

Kentucky Retirement Systems

Domestic and Global Commissions Report

Quarter Ending: March 31, 2019

Kentucky Retirement Systems
Domestic Equity - Common Stock Commissions
Quarter Ended March 31, 2019

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
B RILEY AND CO LLC, NEW YORK	3,010	120	375,043	0.0400	0.0321%
BAIRD, ROBERT W & CO INC, MILWAUKEE	4,820	193	491,174	0.0400	0.0393%
BARCLAYS	25,170	1,007	1,309,024	0.0400	0.0769%
BERNSTEIN SANFORD C & CO, NEW YORK	84,477	2,264	5,364,515	0.0268	0.0422%
BTIG LLC, NEW YORK	535,513	16,065	19,687,586	0.0300	0.0816%
CANTOR FITZGERALD & CO INC, NEW YORK	474,532	14,236	20,354,526	0.0300	0.0699%
CITIGROUP	60,746	1,431	829,300	0.0236	0.1725%
COWEN AND CO LLC, NEW YORK	15,150	606	919,055	0.0400	0.0659%
CREDIT SUISSE	73,152	1,784	3,981,359	0.0244	0.0448%
DIRECT TRADING, UNITED STATES	187,567	5,627	5,054,903	0.0300	0.1113%
GOLDMAN SACHS	210,934	5,516	4,109,153	0.0261	0.1342%
INSTINET CORP	116,796	2,494	5,502,510	0.0214	0.0453%
INVESTMENT TECH GROUP INC, NEW YORK	130,326	2,856	6,038,894	0.0219	0.0473%
ISI GROUP	38,580	1,361	1,837,342	0.0353	0.0741%
ITG INC, NEW YORK	8,898	178	123,814	0.0200	0.1437%
J.P MORGAN SECURITIES INC, NEW YORK	189,693	5,391	14,917,791	0.0284	0.0361%
JEFFERIES & CO INC, NEW YORK	13,450	538	1,283,717	0.0400	0.0419%
JMP SECURITIES, SAN FRANCISCO	8,030	321	269,221	0.0400	0.1193%
JONESTRADING INST SVCS LLC, NEW YORK	26,485	795	2,488,223	0.0300	0.0319%
JP MORGAN SECURITIES	17,640	353	857,354	0.0200	0.0411%
KEYBANC CAPITAL MARKETS INC, NEW YORK	8,740	350	2,302,110	0.0400	0.0152%
LIQUIDNET INC, NEW YORK	77,325	1,795	4,327,257	0.0232	0.0415%
LUMINEX TRADING AND ANALYTICS, BOSTON	23,820	643	2,180,580	0.0270	0.0295%
MACQUARIE SECURITIES	11,560	462	298,300	0.0400	0.1550%
MERRILL LYNCH	38,980	1,279	4,520,996	0.0328	0.0283%
MKM PARTNERS LLC, GREENWICH	15,490	620	421,165	0.0400	0.1471%
NATIONAL FINL SVCS CORP, NEW YORK	950	26	213,921	0.0270	0.0120%
NEEDHAM AND CO LLC, NEW YORK	6,060	242	733,055	0.0400	0.0331%
O NEIL WILLIAM CO INC BCC CLRG, NEW YORK	3,460	138	469,539	0.0400	0.0295%
OPPENHEIMER & CO INC, NEW YORK	15,850	634	1,164,701	0.0400	0.0544%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	113,568	3,449	7,119,062	0.0304	0.0485%
ROSENBLATT SECURITIES INC, NEW YORK	1,112	22	37,562	0.0200	0.0592%
STATE STREET GLOBAL MARKETS LLC, BOSTON	15,499,377	123,995	577,100,900	0.0080	0.0215%
STEPHENS INC, LITTLE ROCK	4,820	193	202,683	0.0400	0.0951%
STIFEL NICOLAUS	30,180	1,207	1,358,448	0.0400	0.0889%
UBS	586,617	5,206	24,437,904	0.0089	0.0213%
WEDBUSH MORGAN SECS INC, LOS ANGELES	6,030	241	475,210	0.0400	0.0508%
WEEDEN and CO	36,791	319	2,370,262	0.0087	0.0135%
WELLS FARGO SECURITIES LLC, CHARLOTTE	17,780	711	502,609	0.0400	0.1415%
WELLS FARGO SECURITIES, LLC, NEW YORK	332,319	10,751	11,429,129	0.0324	0.0941%
WILLIAM BLAIR & CO, CHICAGO	2,430	97	384,073	0.0400	0.0253%
WOLFE TRAHAN SECURITIES, NEW YORK	3,390	136	478,768	0.0400	0.0283%
TOTAL DOMESTIC	19,061,618	215,654	738,322,738	0.0113	0.0292%

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
HARVEST PARTNERS V	118,611	1,186	3,020,448	0.0100	0.0393%
INST VEN PTRN XII	51,516	515	1,075,316	0.0100	0.0479%
RIVER ROAD	73,845	2,064	3,077,507	0.0279	0.0671%
RIVER ROAD FAV	1,525,515	43,578	55,003,133	0.0286	0.0792%
S&P 500 INDEX	312,890	2,348	18,281,730	0.0075	0.0128%
STATE STREET TRANSIT	15,499,377	123,995	577,100,900	0.0080	0.0215%
SYSTEMATIC	70,995	1,525	2,224,711	0.0215	0.0685%
TORTOISE CAP	241,909	2,789	6,985,845	0.0115	0.0399%
WARBURG PINCUS PE X	53,557	536	469,791	0.0100	0.1140%
WESTFIELD CAPITAL	1,113,403	37,119	71,083,357	0.0333	0.0522%
TOTAL DOMESTIC	19,061,618	215,654	738,322,738	0.0113	0.0292%

Kentucky Retirement Systems
Global Equity - Common Stock Commissions
Quarter Ended March 31, 2019

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
BANCO ITAU, SAO PAULO	52,800	705	468,999	0.0133	0.1502%
BANCO SANTANDER (BRASIL) S.A, SAO PAULO	186,200	2,434	1,619,883	0.0131	0.1503%
BARCLAYS	417,378	10,480	17,389,547	0.0251	0.0603%
BERENBERG GOSSLER & CIE, HAMBURG	12,530	648	1,084,442	0.0517	0.0598%
BERNSTEIN SANFORD C & CO, NEW YORK	90,611	453	5,811,355	0.0050	0.0078%
BNP PARIBUS	529,358	5,073	7,126,320	0.0096	0.0712%
BNY MELLON CLEARING	48,214	6,792	5,667,163	0.1409	0.1199%
CANTOR FITZGERALD & CO INC, NEW YORK	25,954	753	1,896,686	0.0290	0.0397%
CIBC WORLD MKTS INC, TORONTO	37,000	1,034	1,047,092	0.0279	0.0987%
CITIGROUP	1,800,273	15,368	28,657,992	0.0085	0.0536%
CREDIT LYONNAIS SECS (ASIA), HONG KONG	483,800	634	906,465	0.0013	0.0699%
CREDIT LYONNAIS SECS, SINGAPORE	104,700	2,721	3,684,280	0.0260	0.0739%
CREDIT SUISSE	4,196,008	27,705	33,313,594	0.0066	0.0832%
DAIWA SECURITIES	21,300	566	689,431	0.0266	0.0822%
DEUTSCHE BANK	236,844	12,541	15,644,745	0.0530	0.0802%
DEUTSCHE SEC ASIA LTD, HONG KONG	1,600,000	699	846,368	0.0004	0.0825%
GOLDMAN SACHS	674,407	16,238	16,443,214	0.0241	0.0988%
HSBC	804,670	13,367	16,337,972	0.0166	0.0818%
INSTINET CORP	750,000	580	1,451,445	0.0008	0.0400%
INVESTMENT TECHNOLOGY GROUP LTD,DUBLIN	154,675	1,202	2,041,641	0.0078	0.0589%
J.P MORGAN SECURITIES INC, NEW YORK	42,148	326	3,937,720	0.0077	0.0083%
JEFFERIES & CO INC, NEW YORK	245,597	3,708	7,166,869	0.0151	0.0517%
JEFFERIES & CO LTD, LONDON	22,000	3,263	2,178,396	0.1483	0.1498%
JP MORGAN SECURITIES	1,854,665	20,626	30,131,903	0.0111	0.0685%
KEPLER EQUITIES, PARIS	39,850	5,444	4,531,574	0.1366	0.1201%
MACQUARIE SECURITIES	115,000	6,771	4,824,276	0.0589	0.1404%
MERRILL LYNCH	3,059,724	24,695	46,185,171	0.0081	0.0535%
MIZUHO SECURITIES USA INC. NEW YORK	81,800	2,284	3,361,811	0.0279	0.0679%
MORGAN STANLEY	2,521,940	17,775	24,943,618	0.0070	0.0713%
NATIONAL FIN SVCS CORP, NEW YORK	100,000	3,750	3,021,050	0.0375	0.1241%
NESBITT BURNS, TORONTO (NTDT)	253,000	7,113	5,981,957	0.0281	0.1189%
NUMIS SECURITIES INC., NEW YORK	29,918	2,000	1,998,420	0.0669	0.1001%
PAREL, PARIS	9,448	782	893,553	0.0828	0.0876%
RBC CAPITAL MARKETS	726,786	11,746	13,733,458	0.0162	0.0855%
REDBURN PARTNERS LLP, LONDON	151,682	4,858	4,844,052	0.0320	0.1003%
SANFORD C BERNSTEIN & CO INC, LONDON	83,104	1,293	3,234,191	0.0156	0.0400%
SCOTIA CAPITAL MKTS, TORONTO	160,000	4,524	3,344,173	0.0283	0.1353%
SG SEC (LONDON) LTD, LONDON	382,625	9,520	8,861,068	0.0249	0.1074%
SMBC SECURITIES, INC NEW YORK	129,400	6,006	6,541,040	0.0464	0.0918%
SOCIETE GENERALE LONDON BRANCH, LONDON	654,889	9,098	16,747,184	0.0139	0.0543%
SOCIETE GENERALE, PARIS	17,400	55	110,834	0.0032	0.0499%
UBS	17,901,478	17,656	26,792,188	0.0010	0.0659%
TOTAL GLOBAL	40,809,176	283,290	385,493,140	0.0069	0.0735%

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMERICAN CENTURY	7,278,652	161,325	212,572,180	0.0222	0.0759%
COLUMBIA	170	1,065	727,249	6.2635	0.1464%
FRANKIN TEMPLETON	5,230,300	54,580	56,177,492	0.0104	0.0972%
LAZARD ASSET MGMT	4,378,986	42,565	64,904,249	0.0097	0.0656%
LSV ASSET MANAGEMENT	17,588,589	16,700	36,629,376	0.0009	0.0456%
LSV ASSET MGMT	6,332,201	6,436	14,030,125	0.0010	0.0459%
MANULIFE ASSET MGMT	278	619	452,469	2.2263	0.1368%
TOTAL GLOBAL	40,809,176	283,290	385,493,140	0.0069	0.0735%