

An aerial night view of a city skyline, featuring the CN Tower and various illuminated buildings. The scene is bathed in a blue and green light, with the city lights creating a vibrant contrast against the dark sky. The CN Tower is a prominent feature on the left side of the image, with its distinctive spire and observation deck. The city extends to the horizon, with numerous skyscrapers and residential buildings, all of which are lit up, creating a dense and colorful urban landscape. The overall atmosphere is one of a bustling, modern city at night.

Woolworths Holdings Limited
Active GEM Fund Ownership Report
12/31/2022



Woolworths Holdings Limited Active GEM Fund Ownership Report 12/31/2022

In this data report, we analyse Woolworths Holdings Limited 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 Woolworths Holdings Limited

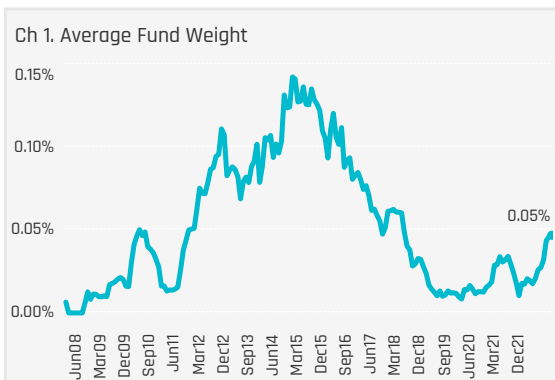


Chart 2 The time series of average fund weight minus the benchmark EEM weight for Woolworths Holdings Limited

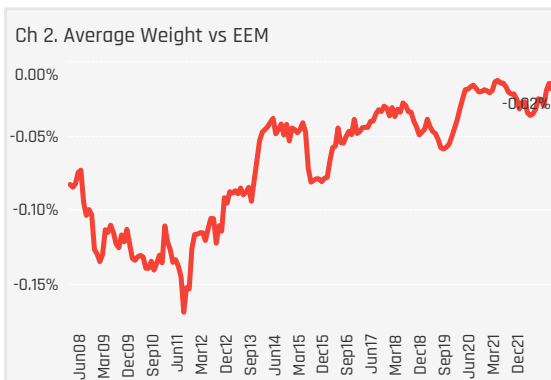


Chart 3 The time series of funds invested % for Woolworths Holdings Limited

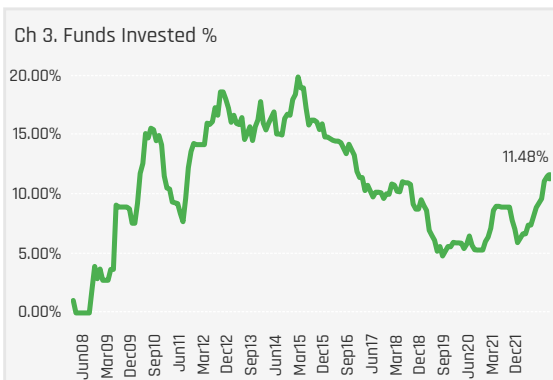


Chart 4 The time series of Funds Overweight the EEM % for Woolworths Holdings Limited

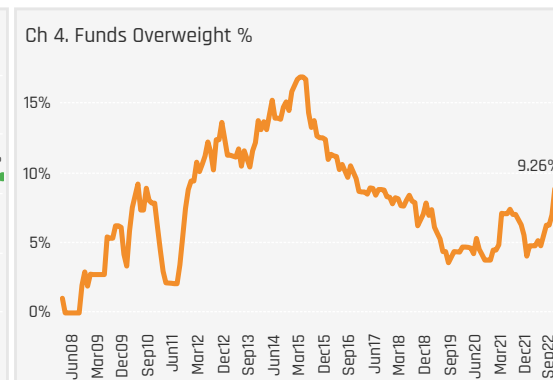


Chart 5 Aggregated fund ownership data among active GEM funds, ranked by the most widely held stocks. Filtered for South Africa stocks only, Woolworths Holdings Limited highlighted in red.

Ch 5. South Africa Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.					
Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
NPN-ZA	Naspers Limited Class N	29.26%	0.44%	-0.13%	\$1,444.79M
FSR-ZA	FirstRand Limited	24.44%	0.23%	-0.06%	\$1,265.20M
CPI-ZA	Capitec Bank Holdings Limited	22.59%	0.22%	0.07%	\$1,143.59M
CLS-ZA	Clicks Group Limited	21.85%	0.21%	0.14%	\$503.77M
ABG-ZA	Absa Group Limited	21.85%	0.18%	0.03%	\$223.67M
IMP-ZA	Impala Platinum Holdings Limited	18.89%	0.09%	-0.08%	\$412.19M
AMS-ZA	Anglo American Platinum Limited	16.30%	0.08%	0.01%	\$160.18M
MTN-ZA	MTN Group Limited	15.93%	0.10%	-0.10%	\$406.64M
GFI-ZA	Gold Fields Limited	15.56%	0.10%	-0.05%	\$311.82M
SSW-ZA	Sibanye Stillwater Limited	14.44%	0.07%	-0.04%	\$138.62M
NED-ZA	Nedbank Group Limited	14.44%	0.07%	-0.02%	\$155.61M
SBK-ZA	Standard Bank Group Limited	14.07%	0.08%	-0.12%	\$269.90M
BID-ZA	Bid Corporation Limited	14.07%	0.12%	0.02%	\$301.90M
VOD-ZA	Vodacom Group Limited	13.33%	0.08%	0.01%	\$106.37M
MRP-ZA	Mr Price Group Limited	13.33%	0.05%	0.01%	\$104.90M
SLM-ZA	Sanlam Limited	12.96%	0.10%	0.02%	\$299.99M
BVT-ZA	Bidvest Group Limited	12.59%	0.08%	0.02%	\$128.07M
SHP-ZA	Shoprite Holdings Limited	11.85%	0.08%	-0.02%	\$286.71M
WHL-ZA	Woolworths Holdings Limited	11.48%	0.05%	-0.02%	\$77.43M
KIO-ZA	Kumba Iron Ore Limited	11.48%	0.04%	0.01%	\$85.51M
OMU-ZA	Old Mutual Ltd.	10.74%	0.03%	-0.02%	\$60.59M
SOL-ZA	Sasol Limited	10.37%	0.05%	-0.09%	\$116.78M
MCG-ZA	Multichoice Group Ltd	8.52%	0.03%	-0.01%	\$43.25M
MNDI-GB	Mondi plc	8.15%	0.10%	0.10%	\$151.18M
APN-ZA	Aspen Pharmacare Holdings Limited	7.78%	0.02%	-0.03%	\$39.58M

Chart 6 Aggregated fund ownership data among active GEM funds, ranked by most widely held stocks. Filtered for Consumer Discretionary stocks only, Woolworths Holdings Limited highlighted in red.

Ch 6. Consumer Discretionary Stocks. Aggregate Holdings Data, Ranked by Most Widely Held.					
Ticker	Stock Name	Funds Invested %	Average Weight	Vs Benchmark	Fund AUM, \$
9988-HK	Alibaba Group Holding Ltd.	74.81%	2.21%	-0.38%	\$6,682.65M
JD-US	JD.com, Inc. Sponsored ADR Class A	62.22%	1.07%	0.11%	\$3,550.66M
WALMEX-MX	Wal-Mart de Mexico SAB de CV	42.59%	0.53%	0.34%	\$2,517.11M
MELI-US	MercadoLibre, Inc.	40.37%	0.69%	0.69%	\$2,100.66M
YUMC-US	Yum China Holdings, Inc.	28.89%	0.55%	0.18%	\$3,307.54M
000270-KR	Kia Corp.	27.78%	0.22%	0.03%	\$693.24M
2331-HK	Li Ning Company Limited	27.04%	0.33%	0.01%	\$1,507.85M
000333-CN	Midea Group Co. Ltd. Class A	26.30%	0.32%	0.32%	\$1,148.91M
PDD-US	Pinduoduo, Inc. Sponsored ADR Class A	25.93%	0.32%	-0.33%	\$1,452.49M
1211-HK	BYD Company Limited Class H	23.70%	0.20%	-0.12%	\$441.76M
TCOM-US	Trip.com Group Ltd. Sponsored ADR	20.37%	0.26%	-0.04%	\$835.10M
2313-HK	Shenzhou International Group Holdings Limi..	20.37%	0.18%	0.04%	\$628.95M
500520-IN	Mahindra & Mahindra Ltd.	20.00%	0.27%	0.06%	\$540.76M
LREN3-BR	Lojas Renner S.A.	18.89%	0.11%	0.05%	\$589.68M
6690-HK	Haier Smart Home Co., Ltd. Class H	18.15%	0.17%	0.05%	\$564.22M
SE-US	Sea Ltd. (Singapore) Sponsored ADR Class A	17.78%	0.13%	0.13%	\$945.06M
VIPS-US	Vipshop Holdings Ltd Sponsored ADR	17.41%	0.13%	0.04%	\$412.38M
2020-HK	ANTA Sports Products Ltd.	16.67%	0.17%	-0.08%	\$402.15M
1585-HK	Yadea Group Holdings Ltd.	16.67%	0.09%	0.05%	\$89.32M
505200-IN	Eicher Motors Limited	16.30%	0.13%	0.04%	\$329.37M
012330-KR	Hyundai Mobis Co., Ltd	15.93%	0.12%	-0.03%	\$260.85M
881-HK	Zhongsheng Group Holdings Ltd.	14.81%	0.11%	0.06%	\$522.05M
005380-KR	Hyundai Motor Company	14.81%	0.11%	-0.15%	\$336.23M
532500-IN	Maruti Suzuki India Limited	14.44%	0.12%	-0.07%	\$429.03M
WHL-ZA	Woolworths Holdings Limited	11.48%	0.05%	-0.02%	\$77.43M

Chart 1 The distribution of Woolworths Holdings Limited weights among the 270 active GEM funds in our analysis, broken down by fund Style.

Chart 2 The largest Woolworths Holdings Limited holders in our analysis, on a portfolio weight basis.

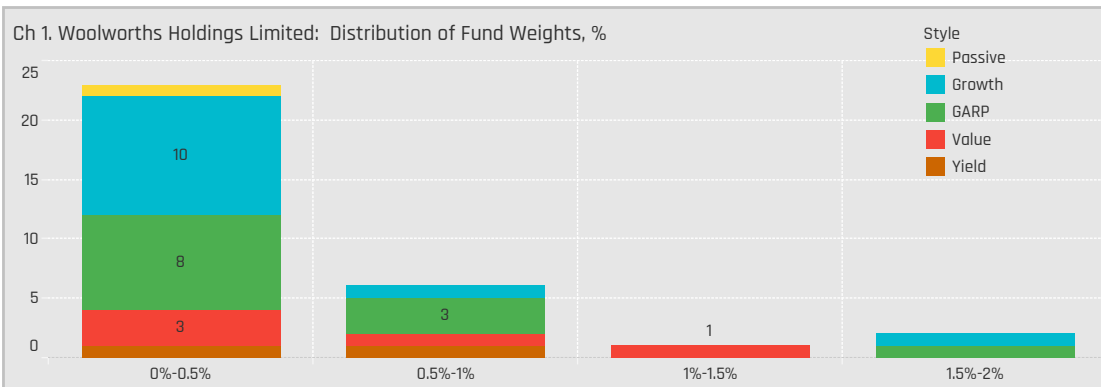
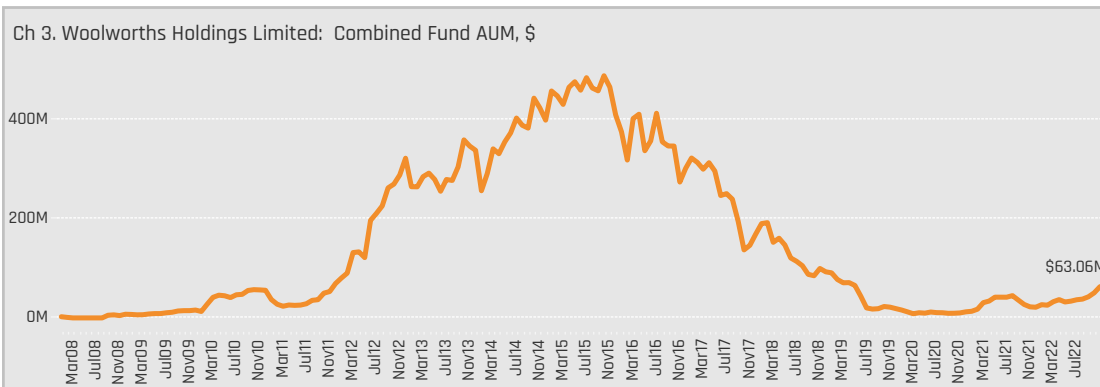


Chart 3 The time-series of combined fund AUM in Woolworths Holdings Limited stocks out of the \$333.04Bn in total active AUM in our analysis.

Chart 4 The largest Woolworths Holdings Limited holders in our analysis, on an \$ AUM basis.



Ch 2. Woolworths Holdings Limited: Top Fund Holdings, %

Fund Name	Style	Weight (%)
Virtus Emerging Markets Opportunities Fund	GARP	1.85%
White Fleet - DLZ Equity Emerging Market Optimized ESG	Growth	1.72%
Celsius Invst. Fd. SICAV - Sustainable Em. Markets	Value	1.07%
Morgan Stanley Instl. Fund - Emerging Markets Portfolio	Growth	0.84%
Pictet Global Selection Fund - Global Growing Market	GARP	0.58%
NN(L) SICAV - Emerging Markets High Dividend Fund	Yield	0.58%
Swisscanto Sammelstiftung Emerging Market Equity Fund	GARP	0.55%
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	Value	0.55%
Victory Sophus Emerging Markets Fund	GARP	0.52%
WisdomTree Tr. - Emerging Markets Dividend Fund	Yield	0.46%
KBC Equity Fund - SRI Emerging Markets	Growth	0.44%
Fidelity SAI Emerging Markets Value Index Fund	Value	0.33%
Northern Trust Invst. Fds. Plc - EM Multifactor ESG Fund	GARP	0.33%
SPP Emerging Markets Plus	Growth	0.32%
VALIC Company I - Emerging Economies Fund	GARP	0.31%
Amundi Funds - Emerging World Equity	Growth	0.30%
Nordea 2 - Emerging Markets Enhanced Equity Fund	Growth	0.27%
State Street Sustainable Climate Emerging Markets Enhanced Eq.	GARP	0.26%
Robeco QI Inst. Emerging Markets Enhanced Index Eq. Fd.	GARP	0.26%
Wellington Mgmt. Funds (IE) Plc - Emerging Mkts. Local Eq.	Growth	0.21%
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	Value	0.21%
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.	GARP	0.19%
Man Funds Plc - Numeric Emerging Markets Equity	GARP	0.11%
Russell Investment Co. - Emerging Markets Fund	GARP	0.08%
SPP Emerging Markets SRI	Growth	0.08%
iShares MSCI Emerging Markets ETF	Passive	0.06%
BlackRock Sustainable Advantage Emerging Markets Equity Fund	Growth	0.06%
Fonditalia - Equity Global Emerging Markets	Value	0.06%
SEI Institutional Intl. Trust - Emerging Markets Equity Fund	GARP	0.06%
Morgan Stanley Pathway Emerging Markets Equity Fund	Growth	0.02%
NN (L) - Emerging Markets Enhanced Index Sustainable Equity	Growth	0.02%
Hirtle Callaghan Emerging Markets Portfolio	Growth	0.01%

Ch 4. Woolworths Holdings Limited: Top Fund Holdings, \$

Fund Name	Style	AUM (\$)
iShares MSCI Emerging Markets ETF	Passive	\$14.38M
Celsius Invst. Fd. SICAV - Sustainable Em. Markets	Value	\$11.45M
Fidelity SAI Emerging Markets Value Index Fund	Value	\$9.17M
KBC Equity Fund - SRI Emerging Markets	Growth	\$4.72M
Morgan Stanley Instl. Fund - Emerging Markets Portfolio	Growth	\$4.18M
Swisscanto Sammelstiftung Emerging Market Equity Fund	GARP	\$3.80M
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	Value	\$3.80M
SPP Emerging Markets Plus	Growth	\$3.64M
Amundi Funds - Emerging World Equity	Growth	\$3.04M
Robeco QI Inst. Emerging Markets Enhanced Index Eq. Fd.	GARP	\$2.51M
Victory Sophus Emerging Markets Fund	GARP	\$2.22M
Virtus Emerging Markets Opportunities Fund	GARP	\$2.17M
VALIC Company I - Emerging Economies Fund	GARP	\$1.73M
State Street Sustainable Climate Emerging Markets Enhanced Eq.	GARP	\$1.60M
Nordea 2 - Emerging Markets Enhanced Equity Fund	Growth	\$1.51M
Wellington Mgmt. Funds (IE) Plc - Emerging Mkts. Local Eq.	Growth	\$1.24M
NN(L) SICAV - Emerging Markets High Dividend Fund	Yield	\$0.94M
White Fleet - DLZ Equity Emerging Market Optimized ESG	Growth	\$0.81M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund	GARP	\$0.79M
SPP Emerging Markets SRI	Growth	\$0.68M
Russell Investment Co. - Emerging Markets Fund	GARP	\$0.64M
Man Funds Plc - Numeric Emerging Markets Equity	GARP	\$0.49M
Fonditalia - Equity Global Emerging Markets	Value	\$0.48M
Northern Trust Invst. Fds. Plc - EM Multifactor ESG Fund	GARP	\$0.38M
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.	GARP	\$0.37M
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	Value	\$0.20M
WisdomTree Tr. - Emerging Markets Dividend Fund	Yield	\$0.11M
Morgan Stanley Pathway Emerging Markets Equity Fund	Growth	\$0.10M
NN (L) - Emerging Markets Enhanced Index Sustainable Equity	Growth	\$0.10M
Pictet Global Selection Fund - Global Growing Market	GARP	\$0.10M
Hirtle Callaghan Emerging Markets Portfolio	Growth	\$0.09M
BlackRock Sustainable Advantage Emerging Markets Equity Fund	Growth	\$0.01M

Chart 1 The largest changes in average Stock weight between 6/30/2022 and 12/31/2022. Woolworths Holdings Limited highlighted in red.

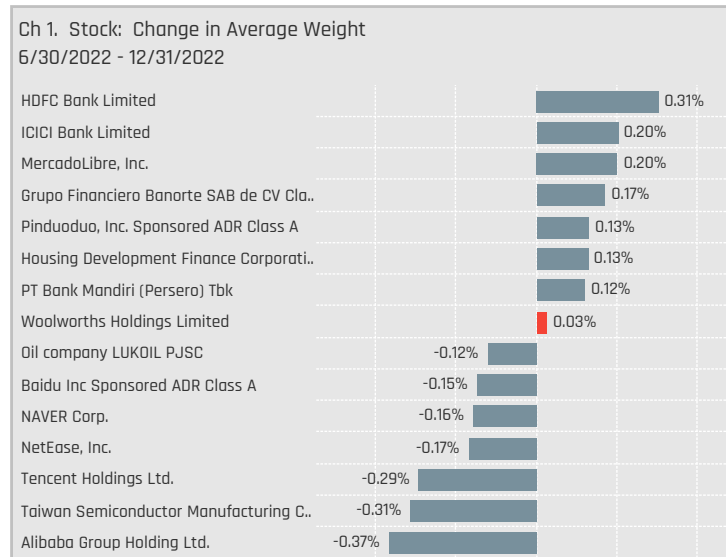


Chart 2 Measures the largest changes in the average Stock weight vs EEM between 6/30/2022 and 12/31/2022. An increasing figure would indicate an increasing overweight or decreasing underweight. Woolworths Holdings Limited highlighted in red.

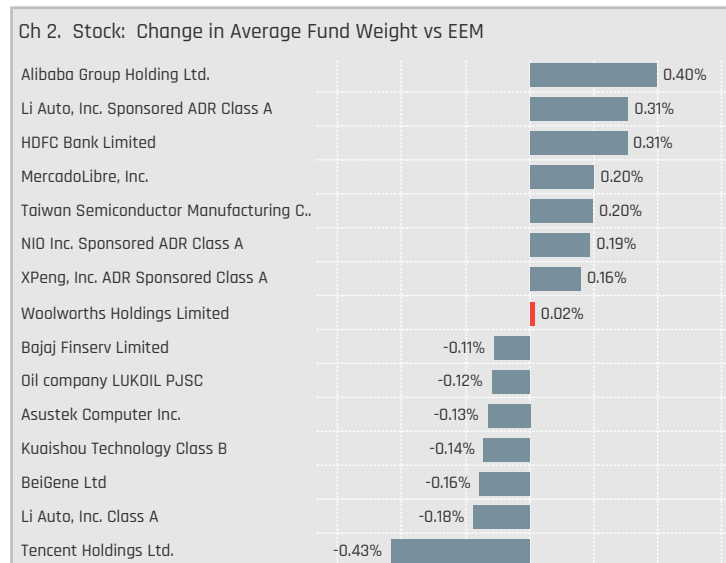


Chart 3 Measures the largest changes in the percentage of funds invested in each Stock between 6/30/2022 and 12/31/2022. Woolworths Holdings Limited highlighted in red.

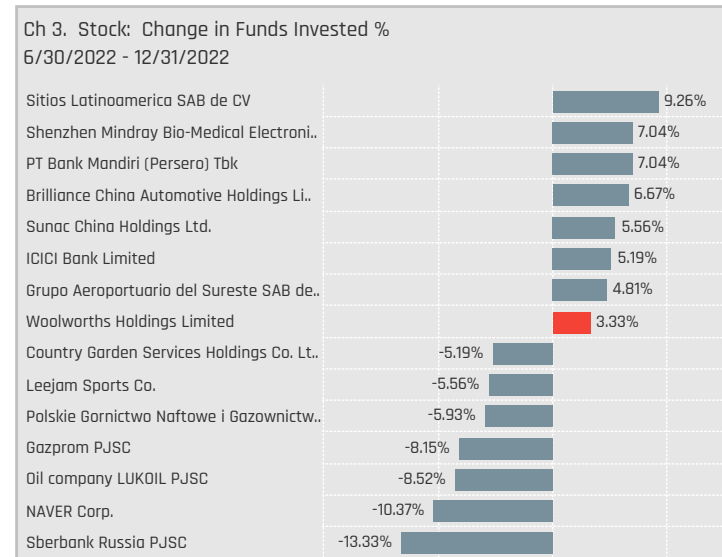


Chart 4 Measures the largest changes in the percentage of funds overweight each Stock compared to the iShares MSCI Emerging Markets ETF between 6/30/2022 and 12/31/2022. Woolworths Holdings Limited highlighted in red.

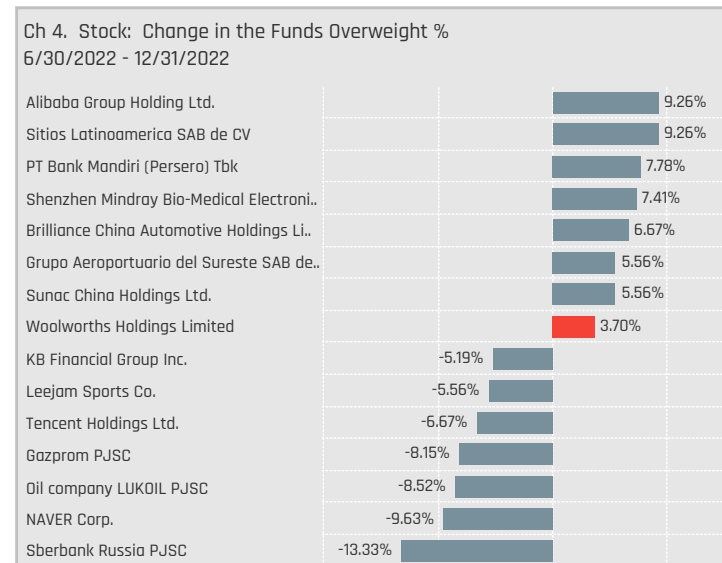


Chart 5 Shows the cumulative fund flows for Woolworths Holdings Limited stocks among the 270 active GEM funds in our analysis. Monthly fund flows are estimated by multiplying the monthly change in stock position by the stock price for every position in every fund in our analysis.

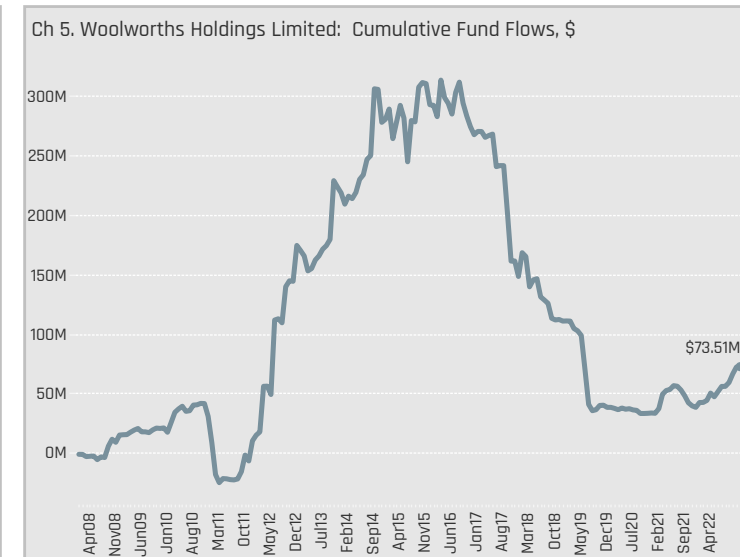


Chart 6 Measures the largest estimated fund flows for each Stock between 6/30/2022 and 12/31/2022. Woolworths Holdings Limited highlighted in red.

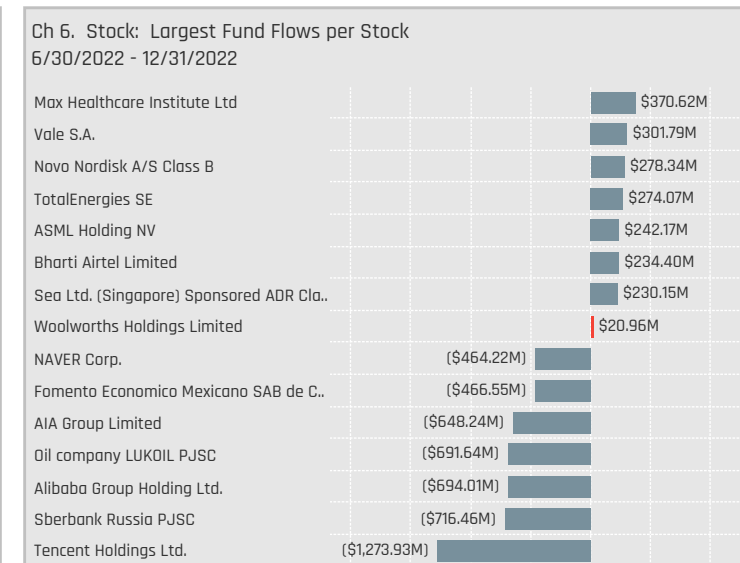


Chart 1 The largest fund weight increases between 6/30/2022 - 12/31/2022.

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.

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 1. Woolworths Holdings Limited: Largest Increases in Position, %

Fund Name	New or Close..	Latest Weight	Weight Change
Virtus Emerging Markets Opportunities Fund	New	1.85%	1.85%
Morgan Stanley Instl. Fund - Emerging Markets Portfolio	New	0.84%	0.84%
White Fleet - DLZ Equity Emerging Market Optimized ESG		1.72%	0.69%
Pictet Global Selection Fund - Global Growing Market	New	0.58%	0.58%
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	New	0.55%	0.55%
Celsius Invt. Fd. SICAV - Sustainable Em. Markets		1.07%	0.53%
VALIC Company I - Emerging Economies Fund	New	0.31%	0.31%
Amundi Funds - Emerging World Equity	New	0.30%	0.30%
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	New	0.21%	0.21%
Robeco QI Inst. Emerging Markets Enhanced Index Eq. Fd.		0.26%	0.20%
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.		0.19%	0.14%
Fidelity SAI Emerging Markets Value Index Fund		0.33%	0.13%
Man Funds Plc - Numeric Emerging Markets Equity	New	0.11%	0.11%
NN(L) SICAV - Emerging Markets High Dividend Fund		0.58%	0.11%
Swisscanto Sammelstiftung Emerging Market Equity Fund		0.55%	0.10%
KBC Equity Fund - SRI Emerging Markets		0.44%	0.07%
Northern Trust Invt. Fds. Plc - EM Multifactor ESG Fund		0.33%	0.06%
BlackRock Sustainable Advantage Emerging Markets Equity Fund	New	0.06%	0.06%
State Street Sustainable Climate Emerging Markets Enhanced Eq.		0.26%	0.06%
Nordea 2 - Emerging Markets Enhanced Equity Fund		0.27%	0.04%

Ch 3. Woolworths Holdings Limited: Largest Fund Inflows, \$

Fund Name	New or Close..	Latest AUM, \$	Fund Flows, \$
Celsius Invt. Fd. SICAV - Sustainable Em. Markets		\$11.45M	\$4.95M
Morgan Stanley Instl. Fund - Emerging Markets Portfolio	New	\$4.18M	\$3.57M
Robeco Capital Gr. Fds. - QI Emerging Markets Active Equities	New	\$3.80M	\$3.34M
Fidelity SAI Emerging Markets Value Index Fund		\$9.17M	\$2.67M
Amundi Funds - Emerging World Equity	New	\$3.04M	\$2.65M
Virtus Emerging Markets Opportunities Fund	New	\$2.17M	\$1.91M
VALIC Company I - Emerging Economies Fund	New	\$1.73M	\$1.72M
Robeco QI Inst. Emerging Markets Enhanced Index Eq. Fd.		\$2.51M	\$1.54M
Man Funds Plc - Numeric Emerging Markets Equity	New	\$0.49M	\$0.43M
Robeco Capital Gr. Fds. - QI EM Sustainable Enhanced Index Eq.		\$0.37M	\$0.24M
Russell Investment Co. - Emerging Markets Fund		\$0.64M	\$0.20M
Robeco Capital Gr. Fds. - QI EM Sust. Active Eq.	New	\$0.20M	\$0.17M
White Fleet - DLZ Equity Emerging Market Optimized ESG		\$0.81M	\$0.16M
Pictet Global Selection Fund - Global Growing Market	New	\$0.10M	\$0.08M
iShares MSCI Emerging Markets ETF		\$14.38M	\$0.01M
BlackRock Sustainable Advantage Emerging Markets Equity Fund	New	\$0.01M	\$0.00M
Northern Trust Invt. Fds. Plc - EM Multifactor ESG Fund		\$0.38M	\$0.00M
Wellington Mgmt. Funds (IE) Plc - Emerging Mkts. Local Eq.		\$1.24M	\$0.00M
Swisscanto Sammelstiftung Emerging Market Equity Fund		\$3.80M	\$0.00M
SEI Institutional Intl. Trust - Emerging Markets Equity Fund		\$0.79M	\$0.00M

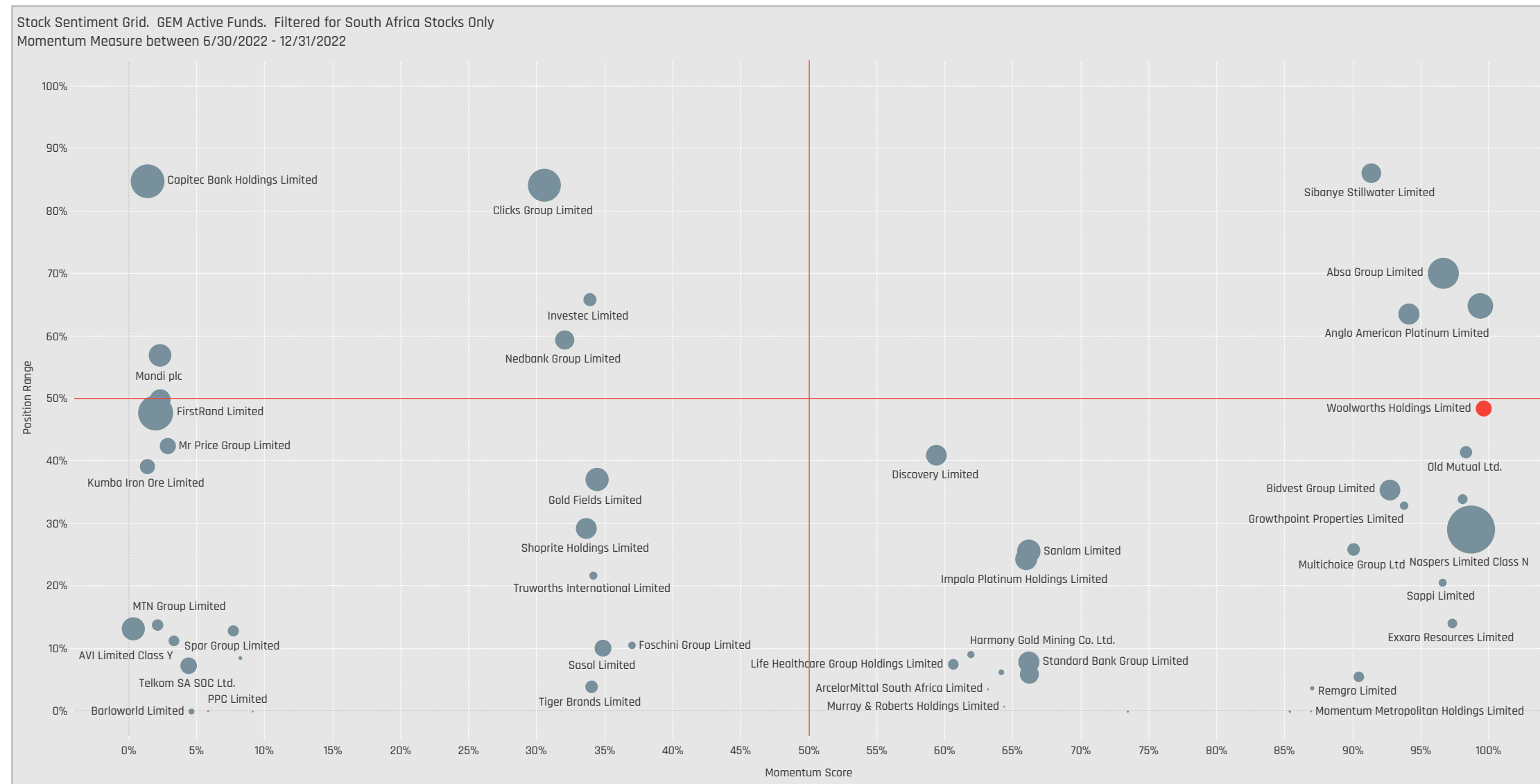
Ch 2. Woolworths Holdings Limited: Largest Decreases in Position, %

Fund Name	New or Close..	Latest Weight	Weight Change
Victory Sophus Emerging Markets Fund		0.52%	-0.02%
SPP Emerging Markets Plus		0.32%	-0.02%

Ch 4. Woolworths Holdings Limited: Largest Fund Outflows, \$

Fund Name	New or Close..	Latest AUM, \$	Fund Flows, \$
State Street Sustainable Climate Emerging Markets Enhanced Eq.		\$1.60M	(\$1.13M)
SPP Emerging Markets Plus		\$3.64M	(\$0.86M)
Victory Sophus Emerging Markets Fund		\$2.22M	(\$0.53M)
SPP Emerging Markets SRI		\$0.68M	(\$0.14M)
WisdomTree Tr. - Emerging Markets Dividend Fund		\$0.11M	(\$0.02M)

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 South Africa 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 Discretionary stocks only.

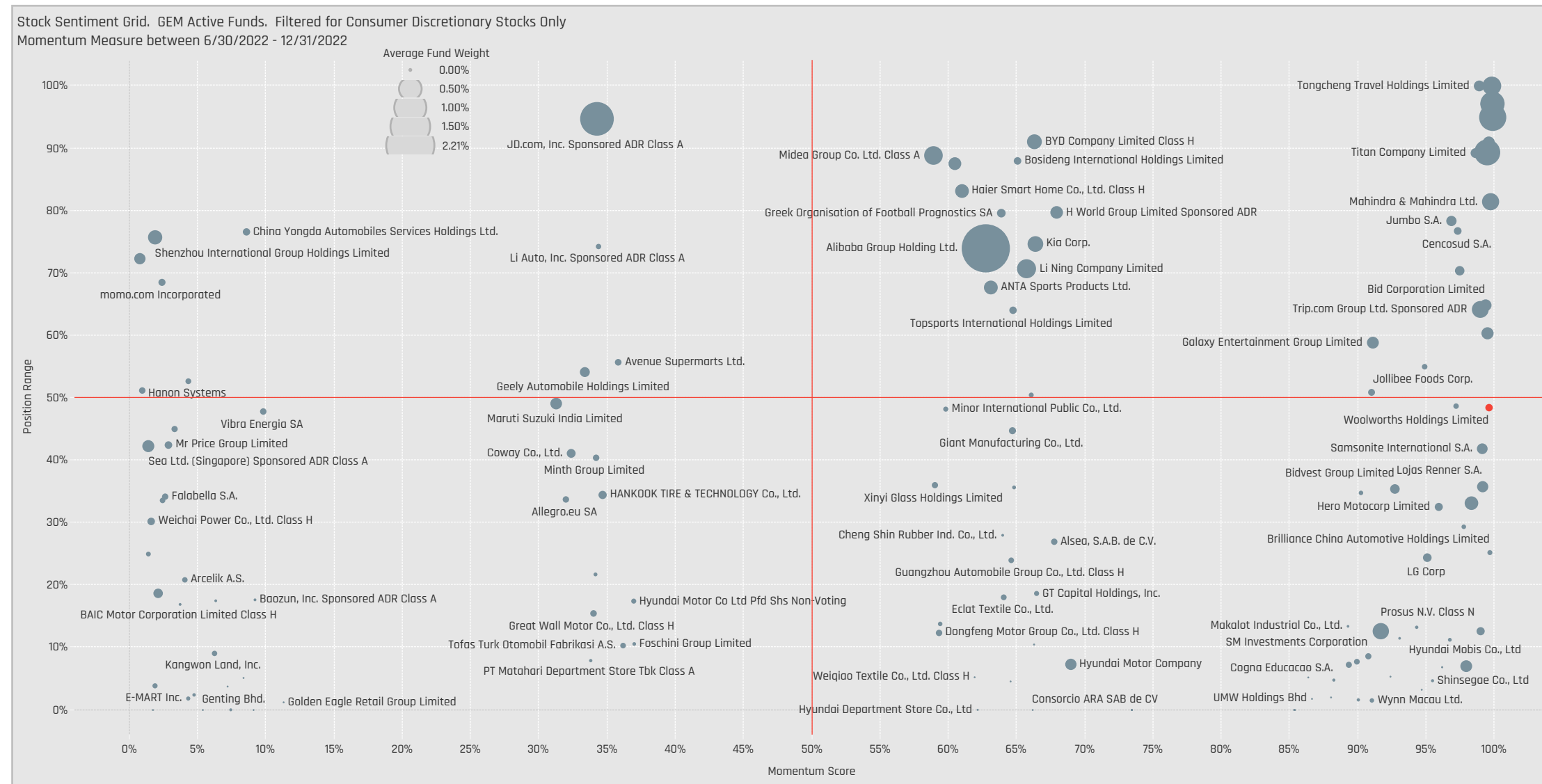


Chart 1 The average weights in Woolworths Holdings Limited stock and the average weights vs the iShares MSCI Emerging Markets ETF, split by fund Style.

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

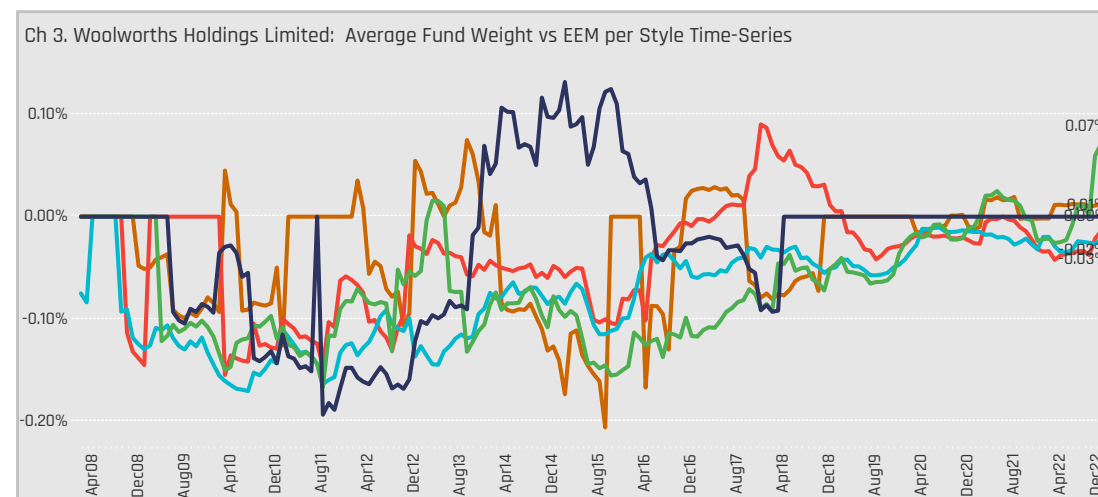
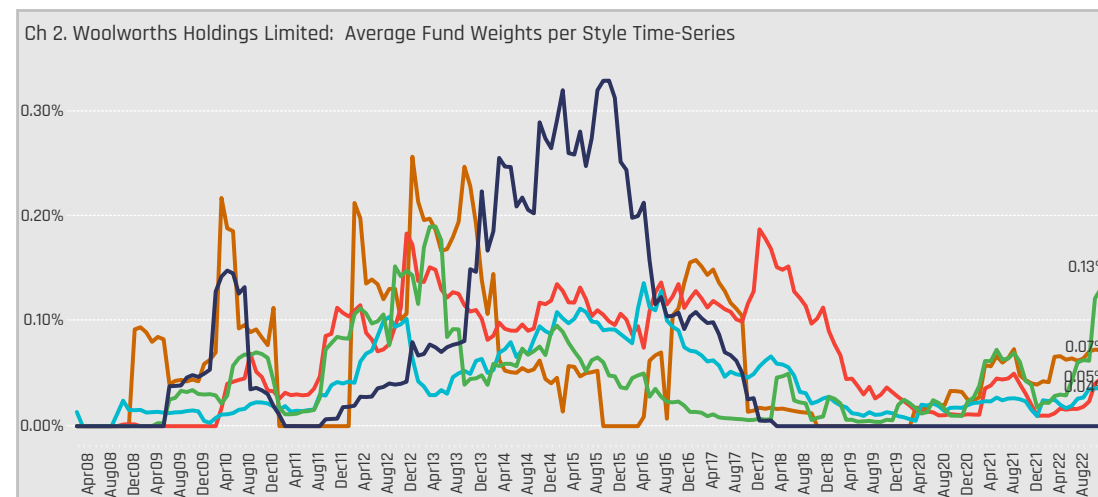
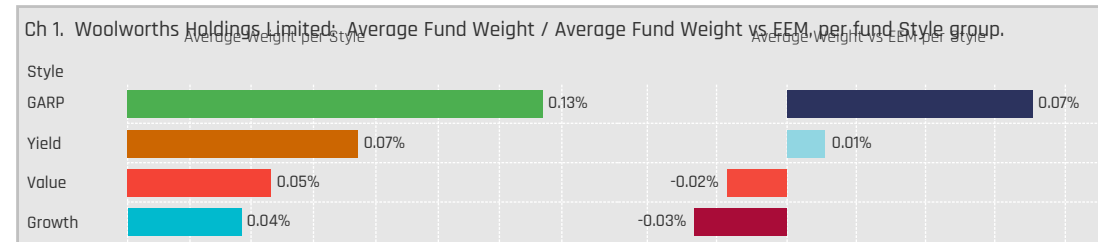
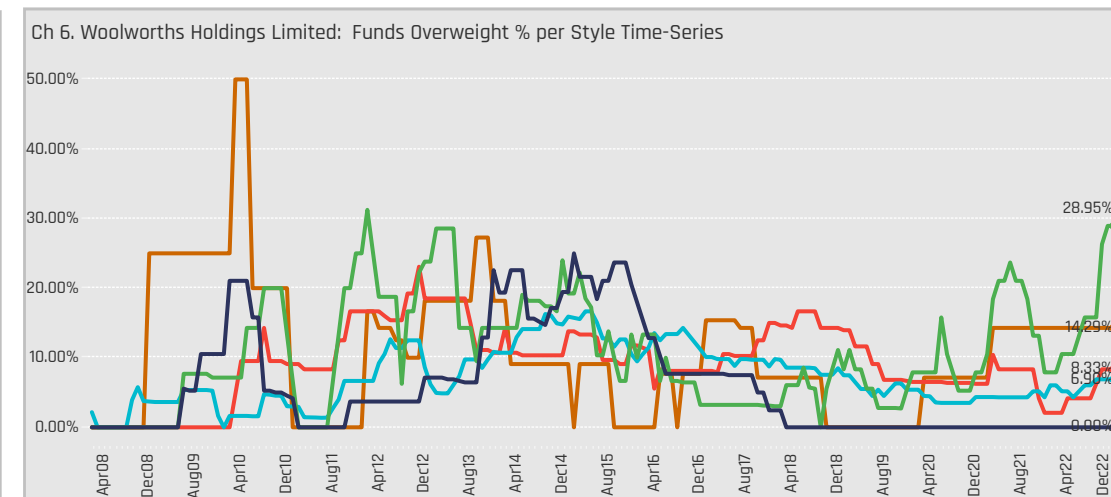
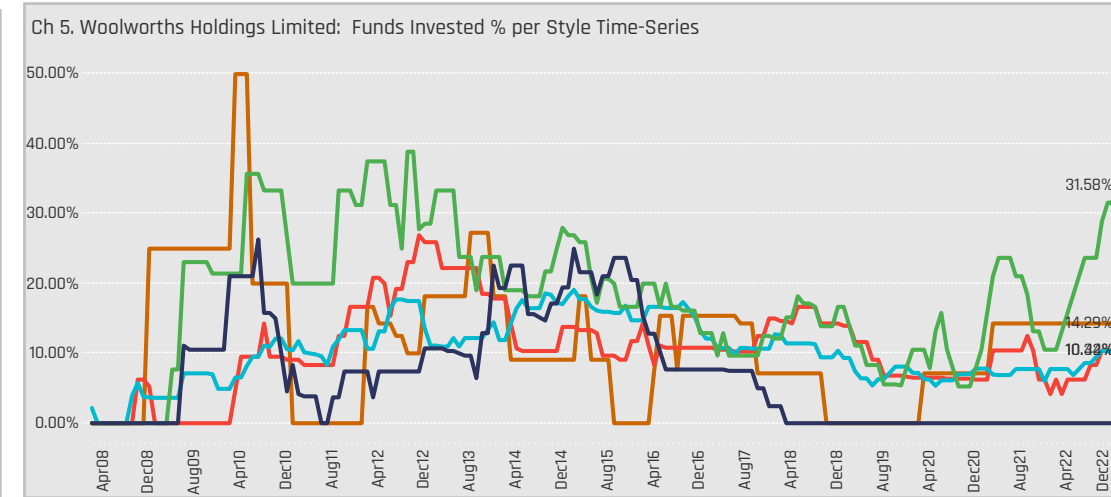
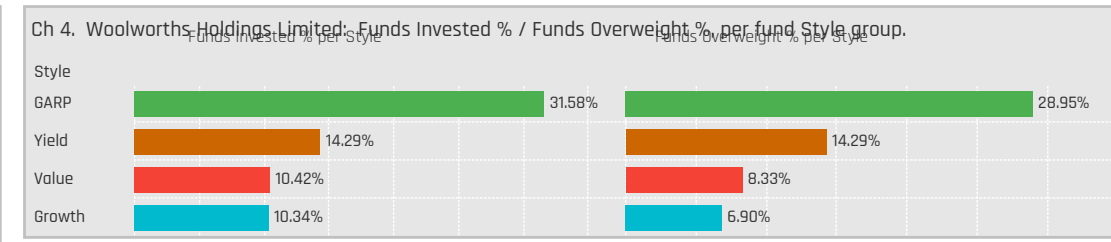


Chart 4 The percentage of funds invested in Woolworths Holdings Limited stocks and the percentage of funds overweight, split by fund Style.

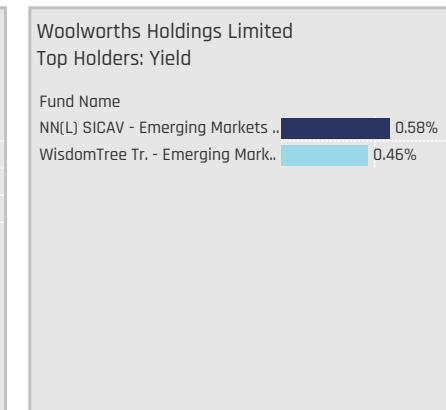
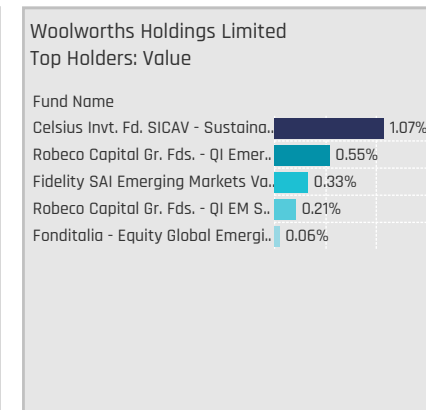
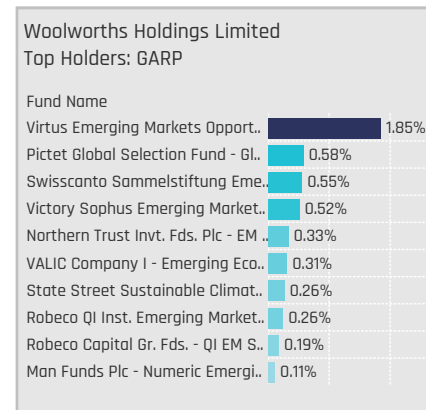
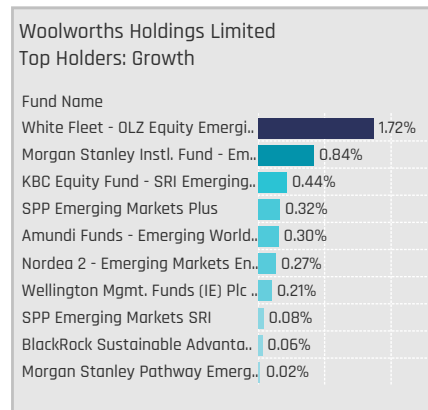
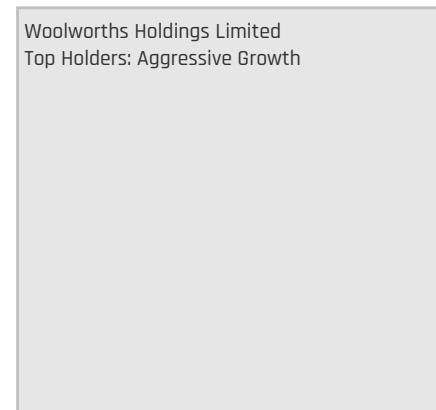
Chart 5 & 6 The time series of the percentage of funds invested in Woolworths Holdings Limited stocks and the percentage of funds overweight, split by fund Style.



Top Row: For each Style category, each chart shows the largest holders in Woolworths Holdings Limited

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

Bottom Row: For each Style category, each chart shows the largest stock overweights and underweights, with Woolworths Holdings Limited highlighted in red.



Woolworths Holdings Limited Most Widely Held Stocks: Aggressive Growth

Stock Name	Ave. Wgt	Funds Inv.
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%

Woolworths Holdings Limited 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%
Woolworths Holdings Limited	0.04%	10.34%

Woolworths Holdings Limited 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%
Woolworths Holdings Limited	0.13%	31.58%

Woolworths Holdings Limited 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%
Woolworths Holdings Limited	0.05%	10.42%

Woolworths Holdings Limited 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%
Woolworths Holdings Limited	0.07%	14.29%

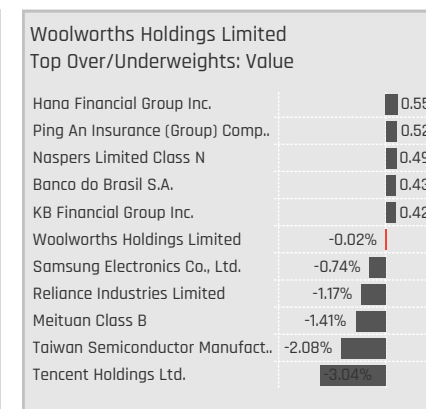
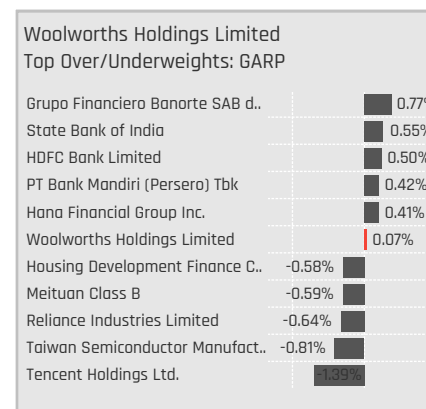
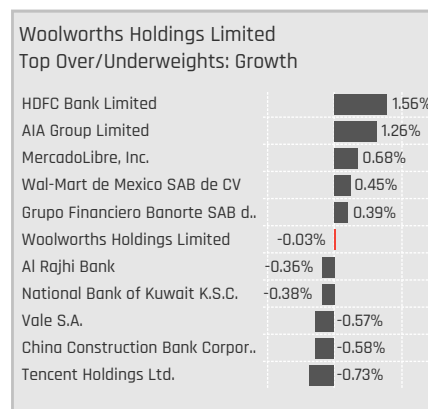
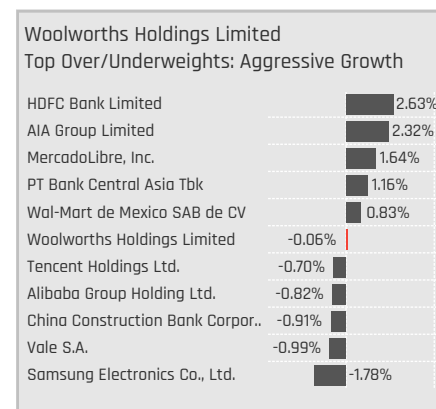


Chart 1 The blue line shows the total number of funds (out of 270) who have ever owned Woolworths Holdings Limited stock. The green area shows the number of funds invested at any one time and the red line the difference. A downward sloping red line means existing investors are closing out positions,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

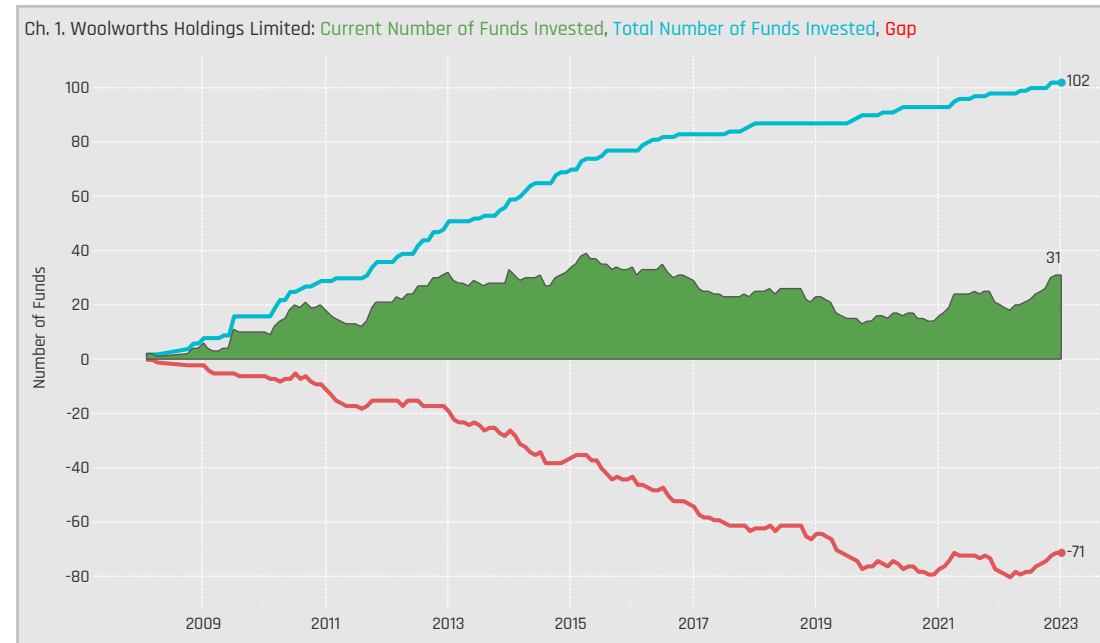


Chart 2 The orange lines show the current AUM in Woolworths Holdings Limited for each fund. The red lines show the gap between today's weight and the maximum weight for each fund.

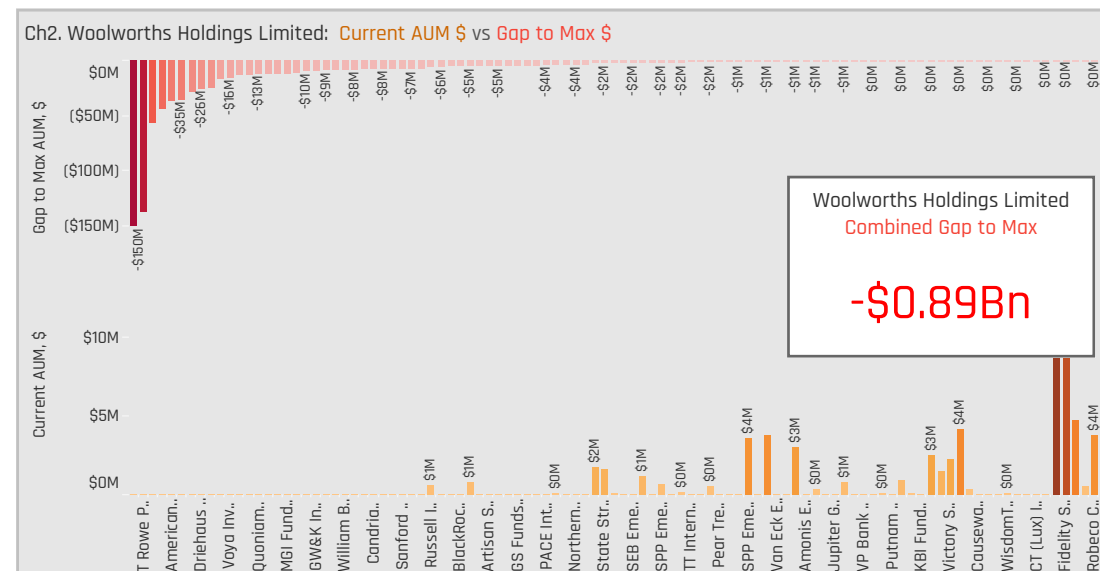


Chart 3 The Z-Score of current weights versus history for all current and previous holders of Woolworths Holdings Limited. A value of 100% means today's weight is the highest on record for that fund, zero the lowest.



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

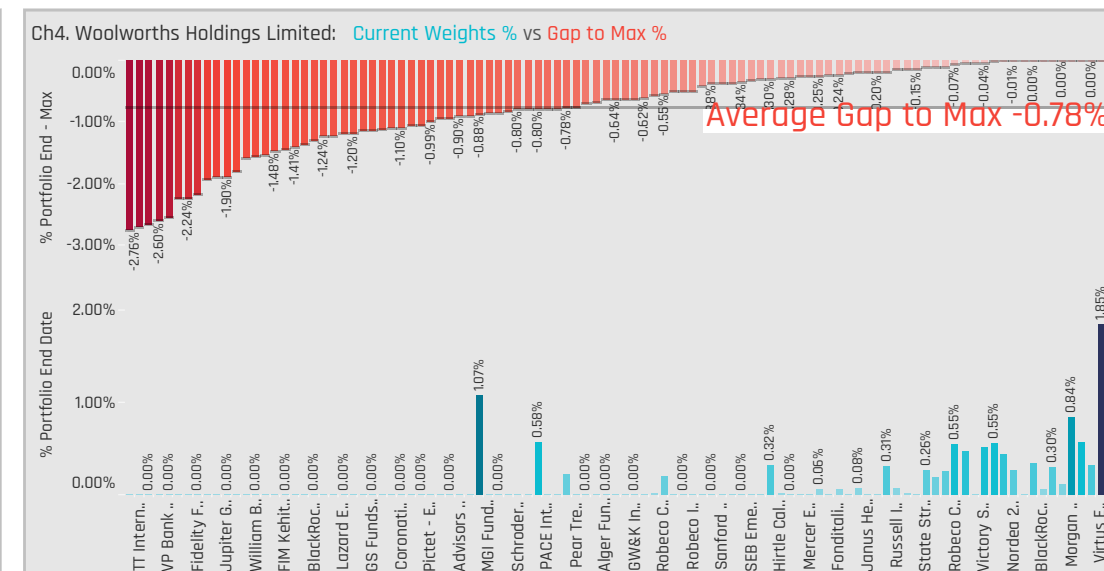


Chart 1 Current fund weight, maximum fund weight and difference for Woolworths Holdings Limited stocks.

Chart 2 Current fund AUM, maximum fund AUM and \$ difference for Woolworths Holdings Limited stocks

Chart 3 Current fund weight, maximum fund weight and Z-Score for Woolworths Holdings Limited stocks, ranked by Z-Score

Chart 4 Current fund AUM, maximum AUM and Z-Score for Woolworths Holdings Limited stocks, ranked by Z-Score.

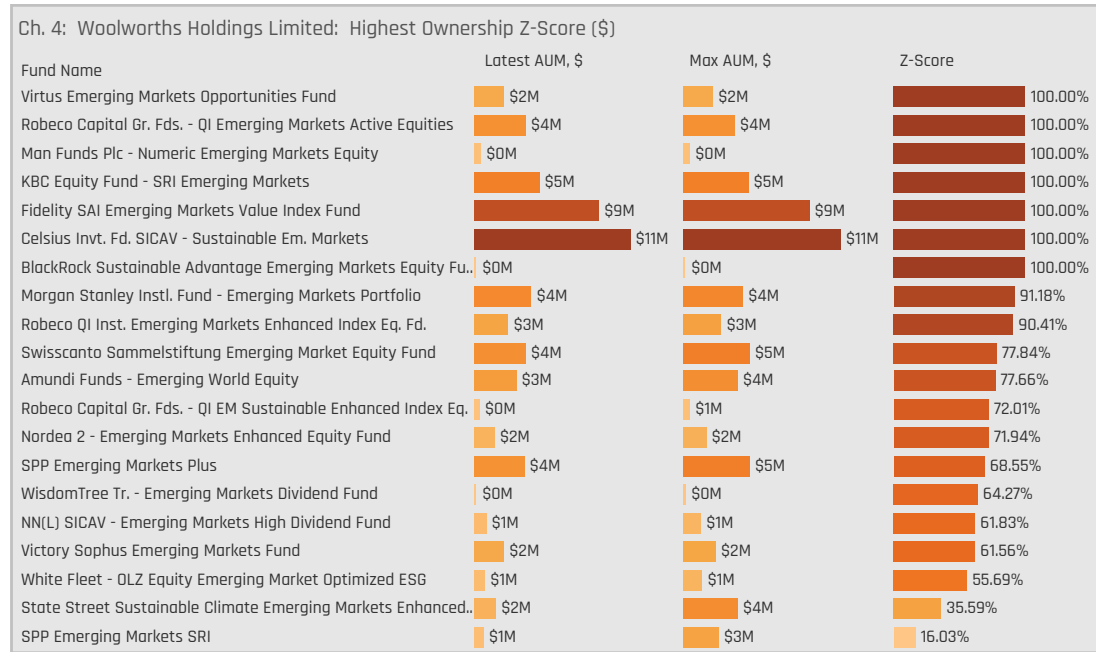
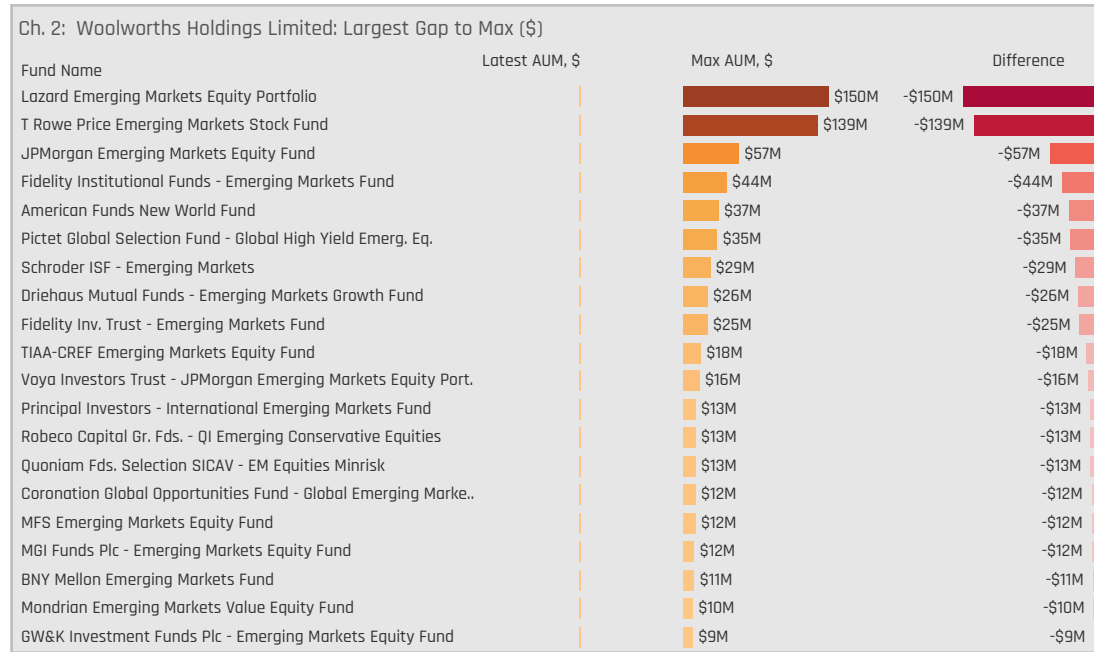
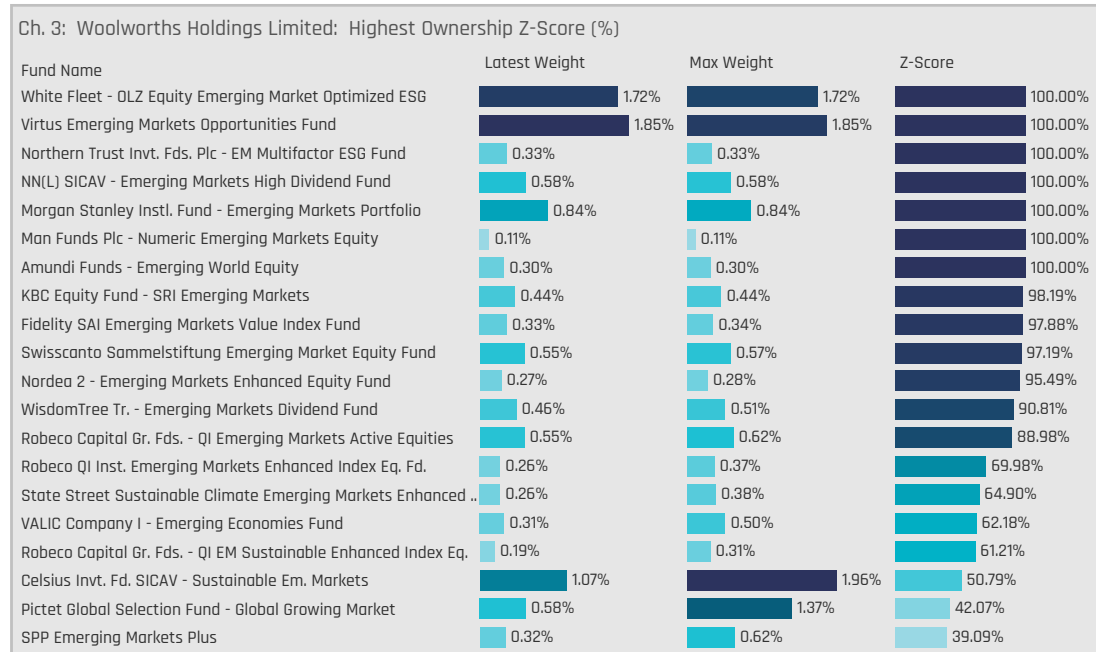
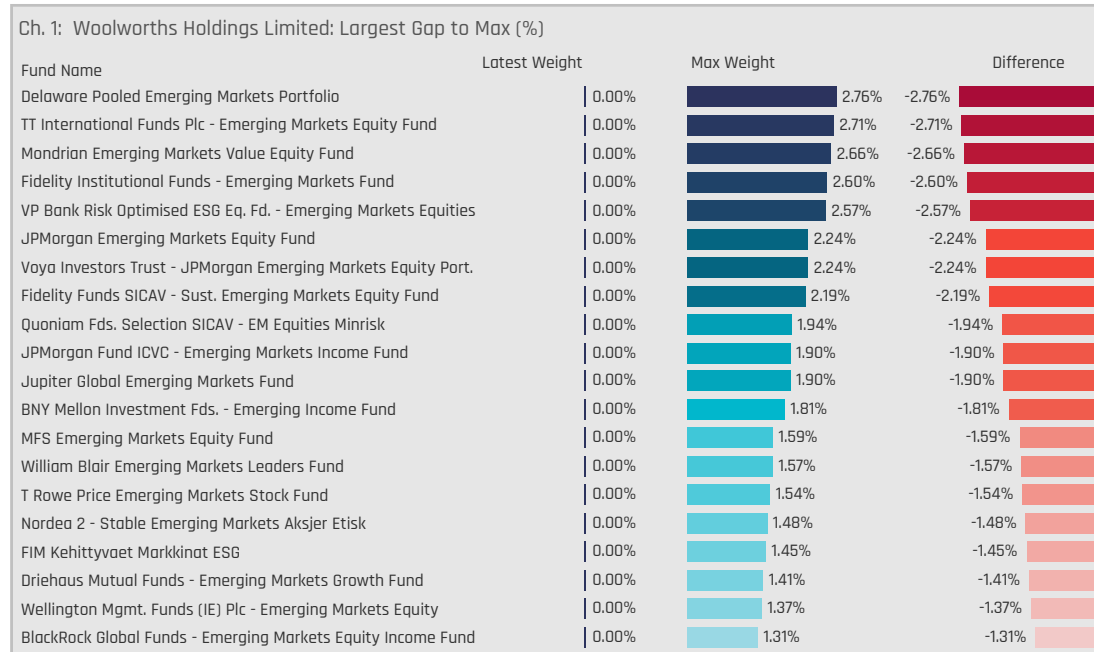
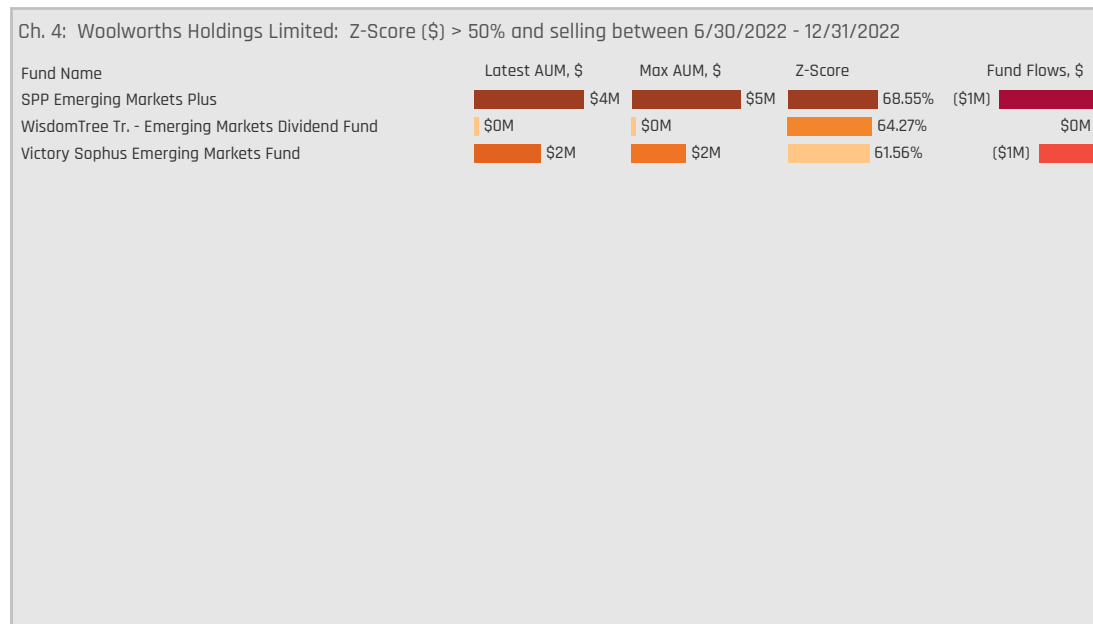
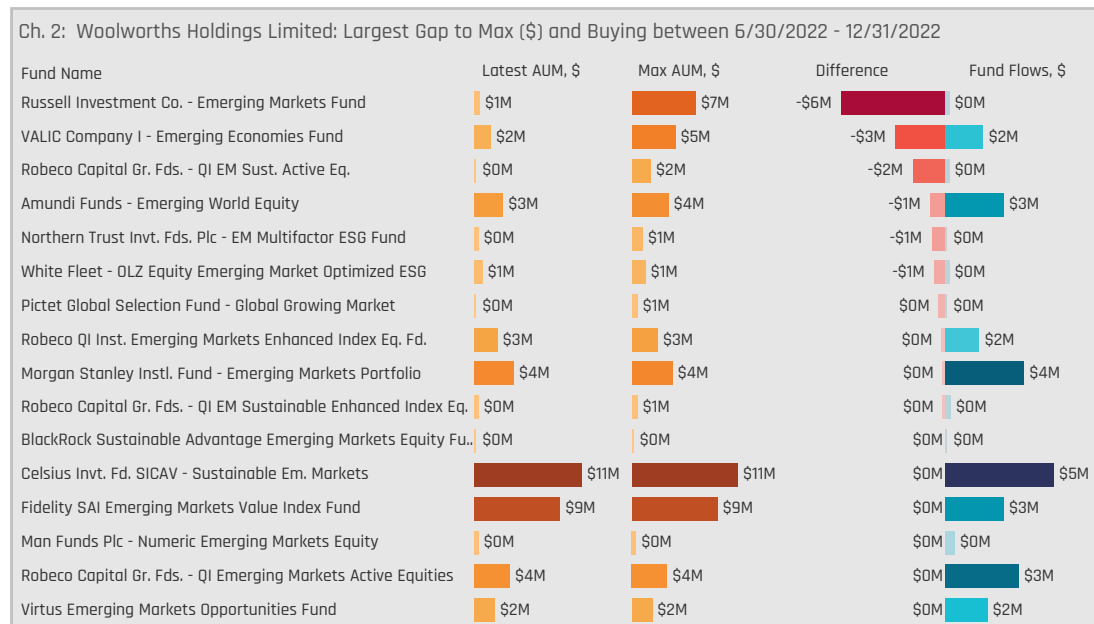
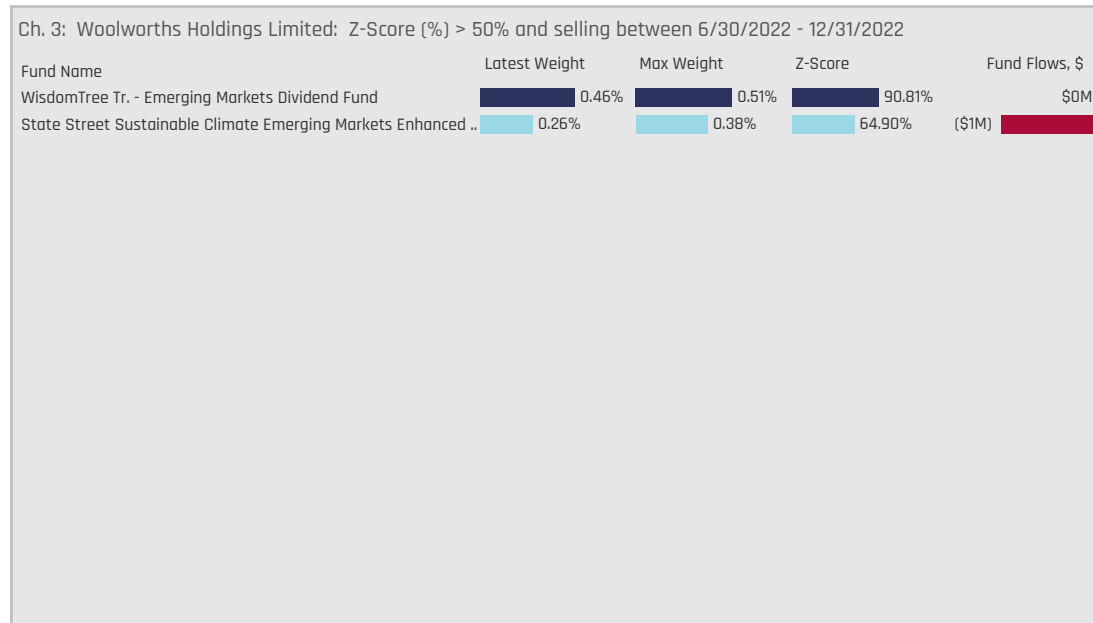
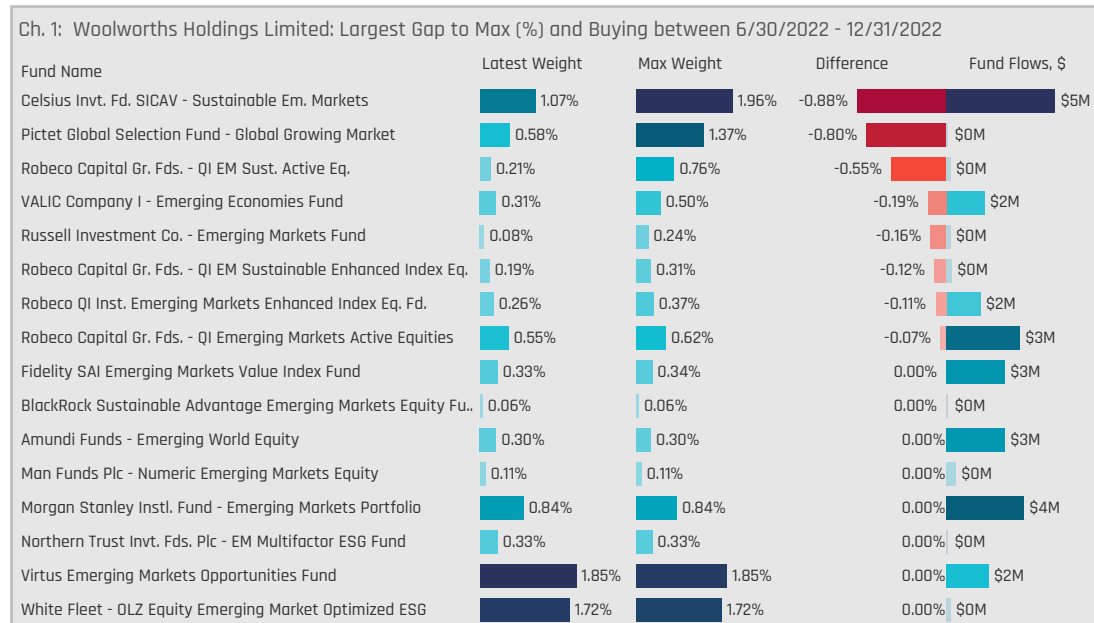


Chart 1 Current fund weight, maximum fund weight and the difference for Woolworths Holdings Limited stocks. Filtered for funds that have bought in to Woolworths Holdings Limited between 6/30/2022 - 12/31/2022

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

Chart 3 Current fund weight, maximum fund weight and Z-Score for Woolworths Holdings Limited stocks, ranked by Z-Score. Filtered for funds that have sold Woolworths Holdings Limited 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 Woolworths Holdings Limited stocks, ranked by Z-Score. Filtered for funds that have sold Woolworths Holdings Limited 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