

Fund Custodians
League Tables

Global Funds and AUC

Reporting Period
Jul 2022 - Jul 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 - Jul 2023 League Tables - Custodians Market Segment - Fund Relationships										
All Custodians	Jul -23 #FR	Jul -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jul -23 Rank	Jul -22 Rank	23-22 Change
JPMORGAN	31,857	17,814	14,043	78.8%	13.8%	8.0%	73.1%	1	1	0
BANK OF NEW YORK	16,501	15,600	901	5.8%	7.1%	7.0%	2.4%	2	2	0
STATE STREET IFS	15,441	14,710	731	5.0%	6.7%	6.6%	1.6%	3	3	0
FIRST CITIZENS BANK AND TRUST	12,335	798	11,537	1445.7%	5.3%	0.4%	1396.2%	4	35	31
BANK OF AMERICA	11,383	10,494	889	8.5%	4.9%	4.7%	5.0%	5	6	1
CITIBANK	8,730	8,034	696	8.7%	3.8%	3.6%	5.2%	6	7	1
NORTHERN TRUST	6,641	6,229	412	6.6%	2.9%	2.8%	3.2%	7	8	1
MORGAN STANLEY	6,179	5,850	329	5.6%	2.7%	2.6%	2.2%	8	9	1
UNION BANK OF SWITZERLAND	5,903	3,414	2,489	72.9%	2.6%	1.5%	67.4%	9	17	8
GOLDMAN SACHS BANK USA	5,748	5,496	252	4.6%	2.5%	2.5%	1.2%	10	11	1
BNP PARIBAS	5,617	5,594	23	0.4%	2.4%	2.5%	-2.8%	11	10	-1
US BANCORP	5,604	5,152	452	8.8%	2.4%	2.3%	5.3%	12	12	0
WELLS FARGO	4,319	4,243	76	1.8%	1.9%	1.9%	-1.5%	13	14	1
HSBC FINANCIAL SERVICES	3,981	3,758	223	5.9%	1.7%	1.7%	2.5%	14	15	1
CACEIS	3,884	3,603	281	7.8%	1.7%	1.6%	4.3%	15	16	1
BROWN BROTHER HARRIMAN	2,785	2,687	98	3.6%	1.2%	1.2%	0.3%	16	18	2
ROYAL BANK OF CANADA	2,464	2,248	216	9.6%	1.1%	1.0%	6.1%	17	19	2
SOCIETE GENERALE	2,360	2,221	139	6.3%	1.0%	1.0%	2.9%	18	20	2
DEUTSCHE BANK	2,019	2,064	-45	-2.2%	0.9%	0.9%	-5.3%	19	21	2
FIDELITY	1,930	1,824	106	5.8%	0.8%	0.8%	2.4%	20	22	2
CITCO FUNDS SERVICES	1,822	1,605	217	13.5%	0.8%	0.7%	9.9%	21	23	2
INTERACTIVE BROKERS	1,586	1,490	96	6.4%	0.7%	0.7%	3.0%	22	24	2
BARCLAYS	1,563	1,365	198	14.5%	0.7%	0.6%	10.8%	23	26	3
CANADIAN IMPERIAL BANK OF COMMERCE	1,505	1,319	186	14.1%	0.7%	0.6%	10.4%	24	27	3
ESHARES	1,348	1,366	-18	-1.3%	0.6%	0.6%	-4.5%	25	25	0
TOP 25 CUSTODIANS FR - ALL	163,505	128,978	34,527	26.8%	70.7%	57.6%	22.7%			
ALL OTHER	67,665	94,777	-27,112	-28.6%	29.3%	42.4%	-30.9%			
TOTAL CUSTODIANS FR DISCLOSED	231,170	223,755	7,415	3.3%	72.4%	75.2%	-3.7%			
NOT REPORTED	34,932	33,133	1,799	5.4%	10.9%	11.1%	-1.8%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	53,045	40,480	12,565	31.0%	16.6%	13.6%	22.1%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	87,977	73,613	14,364	19.5%	27.6%	24.8%	11.4%			
TOTAL FUNDS	319,147	297,368	21,779	7.3%	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 36.50%, or 11.01x the market
 - Market share increased from 39.52% to 52.22%
 - An increase of 32.12%
- Custodians ranked >25 registered the lowest growth in funds
 - Funds decreased 28.61%, or -8.63x the market
 - Market share decreased from 42.36% to 29.27%
 - A decrease of 30.90%

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	7.32%		100%	100%		
Market Growth Custodians Disclosed	3.31%	0.45	72.43%	75.25%	-2.81%	-3.74%
Custodians Ranked 1-10	36.50%	11.01	52.22%	39.52%	12.70%	32.12%
Custodians Ranked 11-25	5.55%	1.67	18.51%	18.12%	0.39%	2.16%
All Other Custodians	-28.61%	-8.63	29.27%	42.36%	-13.09%	-30.90%
Market Growth Custodians Not Disclosed	19.51%	2.66	27.57%	24.75%	2.81%	11.36%

Fund Custodians League Table – Global AUC

Convergence - Jul 2023 League Tables - Custodians Market Segment - Assets (in BN)										
All Custodians	Jul -23 FR-AUC	Jul -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jul -23 Rank	Jul -22 Rank	23-22 Change
JPMORGAN	\$20,272.54	\$17,202.34	\$3,070.20	17.8%	14.5%	12.7%	13.5%	1	1	0
STATE STREET IFS	\$17,675.23	\$16,609.22	\$1,066.01	6.4%	12.6%	12.3%	2.5%	2	2	0
BANK OF NEW YORK	\$14,429.55	\$13,304.60	\$1,124.95	8.5%	10.3%	9.8%	4.5%	3	3	0
BANK OF AMERICA	\$7,275.31	\$6,953.37	\$321.94	4.6%	5.2%	5.1%	0.8%	4	4	0
CITIBANK	\$6,307.27	\$5,651.28	\$655.99	11.6%	4.5%	4.2%	7.5%	5	5	0
UNION BANK OF SWITZERLAND	\$4,703.34	\$3,540.44	\$1,162.90	32.8%	3.4%	2.6%	28.0%	6	10	4
NORTHERN TRUST	\$4,599.79	\$4,576.37	\$23.42	0.5%	3.3%	3.4%	-3.2%	7	7	0
MORGAN STANLEY	\$4,469.56	\$4,743.38	-\$273.82	-5.8%	3.2%	3.5%	-9.2%	8	6	-2
GOLDMAN SACHS BANK USA	\$4,451.81	\$4,414.79	\$37.01	0.8%	3.2%	3.3%	-2.9%	9	8	-1
BNP PARIBAS	\$4,095.99	\$3,815.38	\$280.60	7.4%	2.9%	2.8%	3.4%	10	9	-1
BARCLAYS	\$3,849.51	\$3,519.94	\$329.58	9.4%	2.7%	2.6%	5.3%	11	12	1
HSBC FINANCIAL SERVICES	\$2,684.83	\$2,637.15	\$47.68	1.8%	1.9%	2.0%	-1.9%	12	14	2
WELLS FARGO	\$2,575.61	\$2,663.07	-\$87.46	-3.3%	1.8%	2.0%	-6.8%	13	13	0
US BANCORP	\$2,440.46	\$2,236.65	\$203.81	9.1%	1.7%	1.7%	5.1%	14	16	2
BROWN BROTHER HARRIMAN	\$2,371.98	\$2,148.48	\$223.50	10.4%	1.7%	1.6%	6.3%	15	17	2
DEUTSCHE BANK	\$2,115.52	\$2,131.36	-\$15.85	-0.7%	1.5%	1.6%	-4.4%	16	18	2
FIRST CITIZENS BANK AND TRUST	\$2,070.94	\$0.12	\$2,070.82	1740993.4%	1.5%	0.0%	1676870.0%	17	1042	1,025
SOCIETE GENERALE	\$1,731.40	\$1,703.89	\$27.51	1.6%	1.2%	1.3%	-2.1%	18	20	2
STANDARD CHARTERED BANK	\$1,464.10	\$1,356.36	\$107.74	7.9%	1.0%	1.0%	4.0%	19	21	2
ROYAL BANK OF CANADA	\$1,175.85	\$1,012.68	\$163.17	16.1%	0.8%	0.7%	11.8%	20	24	4
CACEIS	\$1,117.89	\$1,069.10	\$48.78	4.6%	0.8%	0.8%	0.7%	21	23	2
BANK OF NOVA SCOTIA	\$1,036.65	\$892.05	\$144.60	16.2%	0.7%	0.7%	11.9%	22	25	3
FIDELITY	\$953.97	\$1,100.77	-\$146.80	-13.3%	0.7%	0.8%	-16.5%	23	22	-1
COMPUTERSHARE	\$915.48	\$752.04	\$163.44	21.7%	0.7%	0.6%	17.2%	24	26	2
SKANDINAVISKA SECURITIES	\$877.41	\$718.07	\$159.34	22.2%	0.6%	0.5%	17.7%	25	29	4
TOP 25 CUSTODIANS FR - ALL	\$115,661.96	\$104,752.92	\$10,909.04	10.4%	82.5%	77.6%	6.3%			
ALL OTHER	\$24,580.43	\$30,324.44	-\$5,744.00	-18.9%	17.5%	22.4%	-21.9%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$140,242.39	\$135,077.35	\$5,165.04	3.8%	95.1%	95.3%	-0.2%			
NOT REPORTED	\$4,687.78	\$4,855.46	-\$167.69	-3.5%	3.2%	3.4%	-7.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,572.04	\$1,836.60	\$735.45	40.0%	1.7%	1.3%	34.6%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,259.82	\$6,692.06	\$567.76	8.5%	4.9%	4.7%	4.3%			
TOTAL FUND ASSETS	\$147,502.21	\$141,769.41	\$5,732.80	4.0%	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 14.37%, or 3.76x the market
 - Market share increased from 17.72% to 19.52%
 - An increase of 10.16%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 18.94%, or -4.95x the market
 - Market share decreased from 22.45% to 17.53%
 - A decrease of 21.93%

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	4.04%		100%	100%		
Market Growth Custodians Disclosed	3.82%	0.95	95.08%	95.28%	-0.20%	-0.21%
Custodians Ranked 1-10	9.24%	2.42	62.95%	59.83%	3.12%	5.22%
Custodians Ranked 11-25	14.37%	3.76	19.52%	17.72%	1.80%	10.16%
All Other Custodians	-18.94%	-4.95	17.53%	22.45%	-4.92%	-21.93%
Market Growth Custodians Not Disclosed	8.48%	2.10	4.92%	4.72%	0.20%	4.27%

Single Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Single Custodians Market Segment - Fund Relationships										
Single Custodians	Jul -23 #FR	Jul -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jul -23 Rank	Jul -22 Rank	23-22 Change
STATE STREET IFS	13,442	12,765	677	5.3%	12.0%	12.0%	0.1%	1	1	0
BANK OF NEW YORK	10,725	10,237	488	4.8%	9.6%	9.6%	-0.4%	2	2	0
JPMORGAN	9,310	8,855	455	5.1%	8.3%	8.3%	0.0%	3	3	0
CITIBANK	4,998	4,600	398	8.7%	4.5%	4.3%	3.3%	4	4	0
BNP PARIBAS	4,254	4,238	16	0.4%	3.8%	4.0%	-4.6%	5	5	0
CACEIS	3,842	3,577	265	7.4%	3.4%	3.4%	2.1%	6	7	1
NORTHERN TRUST	3,837	3,623	214	5.9%	3.4%	3.4%	0.7%	7	6	-1
US BANCORP	3,447	3,260	187	5.7%	3.1%	3.1%	0.5%	8	8	0
BANK OF AMERICA	2,852	2,910	-58	-2.0%	2.6%	2.7%	-6.8%	9	9	0
HSBC FINANCIAL SERVICES	2,837	2,703	134	5.0%	2.5%	2.5%	-0.2%	10	10	0
BROWN BROTHER HARRIMAN	2,554	2,464	90	3.7%	2.3%	2.3%	-1.4%	11	11	0
ROYAL BANK OF CANADA	1,897	1,931	-34	-1.8%	1.7%	1.8%	-6.6%	12	12	0
SOCIETE GENERALE	1,629	1,544	85	5.5%	1.5%	1.5%	0.3%	13	13	0
WELLS FARGO	1,424	1,393	31	2.2%	1.3%	1.3%	-2.8%	14	14	0
CITCO FUNDS SERVICES	1,031	853	178	20.9%	0.9%	0.8%	14.9%	15	18	3
UNION BANK OF SWITZERLAND	1,025	1,008	17	1.7%	0.9%	0.9%	-3.3%	16	16	0
DZ BANK	1,022	1,038	-16	-1.5%	0.9%	1.0%	-6.4%	17	15	-2
SKANDINAVISKA SECURITIES	904	861	43	5.0%	0.8%	0.8%	-0.2%	18	17	-1
HAUCK & AUFHAEUSER	849	815	34	4.2%	0.8%	0.8%	-1.0%	19	19	0
FIRST CITIZENS BANK AND TRUST	820	5	815	16300.0%	0.7%	0.0%	15493.2%	20	175	155
INTERACTIVE BROKERS	816	793	23	2.9%	0.7%	0.7%	-2.2%	21	20	-1
ROYAL BANK OF SCOTLAND	750	764	-14	-1.8%	0.7%	0.7%	-6.7%	22	21	-1
DEUTSCHE BANK	710	705	5	0.7%	0.6%	0.7%	-4.2%	23	23	0
CECA	680	613	67	10.9%	0.6%	0.6%	5.5%	24	26	2
FIDELITY	647	673	-26	-3.9%	0.6%	0.6%	-8.6%	25	24	-1
TOP 25 SINGLE CUSTODIANS FR	76,302	72,228	4,074	5.6%	68.3%	68.0%	0.4%			
ALL OTHER	35,338	33,920	1,418	4.2%	31.7%	32.0%	-0.9%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	111,640	106,148	5,492	5.2%	35.0%	35.7%	-2.0%			
NOT REPORTED	34,932	33,133	1,799	5.4%	10.9%	11.1%	-1.8%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	53,045	40,480	12,565	31.0%	16.6%	13.6%	22.1%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	87,977	73,613	14,364	19.5%	27.6%	24.8%	11.4%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	119,530	117,607	1,923	1.6%	37.5%	39.5%	-5.3%			
TOTAL FUNDS	319,147	297,368	21,779	7.3%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked 11-25 registered the highest growth in funds
 - Funds increased 8.40%, or 1.62x the market
 - Market share increased from 14.56% to 15.01%
 - An increase of 3.06%
- Custodians ranked >25 registered the lowest growth in funds
 - Funds increased 4.18%, or 0.81x the market
 - Market share decreased from 13.96% to 31.65%
 - A decrease of 0.94%

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	7.32%		100%	100%		
Market Growth Single Custodians Disclosed	5.17%	0.71	34.98%	35.70%	-0.72%	-2.00%
Custodians Ranked 1-10	4.89%	0.95	53.34%	53.48%	-0.14%	-0.27%
Custodians Ranked 11-25	8.40%	1.62	15.01%	14.56%	0.45%	3.06%
All Other Custodians	4.18%	0.81	31.65%	31.96%	-0.30%	-0.94%
Market Growth Multi Custodians Disclosed	1.64%	0.22	37.45%	39.55%	-2.10%	-5.30%
Market Growth Custodians Not Disclosed	19.51%	2.66	27.57%	24.75%	2.81%	11.36%

Single Fund Custodians League Table – Global AUC

Convergence - Jul 2023 League Tables - Single Custodians Market Segment - Assets (in BN)										
Single Custodians	Jul -23 FR-AUC	Jul -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jul -23 Rank	Jul -22 Rank	23-22 Change
STATE STREET IFS	\$14,592.14	\$13,426.88	\$1,165.26	8.7%	26.2%	26.3%	-0.4%	1	1	0
JPMORGAN	\$12,047.59	\$10,887.21	\$1,160.38	10.7%	21.6%	21.3%	1.4%	2	2	0
BANK OF NEW YORK	\$8,704.97	\$7,916.49	\$788.49	10.0%	15.6%	15.5%	0.8%	3	3	0
BROWN BROTHER HARRIMAN	\$2,235.52	\$2,009.94	\$225.58	11.2%	4.0%	3.9%	1.9%	4	5	1
NORTHERN TRUST	\$2,102.11	\$2,055.02	\$47.09	2.3%	3.8%	4.0%	-6.2%	5	4	-1
CITIBANK	\$1,714.08	\$1,362.66	\$351.42	25.8%	3.1%	2.7%	15.3%	6	7	1
BNP PARIBAS	\$1,536.28	\$1,394.62	\$141.66	10.2%	2.8%	2.7%	1.0%	7	6	-1
US BANCORP	\$1,449.41	\$1,350.51	\$98.91	7.3%	2.6%	2.6%	-1.6%	8	8	0
CACEIS	\$1,101.43	\$1,027.39	\$74.04	7.2%	2.0%	2.0%	-1.7%	9	9	0
HSBC FINANCIAL SERVICES	\$1,011.01	\$975.42	\$35.59	3.6%	1.8%	1.9%	-5.0%	10	10	0
BANK OF AMERICA	\$764.84	\$869.99	-\$105.16	-12.1%	1.4%	1.7%	-19.4%	11	11	0
DZ BANK	\$518.30	\$492.81	\$25.49	5.2%	0.9%	1.0%	-3.6%	12	12	0
UNION BANK OF SWITZERLAND	\$460.54	\$448.96	\$11.57	2.6%	0.8%	0.9%	-6.0%	13	13	0
ROYAL BANK OF CANADA	\$394.52	\$391.51	\$3.01	0.8%	0.7%	0.8%	-7.6%	14	14	0
SOCIETE GENERALE	\$376.34	\$361.87	\$14.48	4.0%	0.7%	0.7%	-4.7%	15	15	0
WELLS FARGO	\$327.42	\$323.54	\$3.87	1.2%	0.6%	0.6%	-7.2%	16	16	0
SKANDINAVISKA SECURITIES	\$280.26	\$264.47	\$15.79	6.0%	0.5%	0.5%	-2.9%	17	17	0
PICTET CIE EUROPE	\$256.89	\$220.49	\$36.39	16.5%	0.5%	0.4%	6.8%	18	19	1
CITCO FUNDS SERVICES	\$240.57	\$256.98	-\$16.40	-6.4%	0.4%	0.5%	-14.2%	19	18	-1
DEKABANK	\$230.99	\$203.77	\$27.22	13.4%	0.4%	0.4%	3.9%	20	20	0
ZÜRCHER KANTONALBANK	\$190.49	\$151.93	\$38.56	25.4%	0.3%	0.3%	14.9%	21	22	1
CECA	\$181.39	\$147.04	\$34.36	23.4%	0.3%	0.3%	13.1%	22	24	2
SWEDBANK	\$174.51	\$159.97	\$14.54	9.1%	0.3%	0.3%	0.0%	23	21	-2
ROYAL BANK OF SCOTLAND	\$155.59	\$151.14	\$4.45	2.9%	0.3%	0.3%	-5.6%	24	23	-1
DEUTSCHE BANK	\$139.23	\$136.04	\$3.19	2.3%	0.2%	0.3%	-6.2%	25	25	0
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$51,186.39	\$46,986.65	\$4,199.75	8.9%	91.7%	91.9%	-0.1%			
ALL OTHER	\$4,603.76	\$4,149.68	\$454.07	10.9%	8.3%	8.1%	1.7%			
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$55,790.15	\$51,136.33	\$4,653.82	9.1%	37.8%	36.1%	4.9%			
NOT REPORTED	\$4,687.78	\$4,855.46	-\$167.69	-3.5%	3.2%	3.4%	-7.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,572.04	\$1,836.60	\$735.45	40.0%	1.7%	1.3%	34.6%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,259.82	\$6,692.06	\$567.76	8.5%	4.9%	4.7%	4.3%			
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$84,452.24	\$83,941.02	\$511.22	0.6%	57.3%	59.2%	-3.3%			
TOTAL FUND ASSETS	\$147,502.21	\$141,769.41	\$5,732.80	4.0%	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 10.94%, or 1.20x the market
 - Market share increased from 8.11% to 8.25%
 - An increase of 1.69%
- Custodians ranked 11-25 registered the lowest AUC growth
 - AUC decreased 2.43%, or 0.27x the market
 - Market share decreased from 8.96% to 8.41%
 - A decrease of 6.11%

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	4.04%		100%	100%		
Market Growth Single Custodians Disclosed	9.10%	2.25	37.82%	36.07%	1.75%	4.86%
Custodians Ranked 1-10	9.64%	1.06	83.34%	82.93%	0.41%	0.50%
Custodians Ranked 11-25	2.43%	0.27	8.41%	8.96%	-0.55%	-6.11%
All Other Custodians	10.94%	1.20	8.25%	8.11%	0.14%	1.69%
Market Growth Multi Custodians Disclosed	0.61%	0.15	57.25%	59.21%	-1.95%	-3.30%
Market Growth Custodians Not Disclosed	8.48%	2.10	4.92%	4.72%	0.20%	4.27%

Multi-Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Multi Custodians Market Segment - Fund Relationships										
Multi Custodians	Jul -23 #FR	Jul -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jul -23 Rank	Jul -22 Rank	23-22 Change
JPMORGAN	22,547	8,959	13,588	151.7%	18.9%	7.6%	147.6%	1	3	2
FIRST CITIZENS BANK AND TRUST	11,515	793	10,722	1352.1%	9.6%	0.7%	1328.7%	2	24	22
BANK OF AMERICA	8,531	7,584	947	12.5%	7.1%	6.4%	10.7%	3	4	1
BANK OF NEW YORK	5,776	5,363	413	7.7%	4.8%	4.6%	6.0%	4	5	1
MORGAN STANLEY	5,545	5,245	300	5.7%	4.6%	4.5%	4.0%	5	6	1
GOLDMAN SACHS BANK USA	5,112	4,877	235	4.8%	4.3%	4.1%	3.1%	6	7	1
UNION BANK OF SWITZERLAND	4,878	2,406	2,472	102.7%	4.1%	2.0%	99.5%	7	12	5
CITIBANK	3,732	3,434	298	8.7%	3.1%	2.9%	6.9%	8	9	1
WELLS FARGO	2,895	2,850	45	1.6%	2.4%	2.4%	-0.1%	9	10	1
NORTHERN TRUST	2,804	2,606	198	7.6%	2.3%	2.2%	5.9%	10	11	1
US BANCORP	2,157	1,892	265	14.0%	1.8%	1.6%	12.2%	11	14	3
STATE STREET IFS	1,999	1,945	54	2.8%	1.7%	1.7%	1.1%	12	13	1
BARCLAYS	1,378	1,238	140	11.3%	1.2%	1.1%	9.5%	13	17	4
BNP PARIBAS	1,363	1,356	7	0.5%	1.1%	1.2%	-1.1%	14	16	2
DEUTSCHE BANK	1,309	1,359	-50	-3.7%	1.1%	1.2%	-5.2%	15	15	0
FIDELITY	1,283	1,151	132	11.5%	1.1%	1.0%	9.7%	16	18	2
HSBC FINANCIAL SERVICES	1,144	1,055	89	8.4%	1.0%	0.9%	6.7%	17	19	2
ESHARES	1,132	1,054	78	7.4%	0.9%	0.9%	5.7%	18	20	2
RAYMOND JAMES ASSOCIATES	1,091	939	152	16.2%	0.9%	0.8%	14.3%	19	22	3
NEW YORK COMMUNITY BANK	1,068	18	1,050	5833.3%	0.9%	0.0%	5737.9%	20	132	112
CANADIAN IMPERIAL BANK OF COMMERCE	870	802	68	8.5%	0.7%	0.7%	6.7%	21	23	2
COMPUTERSHARE	814	481	333	69.2%	0.7%	0.4%	66.5%	22	31	9
CITCO FUNDS SERVICES	791	752	39	5.2%	0.7%	0.6%	3.5%	23	25	2
INTERACTIVE BROKERS	770	697	73	10.5%	0.6%	0.6%	8.7%	24	26	2
SOCIETE GENERALE	731	677	54	8.0%	0.6%	0.6%	6.2%	25	27	2
TOP 25 MULTI CUSTODIANS FR	91,235	59,533	31,702	53.3%	76.3%	50.6%	50.8%			
ALL OTHER	28,295	58,074	-29,779	-51.3%	23.7%	49.4%	-52.1%			
TOTAL MULTI CUSTODIANS FR	119,530	117,607	1,923	1.6%	37.5%	39.5%	-5.3%			
NOT REPORTED	34,932	33,133	1,799	5.4%	10.9%	11.1%	-1.8%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	53,045	40,480	12,565	31.0%	16.6%	13.6%	22.1%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	87,977	73,613	14,364	19.5%	27.6%	24.8%	11.4%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	111,640	106,148	5,492	5.2%	35.0%	35.7%	-2.0%			
TOTAL FUNDS	319,147	297,368	21,779	7.3%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 66.23%, or 40.50x the market
 - Market share increased from 37.51% to 61.35%
 - An increase of 63.55%
- Custodians ranked >25 registered the smallest growth in funds
 - Funds decreased 51.28%, or -31.36x the market
 - Market share decreased from 49.38% to 23.67%
 - A decrease of 52.06%

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	7.32%		100%	100%		
Market Growth Multi Custodians Disclosed	1.64%	0.22	37.45%	39.55%	-2.10%	-5.30%
Custodians Ranked 1-10	66.23%	40.50	61.35%	37.51%	23.84%	63.55%
Custodians Ranked 11-25	16.11%	9.85	14.98%	13.11%	1.87%	14.25%
All Other Custodians	-51.28%	-31.36	23.67%	49.38%	-25.71%	-52.06%
Market Growth Single Custodians Disclosed	5.17%	0.71	34.98%	35.70%	-0.72%	-2.00%
Market Growth Custodians Not Disclosed	19.51%	2.66	27.57%	24.75%	2.81%	11.36%

Multi-Fund Custodians League Table – Global AUC

Convergence - Jul 2023 League Tables - Multi Custodians Market Segment - Assets (in BN)										
Multi Custodians	Jul -23 FR-AUC	Jul -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jul -23 Rank	Jul -22 Rank	23-22 Change
JPMORGAN	\$8,224.95	\$6,315.13	\$1,909.82	30.2%	9.7%	7.5%	29.5%	1	3	2
BANK OF AMERICA	\$6,510.47	\$6,083.37	\$427.10	7.0%	7.7%	7.2%	6.4%	2	24	22
BANK OF NEW YORK	\$5,724.57	\$5,388.11	\$336.46	6.2%	6.8%	6.4%	5.6%	3	4	1
CITIBANK	\$4,593.19	\$4,288.62	\$304.56	7.1%	5.4%	5.1%	6.5%	4	5	1
MORGAN STANLEY	\$4,408.76	\$4,661.27	-\$252.52	-5.4%	5.2%	5.6%	-6.0%	5	6	1
GOLDMAN SACHS BANK USA	\$4,376.37	\$4,348.50	\$27.87	0.6%	5.2%	5.2%	0.0%	6	7	1
UNION BANK OF SWITZERLAND	\$4,242.80	\$3,091.47	\$1,151.32	37.2%	5.0%	3.7%	36.4%	7	12	5
BARCLAYS	\$3,807.58	\$3,496.40	\$311.18	8.9%	4.5%	4.2%	8.2%	8	9	1
STATE STREET IFS	\$3,083.08	\$3,182.34	-\$99.26	-3.1%	3.7%	3.8%	-3.7%	9	10	1
BNP PARIBAS	\$2,559.71	\$2,420.76	\$138.95	5.7%	3.0%	2.9%	5.1%	10	11	1
NORTHERN TRUST	\$2,497.68	\$2,521.35	-\$23.67	-0.9%	3.0%	3.0%	-1.5%	11	14	3
WELLS FARGO	\$2,248.19	\$2,339.53	-\$91.34	-3.9%	2.7%	2.8%	-4.5%	12	13	1
DEUTSCHE BANK	\$1,976.29	\$1,995.32	-\$19.03	-1.0%	2.3%	2.4%	-1.6%	13	17	4
FIRST CITIZENS BANK AND TRUST	\$1,952.45	\$0.11	\$1,952.34	1753387.6%	2.3%	0.0%	1742773.1%	14	16	2
HSBC FINANCIAL SERVICES	\$1,673.82	\$1,661.72	\$12.09	0.7%	2.0%	2.0%	0.1%	15	15	0
STANDARD CHARTERED BANK	\$1,449.75	\$1,342.31	\$107.44	8.0%	1.7%	1.6%	7.4%	16	18	2
SOCIETE GENERALE	\$1,355.06	\$1,342.03	\$13.03	1.0%	1.6%	1.6%	0.4%	17	19	2
BANK OF NOVA SCOTIA	\$1,030.32	\$887.63	\$142.69	16.1%	1.2%	1.1%	15.4%	18	20	2
US BANCORP	\$991.05	\$886.14	\$104.91	11.8%	1.2%	1.1%	11.2%	19	22	3
FIDELITY	\$928.54	\$1,057.90	-\$129.36	-12.2%	1.1%	1.3%	-12.8%	20	132	112
COMPUTERSHARE	\$854.02	\$711.19	\$142.83	20.1%	1.0%	0.8%	19.4%	21	23	2
NOMURA BANK LUXEMBOURG SA	\$841.46	\$730.28	\$111.19	15.2%	1.0%	0.9%	14.5%	22	31	9
ROYAL BANK OF CANADA	\$781.33	\$621.16	\$160.17	25.8%	0.9%	0.7%	25.0%	23	25	2
CANADIAN IMPERIAL BANK OF COMMERCE	\$598.35	\$424.13	\$174.22	41.1%	0.7%	0.5%	40.2%	24	26	2
SKANDINAVISKA SECURITIES	\$597.15	\$453.60	\$143.55	31.6%	0.7%	0.5%	30.9%	25	27	2
TOP 25 MULTI CUSTODIANS FR ASSETS	\$67,306.95	\$60,250.40	\$7,056.55	11.7%	79.7%	71.8%	11.0%			
ALL OTHER	\$17,145.30	\$23,690.63	-\$6,545.33	-27.6%	20.3%	28.2%	-28.1%			
TOTAL MULTI CUSTODIANS FR ASSETS	\$84,452.24	\$83,941.02	\$511.22	0.6%	57.3%	59.2%	-3.2%			
NOT REPORTED	\$4,687.78	\$4,855.46	-\$167.69	-3.5%	3.2%	3.4%	-7.1%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,572.04	\$1,836.60	\$735.45	40.0%	1.7%	1.3%	34.7%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,259.82	\$6,692.06	\$567.76	8.5%	4.9%	4.7%	4.4%			
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$55,663.21	\$51,136.33	\$4,526.88	8.9%	37.8%	36.1%	4.7%			
TOTAL FUND ASSETS	\$147,375.27	\$141,769.41	\$5,605.85	4.0%	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 16.50%, or 27.10x the market
 - Market share increased from 20.22% to 23.42%
 - An increase of 15.80%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 27.63%, or -45.37x the market
 - Market share decreased from 28.22% to 20.30%
 - A decrease of 28.07%

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	3.95%		100%	100%		
Market Growth Multi Custodians Disclosed	0.61%	0.15	57.30%	59.21%	-1.91%	-3.22%
Custodians Ranked 1-10	9.83%	16.15	56.28%	51.56%	4.73%	9.17%
Custodians Ranked 11-25	16.50%	27.10	23.42%	20.22%	3.19%	15.80%
All Other Custodians	-27.63%	-45.37	20.30%	28.22%	-7.92%	-28.07%
Market Growth Single Custodians Disclosed	8.85%	2.24	37.77%	36.07%	1.70%	4.71%
Market Growth Custodians Not Disclosed	8.48%	2.15	4.93%	4.72%	0.21%	4.36%

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

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- ❖ 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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