

Fund Custodian
League Tables

Global Funds and AUA

Reporting Period

Mar 2021 - Mar 2022



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. We are 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 prime brokers
 - Funds that use a “single” prime broker
 - Funds that use “multiple” prime brokers
- Additional Fund Prime Broker League Tables for Prime Broker Funds and AUA 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+)

Custodian League Table - Global Funds

Convergence - Mar 2022 League Tables - Custodian Market Segment - Fund Relationships										
All Custodians	Mar -22 #FR	Mar -21 #FR	21-22 Change	21-22 Change %	Market Share-22	Market Share-21	22-21 Change %	Mar -22 Rank	Mar -21 Rank	22-21 Change
JPMORGAN	16,050	15,674	376	2.4%	7.7%	8.2%	-7.1%	1	1	0
BANK OF NEW YORK	15,123	14,670	453	3.1%	7.2%	7.7%	-6.5%	2	2	0
SILICON VALLEY BANK	13,457	9,450	4,007	42.4%	6.4%	5.0%	29.2%	3	5	2
STATE STREET IFS	13,454	13,638	-184	-1.3%	6.4%	7.2%	-10.5%	4	3	-1
BANK OF AMERICA	10,404	9,615	789	8.2%	5.0%	5.1%	-1.8%	5	4	-1
FIRST REPUBLIC BANK	9,754	7,597	2,157	28.4%	4.7%	4.0%	16.5%	6	7	1
CITIBANK	7,929	7,805	124	1.6%	3.8%	4.1%	-7.8%	7	6	-1
NORTHERN TRUST	6,119	5,657	462	8.2%	2.9%	3.0%	-1.9%	8	8	0
MORGAN STANLEY	5,803	5,147	656	12.7%	2.8%	2.7%	2.3%	9	10	1
GOLDMAN SACHS BANK USA	5,499	5,147	352	6.8%	2.6%	2.7%	-3.1%	10	10	0
US BANCORP	5,105	4,531	574	12.7%	2.4%	2.4%	2.2%	11	11	0
BNP PARIBAS	5,103	5,148	-45	-0.9%	2.4%	2.7%	-10.1%	12	9	-3
WELLS FARGO	4,319	4,518	-199	-4.4%	2.1%	2.4%	-13.3%	13	12	-1
HSBC FINANCIAL SERVICES	3,470	3,298	172	5.2%	1.7%	1.7%	-4.5%	14	14	0
CACEIS	3,320	3,575	-255	-7.1%	1.6%	1.9%	-15.7%	15	13	-2
CREDIT SUISSE	3,230	3,085	145	4.7%	1.5%	1.6%	-5.0%	16	15	-1
UNION BANK OF SWITZERLAND	2,883	2,623	260	9.9%	1.4%	1.4%	-0.3%	17	16	-1
BROWN BROTHER HARRIMAN	2,181	2,316	-135	-5.8%	1.0%	1.2%	-14.6%	18	17	-1
SOCIETE GENERALE	2,161	2,194	-33	-1.5%	1.0%	1.2%	-10.6%	19	19	0
ROYAL BANK OF CANADA	2,081	2,112	-31	-1.5%	1.0%	1.1%	-10.6%	20	20	0
DEUTSCHE BANK	2,058	2,292	-234	-10.2%	1.0%	1.2%	-18.5%	21	18	-3
FIDELITY	1,793	1,611	182	11.3%	0.9%	0.8%	1.0%	22	21	-1
CITCO FUNDS SERVICES	1,545	1,507	38	2.5%	0.7%	0.8%	-7.0%	23	22	-1
INTERACTIVE BROKERS	1,463	1,309	154	11.8%	0.7%	0.7%	1.4%	24	24	0
BARCLAYS	1,385	1,356	29	2.1%	0.7%	0.7%	-7.3%	25	23	-2
TOP 25 CUSTODIANS FR - ALL	145,689	135,875	9,814	7.2%	69.5%	71.4%	-2.7%			
ALL OTHER	63,991	54,357	9,634	17.7%	30.5%	28.6%	6.8%			
TOTAL CUSTODIAN FR DISCLOSED	209,680	190,232	19,448	10.2%	73.3%	75.9%	-3.4%			
NOT REPORTED	34,055	28,843	5,212	18.1%	11.9%	11.5%	3.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	42,286	31,683	10,603	33.5%	14.8%	12.6%	17.0%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIAN FR	76,341	60,526	15,815	26.1%	26.7%	24.1%	10.6%			
TOTAL FUNDS	286,021	250,758	35,263	14.1%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest growth in funds
 - Funds increased by 17.72%, 1.73x the market
 - Market share increased from 28.57% to 30.52%
 - Market share increased by 6.80%
- Custodians ranked 11-25 registered the lowest growth in funds
 - Funds increased 1.50%, 0.15x the market
 - Market share declined from 21.80% to 20.08%
 - Market share declined by 7.91%

Peer Group Performance by Fund Relationships						
Custodian Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2022	SOM 2021	SOM Change	SOM Change %
Market Growth Funds	14.06%		100%	100%		
Market Growth Custodian Disclosed	10.22%	0.73	73.31%	75.86%	-2.55%	-3.37%
Custodians Ranked 1-10	9.74%	0.95	49.40%	49.62%	-0.22%	-0.44%
Custodians Ranked 11-25	1.50%	0.15	20.08%	21.80%	-1.73%	-7.91%
All Other Custodians	17.72%	1.73	30.52%	28.57%	1.94%	6.80%
Market Growth Custodian Not Disclosed	26.13%	1.86	26.69%	24.14%	2.55%	10.58%

Fund Custodians League Table – Global AUA

Convergence - Mar 2022 League Tables - Custodian Market Segment - Assets (in BN)										
All Custodians	Mar -22 FR-AUA	Mar -21 FR-AUA	21-22 Change	21-22 Change %	Market Share-22	Market Share-21	22-21 Change %	Mar -22 Rank	Mar -21 Rank	22-21 Change
JPMORGAN	\$18,265.05	\$17,881.90	\$383.15	2.1%	12.9%	14.1%	-8.2%	1	1	0
STATE STREET IFS	\$16,692.95	\$17,187.56	-\$494.61	-2.9%	11.8%	13.5%	-12.7%	2	2	0
BANK OF NEW YORK	\$14,435.31	\$12,869.90	\$1,565.42	12.2%	10.2%	10.1%	0.8%	3	3	0
BANK OF AMERICA	\$7,909.86	\$6,341.89	\$1,567.97	24.7%	5.6%	5.0%	12.1%	4	4	0
CITIBANK	\$5,827.70	\$5,355.07	\$472.63	8.8%	4.1%	4.2%	-2.2%	5	5	0
MORGAN STANLEY	\$4,865.50	\$4,274.67	\$590.82	13.8%	3.4%	3.4%	2.3%	6	7	1
NORTHERN TRUST	\$4,864.68	\$4,553.88	\$310.81	6.8%	3.4%	3.6%	-4.0%	7	6	-1
GOLDMAN SACHS BANK USA	\$4,483.18	\$4,129.81	\$353.37	8.6%	3.2%	3.3%	-2.4%	8	8	0
BARCLAYS	\$4,294.35	\$3,362.23	\$932.12	27.7%	3.0%	2.6%	14.8%	9	10	1
BNP PARIBAS	\$3,857.96	\$3,468.95	\$389.01	11.2%	2.7%	2.7%	0.0%	10	9	-1
UNION BANK OF SWITZERLAND	\$3,567.71	\$3,250.48	\$317.23	9.8%	2.5%	2.6%	-1.3%	11	12	1
CREDIT SUISSE	\$3,433.95	\$3,338.92	\$95.03	2.8%	2.4%	2.6%	-7.5%	12	11	-1
WELLS FARGO	\$2,742.52	\$2,580.89	\$161.64	6.3%	1.9%	2.0%	-4.5%	13	13	0
HSBC FINANCIAL SERVICES	\$2,554.90	\$2,550.59	\$4.32	0.2%	1.8%	2.0%	-9.9%	14	14	0
BROWN BROTHER HARRIMAN	\$2,405.56	\$2,435.97	-\$30.40	-1.2%	1.7%	1.9%	-11.2%	15	15	0
US BANCORP	\$2,323.42	\$2,067.93	\$255.49	12.4%	1.6%	1.6%	1.0%	16	17	1
SILICON VALLEY BANK	\$2,263.91	\$1,660.42	\$603.49	36.3%	1.6%	1.3%	22.6%	17	18	1
DEUTSCHE BANK	\$2,183.28	\$2,408.10	-\$224.82	-9.3%	1.5%	1.9%	-18.5%	18	16	-2
SOCIETE GENERALE	\$1,801.78	\$1,329.23	\$472.55	35.6%	1.3%	1.0%	21.9%	19	19	0
FIRST REPUBLIC BANK	\$1,743.14	\$1,207.40	\$535.74	44.4%	1.2%	1.0%	29.8%	20	21	1
STANDARD CHARTERED BANK	\$1,497.09	\$1,270.15	\$226.94	17.9%	1.1%	1.0%	6.0%	21	20	-1
FIDELITY	\$1,146.41	\$977.03	\$169.38	17.3%	0.8%	0.8%	5.5%	22	23	1
CACEIS	\$1,098.22	\$1,181.54	-\$83.31	-7.1%	0.8%	0.9%	-16.4%	23	22	-1
ROYAL BANK OF CANADA	\$1,012.30	\$893.03	\$119.27	13.4%	0.7%	0.7%	1.9%	24	24	0
BANK OF NOVA SCOTIA	\$886.66	\$792.95	\$93.71	11.8%	0.6%	0.6%	0.5%	25	25	0
TOP 25 CUSTODIANS FR - ALL	\$116,157.42	\$107,370.48	\$8,786.94	8.2%	82.3%	84.6%	-2.7%			
ALL OTHER	\$24,995.27	\$19,537.83	\$5,457.45	27.9%	17.7%	15.4%	15.0%			
TOTAL CUSTODIAN FR AUA DISCLOSED	\$141,152.69	\$126,908.30	\$14,244.39	11.2%	93.4%	94.7%	-1.4%			
NOT REPORTED	\$4,848.21	\$4,390.00	\$458.21	10.4%	3.2%	3.3%	-2.1%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$5,100.54	\$2,670.62	\$2,429.92	91.0%	3.4%	2.0%	69.3%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIAN FR	\$9,948.75	\$7,060.62	\$2,888.13	40.9%	6.6%	5.3%	24.9%			
TOTAL FUND ASSETS	\$151,101.44	\$133,968.92	\$17,132.52	12.8%	100.0%	100.0%	0.0%			

Fund Custodian Peer Analysis – Global AUA - Growth & Market Share

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUA growth
 - AUA increased 27.93%, or 2.49x the market
 - Market share increased from 15.40% to 17.71%
 - Market share increased by 15.02%
- Custodian ranked 1-10 registered the lowest AUA growth
 - AUA increased 7.64%, or 0.68x the market
 - Market share declined from 62.59% to 60.57%
 - Market share declined by 3.22%

Peer Group Performance by Fund Assets						
Custodian Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2022	SOM 2021	SOM Change	SOM Change %
Market Growth Assets	12.79%		100%	100%		
Market Growth Custodian Disclosed	11.22%	0.88	93.42%	94.73%	-1.31%	-1.39%
Custodians Ranked 1-10	7.64%	0.68	60.57%	62.59%	-2.01%	-3.22%
Custodias Ranked 11-25	9.72%	0.87	21.72%	22.02%	-0.30%	-1.35%
All Other Custodians	27.93%	2.49	17.71%	15.40%	2.31%	15.02%
Market Growth Custodian Not Disclosed	40.90%	3.20	6.58%	5.27%	1.31%	24.93%

Single Fund Custodians League Table – Global Funds

Convergence - 2022 League Tables - Single Custodian Market Segment - Fund Relationships										
Single Custodians	Mar -22 #FR	Mar -21 #FR	21-22 Change	21-22 Change %	Market Share-22	Market Share-21	22-21 Change %	Mar -22 Rank	Mar -21 Rank	22-21 Change
STATE STREET IFS	11,592	11,659	-67	-0.6%	9.9%	10.9%	-9.0%	1	1	0
BANK OF NEW YORK	9,859	9,600	259	2.7%	8.4%	8.9%	-6.0%	2	2	0
SILICON VALLEY BANK	8,975	5,716	3,259	57.0%	7.7%	5.3%	43.8%	3	4	1
JPMORGAN	8,950	8,949	1	0.0%	7.6%	8.3%	-8.4%	4	3	-1
FIRST REPUBLIC BANK	5,144	4,592	552	12.0%	4.4%	4.3%	2.6%	5	5	0
CITIBANK	4,471	4,509	-38	-0.8%	3.8%	4.2%	-9.2%	6	6	0
BNP PARIBAS	3,761	3,990	-229	-5.7%	3.2%	3.7%	-13.7%	7	7	0
NORTHERN TRUST	3,544	3,349	195	5.8%	3.0%	3.1%	-3.1%	8	9	1
CACEIS	3,295	3,555	-260	-7.3%	2.8%	3.3%	-15.1%	9	8	-1
US BANCORP	3,278	2,881	397	13.8%	2.8%	2.7%	4.2%	10	10	0
BANK OF AMERICA	2,894	2,718	176	6.5%	2.5%	2.5%	-2.5%	11	11	0
HSBC FINANCIAL SERVICES	2,367	2,277	90	4.0%	2.0%	2.1%	-4.8%	12	12	0
BROWN BROTHER HARRIMAN	1,985	2,145	-160	-7.5%	1.7%	2.0%	-15.3%	13	13	0
ROYAL BANK OF CANADA	1,732	1,829	-97	-5.3%	1.5%	1.7%	-13.3%	14	14	0
CREDIT SUISSE	1,692	1,267	425	33.5%	1.4%	1.2%	22.3%	15	17	2
SOCIETE GENERALE	1,433	1,531	-98	-6.4%	1.2%	1.4%	-14.3%	16	16	0
WELLS FARGO	1,389	1,597	-208	-13.0%	1.2%	1.5%	-20.4%	17	15	-2
DZ BANK	910	1,038	-128	-12.3%	0.8%	1.0%	-19.7%	18	18	0
UNION BANK OF SWITZERLAND	884	686	198	28.9%	0.8%	0.6%	18.0%	19	22	3
CITCO FUNDS SERVICES	817	680	137	20.1%	0.7%	0.6%	10.0%	20	23	3
SKANDINAVISKA SECURITIES	792	784	8	1.0%	0.7%	0.7%	-7.5%	21	20	-1
ROYAL BANK OF SCOTLAND	779	785	-6	-0.8%	0.7%	0.7%	-9.1%	22	19	-3
INTERACTIVE BROKERS	762	628	134	21.3%	0.7%	0.6%	11.1%	23	26	3
EFG INVESTMENT SERVICES	723	18	705	3916.7%	0.6%	0.0%	3577.4%	24	151	127
CECA	683	611	72	11.8%	0.6%	0.6%	2.3%	25	27	2
TOP 25 SINGLE CUSTODIAN FR	82,711	77,394	5,317	6.9%	70.6%	72.1%	-2.2%			
ALL OTHER	34,509	29,926	4,583	15.3%	29.4%	27.9%	5.6%			
TOTAL SINGLE CUSTODIAN FR DISCLOSED	117,220	107,320	9,900	9.2%	41.0%	42.8%	-4.2%			
NOT REPORTED	34,055	28,843	5,212	18.1%	11.9%	11.5%	3.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	42,286	31,683	10,603	33.5%	14.8%	12.6%	17.0%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIAN FR	76,341	60,526	15,815	26.1%	26.7%	24.1%	10.6%			
TOTAL FUNDS WITH MULTI-CUSTODIAN FR	92,461	82,912	9,549	11.5%	32.3%	33.1%	-2.2%			
TOTAL FUNDS	286,022	250,758	35,264	14.1%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest growth in funds
 - Funds increased 15.31%, 1.66x the market
 - Market share increased from 27.88% to 29.44%
 - Market share increased by 5.58%
- Custodians ranked 11-25 registered the lowest growth in funds
 - Funds increased 6.71%, 0.73x the market
 - Market share declined from 17.33% to 16.93%
 - Market share declined by 2.30%

Peer Group Performance by Fund Relationships						
Custodian Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2022	SOM 2021	SOM Change	SOM Change %
Market Growth Funds	14.06%		100%	100%		
Market Growth Single Custodian Disclosed	9.22%	0.66	40.98%	42.80%	-1.82%	-4.24%
Custodians Ranked 1-10	6.92%	0.75	53.63%	54.79%	-1.16%	-2.11%
Custodians Ranked 11-25	6.71%	0.73	16.93%	17.33%	-0.40%	-2.30%
All Other Custodians	15.31%	1.66	29.44%	27.88%	1.55%	5.58%
Market Growth Multi Custodian Disclosed	11.52%	0.82	32.33%	33.06%	-0.74%	-2.23%
Market Growth Custodian Not Disclosed	26.13%	1.86	26.69%	24.14%	2.55%	10.58%

Single Fund Custodians League Table – Global AUA

Convergence - Mar 2022 League Tables - Single Custodian Market Segment - Assets (in BN)										
Single Custodians	Mar -22 FR-AUA	Mar -21 FR-AUA	21-22 Change	21-22 Change %	Market Share-22	Market Share-21	22-21 Change %	Mar -22 Rank	Mar -21 Rank	22-21 Change
STATE STREET IFS	\$13,675.79	\$14,174.86	-\$499.07	-3.5%	24.8%	26.4%	-6.1%	1	1	0
JPMORGAN	\$11,722.70	\$12,386.97	-\$664.28	-5.4%	21.2%	23.0%	-7.9%	2	2	0
BANK OF NEW YORK	\$8,321.21	\$7,640.90	\$680.31	8.9%	15.1%	14.2%	6.0%	3	3	0
NORTHERN TRUST	\$2,282.43	\$2,050.53	\$231.90	11.3%	4.1%	3.8%	8.3%	4	5	1
BROWN BROTHER HARRIMAN	\$2,256.88	\$2,286.38	-\$29.50	-1.3%	4.1%	4.3%	-4.0%	5	4	-1
US BANCORP	\$1,453.66	\$1,310.64	\$143.01	10.9%	2.6%	2.4%	7.9%	6	8	2
CITIBANK	\$1,391.30	\$1,509.64	-\$118.34	-7.8%	2.5%	2.8%	-10.3%	7	6	-1
BNP PARIBAS	\$1,372.56	\$1,416.44	-\$43.88	-3.1%	2.5%	2.6%	-5.7%	8	7	-1
CACEIS	\$1,092.31	\$1,176.61	-\$84.30	-7.2%	2.0%	2.2%	-9.7%	9	9	0
BANK OF AMERICA	\$911.13	\$776.36	\$134.76	17.4%	1.6%	1.4%	14.2%	10	11	1
HSBC FINANCIAL SERVICES	\$903.21	\$918.77	-\$15.56	-1.7%	1.6%	1.7%	-4.3%	11	10	-1
SILICON VALLEY BANK	\$738.83	\$485.29	\$253.54	52.2%	1.3%	0.9%	48.1%	12	13	1
CREDIT SUISSE	\$629.08	\$295.63	\$333.45	112.8%	1.1%	0.6%	107.1%	13	18	5
DZ BANK	\$507.18	\$538.62	-\$31.44	-5.8%	0.9%	1.0%	-8.4%	14	12	-2
FIRST REPUBLIC BANK	\$442.32	\$305.99	\$136.34	44.6%	0.8%	0.6%	40.7%	15	17	2
UNION BANK OF SWITZERLAND	\$398.49	\$241.33	\$157.16	65.1%	0.7%	0.4%	60.7%	16	20	4
SOCIETE GENERALE	\$391.02	\$374.81	\$16.21	4.3%	0.7%	0.7%	1.5%	17	15	-2
ROYAL BANK OF CANADA	\$361.84	\$378.20	-\$16.36	-4.3%	0.7%	0.7%	-6.9%	18	14	-4
WELLS FARGO	\$323.14	\$313.40	\$9.74	3.1%	0.6%	0.6%	0.3%	19	16	-3
SKANDINAVISKA SECURITIES	\$292.13	\$294.93	-\$2.81	-1.0%	0.5%	0.5%	-3.6%	20	19	-1
CITCO FUNDS SERVICES	\$243.31	\$179.06	\$64.25	35.9%	0.4%	0.3%	32.2%	21	25	4
DEKABANK	\$216.50	\$226.69	-\$10.19	-4.5%	0.4%	0.4%	-7.1%	22	21	-1
SWEDBANK	\$183.24	\$182.86	\$0.37	0.2%	0.3%	0.3%	-2.5%	23	24	1
CECA	\$167.29	\$129.54	\$37.74	29.1%	0.3%	0.2%	25.7%	24	26	2
PICTET CIE EUROPE	\$166.71	\$193.83	-\$27.12	-14.0%	0.3%	0.4%	-16.3%	25	22	-3
TOP 25 SINGLE CUSTODIAN FR ASSETS	\$50,444.23	\$49,788.28	\$655.94	1.3%	91.3%	92.6%	-1.4%			
ALL OTHER	\$4,793.62	\$3,960.94	\$832.69	21.0%	8.7%	7.4%	17.8%			
TOTAL SINGLE CUSTODIAN FR ASSETS DISCLOSED	\$55,237.85	\$53,749.22	\$1,488.63	2.8%	36.6%	40.1%	-8.9%			
NOT REPORTED	\$4,848.21	\$4,390.00	\$458.21	10.4%	3.2%	3.3%	-2.1%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$5,100.54	\$2,670.62	\$2,429.92	91.0%	3.4%	2.0%	69.3%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIAN FR	\$9,948.75	\$7,060.62	\$2,888.13	40.9%	6.6%	5.3%	24.9%			
TOTAL ASSETS WITH MULTI-CUSTODIAN FR	\$85,914.84	\$73,159.08	\$12,755.76	17.4%	56.9%	54.6%	4.1%			
TOTAL FUND ASSETS	\$151,101.44	\$133,968.92	\$17,132.52	12.8%	100.0%	100.0%	0.0%			

Single Custodian Peer Analysis – Global AUA - Growth & Market Share

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUA growth
 - AUA increased 21.02%, or 7.59x the market
 - Market share increased from 7.37% to 8.68%
 - Market share increased by 17.76%
- Custodians ranked 1-10 registered the lowest AUA growth
 - AUA declined 0.56%, or -0.20x the market
 - Market share declined from 83.22% to 80.52%
 - Market share declined by 3.24%

Peer Group Performance by Fund Assets						
Custodian Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2022	SOM 2021	SOM Change	SOM Change %
Market Growth Assets	12.79%		100%	100%		
Market Growth Single Custodian Disclosed	2.77%	0.22	36.56%	40.12%	-3.56%	-8.88%
Custodians Ranked 1-10	-0.56%	-0.20	80.52%	83.22%	-2.69%	-3.24%
Custodians Ranked 11-25	17.90%	6.46	10.80%	9.41%	1.39%	14.72%
All Other Custodians	21.02%	7.59	8.68%	7.37%	1.31%	17.76%
Market Growth Multi Custodian Disclosed	17.44%	1.36	56.86%	54.61%	2.25%	4.12%
Market Growth Custodian Not Disclosed	40.90%	3.20	6.58%	5.27%	1.31%	24.93%

Multi-Fund Custodian League Table – Global Funds

Convergence - 2022 League Tables - Multi Custodian Market Segment - Fund Relationships											
Multi Custodians	Mar -22 #FR	Mar -21 #FR	21-22 Change	21-22 Change %	Market Share-22	Market Share-21	22-21 Change %	Mar -22 Rank	Mar -21 Rank	22-21 Change	
BANK OF AMERICA	7,510	6,897	613	8.9%	8.1%	8.3%	-2.4%	1	1	0	
JPMORGAN	7,100	6,725	375	5.6%	7.7%	8.1%	-5.3%	2	2	0	
BANK OF NEW YORK	5,264	5,070	194	3.8%	5.7%	6.1%	-6.9%	3	3	0	
MORGAN STANLEY	5,223	4,628	595	12.9%	5.6%	5.6%	1.2%	4	4	0	
GOLDMAN SACHS BANK USA	4,851	4,518	333	7.4%	5.2%	5.4%	-3.7%	5	5	0	
FIRST REPUBLIC BANK	4,610	3,005	1,605	53.4%	5.0%	3.6%	37.6%	6	8	2	
SILICON VALLEY BANK	4,483	3,734	749	20.1%	4.8%	4.5%	7.7%	7	6	-1	
CITIBANK	3,458	3,296	162	4.9%	3.7%	4.0%	-5.9%	8	7	-1	
WELLS FARGO	2,930	2,921	9	0.3%	3.2%	3.5%	-10.1%	9	9	0	
NORTHERN TRUST	2,575	2,308	267	11.6%	2.8%	2.8%	0.0%	10	10	0	
UNION BANK OF SWITZERLAND	1,999	1,937	62	3.2%	2.2%	2.3%	-7.5%	11	12	1	
STATE STREET IFS	1,862	1,979	-117	-5.9%	2.0%	2.4%	-15.6%	12	11	-1	
US BANCORP	1,827	1,650	177	10.7%	2.0%	2.0%	-0.7%	13	14	1	
CREDIT SUISSE	1,538	1,818	-280	-15.4%	1.7%	2.2%	-24.1%	14	13	-1	
DEUTSCHE BANK	1,423	1,632	-209	-12.8%	1.5%	2.0%	-21.8%	15	15	0	
BNP PARIBAS	1,342	1,158	184	15.9%	1.5%	1.4%	3.9%	16	17	1	
BARCLAYS	1,263	1,250	13	1.0%	1.4%	1.5%	-9.4%	17	16	-1	
FIDELITY	1,134	1,038	96	9.2%	1.2%	1.3%	-2.0%	18	18	0	
HSBC FINANCIAL SERVICES	1,103	1,021	82	8.0%	1.2%	1.2%	-3.1%	19	19	0	
ESHARES	1,081	847	234	27.6%	1.2%	1.0%	14.4%	20	20	0	
RAYMOND JAMES ASSOCIATES	889	617	272	44.1%	1.0%	0.7%	29.2%	21	24	3	
CANADIAN IMPERIAL BANK OF COMMERCE	801	470	331	70.4%	0.9%	0.6%	52.8%	22	27	5	
CITCO FUNDS SERVICES	728	827	-99	-12.0%	0.8%	1.0%	-21.1%	23	21	-2	
SOCIETE GENERALE	728	663	65	9.8%	0.8%	0.8%	-1.5%	23	23	0	
INTERACTIVE BROKERS	701	681	20	2.9%	0.8%	0.8%	-7.7%	24	22	-2	
TOP 25 MULTI CUSTODIAN FR	66,423	60,690	5,733	9.4%	71.8%	73.2%	-1.9%				
ALL OTHER	26,038	22,222	3,816	17.2%	28.2%	26.8%	5.1%				
TOTAL MULTI CUSTODIAN FR	92,461	82,912	9,549	11.5%	32.3%	33.1%	-2.2%				
NOT REPORTED	34,055	28,843	5,212	18.1%	11.9%	11.5%	3.5%				
ELIGIBLE FUNDS - NOT ATTRIBUTED	42,286	31,683	10,603	33.5%	14.8%	12.6%	17.0%				
TOTAL FUNDS NOT DISCLOSING A CUSTODIAN FR	76,341	60,526	15,815	26.1%	26.7%	24.1%	10.6%				
TOTAL FUNDS WITH SINGLE CUSTODIAN FR	117,220	107,320	9,900	9.2%	41.0%	42.8%	-4.2%				
TOTAL FUNDS	286,022	250,758	35,264	14.1%	100.0%	100.0%	0.0%				

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest growth in funds
 - Funds increased 17.17%, 1.49x the market
 - Market share increased from 26.80% to 28.16%
 - Market share increased by 5.07%
- Custodian ranked 11-25 registered the smallest growth in funds
 - Funds increased 4.72%, 0.41x the market
 - Market share declined from 21.21% to 19.92%
 - Market share declined by 6.09%

Peer Group Performance by Fund Relationships						
Custodian Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2022	SOM 2021	SOM Change	SOM Change %
Market Growth Funds	14.06%		100%	100%		
Market Growth Multi Custodian Disclosed	11.52%	0.82	32.33%	33.06%	-0.74%	-2.23%
Custodians Ranked 1-10	11.37%	0.99	51.92%	51.99%	-0.07%	-0.13%
Custodias Ranked 11-25	4.72%	0.41	19.92%	21.21%	-1.29%	-6.09%
All Other Custodians	17.17%	1.49	28.16%	26.80%	1.36%	5.07%
Market Growth Single Custodian Disclosed	9.22%	0.66	40.98%	42.80%	-1.82%	-4.24%
Market Growth Custodian Not Disclosed	26.13%	1.86	26.69%	24.14%	2.55%	10.58%

Multi-Fund Custodians League Table – Global AUA

Convergence - Mar 2022 League Tables - Multi Custodian Market Segment - Assets (in BN)										
Multi Custodians	Mar -22 FR-AUA	Mar -21 FR-AUA	21-22 Change	21-22 Change %	Market Share-22	Market Share-21	22-21 Change %	Mar -22 Rank	Mar -21 Rank	22-21 Change
BANK OF AMERICA	\$6,998.74	\$5,565.53	\$1,433.21	25.8%	8.1%	7.6%	7.1%	1	1	0
JPMORGAN	\$6,542.36	\$5,494.93	\$1,047.43	19.1%	7.6%	7.5%	1.4%	2	2	0
BANK OF NEW YORK	\$6,114.10	\$5,228.99	\$885.11	16.9%	7.1%	7.1%	-0.4%	3	3	0
MORGAN STANLEY	\$4,785.84	\$4,215.57	\$570.27	13.5%	5.6%	5.8%	-3.3%	4	4	0
CITIBANK	\$4,436.41	\$3,845.44	\$590.97	15.4%	5.2%	5.3%	-1.8%	5	5	0
GOLDMAN SACHS BANK USA	\$4,415.27	\$4,079.17	\$336.10	8.2%	5.1%	5.6%	-7.8%	6	8	2
BARCLAYS	\$4,269.57	\$3,344.54	\$925.03	27.7%	5.0%	4.6%	8.7%	7	6	-1
UNION BANK OF SWITZERLAND	\$3,169.23	\$3,009.15	\$160.07	5.3%	3.7%	4.1%	-10.3%	8	7	-1
STATE STREET IFS	\$3,017.16	\$3,012.70	\$4.46	0.1%	3.5%	4.1%	-14.7%	9	9	0
CREDIT SUISSE	\$2,804.88	\$3,043.30	-\$238.42	-7.8%	3.3%	4.2%	-21.5%	10	10	0
NORTHERN TRUST	\$2,582.25	\$2,503.35	\$78.90	3.2%	3.0%	3.4%	-12.2%	11	12	1
BNP PARIBAS	\$2,485.40	\$2,052.51	\$432.89	21.1%	2.9%	2.8%	3.1%	12	11	-1
WELLS FARGO	\$2,419.38	\$2,267.49	\$151.90	6.7%	2.8%	3.1%	-9.1%	13	14	1
DEUTSCHE BANK	\$2,058.32	\$2,278.98	-\$220.66	-9.7%	2.4%	3.1%	-23.1%	14	13	-1
HSBC FINANCIAL SERVICES	\$1,651.69	\$1,631.82	\$19.87	1.2%	1.9%	2.2%	-13.8%	15	15	0
SILICON VALLEY BANK	\$1,525.08	\$1,175.13	\$349.95	29.8%	1.8%	1.6%	10.5%	16	17	1
STANDARD CHARTERED BANK	\$1,483.54	\$1,257.88	\$225.66	17.9%	1.7%	1.7%	0.4%	17	16	-1
SOCIETE GENERALE	\$1,410.77	\$954.43	\$456.34	47.8%	1.6%	1.3%	25.9%	18	18	0
FIRST REPUBLIC BANK	\$1,300.82	\$901.41	\$399.41	44.3%	1.5%	1.2%	22.9%	19	19	0
FIDELITY	\$1,103.85	\$948.25	\$155.60	16.4%	1.3%	1.3%	-0.9%	20	20	0
BANK OF NOVA SCOTIA	\$878.46	\$787.66	\$90.81	11.5%	1.0%	1.1%	-5.0%	21	24	3
US BANCORP	\$869.76	\$757.28	\$112.48	14.9%	1.0%	1.0%	-2.2%	22	27	5
COMPUTERSHARE	\$732.99	\$592.56	\$140.43	23.7%	0.9%	0.8%	5.3%	23	21	-2
NOMURA BANK LUXEMBOURG SA	\$732.22	\$696.48	\$35.74	5.1%	0.9%	1.0%	-10.5%	23	23	0
ROYAL BANK OF CANADA	\$650.46	\$514.83	\$135.62	26.3%	0.8%	0.7%	7.6%	24	22	-2
TOP 25 MULTI CUSTODIAN FR ASSETS	\$68,438.53	\$60,159.36	\$8,279.17	13.8%	79.7%	82.2%	-3.1%			
ALL OTHER	\$17,476.31	\$12,999.73	\$4,476.59	34.4%	20.3%	17.8%	14.5%			
TOTAL MULTI CUSTODIAN FR ASSETS	\$85,914.84	\$73,159.08	\$12,755.76	17.4%	56.9%	54.6%	4.1%			
NOT REPORTED	\$4,848.21	\$4,390.00	\$458.21	10.4%	3.2%	3.3%	-2.1%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$5,100.54	\$2,670.62	\$2,429.92	91.0%	3.4%	2.0%	69.3%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIAN FR	\$9,948.75	\$7,060.62	\$2,888.13	40.9%	6.6%	5.3%	24.9%			
TOTAL ASSETS WITH SINGLE CUSTODIAN FR	\$55,237.85	\$53,749.22	\$1,488.63	2.8%	36.6%	40.1%	-8.9%			
TOTAL FUND ASSETS	\$151,101.44	\$133,968.92	\$17,132.52	12.8%	100.0%	100.0%	0.0%			

Custodians Peer Groups – Global Multi AUA Growth & Market Share

Best and Worst Performing Peer Groups

- Custodian ranked >25 registered the highest AUA growth
 - AUA increased 34.44%, or 1.98x the market
 - Market share increased from 17.77% to 20.34%
 - Market share increased by 14.48%
- Custodian ranked 11-25 registered the lowest AUA growth
 - AUA increased 13.28%, or 0.76x the market
 - Market share declined from 26.41% to 25.47%
 - Market share declined by 3.54%

Peer Group Performance by Fund Assets						
Custodian Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2022	SOM 2021	SOM Change	SOM Change %
Market Growth Assets	12.79%		100%	100%		
Market Growth Multi Custodian Disclosed	17.44%	1.36	56.86%	54.61%	2.25%	4.12%
Custodians Ranked 1-10	13.99%	0.80	54.19%	55.82%	-1.64%	-2.93%
Custodias Ranked 11-25	13.28%	0.76	25.47%	26.41%	-0.94%	-3.54%
All Other Custodians	34.44%	1.98	20.34%	17.77%	2.57%	14.48%
Market Growth Single Custodian Disclosed	2.77%	0.22	36.56%	40.12%	-3.56%	-8.88%
Market Growth Custodian Not Disclosed	40.90%	3.20	6.58%	5.27%	1.31%	24.93%

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 Custodian 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 Custodian.
- **US Funds and Assets**
 - Measures public and private funds and assets domiciled in the US that Convergence can attribute to one or more Fund Custodian.
- **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 Custodian.
- **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 Custodian.
- **All Other Custodian**
 - Is a measure of funds and assets attributed to Fund Administrators ranked outside the Top 25.

Terms Used in Our Fund Custodian League Tables

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

Additional Analytics available for the Custodian 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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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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George Evans, Co-President

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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

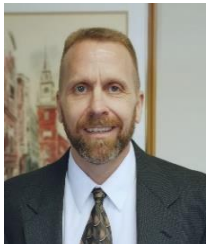
- ❖ Gravitas: Finance & Business Performance Analyst, Apollo [through Gravitas]: Business Analysis & Reporting, Iron Mountain: Acquisition Accounting Manager, KPMG: Transaction Services Manager, Deloitte: Audit Senior Staff
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- ❖ Bank of America – Head of Global Equities Reference Data and Client Delivery, Merrill Lynch: Portfolio Risk Analytics Technology Head, ITG: Senior Product Manager Market and Reference Data, Nicholas Applegate: Market and Reference Data Head
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