

Kentucky Retirement Systems

Domestic and Global Commissions Report

Quarter Ending: March 31, 2018

Kentucky Retirement Systems
Domestic Equity - Common Stock Commissions
Quarter Ended March 31, 2018

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
BARCLAYS CAPITAL INC./LE, NEW JERSEY	25,980	740	974,990	0.0285	0.0759%
BARCLAYS CAPITAL LE, NEW YORK	64,467	1,404	5,818,247	0.0218	0.0241%
BERNSTEIN SANFORD C & CO, NEW YORK	47,450	656	3,074,055	0.0138	0.0213%
BLUEFIN RESEARCH PARTNER, JERSEY CITY	26,650	1,066	1,486,372	0.0400	0.0717%
BMO CAPITAL MARKETS CORP, NEW YORK	2,990	120	232,302	0.0400	0.0515%
BTIG LLC, NEW YORK	210,486	6,315	13,878,283	0.0300	0.0455%
BTIG LLC, SAN FRANCISCO	25,593	768	939,046	0.0300	0.0818%
CANTOR FITZGERALD & CO INC, NEW YORK	138,506	3,017	1,791,486	0.0218	0.1684%
CITIGROUP GBL MKTS INC, NEW YORK	127,081	3,253	6,035,744	0.0256	0.0539%
COWEN AND CO LLC, NEW YORK	45,330	1,393	1,041,998	0.0307	0.1336%
CREDIT SUISSE, NEW YORK (CSUS)	177,232	4,213	13,858,040	0.0238	0.0304%
DEUTSCHE BK SECS INC, NY (NWSCUS33)	166,226	4,438	8,441,162	0.0267	0.0526%
GOLDMAN SACHS & CO, NY	292,641	6,687	16,109,570	0.0229	0.0415%
GUGGENHEIM CAPITAL MARKETS LLC, NEW YORK	4,710	188	755,514	0.0400	0.0249%
ICBC FINCL SVCS, NEW YORK	14,602	292	727,360	0.0200	0.0402%
INSTINET CLEARING SER INC, NEW YORK	1,674,761	25,098	61,127,170	0.0150	0.0411%
INSTINET CORP, NEW YORK	44,714	1,215	1,553,669	0.0272	0.0782%
INSTINET CORP, NY	1,450	15	125,416	0.0100	0.0116%
INVESTMENT TECH GROUP INC, NEW YORK	3,106,202	40,728	109,420,851	0.0131	0.0372%
INVESTMENT TECHNOLOGY GROUP, NEW YORK	37,960	493	3,282,260	0.0130	0.0150%
ISI GROUP INC, NEW YORK	148,485	5,089	11,348,833	0.0343	0.0448%
ITG INC, NEW YORK	251,810	3,457	14,643,360	0.0137	0.0236%
J.P MORGAN SECURITIES INC, NEW YORK	250,791	4,700	14,337,867	0.0187	0.0328%
J.P. MORGAN CLEARING CORP, NEW YORK	27,880	290	756,973	0.0104	0.0383%
JEFFERIES & CO INC, NEW YORK	84,736	1,939	3,317,500	0.0229	0.0585%
JONESTRADING INST SVCS LLC, NEW YORK	32,919	988	3,513,167	0.0300	0.0281%
KEEFE BRUYETTE + WOODS INC, NEW YORK	23,790	952	1,187,753	0.0400	0.0801%
KEYBANC CAPITAL MARKETS INC, NEW YORK	21,740	870	1,961,054	0.0400	0.0443%
LIQUIDNET INC, NEW YORK	2,203,981	30,837	83,660,058	0.0140	0.0369%
MACQUARIE SECS USA INC, NEW YORK	11,650	466	567,857	0.0400	0.0821%
MERRILL LYNCH PIERCE FENNER SMITH INC NY	2,790,422	48,294	109,458,970	0.0173	0.0441%
MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS	14,700	588	1,763,986	0.0400	0.0333%
MORGAN STANLEY & CO INC, NY	122,496	4,766	4,251,668	0.0389	0.1121%
NATIONAL FINL SVCS CORP, NEW YORK	24,180	967	926,102	0.0400	0.1044%
NEEDHAM AND CO LLC, NEW YORK	132,490	4,055	9,402,385	0.0306	0.0431%
O NEIL WILLIAM CO INC BCC CLRG, NEW YORK	16,670	667	520,102	0.0400	0.1282%
OPPENHEIMER & CO INC, NEW YORK	30,839	1,172	1,386,690	0.0380	0.0845%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	438,569	11,625	10,050,493	0.0265	0.1157%
RBC CAPITAL MARKETS LLC, NEW YORK	2,730	109	453,686	0.0400	0.0241%
SANDLER ONEILL AND PARTNER LP, NEW YORK	90,205	2,706	5,794,625	0.0300	0.0467%
STEPHENS INC, LITTLE ROCK	13,315	533	1,488,184	0.0400	0.0358%
STIFEL NICOLAUS	152,852	4,254	5,162,614	0.0278	0.0824%
SUNTRUST CAPITAL MARKETS INC, NEW YORK	44,443	1,349	2,255,314	0.0304	0.0598%
UBS SECURITIES LLC, STAMFORD	4,291,642	27,993	330,623,160	0.0065	0.0085%
WEEDEN & CO, NEW YORK	671,993	20,160	12,843,757	0.0300	0.1570%
WELLS FARGO SECURITIES, LLC, NEW YORK	39,530	1,204	1,355,732	0.0305	0.0888%
WOLFE TRAHAN SECURITIES, NEW YORK	4,460	178	596,563	0.0400	0.0299%
TOTAL DOMESTIC	18,174,349	282,307	884,301,985	0.0155	0.0319%

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
COLUMBIA	(204)	1,099	619,474	-5.3857	0.1774%
INST VEN PTRN XII	42,057	421	506,641	0.0100	0.0830%
NTGI STRUCTURED	1,558,278	15,468	41,465,221	0.0099	0.0373%
RIVER ROAD	360,208	7,230	18,531,312	0.0201	0.0390%
RIVER ROAD FAV	3,248,582	84,263	99,769,156	0.0259	0.0845%
S&P 500 INDEX	4,151,723	24,517	326,867,361	0.0059	0.0075%
SYSTEMATIC	7,030,166	104,540	262,205,548	0.0149	0.0399%

TCV VI	202	2	25,516	0.0100	0.0079%
TORTOISE CAP	221,994	2,279	7,575,700	0.0103	0.0301%
WESTFIELD CAPITAL	1,561,343	42,488	126,736,057	0.0272	0.0335%
TOTAL DOMESTIC	18,174,349	282,307	884,301,985	0.0155	0.0319%

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Global Equity - Common Stock Commissions
Quarter Ended March 31, 2018

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
ABG SECS, OSLO	26,934	57	113,615	0.0021	0.0500%
BANCO BTG PACTUAL SA, RIO DE JANEIRO	214,000	562	1,125,449	0.0026	0.0500%
BANCO ITAU, SAO PAULO	415,400	12,971	6,472,806	0.0312	0.2004%
BARCLAYS CAPITAL LE, NEW YORK	5,700	57	705,807	0.0100	0.0081%
BARCLAYS CAPITAL, LONDON (BARCGB33)	511,051	2,150	2,622,160	0.0042	0.0820%
BERENBERG GOSSLER & CIE, HAMBURG	15,607	1,851	1,544,474	0.1186	0.1199%
BERNSTEIN SANFORD C & CO, NEW YORK	170,500	4,952	3,868,787	0.0290	0.1280%
BMO CAPITAL MARKETS CORP, NEW YORK	58,400	2,190	845,128	0.0375	0.2591%
BNP PARIBAS PEREGRINE SEC LTD, HONG KONG	34,900	2,896	2,446,296	0.0830	0.1184%
BNP PARIBAS SEC SRVS SA, SINGAPORE	158,081	4,001	6,012,052	0.0253	0.0665%
BNP PARIBAS SECURITIES SVCS, HONG KONG	1,097,000	796	797,846	0.0007	0.0998%
CITIGROUP GBL MKTS INC, NEW YORK	14,340	506	3,176,567	0.0353	0.0159%
CITIGROUP GBL MKTS/SALOMON, NEW YORK	5,524,966	7,204	13,171,560	0.0013	0.0547%
CITIGROUP GLOBAL MARKETS LTD, LONDON	186,542	3,509	5,638,049	0.0188	0.0622%
CREDIT LYONNAIS SECS (ASIA), HONG KONG	140,000	2,934	2,661,183	0.0210	0.1102%
CREDIT LYONNAIS SECS, SINGAPORE	13,700	636	530,451	0.0464	0.1199%
CREDIT SUISSE (EUROPE), LONDON	986,279	38,348	35,662,920	0.0389	0.1075%
CREDIT SUISSE (HK) LIMITED, HONG KONG	210,000	3,957	3,589,834	0.0188	0.1102%
CREDIT SUISSE, NEW YORK (CSUS)	7,358,655	34,610	25,523,381	0.0047	0.1356%
CREDIT SUISSE, TAIPEI	226,000	346	693,268	0.0015	0.0500%
DAIWA SECS AMER INC, NEW YORK	35,800	2,102	2,157,475	0.0587	0.0974%
DEUTSCHE BK INTL EQ, LONDN (DEUTGB22EEQ)	765	109	72,596	0.1421	0.1498%
DEUTSCHE BK SECS INC, NY (NWSCUS33)	1,019,308	23,440	23,098,993	0.0230	0.1015%
DEUTSCHE SEC ASIA LTD, SEOUL	18,000	1,126	2,817,214	0.0626	0.0400%
EXANE, PARIS (EXANFRPP)	19,200	487	1,621,518	0.0253	0.0300%
FX- CREDIT SUISSE FIRST BOSTON, LONDON	1,701,800	594	1,186,437	0.0003	0.0501%
GOLDMAN SACHS & CO, NY	571,974	6,695	8,504,069	0.0117	0.0787%
GOODBODY STOCKBROKERS, DUBLIN	46,438	785	1,585,881	0.0169	0.0495%
HSBC BANK PLC (MIDLAND BK)(JAC), LONDON	117,056	1,183	1,419,425	0.0101	0.0834%
HSBC JAMES CAPEL, SEOUL	15,000	3,903	1,955,288	0.2602	0.1996%
INSTINET EUROPE LIMITED, LONDON	79,217	1,697	3,802,523	0.0214	0.0446%
INSTINET PACIFIC LTD, HONG KONG	130,000	310	777,094	0.0024	0.0399%
INVESTMENT TECHNOLOGY GROUP LTD,DUBLIN	297,058	2,940	5,623,033	0.0099	0.0523%
ITG AUSTRALIA LTD, MELBOURNE	21,000	517	861,407	0.0246	0.0600%
J P MORGAN SECS LTD, LONDON	477,759	18,989	23,530,235	0.0397	0.0807%
J.P MORGAN SECURITIES INC, NEW YORK	55,260	276	3,199,585	0.0050	0.0086%
J.P. MORGAN CLEARING CORP, NEW YORK	116,800	4,380	1,850,712	0.0375	0.2367%
JEFFERIES & CO LTD, LONDON	3,803	135	170,103	0.0355	0.0793%
JM MORGAN STANLEY SECURITIES, MUMBAI	3,301,300	9,029	18,058,865	0.0027	0.0500%
JPMORGAN SECURITIES INC, NEW YORK	97,986	1,927	1,772,425	0.0197	0.1087%
KEPLER EQUITIES, PARIS	3,763	160	320,249	0.0424	0.0498%
LIQUIDNET CANADA INC, TORONTO	23,800	379	1,008,891	0.0159	0.0375%
LIQUIDNET EUROPE LIMITED, LONDON	1,040	177	252,375	0.1698	0.0700%
MACQUARIE BANK LTD, HONG KONG	731,400	1,373	1,620,390	0.0019	0.0847%
MERRILL LYNCH INTL LONDON EQUITIES	1,482,273	25,203	35,462,255	0.0170	0.0711%
MERRILL LYNCH PIERCE FENNER SMITH INC NY	175,000	1,473	7,881,662	0.0084	0.0187%
MERRILL LYNCH PIERCE FENNER, WILMINGTON	1,047,367	13,907	9,104,571	0.0133	0.1528%
MIZUHO SECURITIES USA INC. NEW YORK	24,300	1,245	1,245,989	0.0512	0.0999%
MORGAN STANLEY & CO INC, NY	2,233,687	51,952	35,770,909	0.0233	0.1452%
MORGAN STANLEY & CO INTL LTD, TAIPEI	143,000	182	363,754	0.0013	0.0500%
NATIONAL FINL SVCS CORP, NEW YORK	2,700	27	96,438	0.0100	0.0280%
NESBITT BURNS, TORONTO (NTDT)	1,036,381	6,716	8,042,226	0.0065	0.0835%
NOMURA SECS INTL INC, NEW YORK	43,000	761	1,306,480	0.0177	0.0582%

PAREL, PARIS	254,662	4,614	3,365,720	0.0181	0.1371%
RBC CAPITAL MARKETS LLC, NEW YORK	186,400	932	2,493,825	0.0050	0.0374%
RBC DOMINION SECS INC, TORONTO (DOMA)	2,705,893	7,223	13,693,831	0.0027	0.0527%
REDBURN PARTNERS LLP, LONDON	38,737	3,955	4,360,346	0.1021	0.0907%
S G WARBURG, SEOUL	8,000	1,364	1,241,375	0.1705	0.1099%
SANFORD C BERNSTEIN & CO INC, LONDON	140,902	1,797	5,269,910	0.0128	0.0341%
SCOTIA CAPITAL INC, NEW YORK	58,800	578	964,291	0.0098	0.0600%
SG SEC (LONDON) LTD, LONDON	122,392	1,535	2,824,090	0.0125	0.0543%
SMBC SECURITIES, INC NEW YORK	204,600	7,864	12,114,277	0.0384	0.0649%
SOCIETE GENERALE LONDON BRANCH, LONDON	597,849	6,839	13,197,806	0.0114	0.0518%
TORONTO DOMINION SEC, TORONTO	23,300	349	424,326	0.0150	0.0823%
UBS WARBURG ASIA LTD, HONG KONG	1,239,800	4,275	4,457,718	0.0034	0.0959%
UBS WARBURG SEC, TAIWAN	2,362,110	3,628	7,259,341	0.0015	0.0500%
UBS WARBURG, LONDON	1,346,078	17,948	25,284,162	0.0133	0.0710%
WELLS FARGO SECURITIES LLC, CHARLOTTE	116,800	4,380	1,651,023	0.0375	0.2653%
XP INVESTIMENTOS CCTVM SA, RIO DE JANEIRO	86,000	452	452,558	0.0053	0.0999%

TOTAL GLOBAL	41,933,613	376,446	422,797,298	0.0090	0.0890%
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Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMERICAN CENTURY	9,134,564	129,486	158,900,455	0.0142	0.0815%
FRANKIN TEMPLETON	6,527,145	109,616	96,781,828	0.0168	0.1133%
LAZARD ASSET MGMT	3,285,935	100,735	104,305,648	0.0307	0.0966%
LSV ASSET MANAGEMENT	15,945,419	21,688	42,161,144	0.0014	0.0514%
LSV ASSET MGMT	7,039,900	9,276	18,268,752	0.0013	0.0508%
MANULIFE ASSET MGMT	650	5,646	2,379,471	8.6861	0.2373%
TOTAL GLOBAL	41,933,613	376,446	422,797,298	0.0090	0.0890%