

Fund Custodians
League Tables

Global Funds and AUC

Reporting Period
Aug 2022 - Aug 2023



CONVERGENCE
OPTIMAL PERFORMANCE

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About this League Table Report

- Our League Tables leverage the most comprehensive database of active funds and advisers in the market. Convergence is the only firm to have a complete set of advisers and funds including:
 - SEC registered private and public funds and advisers
 - State registered private and public funds and advisers
 - Unregistered private funds and advisers
 - EU UCITS and private funds
 - Non-pooled investment entities
- This report includes all US and non-US funds and is divided into 3-Section
 - Funds that use one or more custodians
 - Funds that use a “single” custodians
 - Funds that use “multiple” custodians
- Additional Fund custodians League Tables for custodians Funds and AUC are available to Convergence Clients in the following cuts:
 - Private Funds, and within private funds, in the following sub-cuts
 - Hedge, Private Equity, Real Estate, Venture Capital, Securitized Assets, Hybrid and Liquidity Funds
 - Public Funds and within public funds, in the following sub-cuts
 - By fund strategy (30+)

Custodians League Table - Global Funds

Convergence - Aug 2023 League Tables - Custodians Market Segment - Fund Relationships										
All Custodians	Aug -23 #FR	Aug -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Aug -23 Rank	Aug -22 Rank	23-22 Change
JPMORGAN	31,762	17,944	13,818	77.0%	13.7%	8.0%	72.0%	1	1	0
BANK OF NEW YORK	16,545	15,692	853	5.4%	7.1%	7.0%	2.5%	2	2	0
STATE STREET IFS	15,542	14,738	804	5.5%	6.7%	6.5%	2.5%	3	3	0
FIRST CITIZENS BANK AND TRUST	12,354	798	11,556	1448.1%	5.3%	0.4%	1404.6%	4	35	31
BANK OF AMERICA	11,407	10,549	858	8.1%	4.9%	4.7%	5.1%	5	6	1
CITIBANK	8,778	8,111	667	8.2%	3.8%	3.6%	5.2%	6	7	1
NORTHERN TRUST	6,644	6,300	344	5.5%	2.9%	2.8%	2.5%	7	8	1
MORGAN STANLEY	6,217	5,876	341	5.8%	2.7%	2.6%	2.8%	8	9	1
UNION BANK OF SWITZERLAND	5,881	3,429	2,452	71.5%	2.5%	1.5%	66.7%	9	17	8
GOLDMAN SACHS BANK USA	5,771	5,527	244	4.4%	2.5%	2.5%	1.5%	10	11	1
US BANCORP	5,660	5,144	516	10.0%	2.4%	2.3%	6.9%	11	12	1
BNP PARIBAS	5,593	5,609	-16	-0.3%	2.4%	2.5%	-3.1%	12	10	-2
CACEIS	4,784	3,625	1,159	32.0%	2.1%	1.6%	28.3%	13	16	3
WELLS FARGO	4,321	4,259	62	1.5%	1.9%	1.9%	-1.4%	14	14	0
HSBC FINANCIAL SERVICES	4,229	3,743	486	13.0%	1.8%	1.7%	9.8%	15	15	0
BROWN BROTHER HARRIMAN	2,774	2,723	51	1.9%	1.2%	1.2%	-1.0%	16	18	2
SOCIETE GENERALE	2,360	2,230	130	5.8%	1.0%	1.0%	2.9%	17	20	3
DEUTSCHE BANK	2,030	2,070	-40	-1.9%	0.9%	0.9%	-4.7%	18	21	3
FIDELITY	1,932	1,835	97	5.3%	0.8%	0.8%	2.3%	19	22	3
CITCO FUNDS SERVICES	1,822	1,603	219	13.7%	0.8%	0.7%	10.5%	20	23	3
INTERACTIVE BROKERS	1,596	1,508	88	5.8%	0.7%	0.7%	2.9%	21	24	3
BARCLAYS	1,571	1,378	193	14.0%	0.7%	0.6%	10.8%	22	25	3
ROYAL BANK OF CANADA	1,525	2,256	-731	-32.4%	0.7%	1.0%	-34.3%	23	19	-4
CANADIAN IMPERIAL BANK OF COMMERCE	1,508	1,331	177	13.3%	0.7%	0.6%	10.1%	24	27	3
ESHARES	1,350	1,361	-11	-0.8%	0.6%	0.6%	-3.6%	25	26	1
TOP 25 CUSTODIANS FR - ALL	163,956	129,639	34,317	26.5%	70.8%	57.6%	22.9%			
ALL OTHER	67,633	95,441	-27,808	-29.1%	29.2%	42.4%	-31.1%			
TOTAL CUSTODIANS FR DISCLOSED	231,589	225,080	6,509	2.9%	73.7%	75.2%	-1.9%			
NOT REPORTED	34,805	33,481	1,324	4.0%	11.1%	11.2%	-0.9%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	47,751	40,874	6,877	16.8%	15.2%	13.7%	11.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	82,556	74,355	8,201	11.0%	26.3%	24.8%	5.8%			
TOTAL FUNDS	314,145	299,435	14,710	4.9%	100.0%	100.0%	0.0%			

Fund Custodians Peer Analysis – Global Funds - Growth and Market Share

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 35.90%, or 12.41x the market
 - Market share increased from 39.53% to 52.20%
 - An increase of 32.08%
- Custodians ranked >25 registered the lowest growth in funds
 - Funds decreased 29.14%, or -10.08x the market
 - Market share decreased from 42.40% to 29.20%
 - A decrease of 31.13%

Peer Group Performance by Fund Relationships						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Funds	4.91%		100%	100%		
Market Growth Custodians Disclosed	2.89%	0.59	73.72%	75.17%	-1.45%	-1.93%
Custodians Ranked 1-10	35.90%	12.41	52.20%	39.53%	12.68%	32.08%
Custodians Ranked 11-25	5.85%	2.02	18.59%	18.07%	0.52%	2.88%
All Other Custodians	-29.14%	-10.08	29.20%	42.40%	-13.20%	-31.13%
Market Growth Custodians Not Disclosed	11.03%	2.25	26.28%	24.83%	1.45%	5.83%

Fund Custodians League Table – Global AUC

Convergence - Aug 2023 League Tables - Custodians Market Segment - Assets (in BN)										
All Custodians	Aug -23 FR-AUC	Aug -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Aug -23 Rank	Aug -22 Rank	23-22 Change
JPMORGAN	\$20,460.10	\$17,641.53	\$2,818.56	16.0%	14.5%	12.9%	12.5%	1	1	0
STATE STREET IFS	\$18,023.26	\$17,244.18	\$779.07	4.5%	12.8%	12.6%	1.4%	2	2	0
BANK OF NEW YORK	\$14,662.22	\$13,634.00	\$1,028.23	7.5%	10.4%	9.9%	4.3%	3	3	0
BANK OF AMERICA	\$7,285.02	\$6,985.22	\$299.80	4.3%	5.2%	5.1%	1.2%	4	4	0
CITIBANK	\$6,213.44	\$5,729.79	\$483.66	8.4%	4.4%	4.2%	5.2%	5	5	0
UNION BANK OF SWITZERLAND	\$4,712.39	\$3,554.39	\$1,158.00	32.6%	3.3%	2.6%	28.6%	6	10	4
NORTHERN TRUST	\$4,610.80	\$4,666.11	-\$55.31	-1.2%	3.3%	3.4%	-4.2%	7	7	0
MORGAN STANLEY	\$4,470.20	\$4,745.34	-\$275.14	-5.8%	3.2%	3.5%	-8.6%	8	6	-2
GOLDMAN SACHS BANK USA	\$4,453.82	\$4,418.71	\$35.11	0.8%	3.2%	3.2%	-2.2%	9	8	-1
BNP PARIBAS	\$4,122.97	\$3,864.44	\$258.53	6.7%	2.9%	2.8%	3.5%	10	9	-1
BARCLAYS	\$3,851.43	\$3,519.78	\$331.65	9.4%	2.7%	2.6%	6.1%	11	12	1
HSBC FINANCIAL SERVICES	\$2,778.74	\$2,663.49	\$115.26	4.3%	2.0%	1.9%	1.2%	12	13	1
WELLS FARGO	\$2,575.23	\$2,663.48	-\$88.25	-3.3%	1.8%	1.9%	-6.2%	13	14	1
US BANCORP	\$2,462.72	\$2,253.88	\$208.84	9.3%	1.7%	1.6%	6.0%	14	16	2
BROWN BROTHER HARRIMAN	\$2,431.92	\$2,248.17	\$183.75	8.2%	1.7%	1.6%	4.9%	15	17	2
DEUTSCHE BANK	\$2,118.23	\$2,134.48	-\$16.24	-0.8%	1.5%	1.6%	-3.8%	16	18	2
FIRST CITIZENS BANK AND TRUST	\$2,072.88	\$0.12	\$2,072.76	1742623.2%	1.5%	0.0%	1690128.8%	17	1043	1,026
SOCIETE GENERALE	\$1,739.57	\$1,708.36	\$31.21	1.8%	1.2%	1.2%	-1.2%	18	20	2
STANDARD CHARTERED BANK	\$1,464.02	\$1,357.84	\$106.18	7.8%	1.0%	1.0%	4.6%	19	21	2
CACEIS	\$1,281.83	\$1,072.93	\$208.90	19.5%	0.9%	0.8%	15.9%	20	23	3
BANK OF NOVA SCOTIA	\$1,036.65	\$892.12	\$144.54	16.2%	0.7%	0.7%	12.7%	21	25	4
ROYAL BANK OF CANADA	\$1,023.60	\$1,030.25	-\$6.65	-0.6%	0.7%	0.8%	-3.6%	22	24	2
FIDELITY	\$953.69	\$1,101.64	-\$147.95	-13.4%	0.7%	0.8%	-16.0%	23	22	-1
COMPUTERSHARE	\$915.60	\$752.42	\$163.18	21.7%	0.6%	0.5%	18.0%	24	26	2
SKANDINAVISKA SECURITIES	\$879.77	\$730.56	\$149.21	20.4%	0.6%	0.5%	16.8%	25	28	3
TOP 25 CUSTODIANS FR - ALL	\$116,600.12	\$106,613.22	\$9,986.90	9.4%	82.5%	77.8%	6.1%			
ALL OTHER	\$24,728.80	\$30,458.57	-\$5,729.77	-18.8%	17.5%	22.2%	-21.3%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$141,328.92	\$137,071.79	\$4,257.12	3.1%	95.0%	95.3%	-0.3%			
NOT REPORTED	\$4,729.98	\$4,884.34	-\$154.36	-3.2%	3.2%	3.4%	-6.4%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,654.95	\$1,834.82	\$820.13	44.7%	1.8%	1.3%	39.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,384.92	\$6,719.15	\$665.77	9.9%	5.0%	4.7%	6.3%			
TOTAL FUND ASSETS	\$148,713.84	\$143,790.95	\$4,922.89	3.4%	100.0%	100.0%	0.0%			

Fund Custodians Peer Analysis – Global AUC - Growth & Market Share

Best and Worst Performing Peer Groups

- Custodians ranked 11-25 registered the highest AUC growth
 - AUC increased 14.32%, or 4.61x the market
 - Market share increased from 17.60% to 19.52%
 - An increase of 10.88%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 18.81%, or -6.06x the market
 - Market share decreased from 22.22% to 17.50%
 - A decrease of 21.26%

Peer Group Performance by Fund Assets						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Assets	3.42%		100%	100%		
Market Growth Custodians Disclosed	3.11%	0.91	95.03%	95.33%	-0.29%	-0.31%
Custodians Ranked 1-10	7.92%	2.55	62.98%	60.18%	2.81%	4.67%
Custodians Ranked 11-25	14.32%	4.61	19.52%	17.60%	1.92%	10.88%
All Other Custodians	-18.81%	-6.06	17.50%	22.22%	-4.72%	-21.26%
Market Growth Custodians Not Disclosed	9.91%	2.89	4.97%	4.67%	0.29%	6.27%

Single Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Single Custodians Market Segment - Fund Relationships										
Single Custodians	Aug -23 #FR	Aug -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Aug -23 Rank	Aug -22 Rank	23-22 Change
STATE STREET IFS	13,550	12,764	786	6.2%	12.1%	12.0%	1.3%	1	1	0
BANK OF NEW YORK	10,746	10,294	452	4.4%	9.6%	9.7%	-0.4%	2	2	0
JPMORGAN	9,113	8,892	221	2.5%	8.2%	8.3%	-2.3%	3	3	0
CITIBANK	5,017	4,645	372	8.0%	4.5%	4.4%	3.0%	4	4	0
CACEIS	4,742	3,599	1,143	31.8%	4.2%	3.4%	25.7%	5	7	2
BNP PARIBAS	4,232	4,242	-10	-0.2%	3.8%	4.0%	-4.8%	6	5	-1
NORTHERN TRUST	3,835	3,665	170	4.6%	3.4%	3.4%	-0.2%	7	6	-1
US BANCORP	3,491	3,267	224	6.9%	3.1%	3.1%	1.9%	8	8	0
HSBC FINANCIAL SERVICES	3,086	2,684	402	15.0%	2.8%	2.5%	9.7%	9	10	1
BANK OF AMERICA	2,865	2,907	-42	-1.4%	2.6%	2.7%	-6.0%	10	9	-1
BROWN BROTHER HARRIMAN	2,546	2,494	52	2.1%	2.3%	2.3%	-2.6%	11	11	0
SOCIETE GENERALE	1,620	1,551	69	4.4%	1.5%	1.5%	-0.4%	12	13	1
WELLS FARGO	1,424	1,412	12	0.8%	1.3%	1.3%	-3.8%	13	14	1
CITCO FUNDS SERVICES	1,031	854	177	20.7%	0.9%	0.8%	15.1%	14	18	4
UNION BANK OF SWITZERLAND	1,028	1,011	17	1.7%	0.9%	0.9%	-3.0%	15	16	1
DZ BANK	1,019	1,036	-17	-1.6%	0.9%	1.0%	-6.2%	16	15	-1
ROYAL BANK OF CANADA	953	1,932	-979	-50.7%	0.9%	1.8%	-53.0%	17	12	-5
SKANDINAVISKA SECURITIES	892	865	27	3.1%	0.8%	0.8%	-1.6%	18	17	-1
HAUCK & AUFHAEUSER	842	824	18	2.2%	0.8%	0.8%	-2.5%	19	19	0
INTERACTIVE BROKERS	824	806	18	2.2%	0.7%	0.8%	-2.5%	20	20	0
FIRST CITIZENS BANK AND TRUST	818	5	813	16260.0%	0.7%	0.0%	15504.0%	21	181	160
ROYAL BANK OF SCOTLAND	753	763	-10	-1.3%	0.7%	0.7%	-5.9%	22	21	-1
DEUTSCHE BANK	710	707	3	0.4%	0.6%	0.7%	-4.2%	23	23	0
GOLDMAN SACHS BANK USA	647	615	32	5.2%	0.6%	0.6%	0.3%	24	26	2
FIDELITY	647	677	-30	-4.4%	0.6%	0.6%	-8.8%	24	24	0
TOP 25 SINGLE CUSTODIANS FR	76,431	72,511	3,920	5.4%	68.4%	68.1%	0.5%			
ALL OTHER	35,235	33,995	1,240	3.6%	31.6%	31.9%	-1.1%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	111,666	106,506	5,160	4.8%	35.5%	35.6%	-0.1%			
NOT REPORTED	34,805	33,481	1,324	4.0%	11.1%	11.2%	-0.9%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	47,751	40,874	6,877	16.8%	15.2%	13.7%	11.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	82,556	74,355	8,201	11.0%	26.3%	24.8%	5.8%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	119,923	118,574	1,349	1.1%	38.2%	39.6%	-3.6%			
TOTAL FUNDS	314,145	299,435	14,710	4.9%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 6.53%, or 1.35x the market
 - Market share increased from 53.48% to 54.34%
 - An increase of 1.60%
- Custodians ranked 11-25 registered the lowest growth in funds
 - Funds increased 1.30%, or 0.27x the market
 - Market share decreased from 14.60% to 14.11%
 - A decrease of 3.38%

Peer Group Performance by Fund Relationships						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Funds	4.91%		100%	100%		
Market Growth Single Custodians Disclosed	4.84%	0.99	35.55%	35.57%	-0.02%	-0.06%
Custodians Ranked 1-10	6.53%	1.35	54.34%	53.48%	0.86%	1.60%
Custodians Ranked 11-25	1.30%	0.27	14.11%	14.60%	-0.49%	-3.38%
All Other Custodians	3.65%	0.75	31.55%	31.92%	-0.36%	-1.14%
Market Growth Multi Custodians Disclosed	1.14%	0.23	38.17%	39.60%	-1.42%	-3.60%
Market Growth Custodians Not Disclosed	11.03%	2.25	26.28%	24.83%	1.45%	5.83%

Single Fund Custodians League Table – Global AUC

Convergence - Aug 2023 League Tables - Single Custodians Market Segment - Assets (in BN)										
Single Custodians	Aug -23 FR-AUC	Aug -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Aug -23 Rank	Aug -22 Rank	23-22 Change
STATE STREET IFS	\$14,939.44	\$14,061.57	\$877.87	6.2%	26.3%	26.6%	-1.0%	1	1	0
JPMORGAN	\$12,235.02	\$11,278.95	\$956.07	8.5%	21.5%	21.3%	1.1%	2	2	0
BANK OF NEW YORK	\$8,937.65	\$8,243.01	\$694.64	8.4%	15.7%	15.6%	1.1%	3	3	0
BROWN BROTHER HARRIMAN	\$2,296.38	\$2,109.29	\$187.09	8.9%	4.0%	4.0%	1.5%	4	5	1
NORTHERN TRUST	\$2,114.96	\$2,147.17	-\$32.21	-1.5%	3.7%	4.1%	-8.2%	5	4	-1
CITIBANK	\$1,616.78	\$1,418.31	\$198.47	14.0%	2.8%	2.7%	6.2%	6	7	1
BNP PARIBAS	\$1,559.83	\$1,428.20	\$131.63	9.2%	2.7%	2.7%	1.8%	7	6	-1
US BANCORP	\$1,472.43	\$1,370.67	\$101.75	7.4%	2.6%	2.6%	0.1%	8	8	0
CACEIS	\$1,265.37	\$1,031.22	\$234.15	22.7%	2.2%	1.9%	14.4%	9	9	0
HSBC FINANCIAL SERVICES	\$1,103.99	\$1,000.37	\$103.61	10.4%	1.9%	1.9%	2.9%	10	10	0
BANK OF AMERICA	\$774.82	\$872.68	-\$97.86	-11.2%	1.4%	1.6%	-17.2%	11	11	0
DZ BANK	\$526.84	\$497.74	\$29.10	5.8%	0.9%	0.9%	-1.3%	12	12	0
UNION BANK OF SWITZERLAND	\$457.92	\$459.59	-\$1.68	-0.4%	0.8%	0.9%	-7.1%	13	13	0
SOCIETE GENERALE	\$383.19	\$366.25	\$16.94	4.6%	0.7%	0.7%	-2.5%	14	15	1
WELLS FARGO	\$327.58	\$324.35	\$3.23	1.0%	0.6%	0.6%	-5.9%	15	16	1
SKANDINAVISKA SECURITIES	\$282.57	\$275.58	\$6.99	2.5%	0.5%	0.5%	-4.4%	16	17	1
PICTET CIE EUROPE	\$262.04	\$228.53	\$33.51	14.7%	0.5%	0.4%	6.9%	17	19	2
ROYAL BANK OF CANADA	\$241.82	\$404.07	-\$162.25	-40.2%	0.4%	0.8%	-44.2%	18	14	-4
CITCO FUNDS SERVICES	\$240.54	\$256.98	-\$16.43	-6.4%	0.4%	0.5%	-12.8%	19	18	-1
DEKABANK	\$234.83	\$205.96	\$28.87	14.0%	0.4%	0.4%	6.3%	20	20	0
ZÜRCHER KANTONALBANK	\$199.01	\$158.94	\$40.08	25.2%	0.4%	0.3%	16.7%	21	22	1
CECA	\$185.52	\$153.31	\$32.21	21.0%	0.3%	0.3%	12.8%	22	23	1
SWEDBANK	\$183.92	\$161.20	\$22.71	14.1%	0.3%	0.3%	6.3%	23	21	-2
ROYAL BANK OF SCOTLAND	\$167.84	\$148.91	\$18.93	12.7%	0.3%	0.3%	5.1%	24	24	0
DEUTSCHE BANK	\$141.52	\$136.12	\$5.40	4.0%	0.2%	0.3%	-3.1%	25	25	0
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$52,151.79	\$48,739.00	\$3,412.79	7.0%	91.8%	92.0%	-0.3%			
ALL OTHER	\$4,660.99	\$4,212.76	\$448.22	10.6%	8.2%	8.0%	3.1%			
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$56,812.78	\$52,951.76	\$3,861.02	7.3%	38.2%	36.8%	3.7%			
NOT REPORTED	\$4,729.98	\$4,884.34	-\$154.36	-3.2%	3.2%	3.4%	-6.4%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,654.95	\$1,834.82	\$820.13	44.7%	1.8%	1.3%	39.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,384.92	\$6,719.15	\$665.77	9.9%	5.0%	4.7%	6.3%			
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$84,516.14	\$84,120.03	\$396.11	0.5%	56.8%	58.5%	-2.9%			
TOTAL FUND ASSETS	\$148,713.84	\$143,790.95	\$4,922.89	3.4%	100.0%	100.0%	0.0%			

Single Custodians Peer Analysis – Global AUC - Growth & Market Share

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUC growth
 - AUC increased 10.64%, or 1.46x the market
 - Market share increased from 7.96% to 8.20%
 - An increase of 3.12%
- Custodians ranked 11-25 registered the lowest AUC growth
 - AUC decreased 0.87%, or -0.12x the market
 - Market share decreased from 8.78% to 8.11%
 - A decrease of 7.60%

Peer Group Performance by Fund Assets						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Assets	3.42%		100%	100%		
Market Growth Single Custodians Disclosed	7.29%	2.13	38.20%	36.83%	1.38%	3.74%
Custodians Ranked 1-10	7.83%	1.07	83.68%	83.26%	0.42%	0.50%
Custodians Ranked 11-25	-0.87%	-0.12	8.11%	8.78%	-0.67%	-7.60%
All Other Custodians	10.64%	1.46	8.20%	7.96%	0.25%	3.12%
Market Growth Multi Custodians Disclosed	0.47%	0.14	56.83%	58.50%	-1.67%	-2.86%
Market Growth Custodians Not Disclosed	9.91%	2.89	4.97%	4.67%	0.29%	6.27%

Multi-Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Multi Custodians Market Segment - Fund Relationships										
Multi Custodians	Aug -23 #FR	Aug -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Aug -23 Rank	Aug -22 Rank	23-22 Change
JPMORGAN	22,649	9,052	13,597	150.2%	18.9%	7.6%	147.4%	1	3	2
FIRST CITIZENS BANK AND TRUST	11,536	793	10,743	1354.7%	9.6%	0.7%	1338.4%	2	24	22
BANK OF AMERICA	8,542	7,642	900	11.8%	7.1%	6.4%	10.5%	3	4	1
BANK OF NEW YORK	5,799	5,398	401	7.4%	4.8%	4.6%	6.2%	4	5	1
MORGAN STANLEY	5,577	5,268	309	5.9%	4.7%	4.4%	4.7%	5	6	1
GOLDMAN SACHS BANK USA	5,124	4,912	212	4.3%	4.3%	4.1%	3.1%	6	7	1
UNION BANK OF SWITZERLAND	4,853	2,418	2,435	100.7%	4.0%	2.0%	98.4%	7	12	5
CITIBANK	3,761	3,466	295	8.5%	3.1%	2.9%	7.3%	8	9	1
WELLS FARGO	2,897	2,847	50	1.8%	2.4%	2.4%	0.6%	9	10	1
NORTHERN TRUST	2,809	2,635	174	6.6%	2.3%	2.2%	5.4%	10	11	1
US BANCORP	2,169	1,877	292	15.6%	1.8%	1.6%	14.3%	11	14	3
STATE STREET IFS	1,992	1,974	18	0.9%	1.7%	1.7%	-0.2%	12	13	1
BARCLAYS	1,386	1,250	136	10.9%	1.2%	1.1%	9.6%	13	17	4
BNP PARIBAS	1,361	1,367	-6	-0.4%	1.1%	1.2%	-1.6%	14	15	1
DEUTSCHE BANK	1,320	1,363	-43	-3.2%	1.1%	1.1%	-4.2%	15	16	1
FIDELITY	1,285	1,158	127	11.0%	1.1%	1.0%	9.7%	16	18	2
HSBC FINANCIAL SERVICES	1,143	1,059	84	7.9%	1.0%	0.9%	6.7%	17	19	2
ESHARES	1,134	1,051	83	7.9%	0.9%	0.9%	6.7%	18	20	2
RAYMOND JAMES ASSOCIATES	1,093	947	146	15.4%	0.9%	0.8%	14.1%	19	22	3
NEW YORK COMMUNITY BANK	1,070	56	1,014	1810.7%	0.9%	0.0%	1789.2%	20	97	77
CANADIAN IMPERIAL BANK OF COMMERCE	870	808	62	7.7%	0.7%	0.7%	6.5%	21	23	2
COMPUTERSHARE	818	483	335	69.4%	0.7%	0.4%	67.5%	22	31	9
CITCO FUNDS SERVICES	791	749	42	5.6%	0.7%	0.6%	4.4%	23	25	2
INTERACTIVE BROKERS	772	702	70	10.0%	0.6%	0.6%	8.7%	24	26	2
SOCIETE GENERALE	740	679	61	9.0%	0.6%	0.6%	7.8%	25	27	2
TOP 25 MULTI CUSTODIANS FR	91,491	59,954	31,537	52.6%	76.3%	50.6%	50.9%			
ALL OTHER	28,432	58,620	-30,188	-51.5%	23.7%	49.4%	-52.0%			
TOTAL MULTI CUSTODIANS FR	119,923	118,574	1,349	1.1%	38.2%	39.6%	-3.6%			
NOT REPORTED	34,805	33,481	1,324	4.0%	11.1%	11.2%	-0.9%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	47,751	40,874	6,877	16.8%	15.2%	13.7%	11.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	82,556	74,355	8,201	11.0%	26.3%	24.8%	5.8%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	111,666	106,506	5,160	4.8%	35.5%	35.6%	-0.1%			
TOTAL FUNDS	314,145	299,435	14,710	4.9%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 65.53%, or 57.60x the market
 - Market share increased from 37.47% to 61.33%
 - An increase of 63.67%
- Custodians ranked >25 registered the smallest growth in funds
 - Funds decreased 51.50%, or -45.27x the market
 - Market share decreased from 49.44% to 23.71%
 - A decrease of 52.04%

Peer Group Performance by Fund Relationships						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Funds	4.91%		100%	100%		
Market Growth Multi Custodians Disclosed	1.14%	0.23	38.17%	39.60%	-1.42%	-3.60%
Custodians Ranked 1-10	65.53%	57.60	61.33%	37.47%	23.86%	63.67%
Custodians Ranked 11-25	15.60%	13.71	14.96%	13.09%	1.87%	14.30%
All Other Custodians	-51.50%	-45.27	23.71%	49.44%	-25.73%	-52.04%
Market Growth Single Custodians Disclosed	4.84%	0.99	35.55%	35.57%	-0.02%	-0.06%
Market Growth Custodians Not Disclosed	11.03%	2.25	26.28%	24.83%	1.45%	5.83%

Multi-Fund Custodians League Table – Global AUC

Convergence - Aug 2023 League Tables - Multi Custodians Market Segment - Assets (in BN)										
Multi Custodians	Aug -23 FR-AUC	Aug -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Aug -23 Rank	Aug -22 Rank	23-22 Change
JPMORGAN	\$8,225.08	\$6,362.58	\$1,862.50	29.3%	9.7%	7.6%	28.7%	1	3	2
BANK OF AMERICA	\$6,510.20	\$6,112.53	\$397.66	6.5%	7.7%	7.3%	6.0%	2	24	22
BANK OF NEW YORK	\$5,724.58	\$5,390.99	\$333.59	6.2%	6.8%	6.4%	5.7%	3	4	1
CITIBANK	\$4,596.66	\$4,311.48	\$285.18	6.6%	5.4%	5.1%	6.1%	4	5	1
MORGAN STANLEY	\$4,409.16	\$4,663.13	-\$253.97	-5.4%	5.2%	5.5%	-5.9%	5	6	1
GOLDMAN SACHS BANK USA	\$4,378.16	\$4,352.67	\$25.49	0.6%	5.2%	5.2%	0.1%	6	7	1
UNION BANK OF SWITZERLAND	\$4,254.48	\$3,094.80	\$1,159.68	37.5%	5.0%	3.7%	36.8%	7	12	5
BARCLAYS	\$3,809.48	\$3,496.08	\$313.40	9.0%	4.5%	4.2%	8.5%	8	9	1
STATE STREET IFS	\$3,083.82	\$3,182.61	-\$98.79	-3.1%	3.6%	3.8%	-3.6%	9	10	1
BNP PARIBAS	\$2,563.14	\$2,436.24	\$126.90	5.2%	3.0%	2.9%	4.7%	10	11	1
NORTHERN TRUST	\$2,495.84	\$2,518.94	-\$23.10	-0.9%	3.0%	3.0%	-1.4%	11	14	3
WELLS FARGO	\$2,247.66	\$2,339.13	-\$91.47	-3.9%	2.7%	2.8%	-4.4%	12	13	1
DEUTSCHE BANK	\$1,976.71	\$1,998.35	-\$21.64	-1.1%	2.3%	2.4%	-1.5%	13	17	4
FIRST CITIZENS BANK AND TRUST	\$1,954.37	\$0.11	\$1,954.26	1755114.4%	2.3%	0.0%	1746888.1%	14	15	1
HSBC FINANCIAL SERVICES	\$1,674.76	\$1,663.11	\$11.65	0.7%	2.0%	2.0%	0.2%	15	16	1
STANDARD CHARTERED BANK	\$1,449.66	\$1,343.77	\$105.89	7.9%	1.7%	1.6%	7.4%	16	18	2
SOCIETE GENERALE	\$1,356.38	\$1,342.11	\$14.27	1.1%	1.6%	1.6%	0.6%	17	19	2
BANK OF NOVA SCOTIA	\$1,030.33	\$887.70	\$142.63	16.1%	1.2%	1.1%	15.5%	18	20	2
US BANCORP	\$990.30	\$883.21	\$107.09	12.1%	1.2%	1.0%	11.6%	19	22	3
FIDELITY	\$928.47	\$1,058.52	-\$130.05	-12.3%	1.1%	1.3%	-12.7%	20	97	77
COMPUTERSHARE	\$853.81	\$711.01	\$142.80	20.1%	1.0%	0.8%	19.5%	21	23	2
NOMURA BANK LUXEMBOURG SA	\$841.11	\$731.29	\$109.82	15.0%	1.0%	0.9%	14.5%	22	31	9
ROYAL BANK OF CANADA	\$781.78	\$626.17	\$155.61	24.9%	0.9%	0.7%	24.3%	23	25	2
CANADIAN IMPERIAL BANK OF COMMERCE	\$598.62	\$426.66	\$171.96	40.3%	0.7%	0.5%	39.6%	24	26	2
SKANDINAVISKA SECURITIES	\$597.20	\$454.98	\$142.22	31.3%	0.7%	0.5%	30.6%	25	27	2
TOP 25 MULTI CUSTODIANS FR ASSETS	\$67,331.74	\$60,388.18	\$6,943.56	11.5%	79.7%	71.8%	11.0%			
ALL OTHER	\$17,184.40	\$23,731.85	-\$6,547.45	-27.6%	20.3%	28.2%	-27.9%			
TOTAL MULTI CUSTODIANS FR ASSETS	\$84,516.14	\$84,120.03	\$396.11	0.5%	56.8%	58.5%	-2.9%			
NOT REPORTED	\$4,729.98	\$4,884.34	-\$154.36	-3.2%	3.2%	3.4%	-6.4%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,654.95	\$1,834.82	\$820.13	44.7%	1.8%	1.3%	39.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,384.92	\$6,719.15	\$665.77	9.9%	5.0%	4.7%	6.3%			
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$56,812.78	\$52,951.76	\$3,861.02	7.3%	38.2%	36.8%	3.7%			
TOTAL FUND ASSETS	\$148,713.84	\$143,790.95	\$4,922.89	3.4%	100.0%	100.0%	0.0%			

Custodians Peer Groups – Global Multi AUC Growth & Market Share

Best and Worst Performing Peer Groups

- Custodians ranked 11-25 registered the highest AUC growth
 - AUC increased 16.44%, or 34.91x the market
 - Market share increased from 20.19% to 23.40%
 - An increase of 15.89%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 27.59%, or -58.59x the market
 - Market share decreased from 28.21% to 20.33%
 - A decrease of 27.93%

Peer Group Performance by Fund Assets						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Assets	3.42%		100%	100%		
Market Growth Multi Custodians Disclosed	0.47%	0.14	56.83%	58.50%	-1.67%	-2.86%
Custodians Ranked 1-10	9.57%	20.31	56.27%	51.60%	4.67%	9.05%
Custodians Ranked 11-25	16.44%	34.91	23.40%	20.19%	3.21%	15.89%
All Other Custodians	-27.59%	-58.59	20.33%	28.21%	-7.88%	-27.93%
Market Growth Single Custodians Disclosed	7.29%	2.13	38.20%	36.83%	1.38%	3.74%
Market Growth Custodians Not Disclosed	9.91%	2.89	4.97%	4.67%	0.29%	6.27%

About Convergence

- Founded in 2013, Convergence provides independent insights into important trends and challenges facing our clients in the fast-growing and dynamic asset management industry by using alternative data and data science analytics.
- Our insights help clients grow revenue, improve efficiency and identify and manage risks.
- Our clients include Asset Managers, Institutional Investors and Service Providers.
- Our founders, are former C-Suite executives in hedge funds, private equity funds, broker-dealers and securities exchanges.
- We are headquartered in South Norwalk, CT and operate in New Jersey and Hyderabad, India.
- For additional information please contact John Phinney @ 203-956-4824 or George Gainer @ 203-956-4824 or to learn more about how Convergence can help you.

Terms Used in Our Fund Custodians League Tables

- **Global Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that Convergence can attribute to one or more Fund Custodians.
- **US Funds and Assets**
 - Measures public and private funds and assets domiciled in the US that Convergence can attribute to one or more Fund Custodians.
- **Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled outside the United States that Convergence can attribute to one or more Fund Custodians.
- **Not Reported – Global – US – Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that are being serviced by the investment adviser or a controlled affiliate.
- **Not Applicable – Global – US – Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that are being serviced by the investment adviser or a controlled affiliate.
- **Unattributed Funds and Assets – Global – US – Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that Convergence cannot attribute to one or more Fund Custodians.
- **All Other Custodians**
 - Is a measure of funds and assets attributed to Fund Custodians ranked outside the Top 25.

Terms Used in Our Fund Custodians League Tables

- **Single/Multiple Relationship**
 - A “**Single**” Custodians relationship exists at the fund level when the adviser discloses one Custodians to their fund and a “**Multiple**” Custodians exists when more than one Custodians is named.
- **Total Fund/Asset Custodians Relationships**
 - Total Funds refer to an overall number of funds available in the market and Total Assets refer to the overall assets available in the market.
- **Total Fund/Asset Custodians Single Relationships**
 - Total Funds in single relationships means, total funds in the market for those who have only single-Custodians relationship and Total Assets in single relationship means total assets in the market for those who have only single-Custodians relationship.
- **Total Fund/Asset Custodians Multiple Relationships**
 - Total Funds in multiple relationships means, total assets in the market for those who have multi-Custodians relationship and Total Assets in multiple relationship means total assets in the market for those who have multi-Custodians relationship.
- **Unique Fund/Asset Custodians Single Relationships**
 - Measures unique Funds in single relationships means, unique funds in the market for those who have only single Custodians relationship .
- **Unique Fund/Asset Custodians Multiple Relationships**
 - Measures unique Funds in multiple relationships means, unique funds in the market for those who have multi-Custodians relationship.
- **Total Fund/Asset Market**
 - Total Fund includes all the funds in the market plus all the unique funds. Similarly, Total Asset Market means all the assets in the market plus all the unique assets.

Additional Analytics available for the Custodians Segment

Convergence offers several additional datasets and analytical tools that can be used to support business development and client and risk management efforts...

- **Competitive Analysis (Business Development)**
 - Compare your growth and market share to a defined peer group in multiple fund type segments
 - Growth is broken down in up to 9 growth factors, each which reveals a story
- **Client New Fund Flow Analytics (Business Development)**
 - Identify new flows into client funds
 - Allows you to determine if you are getting your fair share of the change
- **Clients at Risk (Client Management)**
 - Convergence predictive analytics can identify clients likely to move their business to a competitor in full, or partially through diversification
- **Client Operational Risk Profiles (Risk Management)**
 - Convergence proprietary risk factors can identify high-risk business conditions in your prospective or existing clients
- **ESG Business Profiles**
 - Convergence measures the ESG sensitivity of investment advisers. This differs from ESG investing measurement and complements your work on ESG investing.

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The Convergence Leadership Team



John Phinney, Chairman and CEO

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- ❖ Apollo Global Management-Fund Group: CFO/COO, Rohatyn Group: CFO/COO, JPMorgan [Various Divisions]: CFO, Fidelity Alternative Investments: Director of Operations

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- ❖ Executive Management Consultant, Atlas Data: Chief Executive Officer and Co-founder, J. & W. Seligman & Co. Incorporated: V.P. Human Resources, UJB-Financial: V.P. Employee Benefits

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Vidya Minukuri, Global Head of Data Science & Research

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- ❖ Tata Consultancy Services: Assistant Business Consultant & Project Manager, British Telecom [through TCS]: Lead Business Analyst & Solution Architect, Ericsson [through TCS] : IT Systems Engineer and IT development team leader

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George Evans, Co-President and Chief Revenue Officer

Career History

- ❖ Gladstone Associates: Managing Director, GlobeOp Financial, Outsource Partners International, BISYS Financial Services: Global Head of Business Development, JPMorgan Investor Services: Senior Vice President, The Prudential: Assistant Treasurer

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George Gainer, CPA Global Head – Client Management

Career History

- ❖ Gravitas: Finance & Business Performance Analyst, Apollo [through Gravitas]: Business Analysis & Reporting, Iron Mountain: Acquisition Accounting Manager, KPMG: Transaction Services Manager, Deloitte: Audit Senior Staff

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David Etzbach, Managing Director, Custodians and Allocators

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- ❖ Nod Hill Investment Partners, Founder, Steinberg Asset Management, Managing Director, Fidelity Investments / Pyramis Global Advisors, Senior Vice President, Credit Suisse Asset Management, Director, Citigroup Asset Management / Legg Mason, Director / Vice President, JP Morgan - Global Investor Services, Vice President, Bankers Trust

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