

Kentucky Retirement Systems

Domestic and Global Commissions Report

Quarter Ending: March 31, 2020

Kentucky Retirement Systems
Domestic Equity - Common Stock Commissions
Quarter Ended March 31, 2020

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
B RILEY AND CO LLC, NEW YORK	16681	500.43	445449	0.0300	0.1123%
BAIRD, ROBERT W & CO INC, MILWAUKEE	2669	106.76	282916	0.0400	0.0377%
BARCLAYS	144610	1084.59	2285621	0.0075	0.0475%
BERNSTEIN SANFORD C & CO, NEW YORK	388579	9716.03	21528772	0.0250	0.0451%
BMO CAPITAL MARKETS CORP, NEW YORK	18280	731.2	2590281	0.0400	0.0282%
BNY MELLON CLEARING	6363	44.54	58531	0.0070	0.0761%
BTIG LLC, NEW YORK	524060	15721.8	15047150	0.0300	0.1045%
CANTOR FITZGERALD & CO INC, NEW YORK	2338039	54461.2	70116939	0.0233	0.0777%
CITIGROUP	11358	190.7	1298541	0.0168	0.0147%
COWEN AND CO LLC, NEW YORK	80811	940.51	1581091	0.0116	0.0595%
CREDIT SUISSE	575197	14530.31	17913704	0.0253	0.0811%
GOLDMAN SACHS	24175	631.6	1153472	0.0261	0.0548%
INSTINET CORP	700391	10722.94	26887763	0.0153	0.0399%
INVESTMENT TECH GROUP INC, NEW YORK	88673	2618.28	7160480	0.0295	0.0366%
ISI GROUP	487618	5088.12	13836349	0.0104	0.0368%
ITG INC, NEW YORK	364947	7298.94	5274811	0.0200	0.1384%
J.P MORGAN SECURITIES INC, NEW YORK	264412	4475.77	21229346	0.0169	0.0211%
JANNEY MONTGOMERY SCOTT, PHILADELPHIA	8180	327.2	141425	0.0400	0.2314%
JEFFERIES & CO INC, NEW YORK	386091	3033.08	12594115	0.0079	0.0241%
JMP SECURITIES, SAN FRANCISCO	6866	274.64	343093	0.0400	0.0800%
JONESTRADING INST SVCS LLC, NEW YORK	11545	346.35	3220588	0.0300	0.0108%
JP MORGAN SECURITIES	5219	104.38	299985	0.0200	0.0348%
KNIGHT EQUITY MARKETS LP, NEW YORK	2440	73.2	277851	0.0300	0.0263%
LEERINK SWANN AND COMPANY, NEW YORK	6670	266.8	625958	0.0400	0.0426%
LIQUIDNET INC, NEW YORK	171361	3289.75	4708018	0.0192	0.0699%
LUMINEX TRADING AND ANALYTICS, BOSTON	104510	2821.78	4283445	0.0270	0.0659%
MERRILL LYNCH	61706	2166.64	8955199	0.0351	0.0242%
MISCHLER FINANCIAL GROUP INC, NEW YORK	5452	163.56	93373	0.0300	0.1752%
MORGAN STANLEY	60770	2430.8	2601907	0.0400	0.0934%
NATIONAL FINL SVCS CORP, NEW YORK	4100	110.7	230694	0.0270	0.0480%
OPPENHEIMER & CO INC, NEW YORK	21043	841.72	1223173	0.0400	0.0688%
PIPER JAFFRAY & CO., JERSEY CITY	418886	12074.31	17876952	0.0288	0.0675%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	688138	17705.47	24915378	0.0257	0.0711%
RBC CAPITAL MARKETS	305519	2291.4	6102891	0.0075	0.0375%
STIFEL NICOLAUS	289918	7247.95	4034294	0.0250	0.1797%
TOURMALINE PARTNERS LLC, NEW YORK	89394	1787.88	2249036	0.0200	0.0795%
UBS	6841825	56445.72	558221450	0.0083	0.0101%
WEDBUSH MORGAN SECS INC, LOS ANGELES	4710	188.4	298943	0.0400	0.0630%
WELLS FARGO SECURITIES, LLC, NEW YORK	124277	1316.22	1210109	0.0106	0.1088%
WILLIAM BLAIR & CO, CHICAGO	4680	187.2	1284563	0.0400	0.0146%
WOLFE TRAHAN SECURITIES, NEW YORK	26060	1042.4	1277775	0.0400	0.0816%
TOTAL DOMESTIC	15,686,223	245,401	865,761,431	0.0156	0.0283%

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
NTGI STRUCTURED	6,363	55	58,531	0.0086	0.0933%
RIVER ROAD FAV	5,789,840	135,754	179,014,163	0.0234	0.0758%
S&P 500 INDEX	6,763,849	55,666	554,541,334	0.0082	0.0100%
TCV VI	809	8	87,625	0.0100	0.0092%
TORTOISE CAP	1,697,286	13,291	30,654,605	0.0078	0.0434%
VANTAGEPOINT 2006	38,272	383	1,197,146	0.0100	0.0320%
WARBURG PINCUS PEX	38,895	389	2,395,345	0.0100	0.0162%
WESTFIELD CAPITAL	1,350,909	39,856	97,812,682	0.0295	0.0407%
TOTAL DOMESTIC	15,686,223	245,401	865,761,431	0.0156	0.0283%

Kentucky Retirement Systems
Global Equity - Common Stock Commissions
Quarter Ended March 31, 2020

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
BANCO BTG PACTUAL SA, RIO DE JANEIRO	486,600	188	375,578	0.0004	0.0500%
BARCLAYS	68,609	1,691	8,354,275	0.0246	0.0202%
BERENBERG GOSSLER & CIE, HAMBURG	189,430	16,896	14,480,771	0.0892	0.1167%
BERNSTEIN SANFORD C & CO, NEW YORK	386,500	2,732	3,279,165	0.0071	0.0833%
BMO CAPITAL MARKETS CORP, NEW YORK	12,600	189	2,099,940	0.0150	0.0090%
BNP PARIBUS	376,075	5,030	6,765,175	0.0134	0.0743%
BNY MELLON CLEARING	2,262,115	6,049	12,239,220	0.0027	0.0494%
BOFA SECURITIES, INC, NEW YORK	18,900	133	424,236	0.0071	0.0314%
BRASIL PLURAL CCTVM SA, SAO PAULO	700	1	551	0.0008	0.0998%
CIBC WORLD MKTS INC, TORONTO	134,000	3,591	2,335,060	0.0268	0.1538%
CITIGROUP	6,023,873	15,128	34,901,706	0.0025	0.0433%
CREDIT LYONNAIS SECS (ASIA), HONG KONG	323,900	885	2,038,197	0.0027	0.0434%
CREDIT LYONNAIS SECS, SINGAPORE	215,800	3,350	6,703,066	0.0155	0.0500%
CREDIT SUISSE	11,588,919	28,773	69,118,872	0.0025	0.0416%
D CARNEGIE AB, STOCKHOLM	91,037	7,373	4,908,169	0.0810	0.1502%
DAIWA SECURITIES	70,400	2,200	4,401,184	0.0313	0.0500%
EXANE, PARIS (EXANFRPP)	1,013,016	3,122	7,187,570	0.0031	0.0434%
GOLDMAN SACHS	1,063,220	14,107	29,408,267	0.0133	0.0480%
HSBC	760,400	1,836	6,148,364	0.0024	0.0299%
INSTINET CORP	636,900	1,263	3,156,348	0.0020	0.0400%
INVESTEC SECURITIES (331), LONDON	31,643	440	884,637	0.0139	0.0497%
INVESTMENT TECHNOLOGY GROUP LTD, DUBLIN	459,761	8,640	11,467,638	0.0188	0.0753%
ITG AUSTRALIA LTD, MELBOURNE	31,200	479	797,707	0.0153	0.0600%
J.P MORGAN SECURITIES INC, NEW YORK	3,650	55	404,094	0.0150	0.0135%
JEFFERIES & CO INC, NEW YORK	685,067	22,581	38,113,553	0.0330	0.0592%
JEFFERIES & CO LTD, LONDON	139,865	2,156	4,524,731	0.0154	0.0476%
JEFFERIES HONG KONG LIMITED, HONG KONG	11,021,200	4,923	9,858,684	0.0004	0.0499%
JP MORGAN SECURITIES	468,517	7,916	16,620,236	0.0169	0.0476%
JPMORGAN SECURITIES INC, NEW YORK	269,240	1,647	2,890,828	0.0061	0.0570%
LIQUIDNET CANADA INC, TORONTO	62,300	686	2,268,530	0.0110	0.0302%
LIQUIDNET INC, NEW YORK	60,505	605	3,470,525	0.0100	0.0174%
MACQUARIE SECURITIES	20,900	3,269	3,114,834	0.1564	0.1050%
MERRILL LYNCH	2,535,694	15,647	47,350,609	0.0062	0.0330%
MIZUHO SECURITIES USA INC. NEW YORK	287,173	3,212	6,404,033	0.0112	0.0502%
MORGAN STANLEY	2,432,522	32,535	59,884,373	0.0134	0.0543%
NATIONAL FINL SVCS CORP, NEW YORK	22,900	573	3,151,962	0.0250	0.0182%
NUMIS SECURITIES LTD, LONDON	363,720	11,008	7,332,328	0.0303	0.1501%
RBC CAPITAL MARKETS	2,148,184	21,723	34,214,945	0.0101	0.0635%
S G WARBURG, SEOUL	54,160	1,230	2,461,882	0.0227	0.0500%
SANFORD C BERNSTEIN & CO INC, LONDON	393,924	14,089	14,062,276	0.0358	0.1002%
SCOTIA CAPITAL INC, NEW YORK	412,700	322	322,777	0.0008	0.0999%
SCOTIA CAPITAL MKTS, TORONTO	19,100	59	1,057,411	0.0031	0.0056%
SG SEC (LONDON) LTD, LONDON	6,920	35	69,814	0.0050	0.0500%
SKANDINAVISKA ENSKILDA BANKEN, COPENHAGE	21,100	1,149	1,915,913	0.0544	0.0600%
SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM	199,676	1,508	2,875,355	0.0076	0.0524%
SMBC SECURITIES, INC NEW YORK	32,600	1,100	2,198,994	0.0337	0.0500%
SOCIETE GENERALE LONDON BRANCH, LONDON	384,609	2,857	5,357,161	0.0074	0.0533%
SOCIETE GENERALE, PARIS	115,719	953	1,910,136	0.0082	0.0499%
TORONTO DOMINION SEC, TORONTO	128,600	1,439	4,353,890	0.0112	0.0331%
UBS	9,149,762	39,811	94,829,774	0.0044	0.0420%
WARBURG DILLON READ SEC, MUMBAI	206,975	605	1,211,738	0.0029	0.0499%
TOTAL GLOBAL	57,892,880	317,788	603,707,082	0.0055	0.0526%

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMERICAN CENTURY	10,284,582	104,100	184,394,179	0.0101	0.0565%
FRANKIN TEMPLETON	3,194,137	79,368	101,743,994	0.0248	0.0780%
LAZARD ASSET MGMT	23,100,914	82,807	217,674,151	0.0036	0.0380%
LSV ASSET MANAGEMENT	14,583,241	31,585	67,850,705	0.0022	0.0466%
LSV ASSET MGMT	6,730,258	13,114	28,093,114	0.0019	0.0467%
MANULIFE ASSET MGMT	(252)	6,814	3,950,939	(27.0397)	0.1725%
TOTAL GLOBAL	57,892,880	317,788	603,707,082	0.0055	0.0526%