

Fund Custodians
League Tables

Global Funds and AUC

Reporting Period
Jun 2022 - Jun 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 - Jun 2023 League Tables - Custodians Market Segment - Fund Relationships										
All Custodians	Jun -23 #FR	Jun -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jun -23 Rank	Jun -22 Rank	23-22 Change
JPMORGAN	31,572	17,685	13,887	78.5%	13.7%	8.1%	69.4%	1	1	0
BANK OF NEW YORK	16,556	15,379	1,177	7.7%	7.2%	7.0%	2.1%	2	2	0
STATE STREET IFS	15,424	14,122	1,302	9.2%	6.7%	6.5%	3.6%	3	3	0
FIRST CITIZENS BANK AND TRUST	12,290	796	11,494	1444.0%	5.3%	0.4%	1364.9%	4	34	30
BANK OF AMERICA	11,356	10,408	948	9.1%	4.9%	4.8%	3.5%	5	6	1
CITIBANK	8,729	8,008	721	9.0%	3.8%	3.7%	3.4%	6	7	1
NORTHERN TRUST	6,615	6,156	459	7.5%	2.9%	2.8%	2.0%	7	8	1
MORGAN STANLEY	6,133	5,819	314	5.4%	2.7%	2.7%	0.0%	8	9	1
UNION BANK OF SWITZERLAND	5,932	3,415	2,517	73.7%	2.6%	1.6%	64.8%	9	17	8
GOLDMAN SACHS BANK USA	5,737	5,480	257	4.7%	2.5%	2.5%	-0.7%	10	10	0
BNP PARIBAS	5,685	5,422	263	4.9%	2.5%	2.5%	-0.5%	11	11	0
US BANCORP	5,617	5,124	493	9.6%	2.4%	2.3%	4.0%	12	12	0
WELLS FARGO	4,306	4,210	96	2.3%	1.9%	1.9%	-3.0%	13	13	0
HSBC FINANCIAL SERVICES	4,009	3,593	416	11.6%	1.7%	1.6%	5.9%	14	16	2
CACEIS	3,849	3,595	254	7.1%	1.7%	1.6%	1.6%	15	15	0
BROWN BROTHER HARRIMAN	2,801	2,436	365	15.0%	1.2%	1.1%	9.1%	16	18	2
ROYAL BANK OF CANADA	2,476	2,199	277	12.6%	1.1%	1.0%	6.8%	17	19	2
SOCIETE GENERALE	2,359	2,139	220	10.3%	1.0%	1.0%	4.6%	18	20	2
DEUTSCHE BANK	2,022	2,009	13	0.6%	0.9%	0.9%	-4.5%	19	21	2
FIDELITY	1,924	1,807	117	6.5%	0.8%	0.8%	1.0%	20	22	2
CITCO FUNDS SERVICES	1,677	1,558	119	7.6%	0.7%	0.7%	2.1%	21	23	2
INTERACTIVE BROKERS	1,585	1,475	110	7.5%	0.7%	0.7%	2.0%	22	24	2
BARCLAYS	1,564	1,361	203	14.9%	0.7%	0.6%	9.0%	23	26	3
CANADIAN IMPERIAL BANK OF COMMERCE	1,477	1,312	165	12.6%	0.6%	0.6%	6.8%	24	27	3
ESHARES	1,342	1,370	-28	-2.0%	0.6%	0.6%	-7.1%	25	25	0
TOP 25 CUSTODIANS FR - ALL	163,037	126,878	36,159	28.5%	70.7%	58.0%	21.9%			
ALL OTHER	67,408	91,764	-24,356	-26.5%	29.3%	42.0%	-30.3%			
TOTAL CUSTODIANS FR DISCLOSED	230,445	218,642	11,803	5.4%	72.6%	74.2%	-2.2%			
NOT REPORTED	35,096	32,173	2,923	9.1%	11.1%	10.9%	1.3%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	51,774	43,758	8,016	18.3%	16.3%	14.9%	9.8%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	86,870	75,931	10,939	14.4%	27.4%	25.8%	6.2%			
TOTAL FUNDS	317,315	294,573	22,742	7.7%	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 37.90%, or 7.02x the market
 - Market share increased from 39.91% to 52.22%
 - An increase of 30.84%
- Custodians ranked >25 registered the lowest growth in funds
 - Funds decreased 26.54%, or -4.92x the market
 - Market share decreased from 41.97% to 29.25%
 - A decrease of 30.30%

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	7.72%		100%	100%		
Market Growth Custodians Disclosed	5.40%	0.70	72.62%	74.22%	-1.60%	-2.16%
Custodians Ranked 1-10	37.90%	7.02	52.22%	39.91%	12.31%	30.84%
Custodians Ranked 11-25	7.78%	1.44	18.53%	18.12%	0.41%	2.26%
All Other Custodians	-26.54%	-4.92	29.25%	41.97%	-12.72%	-30.30%
Market Growth Custodians Not Disclosed	14.41%	1.87	27.38%	25.78%	1.60%	6.21%

Fund Custodians League Table – Global AUC

Convergence - Jun 2023 League Tables - Custodians Market Segment - Assets (in BN)										
All Custodians	Jun -23 FR-AUC	Jun -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jun -23 Rank	Jun -22 Rank	23-22 Change
JPMORGAN	\$19,726.49	\$17,951.65	\$1,774.84	9.9%	14.3%	13.1%	8.4%	1	1	0
STATE STREET IFS	\$17,121.47	\$16,994.70	\$126.77	0.7%	12.4%	12.4%	-0.6%	2	2	0
BANK OF NEW YORK	\$14,387.05	\$13,492.22	\$894.83	6.6%	10.4%	9.9%	5.2%	3	3	0
BANK OF AMERICA	\$7,265.71	\$6,917.75	\$347.97	5.0%	5.2%	5.1%	3.6%	4	4	0
CITIBANK	\$6,120.23	\$5,731.91	\$388.31	6.8%	4.4%	4.2%	5.3%	5	5	0
UNION BANK OF SWITZERLAND	\$4,659.51	\$3,545.02	\$1,114.49	31.4%	3.4%	2.6%	29.7%	6	10	4
NORTHERN TRUST	\$4,513.34	\$4,661.89	-\$148.55	-3.2%	3.3%	3.4%	-4.5%	7	7	0
MORGAN STANLEY	\$4,467.87	\$4,731.67	-\$263.81	-5.6%	3.2%	3.5%	-6.8%	8	6	-2
GOLDMAN SACHS BANK USA	\$4,448.96	\$4,430.95	\$18.01	0.4%	3.2%	3.2%	-0.9%	9	8	-1
BNP PARIBAS	\$4,092.07	\$3,862.02	\$230.05	6.0%	3.0%	2.8%	4.5%	10	9	-1
BARCLAYS	\$3,848.84	\$3,522.32	\$326.52	9.3%	2.8%	2.6%	7.8%	11	11	0
HSBC FINANCIAL SERVICES	\$2,676.24	\$2,589.70	\$86.54	3.3%	1.9%	1.9%	1.9%	12	14	2
WELLS FARGO	\$2,574.33	\$2,635.62	-\$61.29	-2.3%	1.9%	1.9%	-3.6%	13	13	0
US BANCORP	\$2,422.10	\$2,267.94	\$154.15	6.8%	1.7%	1.7%	5.4%	14	15	1
BROWN BROTHER HARRIMAN	\$2,298.32	\$2,216.91	\$81.41	3.7%	1.7%	1.6%	2.3%	15	17	2
DEUTSCHE BANK	\$2,108.11	\$2,111.26	-\$3.14	-0.1%	1.5%	1.5%	-1.5%	16	18	2
FIRST CITIZENS BANK AND TRUST	\$2,070.50	\$0.12	\$2,070.39	1765116.0%	1.5%	0.0%	1741320.4%	17	1041	1,024
SOCIETE GENERALE	\$1,724.61	\$1,721.30	\$3.31	0.2%	1.2%	1.3%	-1.2%	18	20	2
STANDARD CHARTERED BANK	\$1,463.89	\$1,358.74	\$105.15	7.7%	1.1%	1.0%	6.3%	19	21	2
ROYAL BANK OF CANADA	\$1,176.35	\$1,014.18	\$162.17	16.0%	0.8%	0.7%	14.4%	20	24	4
CACEIS	\$1,083.77	\$1,142.26	-\$58.49	-5.1%	0.8%	0.8%	-6.4%	21	22	1
BANK OF NOVA SCOTIA	\$1,036.56	\$892.06	\$144.49	16.2%	0.7%	0.7%	14.6%	22	25	3
FIDELITY	\$953.06	\$1,100.31	-\$147.25	-13.4%	0.7%	0.8%	-14.6%	23	23	0
COMPUTERSHARE	\$912.05	\$749.15	\$162.89	21.7%	0.7%	0.5%	20.1%	24	26	2
SKANDINAVISKA SECURITIES	\$870.42	\$741.16	\$129.26	17.4%	0.6%	0.5%	15.9%	25	27	2
TOP 25 CUSTODIANS FR - ALL	\$114,021.85	\$106,382.83	\$7,639.03	7.2%	82.4%	77.9%	5.7%			
ALL OTHER	\$24,403.49	\$30,176.51	-\$5,773.02	-19.1%	17.6%	22.1%	-20.2%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$138,425.34	\$136,559.34	\$1,866.01	1.4%	95.0%	94.6%	0.4%			
NOT REPORTED	\$4,925.21	\$4,635.82	\$289.39	6.2%	3.4%	3.2%	5.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,405.28	\$3,135.66	-\$730.38	-23.3%	1.7%	2.2%	-24.0%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,330.50	\$7,771.48	-\$440.99	-5.7%	5.0%	5.4%	-6.6%			
TOTAL FUND ASSETS	\$145,755.84	\$144,330.82	\$1,425.02	1.0%	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 13.12%, or 9.60x the market
 - Market share increased from 17.62% to 19.66%
 - An increase of 11.59%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 19.13%, or -14.00x the market
 - Market share decreased from 22.10% to 17.63%
 - A decrease of 20.22%

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	0.99%		100%	100%		
Market Growth Custodians Disclosed	1.37%	1.38	94.97%	94.62%	0.36%	0.38%
Custodians Ranked 1-10	5.45%	3.99	62.71%	60.28%	2.43%	4.02%
Custodians Ranked 11-25	13.12%	9.60	19.66%	17.62%	2.04%	11.59%
All Other Custodians	-19.13%	-14.00	17.63%	22.10%	-4.47%	-20.22%
Market Growth Custodians Not Disclosed	-5.67%	-5.75	5.03%	5.38%	-0.36%	-6.60%

Single Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Single Custodians Market Segment - Fund Relationships										
Single Custodians	Jun -23 #FR	Jun -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jun -23 Rank	Jun -22 Rank	23-22 Change
STATE STREET IFS	13,437	12,207	1,230	10.1%	12.0%	11.8%	1.7%	1	1	0
BANK OF NEW YORK	10,754	10,105	649	6.4%	9.6%	9.8%	-1.7%	2	2	0
JPMORGAN	9,215	8,800	415	4.7%	8.2%	8.5%	-3.3%	3	3	0
CITIBANK	5,009	4,590	419	9.1%	4.5%	4.4%	0.8%	4	4	0
BNP PARIBAS	4,324	4,079	245	6.0%	3.9%	3.9%	-2.1%	5	5	0
NORTHERN TRUST	3,836	3,560	276	7.8%	3.4%	3.4%	-0.5%	6	7	1
CACEIS	3,829	3,570	259	7.3%	3.4%	3.5%	-0.9%	7	6	-1
US BANCORP	3,475	3,246	229	7.1%	3.1%	3.1%	-1.1%	8	8	0
HSBC FINANCIAL SERVICES	2,869	2,543	326	12.8%	2.6%	2.5%	4.2%	9	10	1
BANK OF AMERICA	2,846	2,910	-64	-2.2%	2.5%	2.8%	-9.7%	10	9	-1
BROWN BROTHER HARRIMAN	2,573	2,214	359	16.2%	2.3%	2.1%	7.3%	11	11	0
ROYAL BANK OF CANADA	1,892	1,881	11	0.6%	1.7%	1.8%	-7.1%	12	12	0
SOCIETE GENERALE	1,629	1,484	145	9.8%	1.5%	1.4%	1.4%	13	13	0
WELLS FARGO	1,420	1,380	40	2.9%	1.3%	1.3%	-5.0%	14	14	0
UNION BANK OF SWITZERLAND	1,031	1,009	22	2.2%	0.9%	1.0%	-5.6%	15	16	1
DZ BANK	1,027	1,029	-2	-0.2%	0.9%	1.0%	-7.8%	16	15	-1
CITCO FUNDS SERVICES	907	830	77	9.3%	0.8%	0.8%	0.9%	17	18	1
SKANDINAVISKA SECURITIES	887	843	44	5.2%	0.8%	0.8%	-2.8%	18	17	-1
HAUCK & AUFHAEUSER	854	653	201	30.8%	0.8%	0.6%	20.8%	19	24	5
INTERACTIVE BROKERS	815	783	32	4.1%	0.7%	0.8%	-3.9%	20	19	-1
FIRST CITIZENS BANK AND TRUST	767	4	763	19075.0%	0.7%	0.0%	17611.2%	21	179	158
ROYAL BANK OF SCOTLAND	750	752	-2	-0.3%	0.7%	0.7%	-7.9%	22	20	-2
DEUTSCHE BANK	713	656	57	8.7%	0.6%	0.6%	0.4%	23	23	0
CECA	685	596	89	14.9%	0.6%	0.6%	6.2%	24	27	3
FIDELITY	645	662	-17	-2.6%	0.6%	0.6%	-10.0%	25	22	-3
TOP 25 SINGLE CUSTODIANS FR	76,189	70,386	5,803	8.2%	68.1%	68.1%	0.0%			
ALL OTHER	35,718	32,978	2,740	8.3%	31.9%	31.9%	0.0%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	111,907	103,364	8,543	8.3%	35.3%	35.1%	0.5%			
NOT REPORTED	35,096	32,173	2,923	9.1%	11.1%	10.9%	1.3%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	51,774	43,758	8,016	18.3%	16.3%	14.9%	9.8%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	86,870	75,931	10,939	14.4%	27.4%	25.8%	6.2%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	118,545	115,284	3,261	2.8%	37.4%	39.1%	-4.5%			
TOTAL FUNDS	317,322	294,579	22,743	7.7%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 11-25 registered the highest growth in funds
 - Funds increased 12.31%, or 1.49x the market
 - Market share increased from 14.30% to 14.83%
 - An increase of 3.74%
- Custodians ranked 1-10 registered the lowest growth in funds
 - Funds increased 7.16%, or 0.87x the market
 - Market share decreased from 53.80% to 53.25%
 - A decrease of 1.02%

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	7.72%		100%	100%		
Market Growth Single Custodians Disclosed	8.26%	1.07	35.27%	35.09%	0.18%	0.51%
Custodians Ranked 1-10	7.16%	0.87	53.25%	53.80%	-0.55%	-1.02%
Custodians Ranked 11-25	12.31%	1.49	14.83%	14.30%	0.53%	3.74%
All Other Custodians	8.31%	1.01	31.92%	31.90%	0.01%	0.04%
Market Growth Multi Custodians Disclosed	2.83%	0.37	37.36%	39.14%	-1.78%	-4.54%
Market Growth Custodians Not Disclosed	14.41%	1.87	27.38%	25.78%	1.60%	6.21%

Single Fund Custodians League Table – Global AUC

Convergence - Jun 2023 League Tables - Single Custodians Market Segment - Assets (in BN)										
Single Custodians	Jun -23 FR-AUC	Jun -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jun -23 Rank	Jun -22 Rank	23-22 Change
STATE STREET IFS	\$14,042.19	\$13,830.00	\$212.19	1.5%	26.0%	26.1%	-0.3%	1	1	0
JPMORGAN	\$11,538.52	\$11,653.67	-\$115.15	-1.0%	21.3%	22.0%	-2.8%	2	2	0
BANK OF NEW YORK	\$8,661.65	\$8,155.20	\$506.45	6.2%	16.0%	15.4%	4.3%	3	3	0
BROWN BROTHER HARRIMAN	\$2,161.92	\$2,079.07	\$82.85	4.0%	4.0%	3.9%	2.1%	4	5	1
NORTHERN TRUST	\$2,015.94	\$2,143.87	-\$127.93	-6.0%	3.7%	4.0%	-7.7%	5	4	-1
BNP PARIBAS	\$1,533.75	\$1,442.34	\$91.41	6.3%	2.8%	2.7%	4.4%	6	7	1
CITIBANK	\$1,529.25	\$1,465.44	\$63.81	4.4%	2.8%	2.8%	2.4%	7	6	-1
US BANCORP	\$1,434.44	\$1,390.02	\$44.42	3.2%	2.7%	2.6%	1.3%	8	8	0
CACEIS	\$1,078.46	\$1,100.57	-\$22.11	-2.0%	2.0%	2.1%	-3.8%	9	9	0
HSBC FINANCIAL SERVICES	\$1,003.18	\$925.71	\$77.47	8.4%	1.9%	1.7%	6.4%	10	10	0
BANK OF AMERICA	\$764.29	\$872.08	-\$107.78	-12.4%	1.4%	1.6%	-14.0%	11	11	0
DZ BANK	\$504.90	\$525.69	-\$20.79	-4.0%	0.9%	1.0%	-5.7%	12	12	0
UNION BANK OF SWITZERLAND	\$439.79	\$460.08	-\$20.30	-4.4%	0.8%	0.9%	-6.2%	13	13	0
ROYAL BANK OF CANADA	\$383.94	\$392.80	-\$8.87	-2.3%	0.7%	0.7%	-4.1%	14	14	0
SOCIETE GENERALE	\$368.90	\$382.36	-\$13.46	-3.5%	0.7%	0.7%	-5.3%	15	15	0
WELLS FARGO	\$327.77	\$320.04	\$7.73	2.4%	0.6%	0.6%	0.5%	16	16	0
SKANDINAVISKA SECURITIES	\$273.28	\$287.93	-\$14.66	-5.1%	0.5%	0.5%	-6.8%	17	17	0
PICTET CIE EUROPE	\$251.05	\$233.83	\$17.23	7.4%	0.5%	0.4%	5.4%	18	19	1
CITCO FUNDS SERVICES	\$243.81	\$244.59	-\$0.78	-0.3%	0.5%	0.5%	-2.2%	19	18	-1
DEKABANK	\$224.63	\$221.82	\$2.80	1.3%	0.4%	0.4%	-0.6%	20	20	0
ZÜRCHER KANTONALBANK	\$185.10	\$157.88	\$27.23	17.2%	0.3%	0.3%	15.1%	21	22	1
SWEDBANK	\$179.02	\$170.66	\$8.36	4.9%	0.3%	0.3%	3.0%	22	21	-1
CECA	\$175.65	\$153.51	\$22.14	14.4%	0.3%	0.3%	12.3%	23	23	0
ROYAL BANK OF SCOTLAND	\$147.59	\$149.00	-\$1.41	-0.9%	0.3%	0.3%	-2.8%	24	24	0
DEUTSCHE BANK	\$130.11	\$132.06	-\$1.95	-1.5%	0.2%	0.2%	-3.3%	25	25	0
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$49,599.14	\$48,890.23	\$708.90	1.4%	91.7%	92.1%	-0.4%			
ALL OTHER	\$4,462.46	\$4,175.58	\$286.88	6.9%	8.3%	7.9%	4.9%			
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$54,061.59	\$53,065.81	\$995.78	1.9%	37.1%	36.8%	0.9%			
NOT REPORTED	\$4,925.21	\$4,635.82	\$289.39	6.2%	3.4%	3.2%	5.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,405.28	\$3,135.66	-\$730.38	-23.3%	1.7%	2.2%	-24.0%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,330.50	\$7,771.48	-\$440.99	-5.7%	5.0%	5.4%	-6.6%			
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$84,363.75	\$83,493.53	\$870.22	1.0%	57.9%	57.8%	0.1%			
TOTAL FUND ASSETS	\$145,755.84	\$144,330.82	\$1,425.02	1.0%	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 6.87%, or 3.66x the market
 - Market share increased from 7.87% to 8.25%
 - An increase of 4.90%
- Custodians ranked 11-25 registered the lowest AUC growth
 - AUC decreased 2.22%, or -1.18x the market
 - Market share decreased from 8.87% to 8.51%
 - A decrease of 4.02%

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	0.99%		100%	100%		
Market Growth Single Custodians Disclosed	1.88%	1.90	37.09%	36.77%	0.32%	0.88%
Custodians Ranked 1-10	1.84%	0.98	83.24%	83.27%	-0.03%	-0.03%
Custodians Ranked 11-25	-2.22%	-1.18	8.51%	8.87%	-0.36%	-4.02%
All Other Custodians	6.87%	3.66	8.25%	7.87%	0.39%	4.90%
Market Growth Multi Custodians Disclosed	1.04%	1.06	57.88%	57.85%	0.03%	0.05%
Market Growth Custodians Not Disclosed	-5.67%	-5.75	5.03%	5.38%	-0.36%	-6.60%

Multi-Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Multi Custodians Market Segment - Fund Relationships										
Multi Custodians	Jun -23 #FR	Jun -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jun -23 Rank	Jun -22 Rank	23-22 Change
JPMORGAN	22,357	8,885	13,472	151.6%	18.9%	7.7%	144.7%	1	3	2
FIRST CITIZENS BANK AND TRUST	11,523	792	10,731	1354.9%	9.7%	0.7%	1314.9%	2	23	21
BANK OF AMERICA	8,510	7,498	1,012	13.5%	7.2%	6.5%	10.4%	3	4	1
BANK OF NEW YORK	5,802	5,274	528	10.0%	4.9%	4.6%	7.0%	4	5	1
MORGAN STANLEY	5,501	5,222	279	5.3%	4.6%	4.5%	2.4%	5	6	1
GOLDMAN SACHS BANK USA	5,096	4,866	230	4.7%	4.3%	4.2%	1.8%	6	7	1
UNION BANK OF SWITZERLAND	4,901	2,406	2,495	103.7%	4.1%	2.1%	98.1%	7	12	5
CITIBANK	3,720	3,418	302	8.8%	3.1%	3.0%	5.8%	8	9	1
WELLS FARGO	2,886	2,830	56	2.0%	2.4%	2.5%	-0.8%	9	10	1
NORTHERN TRUST	2,779	2,596	183	7.0%	2.3%	2.3%	4.1%	10	11	1
US BANCORP	2,142	1,878	264	14.1%	1.8%	1.6%	10.9%	11	14	3
STATE STREET IFS	1,987	1,915	72	3.8%	1.7%	1.7%	0.9%	12	13	1
BARCLAYS	1,378	1,231	147	11.9%	1.2%	1.1%	8.9%	13	17	4
BNP PARIBAS	1,361	1,343	18	1.3%	1.1%	1.2%	-1.4%	14	16	2
DEUTSCHE BANK	1,309	1,353	-44	-3.3%	1.1%	1.2%	-5.9%	15	15	0
FIDELITY	1,279	1,145	134	11.7%	1.1%	1.0%	8.6%	16	18	2
HSBC FINANCIAL SERVICES	1,140	1,050	90	8.6%	1.0%	0.9%	5.6%	17	20	3
ESHARES	1,130	1,057	73	6.9%	1.0%	0.9%	4.0%	18	19	1
RAYMOND JAMES ASSOCIATES	1,091	917	174	19.0%	0.9%	0.8%	15.7%	19	21	2
CANADIAN IMPERIAL BANK OF COMMERCE	862	799	63	7.9%	0.7%	0.7%	4.9%	20	22	2
COMPUTERSHARE	809	480	329	68.5%	0.7%	0.4%	63.9%	21	31	10
INTERACTIVE BROKERS	770	692	78	11.3%	0.6%	0.6%	8.2%	22	25	3
CITCO FUNDS SERVICES	770	728	42	5.8%	0.6%	0.6%	2.9%	22	24	2
SOCIETE GENERALE	730	655	75	11.5%	0.6%	0.6%	8.4%	23	26	3
COINBASE	636	565	71	12.6%	0.5%	0.5%	9.5%	24	27	3
TOP 25 MULTI CUSTODIANS FR	90,469	59,595	30,874	51.8%	76.3%	51.7%	47.6%			
ALL OTHER	28,076	55,689	-27,613	-49.6%	23.7%	48.3%	-51.0%			
TOTAL MULTI CUSTODIANS FR	118,545	115,284	3,261	2.8%	37.4%	39.1%	-4.5%			
NOT REPORTED	35,096	32,173	2,923	9.1%	11.1%	10.9%	1.3%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	51,774	43,758	8,016	18.3%	16.3%	14.9%	9.8%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	86,870	75,931	10,939	14.4%	27.4%	25.8%	6.2%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	111,907	103,364	8,543	8.3%	35.3%	35.1%	0.5%			
TOTAL FUNDS	317,322	294,579	22,743	7.7%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 66.89%, or 23.65x the market
 - Market share increased from 37.98% to 61.64%
 - An increase of 62.30%
- Custodians ranked >25 registered the smallest growth in funds
 - Funds decreased 49.58%, or -17.53x the market
 - Market share decreased from 48.31% to 23.68%
 - A decrease of 50.97%

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	7.72%		100%	100%		
Market Growth Multi Custodians Disclosed	2.83%	0.37	37.36%	39.14%	-1.78%	-4.54%
Custodians Ranked 1-10	66.89%	23.65	61.64%	37.98%	23.66%	62.30%
Custodians Ranked 11-25	10.03%	3.55	14.67%	13.71%	0.96%	7.01%
All Other Custodians	-49.58%	-17.53	23.68%	48.31%	-24.62%	-50.97%
Market Growth Single Custodians Disclosed	8.26%	1.07	35.27%	35.09%	0.18%	0.51%
Market Growth Custodians Not Disclosed	14.41%	1.87	27.38%	25.78%	1.60%	6.21%

Multi-Fund Custodians League Table – Global AUC

Convergence - Jun 2023 League Tables - Multi Custodians Market Segment - Assets (in BN)										
Multi Custodians	Jun -23 FR-AUC	Jun -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Jun -23 Rank	Jun -22 Rank	23-22 Change
JPMORGAN	\$8,187.96	\$6,297.98	\$1,889.99	30.0%	9.7%	7.5%	28.7%	1	3	2
BANK OF AMERICA	\$6,501.42	\$6,045.67	\$455.75	7.5%	7.7%	7.2%	6.4%	2	23	21
BANK OF NEW YORK	\$5,725.39	\$5,337.02	\$388.37	7.3%	6.8%	6.4%	6.2%	3	4	1
CITIBANK	\$4,590.98	\$4,266.47	\$324.50	7.6%	5.4%	5.1%	6.5%	4	5	1
MORGAN STANLEY	\$4,407.59	\$4,649.74	-\$242.15	-5.2%	5.2%	5.6%	-6.2%	5	6	1
GOLDMAN SACHS BANK USA	\$4,373.13	\$4,364.21	\$8.93	0.2%	5.2%	5.2%	-0.8%	6	7	1
UNION BANK OF SWITZERLAND	\$4,219.72	\$3,084.94	\$1,134.78	36.8%	5.0%	3.7%	35.4%	7	12	5
BARCLAYS	\$3,807.00	\$3,498.30	\$308.70	8.8%	4.5%	4.2%	7.7%	8	9	1
STATE STREET IFS	\$3,079.29	\$3,164.70	-\$85.42	-2.7%	3.7%	3.8%	-3.7%	9	10	1
BNP PARIBAS	\$2,558.33	\$2,419.69	\$138.64	5.7%	3.0%	2.9%	4.6%	10	11	1
NORTHERN TRUST	\$2,497.40	\$2,518.02	-\$20.62	-0.8%	3.0%	3.0%	-1.8%	11	14	3
WELLS FARGO	\$2,246.56	\$2,315.58	-\$69.02	-3.0%	2.7%	2.8%	-4.0%	12	13	1
DEUTSCHE BANK	\$1,978.00	\$1,979.19	-\$1.19	-0.1%	2.3%	2.4%	-1.1%	13	17	4
FIRST CITIZENS BANK AND TRUST	\$1,964.18	\$0.11	\$1,964.07	1763920.0%	2.3%	0.0%	1745723.9%	14	16	2
HSBC FINANCIAL SERVICES	\$1,673.06	\$1,663.99	\$9.07	0.5%	2.0%	2.0%	-0.5%	15	15	0
STANDARD CHARTERED BANK	\$1,449.54	\$1,344.88	\$104.66	7.8%	1.7%	1.6%	6.7%	16	18	2
SOCIETE GENERALE	\$1,355.71	\$1,338.94	\$16.77	1.3%	1.6%	1.6%	0.2%	17	20	3
BANK OF NOVA SCOTIA	\$1,030.23	\$887.64	\$142.59	16.1%	1.2%	1.1%	14.9%	18	19	1
US BANCORP	\$987.66	\$877.92	\$109.74	12.5%	1.2%	1.1%	11.3%	19	21	2
FIDELITY	\$927.66	\$1,057.53	-\$129.87	-12.3%	1.1%	1.3%	-13.2%	20	22	2
COMPUTERSHARE	\$850.56	\$708.28	\$142.28	20.1%	1.0%	0.8%	18.8%	21	31	10
NOMURA BANK LUXEMBOURG SA	\$841.42	\$728.76	\$112.66	15.5%	1.0%	0.9%	14.3%	22	25	3
ROYAL BANK OF CANADA	\$792.42	\$621.38	\$171.04	27.5%	0.9%	0.7%	26.2%	22	24	2
CANADIAN IMPERIAL BANK OF COMMERCE	\$597.16	\$423.13	\$174.03	41.1%	0.7%	0.5%	39.7%	23	26	3
SKANDINAVISKA SECURITIES	\$597.15	\$453.23	\$143.92	31.8%	0.7%	0.5%	30.4%	24	27	3
TOP 25 MULTI CUSTODIANS FR ASSETS	\$67,239.50	\$60,047.30	\$7,192.20	12.0%	79.7%	71.9%	10.8%			
ALL OTHER	\$17,124.25	\$23,446.22	-\$6,321.98	-27.0%	20.3%	28.1%	-27.7%			
TOTAL MULTI CUSTODIANS FR ASSETS	\$84,363.75	\$83,493.53	\$870.22	1.0%	57.9%	57.8%	0.1%			
NOT REPORTED	\$4,925.21	\$4,635.82	\$289.39	6.2%	3.4%	3.2%	5.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,405.28	\$3,135.66	-\$730.38	-23.3%	1.7%	2.2%	-24.0%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,330.50	\$7,771.48	-\$440.99	-5.7%	5.0%	5.4%	-6.6%			
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$54,061.59	\$53,065.81	\$995.78	1.9%	37.1%	36.8%	0.9%			
TOTAL FUND ASSETS	\$145,755.84	\$144,330.82	\$1,425.02	1.0%	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 16.96%, or 16.28x the market
 - Market share increased from 20.26% to 23.46%
 - An increase of 15.76%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 26.96%, or -25.87x the market
 - Market share decreased from 28.08% to 20.30%
 - A decrease of 27.72%

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	0.99%		100%	100%		
Market Growth Multi Custodians Disclosed	1.04%	1.06	57.88%	57.85%	0.03%	0.05%
Custodians Ranked 1-10	10.02%	9.62	56.25%	51.66%	4.59%	8.89%
Custodians Ranked 11-25	16.96%	16.28	23.46%	20.26%	3.19%	15.76%
All Other Custodians	-26.96%	-25.87	20.30%	28.08%	-7.78%	-27.72%
Market Growth Single Custodians Disclosed	1.88%	1.90	37.09%	36.77%	0.32%	0.88%
Market Growth Custodians Not Disclosed	-5.67%	-5.75	5.03%	5.38%	-0.36%	-6.60%

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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Eileen Cleary, President, Convergence Talent Management

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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

Career History

- ❖ 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

Career History

- ❖ 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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