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FLOW OF FUNDS REPORT

TUYID Q3-2023

S&P Global



tüyid turkish investor
relations society

S&P Global

FLOW OF FUNDS REPORT: TÜYİD Q3-2023

November 2023

Dear Readers,

We are happy to present the Flow of Funds Report for the third 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 third quarter of 2023, ending September up 162.1%. The BIST remains the strongest performer of the peer group, with the Hungary BUX (+47.6%) being the best performer after Turkey. The Poland WIG continued to trend upwards (+39.0%). The Russian RTS (-4.6%) 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 the reference markets with Russia, once again seeing the largest outflows (-\$393.7M). Turkey received the largest inflows (+\$395.9M). The Active inflows in Turkey were driven by **RWC Asset Advisors (US), LLC, J.P. Morgan Asset Management (UK), LTD & Origin Asset Management, LLP**.

Active investors contributed to net inflows of +\$228.5M, primarily driven by buying in the Financials Sector (+\$119.3M). The second largest inflows by Active investors were attributed to the Consumer Services Sector (+\$70.9M). Passive investors contributed to net inflows of +\$167.5M, of which all sectors received inflows, except for Healthcare (-\$1.5M). Consumer Goods received the bulk of passive inflows (+\$56.5M).

The orientation remains skewed towards Passive investors, with 62% (-3pp) of Turkish funds being held by Passive investors. Active investors contributed meaningfully over the quarter with Agg Gr./Growth being the largest active contributors (+\$93.8M). Index investors continue to be the largest investor in the Turkish market (\$6,434.1M), followed by Deep Value/Value (\$4,529.4M). Specialty investors were the largest detractors over the quarter (-\$24.3M), driven by **U.S. Global Investors, Inc. (Asset Management) & Ashmore Investment Management, LTD**.

Outside of Turkey, Oslo (Norway) is the largest invested city (\$1,433.4M), closely followed by London (United Kingdom) (\$1,167.0M). In terms of number of investors per city, London continues to lead the ranking with 93 investors, followed by New York (36) and Istanbul (19).

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

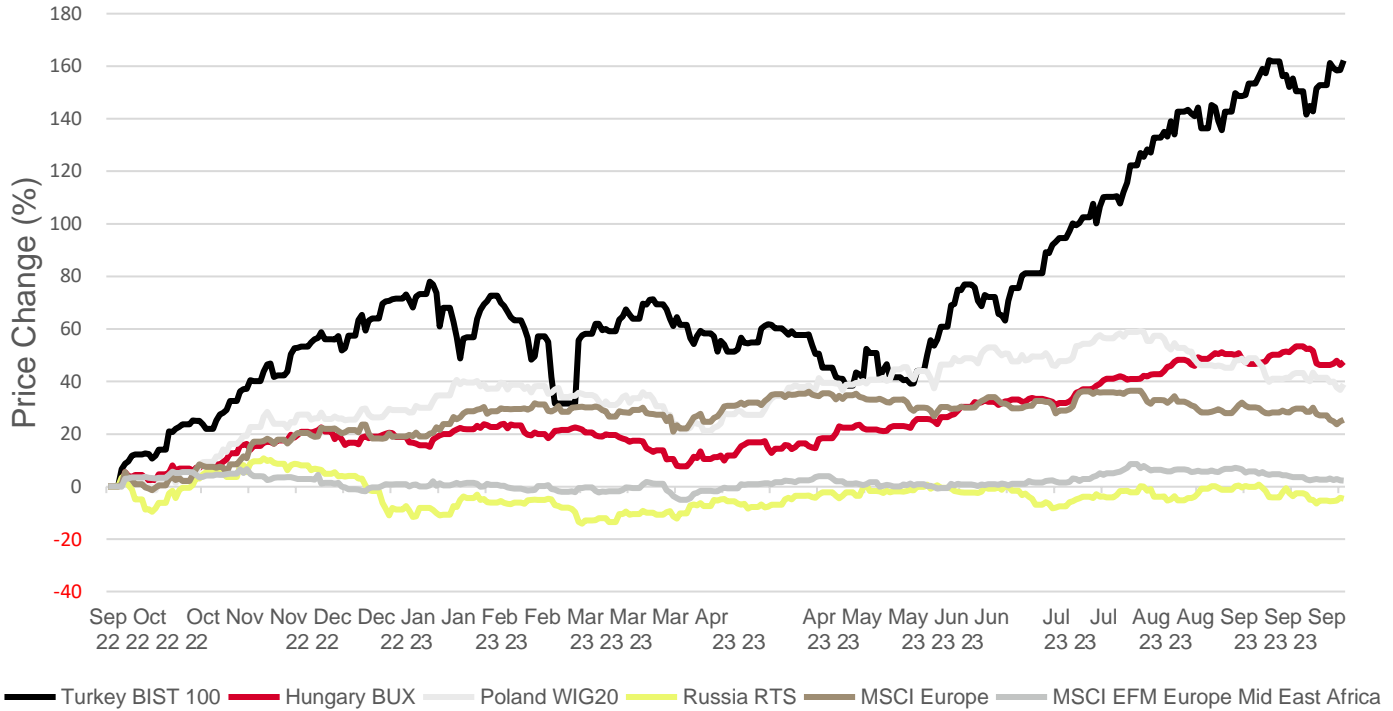
Acknowledgements: We express our gratitude to the S&P Global Issuer Solutions team and the TÜYİD Turkish IR Society.

Disclaimer: The evaluations and the information in the Report, where you can find significant statistics about the stock exchange, are prepared based on S&P Global's database. Investment information, comment and advices are not in the enclosure of investment consultancy and do not comprise information for buying and selling decisions in the capital markets. The data and the information in the Report cannot be guaranteed to be correct; the content can be changed without announcing. All the data are taken from the sources thought to be reliable. The data used in this report is sourced from publicly disclosed portfolios/information and due to the reporting periods, there may be discrepancies (data sources used in this report include, but are not limited to, FactSet, Morningstar, SEC filings (13Fs etc.) and news sources). S&P Global and TÜYİD cannot be taken responsible for the problems that might emerge out of using these sources.

FLOW OF FUNDS REPORT: TUYID Q3-2023

Price performance:

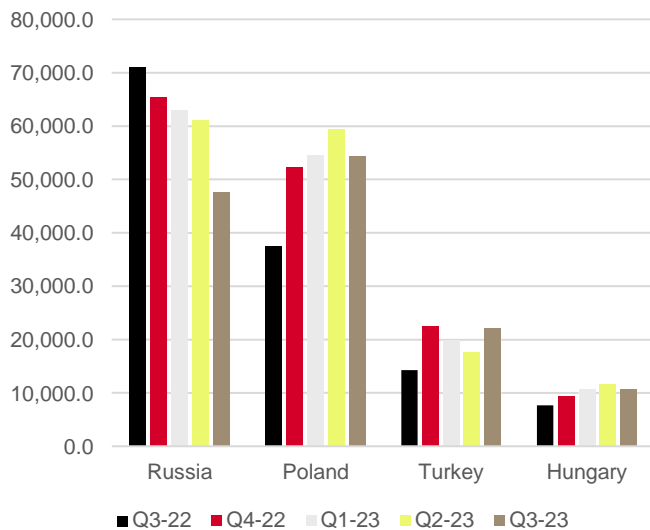
Turkey's strong performance continued in the third quarter of 2023, ending September up 162.1%. The BIST remains the strongest performer of the peer group, with the Hungary BUX (+47.6%) being the best performer after Turkey. The Poland WIG continued to trend upwards (+39.0%). The Russian RTS (-4.6%) 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.



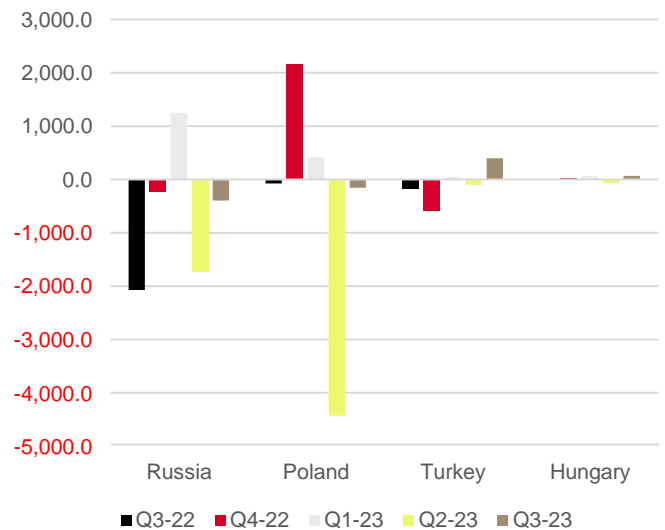
Inflows and Outflows:

Aggregate net outflows were experienced across the below markets, with Russia, once again seeing the largest outflows (-\$393.7M). Turkey received the largest inflows (+\$395.9M). The Active inflows in Turkey were driven by **RWC Asset Advisors (US), LLC, J.P. Morgan Asset Management (UK), LTD & Origin Asset Management, LLP.**

Institutional Investment in Region (\$M)



Institutional Investment in Region (\$M Chg)

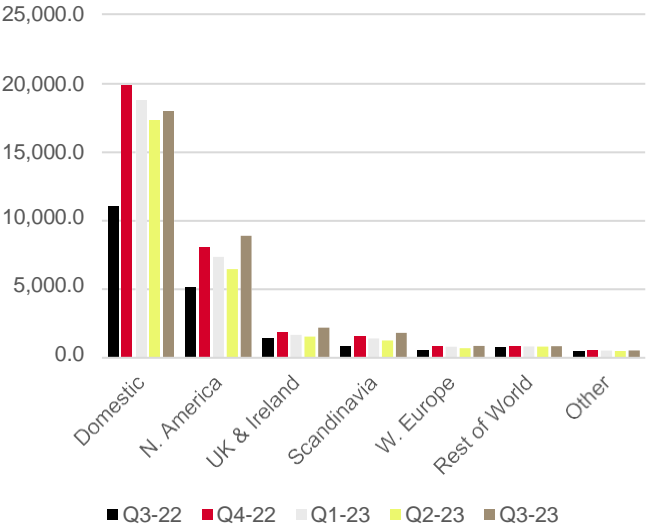


FLOW OF FUNDS REPORT: TUYID Q3-2023

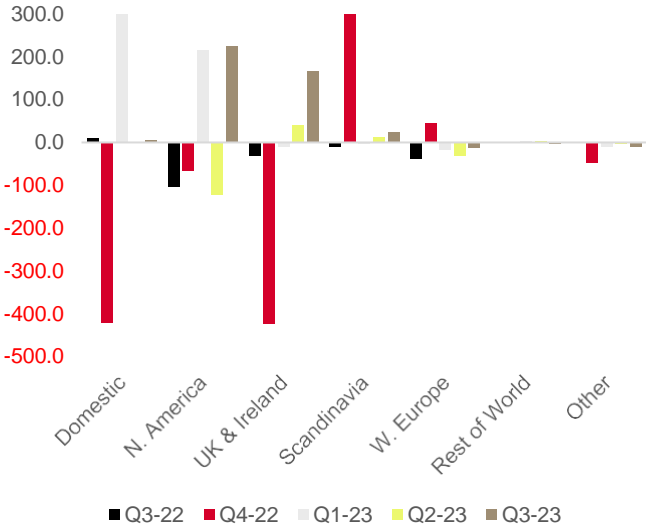
Investment by Investor Region:

The net inflows (+\$395.9M) in the Turkish market are broken down by geographic regions below. North American investors (+\$225.9) 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 (\$17,974.8M), followed by North America (\$8909.1M).

Institutional Investment by Region (\$M)



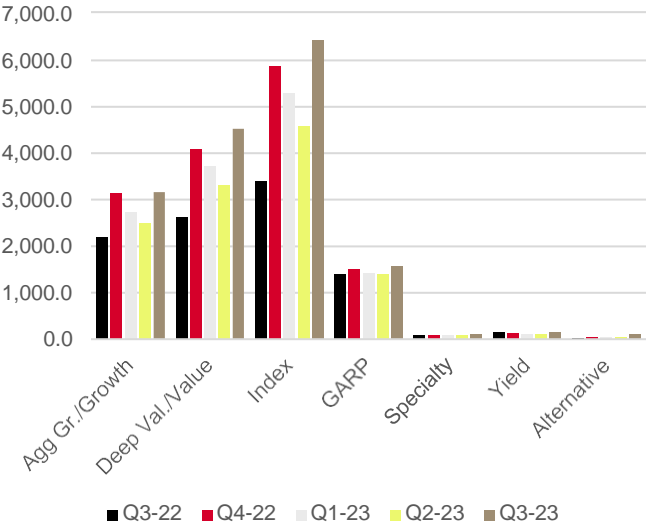
Institutional Investment by Region (\$M Chg)



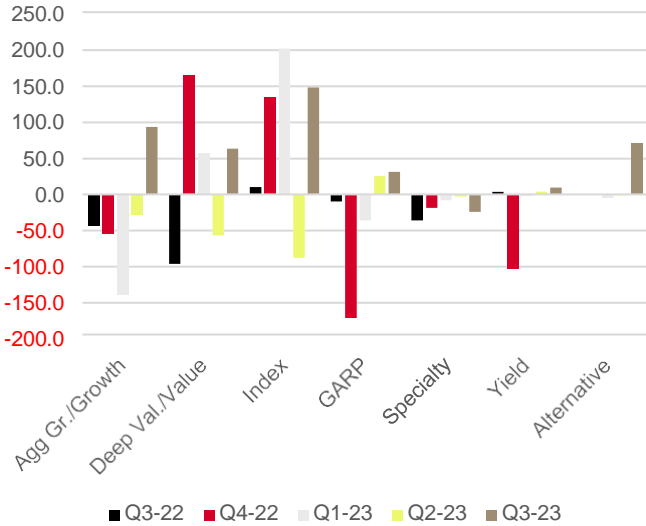
Investment by Style:

Active investors contributed meaningfully over the quarter with Agg Gr./Growth being the largest active contributors (+\$93.8M). Index investors continue to be the largest investor in the Turkish market (\$6,434.1M), followed by Deep Value/Value (\$4,529.4M). Specialty investors were the largest detractors over the quarter (-\$24.3M), driven by **U.S. Global Investors, Inc. (Asset Management) & Ashmore Investment Management, LTD.**

Institutional Investment by Style (\$M)



Institutional Investment by Style(\$M Chg)



FLOW OF FUNDS REPORT: TUYID Q3-2023

Top Active Holders, Buyers & Sellers

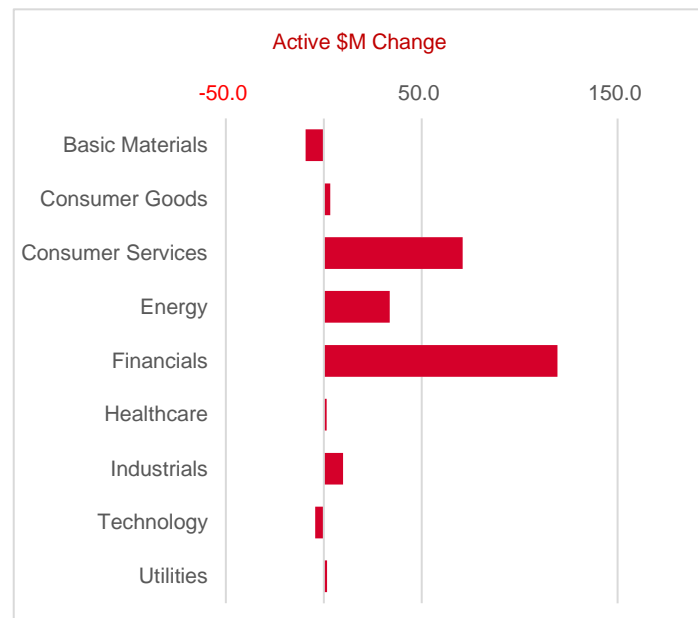
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Norges Bank Investment Management (Norway)	Norway	Value	Low	884,497.8	1,411.3	0.0	0.2	0.0
abrdn Australia, LTD	Australia	GARP	High	n/a	739.3	0.0	n/a	0.0
GQG Partners, LLC	United States	Growth	High	82,728.0	294.3	1.6	0.4	0.6
California Public Employees Retirement System	United States	Growth	Low	120,507.9	169.7	0.0	0.1	0.0
CPP Investment Board	Canada	Growth	Low	123,125.2	168.3	0.0	0.1	0.0
Capital Research & Management Company (U.S.)	United States	Value	Low	152,898.3	144.7	0.0	0.1	0.0
Schroder Investment Management, LTD	United Kingdom	GARP	Low	148,416.8	137.8	2.7	0.1	2.0
Mellon Investments Corporation	United States	Yield	Low	206,108.9	114.0	8.1	0.1	7.6
Caisse de dépôt et placement du Québec	Canada	Value	Medium	81,605.0	112.9	0.0	0.1	0.0
GIC Asset Management Pte., LTD	Singapore	Value	Low	32,400.1	107.5	0.0	0.3	0.0
					3,399.9	12.4		

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
RWC Asset Advisors (US), LLC	United States	Alternative	High	2,774.5	70.5	70.5	2.5	Buy-in
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Low	114,124.5	71.6	69.2	0.1	2,848.0
Origin Asset Management, LLP	United Kingdom	Value	High	2,977.3	77.8	38.9	2.6	99.8
East Capital Asset Management AB	Sweden	GARP	Medium	1,092.8	69.2	24.1	6.3	53.3
Chickasaw Capital Management, LLC	United States	Growth	Low	2,234.8	23.8	23.8	1.1	Buy-in
Columbia Threadneedle Investments (U.S.)	United States	Value	Low	284,822.5	23.4	20.8	0.0	813.2
Thornburg Investment Management, Inc.	United States	GARP	Low	16,215.8	48.3	20.3	0.3	72.5
Robeco Institutional Asset Management BV	Netherlands	Value	Medium	54,088.2	98.8	15.2	0.2	18.2
Driehaus Capital Management, LLC	United States	Agg. Growth	Very High	11,699.3	47.3	14.6	0.4	44.4
T. Rowe Price International, LTD	United Kingdom	Growth	Low	75,903.6	15.6	11.1	0.0	246.9
					546.4	308.4		

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Raiffeisen Kapitalanlage-Gesellschaft m.b.H.	Austria	GARP	Low	9,435.9	0.3	-26.7	0.0	-99.1
U.S. Global Investors, Inc. (Asset Management)	United States	Specialty	Medium	1,658.6	35.1	-23.2	2.1	-39.8
Capital World Investors (U.S.)	United States	Value	Low	728,259.8	13.7	-16.1	0.0	-54.0
MFS Investment Management	United States	Value	Low	338,415.7	22.4	-15.1	0.0	-40.3
MFS International, LTD (Singapore)	Singapore	Growth	Low	6,999.0	25.0	-14.8	0.4	-37.1
Grantham Mayo Van Otterloo & Company, LLC	United States	Value	Medium	29,483.5	54.2	-8.6	0.2	-13.7
Nordea Investment Management AB (Denmark)	Denmark	Value	Low	102,016.7	33.3	-8.3	0.0	-19.9
J.P. Morgan Investment Management, Inc.	United States	Growth	Low	530,738.4	34.8	-5.7	0.0	-14.1
T. Rowe Price Associates, Inc.	United States	Growth	Low	689,679.0	0.8	-5.7	0.0	-88.3
Erste Asset Management GmbH	Austria	Growth	Low	8,184.6	36.9	-5.6	0.5	-13.2
					256.4	-129.8		

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 Q3-2023

Top Passive Holders, Buyers & Sellers

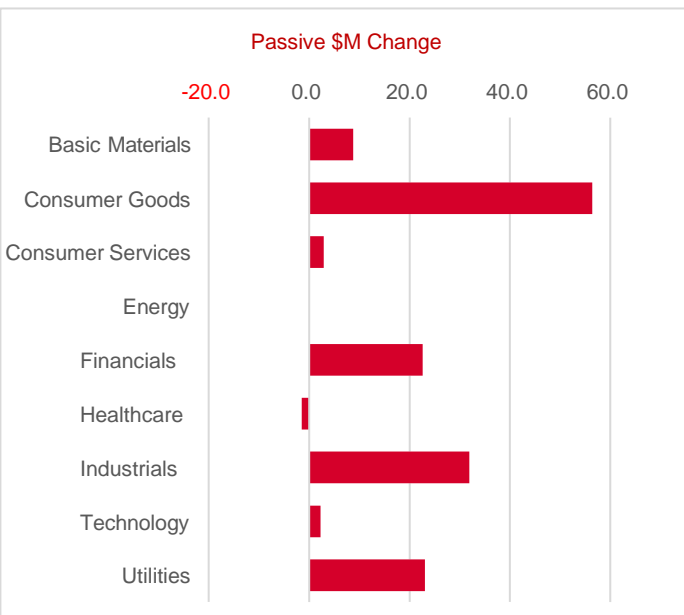
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	4,853,781.7	2,898.5	105.1	0.1	3.8
BlackRock Fund Advisors	United States	Index	Low	2,834,979.6	1,373.4	2.9	0.0	0.2
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	446,030.4	842.2	31.3	0.2	3.9
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	253,658.0	572.9	19.3	0.2	3.5
Geode Capital Management, LLC	United States	Index	Low	967,985.4	238.0	11.0	0.0	4.8
Charles Schwab Investment Management, Inc.	United States	Index	Low	426,624.9	200.2	-11.7	0.0	-5.5
State Street Global Advisors (SSgA)	United States	Index	Low	1,896,255.5	159.9	14.9	0.0	10.3
First Trust Advisors, L.P.	United States	Index	Medium	92,920.5	127.7	-1.8	0.1	-1.4
Acadian Asset Management, LLC	United States	Deep Value	Medium	32,153.0	107.2	-9.9	0.3	-8.5
State Street Global Advisors, LTD	United Kingdom	Index	Low	97,972.7	100.8	6.5	0.1	6.9
				6,620.7	167.5			

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	4,853,781.7	2,898.5	105.1	0.1	3.8
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Geode Capital Management, LLC	United States	Index	Low	967,985.4	238.0	11.0	0.0	4.8
State Street Global Advisors, LTD	United Kingdom	Index	Low	97,972.7	100.8	6.5	0.1	6.9
Legal & General Investment Management, LTD	United Kingdom	Index	Low	344,336.4	94.6	4.9	0.0	5.5
Man Numeric Investors, LLC	United States	Alternative	Very High	21,114.3	7.3	4.0	0.0	122.1
UBS Asset Management (U.K.), LTD	United Kingdom	Index	Low	124,783.3	36.6	3.4	0.0	10.4
BlackRock Fund Advisors	United States	Index	Low	2,834,979.6	1,373.4	2.9	0.0	0.2
				6,324.1	203.3			

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Charles Schwab Investment Management, Inc.	United States	Index	Low	426,624.9	200.2	-11.7	0.0	-5.5
Acadian Asset Management, LLC	United States	Deep Value	Medium	32,153.0	107.2	-9.9	0.3	-8.5
Arrowstreet Capital, L.P.	United States	Deep Value	High	86,238.8	75.4	-7.5	0.1	-9.1
Van Eck Associates Corporation	United States	Index	Low	53,098.8	92.8	-4.6	0.2	-4.8
Cambria Investment Management, L.P.	United States	Index	High	1,762.0	10.6	-3.1	0.6	-22.8
PGIM Quantitative Solutions, LLC	United States	Index	Medium	57,975.0	13.6	-3.0	0.0	-18.0
Invesco Capital Management, LLC	United States	Index	Low	371,564.1	26.4	-2.5	0.0	-8.8
First Trust Advisors, L.P.	United States	Index	Medium	92,920.5	127.7	-1.8	0.1	-1.4
O'Shaughnessy Asset Management, LLC	United States	GARP	Medium	7,052.0	8.8	-1.0	0.1	-10.4
Renaissance Technologies, LLC	United States	Alternative	Very High	58,180.8	1.1	-0.8	0.0	-41.8
				663.7	-46.1			

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 Q3-2023

Road show:

Outside of Turkey, Oslo (Norway) is the largest invested city (\$1,433.4M), closely followed by London (United Kingdom) (\$1,167.0M). In terms of number of investors per city, London continues to lead the ranking with 93 investors, followed by New York (36) and Istanbul (19).

Most Invested

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
Norway (Oslo)	938,021.2	1,433.4	-2.1	3
United Kingdom (London)	2,409,215.9	1,167.0	131.1	93
Turkey (Istanbul)	1,026.7	935.3	5.8	18
Australia (Sydney)	27,158.6	745.8	-0.2	6
United States (Boston)	2,948,655.8	329.4	5.1	13
United States (Fort Lauderdale)	86,274.5	294.7	1.6	3
United States (New York)	2,379,541.0	286.9	1.9	36
Sweden (Stockholm)	258,676.2	243.7	30.8	8
Germany (Frankfurt)	399,876.0	207.7	-0.4	12
Singapore (Singapore)	98,772.2	200.9	-14.7	10
United States (Los Angeles)	933,494.3	195.8	-14.8	6
Canada (Toronto)	539,031.3	180.6	-1.7	8
United States (Sacramento)	120,507.9	169.7	0.0	1
Switzerland (Zürich)	378,777.3	132.8	-1.7	13
Canada (Montreal)	87,535.2	131.3	-0.0	3
Japan (Tokyo)	1,057,334.9	122.6	-2.8	12
Netherlands (Rotterdam)	74,247.0	109.9	14.9	2
United States (Kansas City)	156,454.6	89.9	3.1	2
Poland (Warsaw)	16,305.5	79.7	4.2	10
Belgium (Brussels)	90,389.2	71.9	9.7	6
Excludes Passive/Index Investors		7,128.9	169.9	265

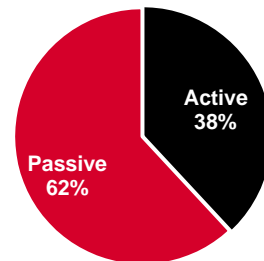
Most Investors

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Switzerland (Zürich)	378,777.3	132.8	-1.7	13
Germany (Frankfurt)	399,876.0	207.7	-0.4	12
Japan (Tokyo)	1,057,334.9	122.6	-2.8	12
Singapore (Singapore)	98,772.2	200.9	-14.7	10
Poland (Warsaw)	16,305.5	79.7	4.2	10
France (Paris)	321,223.4	58.6	1.2	10
Finland (Helsinki)	29,320.2	39.9	-0.2	10
South Korea (Seoul)	47,206.1	6.8	0.0	9
Sweden (Stockholm)	258,676.2	243.7	30.8	8
Canada (Toronto)	539,031.3	180.6	-1.7	8
United States (Chicago)	207,619.6	56.5	14.4	8
Taiwan (Taipei)	10,218.2	12.4	0.0	7
Australia (Sydney)	27,158.6	745.8	-0.2	6
United States (Los Angeles)	933,494.3	195.8	-14.8	6
Belgium (Brussels)	90,389.2	71.9	9.7	6
Denmark (Copenhagen)	135,927.4	54.4	-7.8	6
Excludes Passive/Index Investors		5,128.5	160.1	301

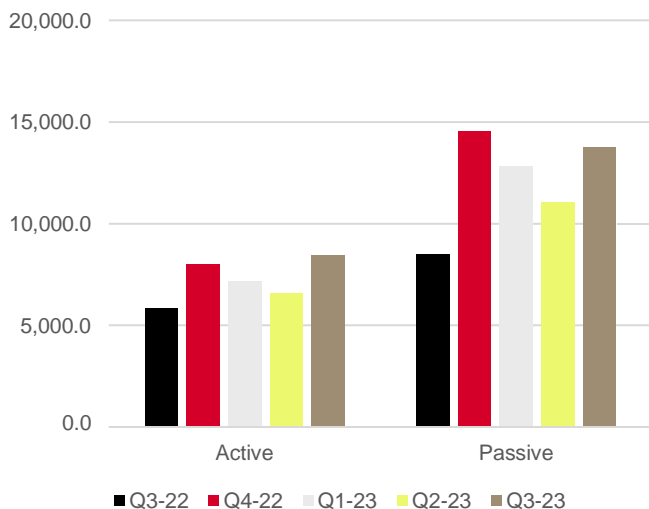
Active vs. Passive investors

Active investors contributed to inflows (+\$228.5). Despite an increase by Active investors, Passive investors continue to hold the bulk of the Turkish market (62%).

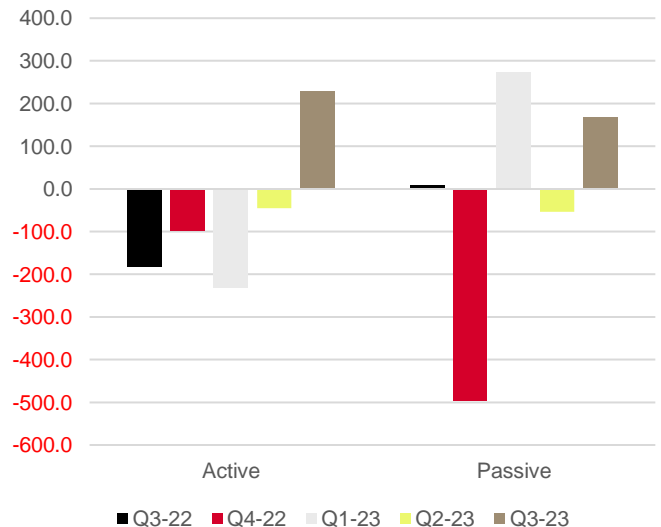
Active vs Passive Split



Active vs Passive (\$M)



Active vs Passive (\$M Chg)



FLOW OF FUNDS REPORT: TUYID Q3-2023

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	18,375.8	220.9	1.4	1.2	0.7
Goldman Sachs Asset Management International	United Kingdom	London	Very High	99,099.5	187.7	22.3	0.2	13.5
Pictet Asset Management, LTD	United Kingdom	London	High	7,989.0	121.2	2.3	1.5	2.0
TIAA-CREF Investment Management, LLC	United States	New York	Very High	200,109.3	98.3	0.0	0.0	0.0
Ninety One UK, LTD	United Kingdom	London	High	11,878.3	80.3	3.3	0.7	4.2
BlackRock Advisors (U.K.), LTD	United Kingdom	London	Low	241,317.2	57.9	-5.4	0.0	-8.5
Bank Julius Baer & Co. AG	Switzerland	Zürich	Low	5,056.0	49.1	1.1	1.0	2.3
Vontobel Asset Management AG (Switzerland)	Switzerland	Zürich	Low	11,340.4	44.0	-3.6	0.4	-7.6
Loomis Sayles & Company, L.P.	United States	Boston	Medium	65,539.0	43.8	0.2	0.1	0.6
abrdn Investment Management, LTD	United Kingdom	London	High	70,369.9	42.6	8.0	0.1	22.9
					945.9	29.6		

TOP BUYERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Goldman Sachs Asset Management International	United Kingdom	London	Very High	99,099.5	187.7	22.3	0.2	13.5
AllianceBernstein, L.P. (U.S.)	United States	Nashville	Low	177,238.7	30.8	11.9	0.0	63.0
Danske Bank Asset Management (Denmark)	Denmark	Kongens Lyngby	Medium	16,820.3	15.8	10.9	0.1	219.3
Muzinich & Co., LTD (London)	United Kingdom	London	Very High	13,732.4	22.2	9.9	0.2	80.8
abrdn Investment Management, LTD	United Kingdom	London	High	70,369.9	42.6	8.0	0.1	22.9
Aquila Asset Management AG	Switzerland	Zürich	Low	454.1	7.5	7.5	1.6	Buy-in
Baillie Gifford & Company, LTD	United Kingdom	Edinburgh	Low	7,391.5	15.0	6.3	0.2	72.0
RBC Global Asset Management (UK), LTD	United Kingdom	London	High	28,430.9	24.0	3.7	0.1	18.2
Mediolanum International Funds, LTD (Ireland)	Ireland	Dublin	Medium	2,893.3	4.2	3.6	0.1	639.9
Ninety One UK, LTD	United Kingdom	London	High	11,878.3	80.3	3.3	0.7	4.2
					430.1	87.2		

TOP SELLERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
CIGNA Investments, Inc.	United States	Bloomfield	Low	3,802.7	34.2	-35.3	0.9	-50.8
Invesco Advisers, Inc.	United States	Atlanta	High	172,894.2	2.0	-22.0	0.0	-91.6
Grantham Mayo Van Otterloo & Company, LLC	United States	Boston	Medium	8,258.7	0.6	-10.6	0.0	-95.0
Federated Investment Management Company	United States	Pittsburgh	Very High	306,764.8	11.2	-10.2	0.0	-47.7
AXA Investment Managers Paris S.A.	France	Puteaux	Medium	26,215.1	6.1	-8.8	0.0	-59.3
T. Rowe Price Associates, Inc.	United States	Baltimore	Very High	149,133.9	9.7	-7.3	0.0	-42.9
Towarzystwo Funduszy Inwestycyjnych PZU S.A.	Poland	Warsaw	Medium	2,830.4	23.5	-6.3	0.8	-21.1
Bank of Singapore, LTD	Singapore	Singapore	Low	380.9	8.8	-6.1	2.3	-41.0
BlackRock Investment Management (U.K.), LTD	United Kingdom	London	Very High	114,997.8	8.6	-6.0	0.0	-40.9
BlackRock Advisors (U.K.), LTD	United Kingdom	London	Low	241,317.2	57.9	-5.4	0.0	-8.5
					162.5	-118.1		

Corporate Debt – City Analysis

Most Invested					Most Investors				
Country / City	Total FI Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms	Country / City	Total FI Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,182,677.3	1,008.7	50.1	48	United Kingdom (London)	1,182,677.3	1,008.7	50.1	48
United States (New York)	1,591,926.9	230.1	1.7	20	United States (New York)	1,591,926.9	230.1	1.7	20
Switzerland (Zürich)	254,166.3	172.6	5.7	14	Switzerland (Zürich)	254,166.3	172.6	5.7	14
United States (Boston)	1,726,012.2	153.2	-12.9	10	Italy (Milan)	133,473.8	47.9	1.7	11
Germany (Frankfurt)	168,653.6	81.9	-1.8	8	Spain (Madrid)	34,256.0	8.0	-0.7	11
France (Paris)	205,917.1	75.3	6.0	10	United States (Boston)	1,726,012.2	153.2	-12.9	10
Denmark (Copenhagen)	57,111.5	68.4	2.9	4	France (Paris)	205,917.1	75.3	6.0	10
Italy (Milan)	133,473.8	47.9	1.7	11	Germany (Frankfurt)	168,653.6	81.9	-1.8	8
United States (Chicago)	184,167.2	42.1	-0.2	5	Singapore (Singapore)	11,634.5	41.8	-6.5	8
Singapore (Singapore)	11,634.5	41.8	-6.5	8	Austria (Vienna)	25,770.5	38.3	3.2	8
United States (San Francisco)	670,863.3	38.7	-0.9	3	United States (Chicago)	184,167.2	42.1	-0.2	5
Austria (Vienna)	25,770.5	38.3	3.2	8	Germany (Munich)	22,006.4	22.3	-0.0	5
Italy (Basiglio Milano)	5,742.1	38.1	-0.0	1	Denmark (Copenhagen)	57,111.5	68.4	2.9	4
United States (Jersey City)	136,718.2	34.9	1.1	1	Hong Kong SAR (Central)	13,763.6	17.0	0.0	4
United States (Bloomfield)	3,802.7	34.2	-35.3	1	Ireland (Dublin)	27,281.8	7.0	3.7	4
United States (Charlotte)	324,937.4	31.7	-0.0	2	Switzerland (Lugano)	2,316.1	1.3	-0.0	4
United States (Nashville)	177,238.7	30.8	11.9	1	United States (San Francisco)	670,863.3	38.7	-0.9	3
Poland (Warsaw)	2,957.4	23.7	-6.3	2	Switzerland (Geneva)	24,268.7	17.8	3.1	3
Germany (Munich)	22,006.4	22.3	-0.0	5	Canada (Toronto)	4,336.9	7.5	0.2	3
Switzerland (Geneva)	24,268.7	17.8	3.1	3	Germany (Berlin)	3,689.8	4.6	1.1	3
		2,232.7	23.5	165			2,084.8	56.4	186

FLOW OF FUNDS REPORT: TUYID Q3-2023

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.

FLOW OF FUNDS REPORT: TUYID Q3-2023

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.