Fund Prime Broker League Tables

Global Funds and Assets

Reporting Period Apr 2022 – Apr 2023



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:
  - o SEC registered private and public funds and advisers
  - State registered private and public funds and advisers
  - o 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 prime brokers
  - Funds that use a "single" prime broker
  - Funds that use "multiple" prime brokers
- Additional Fund Prime Broker League Tables for Prime Broker Funds and Assets 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+)

## Prime Broker League Tables – Global Funds

Convergence - Apr 2023 Leagu	e Tables -	Prime Bi	roker Ma	rket Segmer	nt - Fund R	Relationshi	ips			
All		Apr -22		22-23	Market		23-22	Apr -23	<b>Apr -22</b>	23-22
Prime Brokers	#FR	#FR					Change %	Rank	Rank	Change
GOLDMAN SACHS BANK USA	5,172	5,050	122	2.4%	15.6%	15.4%	1.0%	1	1	0
MORGAN STANLEY	4,872	4,876	-4	-0.1%	14.7%	14.9%	-1.5%	2	2	0
JPMORGAN	4,222	4,074	148	3.6%	12.7%	12.5%	2.2%	3	3	0
BANK OF AMERICA	2,424	2,193	231	10.5%	7.3%	6.7%	9.0%	4	4	0
UNION BANK OF SWITZERLAND	1,717	1,724	-7	-0.4%	5.2%	5.3%	-1.8%	5	5	0
INTERACTIVE BROKERS	1,434	1,342	92	6.9%	4.3%	4.1%	5.4%	6	7	1
BARCLAYS	1,309	1,179	130	11.0%	3.9%	3.6%	9.5%	7	9	2
BNP PARIBAS	1,228	1,314	-86	-6.5%	3.7%	4.0%	-7.9%	8	8	0
CITIBANK	1,218	1,132	86	7.6%	3.7%	3.5%	6.1%	9	10	1
WELLS FARGO	770	752	18	2.4%	2.3%	2.3%	1.0%	10	11	1
BANK OF NEW YORK	725	666	59	8.9%	2.2%	2.0%	7.3%	11	14	3
FIDELITY	719	729	-10	-1.4%	2.2%	2.2%	-2.8%	12	12	0
JEFFERIES	717	703	14	2.0%	2.2%	2.1%	0.6%	13	13	0
CREDIT SUISSE	586	1,499	-913	-60.9%	1.8%	4.6%	-61.5%	14	6	-8
BTIG	554	537	17	3.2%	1.7%	1.6%	1.7%	15	15	0
COWEN GROUP	407	381	26	6.8%	1.2%	1.2%	5.3%	16	16	0
RAYMOND JAMES FINANCIAL SERVICES	343	318	25	7.9%	1.0%	1.0%	6.3%	17	18	1
HSBC FINANCIAL SERVICES	341	334	7	2.1%	1.0%	1.0%	0.7%	18	17	-1
TD BANK	334	312	22	7.1%	1.0%	1.0%	5.5%	19	19	0
SOCGEN	276	240	36	15.0%	0.8%	0.7%	13.4%	20	20	0
CANTOR FITZGERALD	233	223	10	4.5%	0.7%	0.7%	3.0%	21	21	0
CHARLES SCHWAB	201	170	31	18.2%	0.6%	0.5%	16.6%	22	24	2
FIRST REPUBLIC SECURITIES COMPANY	183	172	11	6.4%	0.6%	0.5%	4.9%	23	23	0
NORTH CAPITAL PRIVATE SECURITIES CORPORATION	177	176	1	0.6%	0.5%	0.5%	-0.8%	24	22	-2
STATE STREET IFS	145	136	9	6.6%	0.4%	0.4%	5.1%	25	25	0
TOP 25 PRIME BROKERS - ALL	30,307	30,232	75	0.2%	91.3%	<b>92.4%</b>	-1.2%			
ALL OTHER	2,877	2,485	392	15.8%	8.7%	7.6%	14.1%			
TOTAL PRIME BROKER FR DISCLOSED	33,184	32,717	467	1.4%	12.1%	13.2%	-8.4%			
NOT REPORTED	71,035	66,249	4,786	7.2%	25.8%	26.7%	-3.2%			
INELIGIBLE FUNDS - NOT REPORTING A PB	64,281	56,549	7,732	13.7%	23.3%	22.8%	2.6%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	106,802	92,989	13,813	14.9%	38.8%	37.4%	3.7%			
TOTAL FUNDS NOT DISCLOSING A PRIME BROKER FR	242,118	215,787	26,331	12.2%	<b>87.9%</b>	86.8%	1.3%			
TOTAL FUNDS	275,302	248,504	26,798	10.8%	100.0%	100.0%	0.0%	0	0	0

- Prime Brokers ranked >25 registered the highest growth in funds
  - Funds increased 15.77%, or 11.05x the market
  - Market share increased from 7.60% to 8.67%
    - $\blacktriangleright$  An increase of 14.15%
- Prime Brokers ranked 11-25 registered the smallest growth in funds
  - Funds decreased 9.93%, or -6.96x the market
  - Market share declined from 20.16% to 17.90%
    - $\blacktriangleright$  A decrease of 11.20%

Peer	Group Perfor	mance by Fund	Relationships	8		
Prime Broker	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2023	2022	Change	Change %
Market Growth Funds	10.78%		100%	100%		
Market Growth PB Disclosed	1.43%	0.13	12.05%	13.17%	-1.11%	-8.45%
Prime Brokers Ranked 1-10	3.09%	2.16	73.43%	72.24%	1.18%	1.64%
Prime Brokers Ranked 11-25	-9.93%	-6.96	17.90%	20.16%	-2.26%	-11.20%
All Other Prime Brokers	15.77%	11.05	8.67%	7.60%	1.07%	14.15%
PB Not Disclosed	12.20%	1.13	87.95%	86.83%	1.11%	1.28%

## Prime Broker League Tables – Global Assets

Convergence - Apr 2023 League Tables - Prime Broker Market Segment - Assets (in BN)										
All	Apr -23	Apr -22	22-23	22-23	Market		23-22	Apr -23	Apr -22	23-22
Prime Brokers	FR-Assets	FR-Assets	Change	Change %	Share-23		Change %	Rank	Rank	Change
IPMORGAN	\$5,368.65	\$5,391.05	-\$22.40	-0.4%	11.6%	11.7%	-0.9%	1	1	0
GOLDMAN SACHS BANK USA	\$5,011.60	\$4,829.17	\$182.44	3.8%	10.9%	10.5%	3.2%	2	3	1
MORGAN STANLEY	\$4,992.05	\$5,142.49	-\$150.43	-2.9%	10.8%	11.2%	-3.4%	3	2	-1
BANK OF AMERICA	\$4,041.12	\$4,536.84	-\$495.72	-10.9%	8.8%	9.9%	-11.4%	4	4	0
BARCLAYS	\$3,754.76	\$4,185.28	-\$430.51	-10.3%	8.1%	9.1%	-10.8%	5	5	0
CITIBANK	\$3,574.10	\$3,189.31	\$384.79	12.1%	7.7%	6.9%	11.5%	6	6	0
UNION BANK OF SWITZERLAND	\$3,236.08	\$3,139.75	\$96.34	3.1%	7.0%	6.8%	2.5%	7	8	1
BNP PARIBAS	\$2,999.73	\$2,896.89	\$102.83	3.5%	6.5%	6.3%	3.0%	8	9	1
CREDIT SUISSE	\$2,056.81	\$3,174.56	-\$1,117.75	-35.2%	4.5%	6.9%	-35.6%	9	7	-2
HSBC FINANCIAL SERVICES	\$1,279.33	\$997.36	\$281.97	28.3%	2.8%	2.2%	27.6%	10	12	2
WELLS FARGO	\$1,148.51	\$713.21	\$435.29	61.0%	2.5%	1.6%	60.2%	11	14	3
SOCGEN	\$1,106.70	\$1,071.79	\$34.90	3.3%	2.4%	2.3%	2.7%	12	10	-2
BANK OF NEW YORK	\$946.19	\$846.45	\$99.74	11.8%	2.0%	1.8%	11.2%	13	13	0
FIDELITY	\$928.80	\$1,058.89	-\$130.08	-12.3%	2.0%	2.3%	-12.7%	14	11	-3
NOMURA BANK LUXEMBOURG SA	\$716.09	\$657.33	\$58.76	8.9%	1.6%	1.4%	8.4%	15	16	1
BANK OF NOVA SCOTIA	\$714.73	\$676.64	\$38.09	5.6%	1.5%	1.5%	5.1%	16	15	-1
ROYAL BANK OF CANADA	\$506.46	\$148.45	\$358.01	241.2%	1.1%	0.3%	239.4%	17	24	7
SKANDINAVISKA ENSILDA BANKEN	\$498.57	\$399.79	\$98.78	24.7%	1.1%	0.9%	24.0%	18	17	-1
CIBC WORLD MARKETS	\$246.49	\$59.59	\$186.89	313.6%	0.5%	0.1%	311.4%	19	36	17
ROYAL BANK OF SCOTLAND	\$243.18	\$230.42	\$12.77	5.5%	0.5%	0.5%	5.0%	20	18	-2
MAREX SPECTRON	\$233.12	\$0.13	\$232.99	181640.2%	0.5%	0.0%	180678.9%	21	179	158
STATE STREET IFS	\$225.71	\$214.85	\$10.87	5.1%	0.5%	0.5%	4.5%	22	19	-3
CANTOR FITZGERALD	\$214.95	\$205.58	\$9.38	4.6%	0.5%	0.4%	4.0%	23	20	-3
BMO PRIME BROKERAGE	\$163.64	\$148.89	\$14.75	9.9%	0.4%	0.3%	9.3%	24	23	-1
JEFFERIES	\$146.19	\$161.41	-\$15.21	-9.4%	0.3%	0.4%	-9.9%	25	21	-4
TOP 25 PRIME BROKERS - ALL	\$44,353.58	\$44,076.10	\$277.48	0.6%	96.0%	<b>95.9%</b>	0.1%			
ALL OTHER	\$1,828.74	\$1,861.95	-\$33.21	-1.8%	4.0%	4.1%	-2.3%			
TOTAL PRIME BORKER FR ASSETS DISCLOSED	\$46,182.32	\$45,938.05	\$244.27	0.5%	<b>39.7%</b>	<b>39.0%</b>	1.7%			
NOT REPORTED	\$15,056.77	\$14,754.05	\$302.71	2.1%	12.9%	12.5%	3.3%			
INELIGIBLE FUNDS - NOT REPORTING A PB	\$35,654.17	\$36,950.45	-\$1,296.28	-3.5%	30.7%	31.4%	-2.3%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$19,375.85	\$20,023.04	-\$647.19	-3.2%	16.7%	17.0%	-2.1%			
TOTAL ASSETS NOT DISCLOSING A PRIME BROKER FR	\$70,086.78	\$71,727.54	-\$1,640.75	-2.3%	60.3%	61.0%	-1.1%			
TOTAL FUND ASSETS	\$116,269.10	\$117,665.58	-\$1,396.48	-1.2%	100.0%	100.0%	0.0%	0		

### Prime Broker Peer Analysis – Global Assets - Growth & Market Share

- Prime Brokers ranked 11-25 registered the highest Assets growth
  - Assets increased 21.93%, or 41.24x the market
  - Market share increased from 14.35% to 17.41%
    - ➤ An increase of 21.29%
- Prime brokers ranked 1-10 registered the lowest Assets growth
  - Assets decreased 3.12%, or -5.86x the market
  - Market share declined from 81.59% to 78.63%
    - $\blacktriangleright$  A decrease of 3.63%

P	eer Group Per	formance by F	und Assets			
Prime Broker	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2023	2022	Change	Change %
Market Growth Assets	-1.19%		100%	100%		
Market Growth PB Disclosed	0.53%	0.45	39.72%	39.04%	0.68%	1.74%
Prime Brokers Ranked 1-10	-3.12%	-5.86	78.63%	81.59%	-2.96%	-3.63%
Prime Brokers Ranked 11-25	21.93%	41.24	17.41%	14.35%	3.06%	21.29%
All Other Prime Brokers	-1.78%	-3.35	3.96%	4.05%	-0.09%	-2.30%
PB Not Disclosed	-2.29%	-1.92	60.28%	60.96%	-0.68%	-1.11%

## Single Prime Broker League Table – Global Funds

Convergence - Apr 2023 League T	ables - <u>Sin</u>	gle Pri <u>m</u> e	e Brok <u>er</u>	Market <u>Seg</u>	ment - F <u>un</u>	d Relation	nships			
Single	Apr -23	<u> </u>		22-23	Market	Market	23-22	<b>Apr -23</b>	<b>Apr -22</b>	23-22
Prime Brokers	#FR	#FR		Change %	Share-23	Share-22	Change %	Rank	Rank	Change
GOLDMAN SACHS BANK USA	1,414	1,328	86	6.5%	14.0%	13.9%	0.9%	1	1	0
JPMORGAN	1,227	1,176	51	4.3%	12.1%	12.3%	-1.2%	2	2	0
MORGAN STANLEY	1,219	1,172	47	4.0%	12.1%	12.2%	-1.5%	3	3	0
INTERACTIVE BROKERS	1,111	1,028	83	8.1%	11.0%	10.7%	2.4%	4	4	0
BANK OF AMERICA	420	363	57	15.7%	4.2%	3.8%	9.6%	5	7	2
BTIG	386	386	0	0.0%	3.8%	4.0%	-5.3%	6	5	-1
JEFFERIES	360	368	-8	-2.2%	3.6%	3.8%	-7.3%	7	6	-1
BANK OF NEW YORK	302	293	9	3.1%	3.0%	3.1%	-2.4%	8	8	0
COWEN GROUP	270	268	2	0.7%	2.7%	2.8%	-4.6%	9	10	1
WELLS FARGO	268	289	-21	-7.3%	2.7%	3.0%	-12.1%	10	9	-1
UNION BANK OF SWITZERLAND	240	236	4	1.7%	2.4%	2.5%	-3.7%	11	11	0
RAYMOND JAMES FINANCIAL SERVICES	208	186	22	11.8%	2.1%	1.9%	5.9%	12	13	1
BARCLAYS	199	117	82	70.1%	2.0%	1.2%	61.1%	13	19	6
CITIBANK	184	126	58	46.0%	1.8%	1.3%	38.3%	14	18	4
NORTH CAPITAL PRIVATE SECURITIES CORPORATION	176	176	0	0.0%	1.7%	1.8%	-5.3%	15	14	-1
FIRST REPUBLIC SECURITIES COMPANY	165	155	10	6.5%	1.6%	1.6%	0.8%	16	15	-1
BNP PARIBAS	163	203	-40	-19.7%	1.6%	2.1%	-23.9%	17	12	-5
CHARLES SCHWAB	163	127	36	28.3%	1.6%	1.3%	21.6%	17	17	0
FIDELITY	156	135	21	15.6%	1.5%	1.4%	9.5%	18	16	-2
TD BANK	117	113	4	3.5%	1.2%	1.2%	-1.9%	19	20	1
COINBASE TRUST COMPANY	87	29	58	200.0%	0.9%	0.3%	184.2%	20	27	7
CREDIT SUISSE	78	203	-125	-61.6%	0.8%	2.1%	-63.6%	21	12	-9
CANTOR FITZGERALD	71	69	2	2.9%	0.7%	0.7%	-2.5%	22	21	-1
SOCGEN	57	46	11	23.9%	0.6%	0.5%	17.4%	23	23	0
STONEX FINANCIAL	54	49	5	10.2%	0.5%	0.5%	4.4%	24	22	-2
TOP 25 SINGLE PRIME BROKER FR	9,095	8,641	454	5.3%	90.0%	90.3%	-0.3%			
ALL OTHER	1,011	933	78	8.4%	10.0%	9.7%	2.7%			
TOTAL SINGLE PRIME BROKER FR DISCLOSED	10,106	9,574	532	5.6%	3.7%	3.9%	-4.7%			
NOT REPORTED	71,035	66,249	4,786	7.2%	25.8%	26.7%	-3.2%			
INELIGIBLE FUNDS - NOT REPORTING A PB	64,281	56,549	7,732	13.7%	23.3%	22.8%	2.6%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	106,802	92,989	13,813	14.9%	38.8%	37.4%	3.7%			
TOTAL FUNDS NOT DISCLOSING A PRIME BROKER FR	242,118	215,787	26,331	12.2%	<b>87.9%</b>	86.8%	1.3%			
TOTAL FUNDS WITH MULTI-PRIME BROKER FR	23,078	23,143	-65	-0.3%	8.4%	9.3%	-10.0%			
TOTAL FUNDS	275,302	248,504	26,798	10.8%	100.0%	100.0%	0.0%	0	0	0

- Prime Brokers ranked >25 registered the highest growth in funds
  - Funds increased 8.36%, or 1.50x the market
  - Market share increased from 9.75% to 10.00%
    - ➤ An increase of 2.66%
- Prime Brokers ranked 1-10 registered the smallest growth in funds
  - Funds increased 4.59%, or 0.83x the market
  - Market share declined from 69.68% to 69.04%
    - $\blacktriangleright$  A decrease of 0.92%

Peer	Group Perfor	mance by Fund	Relationships			
Prime Broker	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2023	2022	Change	Change %
Market Growth Funds	10.78%		100%	100%		
Market Growth Single PB Disclosed	5.56%	0.52	3.67%	3.85%	-0.18%	-4.72%
Prime Brokers Ranked 1-10	4.59%	0.83	69.04%	69.68%	-0.64%	-0.92%
Prime Brokers Ranked 11-25	7.51%	1.35	20.96%	20.58%	0.38%	1.85%
All Other Prime Brokers	8.36%	1.50	10.00%	9.75%	0.26%	2.66%
Market Growth Multi PB Disclosed	-0.28%	-0.03	8.38%	9.31%	-0.93%	-9.99%
PB Not Disclosed	12.20%	1.13	87.95%	86.83%	1.11%	1.28%

## Single Prime Broker League Tables – Global Assets

Convergence - Apr 2023 L	eague Tab <u>les</u>	- Single P <u>rim</u>	e Broke <u>r M</u>	arket Seg <u>me</u>	nt - Ass <u>ets</u>	(in BN)				
Single	Apr -23	Apr -22	22-23	22-23		Market	23-22	Apr -23	Apr -22	23-22
Prime Brokers	FR-Assets	FR-Assets	Change	Change %	Share-23	Share-22	Change %	-	Rank	Change
GOLDMAN SACHS BANK USA	\$342.68	\$342.47	\$0.21	0.1%	21.0%	20.2%	4.3%	1	1	0
JPMORGAN	\$337.97	\$306.48	\$31.49	10.3%	20.7%	18.0%	14.9%	2	2	0
MORGAN STANLEY	\$228.02	\$287.71	-\$59.69	-20.7%	14.0%	16.9%	-17.4%	3	3	0
WELLS FARGO	\$103.80	\$112.21	-\$8.41	-7.5%	6.4%	6.6%	-3.6%	4	4	0
BANK OF AMERICA	\$101.56	\$92.60	\$8.96	9.7%	6.2%	5.5%	14.3%	5	5	0
CITIBANK	\$63.69	\$30.37	\$33.31	109.7%	3.9%	1.8%	118.5%	6	12	6
BANK OF NEW YORK	\$44.16	\$43.48	\$0.68	1.6%	2.7%	2.6%	5.8%	7	7	0
JEFFERIES	\$37.85	\$38.30	-\$0.45	-1.2%	2.3%	2.3%	3.0%	8	10	2
UNION BANK OF SWITZERLAND	\$36.47	\$36.15	\$0.32	0.9%	2.2%	2.1%	5.1%	9	11	2
BTIG	\$35.01	\$53.71	-\$18.70	-34.8%	2.1%	3.2%	-32.1%	10	6	-4
FIDELITY	\$34.32	\$42.86	-\$8.55	-19.9%	2.1%	2.5%	-16.6%	11	9	-2
BARCLAYS	\$32.14	\$30.34	\$1.81	6.0%	2.0%	1.8%	10.4%	12	13	1
RAYMOND JAMES FINANCIAL SERVICES	\$23.45	\$30.02	-\$6.57	-21.9%	1.4%	1.8%	-18.6%	13	14	1
INTERACTIVE BROKERS	\$23.39	\$22.80	\$0.59	2.6%	1.4%	1.3%	6.9%	14	16	2
BNP PARIBAS	\$18.02	\$26.52	-\$8.50	-32.1%	1.1%	1.6%	-29.2%	15	15	0
COWEN GROUP	\$14.84	\$15.37	-\$0.54	-3.5%	0.9%	0.9%	0.6%	16	17	1
HSBC FINANCIAL SERVICES	\$13.21	\$13.72	-\$0.51	-3.7%	0.8%	0.8%	0.3%	17	18	1
FIRST REPUBLIC SECURITIES COMPANY	\$12.26	\$13.22	-\$0.96	-7.2%	0.8%	0.8%	-3.4%	18	19	1
CHARLES SCHWAB	\$10.19	\$6.16	\$4.03	65.4%	0.6%	0.4%	72.3%	19	25	6
TD BANK	\$8.57	\$9.14	-\$0.57	-6.2%	0.5%	0.5%	-2.3%	20	21	1
NORTHERN TRUST	\$8.19	\$7.13	\$1.06	14.9%	0.5%	0.4%	19.7%	21	23	2
SOCGEN	\$7.01	\$6.21	\$0.79	12.8%	0.4%	0.4%	17.5%	22	24	2
CREDIT SUISSE	\$6.00	\$43.41	-\$37.41	-86.2%	0.4%	2.6%	-85.6%	23	8	-15
SKANDINAVISKA ENSILDA BANKEN	\$5.03	\$7.74	-\$2.71	-35.0%	0.3%	0.5%	-32.3%	24	22	-2
COINBASE TRUST COMPANY	\$5.00	\$1.69	\$3.31	195.3%	0.3%	0.1%	207.7%	25	37	12
TOP 25 SINGLE PRIME BROKER FR ASSETS	\$1,552.81	\$1,619.82	-\$67.01	-4.1%	95.2%	95.3%	-0.1%			
ALL OTHER	\$77.78	\$79.04	-\$1.27	-1.6%	4.8%	4.7%	2.5%			
TOTAL SINGLE PRIME BROKER FR ASSETS DISCLOSED	\$1,630.59	\$1,698.87	-\$68.28	-4.0%	1.4%	1.4%	-2.9%			
NOT REPORTED	\$15,056.77	\$14,754.05	\$302.71	2.1%	12.9%	12.5%	3.3%			
INELIGIBLE FUNDS - NOT REPORTING A PB	\$35,654.17	\$36,950.45	-\$1,296.28	-3.5%	30.7%	31.4%	-2.3%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$19,375.85	\$20,023.04	-\$647.19	-3.2%	16.7%	17.0%	-2.1%			
TOTAL ASSETS NOT DISCLOSING A PRIME BROKER FR	\$70,086.78	\$71,727.54	-\$1,640.75	-2.3%	60.3%	61.0%	-1.1%			
TOTAL ASSETS WITH MULTI-PRIME BROKER FR	\$44,551.73	\$44,239.18	\$312.55	0.7%	38.3%	37.6%	1.9%			
TOTAL FUND ASSETS	\$116,269.10	\$117,665.58	-\$1,396.48	-1.2%	100.0%	100.0%	0.0%	0		

## Single Prime Broker Peer Analysis – Global Assets - Growth & Market Share

- Prime Brokers ranked 1-10 registered the highest Assets growth
  - Assets decreased 0.91%, or -0.23x the market
  - Market share increased from 79.08% to 81.64%
    - $\blacktriangleright$  An increase of 3.23%
- Prime brokers ranked 11-25 registered the lowest Assets growth
  - Assets decreased 19.80%, or -4.93x the market
  - Market share declined from 16.27% to 13.59%
    - $\blacktriangleright$  A decrease of 16.44%

Р	eer Group Per	formance by F	und Assets			
Prime Broker	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2023	2022	Change	Change %
Market Growth Funds	-1.19%		100%	100%		
Market Growth Single PB Disclosed	-4.02%	-3.38	1.40%	1.44%	-0.04%	-2.87%
Prime Brokers Ranked 1-10	-0.91%	-0.23	81.64%	79.08%	2.56%	3.23%
Prime Brokers Ranked 11-25	-19.80%	-4.93	13.59%	16.27%	-2.67%	-16.44%
All Other Prime Brokers	-1.61%	-0.40	4.77%	4.65%	0.12%	2.51%
Market Growth Multi PB Disclosed	0.71%	0.59	38.32%	37.60%	0.72%	1.92%
PB Not Disclosed	-2.29%	-1.92	60.28%	60.96%	-0.68%	-1.11%

## Multi-Prime Broker League Table – Global Funds

Convergence - Apr 2023 League T	'ables - Mu	ılti Prime	Broker	Aarket Seg	nent - Fun	d Relatior	shins			
Multi	Apr -23			22-23	Market	Market	23-22	<b>Apr -23</b>	Apr -22	23-22
Prime Brokers	#FR	#FR		Change %	Share-23			-	Rank	Change
GOLDMAN SACHS BANK USA	3,758	3,722	36	1.0%	16.3%	16.1%	1.3%	1	1	0
MORGAN STANLEY	3,653	3,704	-51	-1.4%	15.8%	16.0%	-1.1%	2	2	0
JPMORGAN	2,995	2,898	97	3.3%	13.0%	12.5%	3.6%	3	3	0
BANK OF AMERICA	2,004	1,830	174	9.5%	8.7%	7.9%	9.8%	4	4	0
UNION BANK OF SWITZERLAND	1,477	1,488	-11	-0.7%	6.4%	6.4%	-0.5%	5	5	0
BARCLAYS	1,110	1,062	48	4.5%	4.8%	4.6%	4.8%	6	8	2
BNP PARIBAS	1,065	1,111	-46	-4.1%	4.6%	4.8%	-3.9%	7	7	0
CITIBANK	1,034	1,006	28	2.8%	4.5%	4.3%	3.1%	8	9	1
FIDELITY	563	594	-31	-5.2%	2.4%	2.6%	-5.0%	9	10	1
CREDIT SUISSE	508	1,296	-788	-60.8%	2.2%	5.6%	-60.7%	10	6	-4
WELLS FARGO	502	463	39	8.4%	2.2%	2.0%	8.7%	11	11	0
BANK OF NEW YORK	423	373	50	13.4%	1.8%	1.6%	13.7%	12	12	0
JEFFERIES	357	335	22	6.6%	1.5%	1.4%	6.9%	13	13	0
INTERACTIVE BROKERS	323	314	9	2.9%	1.4%	1.4%	3.2%	14	14	0
HSBC FINANCIAL SERVICES	310	302	8	2.6%	1.3%	1.3%	2.9%	15	15	0
SOCGEN	219	194	25	12.9%	0.9%	0.8%	13.2%	16	17	1
TD BANK	217	199	18	9.0%	0.9%	0.9%	9.4%	17	16	-1
BTIG	168	151	17	11.3%	0.7%	0.7%	11.6%	18	19	1
CANTOR FITZGERALD	162	154	8	5.2%	0.7%	0.7%	5.5%	19	18	-1
COWEN GROUP	137	113	24	21.2%	0.6%	0.5%	21.6%	20	21	1
RAYMOND JAMES FINANCIAL SERVICES	135	132	3	2.3%	0.6%	0.6%	2.6%	21	20	-1
STATE STREET IFS	129	111	18	16.2%	0.6%	0.5%	16.5%	22	22	0
BANK OF NOVA SCOTIA	107	110	-3	-2.7%	0.5%	0.5%	-2.5%	23	23	0
NOMURA BANK LUXEMBOURG SA	98	93	5	5.4%	0.4%	0.4%	5.7%	24	24	0
CIBC WORLD MARKETS	84	56	28	50.0%	0.4%	0.2%	50.4%	25	27	2
TOP 25 PRIME BROKER MULTI-FR	21,538	21,811	-273	-1.3%	93.3%	94.2%	-1.0%			
ALL OTHER	1,540	1,332	208	15.6%	6.7%	5.8%	15.9%			
TOTAL PRIME BROKER MULTI-FR	23,078	23,143	-65	-0.3%	8.4%	9.3%	-10.0%			
NOT REPORTED	71,035	66,249	4,786	7.2%	25.8%	26.7%	-3.2%			
INELIGIBLE FUNDS - NOT REPORTING A PB	64,281	56,549	7,732	13.7%	23.3%	22.8%	2.6%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	106,802	ŗ	13,813	14.9%	38.8%	37.4%	3.7%			
TOTAL FUNDS NOT DISCLOSING A PRIME BROKER FR	242,118	-	26,331	12.2%	87.9%	86.8%	1.3%			
TOTAL FUNDS WITH SINGLE PRIME BROKER FR	10,106	9,574	532	5.6%	3.7%	3.9%	-4.7%			
TOTAL FUNDS	275,302	248,504	26,798	10.8%	100.0%	100.0%	0.0%	0	U	0

- Prime Brokers ranked >25 registered the highest growth in funds
  - Funds increased 15.62 %, or 55.77x the market
  - Market share increased from 5.76% to 6.67%
    - ➤ An increase of 15.94%
- Prime Brokers ranked 1-10 registered the smallest growth in funds
  - Funds decreased 2.91 %, or -10.38x the market
  - Market share declined from 80.85% to 78.72%
    - ➤ A decrease of 2.63%

Peer	Group Perfor	mance by Fund	Relationships	5		
Prime Broker	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2023	2022	Change	Change %
Market Growth Funds	10.78%		100%	100%		
Market Growth Multi PB Disclosed	-0.28%	-0.03	8.38%	9.31%	-0.93%	-9.99%
Prime Brokers Ranked 1-10	-2.91%	-10.38	78.72%	80.85%	-2.13%	-2.63%
Prime Brokers Ranked 11-25	8.74%	31.22	14.61%	13.39%	1.21%	9.05%
All Other Prime Brokers	15.62%	55.77	6.67%	5.76%	0.92%	15.94%
Market Growth Single PB Disclosed	5.56%	0.52	3.67%	3.85%	-0.18%	-4.72%
PB Not Disclosed	12.20%	1.13	87.95%	86.83%	1.11%	1.28%

## Multi-Prime Broker League Table – Global Assets

Convergence - Apr 2023 I	eague Tables.	- Multi Prim	e Broker M	arket Segmer	nt - Assets	(in BN)				
Multi	Apr -23	Apr -22	22-23	22-23		Market	23-22	Apr -23	<b>Apr -22</b>	23-22
Prime Brokers	FR-Assets	FR-Assets	Change	Change %	Share-23	Share-22	Change %	Rank	Rank	Change
JPMORGAN	\$5,030.67	\$5,084.56	-\$53.89	-1.1%	11.3%	11.5%	-1.8%	1	1	0
MORGAN STANLEY	\$4,764.03	\$4,854.78	-\$90.74	-1.9%	10.7%	11.0%	-2.6%	2	2	0
GOLDMAN SACHS BANK USA	\$4,668.92	\$4,486.69	\$182.23	4.1%	10.5%	10.1%	3.3%	3	3	0
BANK OF AMERICA	\$3,939.56	\$4,444.24	-\$504.68	-11.4%	8.8%	10.0%	-12.0%	4	4	0
BARCLAYS	\$3,722.62	\$4,154.94	-\$432.32	-10.4%	8.4%	9.4%	-11.0%	5	5	0
CITIBANK	\$3,510.41	\$3,158.93	\$351.48	11.1%	7.9%	7.1%	10.3%	6	6	0
UNION BANK OF SWITZERLAND	\$3,199.62	\$3,103.60	\$96.02	3.1%	7.2%	7.0%	2.4%	7	8	1
BNP PARIBAS	\$2,981.71	\$2,870.38	\$111.33	3.9%	6.7%	6.5%	3.1%	8	9	1
CREDIT SUISSE	\$2,050.81	\$3,131.15	-\$1,080.34	-34.5%	4.6%	7.1%	-35.0%	9	7	-2
HSBC FINANCIAL SERVICES	\$1,266.12	\$983.64	\$282.48	28.7%	2.8%	2.2%	27.8%	10	12	2
SOCGEN	\$1,099.69	\$1,065.58	\$34.11	3.2%	2.5%	2.4%	2.5%	11	10	-1
WELLS FARGO	\$1,044.71	\$601.00	\$443.70	73.8%	2.3%	1.4%	72.6%	12	16	4
BANK OF NEW YORK	\$902.03	\$802.96	\$99.07	12.3%	2.0%	1.8%	11.5%	13	13	0
FIDELITY	\$894.49	\$1,016.03	-\$121.54	-12.0%	2.0%	2.3%	-12.6%	14	11	-3
NOMURA BANK LUXEMBOURG SA	\$715.26	\$656.19	\$59.07	9.0%	1.6%	1.5%	8.2%	15	15	0
BANK OF NOVA SCOTIA	\$710.62	\$671.98	\$38.64	5.7%	1.6%	1.5%	5.0%	16	14	-2
ROYAL BANK OF CANADA	\$506.20	\$148.11	\$358.09	241.8%	1.1%	0.3%	239.4%	17	23	6
SKANDINAVISKA ENSILDA BANKEN	\$493.54	\$392.05	\$101.49	25.9%	1.1%	0.9%	25.0%	18	17	-1
CIBC WORLD MARKETS	\$245.50	\$58.58	\$186.91	319.1%	0.6%	0.1%	316.1%	19	33	14
ROYAL BANK OF SCOTLAND	\$243.15	\$230.41	\$12.74	5.5%	0.5%	0.5%	4.8%	20	18	-2
MAREX SPECTRON	\$232.69	\$0.13	\$232.56	181308.0%	0.5%	0.0%	180035.4%	21	139	118
STATE STREET IFS	\$222.71	\$209.62	\$13.09	6.2%	0.5%	0.5%	5.5%	22	19	-3
CANTOR FITZGERALD	\$210.04	\$195.22	\$14.82	7.6%	0.5%	0.4%	6.8%	23	20	-3
BMO PRIME BROKERAGE	\$163.44	\$148.64	\$14.79	10.0%	0.4%	0.3%	9.2%	24	22	-2
MIZUHO TRUST BANKING CO USA	\$125.94	\$158.56	-\$32.61	-20.6%	0.3%	0.4%	-21.1%	25	21	-4
TOP 25 PRIME BROKER MULTI-FR ASSETS	\$42,944.48	\$42,627.98	\$316.49	0.7%	96.4%	96.4%	0.0%			
ALL OTHER	\$1,607.25	\$1,611.20	-\$3.94	-0.2%	3.6%	3.6%	-0.9%			
TOTAL PRIME BROKER MULTI FR ASSETS DISCLOSED	\$44,551.73	\$44,239.18	\$312.55	0.7%	38.3%	37.6%	1.9%			
NOT REPORTED	\$15,056.77	\$14,754.05	\$302.71	2.1%	12.9%	12.5%	3.3%			
INELIGIBLE FUNDS - NOT REPORTING A PB	\$35,654.17	\$36,950.45	-\$1,296.28	-3.5%	30.7%	31.4%	-2.3%			
ELIGIBLE FUNDS - NOT ATTRIBUTED	\$19,375.85	\$20,023.04	-\$647.19	-3.2%	16.7%	17.0%	-2.1%			
TOTAL ASSETS NOT DISCLOSING A PRIME BROKER FR	\$70,086.78	\$71,727.54	-\$1,640.75	-2.3%	60.3%	61.0%	-1.1%			
TOTAL ASSETS WITH SINGLE PRIME BROKER FR	\$1,630.59	\$1,698.87	-\$68.28	-4.0%	1.4%	1.4%	-2.9%			
TOTAL FUND ASSETS	\$116,269.10	\$117,665.58	-\$1,396.48	-1.2%	98.6%	98.6%	0.0%	0	0	0

## Multi-Prime Broker Peer Analysis – Global Assets - Growth & Market Share

- Prime Brokers ranked 11-25 registered the highest Assets growth
  - Assets increased 22.89%, or 32.40x the market
  - Market share increased from 14.37% to 17.53%
    - $\blacktriangleright$  An increase of 22.03%
- Prime brokers ranked 1-10 registered the lowest Assets growth
  - Assets decreased 3.14%, or -4.44x the market
  - Market share declined from 81.99% to 78.86%
    - $\blacktriangleright$  A decrease of 3.82%

Peer Group Performance by Fund Assets						
Prime Broker	Y-Y	Growth	SOM	SOM	SOM	SOM
Peer Group Analysis	Growth	vs-MKT	2023	2022	Change	Change %
Market Growth Assets	-1.19%		100%	100%		
Market Growth Multi PB Disclosed	0.71%	0.59	38.32%	37.60%	0.72%	1.92%
Prime Brokers Ranked 1-10	-3.14%	-4.44	78.86%	81.99%	-3.13%	-3.82%
Prime Brokers Ranked 11-25	22.89%	32.40	17.53%	14.37%	3.16%	22.03%
All Other Prime Brokers	-0.24%	-0.35	3.61%	3.64%	-0.03%	-0.94%
Market Growth Single PB Disclosed	-4.02%	-3.38	1.40%	1.44%	-0.04%	-2.87%
PB Not Disclosed	-2.29%	-1.92	60.28%	60.96%	-0.68%	-1.11%

## 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.

## Additional Analytics available for the Prime Broker 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.

### 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 Prime Broker.
- US Funds and Assets
  - Measures public and private funds and assets domiciled in the US that Convergence can attribute to one or more Fund Prime Broker.
- 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 Prime Broker.
- 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 Prime Broker.
- All Other Prime Broker
  - Is a measure of funds and assets attributed to Fund Administrators ranked outside the Top 25.

## Terms Used in Our Fund Prime Broker League Tables

### Single/Multiple Relationship

- A **"Single"** Prime Broker relationship exists at the fund level when the adviser discloses one prime broker to their fund and a **"Multiple"** PB exists when more than one PB is named.
- Total PB Relationships
  - Measures total number of funds or total amount of asset available in the market
- Total PB single Relationships
  - Measures total Funds in single relationships means, total funds in the market for those who have only single-PB relationship.
- Total PB Multiple Relationships
  - Measures total Funds in multiple relationships means, total funds in the market for those who have multi-PB relationship.
- Unique PB single Relationships
  - Measures unique Funds in single relationships means, unique funds in the market for those who have only single-PB relationship.
- Unique PB Multiple Relationships
  - Measures unique Funds in multiple relationships means, unique funds in the market for those who have multi-PB relationship.
- Total Market
  - o Measures sum of Unique PB single Relationships and Unique PB Multiple Relationships .

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## The Convergence Leadership Team



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

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#### George Evans, Co-President and Chief Revenue Officer

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 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

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

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#### Vidya Minukuri, Global Head of Data Science & Research

#### Career History

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#### David Etzbach, Managing Director, Custodians and Allocators

#### Career History

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