

Fund Custodians
League Tables

Global Funds and AUC

Reporting Period
Sep 2022 - Sep 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 - Sep 2023 League Tables - Custodians Market Segment - Fund Relationships										
All Custodians	Sep -23 #FR	Sep -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Sep -23 Rank	Sep -22 Rank	23-22 Change
JPMORGAN	31,712	17,985	13,727	76.3%	13.7%	8.0%	71.8%	1	1	0
BANK OF NEW YORK	16,608	15,664	944	6.0%	7.2%	6.9%	3.3%	2	2	0
STATE STREET IFS	15,533	14,765	768	5.2%	6.7%	6.5%	2.5%	3	3	0
FIRST CITIZENS BANK AND TRUST	12,400	802	11,598	1446.1%	5.3%	0.4%	1406.2%	4	35	31
BANK OF AMERICA	11,432	10,586	846	8.0%	4.9%	4.7%	5.2%	5	6	1
CITIBANK	8,790	8,114	676	8.3%	3.8%	3.6%	5.5%	6	7	1
NORTHERN TRUST	6,661	6,316	345	5.5%	2.9%	2.8%	2.7%	7	8	1
MORGAN STANLEY	6,211	5,889	322	5.5%	2.7%	2.6%	2.7%	8	9	1
UNION BANK OF SWITZERLAND	5,855	3,425	2,430	70.9%	2.5%	1.5%	66.5%	9	17	8
GOLDMAN SACHS BANK USA	5,769	5,534	235	4.2%	2.5%	2.4%	1.6%	10	11	1
US BANCORP	5,660	5,131	529	10.3%	2.4%	2.3%	7.5%	11	12	1
BNP PARIBAS	5,575	5,623	-48	-0.9%	2.4%	2.5%	-3.4%	12	10	-2
CACEIS	4,810	3,651	1,159	31.7%	2.1%	1.6%	28.3%	13	16	3
HSBC FINANCIAL SERVICES	4,407	3,770	637	16.9%	1.9%	1.7%	13.9%	14	15	1
WELLS FARGO	4,325	4,259	66	1.5%	1.9%	1.9%	-1.1%	15	14	-1
BROWN BROTHER HARRIMAN	2,742	2,722	20	0.7%	1.2%	1.2%	-1.9%	16	18	2
SOCIETE GENERALE	2,359	2,234	125	5.6%	1.0%	1.0%	2.9%	17	20	3
DEUTSCHE BANK	2,029	2,067	-38	-1.8%	0.9%	0.9%	-4.4%	18	21	3
FIDELITY	1,933	1,836	97	5.3%	0.8%	0.8%	2.6%	19	22	3
CITCO FUNDS SERVICES	1,842	1,601	241	15.1%	0.8%	0.7%	12.1%	20	23	3
INTERACTIVE BROKERS	1,599	1,514	85	5.6%	0.7%	0.7%	2.9%	21	24	3
BARCLAYS	1,575	1,384	191	13.8%	0.7%	0.6%	10.9%	22	26	4
ROYAL BANK OF CANADA	1,529	2,247	-718	-32.0%	0.7%	1.0%	-33.7%	23	19	-4
CANADIAN IMPERIAL BANK OF COMMERCE	1,515	1,335	180	13.5%	0.7%	0.6%	10.6%	24	27	3
ESHARES	1,356	1,388	-32	-2.3%	0.6%	0.6%	-4.8%	25	25	0
TOP 25 CUSTODIANS FR - ALL	164,227	129,842	34,385	26.5%	70.8%	57.5%	23.2%			
ALL OTHER	67,765	96,154	-28,389	-29.5%	29.2%	42.5%	-31.3%			
TOTAL CUSTODIANS FR DISCLOSED	231,992	225,996	5,996	2.7%	73.2%	75.1%	-2.5%			
NOT REPORTED	35,042	33,686	1,356	4.0%	11.1%	11.2%	-1.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	49,850	41,206	8,644	21.0%	15.7%	13.7%	14.9%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	84,892	74,892	10,000	13.4%	26.8%	24.9%	7.6%			
TOTAL FUNDS	316,884	300,888	15,996	5.3%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 35.80%, or 13.49x the market
 - Market share increased from 39.42% to 52.14%
 - An increase of 32.29%
- Custodians ranked >25 registered the lowest growth in funds
 - Funds decreased 29.52%, or -11.13x the market
 - Market share decreased from 42.45% to 29.21%
 - A decrease of 31.35%

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	5.32%		100%	100%		
Market Growth Custodians Disclosed	2.65%	0.50	73.21%	75.11%	-1.90%	-2.53%
Custodians Ranked 1-10	35.80%	13.49	52.14%	39.42%	12.73%	32.29%
Custodians Ranked 11-25	6.12%	2.31	18.65%	18.04%	0.61%	3.38%
All Other Custodians	-29.52%	-11.13	29.21%	42.55%	-13.34%	-31.35%
Market Growth Custodians Not Disclosed	13.35%	2.51	26.79%	24.89%	1.90%	7.63%

Fund Custodians League Table – Global AUC

Convergence - Sep 2023 League Tables - Custodians Market Segment - Assets (in BN)

All Custodians	Sep -23 FR-AUC	Sep -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Sep -23 Rank	Sep -22 Rank	23-22 Change
JPMORGAN	\$20,138.07	\$17,314.29	\$2,823.79	16.3%	14.3%	12.8%	11.4%	1	1	0
STATE STREET IFS	\$18,172.07	\$16,859.08	\$1,312.99	7.8%	12.9%	12.5%	3.2%	2	2	0
BANK OF NEW YORK	\$14,519.43	\$13,405.57	\$1,113.86	8.3%	10.3%	9.9%	3.7%	3	3	0
BANK OF AMERICA	\$7,299.82	\$6,986.03	\$313.80	4.5%	5.2%	5.2%	0.1%	4	4	0
CITIBANK	\$6,244.65	\$5,653.24	\$591.41	10.5%	4.4%	4.2%	5.8%	5	5	0
UNION BANK OF SWITZERLAND	\$4,690.00	\$3,528.01	\$1,161.99	32.9%	3.3%	2.6%	27.3%	6	10	4
NORTHERN TRUST	\$4,674.60	\$4,473.43	\$201.17	4.5%	3.3%	3.3%	0.1%	7	7	0
MORGAN STANLEY	\$4,467.98	\$4,739.36	-\$271.39	-5.7%	3.2%	3.5%	-9.7%	8	6	-2
GOLDMAN SACHS BANK USA	\$4,455.15	\$4,414.39	\$40.76	0.9%	3.2%	3.3%	-3.4%	9	8	-1
BNP PARIBAS	\$4,179.65	\$3,829.66	\$349.99	9.1%	3.0%	2.8%	4.5%	10	9	-1
BARCLAYS	\$3,864.81	\$3,524.21	\$340.59	9.7%	2.7%	2.6%	5.0%	11	11	0
HSBC FINANCIAL SERVICES	\$2,877.19	\$2,630.80	\$246.39	9.4%	2.0%	1.9%	4.7%	12	14	2
WELLS FARGO	\$2,571.19	\$2,658.74	-\$87.55	-3.3%	1.8%	2.0%	-7.4%	13	13	0
BROWN BROTHER HARRIMAN	\$2,392.11	\$2,181.47	\$210.64	9.7%	1.7%	1.6%	5.0%	14	16	2
US BANCORP	\$2,362.74	\$2,150.35	\$212.39	9.9%	1.7%	1.6%	5.2%	15	17	2
DEUTSCHE BANK	\$2,128.65	\$2,129.59	-\$0.94	0.0%	1.5%	1.6%	-4.3%	16	18	2
FIRST CITIZENS BANK AND TRUST	\$2,073.43	\$0.12	\$2,073.32	1743093.3%	1.5%	0.0%	1669077.0%	17	1042	1,025
SOCIETE GENERALE	\$1,755.45	\$1,692.81	\$62.64	3.7%	1.2%	1.3%	-0.7%	18	19	1
STANDARD CHARTERED BANK	\$1,477.97	\$1,358.13	\$119.84	8.8%	1.0%	1.0%	4.2%	19	21	2
CACEIS	\$1,347.71	\$1,045.66	\$302.05	28.9%	1.0%	0.8%	23.4%	20	23	3
BANK OF NOVA SCOTIA	\$1,042.08	\$892.12	\$149.97	16.8%	0.7%	0.7%	11.9%	21	25	4
ROYAL BANK OF CANADA	\$1,034.96	\$1,011.43	\$23.53	2.3%	0.7%	0.7%	-2.0%	22	24	2
FIDELITY	\$953.45	\$1,101.72	-\$148.26	-13.5%	0.7%	0.8%	-17.1%	23	22	-1
COMPUTERSHARE	\$915.29	\$752.29	\$163.00	21.7%	0.6%	0.6%	16.5%	24	26	2
SKANDINAVISKA SECURITIES	\$872.62	\$714.60	\$158.03	22.1%	0.6%	0.5%	16.9%	25	29	4
TOP 25 CUSTODIANS FR - ALL	\$116,511.09	\$105,047.09	\$11,463.99	10.9%	82.5%	77.7%	6.2%			
ALL OTHER	\$24,770.41	\$30,235.56	-\$5,465.16	-18.1%	17.5%	22.3%	-21.6%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$141,281.49	\$135,282.66	\$5,998.84	4.4%	95.1%	95.3%	-0.3%			
NOT REPORTED	\$4,715.12	\$4,869.19	-\$154.07	-3.2%	3.2%	3.4%	-7.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,614.88	\$1,782.06	\$832.82	46.7%	1.8%	1.3%	40.1%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,330.01	\$6,651.25	\$678.75	10.2%	4.9%	4.7%	5.3%			
TOTAL FUND ASSETS	\$148,611.50	\$141,933.91	\$6,677.59	4.7%	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 16.04%, or 3.62x the market
 - Market share increased from 17.63% to 19.58%
 - An increase of 11.12%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 18.08%, or -4.08x the market
 - Market share decreased from 22.35% to 17.53%
 - A decrease of 21.55%

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	4.70%		100%	100%		
Market Growth Custodians Disclosed	4.43%	0.94	95.07%	95.31%	-0.25%	-0.26%
Custodians Ranked 1-10	9.41%	2.12	62.88%	60.02%	2.86%	4.76%
Custodians Ranked 11-25	16.04%	3.62	19.58%	17.63%	1.96%	11.12%
All Other Custodians	-18.08%	-4.08	17.53%	22.35%	-4.82%	-21.55%
Market Growth Custodians Not Disclosed	10.20%	2.17	4.93%	4.69%	0.25%	5.25%

Single Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Single Custodians Market Segment - Fund Relationships										
Single Custodians	Sep -23 #FR	Sep -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Sep -23 Rank	Sep -22 Rank	23-22 Change
STATE STREET IFS	13,543	12,788	755	5.9%	12.1%	12.0%	1.0%	1	1	0
BANK OF NEW YORK	10,743	10,275	468	4.6%	9.6%	9.6%	-0.3%	2	2	0
JPMORGAN	8,978	8,908	70	0.8%	8.0%	8.4%	-3.9%	3	3	0
CITIBANK	5,012	4,646	366	7.9%	4.5%	4.4%	2.9%	4	4	0
CACEIS	4,768	3,624	1,144	31.6%	4.3%	3.4%	25.5%	5	7	2
BNP PARIBAS	4,215	4,252	-37	-0.9%	3.8%	4.0%	-5.5%	6	5	-1
NORTHERN TRUST	3,855	3,659	196	5.4%	3.4%	3.4%	0.5%	7	6	-1
US BANCORP	3,485	3,258	227	7.0%	3.1%	3.1%	2.0%	8	8	0
HSBC FINANCIAL SERVICES	3,263	2,705	558	20.6%	2.9%	2.5%	15.0%	9	10	1
BANK OF AMERICA	2,882	2,851	31	1.1%	2.6%	2.7%	-3.6%	10	9	-1
BROWN BROTHER HARRIMAN	2,519	2,495	24	1.0%	2.3%	2.3%	-3.7%	11	11	0
SOCIETE GENERALE	1,618	1,556	62	4.0%	1.4%	1.5%	-0.8%	12	13	1
WELLS FARGO	1,424	1,414	10	0.7%	1.3%	1.3%	-4.0%	13	14	1
CITCO FUNDS SERVICES	1,045	854	191	22.4%	0.9%	0.8%	16.7%	14	18	4
UNION BANK OF SWITZERLAND	1,022	1,010	12	1.2%	0.9%	0.9%	-3.5%	15	16	1
DZ BANK	1,020	1,037	-17	-1.6%	0.9%	1.0%	-6.2%	16	15	-1
ROYAL BANK OF CANADA	955	1,922	-967	-50.3%	0.9%	1.8%	-52.6%	17	12	-5
SKANDINAVISKA SECURITIES	895	870	25	2.9%	0.8%	0.8%	-1.9%	18	17	-1
HAUCK & AUFHAEUSER	855	825	30	3.6%	0.8%	0.8%	-1.2%	19	19	0
FIRST CITIZENS BANK AND TRUST	827	5	822	16440.0%	0.7%	0.0%	15673.9%	20	188	168
INTERACTIVE BROKERS	825	811	14	1.7%	0.7%	0.8%	-3.0%	21	20	-1
ROYAL BANK OF SCOTLAND	756	764	-8	-1.0%	0.7%	0.7%	-5.6%	22	21	-1
DEUTSCHE BANK	710	699	11	1.6%	0.6%	0.7%	-3.1%	23	23	0
GOLDMAN SACHS BANK USA	652	615	37	6.0%	0.6%	0.6%	1.1%	24	26	2
CANADIAN IMPERIAL BANK OF COMMERCE	647	525	122	23.2%	0.6%	0.5%	17.5%	25	29	4
TOP 25 SINGLE CUSTODIANS FR	76,514	72,368	4,146	5.7%	68.4%	67.9%	0.8%			
ALL OTHER	35,283	34,251	1,032	3.0%	31.6%	32.1%	-1.8%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	111,797	106,619	5,178	4.9%	35.3%	35.4%	-0.4%			
NOT REPORTED	35,042	33,686	1,356	4.0%	11.1%	11.2%	-1.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	49,850	41,206	8,644	21.0%	15.7%	13.7%	14.9%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	84,892	74,892	10,000	13.4%	26.8%	24.9%	7.6%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	120,195	119,377	818	0.7%	37.9%	39.7%	-4.4%			
TOTAL FUNDS	316,884	300,888	15,996	5.3%	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 1-10 registered the highest growth in funds
 - Funds increased 6.63%, or 1.37x the market
 - Market share increased from 53.43% to 54.33%
 - An increase of 1.69%
- Custodians ranked 11-25 registered the lowest growth in funds
 - Funds increased 2.39%, or 0.49x the market
 - Market share decreased from 14.45% to 14.11%
 - A decrease of 2.35%

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	5.32%		100%	100%		
Market Growth Single Custodians Disclosed	4.86%	0.91	35.28%	35.43%	-0.15%	-0.44%
Custodians Ranked 1-10	6.63%	1.37	54.33%	53.43%	0.90%	1.69%
Custodians Ranked 11-25	2.39%	0.49	14.11%	14.45%	-0.34%	-2.35%
All Other Custodians	3.01%	0.62	31.56%	32.12%	-0.56%	-1.76%
Market Growth Multi Custodians Disclosed	0.69%	0.13	37.93%	39.67%	-1.74%	-4.40%
Market Growth Custodians Not Disclosed	13.35%	2.51	26.79%	24.89%	1.90%	7.63%

Single Fund Custodians League Table – Global AUC

Convergence - Sep 2023 League Tables - Single Custodians Market Segment - Assets (in BN)										
Single Custodians	Sep -23 FR-AUC	Sep -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Sep -23 Rank	Sep -22 Rank	23-22 Change
STATE STREET IFS	\$15,094.11	\$13,685.54	\$1,408.57	10.3%	26.5%	26.6%	-0.3%	1	1	0
JPMORGAN	\$12,091.51	\$10,965.37	\$1,126.14	10.3%	21.2%	21.3%	-0.3%	2	2	0
BANK OF NEW YORK	\$8,813.61	\$8,073.35	\$740.26	9.2%	15.5%	15.7%	-1.3%	3	3	0
BROWN BROTHER HARRIMAN	\$2,257.92	\$2,044.65	\$213.27	10.4%	4.0%	4.0%	-0.1%	4	4	0
NORTHERN TRUST	\$2,188.34	\$1,964.17	\$224.18	11.4%	3.8%	3.8%	0.8%	5	5	0
CITIBANK	\$1,638.90	\$1,351.04	\$287.85	21.3%	2.9%	2.6%	9.7%	6	8	2
BNP PARIBAS	\$1,603.36	\$1,396.65	\$206.71	14.8%	2.8%	2.7%	3.8%	7	6	-1
US BANCORP	\$1,469.89	\$1,352.65	\$117.25	8.7%	2.6%	2.6%	-1.7%	8	7	-1
CACEIS	\$1,331.24	\$1,003.91	\$327.33	32.6%	2.3%	1.9%	19.9%	9	9	0
HSBC FINANCIAL SERVICES	\$1,202.34	\$970.10	\$232.25	23.9%	2.1%	1.9%	12.1%	10	10	0
BANK OF AMERICA	\$777.33	\$839.21	-\$61.89	-7.4%	1.4%	1.6%	-16.2%	11	11	0
DZ BANK	\$533.20	\$486.83	\$46.37	9.5%	0.9%	0.9%	-1.0%	12	12	0
UNION BANK OF SWITZERLAND	\$457.30	\$440.29	\$17.00	3.9%	0.8%	0.9%	-6.1%	13	13	0
SOCIETE GENERALE	\$399.20	\$351.08	\$48.12	13.7%	0.7%	0.7%	2.8%	14	15	1
WELLS FARGO	\$327.26	\$324.42	\$2.84	0.9%	0.6%	0.6%	-8.8%	15	16	1
SKANDINAVISKA SECURITIES	\$275.42	\$259.55	\$15.87	6.1%	0.5%	0.5%	-4.0%	16	17	1
PICTET CIE EUROPE	\$242.94	\$222.77	\$20.17	9.1%	0.4%	0.4%	-1.4%	17	19	2
ROYAL BANK OF CANADA	\$242.43	\$386.42	-\$143.99	-37.3%	0.4%	0.8%	-43.3%	18	14	-4
CITCO FUNDS SERVICES	\$241.37	\$256.98	-\$15.61	-6.1%	0.4%	0.5%	-15.1%	19	18	-1
DEKABANK	\$234.69	\$201.39	\$33.30	16.5%	0.4%	0.4%	5.4%	20	20	0
CECA	\$191.06	\$149.17	\$41.89	28.1%	0.3%	0.3%	15.8%	21	24	3
ROYAL BANK OF SCOTLAND	\$175.59	\$150.90	\$24.69	16.4%	0.3%	0.3%	5.2%	22	23	1
ZÜRCHER KANTONALBANK	\$173.24	\$152.24	\$21.00	13.8%	0.3%	0.3%	2.9%	23	22	-1
SWEDBANK	\$172.47	\$155.37	\$17.10	11.0%	0.3%	0.3%	0.4%	24	21	-3
DEUTSCHE BANK	\$141.08	\$134.81	\$6.27	4.7%	0.2%	0.3%	-5.4%	25	25	0
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$52,275.80	\$47,318.83	\$4,956.97	10.5%	91.8%	91.9%	-0.1%			
ALL OTHER	\$4,668.85	\$4,177.82	\$491.03	11.8%	8.2%	8.1%	1.1%			
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$56,944.64	\$51,496.65	\$5,447.99	10.6%	38.3%	36.3%	5.6%			
NOT REPORTED	\$4,715.12	\$4,869.19	-\$154.07	-3.2%	3.2%	3.4%	-7.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,614.88	\$1,782.06	\$832.82	46.7%	1.8%	1.3%	40.1%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,330.01	\$6,651.25	\$678.75	10.2%	4.9%	4.7%	5.3%			
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$84,336.83	\$83,786.01	\$550.83	0.7%	56.7%	59.0%	-3.9%			
TOTAL FUND ASSETS	\$148,611.48	\$141,933.91	\$6,677.57	4.7%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUC growth
 - AUC increased 11.75%, or 1.11x the market
 - Market share increased from 8.11% to 8.20%
 - An increase of 1.06%
- Custodians ranked 11-25 registered the lowest AUC growth
 - AUC increased 1.62%, or 0.15x the market
 - Market share decreased from 8.76% to 8.05%
 - A decrease of 8.10%

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	4.70%		100%	100%		
Market Growth Single Custodians Disclosed	10.58%	2.25	38.32%	36.28%	2.04%	5.61%
Custodians Ranked 1-10	11.41%	1.08	83.75%	83.13%	0.62%	0.75%
Custodians Ranked 11-25	1.62%	0.15	8.05%	8.76%	-0.71%	-8.10%
All Other Custodians	11.75%	1.11	8.20%	8.11%	0.09%	1.06%
Market Growth Multi Custodians Disclosed	0.66%	0.14	56.75%	59.03%	-2.28%	-3.87%
Market Growth Custodians Not Disclosed	10.20%	2.17	4.93%	4.69%	0.25%	5.25%

Multi-Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Multi Custodians Market Segment - Fund Relationships										
Multi Custodians	Sep -23 #FR	Sep -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Sep -23 Rank	Sep -22 Rank	23-22 Change
JPMORGAN	22,734	9,077	13,657	150.5%	18.9%	7.6%	148.8%	1	3	2
FIRST CITIZENS BANK AND TRUST	11,573	797	10,776	1352.1%	9.6%	0.7%	1342.2%	2	24	22
BANK OF AMERICA	8,550	7,735	815	10.5%	7.1%	6.5%	9.8%	3	4	1
BANK OF NEW YORK	5,865	5,389	476	8.8%	4.9%	4.5%	8.1%	4	5	1
MORGAN STANLEY	5,571	5,278	293	5.6%	4.6%	4.4%	4.8%	5	6	1
GOLDMAN SACHS BANK USA	5,117	4,919	198	4.0%	4.3%	4.1%	3.3%	6	7	1
UNION BANK OF SWITZERLAND	4,833	2,415	2,418	100.1%	4.0%	2.0%	98.8%	7	12	5
CITIBANK	3,778	3,468	310	8.9%	3.1%	2.9%	8.2%	8	9	1
WELLS FARGO	2,901	2,845	56	2.0%	2.4%	2.4%	1.3%	9	10	1
NORTHERN TRUST	2,806	2,657	149	5.6%	2.3%	2.2%	4.9%	10	11	1
US BANCORP	2,175	1,873	302	16.1%	1.8%	1.6%	15.3%	11	14	3
STATE STREET IFS	1,990	1,977	13	0.7%	1.7%	1.7%	0.0%	12	13	1
BARCLAYS	1,391	1,252	139	11.1%	1.2%	1.0%	10.3%	13	17	4
BNP PARIBAS	1,360	1,371	-11	-0.8%	1.1%	1.1%	-1.5%	14	15	1
DEUTSCHE BANK	1,319	1,368	-49	-3.6%	1.1%	1.1%	-4.2%	15	16	1
FIDELITY	1,296	1,167	129	11.1%	1.1%	1.0%	10.3%	16	18	2
HSBC FINANCIAL SERVICES	1,144	1,065	79	7.4%	1.0%	0.9%	6.7%	17	20	3
ESHARES	1,139	1,075	64	6.0%	0.9%	0.9%	5.2%	18	19	1
RAYMOND JAMES ASSOCIATES	1,094	949	145	15.3%	0.9%	0.8%	14.5%	19	22	3
NEW YORK COMMUNITY BANK	1,065	186	879	472.6%	0.9%	0.2%	468.7%	20	67	47
CANADIAN IMPERIAL BANK OF COMMERCE	868	810	58	7.2%	0.7%	0.7%	6.4%	21	23	2
COMPUTERSHARE	818	483	335	69.4%	0.7%	0.4%	68.2%	22	31	9
CITCO FUNDS SERVICES	797	747	50	6.7%	0.7%	0.6%	6.0%	23	25	2
INTERACTIVE BROKERS	774	703	71	10.1%	0.6%	0.6%	9.4%	24	26	2
SOCIETE GENERALE	741	678	63	9.3%	0.6%	0.6%	8.5%	25	27	2
TOP 25 MULTI CUSTODIANS FR	91,699	60,284	31,415	52.1%	76.3%	50.5%	51.1%			
ALL OTHER	28,496	59,093	-30,597	-51.8%	23.7%	49.5%	-52.1%			
TOTAL MULTI CUSTODIANS FR	120,195	119,377	818	0.7%	37.9%	39.7%	-4.4%			
NOT REPORTED	35,042	33,686	1,356	4.0%	11.1%	11.2%	-1.2%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	49,850	41,206	8,644	21.0%	15.7%	13.7%	14.9%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	84,892	74,892	10,000	13.4%	26.8%	24.9%	7.6%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	111,797	106,619	5,178	4.9%	35.3%	35.4%	-0.4%			
TOTAL FUNDS	316,884	300,888	15,996	5.3%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 65.38%, or 95.42x the market
 - Market share increased from 37.34% to 61.34%
 - An increase of 64.26%
- Custodians ranked >25 registered the smallest growth in funds
 - Funds decreased 51.78%, or -75.56x the market
 - Market share decreased from 49.50% to 23.71%
 - A decrease of 52.11%

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	5.32%		100%	100%		
Market Growth Multi Custodians Disclosed	0.69%	0.13	37.93%	39.67%	-1.74%	-4.40%
Custodians Ranked 1-10	65.38%	95.42	61.34%	37.34%	24.00%	64.26%
Custodians Ranked 11-25	14.44%	21.07	14.95%	13.15%	1.80%	13.66%
All Other Custodians	-51.78%	-75.56	23.71%	49.50%	-25.79%	-52.11%
Market Growth Single Custodians Disclosed	4.86%	0.91	35.28%	35.43%	-0.15%	-0.44%
Market Growth Custodians Not Disclosed	13.35%	2.51	26.79%	24.89%	1.90%	7.63%

Multi-Fund Custodians League Table – Global AUC

Convergence - Sep 2023 League Tables - Multi Custodians Market Segment - Assets (in BN)										
Multi Custodians	Sep -23 FR-AUC	Sep -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Sep -23 Rank	Sep -22 Rank	23-22 Change
JPMORGAN	\$8,046.57	\$6,348.92	\$1,697.65	26.7%	9.5%	7.6%	25.9%	1	3	2
BANK OF AMERICA	\$6,522.49	\$6,146.81	\$375.68	6.1%	7.7%	7.3%	5.4%	2	24	22
BANK OF NEW YORK	\$5,705.82	\$5,332.22	\$373.60	7.0%	6.8%	6.4%	6.3%	3	4	1
CITIBANK	\$4,605.75	\$4,302.20	\$303.55	7.1%	5.5%	5.1%	6.4%	4	5	1
MORGAN STANLEY	\$4,406.77	\$4,657.29	-\$250.52	-5.4%	5.2%	5.6%	-6.0%	5	6	1
GOLDMAN SACHS BANK USA	\$4,377.64	\$4,348.73	\$28.91	0.7%	5.2%	5.2%	0.0%	6	7	1
UNION BANK OF SWITZERLAND	\$4,232.71	\$3,087.71	\$1,144.99	37.1%	5.0%	3.7%	36.2%	7	12	5
BARCLAYS	\$3,822.60	\$3,500.60	\$322.00	9.2%	4.5%	4.2%	8.5%	8	9	1
STATE STREET IFS	\$3,077.96	\$3,173.54	-\$95.59	-3.0%	3.6%	3.8%	-3.6%	9	10	1
BNP PARIBAS	\$2,576.28	\$2,433.01	\$143.28	5.9%	3.1%	2.9%	5.2%	10	11	1
NORTHERN TRUST	\$2,486.26	\$2,509.27	-\$23.01	-0.9%	2.9%	3.0%	-1.6%	11	14	3
WELLS FARGO	\$2,243.93	\$2,334.32	-\$90.39	-3.9%	2.7%	2.8%	-4.5%	12	13	1
DEUTSCHE BANK	\$1,987.57	\$1,994.78	-\$7.21	-0.4%	2.4%	2.4%	-1.0%	13	17	4
FIRST CITIZENS BANK AND TRUST	\$1,954.68	\$0.11	\$1,954.57	1755395.4%	2.3%	0.0%	1743929.8%	14	15	1
HSBC FINANCIAL SERVICES	\$1,674.85	\$1,660.70	\$14.14	0.9%	2.0%	2.0%	0.2%	15	16	1
STANDARD CHARTERED BANK	\$1,462.57	\$1,344.05	\$118.52	8.8%	1.7%	1.6%	8.1%	16	18	2
SOCIETE GENERALE	\$1,356.25	\$1,341.74	\$14.52	1.1%	1.6%	1.6%	0.4%	17	20	3
BANK OF NOVA SCOTIA	\$1,035.75	\$887.70	\$148.06	16.7%	1.2%	1.1%	15.9%	18	19	1
FIDELITY	\$928.97	\$1,059.21	-\$130.24	-12.3%	1.1%	1.3%	-12.9%	19	22	3
US BANCORP	\$892.84	\$797.71	\$95.14	11.9%	1.1%	1.0%	11.2%	20	67	47
COMPUTERSHARE	\$853.57	\$710.87	\$142.70	20.1%	1.0%	0.8%	19.3%	21	23	2
NOMURA BANK LUXEMBOURG SA	\$838.13	\$725.55	\$112.57	15.5%	1.0%	0.9%	14.8%	22	31	9
ROYAL BANK OF CANADA	\$792.54	\$625.02	\$167.52	26.8%	0.9%	0.7%	26.0%	23	25	2
CANADIAN IMPERIAL BANK OF COMMERCE	\$603.98	\$427.58	\$176.40	41.3%	0.7%	0.5%	40.3%	24	26	2
SKANDINAVISKA SECURITIES	\$597.21	\$455.05	\$142.16	31.2%	0.7%	0.5%	30.4%	25	27	2
TOP 25 MULTI CUSTODIANS FR ASSETS	\$67,083.69	\$60,204.67	\$6,879.02	11.4%	79.5%	71.9%	10.7%			
ALL OTHER	\$17,253.14	\$23,581.34	-\$6,328.19	-26.8%	20.5%	28.1%	-27.3%			
TOTAL MULTI CUSTODIANS FR ASSETS	\$84,336.83	\$83,786.01	\$550.83	0.7%	56.7%	59.0%	-3.9%			
NOT REPORTED	\$4,715.12	\$4,869.19	-\$154.07	-3.2%	3.2%	3.4%	-7.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,614.88	\$1,782.06	\$832.82	46.7%	1.8%	1.3%	40.1%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,330.01	\$6,651.25	\$678.75	10.2%	4.9%	4.7%	5.3%			
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$56,944.64	\$51,496.65	\$5,447.99	10.6%	38.3%	36.3%	5.6%			
TOTAL FUND ASSETS	\$148,611.48	\$141,933.91	\$6,677.57	4.7%	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 16.80%, or 25.56x the market
 - Market share increased from 20.14% to 23.37%
 - An increase of 16.04%
- Custodians ranked >25 registered the lowest AUC growth
 - AUC decreased 26.84%, or -40.82x the market
 - Market share decreased from 28.14% to 20.46%
 - A decrease of 27.31%

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	4.70%		100%	100%		
Market Growth Multi Custodians Disclosed	0.66%	0.14	56.75%	59.03%	-2.28%	-3.87%
Custodians Ranked 1-10	9.33%	14.19	56.17%	51.72%	4.46%	8.62%
Custodians Ranked 11-25	16.80%	25.56	23.37%	20.14%	3.23%	16.04%
All Other Custodians	-26.84%	-40.82	20.46%	28.14%	-7.69%	-27.31%
Market Growth Single Custodians Disclosed	10.58%	2.25	38.32%	36.28%	2.04%	5.61%
Market Growth Custodians Not Disclosed	10.20%	2.17	4.93%	4.69%	0.25%	5.25%

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

Career History

- ❖ 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 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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Eileen Cleary, President, Convergence Talent Management

Career History

- ❖ 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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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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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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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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