Fund Custodians
League Tables

Global Funds and AUC

Reporting Period Feb 2023 - Feb 2024



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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:
 - o SEC registered private and public funds and advisers
 - State registered private and public funds and advisers
 - o Unregistered private funds and advisers
 - o EU UCITS and private funds
 - o 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
 - o Funds that use a "single" custodians
 - o Funds that use "multiple" custodians
- Additional Fund custodians League Tables for custodians Funds and AUC are available to Convergence Clients in the following cuts:
 - o Private Funds, and within private funds, in the following sub-cuts
 - Hedge, Private Equity, Real Estate, Venture Capital, Securitized Assets, Hybrid and Liquidity Funds
 - o Public Funds and within public funds, in the following sub-cuts
 - By fund strategy (30+)

Custodians League Table - Global Funds

Convergence - Feb 2024 League Tables - Custodians Market Segment - Fund Relationships											
All	Feb -24	Feb -23	23-24	23-24	Market	Market	23-24	Feb -24	Feb -23	23-24	
Custodians	#FR	#FR	Change	Change %	Share-24	Share-23	Change %	Rank	Rank	Change	
JPMORGAN	31,731	18,087	13,644	75.4%	13.7%	7.9%	73.0%	1	1	0	
BANK OF NEW YORK	16,584	15,695	889	5.7%	7.2%	6.9%	4.2%	2	3	1	
STATE STREET IFS	15,104	14,827	277	1.9%	6.5%	6.5%	0.5%	3	4	1	
FIRST CITIZENS BANK AND TRUST	12,727	812	11,915	1467.4%	5.5%	0.4%	1446.0%	4	35	31	
BANK OF AMERICA	11,646	10,670	976	9.1%	5.0%	4.7%	7.7%	5	6	1	
CITIBANK	8,769	8,212	557	6.8%	3.8%	3.6%	5.3%	6	7	1	
NORTHERN TRUST	6,807	6,419	388	6.0%	2.9%	2.8%	4.6%	7	8	1	
MORGAN STANLEY	6,173	5,914	259	4.4%	2.7%	2.6%	3.0%	8	9	1	
BNP PARIBAS	5,934	5,818	116	2.0%	2.6%	2.6%	0.6%	9	10	1	
GOLDMAN SACHS BANK USA	5,726	5,608	118	2.1%	2.5%	2.5%	0.7%	10	11	1	
US BANCORP	5,651	5,200	451	8.7%	2.4%	2.3%	7.2%	11	12	1	
UNION BANK OF SWITZERLAND	5,650	3,467	2,183	63.0%	2.4%	1.5%	60.7%	12	17	5	
CACEIS	4,885	3,835	1,050	27.4%	2.1%	1.7%	25.6%	13	16	3	
HSBC FINANCIAL SERVICES	4,494	3,960	534	13.5%	1.9%	1.7%	11.9%	14	15	1	
WELLS FARGO	4,302	4,341	-39	-0.9%	1.9%	1.9%	-2.2%	15	14	-1	
BROWN BROTHER HARRIMAN	2,671	2,742	-71	-2.6%	1.2%	1.2%	-3.9%	16	18	2	
SOCIETE GENERALE	2,273	2,267	6	0.3%	1.0%	1.0%	-1.1%	17	19	2	
DEUTSCHE BANK	2,011	2,097	-86	-4.1%	0.9%	0.9%	-5.4%	18	21	3	
FIDELITY	1,997	1,841	156	8.5%	0.9%	0.8%	7.0%	19	22	3	
CITCO FUNDS SERVICES	1,848	1,479	369	24.9%	0.8%	0.6%	23.2%	20	24	4	
BARCLAYS	1,551	1,422	129	9.1%	0.7%	0.6%	7.6%	21	25	4	
INTERACTIVE BROKERS	1,549	1,556	-7	-0.4%	0.7%	0.7%	-1.8%	22	23	1	
CANADIAN IMPERIAL BANK OF COMMERCE	1,517	1,333	184	13.8%	0.7%	0.6%	12.3%	23	27	4	
ROYAL BANK OF CANADA	1,338	2,231	-893	-40.0%	0.6%	1.0%	-40.8%	24	20	-4	
ESHARES	1,328	1,394	-66	-4.7%	0.6%	0.6%	-6.0%	25	26	1	
TOP 25 CUSTODIANS FR - ALL	164,266	131,227	33,039	25.2%	71.1%	57.6%	23.5%				
ALL OTHER	66,846	96,741	-29,895	-30.9%	28.9%	42.4%	-31.8%				
TOTAL CUSTODIANS FR DISCLOSED	231,112	227,968	3,144	1.4%	72.4%	72.3%	0.2%				
NOT REPORTED	36,761	33,975	2,786	8.2%	11.5%	10.8%	7.0%				
ELIGIBLE FUNDS - NOT ATTRIBUTED	51,219	53,519	-2,300	-4.3%	16.1%	17.0%	-5.4%				
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	87,980	87,494	486	0.6%	27.6%	27.7%	-0.6%				
TOTAL FUNDS	319,092	315,462	3,630	1.2%	100.0%	100.0%	0.0%				

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

- Custodians ranked 1-10 registered the highest growth in funds
 - o Funds increased 31.65%, or 22.95x the market
 - o Market share increased from 40.38% to 52.44%
 - An increase of 29.86%
- Custodians ranked >25 registered the lowest growth in funds
 - o Funds decreased 30.90%, or -22.41x the market
 - Market share decreased from 42.44% to 28.92%
 - ➤ A decrease of 31.84%

Peer	Group Per	formance by F	Sund Relationships			
Custodians	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %
Market Growth Funds	1.15%		100%	100%		
Market Growth Custodians Disclosed	1.38%	1.20	72.43%	72.26%	0.16%	0.23%
Custodians Ranked 1-10	31.65%	22.95	52.44%	40.38%	12.06%	29.86%
Custodians Ranked 11-25	9.96%	7.22	18.63%	17.18%	1.45%	8.46%
All Other Custodians	-30.90%	-22.41	28.92%	42.44%	-13.51%	-31.84%
Market Growth Custodians Not Disclosed	0.56%	0.48	27.57%	27.74%	-0.16%	-0.59%

Fund Custodians League Table – Global AUC

Convergence - Feb 2				ket Segment						
All	Feb -24	Feb -23	23-24	23-24		Market	23-24	Feb -24	Feb -23	
Custodians	FR-AUC	FR-AUC	Change		Share-24	Share-23	Change %	Rank	Rank	Change
JPMORGAN	\$20,969.50	\$17,701.71	\$3,267.78	18.5%	14.8%	12.9%	15.4%	1	1	0
STATE STREET IFS	\$18,635.69	\$17,254.42	\$1,381.27	8.0%	13.2%	12.5%	5.2%	2	2	0
BANK OF NEW YORK	\$14,834.51	\$13,744.52	\$1,090.00	7.9%	10.5%	10.0%	5.1%	3	3	0
BANK OF AMERICA	\$7,539.31	\$7,158.84	\$380.47	5.3%	5.3%	5.2%	2.5%	4	4	0
CITIBANK	\$6,262.62	\$5,792.60	\$470.02	8.1%	4.4%	4.2%	5.3%	5	5	0
NORTHERN TRUST	\$4,781.45	\$4,605.39	\$176.06	3.8%	3.4%	3.3%	1.1%	6	7	1
UNION BANK OF SWITZERLAND	\$4,617.05	\$3,525.95	\$1,091.10	30.9%	3.3%	2.6%	27.5%	7	12	5
MORGAN STANLEY	\$4,422.48	\$4,727.03	-\$304.55	-6.4%	3.1%	3.4%	-8.9%	8	6	-2
GOLDMAN SACHS BANK USA	\$4,416.84	\$4,420.84	-\$3.99	-0.1%	3.1%	3.2%	-2.7%	9	8	-1
BNP PARIBAS	\$4,154.75	\$3,969.31	\$185.44	4.7%	2.9%	2.9%	1.9%	10	9	-1
BARCLAYS	\$3,801.34	\$3,539.49	\$261.85	7.4%	2.7%	2.6%	4.6%	11	11	0
HSBC FINANCIAL SERVICES	\$2,874.54	\$2,698.07	\$176.48	6.5%	2.0%	2.0%	3.7%	12	13	1
WELLS FARGO	\$2,537.39	\$2,676.21	-\$138.83	-5.2%	1.8%	1.9%	-7.7%	13	14	1
BROWN BROTHER HARRIMAN	\$2,456.60	\$2,328.89	\$127.71	5.5%	1.7%	1.7%	2.7%	14	15	1
US BANCORP	\$2,329.56	\$2,133.36	\$196.21	9.2%	1.6%	1.5%	6.3%	15	18	3
DEUTSCHE BANK	\$2,098.25	\$2,224.99	-\$126.73	-5.7%	1.5%	1.6%	-8.2%	16	17	1
FIRST CITIZENS BANK AND TRUST	\$1,951.41	\$0.88	\$1,950.53	220928.5%	1.4%	0.0%	215125.8%	17	623	606
SOCIETE GENERALE	\$1,701.64	\$1,726.51	-\$24.87	-1.4%	1.2%	1.3%	-4.0%	18	19	1
STANDARD CHARTERED BANK	\$1,436.90	\$1,357.42	\$79.48	5.9%	1.0%	1.0%	3.1%	19	21	2
CACEIS	\$1,313.97	\$1,130.80	\$183.17	16.2%	0.9%	0.8%	13.1%	20	22	2
BANK OF NOVA SCOTIA	\$1,042.48	\$892.33	\$150.15	16.8%	0.7%	0.6%	13.8%	21	25	4
FIDELITY	\$949.74	\$1,074.05	-\$124.31	-11.6%	0.7%	0.8%	-13.9%	22	23	1
ROYAL BANK OF CANADA	\$945.51	\$1,015.13	-\$69.62	-6.9%	0.7%	0.7%	-9.3%	23	24	1
SKANDINAVISKA SECURITIES	\$899.73	\$724.44	\$175.28	24.2%	0.6%	0.5%	20.9%	24	28	4
COMPUTERSHARE	\$881.07	\$762.65	\$118.43	15.5%	0.6%	0.6%	12.5%	25	26	1
TOP 25 CUSTODIANS FR - ALL	\$117,854.34	\$107,185.82	\$10,668.52	10.0%	83.3%	77.8%	7.1%			
ALL OTHER	\$23,615.59	\$30,570.08	-\$6,954.48	-22.7%	16.7%	22.2%	-24.8%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$141,469.93	\$137,755.90	\$3,714.03	2.7%	95.1%	95.0%	0.1%			
NOT REPORTED	\$4,676.95	\$4,907.60	-\$230.65	-4.7%	3.1%	3.4%	-7.1%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,640.81	\$2,326.48	\$314.33	13.5%	1.8%	1.6%	10.6%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,317.76	\$7,234.09	\$83.68	1.2%	4.9%	5.0%	-1.4%			

2.6%

100.0% 100.0%

0.0%

\$148,787.70 \$144,989.99 \$3,797.71

TOTAL FUND ASSETS

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

- Custodians ranked 11-25 registered the highest AUC growth
 - o AUC increased 12.09%, or 4.48x the market
 - o Market share increased from 17.63% to 19.24%
 - ➤ An increase of 9.14%
- Custodians ranked >25 registered the lowest AUC growth
 - o AUC decreased 22.75%, or -8.44x the market
 - o Market share decreased from 22.19% to 16.69%
 - A decrease of 24.78%

Peer G	Froup Perform	ance by Fund	Assets			
Custodians	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %
Market Growth Assets	2.62%		100%	100%		
Market Growth Custodians Disclosed	2.70%	1.03	95.08%	95.01%	0.07%	0.07%
Custodians Ranked 1-10	9.33%	3.46	64.07%	60.18%	3.89%	6.46%
Custodians Ranked 11-25	12.09%	4.48	19.24%	17.63%	1.61%	9.14%
All Other Custodians	-22.75%	-8.44	16.69%	22.19%	-5.50%	-24.78%
Market Growth Custodians Not Disclosed	1.16%	0.44	4.92%	4.99%	-0.07%	-1.43%

Single Fund Custodians League Table – Global Funds

Convergence - Feb 2024 League	e Tables -	Single C	ustodian	s Market Se	egment - F	und Re <u>lat</u>	ionships			
Single		Feb -23		23-24	Market	Market	23-24	Feb -24	Feb -23	23-24
Custodians	#FR	#FR		Change %	Share-24	Share-23	Change %	Rank	Rank	Change
STATE STREET IFS	13,196	12,819	377	2.9%	11.8%	11.9%	-0.7%	1	1	0
BANK OF NEW YORK	10,739	10,268	471	4.6%	9.6%	9.5%	0.9%	2	2	0
JPMORGAN	8,767	8,967	-200	-2.2%	7.8%	8.3%	-5.7%	3	3	0
CITIBANK	4,949	4,687	262	5.6%	4.4%	4.3%	1.9%	4	4	0
CACEIS	4,841	3,803	1,038	27.3%	4.3%	3.5%	22.8%	5	6	1
BNP PARIBAS	4,601	4,408	193	4.4%	4.1%	4.1%	0.7%	6	5	-1
NORTHERN TRUST	3,957	3,714	243	6.5%	3.5%	3.4%	2.8%	7	7	0
US BANCORP	3,519	3,310	209	6.3%	3.2%	3.1%	2.6%	8	8	0
HSBC FINANCIAL SERVICES	3,367	2,872	495	17.2%	3.0%	2.7%	13.1%	9	9	0
BANK OF AMERICA	2,971	2,868	103	3.6%	2.7%	2.7%	0.0%	10	10	0
BROWN BROTHER HARRIMAN	2,447	2,514	-67	-2.7%	2.2%	2.3%	-6.1%	11	11	0
SOCIETE GENERALE	1,563	1,577	-14	-0.9%	1.4%	1.5%	-4.4%	12	13	1
WELLS FARGO	1,412	1,432	-20	-1.4%	1.3%	1.3%	-4.9%	13	14	1
CITCO FUNDS SERVICES	1,041	734	307	41.8%	0.9%	0.7%	36.8%	14	20	6
DZ BANK	1,020	1,016	4	0.4%	0.9%	0.9%	-3.1%	15	16	1
UNION BANK OF SWITZERLAND	981	1,058	-77	-7.3%	0.9%	1.0%	-10.5%	16	15	-1
SKANDINAVISKA SECURITIES	898	860	38	4.4%	0.8%	0.8%	0.8%	17	17	0
FIRST CITIZENS BANK AND TRUST	851	4	847	21175.0%	0.8%	0.0%	20428.1%	18	183	165
HAUCK & AUFHAEUSER	850	838	12	1.4%	0.8%	0.8%	-2.1%	19	18	-1
ROYAL BANK OF CANADA	794	1,909	-1,115	-58.4%	0.7%	1.8%	-59.9%	20	12	-8
INTERACTIVE BROKERS	743	831	-88	-10.6%	0.7%	0.8%	-13.7%	21	19	-2
ROYAL BANK OF SCOTLAND	728	731	-3	-0.4%	0.7%	0.7%	-3.9%	22	21	-1
DEUTSCHE BANK	695	698	-3	-0.4%	0.6%	0.6%	-3.9%	23	22	-1
CANADIAN IMPERIAL BANK OF COMMERCE	683	514	169	32.9%	0.6%	0.5%	28.2%	24	29	5
GOLDMAN SACHS BANK USA	656	648	8	1.2%	0.6%	0.6%	-2.3%	25	25	0
TOP 25 SINGLE CUSTODIANS FR	76,269	73,080	3,189	4.4%	68.3%	67.8%	0.7%			
ALL OTHER	35,419	34,687	732	2.1%	31.7%	32.2%	-1.5%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	111,688	107,767	3,921	3.6%	35.0%	34.2%	2.5%			
NOT REPORTED	36,761	33,975	2,786	8.2%	11.5%	10.8%	7.0%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	51,219	53,519	-2,300	-4.3%	16.1%	17.0%	-5.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	87,980	87,494	486	0.6%	27.6%	27.7%	-0.6%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	119,424	120,201	-777	-0.6%	37.4%	38.1%	-1.8%			
TOTAL FUNDS	319 092	315 462	3 630	1 2%	100.0%	100.0%	0.0%			

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

- Custodians ranked 1-10 registered the highest growth in funds
 - o Funds increased 5.53%, or 1.52x the market
 - o Market share increased from 53.56% to 54.53%
 - An increase of 1.82%
- Custodians ranked 11-25 registered the lowest growth in funds
 - o Funds decreased 0.01%, or 0.00x the market
 - Market share decreased from 14.26% to 13.75%
 - A decrease of 3.52%

Peer (Group Per	formance by F	und Relationships			
Custodians	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %
Market Growth Funds	1.15%		100%	100%		
Market Growth Single Custodians Disclosed	3.64%	3.16	35.00%	34.16%	0.84%	2.46%
Custodians Ranked 1-10	5.53%	1.52	54.53%	53.56%	0.98%	1.82%
Custodians Ranked 11-25	-0.01%	0.00	13.75%	14.26%	-0.50%	-3.52%
All Other Custodians	2.11%	0.58	31.71%	32.19%	-0.47%	-1.47%
Market Growth Multi Custodians Disclosed	-0.65%	-0.56	37.43%	38.10%	-0.68%	-1.78%
Market Growth Custodians Not Disclosed	0.56%	0.48	27.57%	27.74%	-0.16%	-0.59%

Single Fund Custodians League Table – Global AUC

Convergence - Feb 202	Convergence - Feb 2024 League Tables - Single Custodians Market Segment - Assets (in BN)												
Single	Feb -24	Feb -23	23-24	23-24		Market	23-24	Feb -24	Feb -23	23-24			
Custodians	FR-AUC	FR-AUC	Change	Change %		Share-23		Rank	Rank	Change			
STATE STREET IFS	\$15,618.52	\$14,087.72	\$1,530.81	10.9%	26.5%	26.4%	0.5%	1	1	0			
JPMORGAN	\$12,916.32	\$11,293.27	\$1,623.05	14.4%	22.0%	21.2%	3.7%	2	2	0			
BANK OF NEW YORK	\$9,187.65	\$8,448.64	\$739.01	8.7%	15.6%	15.8%	-1.4%	3	3	0			
BROWN BROTHER HARRIMAN	\$2,320.41	\$2,189.46	\$130.95	6.0%	3.9%	4.1%	-3.9%	4	4	0			
NORTHERN TRUST	\$2,264.10	\$2,095.39	\$168.71	8.1%	3.8%	3.9%	-2.0%	5	5	0			
CITIBANK	\$1,674.55	\$1,431.90	\$242.65	16.9%	2.8%	2.7%	6.1%	6	7	1			
BNP PARIBAS	\$1,635.87	\$1,522.37	\$113.51	7.5%	2.8%	2.9%	-2.5%	7	6	-1			
US BANCORP	\$1,501.87	\$1,337.24	\$164.64	12.3%	2.6%	2.5%	1.9%	8	8	0			
CACEIS	\$1,296.51	\$1,089.04	\$207.47	19.1%	2.2%	2.0%	8.0%	9	9	0			
HSBC FINANCIAL SERVICES	\$1,226.24	\$1,026.90	\$199.35	19.4%	2.1%	1.9%	8.3%	10	10	0			
BANK OF AMERICA	\$791.28	\$781.12	\$10.16	1.3%	1.3%	1.5%	-8.1%	11	11	0			
DZ BANK	\$528.65	\$504.56	\$24.09	4.8%	0.9%	0.9%	-5.0%	12	12	0			
UNION BANK OF SWITZERLAND	\$450.80	\$446.25	\$4.56	1.0%	0.8%	0.8%	-8.4%	13	13	0			
SOCIETE GENERALE	\$379.62	\$371.66	\$7.96	2.1%	0.6%	0.7%	-7.4%	14	15	1			
WELLS FARGO	\$331.41	\$325.81	\$5.60	1.7%	0.6%	0.6%	-7.7%	15	16	1			
SKANDINAVISKA SECURITIES	\$302.51	\$268.38	\$34.14	12.7%	0.5%	0.5%	2.2%	16	17	1			
PICTET CIE EUROPE	\$256.83	\$247.79	\$9.04	3.6%	0.4%	0.5%	-6.0%	17	18	1			
CITCO FUNDS SERVICES	\$242.58	\$246.01	-\$3.43	-1.4%	0.4%	0.5%	-10.6%	18	19	1			
DEKABANK	\$234.62	\$223.73	\$10.89	4.9%	0.4%	0.4%	-4.9%	19	20	1			
ZÜRCHER KANTONALBANK	\$211.60	\$172.08	\$39.52	23.0%	0.4%	0.3%	11.5%	20	21	1			
SWEDBANK	\$190.63	\$167.15	\$23.48	14.0%	0.3%	0.3%	3.4%	21	23	2			
ROYAL BANK OF CANADA	\$190.18	\$401.07	-\$210.90	-52.6%	0.3%	0.8%	-57.0%	22	14	-8			
CECA	\$189.34	\$167.58	\$21.76	13.0%	0.3%	0.3%	2.5%	23	22	-1			
ROYAL BANK OF SCOTLAND	\$161.60	\$146.40	\$15.20	10.4%	0.3%	0.3%	0.1%	24	24	0			
DEUTSCHE BANK	\$135.78	\$134.73	\$1.05	0.8%	0.2%	0.3%	-8.6%	25	25	0			
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$54,239.47	\$49,126.23	\$5,113.24	10.4%	92.2%	92.1%	0.1%						
ALL OTHER	\$4,601.57	\$4,238.04	\$363.53	8.6%	7.8%	7.9%	-1.5%						
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$58,841.04	\$53,364.27	\$5,476.77	10.3%	39.5%	36.8%	7.4%						
NOT REPORTED	\$4,676.95	\$4,907.60	-\$230.65	-4.7%	3.1%	3.4%	-7.1%						
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,640.81	\$2,326.48	\$314.33	13.5%	1.8%	1.6%	10.6%						
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,317.76	\$7,234.09	\$83.68	1.2%	4.9%	5.0%	-1.4%						
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$82,628.87	\$84,391.63	-\$1,762.76	-2.1%	55.5%	58.2%	-4.6%						
TOTAL FUND ASSETS	\$148,787,68	\$144,989,99	\$3,797,69	2.6%	100.0%	100.0%	0.0%						

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

- Custodians ranked 1-10 registered the highest AUC growth
 - o AUC increased 11.50%, or 1.12x the market
 - o Market share increased from 83.43% to 84.37%
 - ➤ An increase of 1.12%
- Custodians ranked 11-25 registered the lowest AUC growth
 - o AUC decreased 0.15%, or -0.01x the market
 - Market share decreased from 8.63% to 7.81%
 - A decrease of 9.44%

Peer G	Froup Perform	ance by Fund	Assets			
Custodians	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %
Market Growth Assets	2.62%		100%	100%		
Market Growth Single Custodians Disclosed	10.26%	3.92	39.55%	36.81%	2.74%	7.45%
Custodians Ranked 1-10	11.50%	1.12	84.37%	83.43%	0.94%	1.12%
Custodians Ranked 11-25	-0.15%	-0.01	7.81%	8.63%	-0.81%	-9.44%
All Other Custodians	8.58%	0.84	7.82%	7.94%	-0.12%	-1.53%
Market Growth Multi Custodians Disclosed	-2.09%	-0.80	55.53%	58.21%	-2.67%	-4.59%
Market Growth Custodians Not Disclosed	1.16%	0.44	4.92%	4.99%	-0.07%	-1.43%

Multi-Fund Custodians League Table – Global Funds

Convergence - Feb 2024 Leagu	e Tables -	· Multi <u>C</u>	usto dian:	s Market <u>Se</u>	gment - F	und Relati	onships			
Multi	1	Feb -23		23-24	Market		23-24	Feb -24	Feb -23	23-24
Custodians	#FR	#FR	Change	Change %	Share-24	Share-23	Change %	Rank	Rank	Change
JPMORGAN	22,964	9,120	13,844	151.8%	19.2%	7.6%	153.4%	1	3	2
FIRST CITIZENS BANK AND TRUST	11,876	808	11,068	1369.8%	9.9%	0.7%	1379.4%	2	24	22
BANK OF AMERICA	8,675	7,802	873	11.2%	7.3%	6.5%	11.9%	3	4	1
BANK OF NEW YORK	5,845	5,427	418	7.7%	4.9%	4.5%	8.4%	4	5	1
MORGAN STANLEY	5,534	5,310	224	4.2%	4.6%	4.4%	4.9%	5	6	1
GOLDMAN SACHS BANK USA	5,070	4,960	110	2.2%	4.2%	4.1%	2.9%	6	7	1
UNION BANK OF SWITZERLAND	4,669	2,409	2,260	93.8%	3.9%	2.0%	95.1%	7	12	5
CITIBANK	3,820	3,525	295	8.4%	3.2%	2.9%	9.1%	8	9	1
WELLS FARGO	2,890	2,909	-19	-0.7%	2.4%	2.4%	0.0%	9	10	1
NORTHERN TRUST	2,850	2,705	145	5.4%	2.4%	2.3%	6.0%	10	11	1
US BANCORP	2,132	1,890	242	12.8%	1.8%	1.6%	13.5%	11	14	3
STATE STREET IFS	1,908	2,008	-100	-5.0%	1.6%	1.7%	-4.4%	12	13	1
BARCLAYS	1,368	1,284	84	6.5%	1.1%	1.1%	7.2%	13	17	4
FIDELITY	1,350	1,182	168	14.2%	1.1%	1.0%	15.0%	14	18	4
BNP PARIBAS	1,333	1,410	-77	-5.5%	1.1%	1.2%	-4.8%	15	15	0
DEUTSCHE BANK	1,316	1,399	-83	-5.9%	1.1%	1.2%	-5.3%	16	16	0
HSBC FINANCIAL SERVICES	1,127	1,088	39	3.6%	0.9%	0.9%	4.3%	17	19	2
ESHARES	1,109	1,087	22	2.0%	0.9%	0.9%	2.7%	18	20	2
RAYMOND JAMES ASSOCIATES	1,079	909	170	18.7%	0.9%	0.8%	19.5%	19	22	3
NEW YORK COMMUNITY BANK	1,059	185	874	472.4%	0.9%	0.2%	476.2%	20	65	45
CANADIAN IMPERIAL BANK OF COMMERCE	834	819	15	1.8%	0.7%	0.7%	2.5%	21	23	2
CITCO FUNDS SERVICES	807	745	62	8.3%	0.7%	0.6%	9.0%	22	25	3
INTERACTIVE BROKERS	806	725	81	11.2%	0.7%	0.6%	11.9%	23	26	3
COMPUTERSHARE	780	501	279	<i>55.7%</i>	0.7%	0.4%	56.7%	24	31	7
SOCIETE GENERALE	710	690	20	2.9%	0.6%	0.6%	3.6%	25	27	2
TOP 25 MULTI CUSTODIANS FR	91,911	60,897	31,014	50.9%	77.0%	50.7%	51.9%			
ALL OTHER	27,513	59,304	-31,791	-53.6%	23.0%	49.3%	-53.3%			
TOTAL MULTI CUSTODIANS FR	119,424	120,201	-777	-0.6%	37.4%	38.1%	-1.8%			
NOT REPORTED	36,761	33,975	2,786	8.2%	11.5%	10.8%	7.0%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	51,219	53,519	-2,300	-4.3%	16.1%	17.0%	-5.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	87,980	87,494	486	0.6%	27.6%	27.7%	-0.6%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	111,688	107,767	3,921	3.6%	35.0%	34.2%	2.5%			
TOTAL FUNDS	319,092	315,462	3,630	1.2%	100.0%	100.0%	0.0%			

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

- Custodians ranked 1-10 registered the highest growth in funds
 - o Funds increased 64.96%, or 101.50x the market
 - o Market share increased from 37.42% to 62.13%
 - An increase of 66.04%
- Custodians ranked >25 registered the smallest growth in funds
 - o Funds decreased 53.61%, or -81.93x the market
 - Market share decreased from 49.34% to 23.04%
 - ➤ A decrease of 53.30%

Peer (Group Per	formance by F	und Relationships			
Custodians	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %
Market Growth Funds	1.15%		100%	100%		
Market Growth Multi Custodians Disclosed	-0.65%	-0.56	37.43%	38.10%	-0.68%	-1.78%
Custodians Ranked 1-10	64.96%	101.50	62.13%	37.42%	24.71%	66.04%
Custodians Ranked 11-25	11.28%	18.45	14.84%	13.25%	1.59%	12.00%
All Other Custodians	-53.61%	-81.93	23.04%	49.34%	-26.30%	-53.30%
Market Growth Single Custodians Disclosed	3.64%	3.16	35.00%	34.16%	0.84%	2.46%
Market Growth Custodians Not Disclosed	0.56%	0.48	27.57%	27.74%	-0.16%	-0.59%

Multi-Fund Custodians League Table – Global AUC

Convergence - Feb 202	Convergence - Feb 2024 League Tables - Multi Custodians Market Segment - Assets (in BN)											
Multi	Feb -24	Feb -23	23-24	23-24	Market		23-24	Feb -24	Feb -23	23-24		
Custodians	FR-AUC	FR-AUC	Change		Share-24			Rank		Change		
JPMORGAN	\$8,053.17	\$6,408.44	\$1,644.73	25.7%	9.7%	7.6%	28.3%	1	3	2		
BANK OF AMERICA	\$6,748.03	\$6,377.72	\$370.31	5.8%	8.2%	7.6%	8.1%	2	24	22		
BANK OF NEW YORK	\$5,646.87	\$5,295.88	\$350.99	6.6%	6.8%	6.3%	8.9%	3	4	1		
CITIBANK	\$4,588.07	\$4,360.70	\$227.37	5.2%	5.6%	5.2%	7.5%	4	5	1		
MORGAN STANLEY	\$4,361.94	\$4,647.00	-\$285.06	-6.1%	5.3%	5.5%	-4.1%	5	6	1		
GOLDMAN SACHS BANK USA	\$4,341.36	\$4,355.59	-\$14.23	-0.3%	5.3%	5.2%	1.8%	6	7	1		
UNION BANK OF SWITZERLAND	\$4,166.25	\$3,079.71	\$1,086.54	35.3%	5.0%	3.6%	38.2%	7	12	5		
BARCLAYS	\$3,759.92	\$3,515.31	\$244.60	7.0%	4.6%	4.2%	9.2%	8	9	1		
STATE STREET IFS	\$3,017.16	\$3,166.70	-\$149.54	-4.7%	3.7%	3.8%	-2.7%	9	10	1		
BNP PARIBAS	\$2,518.88	\$2,446.95	\$71.93	2.9%	3.0%	2.9%	5.1%	10	11	1		
NORTHERN TRUST	\$2,517.35	\$2,510.00	\$7.35	0.3%	3.0%	3.0%	2.4%	11	14	3		
WELLS FARGO	\$2,205.98	\$2,350.40	-\$144.43	-6.1%	2.7%	2.8%	-4.1%	12	13	1		
DEUTSCHE BANK	\$1,962.47	\$2,090.25	-\$127.78	-6.1%	2.4%	2.5%	-4.1%	13	17	4		
FIRST CITIZENS BANK AND TRUST	\$1,832.78	\$0.88	\$1,831.90	208937.6%	2.2%	0.0%	213397.1%	14	18	4		
HSBC FINANCIAL SERVICES	\$1,648.30	\$1,671.17	-\$22.87	-1.4%	2.0%	2.0%	0.7%	15	15	0		
STANDARD CHARTERED BANK	\$1,421.47	\$1,343.09	\$78.38	5.8%	1.7%	1.6%	8.1%	16	16	0		
SOCIETE GENERALE	\$1,322.02	\$1,354.85	-\$32.83	-2.4%	1.6%	1.6%	-0.3%	17	19	2		
BANK OF NOVA SCOTIA	\$1,035.89	\$887.91	\$147.98	16.7%	1.3%	1.1%	19.2%	18	20	2		
FIDELITY	\$925.08	\$1,032.09	-\$107.00	-10.4%	1.1%	1.2%	-8.5%	19	22	3		
NOMURA BANK LUXEMBOURG SA	\$834.30	\$725.26	\$109.04	15.0%	1.0%	0.9%	17.5%	20	65	45		
US BANCORP	\$827.69	\$796.12	\$31.57	4.0%	1.0%	0.9%	6.2%	21	23	2		
COMPUTERSHARE	\$818.34	\$721.06	\$97.27	13.5%	1.0%	0.9%	15.9%	22	25	3		
ROYAL BANK OF CANADA	\$755.33	\$614.06	\$141.28	23.0%	0.9%	0.7%	25.6%	23	26	3		
SKANDINAVISKA SECURITIES	\$597.21	\$456.07	\$141.14	30.9%	0.7%	0.5%	33.7%	24	31	7		
CANADIAN IMPERIAL BANK OF COMMERCE	\$560.62	\$437.75	\$122.88	28.1%	0.7%	0.5%	30.8%	25	27	2		
TOP 25 MULTI CUSTODIANS FR ASSETS	\$66,466.48	\$60,644.95	\$5,821.53	9.6%	80.4%	71.9%	11.9%					
ALL OTHER	\$16,162.39	\$23,746.68	-\$7,584.29	-31.9%	19.6%	28.1%	-30.5%					
TOTAL MULTI CUSTODIANS FR ASSETS	\$82,628.87	\$84,391.63	-\$1,762.76	-2.1%	55.5%	58.2%	-4.6%					
NOT REPORTED	\$4,676.95	\$4,907.60	-\$230.65	-4.7%	3.1%	3.4%	-7.1%					
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$2,640.81	\$2,326.48	\$314.33	13.5%	1.8%	1.6%	10.6%					
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$7,317.76	\$7,234.09	\$83.68	1.2%	4.9%	5.0%	-1.4%					
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$58,841.04	\$53,364.27	\$5,476.77	10.3%	39.5%	36.8%	7.4%					
TOTAL FUND ASSETS	\$148,787.68	\$144,989.99	\$3,797.69	2.6%	100.0%	100.0%	0.0%					

Custodians Peer Groups – Global Multi AUC Growth & Market Share

- Custodians ranked 11-25 registered the highest AUC growth
 - o AUC increased 13.38%, or 7.41x the market
 - o Market share increased from 20.13% to 23.31%
 - ➤ An increase of 15.80%
- Custodians ranked >25 registered the lowest AUC growth
 - o AUC decreased 31.94%, or -14.29x the market
 - Market share decreased from 28.14% to 19.56%
 - A decrease of 30.49%

Peer Group Performance by Fund Assets						
Custodians	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %
Market Growth Assets	2.62%		100%	100%		
Market Growth Multi Custodians Disclosed	-2.09%	-0.80	55.53%	58.21%	-2.67%	-4.59%
Custodians Ranked 1-10	8.13%	4.89	57.12%	51.73%	5.40%	10.43%
Custodians Ranked 11-25	13.38%	7.41	23.31%	20.13%	3.18%	15.80%
All Other Custodians	-31.94%	-14.29	19.56%	28.14%	-8.58%	-30.49%
Market Growth Single Custodians Disclosed	10.26%	3.92	39.55%	36.81%	2.74%	7.45%
Market Growth Custodians Not Disclosed	1.16%	0.44	4.92%	4.99%	-0.07%	-1.43%

About Convergence

- Founded in 2013, Convergence provides independent <u>insights</u> 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 <u>insights</u> help clients grow revenue, <u>improve efficiency</u> and <u>identify and manage risks</u>.
- Our <u>clients</u> include Asset Managers, Institutional Investors and Service Providers.
- Our <u>founders</u>, 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

o 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

O 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

O 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

O 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
- o Growth is broken down in up to 9 growth factors, each which reveals a story

Client New Fund Flow Analytics (Business Development)

- o Identify new flows into client funds
- o 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/CEO email: jphinney@convergenceinc.com phone: 203-956-4824

John Phinney is Chairman and CEO of Convergence Inc. a Data as a Service (DaaS) company founded on the principals of industry transparency and risk mitigation.

John has spent his entire career working with the world's leading asset managers to increase revenues, improve efficiency and manage investment and non-investment risk. He is a proven thought leader who has designed and developed several first-ever initiatives, including being a named inventor for a patent for a Tier 1 multinational bank.

JPMorgan, Fidelity Investments, TRG Asset Management and Apollo Global Management pedigree.



George EvansPresident/Chief Revenue Officer
email: gevans@convergenceinc.com
phone: 215-704-7100

George Evans is responsible for business development and the delivery of Convergence methodology, solutions, and advisory services to Convergence clients. George has a long history of assisting firms with forward thinking, market leading and innovative techniques to capitalize on short term opportunities while staying focused on long term success.

He has over 40 years of experience in the financial services industry, primarily in the traditional asset management, hedge, private equity, banking, and insurance verticals.



Warren Master
Chief Technology Officer
email: wmaster@convergenceinc.com
phone: 201-674-9175

Warren Master is responsible for all technology research and development at Convergence. He is an accomplished technology executive and hands on technology visionary with over 40 years experience in technology with 30 years specializing in the financial services. Warren has business experience on both the buy and sell side as well as the asset servicing side of the business.

Chemical Bank, Chase Manhattan Bank, JPMorgan and TRG Asset Management pedigree.



George Gainer
Head of Client Management
email: ggainer@convergenceinc.com
phone: 203-956-4824

George's career spans buy and sell side firms including Gravitas where he was a Finance & Business Performance Analyst and Apollo [through Gravitas] where he was responsible for Business Analysis & Reporting.

Prior to Apollo, George was at Iron Mountain as an Acquisition Accounting Manager, KPMG as Transaction Services Manager, and Deloitte where he was part of Audit Senior Staff