



FLOW OF FUNDS REPORT

TUYID Q2-2023

FLOW OF FUNDS REPORT: TÜYİD Q2-2023

June 2023

Dear Readers,

We are happy to present the Flow of Funds Report for the second quarter of 2023. Our report offers a detailed insight into the institutional ownership by investment type and regions as well as top buyers and sellers in the Turkish market. We also provide key investor hubs for roadshows and trust the report will be an important asset in IR planning and investor targeting.

Turkey's strong performance continued in the second quarter of 2023, after dropping -25pp in Q1 of 2023. The BIST remains the strongest performer of the peer group, with the Hungary BUX (+28.7%) being the best performer after Turkey. The Poland WIG showed signs of recovery (+22.1%). The Russian RTS (-21.1%) remains under pressure due to the ongoing conflict with Ukraine. All indices ended the quarter in the green with the exception of the Russian RTS.

Aggregate net outflows were experienced across all markets, with Russia seeing the largest outflows (-\$1,122.0M). Turkey received the largest inflows (+\$316.1M). The Active inflows in Turkey were driven by **Swedbank Robur Fonder AB, Driehaus Capital Management, LLC & Thornburg Investment Management, Inc.**

Active investors contributed to net outflows of -\$16.6M, primarily driven by selling in the Financials Sector (-\$31.7M). The biggest inflows from active investors were allocated to the Consumer Services Sector (+\$26.2M). Passive investors contributed to net inflows of +\$332.6M, of which all sectors received inflows, except for Healthcare (-\$9.0M). Consumer Goods received the bulk of passive inflows (+\$92.0M).

The orientation remains skewed towards Passive investors, with 65% of Turkish funds being held by Passive investors. Index investors were once again the only substantial contributors to inflows into the Turkish Market (+\$303.0M). Index investors continue to be the largest investor in the Turkish market (\$4,921.0M), followed by Deep Value/Value (\$4,059.3M). Agg Gr./Growth investors were the largest detractors over the quarter (-\$39.6M), driven by **Invesco Advisers, Inc. & Barclays Bank PLC (Wealth and Investment Management)**.

London remains the top invested city with holdings in Turkey worth (\$1,851.8M). Istanbul was the largest detracting city (-\$37.4M).

In terms of number of investors per city, London continues to lead the ranking with 76 investors, followed by New York (30) and Boston (12).

This report is prepared quarterly by S&P Global, in cooperation with TÜYİD, using S&P Global's database. We look forward to any feedback you may have.

S&P Global
Director, Shareholder Intelligence EMEA
Frederik Frank

TÜYİD Turkish IR Society
Chair
Başak Öge

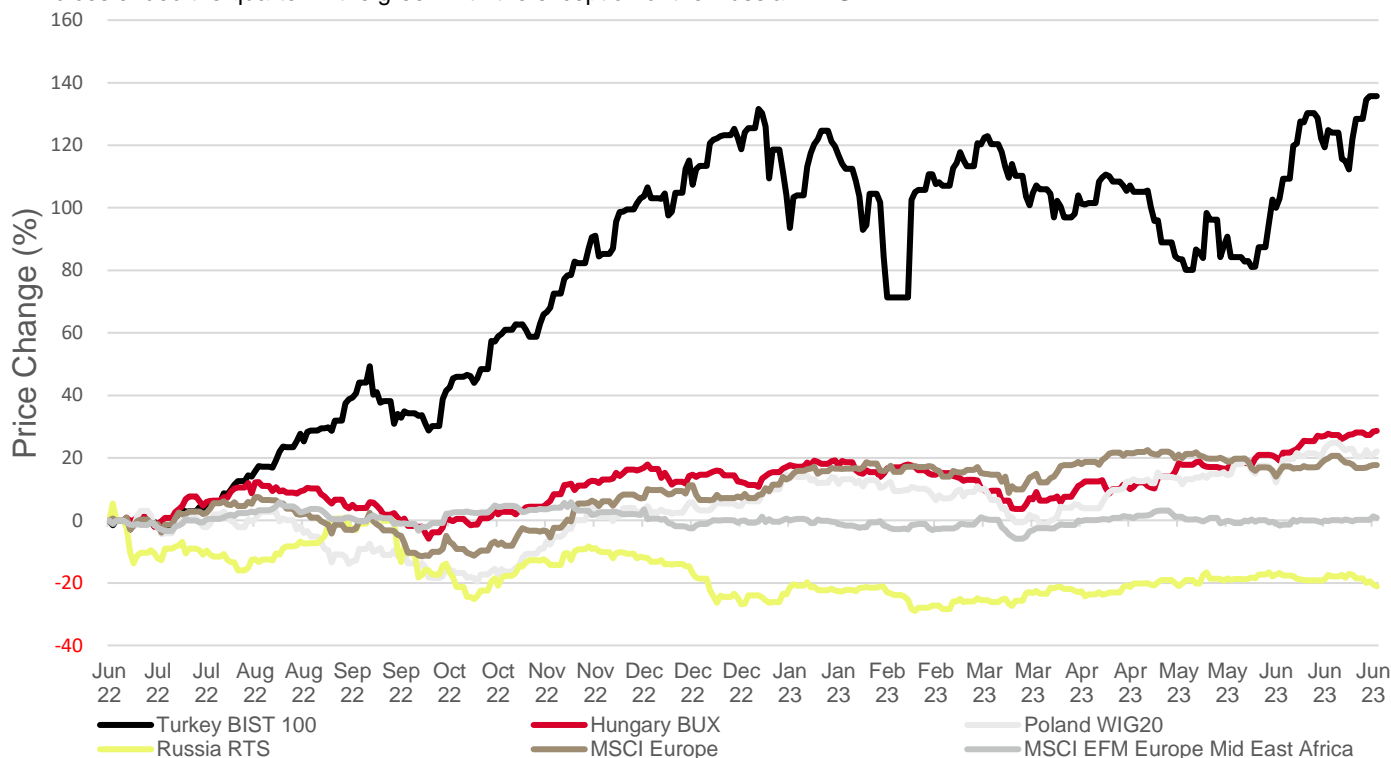
Acknowledgements: We express our gratitude to the S&P Global Issuer Solutions team and the TÜYİD Turkish IR Society.

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FLOW OF FUNDS REPORT: TUYID Q2-2023

Price performance:

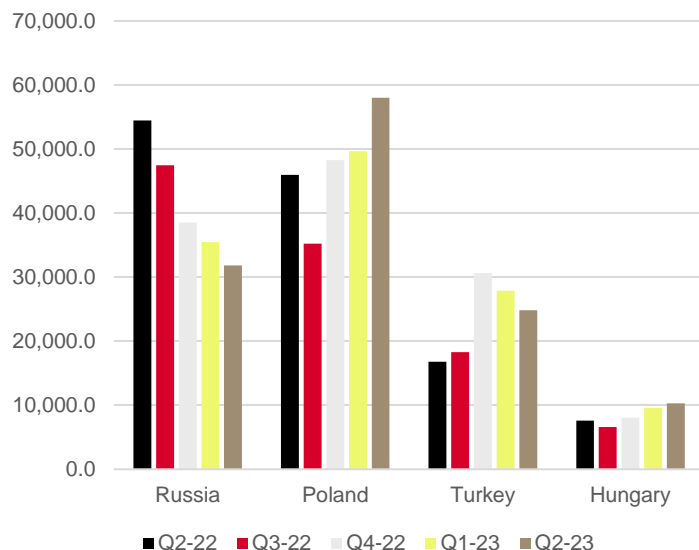
Turkey's strong performance continued in the second quarter of 2023, after dropping -25pp in Q1 of 2023. The BIST remains the strongest performer of the peer group, with the Hungary BUX (+28.7%) being the best performer after Turkey. The Poland WIG showed signs of recovery (+22.1%). The Russian RTS (-21.1%) remains under pressure due to the ongoing conflict with Ukraine. All indices ended the quarter in the green with the exception of the Russian RTS.



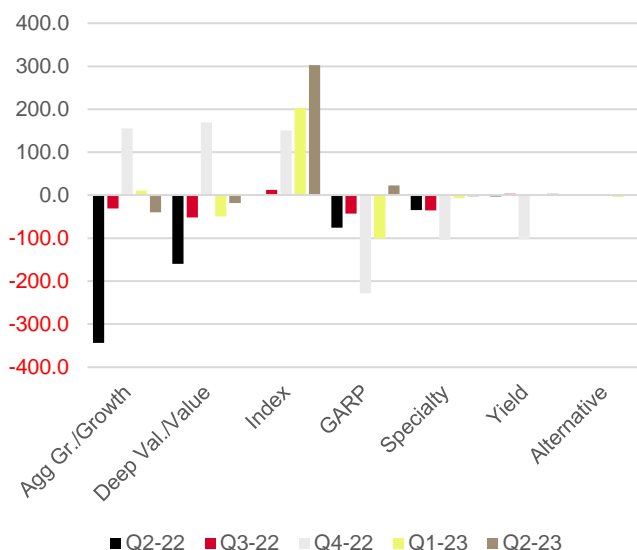
Inflows and Outflows:

Aggregate net outflows were experienced across the below markets, with Russia seeing the largest outflows (-\$1,122.0M). Turkey received the largest inflows (+\$316.1M). The Active inflows in Turkey were driven by **Swedbank Robur Fonder AB, Driehaus Capital Management, LLC & Thornburg Investment Management, Inc.**

Institutional Investment in Region (\$M)



Institutional Investment by Style (\$M Chg)

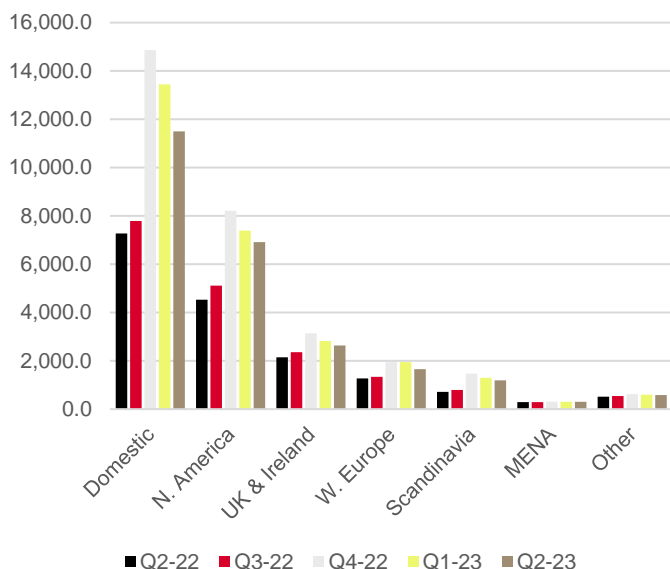


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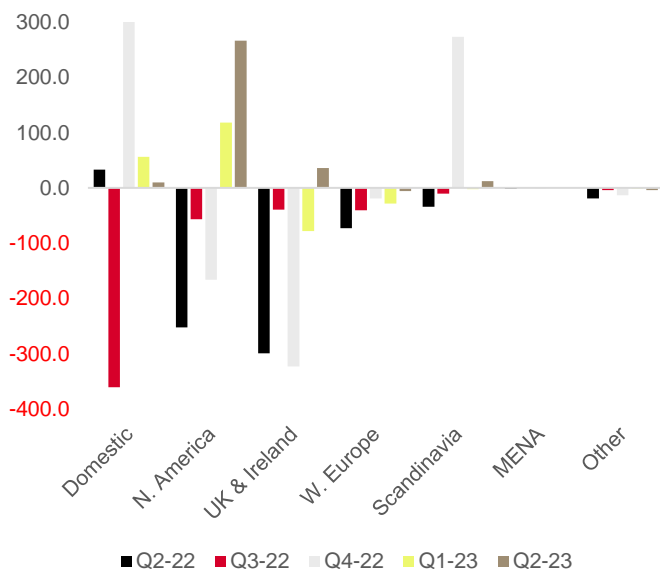
Investment by Investor Region:

The net inflows (+\$316.1M) in the Turkish market are broken down by geographic regions below. North American investors (+\$266.6) continued to contribute to inflows. Domestic investors remained relatively flat, contributing to modest inflows. Domestic investors continue to be the largest holders in the Turkish market (\$11,497.4M), followed by North America (\$6,922.1M).

Institutional Investment by Region (\$M)



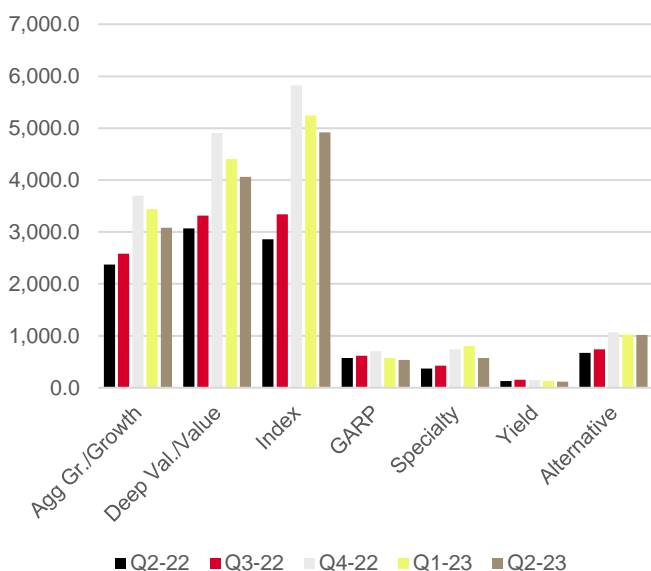
Institutional Investment by Region (\$M Chg)



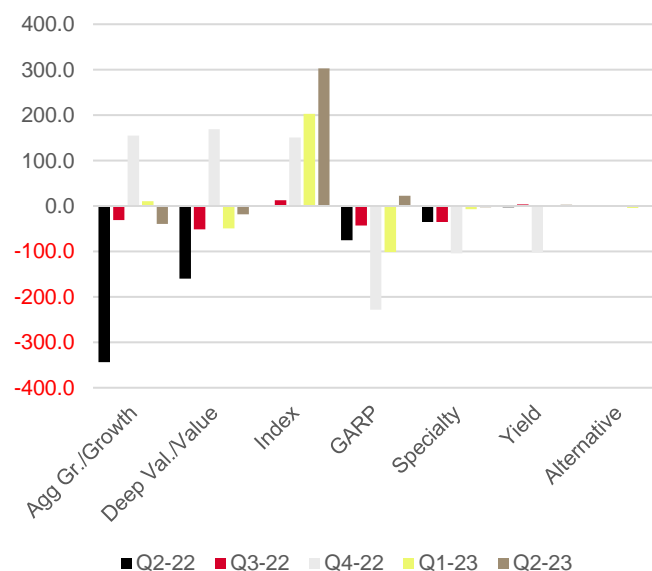
Investment by Style:

Index investors were once again the only substantial contributors to inflows into the Turkish Market (+\$303.0M). Index investors continue to be the largest investor in the Turkish market (\$4,921.0M), followed by Deep Value/Value (\$4,059.3M). Agg Gr./Growth investors were the largest detractors over the quarter (-\$39.6M), driven by **Invesco Advisers, Inc. & Barclays Bank PLC (Wealth and Investment Management)**.

Institutional Investment by Style (\$M)



Institutional Investment by Style (\$M Chg)



FLOW OF FUNDS REPORT: TUYID Q2-2023

Top Active Holders, Buyers & Sellers

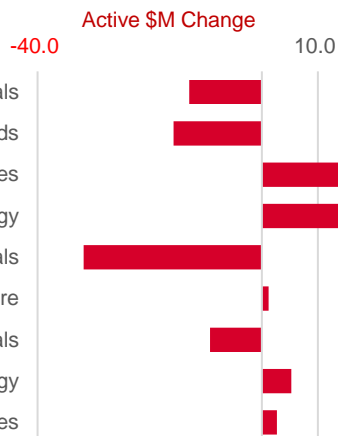
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Norges Bank Investment Management (Norway)	Norway	Value	Low	855,098.3	881.0	0.0	0.1	0.0
BNP Paribas (Suisse) S.A.	Switzerland	Deep Value	Low	1,924.1	531.9	0.0	27.6	0.0
Helikon Investments, LTD (United Kingdom)	United Kingdom	Alternative	Low	1,978.2	495.0	0.0	25.0	0.0
Kuwait Investment Authority	Kuwait	Growth	Low	24,777.6	245.6	0.0	1.0	0.0
Capital World Investors (U.S.)	United States	Value	Low	781,873.8	171.2	0.1	0.0	0.1
California Public Employees Retirement System	United States	Growth	Low	120,689.6	169.7	0.0	0.1	0.0
GQG Partners, LLC	United States	Growth	High	80,554.2	168.2	0.9	0.2	0.6
Silchester International Investors, LLP	United Kingdom	Value	Low	24,486.7	147.3	0.0	0.6	0.0
ClearBridge Investments, LTD	Australia	Value	Medium	6,009.6	144.3	0.0	2.4	0.0
Conifer Management, LLC	United States	Alternative	Low	2,210.9	129.3	0.0	5.9	0.0
					3,083.6	1.1		

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Swedbank Robur Fonder AB	Sweden	Growth	Low	114,896.9	67.9	25.6	0.1	60.6
Driehaus Capital Management, LLC	United States	Agg. Growth	Very High	11,987.9	18.6	18.6	0.2	Buy-in
Thornburg Investment Management, Inc.	United States	GARP	Low	17,329.4	18.3	18.3	0.1	Buy-in
Origin Asset Management, LLP	United Kingdom	Value	High	3,271.6	28.7	14.6	0.9	103.5
Columbia Threadneedle Management, LTD	United Kingdom	Value	Low	24,516.2	19.3	14.6	0.1	306.2
Manulife Investment Management (U.S.), LLC	United States	GARP	Medium	90,582.8	49.0	14.3	0.1	41.2
Baring Asset Management, LTD (U.K.)	United Kingdom	GARP	Low	3,672.2	48.6	12.7	1.3	35.5
Fidelity International Limited - FIL Investment Services (U.K.), LTD	United Kingdom	Growth	Medium	119,664.9	67.6	4.8	0.1	7.7
Mellon Investments Corporation	United States	Yield	Low	221,671.9	100.1	4.5	0.0	4.7
Raiffeisen Kapitalanlage-Gesellschaft m.b.H.	Austria	GARP	Low	10,501.9	24.8	3.4	0.2	16.0
					442.9	131.4		

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Invesco Advisers, Inc.	United States	Growth	Low	254,195.7	27.6	-22.4	0.0	-44.8
Barclays Bank PLC (Wealth and Investment Management)	United Kingdom	Growth	High	111,052.2	0.2	-21.9	0.0	-99.3
Capital Research Global Investors (U.S.)	United States	GARP	Low	476,385.7	30.3	-18.4	0.0	-37.7
BlackRock Investment Management (U.K.), LTD	United Kingdom	Growth	Low	741,573.1	39.7	-18.0	0.0	-31.2
Robeco Institutional Asset Management BV	Netherlands	Value	Medium	60,207.4	58.0	-9.9	0.1	-14.6
Wellington Management Company, LLP	United States	Value	Low	580,700.9	13.9	-9.4	0.0	-40.2
SEB Investment Management AB	Sweden	Value	Medium	41,303.0	18.5	-7.2	0.0	-28.0
Ninety One UK, LTD	United Kingdom	Growth	Low	52,027.6	5.4	-5.1	0.0	-48.4
East Capital Asset Management AB	Sweden	GARP	Low	830.3	24.8	-4.9	3.0	-16.5
ÖkoWorld Lux S.A.	Luxembourg	Growth	Very High	3,568.6	27.0	-3.7	0.8	-12.0
					245.3	-120.8		

Includes Investors with EUM greater than \$100M; Excludes Passive/Index Investors

Sector Inflows/Outflows



% Change in Active Investment vs 5 Previous Quarters



FLOW OF FUNDS REPORT: TUYID Q2-2023

Top Passive Holders, Buyers & Sellers

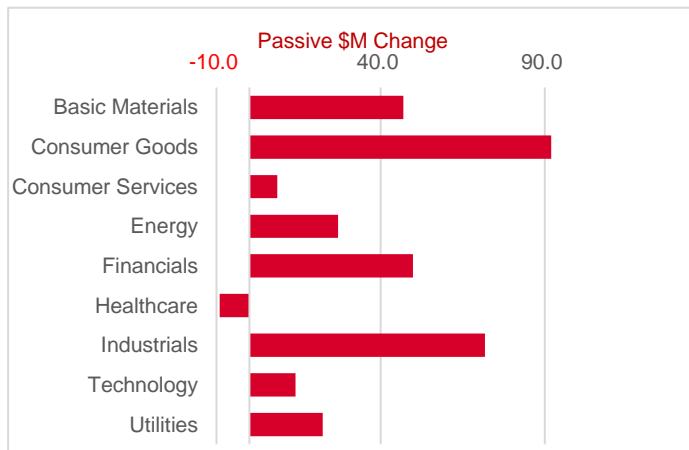
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	5,137,436.4	2,337.4	369.7	0.0	18.8
BlackRock Fund Advisors	United States	Index	Low	3,008,459.0	1,013.9	-21.4	0.0	-2.1
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	243,644.8	409.2	22.2	0.2	5.7
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	440,890.0	400.4	21.5	0.1	5.7
Geode Capital Management, LLC	United States	Index	Low	988,111.1	170.7	4.2	0.0	2.5
Charles Schwab Investment Management, Inc.	United States	Index	Low	424,821.0	149.7	-10.8	0.0	-6.7
Arrowstreet Capital, L.P.	United States	Deep Value	High	86,351.0	116.9	-31.1	0.1	-21.0
Acadian Asset Management, LLC	United States	Deep Value	Medium	33,430.3	109.0	-5.2	0.3	-4.6
State Street Global Advisors (SSgA)	United States	Index	Low	2,000,562.6	103.0	5.4	0.0	5.5
First Trust Advisors, L.P.	United States	Index	Medium	95,399.7	87.3	-23.8	0.1	-21.4
				4,897.5	330.6			

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	5,137,436.4	2,337.4	369.7	0.0	18.8
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	243,644.8	409.2	22.2	0.2	5.7
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	440,890.0	400.4	21.5	0.1	5.7
Northern Trust Global Investments, LTD	United Kingdom	Index	Low	78,212.8	55.5	5.7	0.1	11.4
State Street Global Advisors (SSgA)	United States	Index	Low	2,000,562.6	103.0	5.4	0.0	5.5
State Street Global Advisors, LTD	United Kingdom	Index	Low	111,951.8	69.2	5.2	0.1	8.1
Geode Capital Management, LLC	United States	Index	Low	988,111.1	170.7	4.2	0.0	2.5
Parametric Portfolio Associates, LLC	United States	GARP	Low	209,926.6	43.8	3.7	0.0	9.3
UBS Asset Management (U.K.), LTD	United Kingdom	Index	Low	122,284.0	30.8	2.4	0.0	8.4
DWS Investments UK, LTD	United Kingdom	Index	Medium	82,771.6	29.1	1.6	0.0	5.8
				3,648.9	441.6			

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Arrowstreet Capital, L.P.	United States	Deep Value	High	86,351.0	116.9	-31.1	0.1	-21.0
Van Eck Associates Corporation	United States	Index	Low	56,852.9	78.7	-29.3	0.1	-27.2
First Trust Advisors, L.P.	United States	Index	Medium	95,399.7	87.3	-23.8	0.1	-21.4
BlackRock Fund Advisors	United States	Index	Low	3,008,459.0	1,013.9	-21.4	0.0	-2.1
Cambria Investment Management, L.P.	United States	Index	High	1,744.3	10.9	-17.6	0.6	-61.8
Charles Schwab Investment Management, Inc.	United States	Index	Low	424,821.0	149.7	-10.8	0.0	-6.7
Invesco Capital Management, LLC	United States	Index	Low	376,101.1	20.7	-9.5	0.0	-31.5
LSV Asset Management	United States	Deep Value	Low	50,077.6	13.7	-6.6	0.0	-32.4
Acadian Asset Management, LLC	United States	Deep Value	Medium	33,430.3	109.0	-5.2	0.3	-4.6
Global X Management Company, LLC	United States	Index	Low	41,796.7	12.3	-2.4	0.0	-16.2
				1,613.1	-157.9			

Includes Investors with EUM greater than \$100M; Excludes Active Investors

Sector Inflows/Outflows



% Change in Passive Investment vs 5 Previous Quarters



FLOW OF FUNDS REPORT: TUYID Q2-2023

Road show:

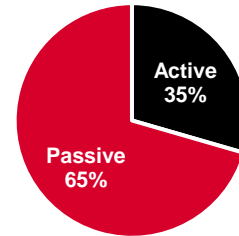
London remains the top invested city with holdings in Turkey worth (\$1,851.8M). Istanbul was the largest detracting city (-\$37.4M). In terms of number of investors per city, London continues to lead the ranking with 76 investors, followed by New York (30) and Boston (12).

Most Invested					Most Investors				
Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms	Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,459,831.9	1,851.8	0.6	76	United Kingdom (London)	2,459,831.9	1,851.8	0.6	76
Turkey (Istanbul)	1,065.6	1,050.9	-37.4	11	United States (New York)	2,711,448.4	305.1	5.9	30
Norway (Oslo)	908,883.6	898.1	3.3	3	United States (Boston)	3,017,457.0	297.3	14.9	12
Switzerland (Geneva)	146,036.8	576.3	0.5	9	Turkey (Istanbul)	1,065.6	1,050.9	-37.4	11
Germany (Stuttgart)	6,318.1	332.5	0.0	1	Switzerland (Zürich)	373,886.9	102.6	2.9	11
United States (New York)	2,711,448.4	305.1	5.9	30	Poland (Warsaw)	17,176.3	60.1	-4.3	10
United States (Boston)	3,017,457.0	297.3	14.9	12	Japan (Tokyo)	930,114.0	48.0	0.2	10
United States (Los Angeles)	1,313,046.1	228.7	-18.0	6	Finland (Helsinki)	30,889.0	37.4	-1.8	10
Sweden (Stockholm)	305,340.4	177.5	11.0	7	Switzerland (Geneva)	146,036.8	576.3	0.5	9
United States (Sacramento)	120,689.6	169.7	0.0	1	Singapore (Singapore)	133,585.2	154.9	0.1	9
United States (Fort Lauderdale)	86,410.2	168.6	0.9	3	Germany (Frankfurt)	416,446.6	135.6	-0.2	9
Singapore (Singapore)	133,585.2	154.9	0.1	9	France (Paris)	292,583.7	41.7	0.5	9
Australia (Sydney)	9,460.9	150.7	-0.0	5	United States (Chicago)	178,113.0	37.5	18.6	9
Germany (Frankfurt)	416,446.6	135.6	-0.2	9	South Korea (Seoul)	48,015.9	3.1	-2.7	9
United States (Austin)	314.2	123.1	0.0	1	Canada (Toronto)	329,781.5	11.1	-1.2	8
Netherlands (Amsterdam)	135,976.6	112.2	0.3	4	Sweden (Stockholm)	305,340.4	177.5	11.0	7
Switzerland (Zürich)	373,886.9	102.6	2.9	11	United States (Los Angeles)	1,313,046.1	228.7	-18.0	6
Canada (Montreal)	95,847.2	97.2	-0.0	4	Austria (Vienna)	21,511.5	61.8	2.5	6
Netherlands (Rotterdam)	81,345.6	67.0	-10.5	2	Denmark (Copenhagen)	140,988.2	41.0	-0.8	6
Belgium (Brussels)	87,941.0	64.6	-0.2	4	Ireland (Dublin)	51,173.8	40.3	-1.2	6
Excludes Passive/Index Investors		7,064.5	-26.0	208	Excludes Passive/Index Investors		5,262.8	-9.8	263

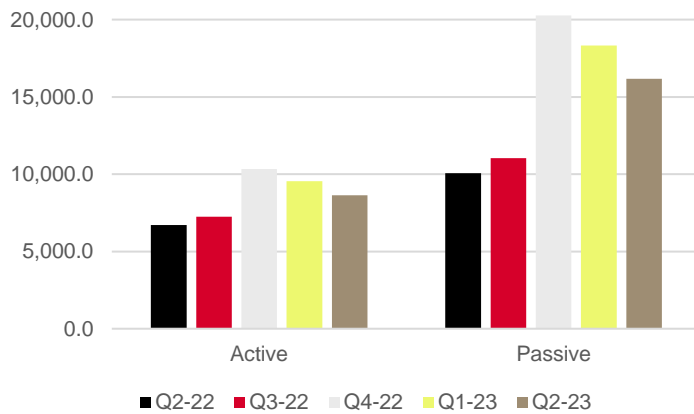
Active vs. Passive investors

Active investors contributed to outflows (-\$16.6M). Passive investors continue to hold the bulk of the Turkish market (65%).

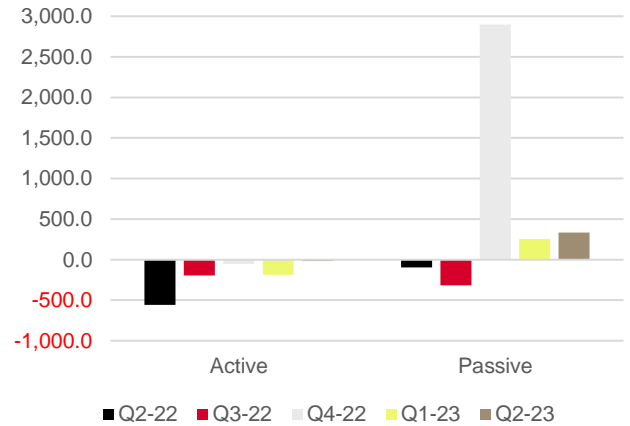
Active vs Passive Split



Active vs Passive (\$M)



Active vs Passive (\$M Chg)



FLOW OF FUNDS REPORT: TUYID Q2-2023

Top Holders, Buyers & Sellers – Corporate Debt

TOP HOLDERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Amundi (U.K.), LTD	United Kingdom	London	Medium	18,136.2	221.9	-2.1	1.2	-0.9
Goldman Sachs Asset Management International	United Kingdom	London	Very High	62,198.2	165.6	0.4	0.3	0.3
Pictet Asset Management, LTD	United Kingdom	London	High	7,987.9	127.0	9.6	1.6	8.2
TIAA-CREF Investment Management, LLC	United States	New York	Very High	202,079.4	120.9	0.0	0.1	0.0
Dimensional Fund Advisors, L.P. (U.S.)	United States	Austin	Medium	82,484.9	88.5	77.2	0.1	684.7
Ninety One UK, LTD	United Kingdom	London	High	12,104.3	86.4	-3.8	0.7	-4.2
CIGNA Investments, Inc.	United States	Bloomfield	Low	4,084.7	69.5	0.0	1.7	0.0
BlackRock Advisors (U.K.), LTD	United Kingdom	London	Low	228,876.2	60.6	-1.6	0.0	-2.6
Bank Julius Baer & Co. AG	Switzerland	Zürich	Low	4,494.2	44.9	-0.2	1.0	-0.4
Loomis Sayles & Company, L.P.	United States	Boston	Medium	64,669.2	43.6	-9.9	0.1	-18.5
					1,028.9	69.7		

TOP BUYERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Dimensional Fund Advisors, L.P. (U.S.)	United States	Austin	Medium	82,484.9	88.5	77.2	0.1	684.7
Pictet Asset Management, LTD	United Kingdom	London	High	7,987.9	127.0	9.6	1.6	8.2
Baillie Gifford & Company, LTD	United Kingdom	Edinburgh	Low	8,605.5	8.7	7.0	0.1	407.8
PineBridge Investments Asia, LTD	Hong Kong SAR	Wan Chai	Medium	1,578.1	3.4	3.4	0.2	Buy-in
Erste Asset Management GmbH	Austria	Vienna	Low	7,957.4	17.3	2.4	0.2	16.0
Federated Investment Management Company	United States	Pittsburgh	Very High	295,629.6	21.4	2.3	0.0	12.1
Kemper Corp. (Asset Management)	United States	Chicago	Low	3,312.2	5.1	1.9	0.2	62.6
Edmond de Rothschild (Suisse) S.A.	Switzerland	Geneva	Medium	512.5	14.6	1.8	2.9	14.1
Public Employees Retirement Association of New Mexico	United States	Santa Fe	Low	3,284.0	1.6	1.6	0.0	Buy-in
Muzinich & Co., LTD (London)	United Kingdom	London	Very High	14,471.6	13.4	1.0	0.1	7.9
					301.1	108.3		

TOP SELLERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Towarzystwo Funduszy Inwestycyjnych PZU S.A.	Poland	Warsaw	Medium	2,242.6	29.8	-29.9	1.3	-50.1
Lord, Abbett & Co., LLC (Asset Management)	United States	Jersey City	High	137,207.6	27.3	-19.6	0.0	-41.8
Ashmore Investment Management, LTD	United Kingdom	London	High	6,053.4	0.0	-18.1	0.0	-100.0
abrdn Investment Management, LTD	United Kingdom	London	High	59,489.4	32.5	-16.5	0.1	-33.6
T. Rowe Price Associates, Inc.	United States	Baltimore	Very High	146,920.5	6.9	-12.4	0.0	-64.3
Loomis Sayles & Company, L.P.	United States	Boston	Medium	64,669.2	43.6	-9.9	0.1	-18.5
Eurizon Capital SGR S.p.A.	Italy	Milan	High	54,875.1	13.5	-9.2	0.0	-40.6
Nordea Investment Management AB (Denmark)	Denmark	Copenhagen	Medium	38,222.0	25.0	-8.3	0.1	-25.0
AXA Investment Managers Paris S.A.	France	Puteaux	Medium	24,753.4	18.9	-7.1	0.1	-27.2
Union Investment Privatfonds GmbH	Germany	Frankfurt am Main	Low	46,953.9	35.4	-6.2	0.1	-14.9
					232.9	-137.1		

Corporate Debt – City Analysis

Most Invested					Most Investors				
	Total FI Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms		Total FI Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
Country / City					Country / City				
United Kingdom (London)	1,150,188.8	975.4	-63.4	45	United Kingdom (London)	1,150,188.8	975.4	-63.4	45
United States (New York)	1,447,317.0	254.9	-9.7	18	United States (New York)	1,447,317.0	254.9	-9.7	18
United States (Boston)	1,700,827.9	168.5	-11.1	11	United States (Boston)	1,700,827.9	168.5	-11.1	11
Switzerland (Zürich)	186,542.3	164.9	-1.8	9	Italy (Milan)	131,637.4	52.3	-14.5	11
United States (Austin)	82,484.9	88.5	77.2	1	Spain (Madrid)	32,590.5	9.1	0.6	11
Germany (Frankfurt am Main)	164,855.7	77.3	-6.3	5	France (Paris)	206,278.0	71.3	-5.3	10
France (Paris)	206,278.0	71.3	-5.3	10	Switzerland (Zürich)	186,542.3	164.9	-1.8	9
United States (Bloomfield)	4,084.7	69.5	0.0	1	Singapore (Singapore)	26,320.4	41.3	-8.0	9
Denmark (Copenhagen)	59,050.4	65.9	-9.1	4	Austria (Vienna)	23,774.0	34.5	3.0	8
Italy (Milan)	131,637.4	52.3	-14.5	11	United States (Chicago)	230,223.4	42.6	0.5	6
United States (Newport Beach)	869,260.8	46.4	0.0	2	Germany (Frankfurt am Main)	164,855.7	77.3	-6.3	5
United States (Chicago)	230,223.4	42.6	0.5	6	Germany (Frankfurt)	6,449.9	17.7	-0.2	5
Singapore (Singapore)	26,320.4	41.3	-8.0	9	Denmark (Copenhagen)	59,050.4	65.9	-9.1	4
United States (San Francisco)	695,184.6	39.8	-2.2	3	Germany (Munich)	21,031.9	18.7	-0.9	4
Italy (Basiglio)	5,741.7	38.1	0.0	1	Ireland (Dublin)	26,692.8	3.0	-0.2	4
United States (Atlanta)	247,176.0	35.7	-2.0	3	Switzerland (Lugano)	2,364.7	1.4	0.1	4
United States (Charlotte)	309,609.9	34.6	-0.0	2	United States (San Francisco)	695,184.6	39.8	-2.2	3
Austria (Vienna)	23,774.0	34.5	3.0	8	United States (Atlanta)	247,176.0	35.7	-2.0	3
Poland (Warsaw)	2,345.9	30.0	-32.4	2	Luxembourg (Luxembourg)	7,812.7	12.0	-0.1	3
United States (Jersey City)	137,207.6	27.3	-19.6	1	Finland (Helsinki)	11,518.2	3.5	-0.0	3
		2,358.8	-104.7	152			2,089.7	-130.6	176

FLOW OF FUNDS REPORT: TUYID Q2-2023

GLOSSARY

Institutional Investment Styles

Aggressive Growth – Investors in this category invest in companies that have very high revenue, EPS growth rates and multiples relative to the overall market. These companies usually do not pay any dividends and are at the early stages of growth. Aggressive Growth investors exhibit a higher portfolio turnover than other styles of investors.

Alternative – Primarily used to classify hedge funds that use various strategies that fall outside the traditional investment strategies that can be categorized as the above. A catch-all for lightly regulated investment vehicles that have the ability to "go-anywhere" and invest long or short in any type of security – equity, debt, commodity, options, currency, etc. Hedge funds seek to earn above market returns for their clients while at the same time controlling risk factors. Hedge funds have grown in prominence over the years as their returns net of fees (typically 2% management, 20% incentive) have outperformed mutual fund and pension managers performance. Recently, many hedge funds have gained notoriety as "activists" demanding change (leadership or strategic) at companies in North America, Europe and Asia.

Asset Allocation – Asset allocation managers allocate their investments among stocks, bonds, and cash equivalents, among others. It is primarily dictated by the various needs of clients and used by many smaller firms and banks.

Deep Value – Investors in this category employ an extreme style of value investing where they invest in companies with very low valuations versus their own historic valuation, and in relation to the overall market. Usually the companies or the industries they are in have been out of favour in the marketplace for an extended period of time.

GARP – These institutions seek to add growth stocks to their portfolios, but will not pay a premium price to obtain the securities. Thus, investors of this type are categorized as GARP, or "growth at a reasonable price," investors. Investors utilizing this investment approach will use methodologies and indicators favoured by both growth and value investors, but neither of the aforementioned styles dominates the process.

Growth – These institutions place the greatest emphasis in their selection process on the growth prospects of a company's earnings. Growth investors prefer companies where bottom line growth will average at least 15% annually and are willing to pay above market average multiples for a stock. At the first sign of an earnings slow-down, however, growth investors are often the quickest to sell.

Index – These institutions strive to match the performance of an equity index such as the MSCI EAFE Index or the S&P 500 Index, while at the same time keeping trading costs at a minimum. An institution accomplishes this by holding the stocks that comprise the index in its portfolio at the same proportion as the index. Indexing is a passive style of investing; stocks are bought and sold based upon their inclusion in an index and not on their fundamentals. Please note, index investors are not familiar with the companies in which they have made investments and are therefore considered investor relations immune.

Other – This style is applied to companies that are not investment firms, such as public companies.

Private Equity – This style is applied to firms that are private equity investors and their public equity holdings are the result of pre-IPO holdings.

Specialty – Applied to firms with investment strategies that cannot be categorized due to the specific nature of their focus. Industry or sector specific focus is the most common example of a Specialty investor.

Value – Value-oriented institutions prefer stocks that are trading at undervalued levels relative to some valuation such as a stock's intrinsic value or a company's free cash flow. Value investors tend to have longer-term investment horizons than their growth counterparts as they wait for the convergence of value and price.

Venture Capital – This style is applied to firms that are venture capital investors and their public equity holdings are the result of pre-IPO holdings.

Yield – Yield investors are sensitive to a high dividend yield and invest in companies with yield levels very high compared to the market yield, and have a history of paying and increasing dividends over time.

Orientation

Active – Indicates that the final investment decision making process at an institution is enacted by a portfolio manager or analyst. While computer screening models may be used in the investment process they are not utilized to make the final investment decision.

Passive – This category primarily captures index and quantitative investors. These investors utilize computer models to define an investable universe and make final portfolio decisions. Investor relations officers cannot influence these investment decisions.

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GLOSSARY

Turnover

Portfolio Equity Turnover is the measure of how frequently a portfolio buys or sells securities over a 12 month period. It is calculated as the sum of the dollar values of buys and sells over a given period, divided by the sum of the beginning and ending equity assets over the same period, reported as an annualized percentage.

A portfolio with a turnover rate of 100% replaces its entire portfolio throughout the course of a 12-month period, whereas, a portfolio with a turnover rate of 50% replaces half of its holdings during the same time.

- Low Turnover (0-33.3% per year)
- Medium Turnover (33.3 -66.6% per year)
- High Turnover (66.6-100% per year)
- Very High Turnover (Over 100% per year)

Equity Assets (\$M) – The market value of all current publicly disclosed ownership of equity securities held by an account/institution as identified by IHS Markit, expressed in millions of USD.

Value (\$M) – Total value invested in a company/country/region by an institution

Equation: $(\sum \text{All Shares Held Owned Over Period} \times \text{End-of-Period Security Price})$

Change (\$M) - Measures the actual buying/selling activity of institutions (excluding changes in the price of the underlying security). Throughout the report, Net Buy/Sell Activity may be displayed as a value or on a percent change .

Equation: $[(\sum \text{All Shares Bought Over Period} \times \text{End-of-Period Security Price}) - (\sum \text{All Shares Sold Over Period} \times \text{End-of-Period Security Price})]$

% Portfolio - The % of a Buy side institution's position in a company/country/region based on an institution's total portfolio value (Equity Assets (\$M)).

% Portfolio Change – The % change of the institution in the company/country/region

Equation: $[(\sum \text{Value} (\$M)) / ((\sum \text{Value} (\$M) - (\sum \text{Change} (\$M)) \times 100)]$

S&P Global's institutional ownership data is based on publicly-disclosed information, collected from such sources as regulatory ownership filings (including SEC forms 13F/D/G), disclosures made by mutual funds / pension funds to their beneficiaries, registration statements, news releases, and other sources. It should be noted that regulatory filings and other ownership sources vary widely country-by-country as to their completeness and timeliness. When an institutional investor's complete ownership is not disclosed by requirement, S&P Global aggregates and sums the publicly-filed portfolio information from the investor to arrive at a disclosed total equity figure. Data for the beginning and end of Q3-2021 can be considered a snapshot of the most current positions.