

Fund Custodians
League Tables

Global Funds and AUC

Reporting Period
Apr 2022 - Apr 2023



CONVERGENCE
OPTIMAL PERFORMANCE

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About this League Table Report

- Our League Tables leverage the most comprehensive database of active funds and advisers in the market. Convergence is the only firm to have a complete set of advisers and funds including:
 - SEC registered private and public funds and advisers
 - State registered private and public funds and advisers
 - Unregistered private funds and advisers
 - EU UCITS and private funds
 - Non-pooled investment entities
- This report includes all US and non-US funds and is divided into 3-Section
 - Funds that use one or more custodians
 - Funds that use a “single” custodians
 - Funds that use “multiple” custodians
- Additional Fund custodians League Tables for custodians Funds and AUC are available to Convergence Clients in the following cuts:
 - Private Funds, and within private funds, in the following sub-cuts
 - Hedge, Private Equity, Real Estate, Venture Capital, Securitized Assets, Hybrid and Liquidity Funds
 - Public Funds and within public funds, in the following sub-cuts
 - By fund strategy (30+)

Custodians League Table - Global Funds

Convergence - Apr 2023 League Tables - Custodians Market Segment - Fund Relationships										
All Custodians	Apr -23 #FR	Apr -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Apr -23 Rank	Apr -22 Rank	23-22 Change
JPMORGAN	18,603	16,651	1,952	11.7%	8.1%	7.9%	1.9%	1	1	0
BANK OF NEW YORK	16,632	15,289	1,343	8.8%	7.2%	7.3%	-0.8%	2	2	0
STATE STREET IFS	14,760	13,891	869	6.3%	6.4%	6.6%	-3.1%	3	3	0
FIRST REPUBLIC BANK	14,298	9,680	4,618	47.7%	6.2%	4.6%	34.7%	4	6	2
FIRST CITIZENS BANK AND TRUST	12,371	13,539	-1,168	-8.6%	5.4%	6.4%	-16.7%	5	4	-1
BANK OF AMERICA	11,500	10,396	1,104	10.6%	5.0%	5.0%	0.9%	6	5	-1
CITIBANK	8,775	7,964	811	10.2%	3.8%	3.8%	0.5%	7	7	0
NORTHERN TRUST	6,584	6,162	422	6.8%	2.9%	2.9%	-2.6%	8	8	0
MORGAN STANLEY	6,185	5,805	380	6.5%	2.7%	2.8%	-2.9%	9	9	0
GOLDMAN SACHS BANK USA	5,792	5,497	295	5.4%	2.5%	2.6%	-3.9%	10	10	0
BNP PARIBAS	5,657	4,935	722	14.6%	2.5%	2.4%	4.5%	11	12	1
US BANCORP	5,629	5,108	521	10.2%	2.4%	2.4%	0.5%	12	11	-1
WELLS FARGO	4,443	4,337	106	2.4%	1.9%	2.1%	-6.6%	13	13	0
HSBC FINANCIAL SERVICES	3,920	3,539	381	10.8%	1.7%	1.7%	1.0%	14	14	0
CACEIS	3,836	2,603	1,233	47.4%	1.7%	1.2%	34.4%	15	17	2
UNION BANK OF SWITZERLAND	3,016	3,049	-33	-1.1%	1.3%	1.5%	-9.8%	16	16	0
CREDIT SUISSE	2,643	3,239	-596	-18.4%	1.1%	1.5%	-25.6%	17	15	-2
BROWN BROTHER HARRIMAN	2,501	2,472	29	1.2%	1.1%	1.2%	-7.8%	18	18	0
ROYAL BANK OF CANADA	2,451	2,216	235	10.6%	1.1%	1.1%	0.8%	19	19	0
SOCIETE GENERALE	2,437	1,974	463	23.5%	1.1%	0.9%	12.6%	20	21	1
DEUTSCHE BANK	2,037	2,025	12	0.6%	0.9%	1.0%	-8.3%	21	20	-1
FIDELITY	1,925	1,807	118	6.5%	0.8%	0.9%	-2.9%	22	22	0
CITCO FUNDS SERVICES	1,709	1,584	125	7.9%	0.7%	0.8%	-1.6%	23	23	0
INTERACTIVE BROKERS	1,586	1,478	108	7.3%	0.7%	0.7%	-2.2%	24	24	0
BARCLAYS	1,548	1,381	167	12.1%	0.7%	0.7%	2.2%	25	26	1
TOP 25 CUSTODIANS FR - ALL	160,838	146,621	14,217	9.7%	69.8%	69.8%	0.0%			
ALL OTHER	69,459	63,358	6,101	9.6%	30.2%	30.2%	0.0%			
TOTAL CUSTODIANS FR DISCLOSED	230,297	209,979	20,318	9.7%	71.3%	72.5%	-1.6%			
NOT REPORTED	34,046	31,623	2,423	7.7%	10.5%	10.9%	-3.4%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	58,510	48,010	10,500	21.9%	18.1%	16.6%	9.3%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	92,556	79,633	12,923	16.2%	28.7%	27.5%	4.3%			
TOTAL FUNDS	322,853	289,612	33,241	11.5%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 10.13%, or 1.05x the market
 - Market share increased from 49.94% to 50.15%
 - An increase of 0.42%
- Custodians ranked 11-25 registered the lowest growth in funds
 - Funds increased 8.60%, or 0.89x the market
 - Market share decreased from 19.88% to 19.69%
 - A decrease of 0.98%

Peer Group Performance by Fund Relationships						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Funds	11.48%		100%	100%		
Market Growth Custodians Disclosed	9.68%	0.84	71.33%	72.50%	-1.17%	-1.62%
Custodians Ranked 1-10	10.13%	1.05	50.15%	49.94%	0.21%	0.42%
Custodians Ranked 11-25	8.60%	0.89	19.69%	19.88%	-0.19%	-0.98%
All Other Custodians	9.63%	1.00	30.16%	30.17%	-0.01%	-0.04%
Market Growth Custodians Not Disclosed	16.23%	1.41	28.67%	27.50%	1.17%	4.26%

Fund Custodians League Table – Global AUC

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

All Custodians	Apr -23 FR-AUC	Apr -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Apr -23 Rank	Apr -22 Rank	23-22 Change
JPMORGAN	\$18,253.39	\$18,920.87	-\$667.48	-3.5%	12.9%	13.3%	-3.0%	1	1	0
STATE STREET IFS	\$16,800.56	\$17,536.86	-\$736.30	-4.2%	11.8%	12.3%	-3.7%	2	2	0
BANK OF NEW YORK	\$14,564.50	\$14,631.70	-\$67.20	-0.5%	10.3%	10.3%	0.0%	3	3	0
BANK OF AMERICA	\$7,585.85	\$7,916.75	-\$330.91	-4.2%	5.3%	5.6%	-3.7%	4	4	0
CITIBANK	\$6,386.08	\$5,838.72	\$547.36	9.4%	4.5%	4.1%	9.9%	5	5	0
NORTHERN TRUST	\$4,547.94	\$4,818.76	-\$270.83	-5.6%	3.2%	3.4%	-5.1%	6	7	1
MORGAN STANLEY	\$4,528.44	\$4,887.71	-\$359.26	-7.4%	3.2%	3.4%	-6.9%	7	6	-1
GOLDMAN SACHS BANK USA	\$4,521.00	\$4,488.48	\$32.53	0.7%	3.2%	3.1%	1.2%	8	8	0
BNP PARIBAS	\$4,125.77	\$3,698.99	\$426.78	11.5%	2.9%	2.6%	12.1%	9	10	1
BARCLAYS	\$3,818.53	\$4,296.56	-\$478.03	-11.1%	2.7%	3.0%	-10.7%	10	9	-1
UNION BANK OF SWITZERLAND	\$3,607.64	\$3,679.81	-\$72.17	-2.0%	2.5%	2.6%	-1.5%	11	11	0
WELLS FARGO	\$2,647.15	\$2,767.08	-\$119.93	-4.3%	1.9%	1.9%	-3.9%	12	13	1
HSBC FINANCIAL SERVICES	\$2,633.71	\$2,613.93	\$19.78	0.8%	1.9%	1.8%	1.3%	13	15	2
CREDIT SUISSE	\$2,565.19	\$3,453.21	-\$888.03	-25.7%	1.8%	2.4%	-25.3%	14	12	-2
US BANCORP	\$2,456.37	\$2,312.94	\$143.43	6.2%	1.7%	1.6%	6.7%	15	17	2
DEUTSCHE BANK	\$2,259.71	\$2,157.37	\$102.34	4.7%	1.6%	1.5%	5.3%	16	18	2
FIRST CITIZENS BANK AND TRUST	\$2,235.46	\$2,314.14	-\$78.68	-3.4%	1.6%	1.6%	-2.9%	17	16	-1
BROWN BROTHER HARRIMAN	\$2,198.10	\$2,630.12	-\$432.01	-16.4%	1.5%	1.8%	-16.0%	18	14	-4
FIRST REPUBLIC BANK	\$1,888.97	\$1,804.85	\$84.12	4.7%	1.3%	1.3%	5.2%	19	19	0
SOCIETE GENERALE	\$1,857.40	\$1,719.70	\$137.70	8.0%	1.3%	1.2%	8.6%	20	20	0
STANDARD CHARTERED BANK	\$1,578.53	\$1,491.04	\$87.49	5.9%	1.1%	1.0%	6.4%	21	21	0
ROYAL BANK OF CANADA	\$1,171.06	\$1,072.63	\$98.44	9.2%	0.8%	0.8%	9.7%	22	23	1
CACEIS	\$1,106.74	\$738.62	\$368.12	49.8%	0.8%	0.5%	50.6%	23	27	4
BANK OF NOVA SCOTIA	\$1,036.23	\$886.52	\$149.70	16.9%	0.7%	0.6%	17.5%	24	24	0
FIDELITY	\$953.24	\$1,156.58	-\$203.34	-17.6%	0.7%	0.8%	-17.2%	25	22	-3
TOP 25 CUSTODIANS FR - ALL	\$115,327.55	\$117,833.93	-\$2,506.38	-2.1%	81.3%	82.6%	-1.6%			
ALL OTHER	\$26,568.62	\$24,779.24	\$1,789.38	7.2%	18.7%	17.4%	7.8%			
TOTAL CUSTODIANS FR AUC DISCLOSED	\$141,896.18	\$142,613.17	-\$717.00	-0.5%	94.4%	93.9%	0.5%			
NOT REPORTED	\$4,860.74	\$4,676.47	\$184.27	3.9%	3.2%	3.1%	5.0%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,583.73	\$4,518.43	-\$934.70	-20.7%	2.4%	3.0%	-19.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,444.46	\$9,194.90	-\$750.43	-8.2%	5.6%	6.1%	-7.3%			
TOTAL FUND ASSETS	\$150,340.64	\$151,808.07	-\$1,467.43	-1.0%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUC growth
 - AUC increased 7.22%, or 14.44x the market
 - Market share increased from 17.38% to 18.72%
 - An increase of 7.76%
- Custodians ranked 1-10 registered the lowest AUC growth
 - AUC decreased 2.19%, or -4.37x the market
 - Market share decreased from 61.03% to 60.00%
 - A decrease of 1.69%

Peer Group Performance by Fund Assets						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Assets	-0.97%		100%	100%		
Market Growth Custodians Disclosed	-0.50%	-0.52	94.38%	93.94%	0.44%	0.47%
Custodians Ranked 1-10	-2.19%	-4.37	60.00%	61.03%	-1.03%	-1.69%
Custodians Ranked 11-25	-1.96%	-3.92	21.28%	21.60%	-0.32%	-1.46%
All Other Custodians	7.22%	14.44	18.72%	17.38%	1.35%	7.76%
Market Growth Custodians Not Disclosed	-8.16%	-8.41	5.62%	6.06%	-0.44%	-7.27%

Single Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Single Custodians Market Segment - Fund Relationships

Single Custodians	Apr -23 #FR	Apr -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Apr -23 Rank	Apr -22 Rank	23-22 Change
STATE STREET IFS	12,762	12,037	725	6.0%	10.3%	10.5%	-2.2%	1	1	0
BANK OF NEW YORK	10,748	10,013	735	7.3%	8.7%	8.8%	-1.0%	2	2	0
JPMORGAN	10,331	9,488	843	8.9%	8.3%	8.3%	0.5%	3	3	0
FIRST REPUBLIC BANK	6,267	5,243	1,024	19.5%	5.1%	4.6%	10.3%	4	5	1
FIRST CITIZENS BANK AND TRUST	6,252	6,046	206	3.4%	5.0%	5.3%	-4.6%	5	4	-1
CITIBANK	4,984	4,526	458	10.1%	4.0%	4.0%	1.6%	6	6	0
BNP PARIBAS	4,288	3,572	716	20.0%	3.5%	3.1%	10.7%	7	7	0
CACEIS	3,813	2,577	1,236	48.0%	3.1%	2.3%	36.5%	8	11	3
NORTHERN TRUST	3,761	3,566	195	5.5%	3.0%	3.1%	-2.7%	9	8	-1
US BANCORP	3,492	3,260	232	7.1%	2.8%	2.9%	-1.2%	10	9	-1
BANK OF AMERICA	2,847	2,896	-49	-1.7%	2.3%	2.5%	-9.3%	11	10	-1
HSBC FINANCIAL SERVICES	2,703	2,426	277	11.4%	2.2%	2.1%	2.8%	12	12	0
BROWN BROTHER HARRIMAN	2,280	2,272	8	0.4%	1.8%	2.0%	-7.4%	13	13	0
ROYAL BANK OF CANADA	1,830	1,870	-40	-2.1%	1.5%	1.6%	-9.7%	14	14	0
CREDIT SUISSE	1,698	1,707	-9	-0.5%	1.4%	1.5%	-8.2%	15	15	0
SOCIETE GENERALE	1,626	1,246	380	30.5%	1.3%	1.1%	20.4%	16	17	1
WELLS FARGO	1,430	1,384	46	3.3%	1.2%	1.2%	-4.7%	17	16	-1
UNION BANK OF SWITZERLAND	1,079	1,049	30	2.9%	0.9%	0.9%	-5.1%	18	18	0
DZ BANK	1,023	951	72	7.6%	0.8%	0.8%	-0.8%	19	19	0
CITCO FUNDS SERVICES	908	841	67	8.0%	0.7%	0.7%	-0.4%	20	20	0
SKANDINAVISKA SECURITIES	870	834	36	4.3%	0.7%	0.7%	-3.8%	21	21	0
INTERACTIVE BROKERS	812	769	43	5.6%	0.7%	0.7%	-2.6%	22	23	1
ROYAL BANK OF SCOTLAND	736	787	-51	-6.5%	0.6%	0.7%	-13.7%	23	22	-1
HAUCK & AUFHAEUSER	699	545	154	28.3%	0.6%	0.5%	18.3%	24	32	8
DEUTSCHE BANK	675	631	44	7.0%	0.5%	0.6%	-1.3%	25	27	2
TOP 25 SINGLE CUSTODIANS FR	87,914	80,536	7,378	9.2%	71.0%	70.5%	0.7%			
ALL OTHER	35,979	33,761	2,218	6.6%	29.0%	29.5%	-1.7%			
TOTAL SINGLE CUSTODIANS FR DISCLOSED	123,893	114,297	9,596	8.4%	38.4%	39.5%	-2.8%			
NOT REPORTED	34,046	31,623	2,423	7.7%	10.5%	10.9%	-3.4%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	58,510	48,010	10,500	21.9%	18.1%	16.6%	9.3%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	92,556	79,633	12,923	16.2%	28.7%	27.5%	4.3%			
TOTAL FUNDS WITH MULTI-CUSTODIANS FR	106,404	95,682	10,722	11.2%	33.0%	33.0%	-0.2%			
TOTAL FUNDS	322,853	289,612	33,241	11.5%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked 1-10 registered the highest growth in funds
 - Funds increased 10.56%, or 1.26x the market
 - Market share increased from 52.78% to 53.84%
 - An increase of 2.00%
- Custodians ranked 11-25 registered the lowest growth in funds
 - Funds increased 4.99%, or 0.59x the market
 - Market share decreased from 17.68% to 17.12%
 - A decrease of 3.14%

Peer Group Performance by Fund Relationships						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Funds	11.48%		100%	100%		
Market Growth Single Custodians Disclosed	8.40%	0.73	38.37%	39.47%	-1.09%	-2.76%
Custodians Ranked 1-10	10.56%	1.26	53.84%	52.78%	1.05%	2.00%
Custodians Ranked 11-25	4.99%	0.59	17.12%	17.68%	-0.56%	-3.14%
All Other Custodians	6.57%	0.78	29.04%	29.54%	-0.50%	-1.68%
Market Growth Multi Custodians Disclosed	11.21%	0.98	32.96%	33.04%	-0.08%	-0.24%
Market Growth Custodians Not Disclosed	16.23%	1.41	28.67%	27.50%	1.17%	4.26%

Single Fund Custodians League Table – Global AUC

Convergence - Apr 2023 League Tables - Single Custodians Market Segment - Assets (in BN)										
Single Custodians	Apr -23 FR-AUC	Apr -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Apr -23 Rank	Apr -22 Rank	23-22 Change
STATE STREET IFS	\$13,708.22	\$14,497.06	-\$788.84	-5.4%	24.9%	25.7%	-3.0%	1	1	0
JPMORGAN	\$11,538.93	\$12,285.53	-\$746.59	-6.1%	21.0%	21.8%	-3.6%	2	2	0
BANK OF NEW YORK	\$8,679.75	\$8,515.57	\$164.18	1.9%	15.8%	15.1%	4.6%	3	3	0
BROWN BROTHER HARRIMAN	\$2,064.82	\$2,493.68	-\$428.86	-17.2%	3.8%	4.4%	-15.0%	4	4	0
NORTHERN TRUST	\$2,051.29	\$2,275.55	-\$224.26	-9.9%	3.7%	4.0%	-7.5%	5	5	0
CITIBANK	\$1,636.30	\$1,383.68	\$252.62	18.3%	3.0%	2.5%	21.4%	6	7	1
BNP PARIBAS	\$1,519.19	\$1,269.54	\$249.65	19.7%	2.8%	2.2%	22.8%	7	8	1
US BANCORP	\$1,446.60	\$1,445.78	\$0.82	0.1%	2.6%	2.6%	2.7%	8	6	-2
CACEIS	\$1,065.54	\$732.69	\$332.85	45.4%	1.9%	1.3%	49.2%	9	12	3
HSBC FINANCIAL SERVICES	\$914.97	\$940.24	-\$25.27	-2.7%	1.7%	1.7%	-0.1%	10	9	-1
BANK OF AMERICA	\$781.76	\$899.58	-\$117.82	-13.1%	1.4%	1.6%	-10.8%	11	10	-1
FIRST CITIZENS BANK AND TRUST	\$629.43	\$737.91	-\$108.48	-14.7%	1.1%	1.3%	-12.5%	12	11	-1
CREDIT SUISSE	\$621.78	\$659.13	-\$37.35	-5.7%	1.1%	1.2%	-3.2%	13	13	0
DZ BANK	\$507.72	\$399.41	\$108.31	27.1%	0.9%	0.7%	30.4%	14	17	3
FIRST REPUBLIC BANK	\$455.78	\$446.05	\$9.73	2.2%	0.8%	0.8%	4.9%	15	15	0
UNION BANK OF SWITZERLAND	\$443.06	\$490.66	-\$47.60	-9.7%	0.8%	0.9%	-7.3%	16	14	-2
SOCIETE GENERALE	\$370.14	\$307.69	\$62.45	20.3%	0.7%	0.5%	23.4%	17	20	3
ROYAL BANK OF CANADA	\$353.28	\$420.90	-\$67.62	-16.1%	0.6%	0.7%	-13.9%	18	16	-2
WELLS FARGO	\$327.04	\$322.78	\$4.26	1.3%	0.6%	0.6%	4.0%	19	18	-1
SKANDINAVISKA SECURITIES	\$268.45	\$316.93	-\$48.48	-15.3%	0.5%	0.6%	-13.1%	20	19	-1
PICTET CIE EUROPE	\$250.16	\$252.99	-\$2.82	-1.1%	0.5%	0.4%	1.5%	21	21	0
CITCO FUNDS SERVICES	\$233.49	\$247.90	-\$14.41	-5.8%	0.4%	0.4%	-3.3%	22	22	0
DEKABANK	\$223.58	\$113.16	\$110.42	97.6%	0.4%	0.2%	102.7%	23	30	7
ZÜRCHER KANTONALBANK	\$181.09	\$169.53	\$11.56	6.8%	0.3%	0.3%	9.6%	24	24	0
SWEDBANK	\$177.21	\$181.72	-\$4.51	-2.5%	0.3%	0.3%	0.1%	25	23	-2
TOP 25 SINGLE CUSTODIANS FR ASSETS	\$50,449.58	\$51,805.63	-\$1,356.05	-2.6%	91.7%	91.8%	-0.1%			
ALL OTHER	\$4,574.32	\$4,657.70	-\$83.37	-1.8%	8.3%	8.2%	0.8%			
TOTAL SINGLE CUSTODIANS FR ASSETS DISCLOSED	\$55,023.90	\$56,463.33	-\$1,439.43	-2.5%	36.6%	37.2%	-1.6%			
NOT REPORTED	\$4,860.74	\$4,676.47	\$184.27	3.9%	3.2%	3.1%	5.0%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,583.73	\$4,518.43	-\$934.70	-20.7%	2.4%	3.0%	-19.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,444.46	\$9,194.90	-\$750.43	-8.2%	5.6%	6.1%	-7.3%			
TOTAL ASSETS WITH MULTI-CUSTODIANS FR	\$86,872.27	\$86,149.84	\$722.43	0.8%	57.8%	56.7%	1.8%			
TOTAL FUND ASSETS	\$150,340.64	\$151,808.07	-\$1,467.43	-1.0%	100.0%	100.0%	0.0%			

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

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUC growth
 - AUC decreased 1.79%, or -0.70x the market
 - Market share increased from 8.25% to 8.31%
 - An increase of 0.78%
- Custodians ranked 1-10 registered the lowest AUC growth
 - AUC decreased 2.65%, or -1.04x the market
 - Market share decreased from 81.18% to 81.10%
 - A decrease of 0.10%

Peer Group Performance by Fund Assets						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Assets	-0.97%		100%	100%		
Market Growth Single Custodians Disclosed	-2.55%	-2.63	36.60%	37.19%	-0.59%	-1.60%
Custodians Ranked 1-10	-2.65%	-1.04	81.10%	81.18%	-0.08%	-0.10%
Custodians Ranked 11-25	-2.39%	-0.94	10.58%	10.57%	0.02%	0.17%
All Other Custodians	-1.79%	-0.70	8.31%	8.25%	0.06%	0.78%
Market Growth Multi Custodians Disclosed	0.84%	0.86	57.78%	56.75%	1.03%	1.82%
Market Growth Custodians Not Disclosed	-8.16%	-8.41	5.62%	6.06%	-0.44%	-7.27%

Multi-Fund Custodians League Table – Global Funds

Convergence - 2023 League Tables - Multi Custodians Market Segment - Fund Relationships										
Multi Custodians	Apr -23 #FR	Apr -22 #FR	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Apr -23 Rank	Apr -22 Rank	23-22 Change
BANK OF AMERICA	8,653	7,500	1,153	15.4%	8.1%	7.8%	3.7%	1	1	0
JPMORGAN	8,272	7,163	1,109	15.5%	7.8%	7.5%	3.8%	2	3	1
FIRST REPUBLIC BANK	8,031	4,437	3,594	81.0%	7.5%	4.6%	62.8%	3	7	4
FIRST CITIZENS BANK AND TRUST	6,119	7,493	-1,374	-18.3%	5.8%	7.8%	-26.6%	4	2	-2
BANK OF NEW YORK	5,884	5,276	608	11.5%	5.5%	5.5%	0.3%	5	4	-1
MORGAN STANLEY	5,574	5,213	361	6.9%	5.2%	5.4%	-3.8%	6	5	-1
GOLDMAN SACHS BANK USA	5,140	4,864	276	5.7%	4.8%	5.1%	-5.0%	7	6	-1
CITIBANK	3,791	3,438	353	10.3%	3.6%	3.6%	-0.8%	8	8	0
WELLS FARGO	3,013	2,953	60	2.0%	2.8%	3.1%	-8.2%	9	9	0
NORTHERN TRUST	2,823	2,596	227	8.7%	2.7%	2.7%	-2.2%	10	10	0
US BANCORP	2,137	1,848	289	15.6%	2.0%	1.9%	4.0%	11	13	2
STATE STREET IFS	1,998	1,854	144	7.8%	1.9%	1.9%	-3.1%	12	12	0
UNION BANK OF SWITZERLAND	1,937	2,000	-63	-3.2%	1.8%	2.1%	-12.9%	13	11	-2
BARCLAYS	1,404	1,259	145	11.5%	1.3%	1.3%	0.3%	14	17	3
BNP PARIBAS	1,369	1,363	6	0.4%	1.3%	1.4%	-9.7%	15	16	1
DEUTSCHE BANK	1,362	1,394	-32	-2.3%	1.3%	1.5%	-12.1%	16	15	-1
FIDELITY	1,286	1,153	133	11.5%	1.2%	1.2%	0.3%	17	18	1
HSBC FINANCIAL SERVICES	1,217	1,113	104	9.3%	1.1%	1.2%	-1.7%	18	19	1
RAYMOND JAMES ASSOCIATES	1,131	944	187	19.8%	1.1%	1.0%	7.7%	19	21	2
ESHARES	1,131	1,101	30	2.7%	1.1%	1.2%	-7.6%	19	20	1
CREDIT SUISSE	945	1,532	-587	-38.3%	0.9%	1.6%	-44.5%	20	14	-6
CANADIAN IMPERIAL BANK OF COMMERCE	826	829	-3	-0.4%	0.8%	0.9%	-10.4%	21	22	1
COMPUTERSHARE	820	476	344	72.3%	0.8%	0.5%	54.9%	22	30	8
SOCIETE GENERALE	811	728	83	11.4%	0.8%	0.8%	0.2%	23	24	1
CITCO FUNDS SERVICES	801	743	58	7.8%	0.8%	0.8%	-3.1%	24	23	-1
TOP 25 MULTI CUSTODIANS FR	76,475	69,270	7,205	10.4%	71.9%	72.4%	-0.7%			
ALL OTHER	29,929	26,412	3,517	13.3%	28.1%	27.6%	1.9%			
TOTAL MULTI CUSTODIANS FR	106,404	95,682	10,722	11.2%	33.0%	33.0%	-0.2%			
NOT REPORTED	34,046	31,623	2,423	7.7%	10.5%	10.9%	-3.4%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	58,510	48,010	10,500	21.9%	18.1%	16.6%	9.3%			
TOTAL FUNDS NOT DISCLOSING A CUSTODIANS FR	92,556	79,633	12,923	16.2%	28.7%	27.5%	4.3%			
TOTAL FUNDS WITH SINGLE CUSTODIANS FR	123,893	114,297	9,596	8.4%	38.4%	39.5%	-2.8%			
TOTAL FUNDS	322,853	289,612	33,241	11.5%	100.0%	100.0%	0.0%			

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest growth in funds
 - Funds increased 13.32%, or 1.19x the market
 - Market share increased from 27.60% to 28.13%
 - An increase of 1.90%
- Custodians ranked 11-25 registered the smallest growth in funds
 - Funds increased 4.57%, or 0.41x the market
 - Market share decreased from 19.16% to 18.02%
 - A decrease of 5.97%

Peer Group Performance by Fund Relationships						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Funds	11.48%		100%	100%		
Market Growth Multi Custodians Disclosed	11.21%	0.98	32.96%	33.04%	-0.08%	-0.24%
Custodians Ranked 1-10	12.50%	1.12	53.85%	53.23%	0.62%	1.16%
Custodians Ranked 11-25	4.57%	0.41	18.02%	19.16%	-1.14%	-5.97%
All Other Custodians	13.32%	1.19	28.13%	27.60%	0.52%	1.90%
Market Growth Single Custodians Disclosed	8.40%	0.73	38.37%	39.47%	-1.09%	-2.76%
Market Growth Custodians Not Disclosed	16.23%	1.41	28.67%	27.50%	1.17%	4.26%

Multi-Fund Custodians League Table – Global AUC

Convergence - Apr 2023 League Tables - Multi Custodians Market Segment - Assets (in BN)										
Multi Custodians	Apr -23 FR-AUC	Apr -22 FR-AUC	22-23 Change	22-23 Change %	Market Share-23	Market Share-22	23-22 Change %	Apr -23 Rank	Apr -22 Rank	23-22 Change
BANK OF AMERICA	\$6,804.09	\$7,017.18	-\$213.09	-3.0%	7.8%	8.1%	-3.8%	1	1	0
JPMORGAN	\$6,714.45	\$6,635.34	\$79.11	1.2%	7.7%	7.7%	0.4%	2	3	1
BANK OF NEW YORK	\$5,884.75	\$6,116.13	-\$231.38	-3.8%	6.8%	7.1%	-4.6%	3	7	4
CITIBANK	\$4,749.78	\$4,455.04	\$294.74	6.6%	5.5%	5.2%	5.7%	4	2	-2
MORGAN STANLEY	\$4,472.35	\$4,806.66	-\$334.31	-7.0%	5.1%	5.6%	-7.7%	5	4	-1
GOLDMAN SACHS BANK USA	\$4,440.01	\$4,419.98	\$20.02	0.5%	5.1%	5.1%	-0.4%	6	5	-1
BARCLAYS	\$3,793.82	\$4,272.06	-\$478.24	-11.2%	4.4%	5.0%	-11.9%	7	6	-1
UNION BANK OF SWITZERLAND	\$3,164.58	\$3,189.16	-\$24.58	-0.8%	3.6%	3.7%	-1.6%	8	8	0
STATE STREET IFS	\$3,092.34	\$3,039.80	\$52.54	1.7%	3.6%	3.5%	0.9%	9	9	0
BNP PARIBAS	\$2,606.58	\$2,429.44	\$177.14	7.3%	3.0%	2.8%	6.4%	10	10	0
NORTHERN TRUST	\$2,496.64	\$2,543.21	-\$46.57	-1.8%	2.9%	3.0%	-2.6%	11	13	2
WELLS FARGO	\$2,320.11	\$2,444.31	-\$124.19	-5.1%	2.7%	2.8%	-5.9%	12	12	0
DEUTSCHE BANK	\$2,133.64	\$2,032.44	\$101.20	5.0%	2.5%	2.4%	4.1%	13	11	-2
CREDIT SUISSE	\$1,943.41	\$2,794.08	-\$850.68	-30.4%	2.2%	3.2%	-31.0%	14	17	3
HSBC FINANCIAL SERVICES	\$1,718.74	\$1,673.69	\$45.05	2.7%	2.0%	1.9%	1.8%	15	16	1
FIRST CITIZENS BANK AND TRUST	\$1,606.03	\$1,576.23	\$29.80	1.9%	1.8%	1.8%	1.0%	16	15	-1
STANDARD CHARTERED BANK	\$1,564.38	\$1,477.46	\$86.92	5.9%	1.8%	1.7%	5.0%	17	18	1
SOCIETE GENERALE	\$1,487.26	\$1,412.02	\$75.25	5.3%	1.7%	1.6%	4.5%	18	19	1
FIRST REPUBLIC BANK	\$1,433.19	\$1,358.80	\$74.38	5.5%	1.6%	1.6%	4.6%	19	21	2
BANK OF NOVA SCOTIA	\$1,024.12	\$878.48	\$145.65	16.6%	1.2%	1.0%	15.6%	19	20	1
US BANCORP	\$1,009.77	\$867.16	\$142.61	16.4%	1.2%	1.0%	15.5%	20	14	-6
FIDELITY	\$927.97	\$1,114.07	-\$186.09	-16.7%	1.1%	1.3%	-17.4%	21	22	1
COMPUTERSHARE	\$867.55	\$739.96	\$127.59	17.2%	1.0%	0.9%	16.3%	22	30	8
NOMURA BANK LUXEMBOURG SA	\$841.26	\$729.25	\$112.01	15.4%	1.0%	0.8%	14.4%	23	24	1
ROYAL BANK OF CANADA	\$817.78	\$651.73	\$166.06	25.5%	0.9%	0.8%	24.4%	24	23	-1
TOP 25 MULTI CUSTODIANS FR ASSETS	\$67,914.60	\$68,673.66	-\$759.06	-1.1%	78.2%	79.7%	-1.9%			
ALL OTHER	\$18,957.67	\$17,476.18	\$1,481.49	8.5%	21.8%	20.3%	7.6%			
TOTAL MULTI CUSTODIANS FR ASSETS	\$86,872.27	\$86,149.84	\$722.43	0.8%	57.8%	56.7%	1.8%			
NOT REPORTED	\$4,860.74	\$4,676.47	\$184.27	3.9%	3.2%	3.1%	5.0%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$3,583.73	\$4,518.43	-\$934.70	-20.7%	2.4%	3.0%	-19.9%			
TOTAL ASSETS NOT DISCLOSING A CUSTODIANS FR	\$8,444.46	\$9,194.90	-\$750.43	-8.2%	5.6%	6.1%	-7.3%			
TOTAL ASSETS WITH SINGLE CUSTODIANS FR	\$55,023.90	\$56,463.33	-\$1,439.43	-2.5%	36.6%	37.2%	-1.6%			
TOTAL FUND ASSETS	\$150,340.64	\$151,808.07	-\$1,467.43	-1.0%	100.0%	100.0%	0.0%			

Custodians Peer Groups – Global Multi AUC Growth & Market Share

Best and Worst Performing Peer Groups

- Custodians ranked >25 registered the highest AUC growth
 - AUC increased 8.48%, or 10.11x the market
 - Market share increased from 20.29% to 21.82%
 - An increase of 7.58%
- Custodians ranked 1-10 registered the lowest AUC growth
 - AUC decreased 1.42%, or -1.69x the market
 - Market share decreased from 53.84% to 52.63%
 - A decrease of 2.24%

Peer Group Performance by Fund Assets						
Custodians Peer Group Analysis	Y-Y Growth	Growth vs-MKT	SOM 2023	SOM 2022	SOM Change	SOM Change %
Market Growth Assets	-0.97%		100%	100%		
Market Growth Multi Custodians Disclosed	0.84%	0.86	57.78%	56.75%	1.03%	1.82%
Custodians Ranked 1-10	-1.42%	-1.69	52.63%	53.84%	-1.21%	-2.24%
Custodians Ranked 11-25	-0.45%	-0.54	25.55%	25.88%	-0.33%	-1.28%
All Other Custodians	8.48%	10.11	21.82%	20.29%	1.54%	7.58%
Market Growth Single Custodians Disclosed	-2.55%	-2.63	36.60%	37.19%	-0.59%	-1.60%
Market Growth Custodians Not Disclosed	-8.16%	-8.41	5.62%	6.06%	-0.44%	-7.27%

About Convergence

- Founded in 2013, Convergence provides independent insights into important trends and challenges facing our clients in the fast-growing and dynamic asset management industry by using alternative data and data science analytics.
- Our insights help clients grow revenue, improve efficiency and identify and manage risks.
- Our clients include Asset Managers, Institutional Investors and Service Providers.
- Our founders, are former C-Suite executives in hedge funds, private equity funds, broker-dealers and securities exchanges.
- We are headquartered in South Norwalk, CT and operate in New Jersey and Hyderabad, India.
- For additional information please contact John Phinney @ 203-956-4824 or George Gainer @ 203-956-4824 or to learn more about how Convergence can help you.

Terms Used in Our Fund Custodians League Tables

- **Global Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that Convergence can attribute to one or more Fund Custodians.
- **US Funds and Assets**
 - Measures public and private funds and assets domiciled in the US that Convergence can attribute to one or more Fund Custodians.
- **Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled outside the United States that Convergence can attribute to one or more Fund Custodians.
- **Not Reported – Global – US – Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that are being serviced by the investment adviser or a controlled affiliate.
- **Not Applicable – Global – US – Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that are being serviced by the investment adviser or a controlled affiliate.
- **Unattributed Funds and Assets – Global – US – Non-US Funds and Assets**
 - Measures public and private funds and assets domiciled in US and non-US locations that Convergence cannot attribute to one or more Fund Custodians.
- **All Other Custodians**
 - Is a measure of funds and assets attributed to Fund Custodians ranked outside the Top 25.

Terms Used in Our Fund Custodians League Tables

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

Additional Analytics available for the Custodians Segment

Convergence offers several additional datasets and analytical tools that can be used to support business development and client and risk management efforts...

- **Competitive Analysis (Business Development)**
 - Compare your growth and market share to a defined peer group in multiple fund type segments
 - Growth is broken down in up to 9 growth factors, each which reveals a story
- **Client New Fund Flow Analytics (Business Development)**
 - Identify new flows into client funds
 - Allows you to determine if you are getting your fair share of the change
- **Clients at Risk (Client Management)**
 - Convergence predictive analytics can identify clients likely to move their business to a competitor in full, or partially through diversification
- **Client Operational Risk Profiles (Risk Management)**
 - Convergence proprietary risk factors can identify high-risk business conditions in your prospective or existing clients
- **ESG Business Profiles**
 - Convergence measures the ESG sensitivity of investment advisers. This differs from ESG investing measurement and complements your work on ESG investing.

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The Convergence Leadership Team



John Phinney, Chairman and CEO

Career History

- ❖ Apollo Global Management-Fund Group: CFO/COO, Rohatyn Group: CFO/COO, JPMorgan [Various Divisions]: CFO, Fidelity Alternative Investments: Director of Operations

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Eileen Cleary, President, Convergence Talent Management

Career History

- ❖ Executive Management Consultant, Atlas Data: Chief Executive Officer and Co-founder, J. & W. Seligman & Co. Incorporated: V.P. Human Resources, UJB-Financial: V.P. Employee Benefits

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Vidya Minukuri, Global Head of Data Science & Research

Career History

- ❖ Tata Consultancy Services: Assistant Business Consultant & Project Manager, British Telecom [through TCS]: Lead Business Analyst & Solution Architect, Ericsson [through TCS] : IT Systems Engineer and IT development team leader

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George Evans, Co-President and Chief Revenue Officer

Career History

- ❖ Gladstone Associates: Managing Director, GlobeOp Financial, Outsource Partners International, BISYS Financial Services: Global Head of Business Development, JPMorgan Investor Services: Senior Vice President, The Prudential: Assistant Treasurer

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George Gainer, CPA Global Head – Client Management

Career History

- ❖ Gravitas: Finance & Business Performance Analyst, Apollo [through Gravitas]: Business Analysis & Reporting, Iron Mountain: Acquisition Accounting Manager, KPMG: Transaction Services Manager, Deloitte: Audit Senior Staff

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David Etzbach, Managing Director, Custodians and Allocators

Career History

- ❖ Nod Hill Investment Partners, Founder, Steinberg Asset Management, Managing Director, Fidelity Investments / Pyramis Global Advisors, Senior Vice President, Credit Suisse Asset Management, Director, Citigroup Asset Management / Legg Mason, Director / Vice President, JP Morgan - Global Investor Services, Vice President, Bankers Trust

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