







April 2022

Dear Readers,

We are happy to present the Flow of Funds Report for the first quarter of 2022. 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 continued its strong performance from Q4 21, ending Q1 22 up 56.6% over the year. The BIST continued to pull away from its peers over the quarter, with Poland being the best performer after Turkey (+9.1%). It comes as no surprise that the Russia RTS ended the quarter down -29.9% after trading was suspended for some time. The Russia RTS experienced a sharp recovery towards the end of March 22, when trading resumed.

Net outflows were witnessed during the quarter with Russia experiencing the largest outflows. Following the invasion of Ukraine many investors withdrew capital from the Russian market, thus fueling the outflows. Capital World Investors, The Vanguard Group, Inc. TIAA-CREF Investment Management, LLC & Sands Capital Management, LLC were amongst the investors driving the outflows in the region.

Active investors were bearish across all sectors within the Turkish Market with the Financials sector being hit the hardest (-\$109.5M). Overall net outflows of -\$306.5M came from Active investors while Passive investors followed the opposite trend, contributing +\$20.1M. Passive investors favored the Basic Materials sector over the guarter (+\$25.5M).

The orientation remains skewed towards Passive investors, with 64% of Turkish funds being held by Passive investors. Index investors continued to rank as the largest investor in the Turkish market by investment style (\$3048.7M). Agg Gr/Growth investors were once again the biggest detractors for the quarter (-\$187.0M). **Invesco Advisers, Inc.** drove outflows by Growth investors (-\$96.4M).

London remains the top invested city, despite outflows amounting to (-\$117.6M) which were mainly attributable to the selling activity of **Schroder Investment Management**, **LTD**. Istanbul jumps to the 4th largest city based on value invested (previously 5th).

In terms of numbers of investors per city, London drops by 2 and continues to lead the ranking with 66 investors, followed by New York (29) and Boston (12).

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

IHS Markit
Director, Shareholder Intelligence EMEA
Frederik Frank

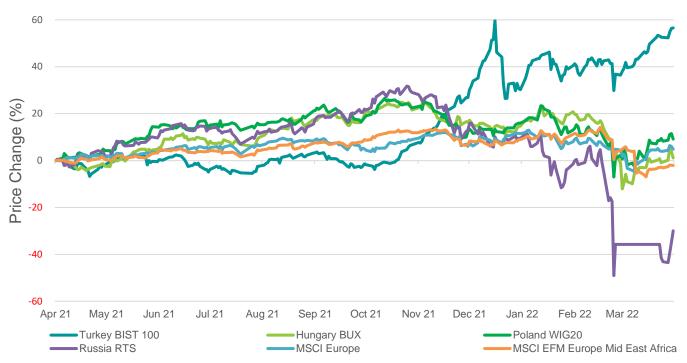
TÜYİD Turkish IR Society Chairperson Aslı Selçuk

Acknowledgements: We express our gratitude to the IHS Markit Issuer Solutions team and the TÜYİD Turkish IR Society.

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Price performance:

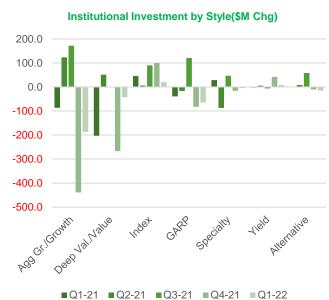
Turkey continued its strong performance from Q4 21, ending Q1 22 up 56.6% over the year. The BIST continued to pull away from its peers over the quarter, with Poland being the best performer after Turkey (+9.1%). It comes as no surprise that the Russia RTS ended the quarter down -29.9% after trading was suspended for some time. The Russia RTS experienced a sharp recovery towards the end of March 22, when trading resumed.



Inflows and Outflows:

Net outflows were witnessed during the quarter with Russia experiencing the largest outflows. Following the invasion of Ukraine many investors withdrew capital from the Russian market, thus fueling the outflows. Capital World Investors, The Vanguard Group, Inc. TIAA-CREF Investment Management, LLC & Sands Capital Management, LLC were amongst the investors driving the outflows in the region.





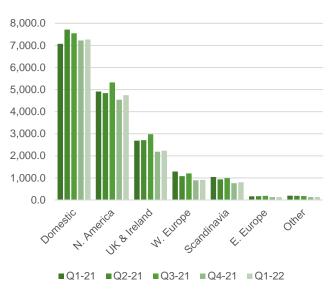




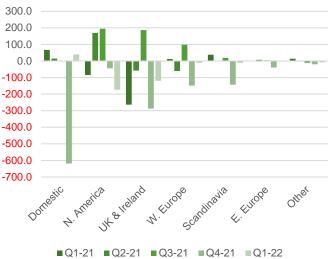
Investment by Investor Region:

The net inflows in the Turkish market are broken down by geographic regions below and were driven by Domestic investors, who detracted in the previous quarter. All other regions contributed negatively, with North America being the largest detractor (-\$171.7M) Invesco Advisers, Inc., was the largest seller in the North American region. Overall net outflows were witnessed across all regions, amounting to (-\$294.3M).

Institutional Investment by Region (\$M)

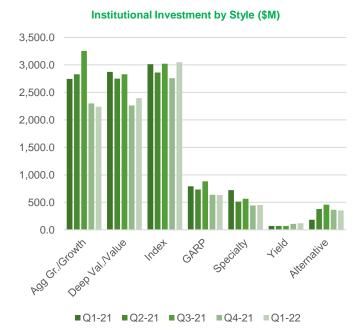


Institutional Investment by Region (\$M Chg)



Investment by Style:

Index and Yield investors were the only two groups to contribute to inflows, with all other investment styles detracting. Index investors continue to be the largest investor in the Turkish market (\$3048.7M), followed by Deep Value/Value (\$2394.5M). Mellon **Investments Corporation**, drove the inflows by Yield investors (+\$7.7M)







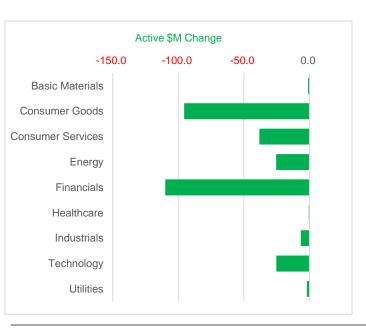
Top Active Holders, Buyers & Sellers

				Equity Assets	Value			% Portfolio
TOP HOLDERS	Country	Style	Turnover	(\$M)	(\$M) Cha	ange (\$M)	% Portfolio	Chg
Norges Bank Investment Management (Norway)	Norway	Value	Low	966,606.2	516.5	0.0	0.1	0.0
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	166,204.6	253.3	-49.2	0.2	-16.3
APG Asset Management N.V.	Netherlands	Specialty	Low	163,002.3	179.5	0.0	0.1	0.0
Silchester International Investors, LLP	United Kingdom	Value	Low	22,335.1	170.6	0.0	0.8	0.0
California Public Employees Retirement System	United States	Growth	Low	133,305.5	169.7	0.0	0.1	0.0
Helikon Investments, LTD (United Kingdom)	United Kingdom	Alternative	Low	1,104.0	169.5	0.0	15.4	0.0
RBC Global Asset Management (UK), LTD	United Kingdom	Growth	Medium	51,030.5	134.0	2.5	0.3	1.9
Ninety-One UK, LTD	United Kingdom	Growth	Low	59,347.2	121.9	-0.3	0.2	-0.3
Mellon Investments Corporation	United States	Yield	Low	241,839.1	114.1	7.7	0.0	7.3
Kairos Investment Management, LTD	United Kingdom	Alternative	Low	125.9	89.3	0.0	71.0	0.0
					1.918.5	-39.2		

				Equity Assets	Value			% Portfolio
TOP BUYERS	Country	Style	Turnover	(\$M)	(\$M) Cha	inge (\$M)	% Portfolio	Chg
Capital Research Global Investors (U.S.)	United States	GARP	Low	538,740.0	81.9	14.4	0.0	21.3
Mellon Investments Corporation	United States	Yield	Low	241,839.1	114.1	7.7	0.0	7.3
Causeway Capital Management, LLC	United States	Value	Medium	16,835.8	12.2	7.2	0.1	146.7
Hosking Partners, LLP	United Kingdom	Value	Low	4,870.0	29.1	6.8	0.6	30.5
Wellington Management Company, LLP	United States	Value	Low	644,628.4	50.4	5.6	0.0	12.5
Victory Capital Management, Inc.	United States	GARP	Medium	113,874.8	23.7	4.2	0.0	21.8
Brandes Investment Partners, L.P.	United States	Deep Value	Low	9,661.9	12.7	3.4	0.1	35.9
Macquarie Investment Management	United States	Growth	Medium	109,869.3	29.7	2.9	0.0	10.8
RBC Global Asset Management (UK), LTD	United Kingdom	Growth	Medium	51,030.5	134.0	2.5	0.3	1.9
Mobius Capital Partners, LLP	United Kingdom	Value	Medium	368.9	15.6	2.2	4.2	16.4
					E02.2	E7 0		

				Equity Assets	Value			% Portfolio
TOP SELLERS	Country	Style	Turnover	(\$M)	(\$M) Cha	ange (\$M)	% Portfolio	Chg
Invesco Advisers, Inc.	United States	Growth	Low	296,394.6	74.4	-96.4	0.0	-56.5
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	166,204.6	253.3	-49.2	0.2	-16.3
Arrowstreet Capital, L.P.	United States	Deep Value	High	86,913.7	65.1	-38.4	0.1	-37.1
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Low	129,789.3	56.0	-38.2	0.0	-40.5
TIAA-CREF Investment Management, LLC	United States	Growth	Low	371,228.2	46.0	-20.4	0.0	-30.7
Baring Asset Management, LTD (U.K.)	United Kingdom	GARP	Medium	4,361.5	34.5	-19.7	0.8	-36.4
Goldman Sachs Asset Management International	United Kingdom	Growth	High	26,095.0	10.2	-17.7	0.0	-63.4
Goldman Sachs Asset Management, L.P. (U.S.)	United States	GARP	Medium	248,318.7	16.7	-12.3	0.0	-42.5
Nuveen Asset Management, LLC	United States	Value	Medium	35,237.5	0.0	-12.2	0.0	-100.0
Kayne Anderson Rudnick Investment Management, LLC	United States	Growth	Low	41,290.7	36.2	-11.8	0.1	-24.5
Includes Investors with EUM greater than \$100M; Excludes		592.4	-316.3					

Sector Inflows/Outflows



% Change in Active Investment vs 5 Previous Quarters





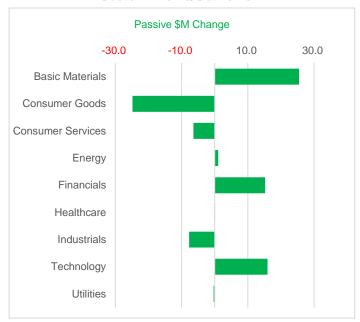
Top Passive Holders, Buyers & Sellers

TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	4,967,079.4	1,236.7	12.5	0.0	1.0
BlackRock Fund Advisors	United States	Index	Low	3,025,792.0	776.7	-15.0	0.0	-1.9
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	197,196.6	272.1	6.0	0.1	2.2
Charles Schwab Investment Management, Inc.	United States	Index	Low	396,825.5	124.4	3.9	0.0	3.2
Acadian Asset Management, LLC	United States	Deep Value	Medium	38,263.5	104.4	-0.9	0.3	-0.8
State Street Global Advisors (SSgA)	United States	Index	Low	2,106,858.9	85.9	-3.4	0.0	-3.9
Geode Capital Management, LLC	United States	Index	Low	928,345.5	81.9	4.7	0.0	6.1
Van Eck Associates Corporation	United States	Index	Medium	60,228.6	75.5	-6.6	0.1	-8.1
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	374,462.2	73.5	0.9	0.0	1.3
Parametric Portfolio Associates, LLC	United States	GARP	Low	192,822.2	67.5	3.5	0.0	5.5
					2,898.5	5.6		

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	4,967,079.4	1,236.7	12.5	0.0	1.0
Global X Management Company, LLC	United States	Index	Medium	42,018.4	19.0	9.3	0.0	95.9
Invesco Capital Management, LLC	United States	Index	Low	317,827.5	35.8	7.7	0.0	27.2
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	197,196.6	272.1	6.0	0.1	2.2
Geode Capital Management, LLC	United States	Index	Low	928,345.5	81.9	4.7	0.0	6.1
Charles Schwab Investment Management, Inc.	United States	Index	Low	396,825.5	124.4	3.9	0.0	3.2
Parametric Portfolio Associates, LLC	United States	GARP	Low	192,822.2	67.5	3.5	0.0	5.5
O'Shaughnessy Asset Management, LLC	United States	GARP	Medium	6,358.2	5.1	2.4	0.1	87.7
Cambria Investment Management, L.P.	United States	Index	Medium	1,059.6	17.1	1.8	1.6	11.7
DWS Investments UK, LTD	United Kingdom	Index	Medium	91,736.6	17.4	1.7	0.0	10.6

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
BlackRock Fund Advisors	United States	Index	Low	3,025,792.0	776.7	-15.0	0.0	-1.9
Van Eck Associates Corporation	United States	Index	Medium	60,228.6	75.5	-6.6	0.1	-8.1
State Street Global Advisors (SSgA)	United States	Index	Low	2,106,858.9	85.9	-3.4	0.0	-3.9
First Trust Advisors, L.P.	United States	Index	Medium	104,141.2	26.5	-3.2	0.0	-10.9
Northern Trust Global Investments, LTD	United Kingdom	Index	Low	84,178.8	20.1	-2.9	0.0	-12.7
Renaissance Technologies, LLC	United States	Alternative	Very High	85,254.1	0.0	-1.3	0.0	-100.0
Aperio Group, LLC	United States	Index	Low	46,283.7	2.5	-1.2	0.0	-33.4
TOBAM	France	Specialty	Medium	4,256.0	0.0	-1.0	0.0	-100.0
Renaissance Group, LLC	United States	Growth	Low	2,219.2	0.0	-0.9	0.0	-100.0
Acadian Asset Management, LLC	United States	Deep Value	Medium	38,263.5	104.4	-0.9	0.3	-0.8
Includes Investors with EUM greater than \$100M; Exclu		1,091.7	-36.5					

Sector Inflows/Outflows



% Change in Passive Investment vs 5 Previous **Quarters**

1,877.0

53.4







Road show:

London remains the top invested city, despite outflows amounting to (-\$117.6M) which were mainly attributable to the selling activity of Schroder Investment Management, LTD. Istanbul jumps to the 4th largest city based on value invested (previously 5th).

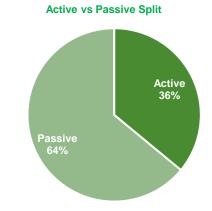
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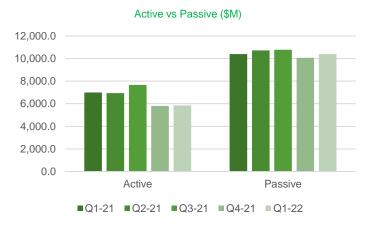
	Most Invested			
Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,282,389.1	1,688.2	-117.6	66
Norway (Oslo)	1,020,499.5	525.3	0.9	3
United States (Boston)	3,275,214.0	420.7	-31.8	12
Turkey (Istanbul)	415.6	391.9	39.7	8
United States (New York)	2,688,000.6	245.1	-35.3	29
Netherlands (Amsterdam)	166,566.9	181.2	0.0	4
United States (Sacramento)	133,305.5	169.7	0.0	1
Germany (Stuttgart)	5,276.9	150.8	0.0	1
United States (Los Angeles)	639,629.1	130.6	10.1	6
Sweden (Stockholm)	329,078.3	120.1	-10.7	8
United States (San Antonio)	117,757.2	100.4	-0.6	2
Netherlands (Rotterdam)	84,032.2	86.5	-1.4	2
Canada (Montreal)	105,923.1	85.1	-0.0	3
Denmark (Copenhagen)	143,855.0	84.9	-5.4	5
Austria (Vienna)	19,985.4	84.4	-1.9	5
Germany (Frankfurt)	427,038.3	79.2	0.1	7
United States (Atlanta)	341,398.3	79.0	-96.4	3
Switzerland (Zürich)	535,321.7	67.1	0.3	11
Netherlands (The Hague)	10,110.5	61.4	0.0	1
United States (Madison)	67,609.8	51.8	0.0	1
Excludes Passive/Index Investors		4,803.5	-249.7	178

	Most Investors			
Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,282,389.1	1,688.2	-117.6	66
United States (New York)	2,688,000.6	245.1	-35.3	29
United States (Boston)	3,275,214.0	420.7	-31.8	12
Switzerland (Zürich)	535,321.7	67.1	0.3	11
South Korea (Seoul)	51,094.3	18.8	-1.2	11
Poland (Warsaw)	18,204.9	50.9	-1.1	10
Finland (Helsinki)	31,081.8	37.4	0.9	10
Japan (Tokyo)	943,973.9	29.8	0.2	10
Turkey (Istanbul)	415.6	391.9	39.7	8
Sweden (Stockholm)	329,078.3	120.1	-10.7	8
Singapore (Singapore)	58,657.1	28.2	-6.7	8
Germany (Frankfurt)	427,038.3	79.2	0.1	7
France (Paris)	278,375.6	39.8	-8.0	7
Ireland (Dublin)	60,840.3	29.6	-3.0	7
Canada (Toronto)	354,872.3	11.8	-2.8	7
United States (Chicago)	290,090.1	8.3	-0.2	7
United States (Los Angeles)	639,629.1	130.6	10.1	6
Switzerland (Geneva)	7,744.9	8.1	-1.0	6
Denmark (Copenhagen)	143,855.0	84.9	-5.4	5
Austria (Vienna)	19,985.4	84.4	-1.9	5
Excludes Passive/Index Investors		3,574.7	-175.2	240

Active vs. Passive investors

Orientation continues to shift towards passive ownership (+3%). Active investors contributed to outflows (-\$306.5M) while passive were net contributors (+\$20.1M)













547.0

782.4

232.7

-297.4

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	22,045.3	306.2	-22.9	1.4	-7.0
Goldman Sachs Asset Management International	United Kingdom	London	Very High	101,583.8	257.7	-56.6	0.3	-18.0
Lord, Abbett & Co., LLC (Asset Management)	United States	Jersey City	High	165,829.1	188.8	-12.1	0.1	-6.0
Pictet Asset Management, LTD	United Kingdom	London	Medium	8,696.0	172.2	24.0	2.0	16.2
TIAA-CREF Investment Management, LLC	United States	New York	Very High	275,768.7	168.8	0.0	0.1	0.0
Ninety-One UK, LTD	United Kingdom	London	Medium	14,447.3	140.1	-9.5	1.0	-6.4
Eurizon Capital SGR S.p.A.	Italy	Milan	High	58,493.2	128.8	26.3	0.2	25.6
AIG Asset Management (U.S.), LLC	United States	New York	Low	180,323.9	93.7	0.0	0.1	0.0
Union Investment Privatfonds GmbH	Germany	Frankfurt	Low	51,872.3	89.6	-35.0	0.2	-28.1
abrdn Investment Management, LTD	United Kingdom	Aberdeen	Medium	83,344.8	79.1	-7.6	0.1	-8.7
					1 625 0	-03.4		

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	100,392.6	68.5	68.5	0.1	Buy-in
UBS Asset Management (Americas), Inc.	United States	New York	Medium	36,072.8	30.7	27.7	0.1	937.7
Eurizon Capital SGR S.p.A.	Italy	Milan	High	58,493.2	128.8	26.3	0.2	25.6
Pictet Asset Management, LTD	United Kingdom	London	Medium	8,696.0	172.2	24.0	2.0	16.2
AXA Investment Managers Paris S.A.	France	Puteaux	Medium	25,076.1	38.6	21.9	0.2	131.2
PGIM, LTD	United Kingdom	London	High	12,245.7	34.8	19.1	0.3	121.6
Nordea Investment Management AB (Denmark)	Denmark	Copenhagen	Medium	50,408.7	30.9	16.6	0.1	115.5
Bank Vontobel AG (Private Banking)	Switzerland	Zürich	High	7,209.8	19.9	11.6	0.3	139.8
Altshuler-Shaham Mutual Funds Management, LTD	Israel	Tel Aviv	Medium	5,863.5	11.0	11.0	0.2	Buy-in
StarCapital AG	Germany	Oberursel	Medium	278.4	11.6	6.0	4.2	107.0

TOP SELLERS Turnover FI Assets (\$M) (\$M) ge (\$M) Chg Goldman Sachs Asset Management International United Kingdom London Very High 101,583.8 257.7 -56.6 0.3 -18.0 AcomeA SGR S.p.A. Milan Medium -44.7 0.1 Italy 1,683.2 2.0 -95.8 Union Investment Privatfonds GmbH Frankfurt 51,872.3 89.6 -35.0 0.2 -28.1 Candriam (London) United Kingdom London High 987.7 0.0 -33.6 0.0 -100.0 Fidelity International Limited - FIL Investment Services (U.K.), LTD United Kingdom Tadworth Medium 39,037.0 7.2 -26.0 0.0 -78.4 Amundi (U.K.), LTD United Kingdom Medium 22,045.3 306.2 -22.9 1.4 -7.0 London Federated Investment Management Company United States Pittsburgh Very High 279,585.1 20.5 -21.2 0.0 -50.7 Candriam Belgium S.A. Belgium Brussels Medium 18,611.8 -20.4 0.0 -96.0 0.8 Edmond de Rothschild (Suisse) S.A. Switzerland Geneva Medium 755.5 34.1 -19.2 4.5 -36.0 Van Eck Associates Corporation 17,076.5 -17.8 -21.6 64.3

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)	1,118,909.7	1,499.5	-140.8	41	United Kingdom (London)	1,118,909.7	1,499.5	-140.8	41
United States (New York)	2,493,412.4	597.6	-2.3	29	United States (New York)	2,493,412.4	597.6	-2.3	29
United States (Boston)	1,621,308.2	258.5	-9.2	9	Switzerland (Zürich)	306,197.8	254.0	2.2	16
Switzerland (Zürich)	306,197.8	254.0	2.2	16	France (Paris)	286,031.9	115.9	-12.0	14
Italy (Milan)	111,631.8	213.7	-21.3	11	Spain (Madrid)	26,850.9	13.4	-1.3	14
Germany (Frankfurt)	229,018.4	211.6	-38.8	11	Italy (Milan)	111,631.8	213.7	-21.3	11
United States (Jersey City)	165,829.1	188.8	-12.1	1	Germany (Frankfurt)	229,018.4	211.6	-38.8	11
France (Paris)	286,031.9	115.9	-12.0	14	Singapore (Singapore)	39,563.0	93.0	-7.8	10
Singapore (Singapore)	39,563.0	93.0	-7.8	10	United States (Boston)	1,621,308.2	258.5	-9.2	9
United States (Charlotte)	176,913.1	74.4	-0.0	2	Austria (Vienna)	28,145.8	35.6	3.2	9
Denmark (Copenhagen)	79,608.4	72.8	17.8	5	Switzerland (Geneva)	30,172.4	49.0	-26.7	8
Poland (Warsaw)	7,632.5	71.3	6.0	5	Luxembourg (Luxembourg)	10,333.7	29.9	-1.6	7
United States (Austin)	100,392.6	68.5	68.5	1	Switzerland (Lugano)	3,544.5	28.5	0.0	7
Spain (Barcelona)	3,362.9	52.6	-0.5	3	Denmark (Copenhagen)	79,608.4	72.8	17.8	5
United States (Bloomfield)	5,661.0	51.8	3.9	1	Poland (Warsaw)	7,632.5	71.3	6.0	5
United States (Atlanta)	193,336.7	50.5	-1.9	2	Germany (Munich)	29,708.1	25.8	-1.2	5
Switzerland (Geneva)	30,172.4	49.0	-26.7	8	United States (Chicago)	37,447.9	17.0	-2.4	5
United States (Newport Beach)	956,314.2	46.8	0.0	2	Ireland (Dublin)	29,462.7	28.6	1.2	4
United States (Philadelphia)	65,329.5	45.1	-2.4	2	Finland (Helsinki)	16,178.6	14.1	-0.3	4
United States (San Francisco)	592,406.0	42.5	-8.2	3	Spain (Barcelona)	3,362.9	52.6	-0.5	3
		4,058.2	-185.6	176			3,682.6	-235.9	217





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.





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: (\(\sum \) All Shares Held Owned Over Period X 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: [(Σ All Shares Bought Over Period X End-of-Period Security Price)] - (Σ All Shares Sold Over Period X 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]]$

IHS Markit'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, IHS Markit 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 Q1-2021 can be considered a snapshot of the most current positions.