
Tencent Holdings Ltd.	-3.04%	

Saudi Arabian Oil Company (Saudi Aramco) Top Over/Underweights: Yield



Aggregate Gap Analysis



Chart 1 The blue line shows the total number of funds (out of 270) who have ever owned Saudi Arabian Oil Company (Saudi Aramco) 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.

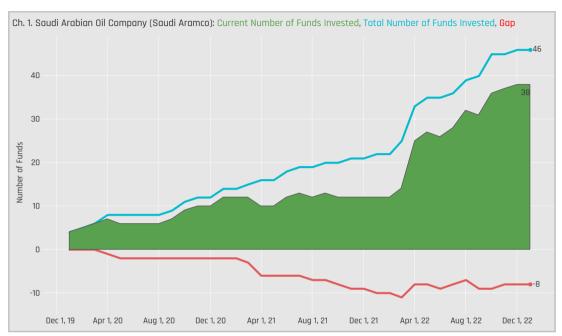


Chart 2 The orange lines show the current AUM in Saudi Arabian Oil Company (Saudi Aramco) for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.

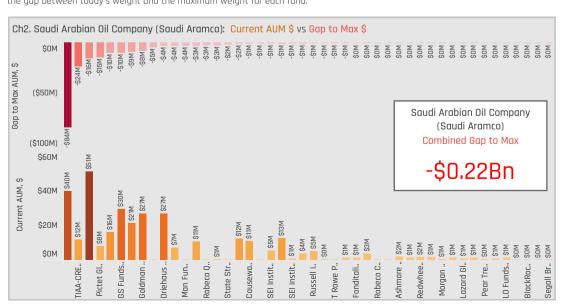
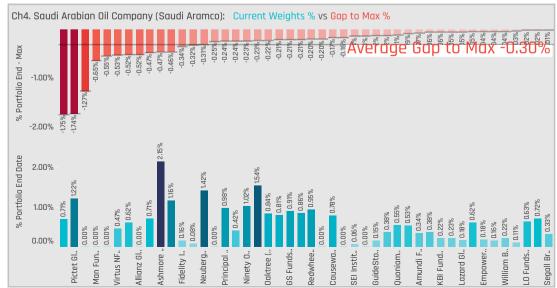


Chart 3 The Z-Score of current weights versus history for all current and previous holders of Saudi Arabian Oil Company (Saudi Aramco). A value of 100% means today's weight is the highest on record for that fund, zero the lowest.



Chart 4 Blue lines show the current weight in Saudi Arabian Oil Company (Saudi Aramco) for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.



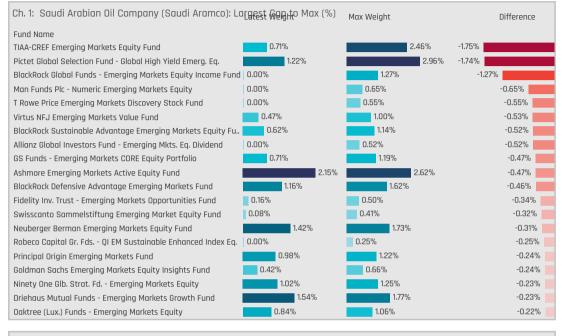
Fund Level Gap Analysis

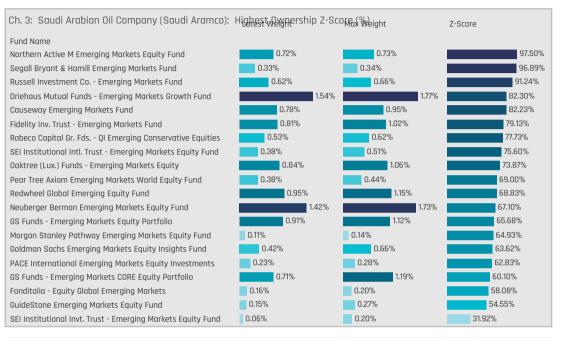


Chart 1 Current fund weight, maximum fund weight and difference for Saudi Arabian Oil Company (Saudi Aramco) stocks. **Chart 2** Current fund AUM, maximum fund AUM and \$ difference for Saudi Arabian Oil Company (Saudi Aramco) stocks

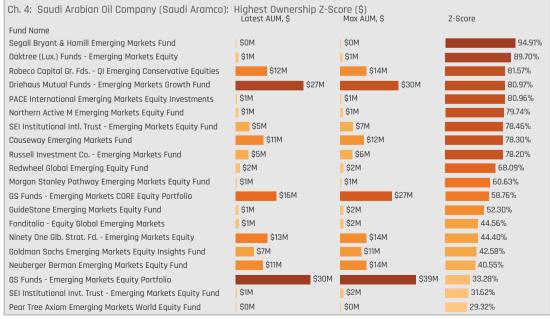
Chart 3 Current fund weight, maximum fund weight and Z-Score for Saudi Arabian Oil Company (Saudi Aramco) stocks, ranked by Z-Score

Chart 4 Current fund AUM, maximum AUM and Z-Score for Saudi Arabian Oil Company (Saudi Aramco) stocks, ranked by Z-Score.









Flow Potential



Chart 1 Current fund weight, maximum fund weight and the difference for Saudi Arabian Oil Company (Saudi Aramco) stocks. Filtered for funds that have bought in to Saudi Arabian Oil Company (Saudi Aramco) between 6/30/2022 - 12/31/2022

Chart 2 Current fund AUM, maximum fund AUM and the USD difference for Saudi Arabian Oil Company (Saudi Aramco) stocks. Filtered for funds that have bought in to Saudi Arabian Oil Company (Saudi Aramco) between 6/30/2022 - 12/31/2022

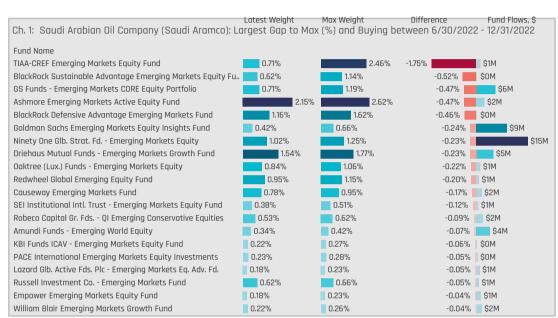
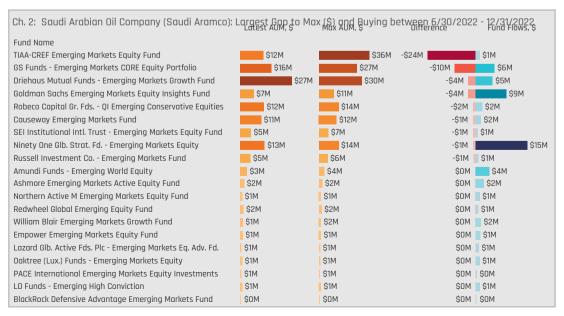
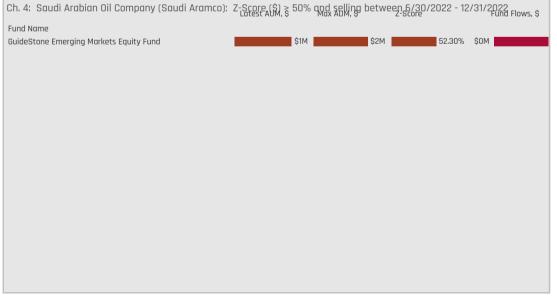


Chart 3 Current fund weight, maximum fund weight and Z-Score for Saudi Arabian Oil Company (Saudi Aramco) stocks, ranked by Z-Score. Filtered for funds that have sold Saudi Arabian Oil Company (Saudi Aramco) between 6/30/2022 - 12/31/2022 and have a % Z-Score of above 50%.

Chart 4 Current fund AUM, maximum AUM and Z-Score for Saudi Arabian Oil Company (Saudi Aramco) stocks, ranked by Z-Score. Filtered for funds that have sold Saudi Arabian Oil Company (Saudi Aramco) between 6/30/2022 - 12/31/2022 and have a \$ Z-Score of above 50%.









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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