

# FLOW OF FUNDS REPORT

## TUYID Q4-2020



Dear Readers,

We are happy to present the Flow of Funds Report for the fourth quarter of 2020. 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 experienced a strong Q4-2020 and returned 28.7% year-on-year, significantly outperforming the Poland WIG20, MSCI Europe, Hungarian BUX, MSCI EFM EMEA, and Russian RTS – all of which generated negative returns over the same period. The BIST 100 index was once again the only index covered in this report which experienced positive year-on-year returns with the Russia RTS experiencing the worst returns for the period.

Turkey has recorded a net inflow in Q4-2020 after experiencing outflows in the previous four quarters. This inflow was driven by primarily by North American and UK & Ireland index and growth investors. Poland and Hungary experienced inflows, driven by Capital World Investors (U.S.), and Baron Capital Management, Inc., respectively. Russian outflows were driven by Invesco Advisors, Inc.

The consumer goods and utilities sectors saw the largest outflows amongst active investors, who were bullish about the financial sector. Conversely, the financial sector saw the largest outflows amongst passive investors, who preferred the consumer goods and technology sectors. Notably, both active and passive investors were bullish about the technology sector.

The orientation has marginally shifted towards passive investors and is now split 58% passive vs 42% active – this despite both segments experiencing inflows. Deep Value/Value investors are the most invested in the Turkish market, narrowly beating out Aggressive Growth/Growth investors. Invesco Advisors, Inc. is one of the largest growth investors, whilst Norges Bank Investment Management (Norway) are the largest value investors in the market.

London remains the most invested city in the Turkish market, followed by Oslo. Boston has surpassed New York as the third most invested city, with the latter dropping to fourth – this despite both cities recording inflows which were driven by MFS Investment Management and TIAA-CREF Investment Management, LLC, respectively. Paris and Los Angeles saw the largest outflows.

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

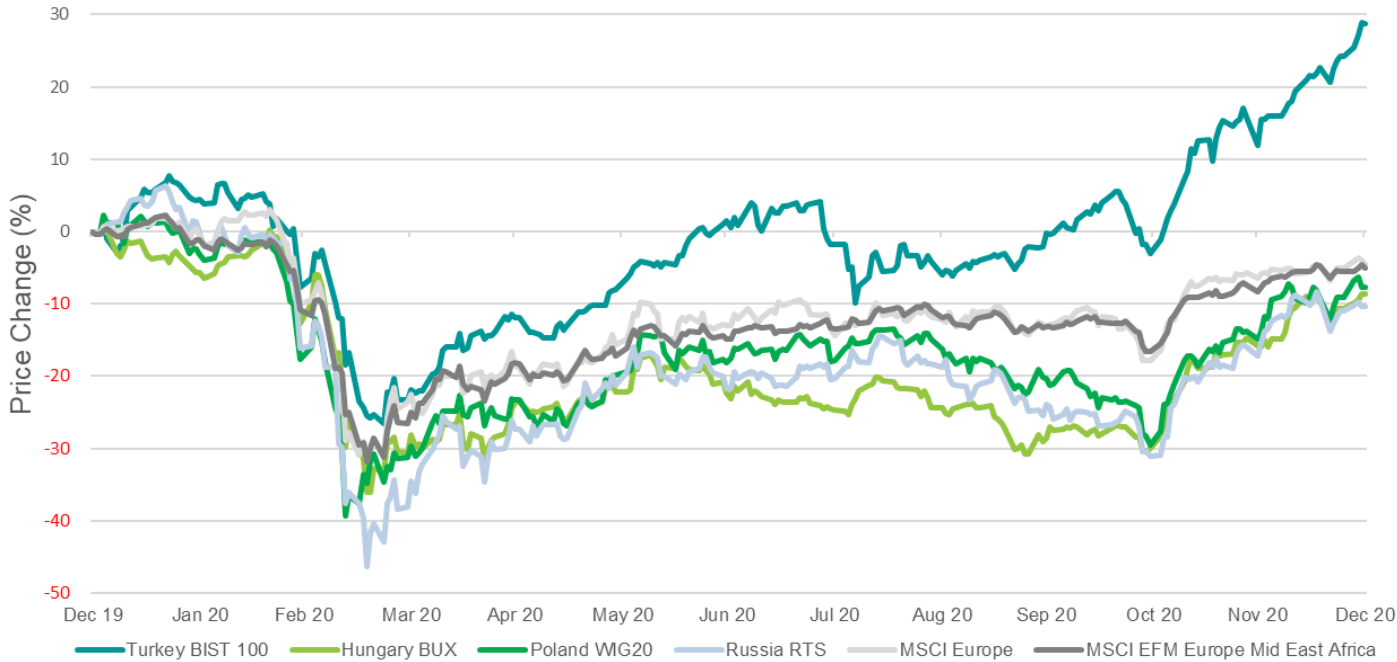
TÜYİD Turkish IR Society  
Chairperson/ Ford Otosan  
Head of Investor Relations  
Aslı Selçuk

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

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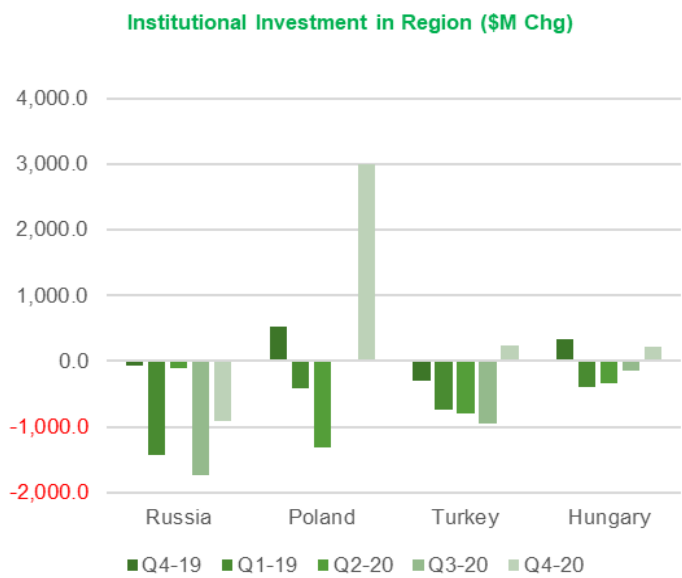
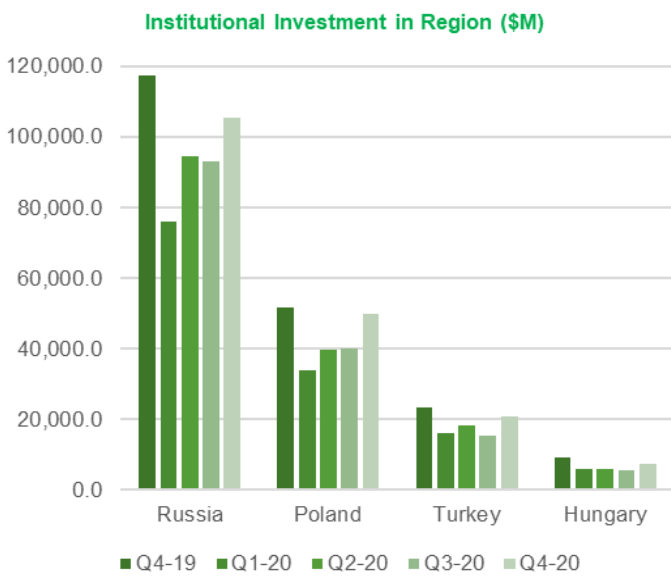
## Price performance:

The BIST 100 index experienced a strong Q4-2020 and in doing so returned 28.7% year-on-year, significantly outperforming the Poland WIG20, MSCI Europe, Hungarian BUX, MSCI EFM EMEA, and Russian RTS – all of which generated negative returns over the same period. This strong performance most-likely contributed to the in-flows seen in the Turkish market.



## Inflows and Outflows:

In Q4-2020, Turkey, Hungary, and Poland experienced inflows. Inflows in Turkey were driven predominantly by BlackRock Fund Advisors. The inflows in Poland and Hungary were driven by Capital World Investors (U.S.), and Baron Capital Management, Inc., respectively whilst Russian outflows were driven by Invesco Advisors, Inc.

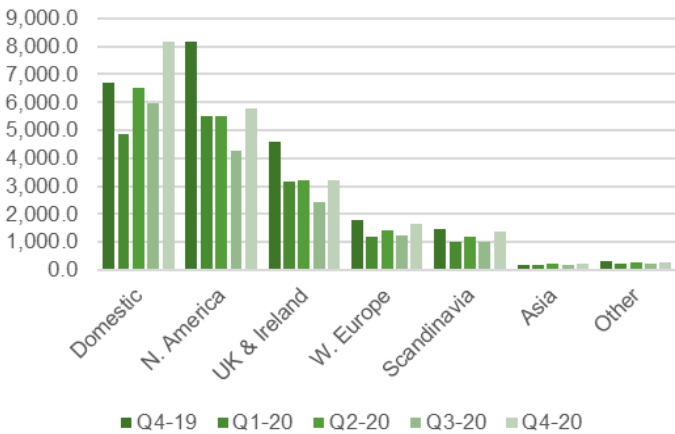




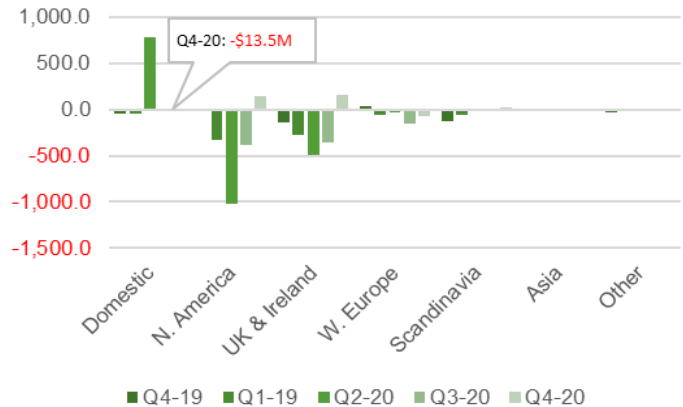
## Investment by Investor Region:

The inflows in the Turkish market is broken down by geographic regions below, and were driven primarily North American, and UK & Ireland investors. BlackRock Fund Advisors were the largest drivers of North American inflows, whilst BlackRock Investment Management (U.K.), LTD were the main drivers of UK & Ireland inflows. DWS Investment GmbH and Swedbank Robur Fonder AB were the top buyers in Western Europe and Scandinavia, respectively. Domestic investors' ownership saw a marginal net outflow of (-\$13.5M), suggesting continued support for the Turkish market (based on the relatively small level of outflow).

### Institutional Investment by Region (\$M)



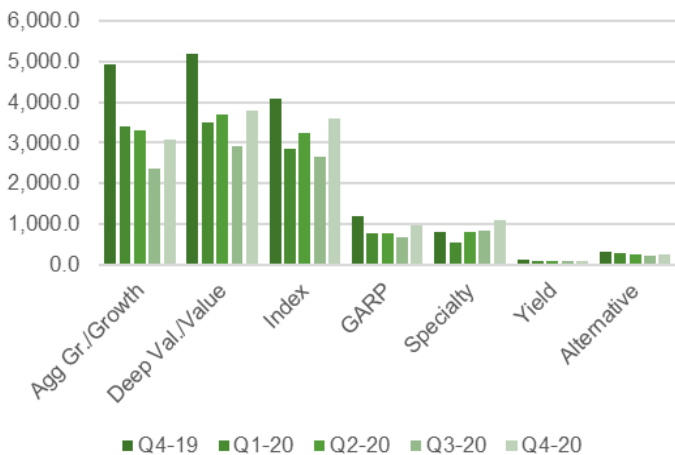
### Institutional Investment by Region (\$M Chg)



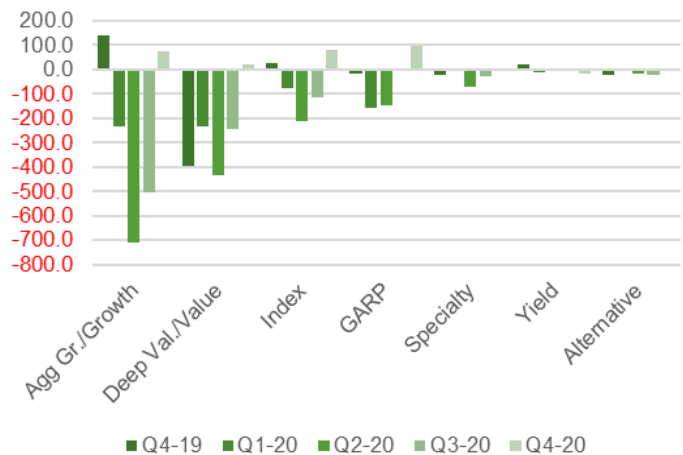
## Investment by Style:

Deep Value/Value investors are the most invested in the Turkish market, narrowly beating out Aggressive Growth/Growth investors. Invesco Advisors, Inc. are one of the largest growth investors, whilst Norges Bank Investment Management (Norway) are the largest value investors in the market.

### Institutional Investment by Style (\$M)



### Institutional Investment by Style (\$M Chg)





## Top Active Holders, Buyers & Sellers

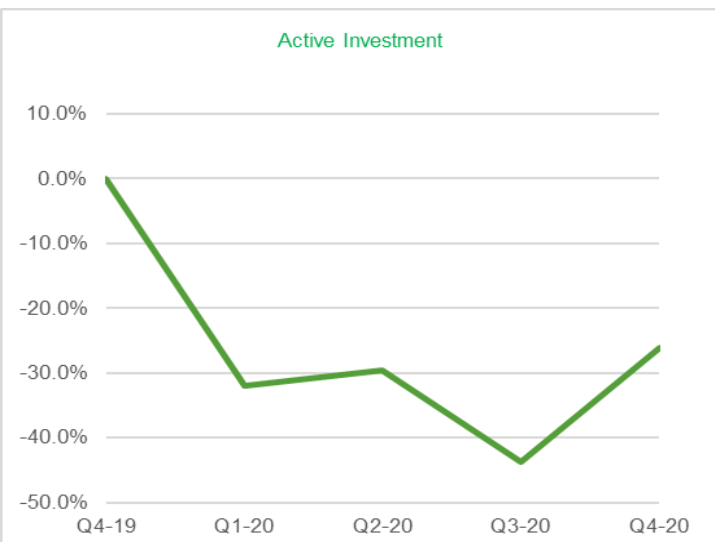
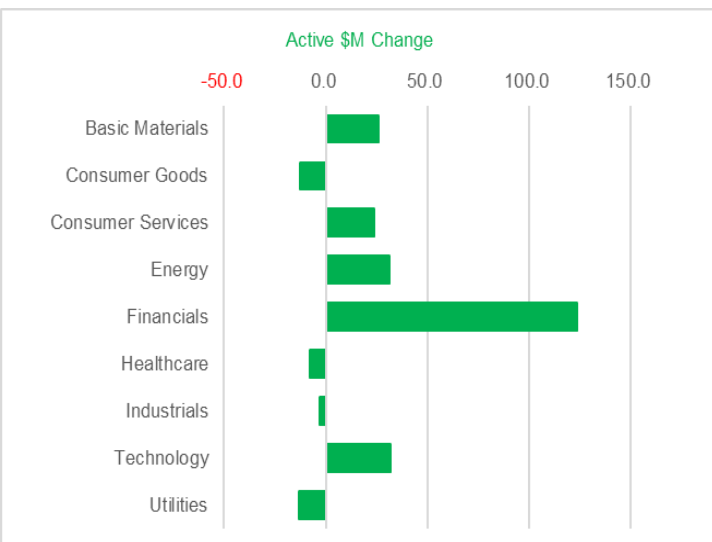
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Norges Bank Investment Management (Norway)	Norway	Value	Low	861,848.9	825.5	0.0	0.1	0.0
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	137,891.1	345.7	23.6	0.3	7.3
Invesco Advisers, Inc.	United States	Growth	Medium	315,402.8	316.7	26.9	0.1	9.3
APG Asset Management N.V.	Netherlands	Specialty	Low	196,078.0	315.6	0.0	0.2	0.0
Silchester International Investors, LLP	United Kingdom	Value	Low	22,078.6	237.0	0.0	1.1	0.0
BlackRock Investment Management (U.K.), LTD	United Kingdom	Growth	Low	660,540.3	166.6	91.0	0.0	120.4
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	115,374.0	164.2	-6.8	0.1	-4.0
Arrowstreet Capital, L.P.	United States	Deep Value	Very High	78,043.3	147.1	10.1	0.2	7.4
Grantham Mayo Van Otterloo & Co., LLC	United States	Value	Medium	30,232.5	146.6	5.5	0.5	3.9
Ninety One UK Limited	United Kingdom	Growth	Medium	56,254.0	142.1	11.1	0.3	8.5
					<b>2,807.0</b>	<b>161.5</b>		

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
BlackRock Investment Management (U.K.), LTD	United Kingdom	Growth	Low	660,540.3	166.6	91.0	0.0	120.4
Invesco Advisers, Inc.	United States	Growth	Medium	315,402.8	316.7	26.9	0.1	9.3
Capital Research Global Investors (U.S.)	United States	GARP	Medium	536,863.7	36.8	26.7	0.0	264.3
MFS Investment Management	United States	Value	Low	367,617.7	76.2	25.2	0.0	49.5
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	137,891.1	345.7	23.6	0.3	7.3
Goldman Sachs Asset Management International	United Kingdom	Growth	High	24,514.4	77.8	23.2	0.3	42.4
BlackRock Advisors, LLC	United States	Value	Low	442,491.3	29.2	22.7	0.0	350.4
Polunin Capital Partners, LTD	United Kingdom	Value	Medium	2,113.3	121.9	22.6	5.8	22.7
Wellington Management Company, LLP	United States	Value	Medium	608,106.7	54.6	19.9	0.0	57.1
Swedbank Robur Fonder AB	Sweden	Growth	Low	117,396.9	73.3	19.3	0.1	35.7
					<b>1,298.8</b>	<b>301.1</b>		

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Capital World Investors (U.S.)	United States	Value	Low	834,080.8	73.7	-81.3	0.0	-52.5
Comgest S.A.	France	Growth	Low	30,075.5	2.2	-58.7	0.0	-96.4
Baillie Gifford & Company	United Kingdom	Growth	Low	292,071.4	0.0	-18.0	0.0	-100.0
Morgan Stanley Investment Management Inc.	United States	Growth	Medium	157,075.8	1.7	-14.4	0.0	-89.3
Robeco Institutional Asset Management BV	Netherlands	Value	Medium	67,699.0	134.3	-14.4	0.2	-9.7
Mellon Investments Corporation	United States	Yield	Low	221,742.6	81.3	-14.3	0.0	-14.9
AllianceBernstein, L.P. (U.S.)	United States	Value	Low	234,965.9	34.9	-11.4	0.0	-24.6
SEB Investment Management AB	Sweden	Value	Medium	45,290.5	46.1	-10.5	0.1	-18.6
Somerset Capital Management, LLP	United Kingdom	Value	Medium	3,308.7	34.7	-7.8	1.0	-18.4
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	115,374.0	164.2	-6.8	0.1	-4.0
<i>Includes Investors with EUM greater than \$100M; Excludes Passive/Index Investors</i>					<b>573.1</b>	<b>-237.5</b>		

## Sector Inflows/Outflows

## % Change in Active Investment vs 5 Previous Quarters





## Top Passive Holders, Buyers & Sellers

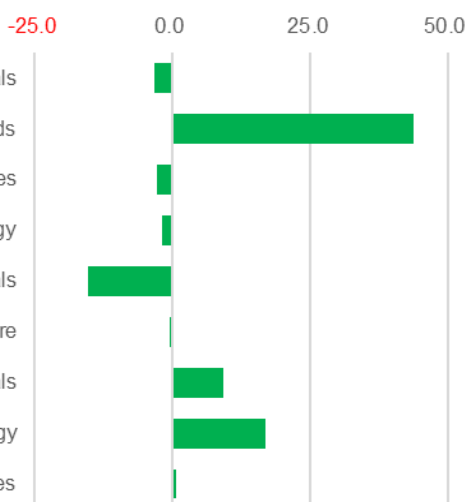
TOP HOLDERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	4,155,845.7	1,468.7	-61.1	0.0	-4.0
BlackRock Fund Advisors	United States	Index	Low	2,686,361.8	909.5	146.6	0.0	19.2
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	200,302.5	309.2	-15.4	0.2	-4.8
Acadian Asset Management, LLC	United States	Deep Value	Medium	39,818.3	243.5	-0.4	0.6	-0.2
California Public Employees Retirement System	United States	Index	Low	135,146.5	169.7	0.0	0.1	0.0
Charles Schwab Investment Management, Inc.	United States	Index	Low	311,720.4	117.5	4.7	0.0	4.2
State Street Global Advisors (SSgA)	United States	Index	Low	1,712,415.4	82.6	0.7	0.0	0.9
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	322,476.8	81.2	1.1	0.0	1.4
Geode Capital Management, LLC	United States	Index	Low	685,820.6	78.4	7.6	0.0	10.7
Parametric Portfolio Associates, LLC	United States	GARP	Low	163,296.7	57.4	-7.9	0.0	-12.1
						<b>3,517.7</b>	<b>75.9</b>	

TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
BlackRock Fund Advisors	United States	Index	Low	2,686,361.8	909.5	146.6	0.0	19.2
Geode Capital Management, LLC	United States	Index	Low	685,820.6	78.4	7.6	0.0	10.7
Charles Schwab Investment Management, Inc.	United States	Index	Low	311,720.4	117.5	4.7	0.0	4.2
Invesco Capital Management, LLC	United States	Index	Low	274,615.1	34.1	3.8	0.0	12.6
State Street Global Advisors, LTD	United Kingdom	Index	Low	100,971.3	48.4	1.5	0.0	3.3
DWS Investments UK, LTD	United Kingdom	Index	High	68,212.0	15.3	1.4	0.0	9.8
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	322,476.8	81.2	1.1	0.0	1.4
Aperio Group, LLC	United States	Index	Low	33,981.6	5.6	0.8	0.0	16.1
State Street Global Advisors (SSgA)	United States	Index	Low	1,712,415.4	82.6	0.7	0.0	0.9
Avantis Investors	United States	Index	High	3,421.1	2.8	0.7	0.1	30.5
						<b>1,375.4</b>	<b>168.9</b>	

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
The Vanguard Group, Inc.	United States	Index	Low	4,155,845.7	1,468.7	-61.1	0.0	-4.0
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	200,302.5	309.2	-15.4	0.2	-4.8
Parametric Portfolio Associates, LLC	United States	GARP	Low	163,296.7	57.4	-7.9	0.0	-12.1
TOBAM	France	Specialty	High	5,199.6	38.3	-3.7	0.7	-8.8
Northern Trust Investments, Inc.	United States	Index	Low	480,214.3	26.8	-3.4	0.0	-11.2
State Street Global Advisors France S.A.	France	Index	Low	19,740.3	25.5	-2.2	0.1	-8.0
Assenagon GmbH	Germany	Index	Very High	24,619.8	2.6	-1.5	0.0	-37.3
First Trust Advisors, L.P.	United States	Index	Medium	81,150.7	43.2	-1.2	0.1	-2.7
Northern Trust Global Investments, LTD	United Kingdom	Index	Low	90,374.4	34.0	-1.1	0.0	-3.0
AQR Capital Management, LLC	United States	Alternative	Medium	70,159.5	10.7	-1.0	0.0	-8.3
<i>Includes Investors with EUM greater than \$100M; Excludes Active Investors</i>						<b>2,016.5</b>	<b>-98.5</b>	

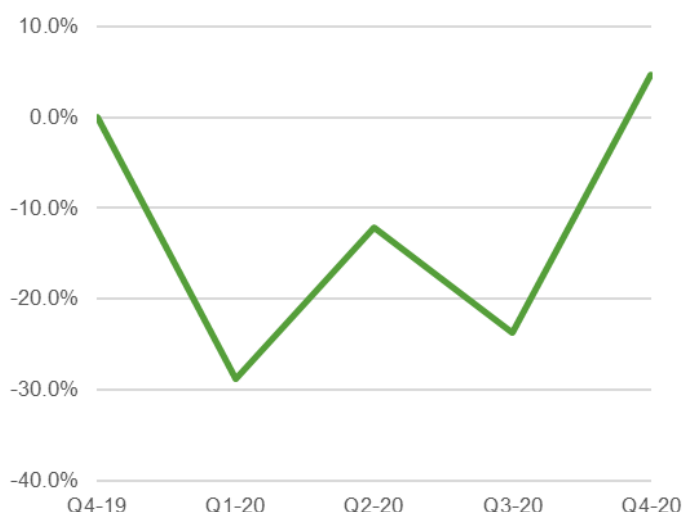
## Sector Inflows/Outflows

Passive \$M Change



## % Change in Passive Investment vs 5 Previous Quarters

Passive Investment





## Road show:

London remains the most invested city in the Turkish market, followed by Oslo. Boston has surpassed New York as the third most invested city, with the latter dropping to fourth – this despite both cities recording inflows driven by MFS Investment Management and TIAA-CREF Investment Management, LLC, respectively. Paris and Los Angeles saw the largest outflows.

### Most Invested

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,098,000.8	2,481.0	189.7	68
Norway (Oslo)	905,786.4	839.0	5.1	3
United States (Boston)	3,001,462.2	534.7	37.0	13
United States (New York)	2,758,936.0	496.8	23.2	32
Turkey (Istanbul)	433.8	426.8	3.3	7
Germany (Stuttgart)	6,414.5	355.6	0.0	1
Netherlands (Amsterdam)	199,721.1	318.8	1.9	4
United States (Atlanta)	330,770.0	316.7	26.9	2
Sweden (Stockholm)	338,240.7	221.7	7.0	10
Netherlands (Rotterdam)	67,699.0	134.3	-14.4	1
United States (Los Angeles)	1,400,045.0	132.7	-54.3	5
Denmark (Copenhagen)	116,059.2	129.4	-4.4	6
Austria (Vienna)	15,221.8	110.3	1.4	5
Italy (Milan)	65,583.2	109.9	0.3	6
United States (San Antonio)	102,136.8	98.3	9.2	2
Switzerland (Zürich)	421,013.5	95.7	-4.0	8
Singapore (Singapore)	75,649.9	91.3	8.1	12
Sweden (Gothenburg)	18,661.6	89.6	0.0	1
Canada (Montreal)	110,929.9	88.5	-0.1	3
United Kingdom (Edinburgh)	136,753.0	87.5	3.5	4
<i>Excludes Passive/Index Investors</i>		7,158.6	239.4	193

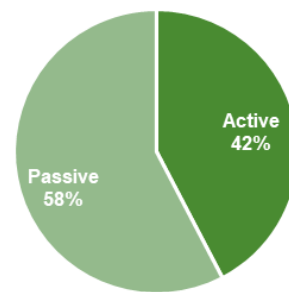
### Most Investors

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	2,098,000.8	2,481.0	189.7	68
United States (New York)	2,758,936.0	496.8	23.2	32
United States (Boston)	3,001,462.2	534.7	37.0	13
Singapore (Singapore)	75,649.9	91.3	8.1	12
Japan (Tokyo)	1,062,462.6	66.9	0.0	11
South Korea (Seoul)	40,272.3	3.9	0.0	11
Sweden (Stockholm)	338,240.7	221.7	7.0	10
France (Paris)	333,654.7	69.4	-57.7	10
Poland (Warsaw)	14,818.5	61.5	0.0	10
Canada (Toronto)	376,397.0	35.5	6.6	10
Switzerland (Zürich)	421,013.5	95.7	-4.0	8
United States (Chicago)	216,328.1	49.8	4.8	8
Finland (Helsinki)	22,319.0	42.2	0.1	8
Turkey (Istanbul)	433.8	426.8	3.3	7
Switzerland (Geneva)	8,246.4	13.2	-10.1	7
Taiwan (Taipei)	7,363.3	5.6	0.4	7
Denmark (Copenhagen)	116,059.2	129.4	-4.4	6
Italy (Milan)	65,583.2	109.9	0.3	6
Germany (Frankfurt)	140,825.6	53.4	1.3	6
Ireland (Dublin)	36,151.8	44.3	1.8	6
<i>Excludes Passive/Index Investors</i>		5,032.9	207.4	256

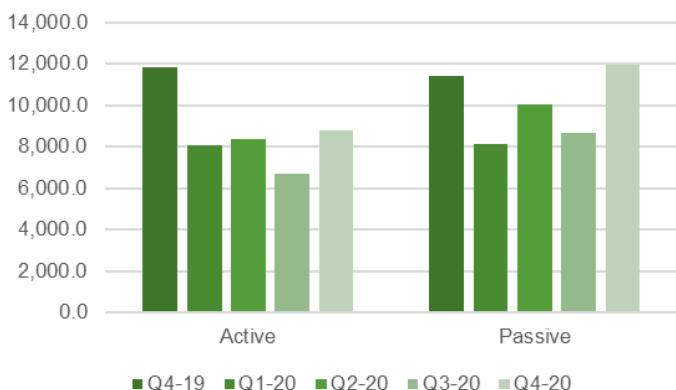
## Active vs. Passive investors

Orientation shifted to a 58% Passive vs 42% Active split in Q4-2020 with Active investors experiencing inflows for the first time in multiple reporting periods.

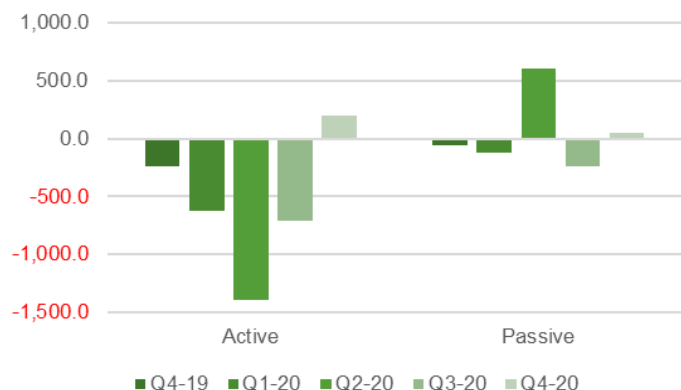
Active vs Passive Split



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
Dimensional Fund Advisors, L.P. (U.S.)	United States	Austin	High	96,104.2	400.0	397.3	0.4	14,737.4
Goldman Sachs Asset Management International	United Kingdom	London	Very High	148,688.0	343.5	14.7	0.2	4.5
Lord, Abbett & Co., LLC (Asset Management)	United States	Jersey City	High	152,217.1	275.3	2.8	0.2	1.0
Pictet Asset Management, LTD	United Kingdom	London	High	10,954.0	245.9	50.4	2.2	25.8
Amundi Ireland, LTD (London)	United Kingdom	London	High	14,553.1	216.4	18.2	1.5	9.2
TIAA-CREF Investment Management, LLC	United States	New York	Very High	290,515.2	201.9	0.2	0.1	0.1
Amundi Asset Management (U.K.)	United Kingdom	London	High	13,281.0	181.5	11.4	1.4	6.7
Ninety One UK Limited	United Kingdom	London	High	15,491.1	178.1	5.3	1.1	3.1
T. Rowe Price Associates, Inc.	United States	Baltimore	Low	221,375.0	142.3	37.8	0.1	36.2
Ashmore Investment Management, LTD	United Kingdom	London	High	23,994.7	128.2	13.9	0.5	12.1
						<b>2,313.2</b>	<b>552.1</b>	

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	96,104.2	400.0	397.3	0.4	14,737.4
Pictet Asset Management, LTD	United Kingdom	London	High	10,954.0	245.9	50.4	2.2	25.8
T. Rowe Price Associates, Inc.	United States	Baltimore	Low	221,375.0	142.3	37.8	0.1	36.2
Union Investment Privatfonds GmbH	Germany	Frankfurt am Main	Low	57,989.2	125.7	33.4	0.2	36.1
Edmond de Rothschild (Suisse) S.A.	Switzerland	Geneva	Medium	1,127.1	83.1	25.5	7.4	44.3
Van Eck Associates Corporation	United States	New York	Low	17,647.9	67.8	24.8	0.4	57.6
Eurizon Capital SGR S.p.A.	Italy	Milan	Very High	46,929.6	100.9	24.1	0.2	31.3
AllianceBernstein, L.P. (U.S.)	United States	New York	Medium	205,209.4	48.1	20.4	0.0	73.7
Amundi Ireland, LTD (London)	United Kingdom	London	High	14,553.1	216.4	18.2	1.5	9.2
DWS Investment GmbH	Germany	Frankfurt am Main	High	80,683.9	101.2	17.0	0.1	20.2
						<b>1,531.6</b>	<b>649.0</b>	

TOP SELLERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
ABN AMRO Investment Solutions S.A.	France	Paris	Medium	6,063.6	21.1	-16.3	0.3	-43.6
Fidelity Management & Research Company	United States	Boston	High	67,921.7	27.0	-15.3	0.0	-36.1
Morgan Stanley Investment Management, LTD (U.K.)	United Kingdom	London	Low	13,659.6	27.2	-8.0	0.2	-22.7
Mediolanum Gestione Fondi SGRpA	Italy	Basiglio	Medium	7,883.0	52.8	-7.9	0.7	-13.0
Generali Investments TFI S.A.	Poland	Warsaw	Medium	6,180.2	40.8	-6.9	0.7	-14.4
Lion Global Investors, LTD	Singapore	Singapore	Medium	1,569.4	18.6	-6.6	1.2	-26.1
AmFunds Management Bhd	Malaysia	Kuala Lumpur	Medium	597.1	6.5	-5.9	1.1	-47.7
StarCapital AG	Germany	Oberursel	Medium	435.5	4.3	-5.1	1.0	-54.5
Fidelity Investments Money Management, Inc.	United States	Merrimack	Very High	1,167,521.3	35.9	-4.2	0.0	-10.5
Opera TFI S.A.	Poland	Warsaw	Low	145.8	3.3	-3.2	2.3	-49.3
						<b>237.6</b>	<b>-79.4</b>	

## Corporate Debt – City Analysis

### Most Invested

Country / City	Total FI Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,158,708.7	1,895.8	154.6	48
United States (New York)	1,871,442.9	681.1	59.6	23
United States (Austin)	96,104.2	400.0	397.3	1
Italy (Milan)	171,802.8	285.0	45.0	12
United States (Jersey City)	152,217.1	275.3	2.8	1
Switzerland (Zürich)	126,058.9	255.7	17.0	11
United States (Boston)	1,047,007.3	200.2	4.1	11
France (Paris)	301,331.8	165.5	-15.6	13
United States (Baltimore)	221,375.0	142.3	37.8	1
Switzerland (Geneva)	32,500.7	97.1	22.3	6
United Kingdom (Edinburgh)	101,818.6	93.3	-0.6	3
United States (Atlanta)	287,746.7	91.4	3.6	3
Ireland (Dublin)	35,637.1	89.8	16.2	7
Germany (Frankfurt)	80,104.6	88.5	0.5	9
Denmark (Copenhagen)	67,795.3	77.8	6.5	3
Netherlands (The Hague)	26,248.5	72.4	0.2	2
United States (San Mateo)	229,035.0	67.8	7.9	1
Poland (Warsaw)	8,539.8	61.5	-6.4	4
Singapore (Singapore)	25,893.0	57.8	-6.7	5
United States (Philadelphia)	50,251.1	57.2	15.5	1
		<b>5,155.5</b>	<b>761.6</b>	<b>165</b>

### Most Investors

Country / City	Total FI Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,158,708.7	1,895.8	154.6	48
United States (New York)	1,871,442.9	681.1	59.6	23
France (Paris)	301,331.8	165.5	-15.6	13
Italy (Milan)	171,802.8	285.0	45.0	12
Switzerland (Zürich)	126,058.9	255.7	17.0	11
United States (Boston)	1,047,007.3	200.2	4.1	11
Spain (Madrid)	32,057.7	9.6	-2.3	11
Germany (Frankfurt)	80,104.6	88.5	0.5	9
Switzerland (Lugano)	3,650.6	31.5	0.0	8
Ireland (Dublin)	35,637.1	89.8	16.2	7
Switzerland (Geneva)	32,500.7	97.1	22.3	6
Austria (Vienna)	25,849.5	42.6	9.4	6
Luxembourg (Luxembourg)	14,261.6	37.5	0.7	6
United States (Chicago)	184,231.8	35.8	6.6	6
Singapore (Singapore)	25,893.0	57.8	-6.7	5
Malaysia (Kuala Lumpur)	3,498.0	32.0	-7.7	5
Canada (Toronto)	32,731.5	21.9	1.4	5
Germany (Munich)	40,958.3	9.4	0.2	5
Poland (Warsaw)	8,539.8	61.5	-6.4	4
Spain (Barcelona)	3,501.4	49.4	-0.1	4
		<b>4,147.6</b>	<b>298.8</b>	<b>205</b>



**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.