

# FLOW OF FUNDS REPORT

## TUYID Q3-2018



November, 2018

Dear Readers,

We are happy to present the Flow of Funds Report for the third quarter of 2018. 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.

Turkey experienced net outflows for the first time in five quarters, with all other regions in this comparison also subjected to net outflows over the quarter. Regionally, the UK & Ireland and North America were the largest sellers of Turkish equities with net divestments of -\$748.5M and -\$475.2M respectively. UK & Ireland investors also reduced exposure to Russia (-\$208.4M) in addition to Poland and Hungary with net selling of -\$45.7M and -\$180.6M respectively.

From an investment style perspective, Growth investors were the largest sellers of Turkish equities with divestments of -\$926.2M, whilst Index Investors were the largest net buyers with an aggregated increase of +\$254.9M in the review period.

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

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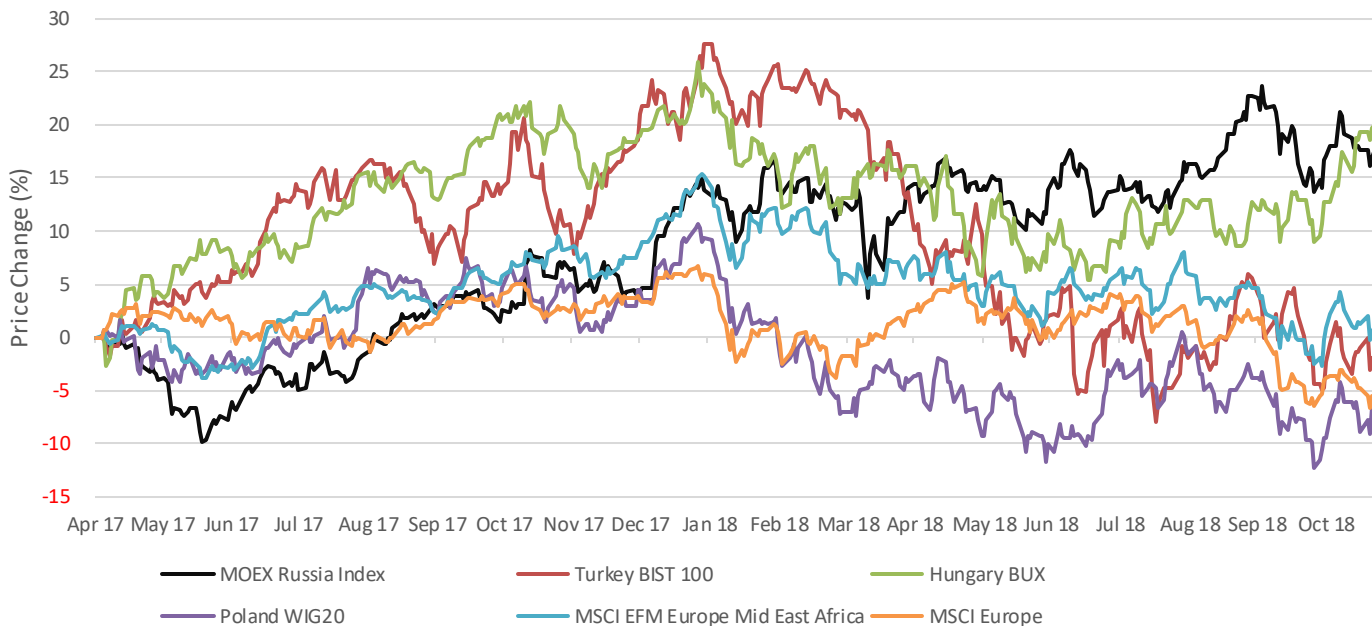
## Price performance:

The Turkey BIST 100 index finished the twelve months to end of October with a -4.35% decrease – making it the third lowest performing index within the basket behind the Poland WIG20, which was the weakest performing index decreasing by -9.47%, and MSCI Europe. The MOEX Russia and the Hungary BUX Index rose +14.05% and +9.57% respectively, ending October in the strongest position.

“It has been a challenging year for emerging markets (EM), with the MSCI EM Index down around 10%. <sup>1</sup> Negative sentiment has been driven by the intensifying US/China trade spat, higher US interest rates, a stronger US dollar and twin crises in Turkey and Argentina. Equity markets have fallen in response.

While periods of volatility are never comfortable, we believe it is important to look at events through a long-term lens. From that perspective, we not only think that EM will weather the current storm – but have the potential to deliver robust returns.”

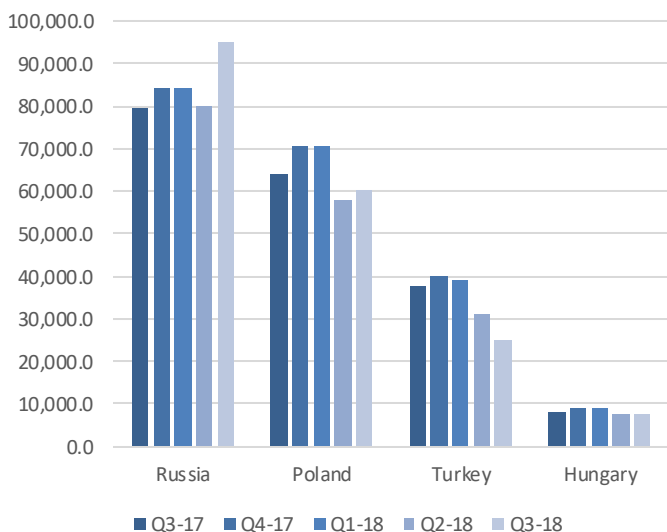
Source: Aberdeen Standard Investments – Insights & Thinking Aloud (November 2018)



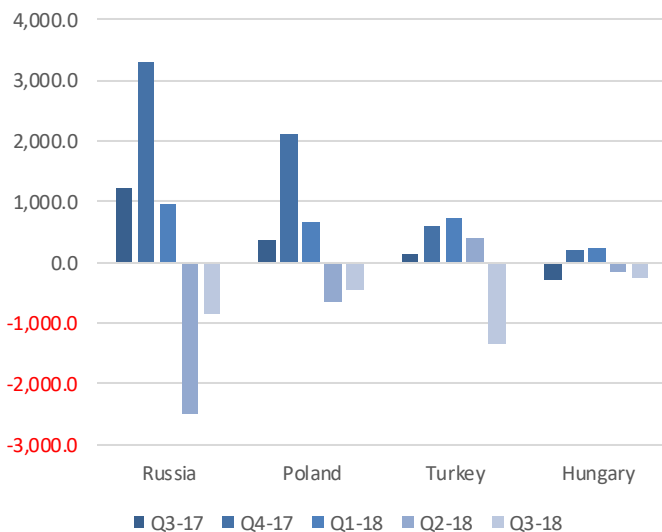
## Inflows and Outflows:

Turkish equities experienced net outflows for the first time in five quarters with a net divestment of -\$1,334.2M. Russian, Polish and Hungarian equity markets also experienced net outflows.

Institutional Investment in Region (\$M)



Institutional Investment in Region (\$M Chg)

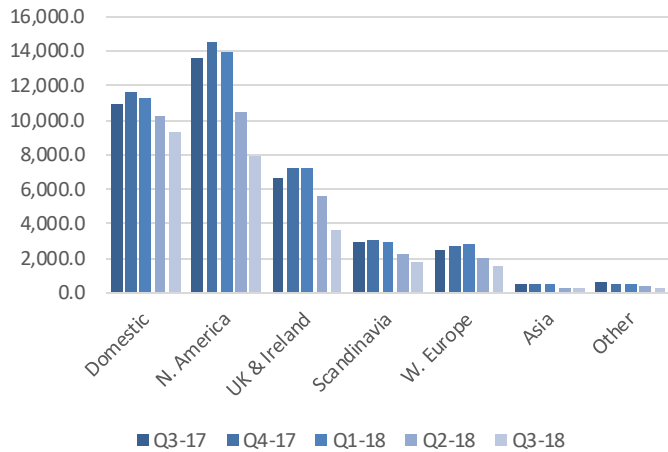




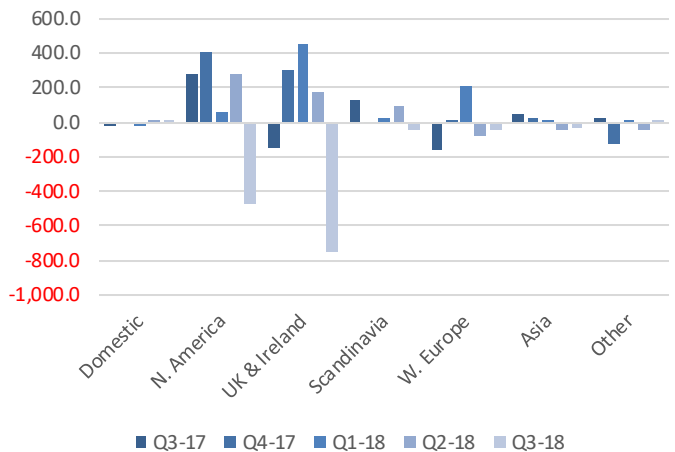
## Investment by Investor Region:

All investor regions showed decreases in aggregate Turkish equities holdings during the quarter, while the largest outflows were attributed to North American and UK & Ireland institutional investors. Growth investor, Aberdeen Standard Investments (U.K.) was the largest net seller (-\$280.5M) while the second largest seller, U.S. investor Lazard Asset Management, LLC (U.S.) divested (-\$272.9M) in the review period. U.S. Index Investor, BlackRock Fund Advisors was the largest buyer investing +\$251.8M in Turkish stocks in the quarter.

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



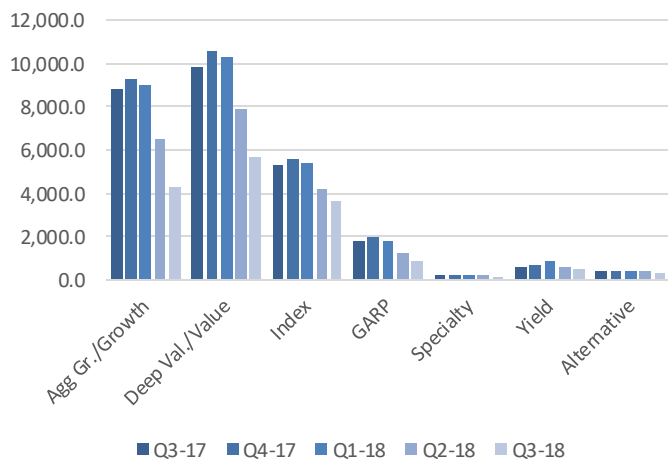
### Institutional Investment by Region (\$M Chg)



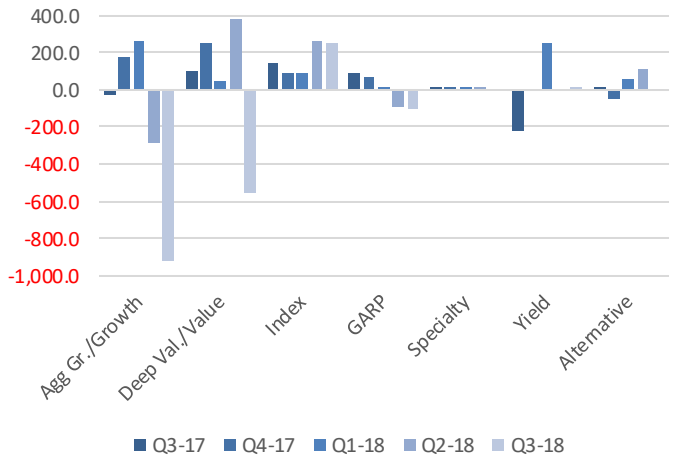
## Investment by Style:

All institutional investors by style showed net decreases in their aggregate (\$M) Turkish equity holdings, with the largest change (\$M) seen in Growth orientated investment strategies (-\$926.2M) followed by Value (-\$550.7M). Growth selling was driven by U.K. investors Aberdeen Standard Investments (U.K.) (-\$280.5M), J.P. Morgan Asset Management (UK), LTD (-\$196.7M) and Fidelity International Limited (-\$131.8M). Index investors were the largest net buyers, largely driven by U.S. investor BlackRock Fund Advisors with a net investment of +\$251.8M in the quarter.

### 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	680,913.7	710.3	0.0	0.1	0.0
Lazard Asset Management, LLC (U.S.)	United States	Value	Medium	92,738.5	499.5	-272.9	0.5	-35.3
APG Asset Management N.V.	Netherlands	Yield	Low	165,311.4	485.6	3.5	0.3	0.7
Genesis Investment Management, LLP	United Kingdom	Growth	Medium	15,371.5	396.5	-14.7	2.6	-3.6
Grantham Mayo Van Otterloo & Co., LLC	United States	Value	Medium	33,460.8	348.1	4.7	1.0	1.4
Invesco Advisers, Inc.	United States	Growth	Low	168,240.4	272.4	15.5	0.2	6.0
OppenheimerFunds, Inc	United States	Growth	Medium	163,012.8	249.2	14.4	0.2	6.2
Schroder Investment Management, LTD	United Kingdom	GARP	Medium	120,739.1	236.1	-12.9	0.2	-5.2
Silchester International Investors, LLP	United Kingdom	Value	Low	18,959.3	212.7	0.0	1.1	0.0
Nordea Investment Management (Denmark)	Denmark	Value	Medium	73,987.3	211.0	-3.2	0.3	-1.5
				<b>3,621.3</b>	<b>3,621.3</b>	<b>-265.6</b>		

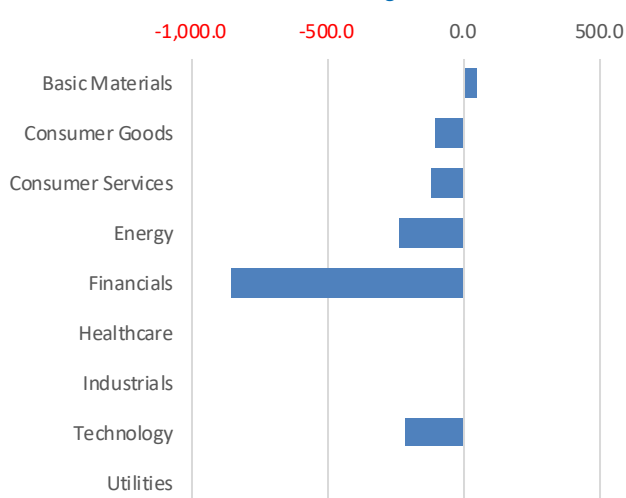
TOP BUYERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
SEB Investment Management AB	Sweden	Value	Medium	38,577.8	194.0	50.8	0.5	35.5
Polunin Capital Partners, LTD	United Kingdom	Value	Medium	1,313.6	47.2	25.1	3.6	113.0
M&G Investment Management, LTD	United Kingdom	Growth	Low	64,902.6	142.2	22.3	0.2	18.6
Invesco Advisers, Inc.	United States	Growth	Low	168,240.4	272.4	15.5	0.2	6.0
Capital International Investors	United States	Growth	Medium	220,928.7	14.7	14.7	0.0	Buy-in
OppenheimerFunds, Inc	United States	Growth	Medium	163,012.8	249.2	14.4	0.2	6.2
Causeway Capital Management, LLC	United States	Value	Medium	31,715.4	81.4	14.4	0.3	21.5
BlackRock Investment Management (U.K.), LTD	United Kingdom	Growth	Low	428,656.6	169.6	13.5	0.0	8.6
East Capital Asset Management AB	Sweden	GARP	Medium	1,161.2	81.0	12.6	7.0	18.5
Neuberger Berman Investment Advisers, LLC	United States	Value	Low	93,719.2	23.5	12.3	0.0	110.0
				<b>1,275.2</b>	<b>1,275.2</b>	<b>195.6</b>		

TOP SELLERS	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
Aberdeen Standard Investments (U.K.)	United Kingdom	Growth	Medium	135,683.8	184.3	-280.5	0.1	-60.4
Lazard Asset Management, LLC (U.S.)	United States	Value	Medium	92,738.5	499.5	-272.9	0.5	-35.3
J.P. Morgan Asset Management (UK), LTD	United Kingdom	Growth	Medium	113,092.1	107.4	-196.7	0.1	-64.7
Fidelity International Limited - FIL Investment Services (L	United Kingdom	Growth	Medium	100,602.0	61.1	-131.8	0.1	-68.3
Fidelity Management & Research Company	United States	Growth	Low	978,403.3	113.4	-112.3	0.0	-49.7
SKAGEN AS	Norway	Value	Medium	6,099.1	63.6	-90.9	1.0	-58.8
Harding Loevner, L.P.	United States	GARP	Low	41,577.1	4.5	-88.8	0.0	-95.2
AllianceBernstein, L.P. (U.S.)	United States	Value	Low	183,342.6	80.0	-45.5	0.0	-36.2
Somerset Capital Management, LLP	United Kingdom	Value	Low	4,233.4	70.5	-42.2	1.7	-37.5
J.P. Morgan Investment Management, Inc.	United States	Growth	Medium	288,255.2	52.0	-38.0	0.0	-42.2
				<b>1,236.3</b>	<b>1,236.3</b>	<b>-1,299.4</b>		

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

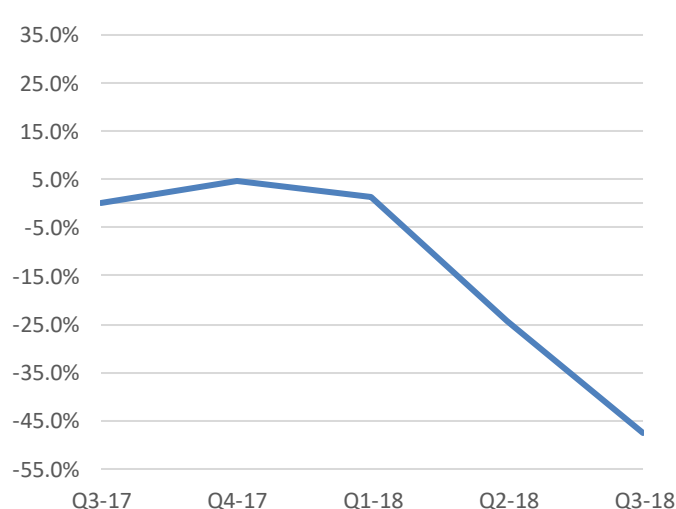
## Sector Inflows/Outflows

Active \$M Chg



## % Change in Active Investment vs 5 Previous Quarters

Active Investment

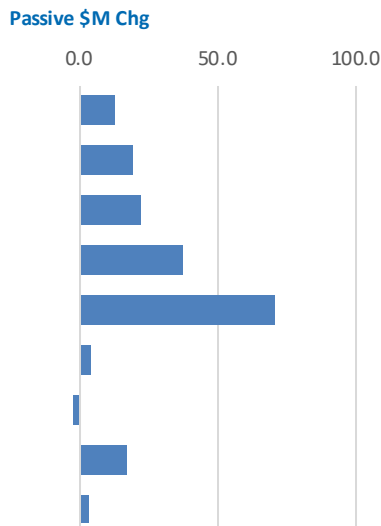


## Top Passive Holders, Buyers & Sellers

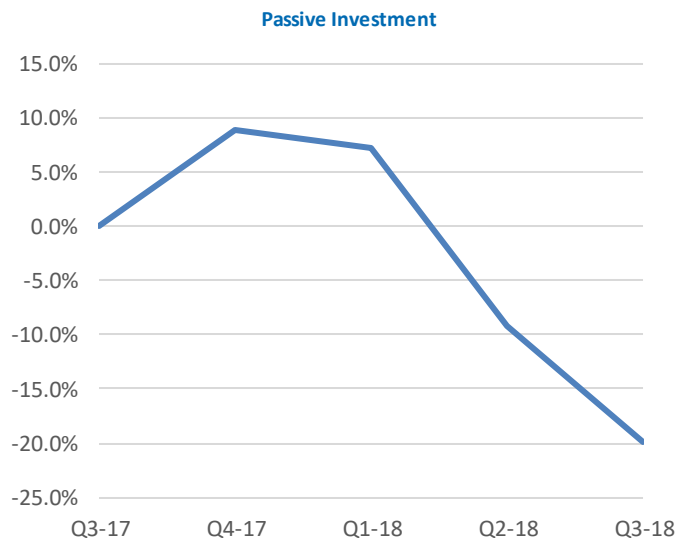
	Country	Style	Turnover	Equity Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
<b>TOP HOLDERS</b>					<b>4,434.5</b>	<b>222.5</b>		
The Vanguard Group, Inc.	United States	Index	Low	3,113,299.3	1,327.9	20.0	0.0	1.5
BlackRock Fund Advisors	United States	Index	Low	2,049,917.2	1,043.1	251.8	0.1	31.8
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	442,888.9	672.0	13.7	0.2	2.1
Arrowstreet Capital, L.P.	United States	Deep Value	Very High	51,938.4	350.7	-54.2	0.7	-13.4
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	135,191.4	336.6	-29.9	0.2	-8.2
Parametric Portfolio Associates, LLC	United States	GARP	Low	121,164.6	183.6	12.6	0.2	7.4
Acadian Asset Management, LLC	United States	Deep Value	Medium	40,590.5	181.3	13.7	0.4	8.2
California Public Employees Retirement System	United States	Index	Low	82,380.8	171.5	0.0	0.2	0.0
State Street Global Advisors (SSgA)	United States	Index	Low	1,377,564.5	91.5	8.4	0.0	10.1
BNY Mellon Asset Management North America Corporati	United States	Index	Low	203,903.5	76.2	-13.7	0.0	-15.3
<b>TOP BUYERS</b>					<b>3,680.9</b>	<b>359.0</b>		
BlackRock Fund Advisors	United States	Index	Low	2,049,917.2	1,043.1	251.8	0.1	31.8
Vident Investment Advisory, LLC	United States	Index	Medium	4,559.8	57.0	21.2	1.3	59.0
The Vanguard Group, Inc.	United States	Index	Low	3,113,299.3	1,327.9	20.0	0.0	1.5
Acadian Asset Management, LLC	United States	Deep Value	Medium	40,590.5	181.3	13.7	0.4	8.2
Dimensional Fund Advisors, L.P. (U.S.)	United States	Value	Low	442,888.9	672.0	13.7	0.2	2.1
Parametric Portfolio Associates, LLC	United States	GARP	Low	121,164.6	183.6	12.6	0.2	7.4
State Street Global Advisors (SSgA)	United States	Index	Low	1,377,564.5	91.5	8.4	0.0	10.1
Geode Capital Management, LLC	United States	Index	Low	405,290.9	55.5	7.3	0.0	15.2
Charles Schwab Investment Management, Inc.	United States	Index	Low	187,436.2	65.0	7.2	0.0	12.5
Two Sigma Investments, L.P.	United States	Alternative	Very High	32,814.3	3.9	2.9	0.0	313.6
<b>TOP SELLERS</b>					<b>930.3</b>	<b>-169.5</b>		
Arrowstreet Capital, L.P.	United States	Deep Value	Very High	51,938.4	350.7	-54.2	0.7	-13.4
Quoniam Asset Management GmbH	Germany	Value	High	6,249.5	0.0	-30.3	0.0	-100.0
BlackRock Advisors (U.K.), LTD	United Kingdom	Index	Low	135,191.4	336.6	-29.9	0.2	-8.2
BNY Mellon Asset Management North America Corporati	United States	Index	Low	203,903.5	76.2	-13.7	0.0	-15.3
Invesco Capital Management, LLC	United States	Index	Low	161,570.5	16.4	-10.9	0.0	-40.0
First Trust Advisors, L.P.	United States	Growth	Medium	58,518.8	43.8	-8.4	0.1	-16.1
AQR Capital Management, LLC	United States	Alternative	Medium	118,039.4	24.5	-7.5	0.0	-23.5
State Street Global Advisors France S.A.	France	Index	Low	18,916.9	26.8	-7.1	0.1	-20.9
TOBAM	France	Specialty	Medium	6,135.1	50.7	-3.8	0.8	-6.9
Managed Account Advisors, LLC	United States	Specialty	Medium	244,406.8	4.7	-3.7	0.0	-43.9

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

## Sector Inflows/Outflows



## % Change in Passive Investment vs 5 Previous Quarters





## Road show:

While London and New York continue to be the largest institutional investment centres, they switched from net buyers in Q2-18 to being the largest sellers on a city level largely attributed to Lazard Asset Management, LLC (U.S.) and J.P. Morgan Asset Management (UK). Boston based investors continued the selling trend from Q2-18 with Edinburgh following a similar path after divesting more than half their holdings led by Aberdeen Standard Investments (U.K.).

### Most Invested

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,904,140.9	<b>2,464.1</b>	<b>-440.0</b>	71
United States (New York)	2,540,414.1	<b>1,248.7</b>	<b>-345.7</b>	44
Norway (Oslo)	713,729.9	<b>721.0</b>	<b>-2.7</b>	3
United States (Boston)	2,321,038.4	<b>516.7</b>	<b>-155.8</b>	11
Netherlands (Amsterdam)	169,819.6	<b>486.5</b>	3.5	3
Sweden (Stockholm)	253,045.4	<b>451.1</b>	59.3	12
United States (Atlanta)	182,394.0	<b>280.2</b>	13.3	3
Canada (Toronto)	496,227.2	<b>248.7</b>	<b>-3.1</b>	11
United Kingdom (Edinburgh)	317,584.6	<b>221.8</b>	<b>-279.7</b>	5
Denmark (Copenhagen)	87,933.6	<b>220.1</b>	<b>-3.5</b>	6
United Kingdom (I)	18,959.3	<b>212.7</b>	0.0	1
Turkey (Istanbul)	209.5	<b>210.1</b>	8.4	9
United States (Los Angeles)	1,185,944.4	<b>172.7</b>	<b>-26.2</b>	5
Netherlands (Rotterdam)	50,278.9	<b>164.4</b>	7.6	1
Canada (Montreal)	106,100.2	<b>162.6</b>	0.0	3
Germany (Frankfurt)	301,331.7	<b>139.9</b>	<b>-18.5</b>	7
Switzerland (Geneva)	116,283.6	<b>138.9</b>	1.3	11
Austria (Vienna)	11,220.3	<b>111.4</b>	5.6	6
Canada (Victoria)	37,441.2	<b>109.0</b>	0.0	1
United States (San Diego)	89,406.6	<b>97.6</b>	<b>-27.5</b>	4
<i>Excludes Passive/Index Investors</i>		<b>8,378.4</b>	<b>-1,203.8</b>	217

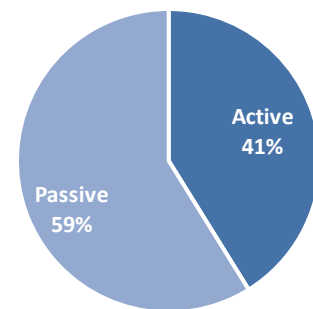
### Most Investors

Country / City	Total Equity Assets (\$M)	Value (\$M)	Activity (\$M)	# Firms
United Kingdom (London)	1,904,140.9	2,464.1	<b>-440.0</b>	71
United States (New York)	2,540,414.1	1,248.7	<b>-345.7</b>	44
France (Paris)	317,201.2	86.3	0.4	16
Japan (Tokyo)	791,352.9	64.9	0.5	15
Poland (Warsaw)	20,933.8	62.6	0.0	15
South Korea (Seoul)	56,733.0	8.3	0.4	13
Sweden (Stockholm)	253,045.4	451.1	59.3	12
United States (Boston)	2,321,038.4	516.7	<b>-155.8</b>	11
Canada (Toronto)	496,227.2	248.7	<b>-3.1</b>	11
Switzerland (Geneva)	116,283.6	138.9	1.3	11
Singapore (Singapore)	140,511.6	84.6	<b>-25.6</b>	10
United States (Chicago)	176,750.6	35.2	<b>-23.0</b>	10
Turkey (Istanbul)	209.5	210.1	8.4	9
Taiwan (Taipei)	9,250.7	9.6	0.0	8
Germany (Frankfurt)	301,331.7	139.9	<b>-18.5</b>	7
Switzerland (Zürich)	132,626.5	58.1	<b>-4.9</b>	7
Denmark (Copenhagen)	87,933.6	220.1	<b>-3.5</b>	6
Austria (Vienna)	11,220.3	111.4	5.6	6
Finland (Helsinki)	14,797.7	52.7	<b>-9.2</b>	6
Luxembourg (Luxembourg)	19,991.5	38.6	5.3	6
<i>Excludes Passive/Index Investors</i>		6,250.6	<b>-948.1</b>	294

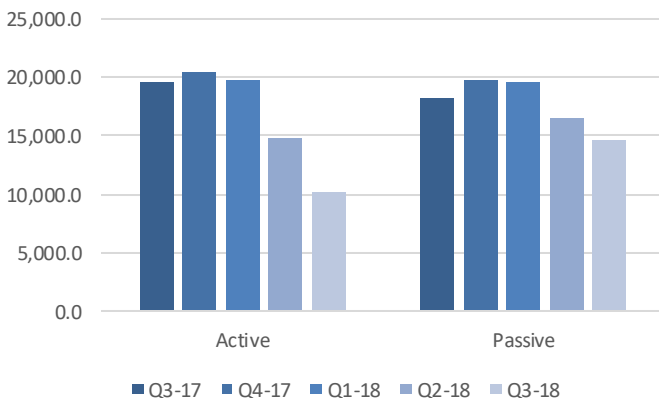
## Active vs. Passive investors

The active-to-passive split of ownership stands at a 18% difference. Passive orientated investors made net purchases of +\$189.1M in the market led by BlackRock Fund Advisors. Active orientated investors decreased their holdings by -\$1,523.2M led by Aberdeen Standard Investments (U.K.), Lazard Asset Management, LLC (U.S.) and J.P. Morgan Asset Management (UK), LTD together selling an aggregated amount of -\$750.1M in Turkish stocks.

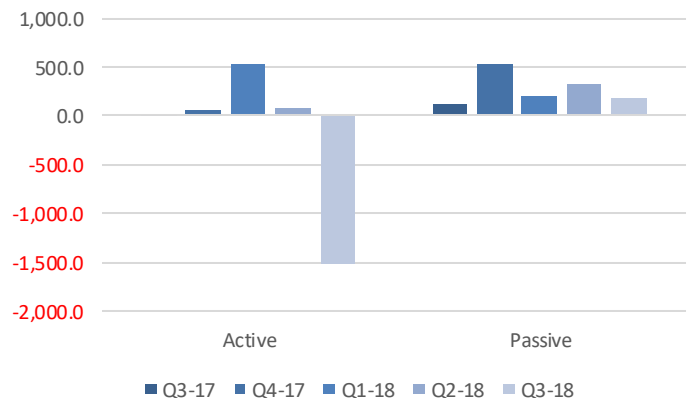
## Active vs Passive Split



## 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	18,727.7	464.7	68.6	2.5	17.3
TIAA-CREF Investment Management, LLC	United States	New York	Very High	343,189.2	396.1	-4.8	0.1	-1.2
Dimensional Fund Advisors, L.P. (U.S.)	United States	Austin	High	84,361.5	357.3	357.3	0.4	Buy-in
Amundi Ireland, LTD (London)	United Kingdom	London	Medium	8,262.0	319.4	47.7	3.9	17.5
Lord, Abnett & Co., LLC (Asset Management)	United States	Jersey City	High	123,625.9	298.9	37.3	0.2	14.3
Fidelity International Limited - FIL Investment Services (L	United Kingdom	London	Medium	34,988.5	272.1	-20.4	0.8	-7.0
Ashmore Investment Management, LTD	United Kingdom	London	Medium	25,807.3	215.7	100.3	0.8	86.8
Union Investment Privatfonds GmbH	Germany	Frankfurt	Low	56,393.5	184.1	-18.7	0.3	-9.2
Neuberger Berman Europe, LTD (Netherlands)	Netherlands	The Hague	High	5,873.8	172.8	0.0	2.9	0.0
Barings, LLC	United States	Charlotte	Medium	145,107.5	163.1	-0.0	0.1	-0.0
					<b>2,844.3</b>	<b>567.2</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	84,361.5	357.3	357.3	0.4	Buy-in
Ashmore Investment Management, LTD	United Kingdom	London	Medium	25,807.3	215.7	100.3	0.8	86.8
T. Rowe Price Associates, Inc.	United States	Baltimore	Low	176,969.1	93.8	78.3	0.1	504.0
Pictet Asset Management, LTD	United Kingdom	London	Medium	18,727.7	464.7	68.6	2.5	17.3
Amundi Ireland, LTD (London)	United Kingdom	London	Medium	8,262.0	319.4	47.7	3.9	17.5
Acomea SGR S.p.A.	Italy	Milan	Very High	1,222.1	67.2	38.2	5.5	131.7
Lord, Abnett & Co., LLC (Asset Management)	United States	Jersey City	High	123,625.9	298.9	37.3	0.2	14.3
Capital Research Global Investors (U.S.)	United States	Los Angeles	Very High	24,758.5	26.9	26.9	0.1	Buy-in
Edmond de Rothschild Asset Management (France)	France	Paris	Medium	10,713.8	58.3	25.8	0.5	79.5
Altshuler-Shaham Mutual Funds Management, LTD	Israel	Tel Aviv	High	5,390.7	15.3	15.3	0.3	Buy-in
					<b>1,917.5</b>	<b>795.5</b>		

TOP SELLERS	Country	City	Turnover	FI Assets (\$M)	Value (\$M)	Change (\$M)	% Portfolio	% Portfolio Chg
BZWBK TFI S.A.	Poland	Poznan	Medium	3,865.3	14.0	-141.3	0.4	-91.0
J.P. Morgan Investment Management, Inc.	United States	New York	Medium	129,962.8	126.2	-122.5	0.1	-49.3
BlueBay Asset Management, LLP	United Kingdom	London	Very High	36,522.8	74.4	-50.8	0.2	-40.6
Deutsche Asset Management Investment GmbH	Germany	Frankfurt	Medium	71,628.2	138.7	-50.5	0.2	-26.7
Quercus Towarzystwo Funduszy Inwestycyjnych S.A.	Poland	Warsaw	Low	392.1	11.6	-42.1	3.0	-78.4
J.P. Morgan Asset Management (UK), LTD	United Kingdom	London	Medium	39,779.9	43.6	-40.5	0.1	-48.2
AZ Fund Management S.A.	Luxembourg	Luxembourg	Medium	1,780.7	2.9	-26.7	0.2	-90.2
Stone Harbor Investment Partners, L.P.	United States	New York	High	11,628.0	15.4	-26.1	0.1	-63.0
Robeco Institutional Asset Management BV	Netherlands	Rotterdam	Medium	26,412.7	11.2	-24.5	0.0	-68.6
American Century Investment Management, Inc.	United States	Kansas City	Low	53,889.6	39.7	-23.8	0.1	-37.4
					<b>477.6</b>	<b>-548.7</b>		

## 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)	1,014,081.5	2,316.8	93.3	61	United Kingdom (London)	1,014,081.5	2,316.8	93.3	61
United States (New York)	2,034,030.6	1,105.3	-207.2	28	United States (New York)	2,034,030.6	1,105.3	-207.2	28
Germany (Frankfurt)	207,613.4	492.9	-81.2	9	Spain (Madrid)	77,354.8	108.5	-0.6	22
United States (Austin)	84,361.5	357.3	357.3	1	Taiwan (Taipei)	8,051.2	97.7	2.4	16
Switzerland (Zürich)	137,487.9	332.4	-14.8	12	United States (Boston)	1,153,980.3	315.2	-5.8	13
United States (Boston)	1,153,980.3	315.2	-5.8	13	Switzerland (Zürich)	137,487.9	332.4	-14.8	12
United States (Jersey City)	123,625.9	298.9	37.3	1	Italy (Milan)	135,987.2	293.1	22.7	11
Italy (Milan)	135,987.2	293.1	22.7	11	Luxembourg (Luxembourg)	25,120.0	55.9	-30.5	10
Singapore (Singapore)	23,661.3	193.2	-1.0	8	Germany (Frankfurt)	207,613.4	492.9	-81.2	9
Netherlands (The Hague)	40,445.8	177.0	-1.2	3	Poland (Warsaw)	8,077.4	125.4	-75.0	9
Ireland (Dublin)	41,016.7	168.9	-3.0	5	France (Paris)	203,323.6	89.9	42.6	9
United States (Charlotte)	146,267.0	164.2	-0.1	2	Austria (Vienna)	27,787.3	83.7	-10.1	9
United States (Newport Beach)	805,189.8	161.5	0.0	2	Switzerland (Lugano)	3,580.0	67.1	-4.5	9
Poland (Warsaw)	8,077.4	125.4	-75.0	9	Singapore (Singapore)	23,661.3	193.2	-1.0	8
Spain (Madrid)	77,354.8	108.5	-0.6	22	Switzerland (Geneva)	29,670.7	93.7	-24.5	7
United States (Atlanta)	202,945.5	105.6	-1.4	2	Ireland (Dublin)	41,016.7	168.9	-3.0	5
Taiwan (Taipei)	8,051.2	97.7	2.4	16	Switzerland (Zurich)	64,500.8	78.5	4.5	5
United States (Baltimore)	176,969.1	93.8	78.3	1	Spain (Barcelona)	3,927.0	51.7	-1.4	5
Switzerland (Geneva)	29,670.7	93.7	-24.5	7	United States (Chicago)	19,021.6	6.4	0.1	5
France (Paris)	203,323.6	89.9	42.6	9	Germany (Munich)	18,788.6	12.9	-0.4	4
	<b>7,091.4</b>		<b>218.0</b>	<b>222</b>			<b>6,089.2</b>	<b>-294.5</b>	<b>257</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.

### 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)



## GLOSSARY

**Equity Assets (\$M)** – The market value of all current publicly disclosed ownership of equity securities held by an account/institution as identified by Ipreo, 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:  $[(\sum \text{Value} (\$M)) / ((\sum \text{Value} (\$M) - (\sum \text{Change} (\$M)) \times 100)]$

Ipreo'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, Ipreo aggregates and sums the publicly-filed portfolio information from the investor to arrive at a disclosed total equity figure. Data for the beginning and end of Q3 2018 can be considered a snapshot of the most current positions.