Fund Custodians League Tables

Global Funds and AUC

Reporting Period Oct 2023 - Oct 2024



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
  - 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
  - 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+)
- Effective with the publication of our May 2024 League Tables, Convergence considers Fund Reported GAV (as reported in the Regulatory filings) for the calculation of Assets Under Custody instead of Unique GAV which de-duplicates assets for cases such as Master-Feeder Fund structures.

# Custodians League Table - Global Funds

Convergence - Oct 2024 Lo	agua Tak	les - Cust	odians_N	arket Seam	ont - Fund	Relations	hins			
All	Oct -24		23-24	23-24	Market	Market	23-24	Oct -24	Oct -23	23-24
Custodians	#FR	#FR		Change %			Change %		Rank	Change
JPMORGAN	33,023	32,007	1,016	3.2%	13.6%	13.6%	0.1%	1	1	0
BANK OF NEW YORK	17,446	16,893	553	3.3%	7.2%	7.2%	0.2%	2	2	0
STATE STREET IFS	15,656	15,690	-34	-0.2%	6.4%	6.7%	-3.2%	3	3	0
FIRST CITIZENS BANK AND TRUST	12,965	12,753	212	1.7%	5.3%	5.4%	-1.3%	4	4	0
BANK OF AMERICA	12,741	11,654	1,087	9.3%	5.2%	4.9%	6.1%	5	5	0
CITIBANK	9,165	8,957	208	2.3%	3.8%	3.8%	-0.7%	6	6	0
NORTHERN TRUST	7,225	6,704	521	7.8%	3.0%	2.8%	4.6%	7	7	0
MORGAN STANLEY	6,506	6,322	184	2.9%	2.7%	2.7%	-0.1%	8	8	0
GOLDMAN SACHS BANK USA	6,124	5,883	241	4.1%	2.5%	2.5%	1.0%	9	11	2
BNP PARIBAS	5,912	5,901	11	0.2%	2.4%	2.5%	-2.8%	10	9	-1
US BANCORP	5,663	5,712	-49	-0.9%	2.3%	2.4%	-3.8%	11	12	1
UNION BANK OF SWITZERLAND	5,388	5,890	-502	-8.5%	2.2%	2.5%	-11.2%	12	10	-2
CACEIS	5,048	4,873	175	3.6%	2.1%	2.1%	0.5%	13	13	0
HSBC FINANCIAL SERVICES	4,845	4,504	341	7.6%	2.0%	1.9%	4.4%	14	14	0
WELLS FARGO	4,608	4,497	111	2.5%	1.9%	1.9%	-0.5%	15	15	0
BROWN BROTHER HARRIMAN	2,496	2,704	-208	-7.7%	1.0%	1.1%	-10.4%	16	16	0
SOCIETE GENERALE	2,321	2,471	-150	-6.1%	1.0%	1.0%	-8.8%	17	17	0
FIDELITY	2,092	1,982	110	5.5%	0.9%	0.8%	2.4%	18	19	1
CITCO FUNDS SERVICES	1,878	1,914	-36	-1.9%	0.8%	0.8%	-4.8%	19	20	1
DEUTSCHE BANK	1,851	2,118	-267	-12.6%	0.8%	0.9%	-15.2%	20	18	-2
BARCLAYS	1,766	1,644	122	7.4%	0.7%	0.7%	4.3%	21	21	0
INTERACTIVE BROKERS	1,689	1,639	50	3.1%	0.7%	0.7%	0.0%	22	22	0
BELLTOWER FUND GROUP	1,620	121	1,499	1238.8%	0.7%	0.1%	1199.5%	23	142	119
CANADIAN IMPERIAL BANK OF COMMERCE	1,565	1,549	16	1.0%	0.6%	0.7%	-1.9%	24	23	-1
ESHARES	1,452	1,376	76	5.5%	0.6%	0.6%	2.4%	25	25	0
TOP 25 CUSTODIANS FR - ALL	171,045	165,758	5,287	3.2%	70.4%	70.3%	0.2%			
ALL OTHER	71,922	70,063	1,859	2.7%	29.6%	29.7%	-0.4%			
TOTAL CUSTODIANS FR DISCLOSED	242,967	235,821	7,146	3.0%	72.4%	72.8%	-0.5%			
NOT REPORTED	36,433	35,373	1,060	3.0%	10.9%	10.9%	-0.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	55,985	52,809	3,176	6.0%	16.7%	16.3%	2.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	92,418	88,182	4,236	4.8%	27.6%	27.2%	1.2%			
TOTAL FUNDS	335,385	324,003	11,382	3.5%	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
  - $\circ$  Funds increased 3.26%, or 1.07x the market
  - Market share increased from 52.06% to 52.17%
    - $\blacktriangleright$  An increase of 0.22%
- Custodians ranked >25 registered the lowest growth in funds
  - Funds increased 2.65%, or 0.88x the market
  - Market share decreased from 29.71% to 29.60%
    - $\blacktriangleright$  A decrease of 0.37%

Peer C	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	3.51%		100%	100%		
Market Growth Custodians Disclosed	3.03%	0.86	72.44%	72.78%	-0.34%	-0.47%
Custodians Ranked 1-10	3.26%	1.07	52.17%	52.06%	0.11%	0.22%
Custodians Ranked 11-25	3.00%	0.99	18.23%	18.23%	-0.01%	-0.03%
All Other Custodians	2.65%	0.88	29.60%	29.71%	-0.11%	-0.37%
Market Growth Custodians Not Disclosed	4.80%	1.37	27.56%	27.22%	0.34%	1.25%

### Fund Custodians League Table – Global AUC

Convergence - Oc	t 2024 I 09000	Tables - Cust	odians Marl	vet Segment	- Assots (in	• RN)				
All	Oct -24	Oct -23	23-24	23-24	- Assets (II Market	Market	23-24	Oct -24	Oct -23	23-24
Custodians	FR-AUC	FR-AUC	Change	Change %			Change %		Rank	Change
JPMORGAN	\$24,247.92	\$20,328.24	\$3,919.68	19.3%	15.1%	14.2%	6.3%	1	1	0
STATE STREET IFS	\$21,420.74	\$18,215.48	\$3,205.26	17.6%	13.3%	12.7%	4.8%	2	2	0
BANK OF NEW YORK	\$17,610.61	\$14,751.90	\$2,858.71	19.4%	11.0%	10.3%	6.4%	3	3	0
BANK OF AMERICA	\$8,853.08	\$7,699.72	\$1,153.35	15.0%	5.5%	5.4%	2.4%	4	4	0
CITIBANK	\$7,395.22	\$6,510.72	\$884.50	13.6%	4.6%	4.5%	1.2%	5	5	0
NORTHERN TRUST	\$5,767.72	\$4,470.46	\$1,297.26	29.0%	3.6%	3.1%	14.9%	6	9	3
GOLDMAN SACHS BANK USA	\$5,455.86	\$4,538.40	\$917.46	20.2%	3.4%	3.2%	7.1%	7	7	0
MORGAN STANLEY	\$5,215.07	\$4,533.33	\$681.74	15.0%	3.2%	3.2%	2.5%	8	8	0
UNION BANK OF SWITZERLAND	\$4,987.43	\$4,690.55	\$296.88	6.3%	3.1%	3.3%	-5.3%	9	6	-3
BARCLAYS	\$4,895.68	\$3,978.93	\$916.75	23.0%	3.0%	2.8%	9.6%	10	11	1
BNP PARIBAS	\$4,434.33	\$4,122.68	\$311.65	7.6%	2.8%	2.9%	-4.2%	11	10	-1
HSBC FINANCIAL SERVICES	\$3,165.75	\$2,863.82	\$301.94	10.5%	2.0%	2.0%	-1.5%	12	12	0
BROWN BROTHER HARRIMAN	\$2,756.41	\$2,295.72	\$460.70	20.1%	1.7%	1.6%	7.0%	13	16	3
WELLS FARGO	\$2,715.12	\$2,693.40	\$21.73	0.8%	1.7%	1.9%	-10.2%	14	13	-1
US BANCORP	\$2,462.85	\$2,369.45	\$93.40	3.9%	1.5%	1.7%	-7.4%	15	14	-1
FIRST CITIZENS BANK AND TRUST	\$2,167.63	\$2,073.73	\$93.90	4.5%	1.3%	1.4%	-6.9%	16	17	1
DEUTSCHE BANK	\$2,121.06	\$2,299.17	-\$178.11	-7.7%	1.3%	1.6%	-17.8%	17	15	-2
SOCIETE GENERALE	\$1,816.78	\$1,869.87	-\$53.09	-2.8%	1.1%	1.3%	-13.4%	18	18	0
CACEIS	\$1,545.62	\$1,214.89	\$330.74	27.2%	1.0%	0.8%	13.3%	19	20	1
STANDARD CHARTERED BANK	\$1,363.73	\$1,499.78	-\$136.05	-9.1%	0.8%	1.0%	-19.0%	20	19	-1
FIDELITY	\$1,278.48	\$953.48	\$325.00	34.1%	0.8%	0.7%	19.5%	21	23	2
BANK OF NOVA SCOTIA	\$1,077.87	\$1,048.31	\$29.56	2.8%	0.7%	0.7%	-8.4%	22	22	0
SKANDINAVISKA SECURITIES	\$963.43	\$866.58	\$96.85	11.2%	0.6%	0.6%	-1.0%	23	25	2
SG HAMBROS TRUST	\$908.79	\$417.33	\$491.46	117.8%	0.6%	0.3%	94.0%	24	34	10
CITCO FUNDS SERVICES	\$886.84	\$824.20	\$62.64	7.6%	0.6%	0.6%	-4.1%	25	27	2
TOP 25 CUSTODIANS FR - ALL	\$135,514.02	\$117,130.13	\$18,383.89	15.7%	84.4%	81.8%	3.1%			
ALL OTHER	\$25,117.36	\$25,977.94	-\$860.58	-3.3%	15.6%	18.2%	-13.9%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$160,631.38	\$143,108.08	\$17,523.30	12.2%	95.2%	95.1%	0.1%			
NOT REPORTED	\$4,863.46	\$4,742.46	\$121.00	2.6%	2.9%	3.2%	-8.6%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,322.01	\$2,645.86	\$676.16	25.6%	2.0%	1.8%	11.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,185.48	\$7,388.32	<b>\$797.16</b>	10.8%	4.8%	4.9%	-1.2%			
TOTAL FUND ASSETS	\$168,816.85	\$150,496.39	\$18,320.46	12.2%	100.0%	100.0%	0.0%			

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

- Custodians ranked 1-10 registered the highest AUC growth
  - AUC increased 17.98%, or 1.47x the market
  - Market share increased from 62.69% to 65.90%
    - > An increase of 5.11%
- Custodians ranked >25 registered the lowest AUC growth
  - $\circ$  AUC decreased 3.31%, or -0.27x the market
  - Market share decreased from 18.15% to 15.64%
    - $\blacktriangleright$  A decrease of 13.86%

Peer C	Group 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	12.17%		100%	100%		
Market Growth Custodians Disclosed	12.24%	1.01	95.15%	95.09%	0.06%	0.06%
Custodians Ranked 1-10	17.98%	1.47	65.90%	62.69%	3.20%	5.11%
Custodians Ranked 11-25	8.22%	0.67	18.47%	19.16%	-0.69%	-3.59%
All Other Custodians	-3.31%	-0.27	15.64%	18.15%	-2.52%	-13.86%
Market Growth Custodians Not Disclosed	10.79%	0.89	4.85%	4.91%	-0.06%	-1.23%

# Single Fund Custodians League Table – Global Funds

Convergence - Oct 2024 League Tables - Single Custodians Market Segment - Fund Relationships										
		- Single C	23-24	$\frac{15 \text{ Market Se}}{23-24}$	egment - Fo Market	Market	23-24	Oct 24	Oct -23	23-24
Single Custodians	Uct -24 #FR	Uct -23 #FR		-						
JPMORGAN			99	Change %		<b>Share-23</b>				Change
	16,613	16,514		0.6%	12.7%	12.9%	-1.3%	1	1	0
STATE STREET IFS	13,799	13,697	102	0.7%	10.5%	10.7%	-1.1%	2	2	0
BANK OF NEW YORK FIRST CITIZENS BANK AND TRUST	11,205	10,902	303	2.8%	8.6%	8.5%	0.9%	3 4	3 4	0
	5,439	6,134	-695	-11.3%	4.2%	4.8%	-13.0%	4 5	-	0
CITIBANK	4,954	5,055	-101	-2.0%	3.8%	3.9%	-3.8%	-	5	0
CACEIS	4,946	4,831	115	2.4%	3.8%	3.8%	0.5%	6 7	6	0
BNP PARIBAS	4,720	4,499	221	4.9%	3.6%	3.5%	3.0%	'	7	0
NORTHERN TRUST	4,048	3,836	212	5.5%	3.1%	3.0%	3.6%	8	8	0
US BANCORP	3,619	3,532	87	2.5%	2.8%	2.8%	0.6%	9	9	0
HSBC FINANCIAL SERVICES	3,414	3,288	126	3.8%	2.6%	2.6%	1.9%	10	11	1
UNION BANK OF SWITZERLAND	3,172	3,320	-148	-4.5%	2.4%	2.6%	-6.2%	11	10	-1
BANK OF AMERICA	3,020	2,928	92	3.1%	2.3%	2.3%	1.2%	12	12	0
BROWN BROTHER HARRIMAN	2,289	2,496	-207	-8.3%	1.7%	1.9%	-10.0%	13	13	0
BELLTOWER FUND GROUP	1,609	119	1,490	1252.1%	1.2%	0.1%	1227.2%	14	98	84
SOCIETE GENERALE	1,454	1,628	-174	-10.7%	1.1%	1.3%	-12.3%	15	14	-1
WELLS FARGO	1,333	1,443	-110	-7.6%	1.0%	1.1%	-9.3%	16	15	-1
DZ BANK	1,005	1,016	-11	-1.1%	0.8%	0.8%	-2.9%	17	17	0
CITCO FUNDS SERVICES	1,004	1,072	-68	-6.3%	0.8%	0.8%	-8.1%	18	16	-2
SKANDINAVISKA SECURITIES	906	891	15	1.7%	0.7%	0.7%	-0.2%	19	18	-1
HAUCK & AUFHAEUSER	847	840	7	0.8%	0.6%	0.7%	-1.0%	20	21	1
INTERACTIVE BROKERS	768	845	-77	-9.1%	0.6%	0.7%	-10.8%	21	20	-1
CANADIAN IMPERIAL BANK OF COMMERCE	740	673	67	10.0%	0.6%	0.5%	7.9%	22	25	3
GOLDMAN SACHS BANK USA	732	675	57	8.4%	0.6%	0.5%	6.4%	23	24	1
ROYAL BANK OF SCOTLAND	718	738	-20	-2.7%	0.5%	0.6%	-4.5%	24	22	-2
FIDELITY	710	647	63	9.7%	0.5%	0.5%	7.7%	25	27	2
TOP 25 SINGLE CUSTODIANS FR	93,064	91,619	1,445	1.6%	71.1%	71.3%	-0.3%			
ALL OTHER	37,764	36,802	962	2.6%	28.9%	28.7%	0.7%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	130,828	128,421	2,407	1.9%	39.0%	39.6%	-1.6%			
NOT REPORTED	36,433	35,373	1,060	3.0%	10.9%	10.9%	-0.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	55,985	52,809	3,176	6.0%	16.7%	16.3%	2.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	92,418	88,182	4,236	4.8%	27.6%	27.2%	1.2%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	112,139	107,400	4,739	4.4%	33.4%	33.1%	0.9%			
TOTAL FUNDS	335,385	324,003	11,382	3.5%	100.0%	100.0%	0.0%			

- Custodians ranked 11-25 registered the highest growth in funds
  - Funds increased 5.05%, or 2.69x the market
  - Market share increased from 15.05% to 15.52%
    - $\blacktriangleright$  An increase of 3.12%
- Custodians ranked 1-10 registered the lowest growth in funds
  - $\circ$  Funds increased 0.65%, or 0.35x the market
  - Market share decreased from 56.29% to 55.61%
    - $\blacktriangleright$  A decrease of 1.20%

Peer G	broup Perf	ormance 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	3.51%		100%	100%		
Market Growth Single Custodians Disclosed	1.87%	0.53	39.01%	39.64%	-0.63%	-1.58%
Custodians Ranked 1-10	0.65%	0.35	55.61%	56.29%	-0.68%	-1.20%
Custodians Ranked 11-25	5.05%	2.69	15.52%	15.05%	0.47%	3.12%
All Other Custodians	2.61%	1.39	28.87%	28.66%	0.21%	0.73%
Market Growth Multi Custodians Disclosed	4.41%	1.26	33.44%	33.15%	0.29%	0.87%
Market Growth Custodians Not Disclosed	4.80%	1.37	27.56%	27.22%	0.34%	1.25%

# Single Fund Custodians League Table – Global AUC

Convergence - Oct 2024 League Tables - Single Custodians Market Segment - Assets (in BN)										
	0	5				. /	- 22.24		0 1 00	
Single	Oct -24	Oct -23	23-24	23-24	Market	Market	23-24		Oct -23	23-24
Custodians	FR-AUC	FR-AUC	Change	Change %			Change %		Rank	Change
STATE STREET IFS	\$17,753.92	\$15,095.22	\$2,658.70	17.6%	25.9%	26.0%	-0.4%	1	1	0
JPMORGAN	\$15,134.67	\$12,622.55	\$2,512.12	19.9%	22.1%	21.7%	1.5%	2	2	0
BANK OF NEW YORK	\$10,767.60	\$8,802.84	\$1,964.76	22.3%	15.7%	15.2%	3.5%	3	3	0
NORTHERN TRUST	\$2,672.38	\$1,946.33	\$726.04	37.3%	3.9%	3.4%	16.2%	4	5	1
BROWN BROTHER HARRIMAN	\$2,621.95	\$2,164.78	\$457.17	21.1%	3.8%	3.7%	2.5%	5	4	-1
CITIBANK	\$1,938.63	\$1,705.09	\$233.54	13.7%	2.8%	2.9%	-3.8%	6	6	0
BNP PARIBAS	\$1,784.45	\$1,507.43	\$277.03	18.4%	2.6%	2.6%	0.2%	7	7	0
US BANCORP	\$1,603.37	\$1,479.46	\$123.91	8.4%	2.3%	2.5%	-8.3%	8	8	0
CACEIS	\$1,466.01	\$1,198.81	\$267.20	22.3%	2.1%	2.1%	3.5%	9	9	0
HSBC FINANCIAL SERVICES	\$1,349.45	\$1,118.69	\$230.76	20.6%	2.0%	1.9%	2.1%	10	11	1
UNION BANK OF SWITZERLAND	\$1,304.11	\$1,182.09	\$122.01	10.3%	1.9%	2.0%	-6.6%	11	10	-1
BANK OF AMERICA	\$848.89	\$835.41	\$13.48	1.6%	1.2%	1.4%	-14.0%	12	12	0
DZ BANK	\$567.87	\$499.94	\$67.94	13.6%	0.8%	0.9%	-3.9%	13	14	1
SOCIETE GENERALE	\$429.29	\$369.22	\$60.07	16.3%	0.6%	0.6%	-1.6%	14	15	1
FIRST CITIZENS BANK AND TRUST	\$377.84	\$586.36	-\$208.52	-35.6%	0.6%	1.0%	-45.5%	15	13	-2
CITCO FUNDS SERVICES	\$359.40	\$333.00	\$26.40	7.9%	0.5%	0.6%	-8.6%	16	17	1
WELLS FARGO	\$339.11	\$368.04	-\$28.93	-7.9%	0.5%	0.6%	-22.0%	17	16	-1
SKANDINAVISKA SECURITIES	\$338.85	\$268.71	\$70.14	26.1%	0.5%	0.5%	6.7%	18	18	0
PICTET CIE EUROPE	\$287.27	\$244.39	\$42.88	17.5%	0.4%	0.4%	-0.5%	19	19	0
DEKABANK	\$258.80	\$219.61	\$39.19	17.8%	0.4%	0.4%	-0.3%	20	21	1
ZÜRCHER KANTONALBANK	\$249.48	\$191.16	\$58.32	30.5%	0.4%	0.3%	10.5%	21	22	1
SWEDBANK	\$222.95	\$167.38	\$55.58	33.2%	0.3%	0.3%	12.8%	22	24	2
CECA	\$215.10	\$176.67	\$38.43	21.8%	0.3%	0.3%	3.1%	23	23	0
ROYAL BANK OF SCOTLAND	\$196.18	\$166.50	\$29.68	17.8%	0.3%	0.3%	-0.3%	24	25	1
DEUTSCHE BANK	\$151.01	\$140.05	\$10.96	7.8%	0.2%	0.2%	-8.7%	25	26	1
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$63,238.57	\$53,389.73	\$9,848.84	18.4%	92.2%	91.9%	0.3%			
ALL OTHER	\$5,363.38	\$4,678.68	\$684.70	14.6%	7.8%	8.1%	-3.0%			
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$68,601.95	\$58,068.40	\$10,533.54	18.1%	40.6%	38.6%	5.3%			
NOT REPORTED	\$4,863.46	\$4,742.46	\$121.00	2.6%	2.9%	3.2%	-8.6%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,322.01	\$2,645.86	\$676.16	25.6%	2.0%	1.8%	11.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,185.48	\$7,388.32	\$797.16	10.8%	4.8%	4.9%	-1.2%			
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$92,029.43	\$85,039.67	\$6,989.76	8.2%	54.5%	56.5%	-3.5%			
TOTAL FUND ASSETS	\$168,816.85	\$150,496.39	\$18,320.46	12.2%	100.0%	100.0%	0.0%			

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

- Custodians ranked 1-10 registered the highest AUC growth
  - AUC increased 19.84%, or 1.09x the market
  - Market share increased from 82.04% to 83.22%
    - $\blacktriangleright$  An increase of 1.44%
- Custodians ranked 11-25 registered the lowest AUC growth
  - AUC increased 6.92%, or 0.38x the market
  - Market share decreased from 9.90% to 8.96%
    - $\blacktriangleright$  A decrease of 9.50%

Peer C	Group 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	12.17%		100%	100%		
Market Growth Single Custodians Disclosed	18.14%	1.49	40.64%	38.58%	2.05%	5.32%
Custodians Ranked 1-10	19.84%	1.09	83.22%	82.04%	1.18%	1.44%
Custodians Ranked 11-25	6.92%	0.38	8.96%	9.90%	-0.94%	-9.50%
All Other Custodians	14.63%	0.81	7.82%	8.06%	-0.24%	-2.97%
Market Growth Multi Custodians Disclosed	8.22%	0.68	54.51%	56.51%	-1.99%	-3.52%
Market Growth Custodians Not Disclosed	10.79%	0.89	4.85%	4.91%	-0.06%	-1.23%

# Multi-Fund Custodians League Table – Global Funds

Convergence - Oct 2024 Leag	ue Tables	- Multi (	Custodian	ıs Market Se	egment - Fi	und Relatio	onships			
Multi		Oct -23	23-24	23-24	Market	Market	23-24	Oct -24	Oct -23	23-24
Custodians	#FR	#FR	Change	Change %	Share-24	Share-23	Change %	Rank	Rank	Change
JPMORGAN	16,410	15,493	917	5.9%	14.6%	14.4%	1.4%	1	1	0
BANK OF AMERICA	9,721	8,726	995	11.4%	8.7%	8.1%	6.7%	2	2	0
FIRST CITIZENS BANK AND TRUST	7,526	6,619	907	13.7%	6.7%	6.2%	8.9%	3	3	0
BANK OF NEW YORK	6,241	5,991	250	4.2%	5.6%	5.6%	-0.2%	4	4	0
MORGAN STANLEY	5,863	5,667	196	3.5%	5.2%	5.3%	-0.9%	5	5	0
GOLDMAN SACHS BANK USA	5,392	5,208	184	3.5%	4.8%	4.8%	-0.8%	6	6	0
CITIBANK	4,211	3,902	309	7.9%	3.8%	3.6%	3.4%	7	7	0
WELLS FARGO	3,275	3,054	221	7.2%	2.9%	2.8%	2.7%	8	8	0
NORTHERN TRUST	3,177	2,868	309	10.8%	2.8%	2.7%	6.1%	9	9	0
UNION BANK OF SWITZERLAND	2,216	2,570	-354	-13.8%	2.0%	2.4%	-17.4%	10	10	0
US BANCORP	2,044	2,180	-136	-6.2%	1.8%	2.0%	-10.2%	11	11	0
STATE STREET IFS	1,857	1,993	-136	-6.8%	1.7%	1.9%	-10.8%	12	12	0
BARCLAYS	1,559	1,454	105	7.2%	1.4%	1.4%	2.7%	13	13	0
HSBC FINANCIAL SERVICES	1,431	1,216	215	17.7%	1.3%	1.1%	12.7%	14	17	3
FIDELITY	1,382	1,335	47	3.5%	1.2%	1.2%	-0.9%	15	16	1
ESHARES	1,221	1,156	65	5.6%	1.1%	1.1%	1.2%	16	18	2
BNP PARIBAS	1,192	1,402	-210	-15.0%	1.1%	1.3%	-18.6%	17	14	-3
DEUTSCHE BANK	1,180	1,397	-217	-15.5%	1.1%	1.3%	-19.1%	18	15	-3
RAYMOND JAMES ASSOCIATES	1,103	1,110	-7	-0.6%	1.0%	1.0%	-4.8%	19	19	0
INTERACTIVE BROKERS	921	794	127	16.0%	0.8%	0.7%	11.1%	20	24	4
CITCO FUNDS SERVICES	874	842	32	3.8%	0.8%	0.8%	-0.6%	21	22	1
SOCIETE GENERALE	867	843	24	2.8%	0.8%	0.8%	-1.5%	22	21	-1
BANK OF MONTREAL	848	639	209	32.7%	0.8%	0.6%	27.1%	23	26	3
CANADIAN IMPERIAL BANK OF COMMERCE	825	876	-51	-5.8%	0.7%	0.8%	-9.8%	24	20	-4
COINBASE	814	680	134	19.7%	0.7%	0.6%	14.6%	25	25	0
TOP 25 MULTI CUSTODIANS FR	82,150	78,015	4,135	5.3%	73.3%	72.6%	0.9%			
ALL OTHER	29,989	29,385	604	2.1%	26.7%	27.4%	-2.3%			
TOTAL MULTI CUSTODIANS FR	112,139	107,400	4,739	4.4%	33.4%	33.1%	0.9%			
NOT REPORTED	36,433	35,373	1,060	3.0%	10.9%	10.9%	-0.5%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	55,985	52,809	3,176	6.0%	16.7%	16.3%	2.4%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	92,418	88,182	4,236	4.8%	27.6%	27.2%	1.2%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	130,828	128,421	2,407	1.9%	39.0%	39.6%	-1.6%			
TOTAL FUNDS	335,385	324,003	11,382	3.5%	100.0%	100.0%	0.0%			

- Custodians ranked 1-10 registered the highest growth in funds
  - Funds increased 6.55%, or 1.48x the market
  - Market share increased from 55.96% to 57.10%
    - $\blacktriangleright$  An increase of 2.04%
- Custodians ranked 11-25 registered the smallest growth in funds
  - $\circ$  Funds increased 1.12%, or 0.25x the market
  - Market share decreased from 16.68% to 16.16%
    - $\blacktriangleright$  A decrease of 3.15%

Peer G	roup 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	3.51%		100%	100%		
Market Growth Multi Custodians Disclosed	4.41%	1.26	33.44%	33.15%	0.29%	0.87%
Custodians Ranked 1-10	6.55%	1.48	57.10%	55.96%	1.14%	2.04%
Custodians Ranked 11-25	1.12%	0.25	16.16%	16.68%	-0.53%	-3.15%
All Other Custodians	2.06%	0.47	26.74%	27.36%	-0.62%	-2.26%
Market Growth Single Custodians Disclosed	1.87%	0.53	39.01%	39.64%	-0.63%	-1.58%
Market Growth Custodians Not Disclosed	4.80%	1.37	27.56%	27.22%	0.34%	1.25%

# Multi-Fund Custodians League Table – Global AUC

Convergence - Oct 20	)24 League Ta	hles - Multi C	'ustodians M	arket Seam	ent - Assets	(in RN)				
Multi	Oct -24	Oct -23	23-24	23-24	Market	Market	23-24	Oct -24	Oct -23	23-24
Custodians	FR-AUC	FR-AUC	Change	Change %			Change %		Rank	Change
JPMORGAN	\$9,113.26	\$7,705.70	\$1,407.56	18.3%	9.9%	9.1%	9.3%	1	1	0
BANK OF AMERICA	\$8,004.18	\$6,864.31	\$1,139.87	16.6%	8.7%	8.1%	7.7%	2	2	0
BANK OF NEW YORK	\$6,843.01	\$5,949.06	\$893.95	15.0%	7.4%	7.0%	6.3%	3	3	0
CITIBANK	\$5,456.59	\$4,805.63	\$650.96	13.5%	5.9%	5.7%	4.9%	4	4	0
GOLDMAN SACHS BANK USA	\$5,346.29	\$4,445.93	\$900.35	20.3%	5.8%	5.2%	11.1%	5	5	0
MORGAN STANLEY	\$5,152.61	\$4,468.46	\$684.16	15.3%	5.6%	5.3%	6.6%	6	6	0
BARCLAYS	\$4,814.47	\$3,936.53	\$877.94	22.3%	5.2%	4.6%	13.0%	7	7	0
UNION BANK OF SWITZERLAND	\$3,683.32	\$3,508.46	\$174.86	5.0%	4.0%	4.1%	-3.0%	8	8	0
STATE STREET IFS	\$3,666.82	\$3,120.26	\$546.56	17.5%	4.0%	3.7%	8.6%	9	9	0
NORTHERN TRUST	\$3,095.34	\$2,524.13	\$571.22	22.6%	3.4%	3.0%	13.3%	10	10	0
BNP PARIBAS	\$2,649.87	\$2,615.25	\$34.62	1.3%	2.9%	3.1%	-6.4%	11	11	0
WELLS FARGO	\$2,376.01	\$2,325.36	\$50.66	2.2%	2.6%	2.7%	-5.6%	12	12	0
DEUTSCHE BANK	\$1,970.05	\$2,159.12	-\$189.06	-8.8%	2.1%	2.5%	-15.7%	13	13	0
HSBC FINANCIAL SERVICES	\$1,816.30	\$1,745.13	\$71.18	4.1%	2.0%	2.1%	-3.8%	14	17	3
FIRST CITIZENS BANK AND TRUST	\$1,789.79	\$1,487.37	\$302.42	20.3%	1.9%	1.7%	11.2%	15	16	1
SOCIETE GENERALE	\$1,387.49	\$1,500.65	-\$113.16	-7.5%	1.5%	1.8%	-14.6%	16	18	2
STANDARD CHARTERED BANK	\$1,347.81	\$1,484.43	-\$136.62	-9.2%	1.5%	1.7%	-16.1%	17	14	-3
FIDELITY	\$1,250.62	\$928.72	\$321.90	34.7%	1.4%	1.1%	24.4%	18	15	-3
BANK OF NOVA SCOTIA	\$1,067.65	\$1,036.28	\$31.37	3.0%	1.2%	1.2%	-4.8%	19	19	0
SG HAMBROS TRUST	\$908.66	\$417.16	\$491.49	117.8%	1.0%	0.5%	101.3%	20	24	4
US BANCORP	\$859.48	\$889.99	-\$30.51	-3.4%	0.9%	1.0%	-10.8%	21	22	1
SUMITOMO	\$656.89	\$537.52	\$119.37	22.2%	0.7%	0.6%	12.9%	22	21	-1
BANK OF MONTREAL	\$637.21	\$530.96	\$106.25	20.0%	0.7%	0.6%	10.9%	23	26	3
SKANDINAVISKA SECURITIES	\$624.58	\$597.87	\$26.71	4.5%	0.7%	0.7%	-3.5%	24	20	-4
COMPUTERSHARE	\$611.32	\$870.96	-\$259.64	-29.8%	0.7%	1.0%	-35.1%	25	25	0
TOP 25 MULTI CUSTODIANS FR ASSETS	\$75,129.63	\$66,455.23	\$8,674.40	13.1%	81.6%	78.1%	4.5%			
ALL OTHER	\$16,899.80	\$18,584.44	-\$1,684.64	-9.1%	18.4%	21.9%	-16.0%			
TOTAL MULTI CUSTODIANS FR ASSETS	\$92,029.43	\$85,039.67	\$6,989.76	8.2%	54.5%	56.5%	-3.5%			
NOT REPORTED	\$4,863.46	\$4,742.46	\$121.00	2.6%	2.9%	3.2%	-8.6%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,322.01	\$2,645.86	\$676.16	25.6%	2.0%	1.8%	11.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,185.48	\$7,388.32	<b>\$797.16</b>	10.8%	4.8%	4.9%	-1.2%			
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$68,601.95	\$58,068.40	\$10,533.54	18.1%	40.6%	38.6%	5.3%			
TOTAL FUND ASSETS		\$150,496.39	\$18,320.46	12.2%	100.0%	100.0%	0.0%			
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### Custodians Peer Groups – Global Multi AUC Growth & Market Share

- Custodians ranked 1-10 registered the highest AUC growth
  - AUC increased 16.58%, or 2.02x the market
  - Market share increased from 55.65% to 59.95%
    - $\blacktriangleright$  An increase of 7.73%
- Custodians ranked >25 registered the lowest AUC growth
  - AUC decreased 9.06%, or -1.10x the market
  - Market share decreased from 21.85% to 18.36%
    - $\blacktriangleright$  A decrease of 15.97%

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	12.17%		100%	100%		
Market Growth Multi Custodians Disclosed	8.22%	0.68	54.51%	56.51%	-1.99%	-3.52%
Custodians Ranked 1-10	16.58%	2.02	59.95%	55.65%	4.30%	7.73%
Custodians Ranked 11-25	4.32%	0.53	21.68%	22.49%	-0.81%	-3.60%
All Other Custodians	-9.06%	-1.10	18.36%	21.85%	-3.49%	-15.97%
Market Growth Single Custodians Disclosed	18.14%	1.49	40.64%	38.58%	2.05%	5.32%
Market Growth Custodians Not Disclosed	10.79%	0.89	4.85%	4.91%	-0.06%	-1.23%

### 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.

#### 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.

#### • 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/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 firstever 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 Evans President/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: <u>wmaster@convergenceinc.com</u> 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.