

Kentucky Retirement Systems

# Domestic and Global Commissions Report

Quarter Ending: December 31, 2020

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

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
B RILEY AND CO LLC, NEW YORK	48,233	1,929	1,013,505	0.0400	0.1904%
BAIRD, ROBERT W & CO INC, MILWAUKEE	7,650	306	2,918,195	0.0400	0.0105%
BARCLAYS	207,690	2,736	5,975,785	0.0132	0.0458%
BERNSTEIN SANFORD C & CO, NEW YORK	214,367	7,852	7,448,931	0.0366	0.1054%
BTIG LLC, NEW YORK	303,020	6,060	6,561,624	0.0200	0.0924%
CANTOR FITZGERALD & CO INC, NEW YORK	425,218	8,504	35,289,148	0.0200	0.0241%
CITIGROUP	124,235	1,549	1,833,540	0.0125	0.0845%
COWEN AND CO LLC, NEW YORK	172,264	5,486	3,165,200	0.0318	0.1733%
CREDIT SUISSE	326,713	4,977	22,025,382	0.0152	0.0226%
DOUGHERTY & COMPANY LLC, MINNEAPOLIS	38,303	1,242	604,953	0.0324	0.2053%
GOLDMAN SACHS	144,841	2,960	6,350,801	0.0204	0.0466%
GUGGENHEIM CAPITAL MARKETS LLC, NEW YORK	176,244	7,050	7,685,994	0.0400	0.0917%
INSTINET CORP	715,849	11,272	31,978,739	0.0157	0.0352%
INVESTMENT TECH GROUP INC, NEW YORK	119,305	3,127	13,348,998	0.0262	0.0234%
ISI GROUP	326,334	5,002	14,515,936	0.0153	0.0345%
ITG INC, NEW YORK	598,480	6,986	19,946,005	0.0117	0.0350%
J.P MORGAN SECURITIES INC, NEW YORK	406,482	5,601	21,174,667	0.0138	0.0265%
JEFFERIES & CO INC, NEW YORK	202,144	2,039	26,364,464	0.0101	0.0077%
JMP SECURITIES, SAN FRANCISCO	91,073	3,643	899,424	0.0400	0.4050%
JONESTRADING INST SVCS LLC, NEW YORK	36,957	1,109	2,462,810	0.0300	0.0450%
KEEFE BRUYETTE + WOODS INC, NEW YORK	54,160	2,166	3,054,354	0.0400	0.0709%
KEYBANC CAPITAL MARKETS INC, NEW YORK	62,897	2,516	1,206,243	0.0400	0.2086%
LIQUIDNET INC, NEW YORK	857,465	11,469	36,825,578	0.0134	0.0311%
LUMINEX TRADING AND ANALYTICS, BOSTON	72,352	1,855	5,739,792	0.0256	0.0323%
MERRILL LYNCH	48,257	968	2,387,110	0.0201	0.0405%
MORGAN STANLEY	62,050	2,482	2,258,911	0.0400	0.1099%
NATIONAL FINL SVCS CORP, NEW YORK	226,240	7,392	3,740,646	0.0327	0.1976%
NEEDHAM AND CO LLC, NEW YORK	16,202	648	1,163,466	0.0400	0.0557%
NORTHLAND SECURITIES INC., NEW YORK	21,071	843	929,777	0.0400	0.0906%
O NEIL WILLIAM CO INC BCC CLRG, NEW YORK	14,720	589	1,749,777	0.0400	0.0337%
PICKERING ENERGY PARTNERS, HOUSTON	22,924	458	359,730	0.0200	0.1275%
PIPER JAFFRAY & CO., JERSEY CITY	368,613	9,889	10,444,209	0.0268	0.0947%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	131,801	3,046	7,259,696	0.0231	0.0420%
RBC CAPITAL MARKETS	178,803	1,840	2,419,942	0.0103	0.0760%
ROTH CAPITAL PARTNERS LLC, NEW YORK	51,308	2,052	1,074,743	0.0400	0.1910%
SCOTIA CAPITAL (USA) INC, NEW YORK	16,930	127	337,799	0.0075	0.0376%
STIFEL NICOLAUS	9,723	389	447,231	0.0400	0.0870%
TOURMALINE PARTNERS LLC, NEW YORK	54,831	1,097	3,345,325	0.0200	0.0328%
UBS	2,189,548	22,391	228,824,976	0.0102	0.0098%
VIRTU AMERICAS LLC, NEW YORK	1,085	8	32,451	0.0075	0.0251%
WEDBUSH MORGAN SECS INC, LOS ANGELES	85,912	3,377	7,250,596	0.0393	0.0466%
WILLIAM BLAIR & CO, CHICAGO	239,716	7,785	4,906,123	0.0325	0.1587%
WOLFE TRAHAN SECURITIES, NEW YORK	38,134	1,525	6,346,693	0.0400	0.0240%
<b>TOTAL DOMESTIC</b>	<b>9,510,144</b>	<b>174,343</b>	<b>563,669,269</b>	<b>0.0183</b>	<b>0.0309%</b>

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
DAG VENTURES V QP	14,465	145	177,471	0.0100	0.0815%
NEXT CENTURY GROWTH	1,966,313	51,324	51,088,686	0.0261	0.1005%
NTGI STRUCTURED	399,303	2,998	9,585,375	0.0075	0.0313%
RIVER ROAD FAV	2,168,657	40,328	121,841,481	0.0186	0.0331%
S&P 500 INDEX	2,150,706	21,507	227,996,055	0.0100	0.0094%
TORTOISE CAP	1,174,109	9,920	19,969,958	0.0084	0.0497%
WATERFALL	6,836	205	148,075	0.0300	0.1385%
WESTFIELD CAPITAL	1,629,755	47,916	132,862,168	0.0294	0.0361%
<b>TOTAL DOMESTIC</b>	<b>9,510,144</b>	<b>174,343</b>	<b>563,669,269</b>	<b>0.0183</b>	<b>0.0309%</b>

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

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMBIT CAPITAL PRIVATE LTD, MUMBAI	93,069	1,052	733,064	0.0113	0.1435%
BANCO ITAU, SAO PAULO	900	4	4,641	0.0041	0.0802%
BANCO SANTANDER, NEW YORK	45,937	153	191,107	0.0033	0.0800%
BARCLAYS	1,213,254	6,677	23,833,255	0.0055	0.0280%
BATLIVALA & KARANI SECS (INDIA) PVT	3,575	28	27,447	0.0077	0.1002%
BERNSTEIN SANFORD C & CO, NEW YORK	3,749,445	9,553	22,207,148	0.0025	0.0430%
BNP PARIBUS	48,600	507	803,800	0.0104	0.0631%
BNY MELLON CLEARING	457,115	6,194	9,723,166	0.0136	0.0637%
BOFA SECURITIES, INC, NEW YORK	65,587	510	2,332,989	0.0078	0.0219%
BRDESCO S.A. CTVM, SAO PAULO	300,000	265	265,599	0.0009	0.0999%
BRASIL PLURAL CCTVM SA, SAO PAULO	500,000	464	464,471	0.0009	0.0999%
CANADIAN IMPERIAL BK OF COMMERCE, NY	78,200	472	786,857	0.0060	0.0600%
CITATION GROUP BCC CLRG, NEW YORK	16,329	163	2,499,256	0.0100	0.0065%
CITIGROUP	5,797,087	27,921	50,354,058	0.0048	0.0554%
CLSA INDIA LTD, MUMBAI	69,843	497	495,591	0.0071	0.1002%
CREDIT LYONNAIS SEC, SEOUL	12,521	671	892,182	0.0536	0.0752%
CREDIT LYONNAIS SECS (ASIA), HONG KONG	45,000	166	221,222	0.0037	0.0749%
CREDIT LYONNAIS SECS ASIA LTD, TAIPEI	526,000	746	1,138,635	0.0014	0.0655%
CREDIT SUISSE	3,347,656	31,184	68,827,720	0.0093	0.0453%
D CARNEGIE AB, STOCKHOLM	131,740	798	1,597,317	0.0061	0.0500%
DAIWA SECURITIES	581,038	11,740	23,197,658	0.0202	0.0506%
DEN NORSKE CREDITBANK, OSLO	41,525	294	588,382	0.0071	0.0500%
DEPOSITORY TR CO (DTC), TORONTO (DTCC)	11,736	184	162,091	0.0157	0.1134%
EXANE, PARIS (EXANFRPP)	1,027,683	5,224	13,066,106	0.0051	0.0400%
FUBON SECS CO LTD (HEAD OFFICE), TAIPEI	35,000	126	632,248	0.0036	0.0200%
GOLDMAN SACHS	1,472,725	21,933	30,934,504	0.0149	0.0709%
HANWHA SECS CO LTD, SEOUL	3,832	79	134,726	0.0206	0.0586%
HSBC	1,148,901	14,569	9,199,424	0.0127	0.1584%
ICICI BROKERAGE SERVICES LTD, MUMBAI	968	3	8,552	0.0027	0.0301%
INSTINET CORP	212,100	967	2,553,723	0.0046	0.0379%
INVESTMENT TECHNOLOGY GROUP LTD,DUBLIN	1,749,920	4,003	12,090,968	0.0023	0.0331%
ITG AUSTRALIA LTD, MELBOURNE	7,180	109	136,629	0.0152	0.0801%
J.P MORGAN SECURITIES INC, NEW YORK	237,955	2,506	5,418,071	0.0105	0.0462%
JEFFERIES & CO INC, NEW YORK	33,061	336	3,369,457	0.0102	0.0100%
JEFFERIES & CO LTD, LONDON	91,154	1,721	4,799,620	0.0189	0.0358%
JEFFERIES HONG KONG LIMITED, HONG KONG	4,799,200	2,841	7,000,926	0.0006	0.0406%
JM FIN INSTL SEC PRIVATE LTD, MUMBAI	811	75	74,577	0.0922	0.1002%

JP MORGAN SECURITIES	3,441,433	21,738	75,194,730	0.0063	0.0289%
JPMORGAN SECURITIES INC, NEW YORK	313,785	4,085	20,467,668	0.0130	0.0200%
KEB SALOMON SMITH BARNEY SECS, SEOUL	4,500	321	1,070,222	0.0713	0.0300%
KEPLER EQUITIES, PARIS	43,120	1,289	2,155,547	0.0299	0.0598%
KOTAK SECURITIES,MUMBAI	110,433	387	385,925	0.0035	0.1002%
LIQUIDNET ASIA LTD, HONG KONG	64,000	125	125,611	0.0020	0.0998%
LIQUIDNET CANADA INC, TORONTO	11,725	135	667,167	0.0115	0.0202%
LIQUIDNET EUROPE LIMITED, LONDON	272,883	2,914	6,529,080	0.0107	0.0446%
LIQUIDNET INC, NEW YORK	5,191	26	28,656	0.0050	0.0906%
MACQUARIE SECURITIES	44,300	1,498	4,115,880	0.0338	0.0364%
MERRILL LYNCH	2,021,308	6,191	12,047,035	0.0031	0.0514%
MIZUHO SECURITIES USA INC. NEW YORK	9,100	67	133,716	0.0073	0.0499%
MIZUHO SECURITIES USA, INC., NEW YORK	25,323	886	788,949	0.0350	0.1123%
MORGAN STANLEY	5,862,974	47,739	81,514,073	0.0081	0.0586%
MOTILAL OSWAL, INDIA	166,580	492	490,858	0.0030	0.1002%
NATIONAL FINL SVCS CORP, NEW YORK	14,946	255	4,544,574	0.0171	0.0056%
NATL FINL SVCS CORP/PRIME BRK/CNS, NY	50,306	1,761	724,437	0.0350	0.2430%
NBCN INC, TORONTO (NBCS)	30,839	687	607,455	0.0223	0.1130%
NOMURA SECURITIES	6,653	296	570,791	0.0445	0.0519%
NUMIS SECURITIES LTD, LONDON	4,000	37	53,313	0.0093	0.0701%
OPPENHEIMER & CO INC, NEW YORK	49,720	1,492	775,423	0.0300	0.1924%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	51,816	1,814	745,823	0.0350	0.2432%
RBC CAPITAL MARKETS	1,634,910	8,079	18,951,485	0.0049	0.0426%
REDBURN PARTNERS LLP, LONDON	24,040	1,972	3,298,060	0.0820	0.0598%
RENAISSANCE CAPITAL LTD, LONDON	48,629	274	282,549	0.0056	0.0969%
SANFORD C BERNSTEIN & CO INC, LONDON	201,471	1,086	4,154,270	0.0054	0.0261%
SMBC SECURITIES, INC NEW YORK	2,900	275	549,902	0.0948	0.0500%
STIFEL NICOLAUS	56,346	1,690	709,413	0.0300	0.2383%
TD WATERHOUSE SEC, TORONTO (GIST)	49,624	1,166	688,858	0.0235	0.1692%
UBS	635,817	11,042	23,838,686	0.0174	0.0463%
UNICREDIT BANK AUSTRIA AG, VIENNA	727,882	1,387	394,958	0.0019	0.3512%
UNION BANK SWITZERLAND SECS, LONDON	791,000	1,223	3,444,788	0.0015	0.0355%
WALL STREET ACCESS, JERSEY CITY	6,200	62	570,555	0.0100	0.0109%
WARBURG DILLON READ SEC, MUMBAI	117,464	376	1,251,656	0.0032	0.0300%
WILLIAM BLAIR & CO, CHICAGO	38,990	1,170	1,565,641	0.0300	0.0747%
XP INVESTIMENTOS CCTVM SA,RIO DE JANEIRO	734,300	1,734	1,715,928	0.0024	0.1010%

TOTAL GLOBAL	45,631,155	280,503	575,920,869	0.0061	0.0487%
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Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMERICAN CENTURY	10,690,610	125,476	272,644,833	0.0117	0.0460%
FRANKIN TEMPLETON	6,360,877	40,030	97,488,663	0.0063	0.0411%
JP MORGAN EMERG MKTS	5,188,051	18,855	26,918,135	0.0036	0.0700%
LAZARD ASSET MGMT	6,102,845	45,361	101,187,953	0.0074	0.0448%
LSV ASSET MANAGEMENT	6,392,772	12,899	29,012,011	0.0020	0.0445%
LSV ASSET MGMT	2,993,765	5,464	12,178,688	0.0018	0.0449%
MANULIFE ASSET MGMT	471,034	14,020	16,092,670	0.0298	0.0871%
PZENA EMERGING MKTS	7,431,201	18,398	20,397,916	0.0025	0.0902%
TOTAL GLOBAL	45,631,155	280,503	575,920,869	0.0061	0.0487%