Fund Custodians
League Tables

Global Funds and AUC

Reporting Period Aug 2023 - Aug 2024



Table of Contents – Custodians

Slide Description	Page#
About this Report Top 25 Fund Custodians League Tables – Global Funds Fund Custodians Peer Groups – Global Fund Growth and Market Share Top 25 Fund Custodians League Tables – Global AUC Custodians Peer Groups – Global AUC Growth & Market Share	3 4 5 6 7
Top 25 Fund Custodians League Tables – Global Single Funds Fund Custodians Peer Groups – Global Single Fund Growth and Market Share Top 25 Fund Custodians League Tables – Global Single AUC Custodians Peer Groups – Global Single AUC Growth & Market Share	8 9 10 11
Top 25 Fund Custodians League Tables – Global Multi Funds Fund Custodians Peer Groups – Global Multi Fund Growth and Market Share Top 25 Fund Custodians League Tables – Global Multi AUC Custodians Peer Groups – Global Multi AUC Growth & Market Share	12 13 14 15
About Convergence Additional Analytics available for Fund Custodians Terms used in Our League Tables Additional Analytics available for the Custodians Segment Disclaimer Convergence Leadership Team	16 17 18 19 20 21

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
 - Non-pooled investment entities
- This report includes all US and non-US funds and is divided into 3-Section
 - o 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+)
- 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 - Aug 2024 League Tables - Custodians Market Segment - Fund Relationships												
All		Aug -23		23-24	Market	Market	23-24	Aug -24	Aug -23	23-24		
Custodians	#FR	#FR		Change %			Change %		Rank	Change		
JPMORGAN	32,863	31,943	920	2.9%	13.6%	13.6%	-0.2%	1	1	0		
BANK OF NEW YORK	17,389	16,741	648	3.9%	7.2%	7.1%	0.8%	2	2	0		
STATE STREET IFS	15,664	15,691	-27	-0.2%	6.5%	6.7%	-3.1%	3	3	0		
FIRST CITIZENS BANK AND TRUST	12,875	12,794	81	0.6%	5.3%	5.4%	-2.4%	4	4	0		
BANK OF AMERICA	12,734	11,614	1,120	9.6%	5.3%	4.9%	6.4%	5	5	0		
CITIBANK	9,173	8,935	238	2.7%	3.8%	3.8%	-0.4%	6	6	0		
NORTHERN TRUST	7,201	6,706	495	7.4%	3.0%	2.9%	4.2%	7	7	0		
MORGAN STANLEY	6,474	6,315	159	2.5%	2.7%	2.7%	-0.5%	8	8	0		
GOLDMAN SACHS BANK USA	6,083	5,892	191	3.2%	2.5%	2.5%	0.2%	9	10	1		
BNP PARIBAS	5,895	5,634	261	4.6%	2.4%	2.4%	1.5%	10	12	2		
US BANCORP	5,670	5,687	-17	-0.3%	2.3%	2.4%	-3.3%	11	11	0		
UNION BANK OF SWITZERLAND	5,387	5,955	-568	-9.5%	2.2%	2.5%	-12.2%	12	9	-3		
CACEIS	5,042	4,774	268	5.6%	2.1%	2.0%	2.5%	13	13	0		
HSBC FINANCIAL SERVICES	4,848	4,312	536	12.4%	2.0%	1.8%	9.1%	14	15	1		
WELLS FARGO	4,600	4,487	113	2.5%	1.9%	1.9%	-0.5%	15	14	-1		
BROWN BROTHER HARRIMAN	2,507	2,771	-264	-9.5%	1.0%	1.2%	-12.2%	16	16	0		
SOCIETE GENERALE	2,325	2,493	-168	-6.7%	1.0%	1.1%	-9.5%	17	17	0		
FIDELITY	2,070	1,965	105	5.3%	0.9%	0.8%	2.2%	18	19	1		
DEUTSCHE BANK	1,859	2,117	-258	-12.2%	0.8%	0.9%	-14.8%	19	18	-1		
CITCO FUNDS SERVICES	1,856	1,896	-40	-2.1%	0.8%	0.8%	-5.0%	20	20	0		
BARCLAYS	1,762	1,638	124	7.6%	0.7%	0.7%	4.4%	21	21	0		
INTERACTIVE BROKERS	1,658	1,617	41	2.5%	0.7%	0.7%	-0.5%	22	22	0		
BELLTOWER FUND GROUP	1,599	103	1,496	1452.4%	0.7%	0.0%	1406.4%	23	146	123		
CANADIAN IMPERIAL BANK OF COMMERCE	1,540	1,521	19	1.2%	0.6%	0.6%	-1.8%	24	24	0		
ESHARES	1,449	1,361	88	6.5%	0.6%	0.6%	3.3%	25	25	0		
TOP 25 CUSTODIANS FR - ALL	170,523	164,962	5,561	3.4%	70.4%	70.2%	0.3%					
ALL OTHER	71,622	69,997	1,625	2.3%	29.6%	29.8%	-0.7%					
TOTAL CUSTODIANS FR DISCLOSED	242,145	234,959	7,186	3.1%	72.8%	73.1%	-0.4%					
NOT REPORTED	36,133	34,728	1,405	4.0%	10.9%	10.8%	0.6%					
ELIGIBLE FUNDS - NOT ATTRIBUTED	54,232	51,659	2,573	5.0%	16.3%	16.1%	1.5%					
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	90,365	86,387	3,978	4.6%	27.2%	26.9%	1.1%					
TOTAL FUNDS	332,510	321,346	11,164	3.5%	100.0%	100.0%	0.0%					

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

- Custodians ranked 11-25 registered the highest growth in funds
 - o Funds increased 3.45%, or 1.13x the market
 - o Market share increased from 18.17% to 18.24%
 - ➤ An increase of 0.38%
- Custodians ranked >25 registered the lowest growth in funds
 - o Funds increased 2.32%, or 0.76x the market
 - Market share decreased from 29.79% to 29.58%
 - ➤ A decrease of 0.72%

Peer (Froup 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	3.47%		100%	100%		
Market Growth Custodians Disclosed	3.06%	0.88	72.82%	73.12%	-0.29%	-0.40%
Custodians Ranked 1-10	3.34%	1.09	52.18%	52.04%	0.14%	0.28%
Custodians Ranked 11-25	3.45%	1.13	18.24%	18.17%	0.07%	0.38%
All Other Custodians	2.32%	0.76	29.58%	29.79%	-0.21%	-0.72%
Market Growth Custodians Not Disclosed	4.60%	1.33	27.18%	26.88%	0.29%	1.09%

Fund Custodians League Table – Global AUC

	Convergence - Aug 2024 League Tables - Custodians Market Segment - Assets (in BN)											
						-						
All	Aug -24	Aug -23	23-24	23-24	Market	Market	23-24		Aug -23			
Custodians	FR-AUC	FR-AUC	Change				Change %	Rank	Rank	Change		
JPMORGAN	\$23,684.45	\$20,555.08	\$3,129.37	15.2%	15.0%	14.3%	5.3%	1	1	0		
STATE STREET IFS	\$20,810.49	\$18,231.01	\$2,579.48	14.1%	13.2%	12.7%	4.4%	2	2	0		
BANK OF NEW YORK	\$17,215.58	\$14,704.93	\$2,510.65	17.1%	10.9%	10.2%	7.0%	3	3	0		
BANK OF AMERICA	\$8,822.50	\$7,689.26	\$1,133.24	14.7%	5.6%	5.3%	4.9%	4	4	0		
CITIBANK	\$7,144.80	\$6,425.39	\$719.41	11.2%	4.5%	4.5%	1.7%	5	5	0		
NORTHERN TRUST	\$5,646.74	\$4,692.12	\$954.62	20.3%	3.6%	3.3%	10.0%	6	7	1		
GOLDMAN SACHS BANK USA	\$5,426.59	\$4,540.95	\$885.65	19.5%	3.4%	3.2%	9.3%	7	8	1		
MORGAN STANLEY	\$5,185.81	\$4,536.20	\$649.62	14.3%	3.3%	3.1%	4.5%	8	9	1		
UNION BANK OF SWITZERLAND	\$4,905.41	\$4,777.77	\$127.64	2.7%	3.1%	3.3%	-6.1%	9	6	-3		
BARCLAYS	\$4,873.33	\$3,964.35	\$908.98	22.9%	3.1%	2.8%	12.4%	10	11	1		
BNP PARIBAS	\$4,359.87	\$4,176.76	\$183.11	4.4%	2.8%	2.9%	-4.6%	11	10	-1		
HSBC FINANCIAL SERVICES	\$3,068.78	\$2,855.21	\$213.57	7.5%	1.9%	2.0%	-1.7%	12	12	0		
WELLS FARGO	\$2,703.78	\$2,695.28	\$8.50	0.3%	1.7%	1.9%	-8.3%	13	13	0		
BROWN BROTHER HARRIMAN	\$2,652.72	\$2,430.06	\$222.66	9.2%	1.7%	1.7%	-0.2%	14	14	0		
US BANCORP	\$2,444.58	\$2,386.18	\$58.41	2.4%	1.6%	1.7%	-6.3%	15	15	0		
FIRST CITIZENS BANK AND TRUST	\$2,147.30	\$2,130.76	\$16.54	0.8%	1.4%	1.5%	-7.9%	16	17	1		
DEUTSCHE BANK	\$2,107.05	\$2,294.36	-\$187.31	-8.2%	1.3%	1.6%	-16.0%	17	16	-1		
SOCIETE GENERALE	\$1,784.65	\$1,887.72	-\$103.07	-5.5%	1.1%	1.3%	-13.6%	18	18	0		
CACEIS	\$1,488.47	\$1,284.48	\$203.99	15.9%	0.9%	0.9%	5.9%	19	20	1		
STANDARD CHARTERED BANK	\$1,357.73	\$1,485.84	-\$128.11	-8.6%	0.9%	1.0%	-16.5%	20	19	-1		
FIDELITY	\$1,276.15	\$953.14	\$323.00	33.9%	0.8%	0.7%	22.4%	21	23	2		
BANK OF NOVA SCOTIA	\$1,067.65	\$1,042.53	\$25.13	2.4%	0.7%	0.7%	-6.4%	22	22	0		
SKANDINAVISKA SECURITIES	\$945.95	\$880.20	\$65.75	7.5%	0.6%	0.6%	-1.7%	23	25	2		
SG HAMBROS TRUST	\$892.13	\$411.99	\$480.14	116.5%	0.6%	0.3%	98.0%	24	34	10		
CITCO FUNDS SERVICES	\$876.84	\$821.33	\$55.51	6.8%	0.6%	0.6%	-2.4%	25	27	2		
TOP 25 CUSTODIANS FR - ALL	\$132,889.36	\$117,852.90	\$15,036.46	12.8%	84.4%	81.8%	3.1%					
ALL OTHER	\$24,647.31	\$26,180.76	-\$1,533.45	-5.9%	15.6%	18.2%	-13.9%					
TOTAL CUSTODIANS FR AUC DISCLOSED	\$157,536.67	\$144,033.66	\$13,503.01	9.4%	95.1%	95.1%	0.0%					
NOT REPORTED	\$4,865.04	\$4,791.19	\$73.85	1.5%	2.9%	3.2%	-7.1%					
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,167.30	\$2,620.49	\$546.81	20.9%	1.9%	1.7%	10.6%					
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,032.34	\$7,411.68	\$620.66	8.4%	4.9%	4.9%	-0.9%					

100.0%

100.0%

0.0%

9.3%

\$165,569.01 \$151,445.34 \$14,123.67

TOTAL FUND ASSETS

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

- Custodians ranked 1-10 registered the highest AUC growth
 - o AUC increased 15.09%, or 1.61x the market
 - o Market share increased from 62.57% to 65.84%
 - ➤ An increase of 5.23%
- Custodians ranked >25 registered the lowest AUC growth
 - o AUC decreased 5.86%, or -0.62x the market
 - o Market share decreased from 18.18% to 15.65%
 - A decrease of 13.93%

Peer (Group Perform	ance by Fund	Assets								
Custodians											
Peer Group Analysis	Growth	vs-MKT	2024	2023	Change	Change %					
Market Growth Assets	9.33%		100%	100%							
Market Growth Custodians Disclosed	9.37%	1.01	95.15%	95.11%	0.04%	0.04%					
Custodians Ranked 1-10	15.09%	1.61	65.84%	62.57%	3.27%	5.23%					
Custodians Ranked 11-25	5.18%	0.55	18.52%	19.26%	-0.74%	-3.83%					
All Other Custodians	-5.86%	-0.62	15.65%	18.18%	-2.53%	-13.93%					
Market Growth Custodians Not Disclosed	8.37%	0.90	4.85%	4.89%	-0.04%	-0.87%					

Single Fund Custodians League Table – Global Funds

Convergence - Aug 2024 League Tables - Single Custodians Market Segment - Fund Relationships												
Single		Aug -23		23-24	Market	Market	23-24	Aug -24	Aug -23	23-24		
Custodians	#FR	#FR		Change %	Share-24	Share-23	Change %	_	Rank	Change		
JPMORGAN	16,539	16,599	-60	-0.4%	12.7%	13.0%	-2.3%	1	1	0		
STATE STREET IFS	13,814	13,685	129	0.9%	10.6%	10.7%	-1.0%	2	2	0		
BANK OF NEW YORK	11,179	10,875	304	2.8%	8.6%	8.5%	0.8%	3	3	0		
FIRST CITIZENS BANK AND TRUST	5,414	6,182	-768	-12.4%	4.1%	4.8%	-14.1%	4	4	0		
CITIBANK	4,988	5,060	-72	-1.4%	3.8%	3.9%	-3.4%	5	5	0		
CACEIS	4,941	4,732	209	4.4%	3.8%	3.7%	2.4%	6	6	0		
BNP PARIBAS	4,708	4,228	480	11.4%	3.6%	3.3%	9.2%	7	7	0		
NORTHERN TRUST	4,048	3,850	198	5.1%	3.1%	3.0%	3.1%	8	8	0		
US BANCORP	3,631	3,525	106	3.0%	2.8%	2.8%	1.0%	9	9	0		
HSBC FINANCIAL SERVICES	3,420	3,099	321	10.4%	2.6%	2.4%	8.2%	10	11	1		
UNION BANK OF SWITZERLAND	3,183	3,383	-200	-5.9%	2.4%	2.6%	-7.8%	11	10	-1		
BANK OF AMERICA	3,010	2,922	88	3.0%	2.3%	2.3%	1.0%	12	12	0		
BROWN BROTHER HARRIMAN	2,304	2,551	-247	-9.7%	1.8%	2.0%	-11.5%	13	13	0		
BELLTOWER FUND GROUP	1,587	101	1,486	1471.3%	1.2%	0.1%	1440.5%	14	108	94		
SOCIETE GENERALE	1,462	1,653	-191	-11.6%	1.1%	1.3%	-13.3%	15	14	-1		
WELLS FARGO	1,342	1,443	-101	-7.0%	1.0%	1.1%	-8.8%	16	15	-1		
DZ BANK	1,016	1,018	-2	-0.2%	0.8%	0.8%	-2.1%	17	17	0		
CITCO FUNDS SERVICES	996	1,056	-60	-5.7%	0.8%	0.8%	-7.5%	18	16	-2		
SKANDINAVISKA SECURITIES	902	891	11	1.2%	0.7%	0.7%	-0.7%	19	19	0		
HAUCK & AUFHAEUSER	845	842	3	0.4%	0.6%	0.7%	-1.6%	20	20	0		
INTERACTIVE BROKERS	768	833	-65	-7.8%	0.6%	0.7%	-9.6%	21	21	0		
GOLDMAN SACHS BANK USA	724	672	52	7.7%	0.6%	0.5%	5.6%	22	24	2		
ROYAL BANK OF SCOTLAND	721	748	-27	-3.6%	0.6%	0.6%	-5.5%	23	22	-1		
CANADIAN IMPERIAL BANK OF COMMERCE	720	650	70	10.8%	0.6%	0.5%	8.6%	24	25	1		
FIDELITY	708	636	72	11.3%	0.5%	0.5%	9.1%	25	28	3		
TOP 25 SINGLE CUSTODIANS FR	92,970	91,234	1,736	1.9%	71.1%	71.2%	-0.1%					
ALL OTHER	37,723	36,901	822	2.2%	28.9%	28.8%	0.2%					
TOTAL SINGLE CUSTODIANS FR DISCLOSED	130,693	128,135	2,558	2.0%	39.3%	39.9%	-1.4%					
NOT REPORTED	36,133	34,728	1,405	4.0%	10.9%	10.8%	0.6%					
ELIGIBLE FUNDS - NOT ATTRIBUTED	54,232	51,659	2,573	5.0%	16.3%	16.1%	1.5%					
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	90,365	86,387	3,978	4.6%	27.2%	26.9%	1.1%					
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	111,452	106,824	4,628	4.3%	33.5%	33.2%	0.8%					
TOTAL FUNDS	332,510	321,346	11,164	3.5%	100.0%	100.0%	0.0%					

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

- Custodians ranked 11-25 registered the highest growth in funds
 - o Funds increased 4.58%, or 2.30x the market
 - o Market share increased from 15.14% to 15.52%
 - ➤ An increase of 2.54%
- Custodians ranked 1-10 registered the lowest growth in funds
 - o Funds increased 1.18%, or 0.59x the market
 - Market share decreased from 56.06% to 55.61%
 - ➤ A decrease of 0.80%

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	3.47%		100%	100%		
Market Growth Single Custodians Disclosed	2.00%	0.57	39.30%	39.87%	-0.57%	-1.43%
Custodians Ranked 1-10	1.18%	0.59	55.61%	56.06%	-0.45%	-0.80%
Custodians Ranked 11-25	4.58%	2.30	15.52%	15.14%	0.38%	2.54%
All Other Custodians	2.23%	1.12	28.86%	28.80%	0.07%	0.23%
Market Growth Multi Custodians Disclosed	4.33%	1.25	33.52%	33.24%	0.28%	0.83%
Market Growth Custodians Not Disclosed	4.60%	1.33	27.18%	26.88%	0.29%	1.09%

Single Fund Custodians League Table – Global AUC

Convergence - Aug 2024 League Tables - Single Custodians Market Segment - Assets (in BN)												
Single	Aug -24	Aug -23	23-24	23-24	Market	Market	23-24	Aug -24	Aug -23	23-24		
Custodians	FR-AUC	FR-AUC	Change	Change %	Share-24	Share-23	Change %	Rank	Rank	Change		
STATE STREET IFS	\$17,161.63	\$15,109.90	\$2,051.73	13.6%	25.9%	25.5%	1.6%	1	1	0		
JPMORGAN	\$14,608.91	\$12,867.01	\$1,741.90	13.5%	22.1%	21.7%	1.5%	2	2	0		
BANK OF NEW YORK	\$10,412.23	\$8,832.62	\$1,579.60	17.9%	15.7%	14.9%	5.4%	3	3	0		
NORTHERN TRUST	\$2,568.01	\$2,186.77	\$381.23	17.4%	3.9%	3.7%	5.0%	4	5	1		
BROWN BROTHER HARRIMAN	\$2,518.94	\$2,298.15	\$220.79	9.6%	3.8%	3.9%	-2.0%	5	4	-1		
BNP PARIBAS	\$1,729.59	\$1,574.76	\$154.82	9.8%	2.6%	2.7%	-1.8%	6	7	1		
CITIBANK	\$1,726.45	\$1,634.98	\$91.47	5.6%	2.6%	2.8%	-5.6%	7	6	-1		
US BANCORP	\$1,583.53	\$1,501.67	\$81.86	5.5%	2.4%	2.5%	-5.7%	8	8	0		
CACEIS	\$1,408.93	\$1,268.41	\$140.52	11.1%	2.1%	2.1%	-0.7%	9	9	0		
HSBC FINANCIAL SERVICES	\$1,279.38	\$1,110.58	\$168.80	15.2%	1.9%	1.9%	3.0%	10	11	1		
UNION BANK OF SWITZERLAND	\$1,251.02	\$1,264.94	-\$13.92	-1.1%	1.9%	2.1%	-11.6%	11	10	-1		
BANK OF AMERICA	\$845.97	\$833.28	\$12.69	1.5%	1.3%	1.4%	-9.2%	12	12	0		
DZ BANK	\$552.21	\$526.82	\$25.38	4.8%	0.8%	0.9%	-6.3%	13	14	1		
SOCIETE GENERALE	\$414.21	\$386.64	\$27.57	7.1%	0.6%	0.7%	-4.2%	14	15	1		
FIRST CITIZENS BANK AND TRUST	\$375.43	\$599.46	-\$224.04	-37.4%	0.6%	1.0%	-44.0%	15	13	-2		
CITCO FUNDS SERVICES	\$354.91	\$332.32	\$22.59	6.8%	0.5%	0.6%	-4.5%	16	17	1		
WELLS FARGO	\$338.86	\$367.46	-\$28.60	-7.8%	0.5%	0.6%	-17.5%	17	16	-1		
SKANDINAVISKA SECURITIES	\$321.37	\$282.62	\$38.75	13.7%	0.5%	0.5%	1.7%	18	18	0		
PICTET CIE EUROPE	\$276.82	\$264.79	\$12.03	4.5%	0.4%	0.4%	-6.5%	19	19	0		
DEKABANK	\$247.62	\$234.45	\$13.17	5.6%	0.4%	0.4%	-5.6%	20	21	1		
ZÜRCHER KANTONALBANK	\$233.30	\$199.01	\$34.29	17.2%	0.4%	0.3%	4.8%	21	22	1		
SWEDBANK	\$210.90	\$183.34	\$27.55	15.0%	0.3%	0.3%	2.9%	22	24	2		
CECA	\$204.68	\$185.49	\$19.18	10.3%	0.3%	0.3%	-1.3%	23	23	0		
ROYAL BANK OF SCOTLAND	\$196.38	\$173.05	\$23.33	13.5%	0.3%	0.3%	1.5%	24	25	1		
DEUTSCHE BANK	\$151.82	\$143.54	\$8.28	5.8%	0.2%	0.2%	-5.4%	25	26	1		
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$60,973.08	\$54,362.07	\$6,611.01	12.2%	92.0%	91.8%	0.3%					
ALL OTHER	\$5,278.11	\$4,883.55	\$394.56	8.1%	8.0%	8.2%	-3.3%					
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$66,251.19	\$59,245.62	\$7,005.57	11.8%	40.0%	39.1%	2.3%					
NOT REPORTED	\$4,865.04	\$4,791.19	\$73.85	1.5%	2.9%	3.2%	-7.1%					
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,167.30	\$2,620.49	\$546.81	20.9%	1.9%	1.7%	10.6%					
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,032.34	\$7,411.68	\$620.66	8.4%	4.9%	4.9%	-0.9%					
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$91,285.48	\$84,788.04	\$6,497.44	7.7%	55.1%	56.0%	-1.5%					
TOTAL FUND ASSETS	\$165,569.01	\$151,445.34	\$14,123.67	9.3%	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 13.67%, or 1.16x the market
 - Market share increased from 81.67% to 83.01%
 - ➤ An increase of 1.65%
- Custodians ranked 11-25 registered the lowest AUC growth
 - o AUC decreased 0.03%, or 0.00x the market
 - Market share decreased from 10.09% to 9.02%
 - A decrease of 10.60%

Peer G	roup 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	9.33%		100%	100%		
Market Growth Single Custodians Disclosed	11.82%	1.27	40.01%	39.12%	0.89%	2.29%
Custodians Ranked 1-10	13.67%	1.16	83.01%	81.67%	1.35%	1.65%
Custodians Ranked 11-25	-0.03%	0.00	9.02%	10.09%	-1.07%	-10.60%
All Other Custodians	8.08%	0.68	7.97%	8.24%	-0.28%	-3.35%
Market Growth Multi Custodians Disclosed	7.66%	0.82	55.13%	55.99%	-0.85%	-1.52%
Market Growth Custodians Not Disclosed	8.37%	0.90	4.85%	4.89%	-0.04%	-0.87%

Multi-Fund Custodians League Table – Global Funds

Convergence - Aug 2024 League Tables - Multi Custodians Market Segment - Fund Relationships											
Multi	Aug -24	Aug -23	23-24	23-24	Market	Market	23-24	Aug -24	Aug -23	23-24	
Custodians	#FR	#FR	Change	Change %	Share-24	Share-23	Change %	Rank	Rank	Change	
JPMORGAN	16,324	15,344	980	6.4%	14.6%	14.4%	2.0%	1	1	0	
BANK OF AMERICA	9,724	8,692	1,032	11.9%	8.7%	8.1%	7.2%	2	2	0	
FIRST CITIZENS BANK AND TRUST	7,461	6,612	849	12.8%	6.7%	6.2%	8.2%	3	3	0	
BANK OF NEW YORK	6,210	5,866	344	5.9%	5.6%	5.5%	1.5%	4	4	0	
MORGAN STANLEY	5,823	5,668	155	2.7%	5.2%	5.3%	-1.5%	5	5	0	
GOLDMAN SACHS BANK USA	5,359	5,220	139	2.7%	4.8%	4.9%	-1.6%	6	6	0	
CITIBANK	4,185	3,875	310	8.0%	3.8%	3.6%	3.5%	7	7	0	
WELLS FARGO	3,258	3,044	214	7.0%	2.9%	2.8%	2.6%	8	8	0	
NORTHERN TRUST	3,153	2,856	297	10.4%	2.8%	2.7%	5.8%	9	9	0	
UNION BANK OF SWITZERLAND	2,204	2,572	-368	-14.3%	2.0%	2.4%	-17.9%	10	10	0	
US BANCORP	2,039	2,162	-123	-5.7%	1.8%	2.0%	-9.6%	11	11	0	
STATE STREET IFS	1,850	2,006	-156	-7.8%	1.7%	1.9%	-11.6%	12	12	0	
BARCLAYS	1,559	1,450	109	7.5%	1.4%	1.4%	3.1%	13	13	0	
HSBC FINANCIAL SERVICES	1,428	1,213	215	17.7%	1.3%	1.1%	12.8%	14	17	3	
FIDELITY	1,362	1,329	33	2.5%	1.2%	1.2%	-1.8%	15	16	1	
ESHARES	1,216	1,145	71	6.2%	1.1%	1.1%	1.8%	16	18	2	
BNP PARIBAS	1,187	1,406	-219	-15.6%	1.1%	1.3%	-19.1%	17	14	-3	
DEUTSCHE BANK	1,180	1,396	-216	-15.5%	1.1%	1.3%	-19.0%	18	15	-3	
RAYMOND JAMES ASSOCIATES	1,081	1,086	-5	-0.5%	1.0%	1.0%	-4.6%	19	19	0	
INTERACTIVE BROKERS	890	784	106	13.5%	0.8%	0.7%	8.8%	20	23	3	
SOCIETE GENERALE	863	840	23	2.7%	0.8%	0.8%	-1.5%	21	21	0	
CITCO FUNDS SERVICES	860	840	20	2.4%	0.8%	0.8%	-1.9%	22	21	-1	
BANK OF MONTREAL	849	623	226	36.3%	0.8%	0.6%	30.6%	23	25	2	
CANADIAN IMPERIAL BANK OF COMMERCE	820	871	-51	-5.9%	0.7%	0.8%	-9.8%	24	20	-4	
COMPUTERSHARE	810	831	-21	-2.5%	0.7%	0.8%	-6.6%	25	22	-3	
TOP 25 MULTI CUSTODIANS FR	81,695	77,731	3,964	5.1%	73.3%	72.8%	0.7%				
ALL OTHER	29,757	29,093	664	2.3%	26.7%	27.2%	-2.0%				
TOTAL MULTI CUSTODIANS FR	111,452	106,824	4,628	4.3%	33.5%	33.2%	0.8%				
NOT REPORTED	36,133	34,728	1,405	4.0%	10.9%	10.8%	0.6%				
ELIGIBLE FUNDS - NOT ATTRIBUTED	54,232	51,659	2,573	5.0%	16.3%	16.1%	1.5%				
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	90,365	86,387	3,978	4.6%	27.2%	26.9%	1.1%				
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	130,693	128,135	2,558	2.0%	39.3%	39.9%	-1.4%				
TOTAL FUNDS	332,510	321,346	11,164	3.5%	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 6.61%, or 1.53x the market
 - o Market share increased from 55.93% to 57.16%
 - ➤ An increase of 2.19%
- Custodians ranked 11-25 registered the smallest growth in funds
 - o Funds increased 0.07%, or 0.02x the market
 - Market share decreased from 16.83% to 16.15%
 - ➤ A decrease of 4.09%

Peer (Froup 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	3.47%		100%	100%		
Market Growth Multi Custodians Disclosed	4.33%	1.25	33.52%	33.24%	0.28%	0.83%
Custodians Ranked 1-10	6.61%	1.53	57.16%	55.93%	1.22%	2.19%
Custodians Ranked 11-25	0.07%	0.02	16.15%	16.83%	-0.69%	-4.09%
All Other Custodians	2.28%	0.53	26.70%	27.23%	-0.54%	-1.96%
Market Growth Single Custodians Disclosed	2.00%	0.57	39.30%	39.87%	-0.57%	-1.43%
Market Growth Custodians Not Disclosed	4.60%	1.33	27.18%	26.88%	0.29%	1.09%

Multi-Fund Custodians League Table – Global AUC

Convergence - Aug 2	Convergence - Aug 2024 League Tables - Multi Custodians Market Segment - Assets (in BN)												
Multi	Aug -24	Aug -23	23-24	23-24	Market	Market	23-24	Aug -24	Aug -23	23-24			
Custodians	FR-AUC	FR-AUC	Change	Change %	Share-24	Share-23	Change %	_	Rank	Change			
JPMORGAN	\$9,075.53	\$7,688.07	\$1,387.46	18.0%	9.9%	9.1%	9.6%	1	1	0			
BANK OF AMERICA	\$7,976.53	\$6,855.98	\$1,120.55	16.3%	8.7%	8.1%	8.1%	2	2	0			
BANK OF NEW YORK	\$6,803.35	\$5,872.31	\$931.04	15.9%	7.5%	6.9%	7.6%	3	3	0			
CITIBANK	\$5,418.35	\$4,790.41	\$627.94	13.1%	5.9%	5.6%	5.1%	4	4	0			
GOLDMAN SACHS BANK USA	\$5,317.39	\$4,448.07	\$869.31	19.5%	5.8%	5.2%	11.0%	5	5	0			
MORGAN STANLEY	\$5,122.99	\$4,471.30	\$651.69	14.6%	5.6%	5.3%	6.4%	6	6	0			
BARCLAYS	\$4,792.31	\$3,922.04	\$870.27	22.2%	5.2%	4.6%	13.5%	7	7	0			
UNION BANK OF SWITZERLAND	\$3,654.40	\$3,512.83	\$141.57	4.0%	4.0%	4.1%	-3.4%	8	8	0			
STATE STREET IFS	\$3,648.86	\$3,121.11	\$527.75	16.9%	4.0%	3.7%	8.6%	9	9	0			
NORTHERN TRUST	\$3,078.74	\$2,505.35	\$573.39	22.9%	3.4%	3.0%	14.1%	10	10	0			
BNP PARIBAS	\$2,630.29	\$2,602.00	\$28.29	1.1%	2.9%	3.1%	-6.1%	11	11	0			
WELLS FARGO	\$2,364.92	\$2,327.82	\$37.10	1.6%	2.6%	2.7%	-5.6%	12	12	0			
DEUTSCHE BANK	\$1,955.23	\$2,150.82	-\$195.59	-9.1%	2.1%	2.5%	-15.6%	13	13	0			
HSBC FINANCIAL SERVICES	\$1,789.40	\$1,744.63	\$44.77	2.6%	2.0%	2.1%	-4.7%	14	17	3			
FIRST CITIZENS BANK AND TRUST	\$1,771.87	\$1,531.30	\$240.57	15.7%	1.9%	1.8%	7.5%	15	16	1			
SOCIETE GENERALE	\$1,370.44	\$1,501.07	-\$130.64	-8.7%	1.5%	1.8%	-15.2%	16	18	2			
STANDARD CHARTERED BANK	\$1,342.22	\$1,471.48	-\$129.26	-8.8%	1.5%	1.7%	-15.3%	17	14	-3			
FIDELITY	\$1,248.76	\$928.61	\$320.14	34.5%	1.4%	1.1%	24.9%	18	15	-3			
BANK OF NOVA SCOTIA	\$1,057.43	\$1,030.49	\$26.94	2.6%	1.2%	1.2%	-4.7%	19	19	0			
SG HAMBROS TRUST	\$892.00	\$411.82	\$480.18	116.6%	1.0%	0.5%	101.2%	20	23	3			
US BANCORP	\$861.05	\$884.51	-\$23.46	-2.7%	0.9%	1.0%	-9.6%	21	21	0			
SUMITOMO	\$641.02	\$537.61	\$103.42	19.2%	0.7%	0.6%	10.7%	22	21	-1			
BANK OF MONTREAL	\$627.30	\$520.96	\$106.34	20.4%	0.7%	0.6%	11.8%	23	25	2			
SKANDINAVISKA SECURITIES	\$624.59	\$597.59	\$27.00	4.5%	0.7%	0.7%	-2.9%	24	20	-4			
COMPUTERSHARE	\$612.58	\$866.80	-\$254.22	-29.3%	0.7%	1.0%	-34.4%	25	22	-3			
TOP 25 MULTI CUSTODIANS FR ASSETS	\$74,677.55	\$66,295.00	\$8,382.56	12.6%	81.8%	78.2%	4.6%						
ALL OTHER	\$16,607.93	\$18,493.05	-\$1,885.12	-10.2%	18.2%	21.8%	-16.6%						
TOTAL MULTI CUSTODIANS FR ASSETS	\$91,285.48	\$84,788.04	\$6,497.44	7.7%	55.1%	56.0%	-1.5%						
NOT REPORTED	\$4,865.04	\$4,791.19	\$73.85	1.5%	2.9%	3.2%	-7.1%						
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,167.30	\$2,620.49	\$546.81	20.9%	1.9%	1.7%	10.6%						
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,032.34	\$7,411.68	\$620.66	8.4%	4.9%	4.9%	-0.9%						
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$66,251.19	\$59,245.62	\$7,005.57	11.8%	40.0%	39.1%	2.3%						
TOTAL FUND ASSETS	\$165,569.01	\$151,445.34	\$14,123.67	9.3%	100.0%	100.0%	0.0%						

Custodians Peer Groups – Global Multi AUC Growth & Market Share

- Custodians ranked 1-10 registered the highest AUC growth
 - o AUC increased 16.32%, or 2.13x the market
 - o Market share increased from 55.65% to 60.13%
 - ➤ An increase of 8.04%
- Custodians ranked >25 registered the lowest AUC growth
 - o AUC decreased 10.19%, or -1.33x the market
 - Market share decreased from 21.81% to 18.19%
 - A decrease of 16.59%

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	9.33%		100%	100%		
Market Growth Multi Custodians Disclosed	7.66%	0.82	55.13%	55.99%	-0.85%	-1.52%
Custodians Ranked 1-10	16.32%	2.13	60.13%	55.65%	4.47%	8.04%
Custodians Ranked 11-25	3.57%	0.47	21.68%	22.54%	-0.86%	-3.80%
All Other Custodians	-10.19%	-1.33	18.19%	21.81%	-3.62%	-16.59%
Market Growth Single Custodians Disclosed	11.82%	1.27	40.01%	39.12%	0.89%	2.29%
Market Growth Custodians Not Disclosed	8.37%	0.90	4.85%	4.89%	-0.04%	-0.87%

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.

Disclaimer

The contents of this report are for informational and educational purposes only. This report is made available for the public good and the insights and comments contained herein (the "information") are based on data obtained on the relevant subject from regulatory filings and other third-party sources, unless otherwise specified. While Convergence takes steps to verify the accuracy and completeness of the information used, it makes no representation or warranty as to the accuracy of the underlying data we source.

This report does not constitute, nor should it be used to form, an opinion on the subject party's control environment. In addition, recipients are not to construe this report as legal, financial or tax advice.

This report is not part of, nor should it be construed as, any offer for sale or subscription of, or any invitation to offer to buy or subscribe for, any securities, nor should it, nor any part of it, form the basis of, or be relied on in any connection with, any contract or commitment whatsoever. Convergence expressly disclaims any and all responsibility for any direct or consequential loss or damage of any kind whatsoever arising directly or indirectly from: (i) the use of this report, (ii) reliance on any information contained herein, (iii) any error, omission or inaccuracy in any information contained herein or (iv) any action resulting from the information contained herein.

This report, and the insights, terms, marks and methods described herein, represents the intellectual property of Convergence and its recipient may not use or re-use any of its contents for commercial purposes and may not reproduce it, nor send it to any affiliate or third-party, without the written permission of Convergence.

Convergence, in its sole discretion, reserves the right to update and/or modify this Report, and the data contained therein, at any time when we receive, discover or add new information about the subject Manager and SEC action without future obligations. CONVERGENCE WARRANTS THAT THIS REPORT IS BASED ON CONVERGENCE'S REASONABLE EFFORTS TO COMPILE AND ANALYZE THE BEST SOURCES REASONABLY AVAILABLE TO CONVERGENCE AT ANY GIVEN TIME AND, THAT ANY OPINIONS REFLECT CONVERGENCE'S JUDGMENT AT THE TIME AND ARE SUBJECT TO CHANGE. THE FOREGOING WARRANTY IS IN LIEU OF ALL WARRANTIES, EXPRESS, OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND WARRANTIES AS TO ACCURACY, COMPLETENESS, OR ADEQUACY OF INFORMATION.

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