

FLOW OF FUNDS REPORT

TUYID Q1-2021

June 2021

Dear Readers,

We are happy to present the Flow of Funds Report for the first quarter of 2021. 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.

The BIST 100 index saw a (-6.9%) return during the first quarter of 2021, with the index experiencing a large decline in the latter stages of March 2021. Despite this, the BIST 100 saw a positive return of (+55.3%) on an annual basis, and in doing so outperformed its peers over the same period. The second-best performing index on an annual basis was the Russian RTS (+45.6%), followed by the MCSI EFM Europe EMEA (+37.1%). The Polish WIG20 performed the worst over the same period, returning (+28.2%).

Following the net inflow recorded in the final quarter of 2020, the Turkish market recorded a net outflow in the first quarter of 2021, with Capital World Investors U.S. being the largest seller in the region. Poland saw the largest net inflow, driven by J.P. Morgan Asset Management (UK), LTD, whilst Russia also experienced a net inflow, driven by BlackRock Fund Advisors.

The financials and basic materials sectors were the most sold amongst active investors, who in turn preferred the consumer services and technology sectors. The consumer goods sector was the most sold amongst passive investors, who in turn preferred the basic materials and industrials sectors. Notably, the financials sector (-\$166.1M) saw the largest total outflow, far exceeding the next in line consumer goods sector (-\$22.6M).

The orientation has once again marginally shifted towards passive investors, with 59% of Turkish funds being held by passive investors. Deep Value/Value investors remain the most prominent in the Turkish market, despite seeing the largest outflows on an investment-style basis (driven by Acadian Asset Management, LLC). Index and Growth investors are the second and third largest investors, respectively.

London remained the top invested city, despite experiencing the largest outflows (-\$152.0M), driven by BlackRock Investment Management (U.K.), LTD (-\$42.2M). Stockholm dropped to 10th in the rankings after the city experienced a (-\$44.4M) outflow of funds, driven by SEB Investment Management AB (-\$22.8M). Singapore meanwhile experienced an inflow of (+\$20.2M), with Eastspring Investments (Singapore), LTD driving the inflow. In terms of number of investors per city, London (67) leads the way, followed by New York (34) 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.

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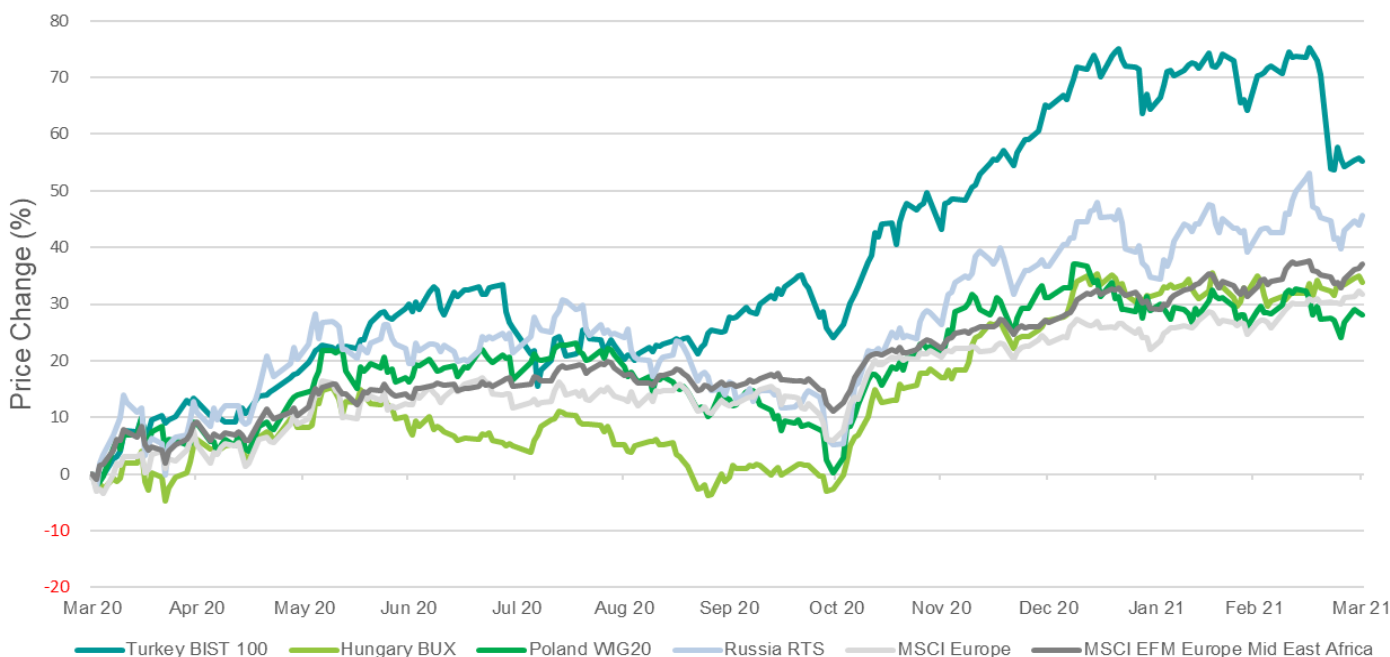
Acknowledgements: We express our gratitude to the IHS Markit Issuer Solutions team and the TÜYİD Turkish IR Society.

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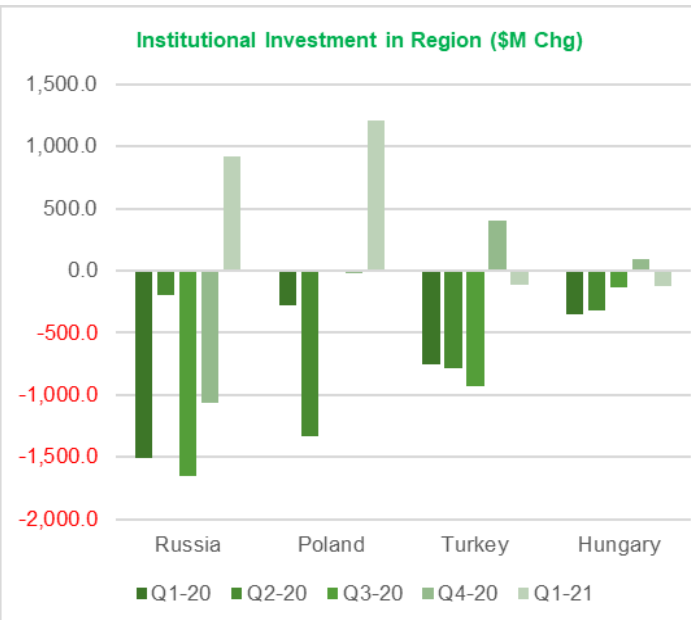
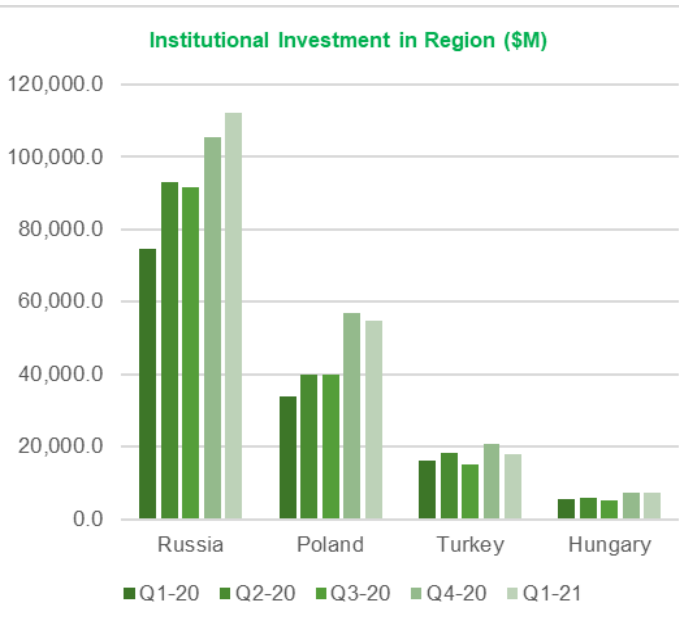
Price performance:

The BIST 100 index saw a (-6.9%) return during the first quarter of 2021, with the index experiencing a large decline in the latter stages of March 2021. Despite this, the BIST 100 saw a positive return of (+55.3%) on an annual basis, and in doing so outperformed its peers over the same period. The second-best performing index on an annual basis was the Russian RTS (+45.6%), followed by the MCSI EFM Europe EMEA (+37.1%). The Polish WIG20 performed the worst over the same period, returning (+28.2%).



Inflows and Outflows:

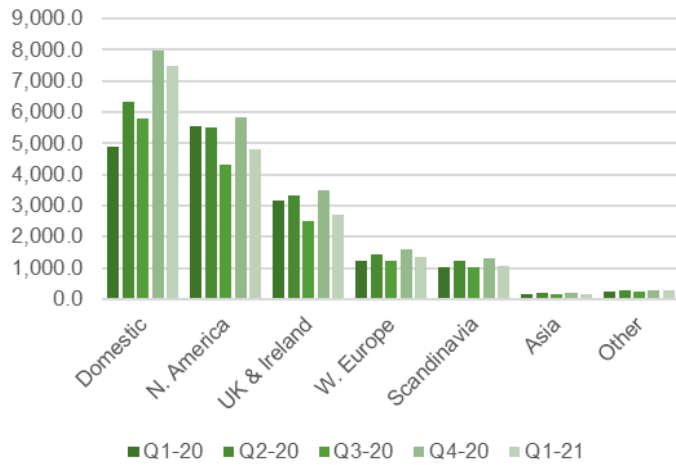
Poland and Russia each experienced net inflows in Q1-2021, driven by J.P. Morgan Asset Management (UK), LTD and BlackRock Fund Advisors, respectively. Lazard Asset Management, LLC (U.S.) was a primary driver of the net outflow seen in Hungary, whilst the net outflow in Turkey was driven by Capital World Investors (U.S.).



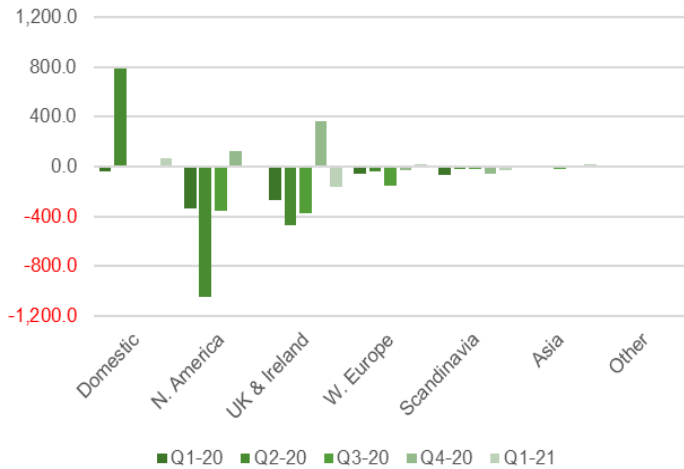
Investment by Investor Region:

The outflows in the Turkish market is broken down by geographic regions below and were driven primarily by UK & Ireland (-\$167.7M) and Scandinavian (-\$29.5M) investors. BlackRock Investment Management (U.K.), LTD was the largest seller in the former and SEB Investment Management AB was the largest seller in the latter. North America saw a marginal outflow of (-\$14.7M), driven by Capital World Investors (U.S.) whilst Western Europe accounted for a marginal inflow of (+\$19.6M), driven by AEGON Asset Management N.V. (Netherlands). Domestic investors supported the market during the quarter and as such accounted for a net inflow of (+\$68.3M).

Institutional Investment by Region (\$M)



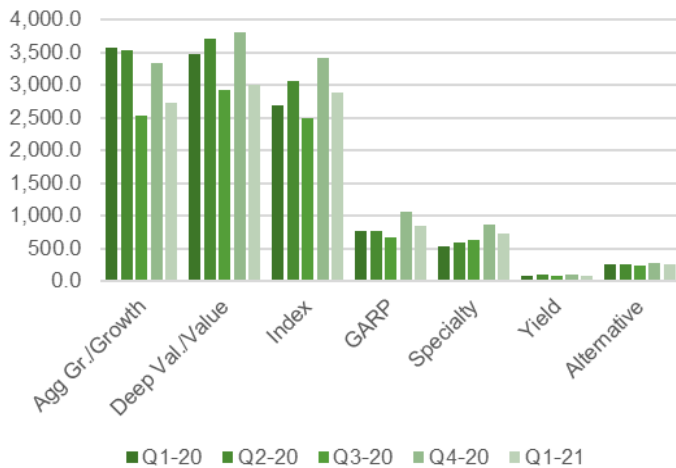
Institutional Investment by Region (\$M Chg)



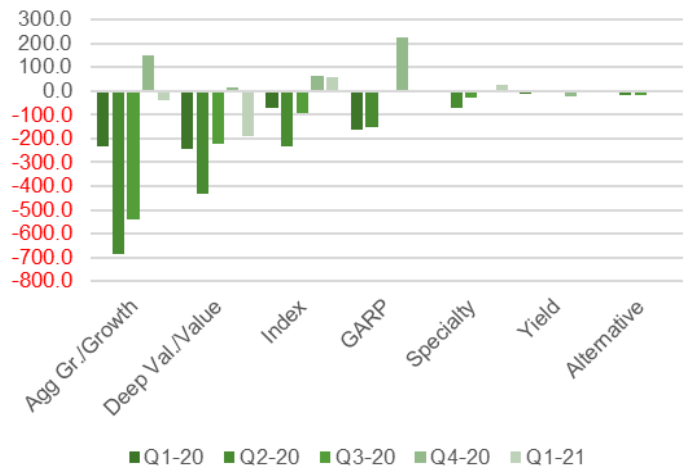
Investment by Style:

Deep Value/Value investors saw the largest outflows in the quarter, driven primarily by Acadian Asset Management, LLC. Despite this, Value-orientated investors remain the most prominent in the Turkish market, led by Norges Bank Investment Management (Norway). Index investors are the second-largest investors by style, led by The Vanguard Group, followed by Aggressive Growth/Growth investors.

Institutional Investment by Style (\$M)



Institutional Investment by Style (\$M Chg)





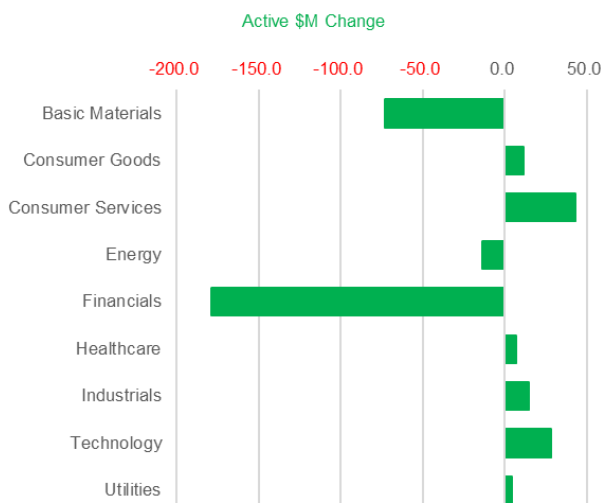
Top Active Holders, Buyers & Sellers

TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg	
Norges Bank Investment Management (Norway)	Norway	Value	Low	946,673.6	730.1	19.1	0.1	2.7	
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	148,221.5	333.9	-15.7	0.2	-4.5	
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	137,584.3	302.1	-28.2	0.2	-8.5	
APG Asset Management N.V.	Netherlands	Specialty	Medium	192,443.9	255.5	0.0	0.1	0.0	
Silchester International Investors, LLP	United Kingdom	Value	Low	24,117.6	195.5	0.0	0.8	0.0	
Invesco Advisers, Inc.	United States	Growth	Medium	322,388.4	192.3	-5.1	0.1	-2.6	
California Public Employees Retirement System	United States	Growth	Low	137,159.9	169.7	0.0	0.1	0.0	
Arrowstreet Capital, L.P.	United States	Deep Value	Very High	83,210.2	126.1	-7.8	0.2	-5.9	
Ninety One UK Limited	United Kingdom	Growth	Medium	58,442.0	119.8	3.4	0.2	2.9	
Robeco Institutional Asset Management BV	Netherlands	Value	Medium	69,887.6	114.2	-15.3	0.2	-11.8	
					2,539.2	-49.6			

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg	
U.S. Global Investors, Inc. (Asset Management)	United States	Specialty	Very High	4,465.2	96.0	31.3	2.2	48.4	
MFS Investment Management	United States	Value	Low	384,654.0	88.6	26.9	0.0	43.7	
Goldman Sachs Asset Management, L.P. (U.S.)	United States	GARP	Medium	207,015.3	58.1	26.6	0.0	84.6	
Eastspring Investments (Singapore), LTD	Singapore	Growth	High	22,164.4	49.5	20.1	0.2	68.2	
Norges Bank Investment Management (Norway)	Norway	Value	Low	946,673.6	730.1	19.1	0.1	2.7	
AEGON Asset Management N.V. (Netherlands)	Netherlands	Deep Value	High	8,931.6	37.3	18.0	0.4	93.6	
Capital Research Global Investors (U.S.)	United States	GARP	Medium	565,833.9	50.7	17.7	0.0	53.6	
Wellington Management Company, LLP	United States	Value	Medium	633,765.3	53.7	11.0	0.0	25.7	
Lemanik Asset Management S.A.	Luxembourg	Growth	Very High	726.1	23.8	10.8	3.3	84.0	
AllianceBernstein, L.P. (U.S.)	United States	Value	Low	251,325.2	41.4	9.5	0.0	29.5	
					1,229.2	191.1			

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg	
Capital World Investors (U.S.)	United States	Value	Low	854,514.4	0.0	-73.7	0.0	-100.0	
Grantham Mayo Van Otterloo & Co., LLC	United States	Value	Medium	33,050.0	56.2	-58.6	0.2	-51.1	
BlackRock Investment Management (U.K.), LTD	United Kingdom	Growth	Low	713,566.2	102.5	-42.2	0.0	-29.1	
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	137,584.3	302.1	-28.2	0.2	-8.5	
J O Hambro Capital Management, LTD	United Kingdom	Value	Medium	12,207.0	0.6	-24.9	0.0	-97.8	
SEB Investment Management AB	Sweden	Value	Medium	48,960.1	22.7	-22.8	0.0	-50.1	
Origin Asset Management, LLP	United Kingdom	Value	High	4,409.6	19.0	-17.8	0.4	-48.4	
Swedbank Robur Fonder AB	Sweden	Growth	Low	123,123.9	46.6	-17.3	0.0	-27.1	
Hermes Investment Management, LTD	United Kingdom	GARP	Medium	27,060.7	48.5	-16.5	0.2	-25.4	
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	148,221.5	333.9	-15.7	0.2	-4.5	
<i>Includes Investors with EUM greater than \$100M; Excludes Passive/Index Investors</i>					932.0	-317.6			

Sector Inflows/Outflows



% Change in Active Investment vs 5 Previous Quarters



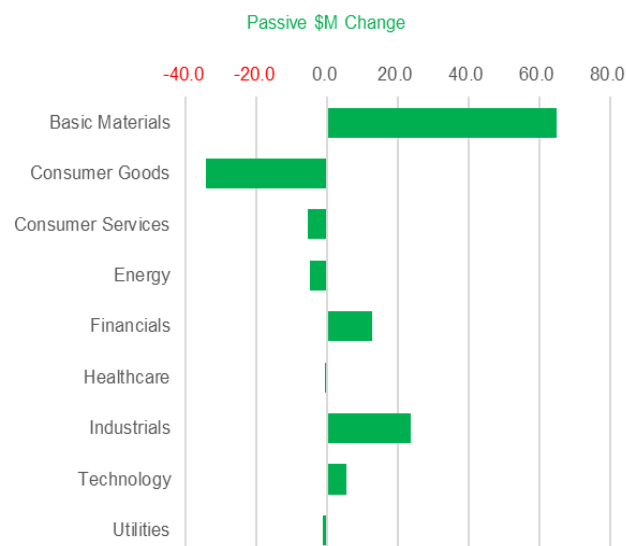
Top Passive Holders, Buyers & Sellers

TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg	
The Vanguard Group, Inc.	United States	Index	Low	4,433,010.3	1,242.8	18.0	0.0	1.5	
BlackRock Fund Advisors	United States	Index	Low	2,882,880.6	765.4	16.5	0.0	2.2	
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	208,297.0	262.9	15.6	0.1	6.3	
Acadian Asset Management, LLC	United States	Deep Value	Medium	40,167.2	175.0	-15.6	0.4	-8.2	
Charles Schwab Investment Management, Inc.	United States	Index	Low	337,501.3	94.5	5.3	0.0	5.9	
State Street Global Advisors (SSgA)	United States	Index	Low	1,823,232.9	80.2	9.7	0.0	13.8	
Geode Capital Management, LLC	United States	Index	Low	750,970.6	66.4	5.3	0.0	8.7	
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	355,445.4	64.9	-2.3	0.0	-3.4	
New York State Common Retirement Fund	United States	Index	Low	110,532.7	44.2	0.0	0.0	0.0	
Parametric Portfolio Associates, LLC	United States	GARP	Low	177,286.6	43.6	-6.5	0.0	-12.9	
					2,839.9	46.0			

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg	
The Vanguard Group, Inc.	United States	Index	Low	4,433,010.3	1,242.8	18.0	0.0	1.5	
BlackRock Fund Advisors	United States	Index	Low	2,882,880.6	765.4	16.5	0.0	2.2	
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	208,297.0	262.9	15.6	0.1	6.3	
State Street Global Advisors (SSgA)	United States	Index	Low	1,823,232.9	80.2	9.7	0.0	13.8	
Geode Capital Management, LLC	United States	Index	Low	750,970.6	66.4	5.3	0.0	8.7	
Charles Schwab Investment Management, Inc.	United States	Index	Low	337,501.3	94.5	5.3	0.0	5.9	
DWS Investments UK, LTD	United Kingdom	Index	High	81,567.4	16.0	4.2	0.0	35.2	
Legal & General Investment Management, LTD	United Kingdom	Index	Low	314,066.0	29.8	2.4	0.0	8.8	
Aperio Group, LLC	United States	Index	Low	36,967.2	6.5	1.7	0.0	34.8	
Avantis Investors	United States	Index	High	5,422.3	4.0	1.6	0.1	71.3	
					2,568.5	80.2			

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg	
Acadian Asset Management, LLC	United States	Deep Value	Medium	40,167.2	175.0	-15.6	0.4	-8.2	
State Street Global Advisors, LTD	United Kingdom	Index	Low	105,728.6	32.9	-13.4	0.0	-29.0	
Parametric Portfolio Associates, LLC	United States	GARP	Low	177,286.6	43.6	-6.5	0.0	-12.9	
Northern Trust Investments, Inc.	United States	Index	Low	501,914.6	18.7	-5.8	0.0	-23.6	
State Street Global Advisors France S.A.	France	Index	Low	19,261.9	20.0	-4.6	0.1	-18.9	
TOBAM	France	Specialty	High	5,276.5	29.7	-3.1	0.6	-9.5	
Stewart Investors (U.K.)	United Kingdom	Growth	Medium	1,433.3	34.8	-2.9	2.4	-7.6	
Invesco Capital Management, LLC	United States	Index	Low	292,794.2	24.4	-2.6	0.0	-9.5	
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	355,445.4	64.9	-2.3	0.0	-3.4	
Northern Trust Global Investments, LTD	United Kingdom	Index	Low	98,137.1	26.5	-1.2	0.0	-4.2	
<i>Includes Investors with EUM greater than \$100M; Excludes Active Investors</i>					470.5	-57.8			

Sector Inflows/Outflows



% Change in Passive Investment vs 5 Previous Quarters





Road show:

London remained the top invested city, despite experiencing the largest outflows (-\$152.0M), driven by BlackRock Investment Management (U.K.), LTD (-\$42.2M). Stockholm dropped to 10th in the rankings after the city experienced a (-\$44.4M) outflow of funds, driven by SEB Investment Management AB (-\$22.8M). Singapore meanwhile experienced an inflow of (+\$20.2M), with Eastspring Investments (Singapore), LTD driving the inflow. In terms of number of investors per city, London (67), leads the way, followed by New York (34), and Boston (12).

Most Invested

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,292,652.5	2,151.3	-152.0	67
Norway (Oslo)	997,012.7	737.6	16.1	3
United States (Boston)	3,148,164.6	413.6	-27.1	12
United States (New York)	2,809,949.2	336.2	11.4	34
Germany (Stuttgart)	5,697.2	271.9	0.0	1
Netherlands (Amsterdam)	196,010.7	257.8	-0.9	4
Turkey (Istanbul)	206.4	198.1	12.3	6
United States (Atlanta)	340,196.8	192.3	-5.1	2
United States (Sacramento)	137,159.9	169.7	0.0	1
Sweden (Stockholm)	357,007.5	149.6	-44.4	10
Germany (Frankfurt)	394,776.8	125.1	-3.9	8
United States (San Antonio)	108,351.0	116.1	32.9	2
Netherlands (Rotterdam)	69,887.6	114.2	-15.3	1
United States (San Francisco)	771,773.1	104.6	2.8	4
Singapore (Singapore)	74,858.0	87.1	20.2	11
Austria (Vienna)	16,136.7	84.7	-0.5	5
Denmark (Copenhagen)	127,781.3	82.7	-3.0	6
Canada (Montreal)	112,240.7	78.4	-0.0	3
United Kingdom (Edinburgh)	144,127.4	77.6	2.2	4
Switzerland (Zürich)	516,634.2	76.8	3.4	10
<i>Excludes Passive/Index Investors</i>		5,825.6	-150.9	194

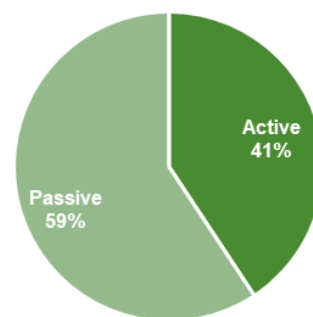
Most Investors

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,292,652.5	2,151.3	-152.0	67
United States (New York)	2,809,949.2	336.2	11.4	34
United States (Boston)	3,148,164.6	413.6	-27.1	12
Singapore (Singapore)	74,858.0	87.1	20.2	11
South Korea (Seoul)	44,143.1	3.7	0.3	11
Sweden (Stockholm)	357,007.5	149.6	-44.4	10
Switzerland (Zürich)	516,634.2	76.8	3.4	10
Poland (Warsaw)	15,304.3	63.7	-0.0	10
France (Paris)	357,258.1	48.4	-0.4	10
Japan (Tokyo)	1,065,291.5	47.5	1.7	10
United States (Chicago)	337,710.5	33.8	-4.0	10
Canada (Toronto)	530,888.1	29.4	-0.7	10
Finland (Helsinki)	29,574.6	37.6	-2.3	9
Germany (Frankfurt)	394,776.8	125.1	-3.9	8
Switzerland (Geneva)	8,206.5	37.0	15.5	7
Ireland (Dublin)	45,974.7	36.5	1.5	7
Turkey (Istanbul)	206.4	198.1	12.3	6
Denmark (Copenhagen)	127,781.3	82.7	-3.0	6
Italy (Milan)	69,213.2	72.2	-2.5	6
Taiwan (Taipei)	7,369.8	5.2	-0.0	6
<i>Excludes Passive/Index Investors</i>		4,035.6	-174.0	260

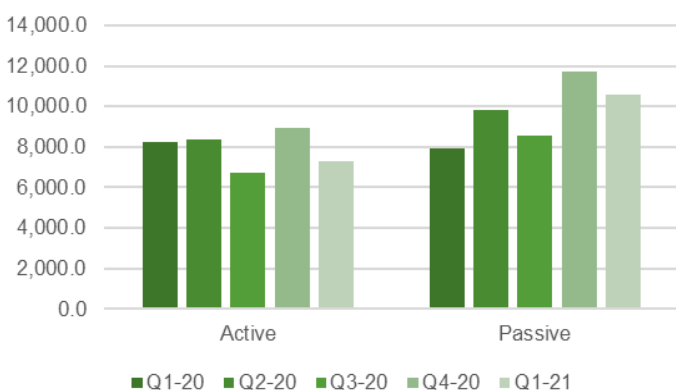
Active vs. Passive investors

Orientation shifted to a 59% Passive vs 41% Active split in Q1-2021, with Passive investors seeing a marginal inflow of funds.

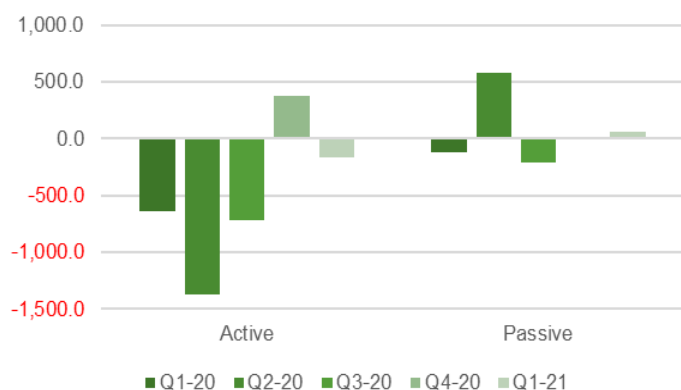
Active vs Passive Split



Active vs Passive (\$M)



Active vs Passive (\$M Chg)





Top Holders, Buyers & Sellers – Corporate Debt

TOP HOLDERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Goldman Sachs Asset Management International	United Kingdom	Zürich	Very High	140,978.7	357.4	1.4	0.3	0.4
Lord, Abnett & Co., LLC (Asset Management)	United States	Jersey City	High	160,523.7	279.3	-40.1	0.2	-12.5
TIAA-CREF Investment Management, LLC	United States	Zürich	Very High	299,215.3	202.4	-2.6	0.1	-1.3
Amundi Asset Management (U.K.)	United Kingdom	Zürich	High	12,147.0	201.4	20.2	1.7	11.1
Ninety One UK Limited	United Kingdom	Zürich	Medium	16,097.3	196.3	-1.3	1.2	-0.7
Pictet Asset Management, LTD	United Kingdom	Zürich	High	10,526.8	196.2	-10.0	1.9	-4.8
T. Rowe Price Associates, Inc.	United States	Zürich	Low	234,684.7	157.4	15.1	0.1	10.6
Ashmore Investment Management, LTD	United Kingdom	Zürich	High	23,153.7	139.2	10.9	0.6	8.5
Union Investment Privatfonds GmbH	Germany	Frankfurt	Low	57,640.7	137.8	14.3	0.2	11.6
AIG Asset Management (U.S.), LLC	United States	Zürich	Low	184,626.2	128.8	1.6	0.1	1.3
				1,996.2	9.6			

TOP BUYERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Muzinich & Co., LTD (London)	United Kingdom	London	Very High	19,336.8	100.7	68.5	0.5	212.8
Dimensional Fund Advisors, L.P. (U.S.)	United States	Austin	High	95,991.4	66.1	63.4	0.1	2,350.4
Fidelity International Limited - FIL Investment Services (U.K.), LTD	United Kingdom	Zürich	Medium	54,378.7	113.3	24.7	0.2	28.0
Tow arzystw o Funduszy Inwestycyjnych PZU S.A.	Poland	Warsaw	Medium	1,916.6	40.6	24.5	2.1	152.4
Franklin Templeton Investment Management, LTD (U.K.)	United Kingdom	Zürich	Low	6,974.2	51.0	21.8	0.7	74.9
Amundi Asset Management (U.K.)	United Kingdom	Zürich	High	12,147.0	201.4	20.2	1.7	11.1
Neuberger Berman Europe, LTD (Netherlands)	Netherlands	Zürich	Medium	8,359.0	111.4	15.7	1.3	16.4
T. Rowe Price Associates, Inc.	United States	Zürich	Low	234,684.7	157.4	15.1	0.1	10.6
Union Investment Privatfonds GmbH	Germany	Frankfurt	Low	57,640.7	137.8	14.3	0.2	11.6
Edmond de Rothschild (Suisse) S.A.	Switzerland	Geneva	Medium	1,156.8	97.2	14.0	8.4	16.9
				1,076.8	282.3			

TOP SELLERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Lord, Abnett & Co., LLC (Asset Management)	United States	Jersey City	High	160,523.7	279.3	-40.1	0.2	-12.5
Morgan Stanley Investment Management, LTD (U.K.)	United Kingdom	London	Low	13,468.0	1.4	-33.8	0.0	-96.0
Candriam Belgium S.A.	Belgium	Brussels	Medium	18,768.8	21.4	-30.4	0.1	-58.7
Generall Investments TFI S.A.	Poland	Warsaw	Medium	6,759.2	25.1	-15.7	0.4	-38.4
UBS Switzerland AG	Switzerland	Zürich	Medium	11,062.4	124.1	-14.2	1.1	-10.3
HSBC Global Asset Management (USA), Inc.	United States	New York	Very High	68,942.1	64.9	-14.0	0.1	-17.7
DWS Investment GmbH	Germany	Zürich	High	85,347.7	88.2	-12.2	0.1	-12.1
Pictet Asset Management, LTD	United Kingdom	Zürich	High	10,526.8	196.2	-10.0	1.9	-4.8
Bluebay Asset Management USA, LLC	United States	Zürich	Very High	2,232.2	0.0	-8.6	0.0	-100.0
Grantham Mayo Van Otterloo & Co., LLC	United States	Boston	High	8,599.1	66.4	-8.1	0.8	-10.9
				867.1	-187.0			

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)	472,313.0	515.4	55.1	18	Switzerland (Zürich)	288,669.7	426.9	-16.3	24	
Switzerland (Zürich)	288,669.7	426.9	-16.3	24	United Kingdom (London)	472,313.0	515.4	55.1	18	
United States (Jersey City)	160,523.7	279.3	-40.1	1	United States (New York)	309,244.0	158.8	-11.6	7	
Germany (Frankfurt)	95,802.6	215.6	20.2	5	Spain (Madrid)	16,494.8	5.0	-1.6	7	
United States (New York)	309,244.0	158.8	-11.6	7	Italy (Milan)	64,617.0	78.2	-3.4	6	
United States (Boston)	238,404.3	140.7	-5.5	4	Germany (Frankfurt)	95,802.6	215.6	20.2	5	
Switzerland (Geneva)	14,512.9	102.0	12.0	3	France (Paris)	57,154.2	44.9	-1.8	5	
United Kingdom (Edinburgh)	102,437.2	98.3	-11.5	3	United States (Boston)	238,404.3	140.7	-5.5	4	
Italy (Milan)	64,617.0	78.2	-3.4	6	Poland (Warsaw)	9,321.3	70.4	8.9	4	
Poland (Warsaw)	9,321.3	70.4	8.9	4	Switzerland (Geneva)	14,512.9	102.0	12.0	3	
United States (Austin)	95,991.4	66.1	63.4	1	United Kingdom (Edinburgh)	102,437.2	98.3	-11.5	3	
Italy (Basiglio)	7,852.0	55.4	2.6	1	Luxembourg (Luxembourg)	12,547.7	29.6	3.5	3	
United States (San Francisco)	643,268.1	48.4	4.5	2	Switzerland (Lugano)	1,903.2	15.5	-0.0	3	
United States (Bloomfield)	6,674.7	47.9	0.0	1	Finland (Helsinki)	17,682.6	9.2	-3.0	3	
France (Paris)	57,154.2	44.9	-1.8	5	United States (Chicago)	18,003.1	7.9	-0.8	3	
United States (Atlanta)	111,801.1	42.2	0.3	1	United States (San Francisco)	643,268.1	48.4	4.5	2	
Luxembourg (Luxembourg)	12,547.7	29.6	3.5	3	Singapore (Singapore)	1,265,219.0	13.4	-0.3	2	
United States (New ark)	520,846.8	25.6	0.3	1	Canada (Toronto)	422.3	2.2	0.0	2	
Netherlands (Rotterdam)	37,395.4	23.1	-0.5	1	United States (Jersey City)	160,523.7	279.3	-40.1	1	
Belgium (Brussels)	18,768.8	21.4	-30.4	1	United States (Austin)	95,991.4	66.1	63.4	1	
				2,490.1	49.8	92				
							2,327.6	71.8	106	



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

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

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.