

# FLOW OF FUNDS REPORT

## TUYID Q1-2020

September, 2020

Dear Readers,

We are happy to present the Flow of Funds Report for the first quarter of 2020. Our report offers detailed insight of 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 road shows and trust the Report will be an important asset in IR planning and investor targeting.

In terms of index performance, the BIST 100 index managed to outperform the Poland WIG20, MSCI Europe, Hungarian BUX, MSCI EFM EMEA, and the Russian RTS. It should be noted that the performance of all indices mentioned in this report were significantly impacted by the global coronavirus pandemic and its impacts on the global market.

Turkey accounts for a net outflow in Q1-20 after the relatively small decrease in the previous quarter. Russian equities saw the largest net outflow, with Poland and Hungary also experiencing net outflows. North America is still the largest investor region in Turkey despite being net sellers in Q1-2020.

There have also been notable outflows within certain sectors for both active and passive investors. Notably, the energy sector experienced massive outflows among active investors, while the financial sector experienced large outflows among passive investors. Furthermore, despite the general trend of outflows occurring within most sectors, the technology and utilities sectors experienced marginal net inflows among both passive and active investors. Additionally, the healthcare sector experienced only marginal net outflows across both active and passive investors. The orientation has also shifted from previously being in balance to 51% passive vs 49% active. This is due to active investors experiencing greater outflows compared to passive investors over the preceding periods.

Top holders by style: growth investors are now the largest investors in Turkey by style, surpassing value investors. This despite both investor styles experiencing net outflows during Q1-20. The net outflow for growth investors was driven primarily by CPP Investment Board and BlackRock Investment Management (U.K.), LTD while the net outflow for value investors was led primarily by Grantham Mayo Van Otterloo & Co., LLC and Mondrian Investment Partners, LTD. Whilst most major investor styles have experienced net outflows, it is noteworthy that value investors have now experienced outflows in each the previous 5 quarters.

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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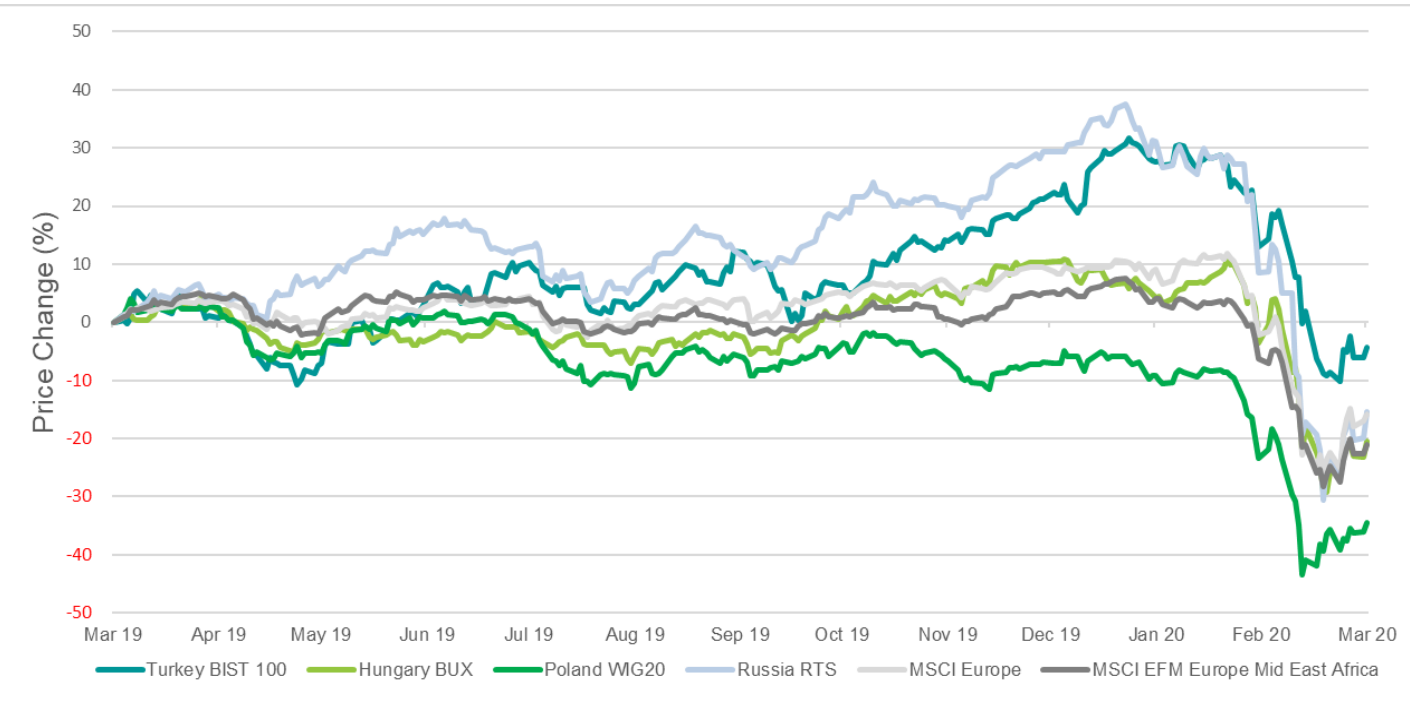
*Acknowledgements: We express our gratitude to Max Heera from IHS Markit Global Markets Intelligence and TÜYİD member Işıl Bük for their contributions.*

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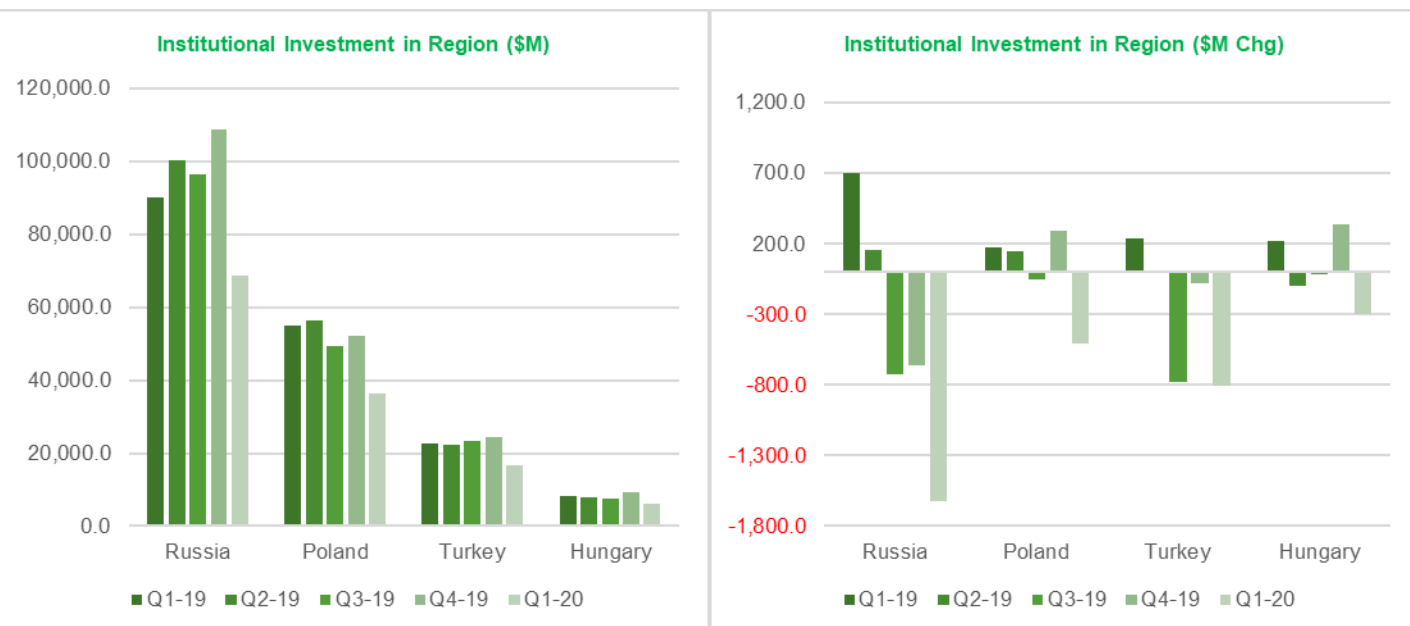
## Price performance:

The BIST 100 index returned -4.41% year-on-year, outperforming the Poland WIG20, MSCI Europe, Hungarian BUX, MSCI EFM EMEA, and the Russian RTS. While all the indices saw a negative year-on-year return, the BIST 100 delivered the smallest negative return compared to the aforementioned indices.



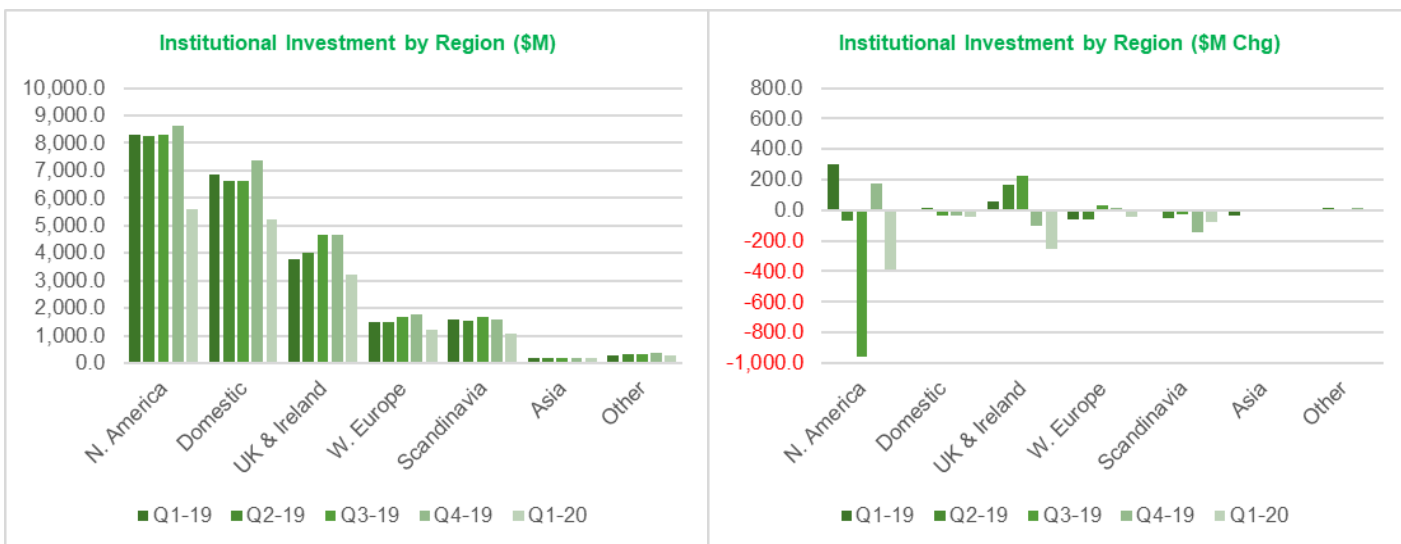
## Inflows and Outflows:

In Q1-20 all major regions saw net outflows. Turkish outflows were driven primarily by CPP Investment Board, Grantham Mayo Van Otterloo & Co., LLC, and BlackRock Fund Advisors while CPP Investment Board, Fidelity International Limited and Artisan Partners led Russian outflows.



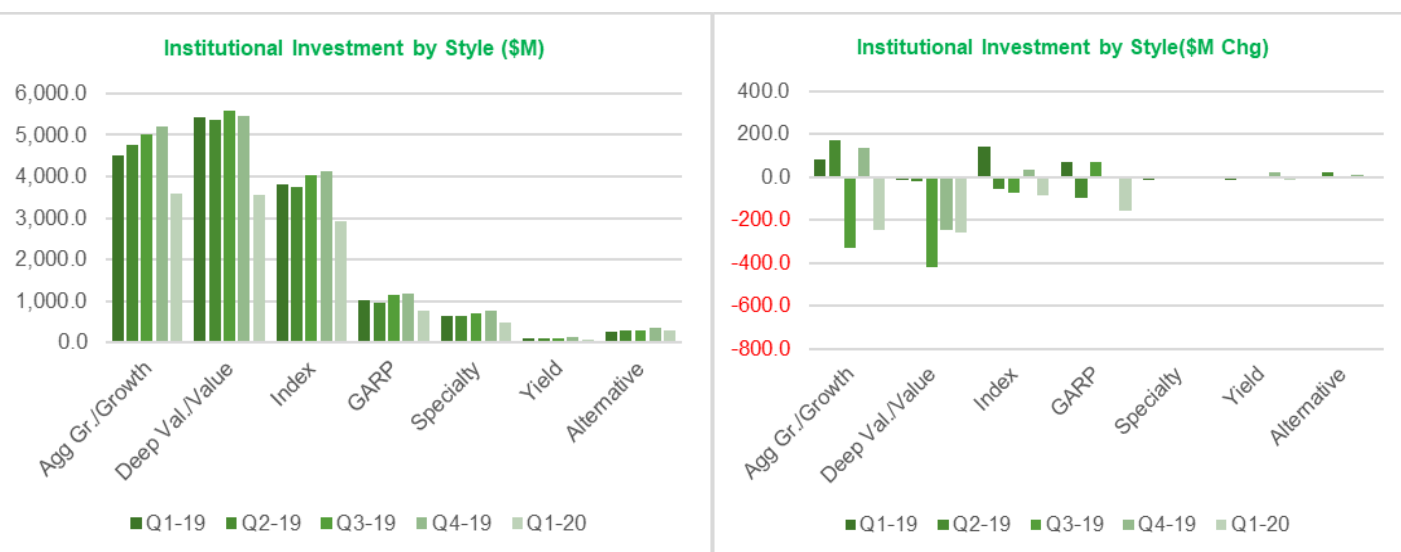
## Investment by Investor Region:

North America continues to be most invested region despite experiencing a net outflow in Q1-20. While North America experienced the largest net outflow, all other major geographic regions experienced major outflows as well. Invesco Advisors and Capital World remain the largest North American holders. BlackRock Investment Management and Mondrian Investment Partners drove the outflow in the UK & Ireland, while Nordea Investment Management drove the outflows in the Scandinavian region.



## Investment by Style:

Aggressive growth / Growth investors are now the largest investors by style. This contrasts with Q4-2019, when Value / Deep Value investors were the largest investors by style. Most investment styles saw net decreases, with Aggressive Growth / Growth and Value / Deep Value experiencing the largest net outflows. The largest outflows from a growth investor came via CPP Investment Board while the largest outflow for a value investor came via Grantham Mayo.



## Top Active Holders, Buyers & Sellers

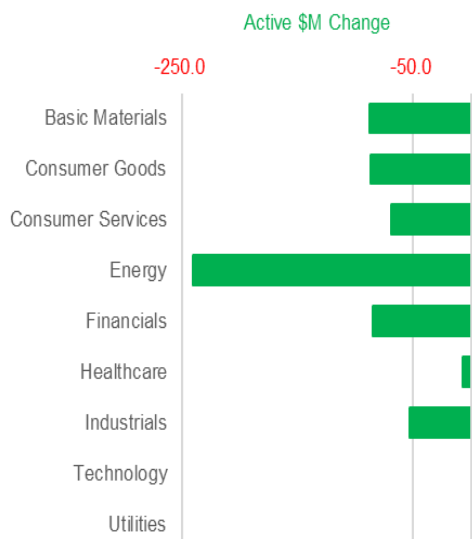
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Invesco Advisers, Inc.	United States	Growth	Low	268,125.6	635.3	114.6	0.2	22.0
Norges Bank Investment Management (Norway)	Norway	Value	Low	773,634.5	553.5	0.0	0.1	0.0
Genesis Investment Management, LLP	United Kingdom	Growth	Low	10,063.7	432.2	-14.9	4.3	-3.3
APG Asset Management N.V.	Netherlands	Specialty	Low	157,177.1	351.9	0.0	0.2	0.0
Capital World Investors (U.S.)	United States	Value	Low	653,188.2	351.0	66.2	0.1	23.2
Lazard Asset Management, LLC (U.S.)	United States	Value	Medium	89,619.7	332.2	-13.8	0.4	-4.0
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	105,194.9	273.2	-18.8	0.3	-6.5
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	107,468.5	265.3	9.4	0.2	3.7
Silchester International Investors, LLP	United Kingdom	Value	Low	18,530.9	256.9	0.0	1.4	0.0
Comgest S.A.	France	Growth	Low	25,132.5	123.8	27.6	0.5	28.7
				<b>3,575.3</b>		<b>170.2</b>		

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Invesco Advisers, Inc.	United States	Growth	Low	268,125.6	635.3	114.6	0.2	22.0
Capital World Investors (U.S.)	United States	Value	Low	653,188.2	351.0	66.2	0.1	23.2
Comgest S.A.	France	Growth	Low	25,132.5	123.8	27.6	0.5	28.7
Stewart Investors (Singapore)	Singapore	Growth	Low	1,426.8	19.2	19.2	1.3	Buy-in
J O Hambro Capital Management, LTD	United Kingdom	Value	Medium	10,310.0	41.9	13.2	0.4	45.8
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	107,468.5	265.3	9.4	0.2	3.7
MFS Investment Management	United States	Value	Low	297,620.4	20.0	9.3	0.0	86.6
TT International	United Kingdom	Growth	High	2,016.9	8.1	8.1	0.4	Buy-in
Origin Asset Management, LLP	United Kingdom	Value	High	2,317.3	7.9	7.9	0.3	Buy-in
Investec Asset Management, LTD (U.K.)	United Kingdom	Growth	Medium	45,920.0	78.8	6.6	0.2	9.2
				<b>1,551.2</b>		<b>282.0</b>		

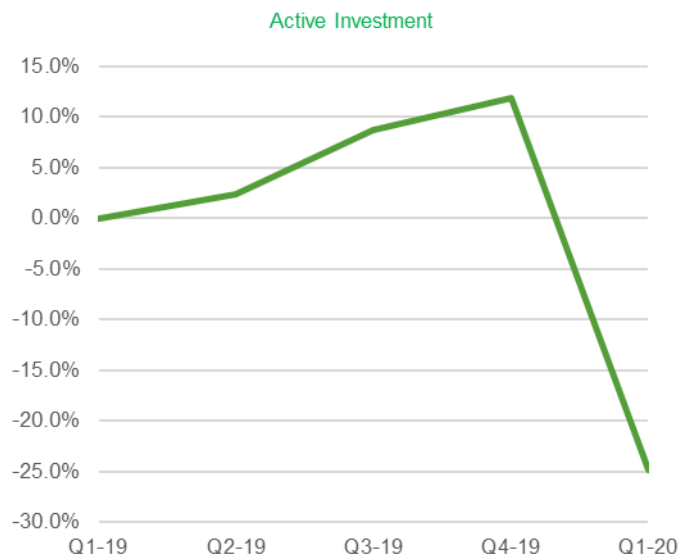
TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
CPP Investment Board	Canada	Growth	Medium	92,596.5	4.9	-174.5	0.0	-97.2
Grantham Mayo Van Otterloo & Co., LLC	United States	Value	Medium	27,607.8	117.4	-168.1	0.4	-58.9
BlackRock Investment Management (U.K.), LTD	United Kingdom	Growth	Low	495,317.6	100.1	-57.9	0.0	-36.7
Mondrian Investment Partners, LTD	United Kingdom	Value	Low	15,968.9	9.3	-44.7	0.1	-82.8
Nordea Investment Management (Denmark)	Denmark	Value	Medium	69,976.6	95.8	-37.6	0.1	-28.2
Baring Asset Management, LTD (U.K.)	United Kingdom	GARP	Medium	6,858.2	71.6	-34.7	1.0	-32.7
Capital Research Global Investors (U.S.)	United States	GARP	Low	429,639.3	15.6	-32.6	0.0	-67.6
Swedbank Robur Fonder AB	Sweden	Growth	Low	92,163.3	48.8	-30.4	0.1	-38.4
Dodge & Cox	United States	Value	Low	142,877.1	18.9	-28.3	0.0	-59.9
Hermes Investment Management, LTD	United Kingdom	GARP	Low	17,681.6	80.7	-27.1	0.5	-25.1
				<b>563.2</b>		<b>-636.0</b>		

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

## Sector Inflows/Outflows



## % Change in Active Investment vs 5 Previous Quarters



## Top Passive Holders, Buyers & Sellers

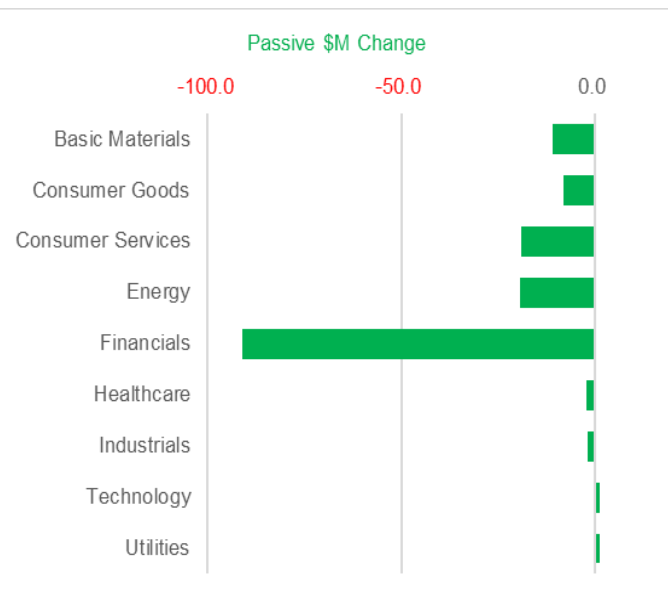
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	3,465,941.6	1,147.9	51.4	0.0	4.7
BlackRock Fund Advisors	United States	Index	Low	2,163,069.3	587.6	-98.3	0.0	-14.3
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	148,601.7	284.5	-22.7	0.2	-7.4
California Public Employees Retirement System	United States	Index	Low	106,376.9	171.6	0.0	0.2	0.0
Acadian Asset Management, LLC	United States	Deep Value	Medium	35,634.9	169.6	-1.0	0.5	-0.6
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	271,799.0	125.2	-14.2	0.0	-10.2
Research Affiliates, LLC	United States	Index	Low	4,840.1	108.7	11.1	2.2	11.4
Arrowstreet Capital, L.P.	United States	Deep Value	Very High	60,660.9	85.7	-0.7	0.1	-0.8
Charles Schwab Investment Management, Inc.	United States	Index	Low	250,001.9	76.1	2.3	0.0	3.1
Stewart Investors (U.K.)	United Kingdom	Growth	Low	1,960.9	67.1	-8.2	3.4	-10.9
				<b>2,824.0</b>	<b>-80.3</b>			

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	3,465,941.6	1,147.9	51.4	0.0	4.7
Research Affiliates, LLC	United States	Index	Low	4,840.1	108.7	11.1	2.2	11.4
LSV Asset Management	United States	Deep Value	Low	53,832.7	21.4	4.6	0.0	27.4
Assenagon GmbH	Germany	Index	Very High	18,486.8	3.4	3.4	0.0	38,232.2
Quoniam Asset Management GmbH	Germany	Value	High	5,748.4	2.8	2.8	0.0	Buy-in
Charles Schwab Investment Management, Inc.	United States	Index	Low	250,001.9	76.1	2.3	0.0	3.1
State Street Global Advisors, LTD	United Kingdom	Index	Low	91,439.1	30.7	1.9	0.0	6.7
Sjunde AP-Fonden (AP 7)	Sweden	Index	Low	60,251.2	40.8	1.9	0.1	4.8
Geode Capital Management, LLC	United States	Index	Low	535,294.0	51.8	1.4	0.0	2.8
Aperio Group, LLC	United States	Index	Low	27,257.2	4.6	1.2	0.0	33.9
				<b>1,488.1</b>	<b>81.9</b>			

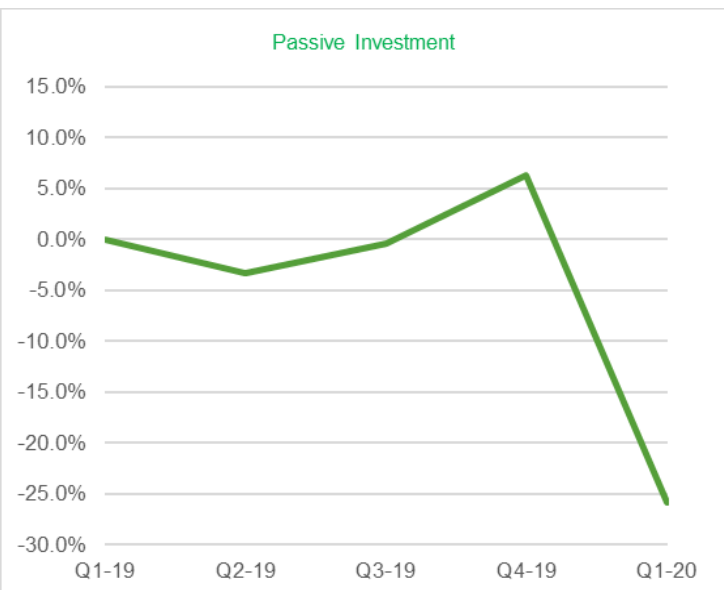
TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
BlackRock Fund Advisors	United States	Index	Low	2,163,069.3	587.6	-98.3	0.0	-14.3
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	148,601.7	284.5	-22.7	0.2	-7.4
State Street Global Advisors (SSgA)	United States	Index	Low	1,442,357.5	52.2	-14.6	0.0	-21.9
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	271,799.0	125.2	-14.2	0.0	-10.2
Northern Trust Investments, Inc.	United States	Index	Low	392,268.8	26.7	-11.9	0.0	-30.8
Parametric Portfolio Associates, LLC	United States	GARP	Low	133,455.6	39.5	-9.9	0.0	-20.1
Stewart Investors (U.K.)	United Kingdom	Growth	Low	1,960.9	67.1	-8.2	3.4	-10.9
Vident Investment Advisory, LLC	United States	Index	High	4,482.8	44.7	-6.5	1.0	-12.7
Margetts Fund Management, LTD	United Kingdom	Index	Medium	1,880.7	2.2	-1.8	0.1	-45.1
Vanguard Global Advisers, LLC	United States	Index	Low	6,406.8	9.4	-1.2	0.1	-11.4
				<b>1,239.1</b>	<b>-189.3</b>			

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

## Sector Inflows/Outflows



## % Change in Passive Investment vs 5 Previous Quarters



## Road show:

The most invested cities in Turkey remain London and New York with Genesis Investment Management and Capital World Investors (U.S.) being the top investors from each respectively. BlackRock Investment Management (U.K) and Mondrian Investment Partners drove the London outflows while New York saw a marginal net inflow driven primarily by Capital World Investors (U.S.). Atlanta once again moves up the list and now occupies the third-spot as Invesco Advisors was once again a notable buyer in the region.

### Most Invested

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,799,534.4	2,557.0	-174.1	70
United States (New York)	2,822,661.4	1,112.5	10.0	36
United States (Atlanta)	279,406.2	635.3	114.6	2
Norway (Oslo)	807,104.8	559.6	-0.6	3
Netherlands (Amsterdam)	160,422.1	352.6	0.0	3
United States (Boston)	2,472,913.6	273.1	-171.6	13
Sweden (Stockholm)	262,483.3	191.6	-27.3	11
Turkey (Istanbul)	191.7	174.6	-11.4	7
France (Paris)	250,381.9	166.4	26.3	10
United Kingdom (Edinburgh)	334,234.8	113.9	-35.5	5
Netherlands (Rotterdam)	52,967.0	108.8	2.8	1
Denmark (Copenhagen)	87,522.6	105.0	-42.0	6
Germany (Frankfurt)	292,414.3	99.9	-35.7	8
Austria (Vienna)	11,209.8	79.5	-4.3	5
Italy (Milan)	56,461.9	77.5	-6.4	7
Singapore (Singapore)	61,282.2	67.3	13.4	9
Sweden (Gothenburg)	14,025.5	62.8	0.0	1
Canada (Montreal)	89,348.4	59.9	-0.0	3
Germany (Stuttgart)	5,572.5	59.6	0.0	1
Poland (Warsaw)	12,317.8	59.3	0.0	11
Excludes Passive/Index Investors		6,916.1	-342.0	212

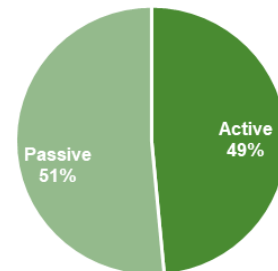
### Most Investors

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,799,534.4	2,557.0	-174.1	70
United States (New York)	2,822,661.4	1,112.5	10.0	36
United States (Boston)	2,472,913.6	273.1	-171.6	13
Canada (Toronto)	491,849.6	41.6	-173.9	12
Sweden (Stockholm)	262,483.3	191.6	-27.3	11
Poland (Warsaw)	12,317.8	59.3	0.0	11
Japan (Tokyo)	890,059.1	47.2	-2.4	11
South Korea (Seoul)	31,534.1	3.2	-0.3	11
France (Paris)	250,381.9	166.4	26.3	10
Singapore (Singapore)	61,282.2	67.3	13.4	9
Germany (Frankfurt)	292,414.3	99.9	-35.7	8
Switzerland (Zürich)	216,473.6	51.6	-1.1	8
Finland (Helsinki)	18,744.7	31.0	-1.4	8
Switzerland (Geneva)	20,163.8	15.9	3.4	8
Turkey (Istanbul)	191.7	174.6	-11.4	7
Italy (Milan)	56,461.9	77.5	-6.4	7
Ireland (Dublin)	48,481.8	37.6	-1.2	7
United States (Chicago)	158,727.5	15.7	-0.8	7
Taiwan (Taipei)	5,594.6	4.8	0.2	7
Denmark (Copenhagen)	87,522.6	105.0	-42.0	6
Excludes Passive/Index Investors		5,132.7	-596.4	267

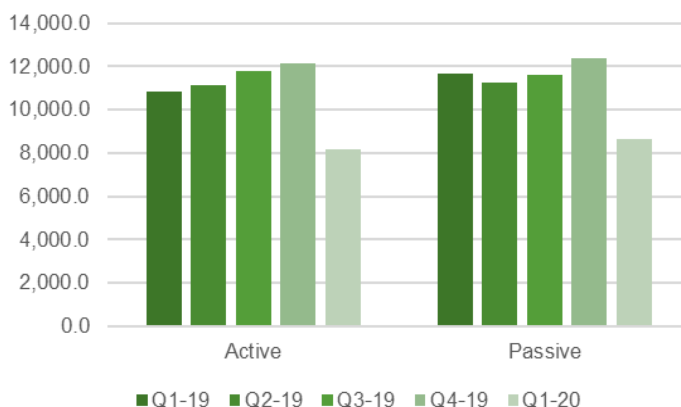
## Active vs. Passive investors

Orientation shifted to a 51% Passive vs 49% Active split in Q1-20 as Active investors experienced outflows driven mainly by CPP Investment Board and Grantham Mayo Van Otterloo & Co., LLC.

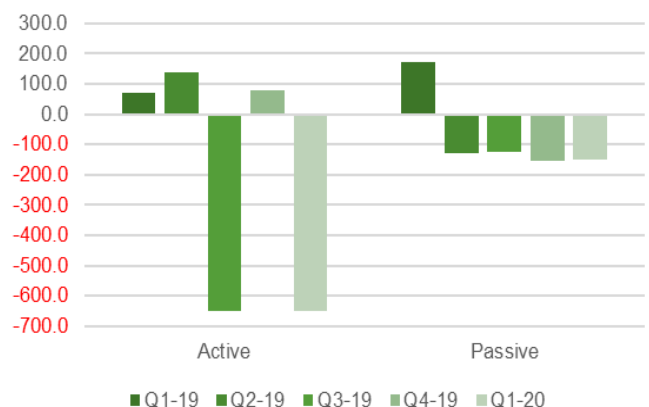
### Active vs Passive Split



### 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
Pictet Asset Management, LTD	United Kingdom	London	Medium	14,545.7	263.3	6.4	1.8	2.5
Goldman Sachs Asset Management International	United Kingdom	London	Very High	159,592.7	259.3	3.5	0.2	1.4
TIAA-CREF Investment Management, LLC	United States	New York	Very High	302,039.0	233.6	5.3	0.1	2.3
Amundi Ireland, LTD (London)	United Kingdom	London	High	14,703.8	199.3	-22.8	1.4	-10.3
Ashmore Investment Management, LTD	United Kingdom	London	Medium	25,681.2	184.5	17.8	0.7	10.6
Lord, Abbett & Co., LLC (Asset Management)	United States	Jersey City	Very High	138,289.0	173.0	5.3	0.1	3.2
Amundi Asset Management (U.K.)	United Kingdom	London	High	12,540.4	153.5	-24.2	1.2	-13.6
Dimensional Fund Advisors, L.P. (U.S.)	United States	Austin	High	92,548.9	139.7	137.0	0.2	5,082.2
Ninety One UK Limited	United Kingdom	London	High	14,821.8	136.5	4.2	0.9	3.2
AllianceBernstein, L.P. (U.S.)	United States	New York	Medium	203,926.4	117.2	-70.2	0.1	-37.4
					1,859.9	62.3		

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	High	92,548.9	139.7	137.0	0.2	5,082.2
Ashmore Investment Management, LTD	United Kingdom	London	Medium	25,681.2	184.5	17.8	0.7	10.6
Tow arzystw o Funduszy Inw estycyjnych PZU S.A.	Poland	Warsaw	Medium	1,903.7	12.5	12.5	0.7	Buy-in
RHB Islamic International Asset Management Bhd	Malaysia	Kuala Lumpur	Low	58.7	10.9	10.1	18.6	1,182.9
Washington State Investment Board	United States	Olympia	Low	22,364.6	9.1	9.1	0.0	Buy-in
Azimut Portföy Yönetimi A.S.	Turkey	Istanbul	Very High	73.7	43.1	8.8	58.6	25.7
Edmond de Rothschild Asset Management (France)	France	Paris	Medium	7,121.4	41.1	8.1	0.6	24.7
Loomis Sayles & Company, L.P.	United States	Boston	High	65,738.4	58.4	8.0	0.1	15.9
T. Rowe Price Associates, Inc.	United States	Baltimore	Low	219,115.2	103.8	7.6	0.0	7.9
Macquarie Investment Management	United States	Philadelphia	Medium	48,255.4	45.2	6.8	0.1	17.7
					648.4	225.8		

TOP SELLERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
AllianceBernstein, L.P. (U.S.)	United States	New York	Medium	203,926.4	117.2	-70.2	0.1	-37.4
Trea Capital Partners, S.V., S.A.	Spain	Barcelona	Medium	3,603.6	50.5	-43.4	1.4	-46.2
AcomeA SGR S.p.A.	Italy	Milan	Medium	2,207.7	11.7	-28.5	0.5	-70.9
Schroder Investment Management, LTD	United Kingdom	London	Medium	60,236.1	0.5	-27.7	0.0	-98.4
J.P. Morgan Investment Management, Inc.	United States	New York	Medium	156,484.3	55.0	-24.9	0.0	-31.2
Amundi Asset Management (U.K.)	United Kingdom	London	High	12,540.4	153.5	-24.2	1.2	-13.6
Principal Global Investors, LLC	United States	Des Moines	Low	128,287.2	31.6	-23.0	0.0	-42.1
Amundi Ireland, LTD (London)	United Kingdom	London	High	14,703.8	199.3	-22.8	1.4	-10.3
Neuberger Berman Europe, LTD (Netherlands)	Netherlands	The Hague	Medium	6,871.2	73.2	-21.4	1.1	-22.6
Union Investment Privatfonds GmbH	Germany	Frankfurt am Main	Low	56,280.1	99.6	-18.3	0.2	-15.5
					792.1	-304.3		

## 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)	1,188,140.0	1,837.5	-81.8	48	United Kingdom (London)	1,188,140.0	1,837.5	-81.8	48
United States (New York)	2,961,081.2	764.3	-102.3	25	United States (New York)	2,961,081.2	764.3	-102.3	25
Switzerland (Zürich)	150,339.8	280.0	-2.2	12	Switzerland (Zürich)	150,339.8	280.0	-2.2	12
United States (Boston)	983,002.8	257.1	11.1	11	France (Paris)	255,334.7	190.8	7.9	12
France (Paris)	255,334.7	190.8	7.9	12	Italy (Milan)	148,703.4	184.3	-45.2	12
Italy (Milan)	148,703.4	184.3	-45.2	12	United States (Boston)	983,002.8	257.1	11.1	11
United States (Jersey City)	138,289.0	173.0	5.3	1	Spain (Madrid)	30,595.5	7.2	-3.5	11
Singapore (Singapore)	24,895.7	149.4	0.0	6	Switzerland (Lugano)	4,211.2	76.8	0.3	10
United States (Austin)	92,548.9	139.7	137.0	1	Germany (Frankfurt)	72,963.2	128.2	2.6	9
Germany (Frankfurt)	72,963.2	128.2	2.6	9	Austria (Vienna)	23,546.2	36.3	1.5	8
United States (Atlanta)	298,368.3	118.2	-2.1	2	Switzerland (Geneva)	29,642.6	73.6	2.1	7
United States (Charlotte)	158,981.5	112.0	-0.2	2	Singapore (Singapore)	24,895.7	149.4	0.0	6
United States (Baltimore)	219,115.2	103.8	7.6	1	Ireland (Dublin)	31,978.1	72.1	-16.5	6
United Kingdom (Edinburgh)	91,661.4	92.3	-1.1	3	United States (Chicago)	167,642.0	18.3	-0.9	6
United States (Newport Beach)	893,013.8	80.5	0.0	2	Poland (Warsaw)	9,884.2	68.7	7.0	5
Denmark (Copenhagen)	46,297.2	80.3	4.0	2	Malaysia (Kuala Lumpur)	2,199.4	44.2	7.5	5
Switzerland (Lugano)	4,211.2	76.8	0.3	10	Luxembourg (Luxembourg)	13,177.6	42.9	-2.3	5
Netherlands (The Hague)	23,194.2	74.4	-21.2	2	Spain (Barcelona)	4,423.9	54.0	-42.3	4
Switzerland (Geneva)	29,642.6	73.6	2.1	7	Germany (Munich)	24,619.4	18.3	-0.5	4
Ireland (Dublin)	31,978.1	72.1	-16.5	6	United Kingdom (Edinburgh)	91,661.4	92.3	-1.1	3
	4,988.3		-94.7	174		4,396.3		-258.6	209



## 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 Q4 2019 can be considered a snapshot of the most current positions.