

Brokers, Asset Managers & Exchanges

4Q23 Preview – Expect beats from asset managers vs. in-line for brokers/exchanges

Price Objective Change

Forecast strong 4Q23 results for the asset managers

We expect better than expected financial results and positive EPS revisions for both the Trads and Alts given the strong equity market and declining interest rate backdrops that developed in 4Q23. Alternatively, we look for in-line results for both the Brokers and Exchanges. There is potential for negative EPS revisions for the Brokers driven mainly by lower cash sweep revenue expectations with the market now pricing in six Fed rate cuts in 2024 (and more in 2025). With this research note, we are revising EPS and POs across our coverage and introducing our 2026 EPS estimates.

Continued preference for Alts versus Brokers in 1H24

Given the secular growth themes underpinning the Alts' business models, it remains our favorite industry over the long-term. Alt fundamentals troughed in 2023 following the bear market and 500bps+ Fed rate increases, but we expect to see green shoots emerge in 1H24 on multiple fronts (fundraising, investing, returns, realizations) which should trigger positive EPS revisions. Additionally, while we expect most of our broker coverage to generate solid organic growth in 2024-26, we are cautious in the short term given the declining interest rate backdrop combined with bullish ownership in select names.

Short-term: Expect beats from OWL, JHG, TPG

We expect a large increase in fundraising q/q at OWL. At TPG, we have adjusted our class A share count (not total) assumption which increased the expected EPS accretion from the Angelo Gordon deal, and we expect sizable catch-up fees too. Lower expenses and tax rate supports our above consensus EPS estimate at JHG, and we look for expense management and buybacks to drive upside to 2024-25E EPS. Alternatively, we are looking for a large EPS miss from VIRT following soft 605 data intra-quarter combined with lower spreads as a result of elevated subdollar trading.

Remain LT bullish on KKR, OWL, BLK, AB, TW, ICE

KKR and OWL remain our top picks given multiple catalysts (ex: KKR S&P 500 add) and an expectation of accelerating fundraising levels. KKR just entered its next fundraising cycle and we expect the denominator effect/crowded fundraising backdrop headwinds to subside in 2024. We also believe BLK and AB will be the biggest beneficiaries of the fixed income reallocation theme with investors broadly expected to raise allocations this year. This should also benefit e-trading (TW) and ICE's differentiated fixed income business (data, index, trading, analytics). Additionally, ICE should profit from a rebound in origination volumes via its Mortgage Technology business. We remain Underperform on SCHW due to our view that organic growth and deposit growth will lag expectations. The Thinkorswim integration could also drive near-term client attrition (despite its longer duration balance sheet and AOCI gain from lower rates).

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Exhibit 1: Price Objective Changes

PO changes across our coverage

	New PO	Old PO
APO	112	94
ARES	141	111
BAM	44	37
BX	135	115
CG	31	26
KKR	109	75
OWL	21	17
PAX	18	16
TPG	47	33
CBOE	197	186
CME	194	219
ICE	153	136
NDAQ	55	50
TW	105	99
VIRT	22	20
AB	47	40
AMG	172	144
BEN	23	21
BLK	1034	877
IVZ	20	14
JHG	35	31
TROW	93	79
VCTR	52	44
AMP	447	391
HOOD	12	10
IBKR	146	128
LPLA	276	242
RJF	141	118
SCHW	54	54

Source: BofA Global Research

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Our EPS Forecasts & Price Objectives Exhibit 2: BofA estimates vs. consensus for the alternative asset managers

We expect the largest earnings beats from BX, CG, OWL and TPG

	4Q23E			2024E			2025E			2026E		
	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta
APO	1.77	1.74	2%	8.01	7.95	1%	9.48	9.25	3%	11.03	10.77	2%
ARES	1.12	1.10	2%	4.77	4.73	1%	6.39	6.12	4%	7.81	7.74	1%
BAM	0.34	0.34	-1%	1.47	1.57	-7%	1.77	1.79	-1%	2.10	2.14	-2%
BX	1.14	1.02	12%	5.25	5.19	1%	6.48	6.12	6%	7.52	6.49	16%
CG	0.83	0.78	7%	3.91	3.88	1%	3.89	4.30	-10%	3.79	4.39	-14%
KKR	0.96	0.93	4%	4.70	4.88	-4%	5.73	5.87	-2%	6.85	6.53	5%
OWL	0.19	0.17	10%	0.84	0.76	11%	1.12	0.94	19%	1.28	1.03	24%
PAX	0.34	0.39	-12%	1.59	1.58	0%	1.74	1.88	-7%	1.83	-	-
TPG	0.44	0.41	7%	2.38	2.11	13%	2.80	2.56	10%	3.15	3.04	3%
Average	-	-	3%	-	-	2%	-	-	2%	-	-	5%

Source: Bloomberg, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 3: BofA estimates vs. consensus for the exchanges

We expect the largest earnings beats from TW and CME

	4Q23E			2024E			2025E			2026E		
	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta
CBOE	2.05	2.02	1%	9.07	8.35	9%	10.05	8.84	14%	11.24	9.89	14%
CME	2.33	2.28	2%	10.07	9.31	8%	10.42	9.42	11%	11.06	9.71	14%
ICE	1.29	1.28	0%	6.00	5.75	4%	6.81	6.46	5%	7.66	7.19	7%
NDAQ	0.68	0.68	0%	2.81	2.78	1%	3.21	3.08	4%	3.69	3.32	11%
TW	0.64	0.62	4%	2.62	2.58	1%	3.03	2.83	7%	3.51	3.36	4%
VIRT	0.39	0.48	-19%	2.25	2.31	-3%	2.83	2.75	3%	3.21	-	-
Average	-	-	-2%	-	-	4%	-	-	7%	-	-	10%

Source: Bloomberg, BofA Global Research estimates

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Exhibit 4: BofA estimates vs. consensus for the traditional asset managers

We expect the largest earnings beats from BEN, JHG, TROW and VCTR

	4Q23E			2024E			2025E			2026E		
	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta
AB	0.64	0.63	2%	2.95	2.88	2%	3.41	3.35	2%	3.76	2.75	37%
AMG	6.07	5.93	2%	20.98	20.67	2%	22.95	23.38	-2%	25.15	23.82	6%
BEN	0.55	0.54	1%	2.49	2.47	1%	2.86	2.85	0%	2.91	3.22	-10%
BLK	8.94	8.88	1%	41.58	39.07	6%	45.68	44.50	3%	51.70	47.97	8%
IVZ	0.38	0.39	-3%	1.76	1.68	5%	1.85	1.91	-3%	2.00	2.09	-4%
JHG	0.59	0.54	10%	2.61	2.43	7%	2.98	2.63	13%	3.31	2.63	26%
TROW	1.61	1.59	2%	7.97	7.18	11%	8.00	7.57	6%	8.23	7.74	6%
VCTR	1.16	1.10	5%	5.16	4.69	10%	5.76	5.24	10%	6.44	-	-
Average	-	-	3%	-	-	5%	-	-	4%	-	-	10%

Source: Bloomberg, BofA Global Research estimates

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Exhibit 5: BofA estimates vs. consensus for the brokers

We expect the largest earnings beats from AMP and RJF

	4Q23E			2024E			2025E			2026E		
	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta	BofA	Consensus	% Delta
AMP	7.84	7.68	2%	35.47	33.43	6%	39.14	36.58	7%	44.66	38.52	16%
HOOD	0.02	0.00	-	0.30	0.18	69%	0.47	0.25	85%	0.76	0.78	-2%
IBKR	1.54	1.55	0%	7.01	6.31	11%	7.44	5.94	25%	8.34	6.22	34%
LPLA	3.30	3.36	-2%	15.75	16.14	-2%	20.81	19.51	7%	25.05	23.23	8%
RJF	2.02	2.29	-12%	9.44	9.43	0%	10.64	9.84	8%	12.35	10.51	18%
SCHW	0.57	0.66	-13%	3.14	3.72	-16%	3.55	4.69	-24%	3.86	5.54	-30%
Average	-	-	-5%	-	-	0%	-	-	5%	-	-	9%

Source: Bloomberg, BofA Global Research estimates

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Exhibit 6: BofA estimate revisions for the alternative asset managers

We are revising up our alt asset manager estimates to reflect the improving capital markets backdrop

	4Q23E			2024E			2025E		
	New	Old	% Delta	New	Old	% Delta	New	Old	% Delta
APO	1.77	1.75	1%	8.01	7.81	3%	9.48	9.35	1%
ARES	1.12	1.12	0%	4.77	4.78	0%	6.39	6.38	0%
BAM	0.34	0.35	-3%	1.47	1.51	-3%	1.77	1.75	1%
BX	1.14	1.15	-1%	5.25	5.66	-7%	6.48	6.56	-1%
CG	0.83	0.80	4%	3.91	3.72	5%	3.89	3.54	10%
KKR	0.96	0.96	0%	4.70	4.72	0%	5.73	5.57	3%
OWL	0.19	0.18	6%	0.84	0.81	4%	1.12	1.07	5%
PAX	0.34	0.36	-6%	1.59	1.50	6%	1.74	1.67	4%
TPG	0.44	0.42	5%	2.38	2.14	11%	2.80	2.62	7%
Average	-	-	1%	-	-	2%	-	-	3%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 7: BofA estimate revisions for the exchanges

We are updating our 4Q23 EPS estimates to reflect intraquarter volume disclosures

	4Q23E			2024E			2025E		
	New	Old	% Delta	New	Old	% Delta	New	Old	% Delta
CBOE	2.05	1.98	4%	9.07	8.61	5%	10.05	9.29	8%
CME	2.33	2.36	-1%	10.07	10.48	-4%	10.42	10.93	-5%
ICE	1.29	1.31	-2%	6.00	5.97	1%	6.81	6.80	0%
NDAQ	0.68	0.63	8%	2.81	2.48	13%	3.21	2.88	11%
TW	0.64	0.57	12%	2.62	2.59	1%	3.03	3.03	0%
VIRT	0.39	0.52	-25%	2.25	2.28	-1%	2.83	2.76	3%
Average	-	-	-1%	-	-	3%	-	-	3%

Source: BofA Global Research estimates

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Exhibit 8: BofA estimate revisions for the traditional asset managers

We are revising up our traditional asset manager estimates primarily due to beta

	4Q23E			2024E			2025E		
	New	Old	% Delta	New	Old	% Delta	New	Old	% Delta
AB	0.64	0.62	3%	2.95	2.67	10%	3.41	3.20	7%
AMG	6.07	5.83	4%	20.98	19.86	6%	22.95	21.63	6%
BEN	0.55	0.52	6%	2.49	2.23	12%	2.86	2.56	12%
BLK	8.94	8.94	0%	41.58	37.99	9%	45.68	43.85	4%
IVZ	0.38	0.33	15%	1.76	1.40	26%	1.85	1.47	26%
JHG	0.59	0.54	9%	2.61	2.40	9%	2.98	2.87	4%
TROW	1.61	1.43	13%	7.97	6.49	23%	8.00	6.83	17%
VCTR	1.16	1.15	1%	5.16	4.79	8%	5.76	5.51	5%
Average	-	-	6%	-	-	13%	-	-	10%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 9: BofA Estimate revisions for the brokers

We are reducing our broker earnings estimates to reflect heightened margin pressure from lower rates

	4Q23E			2024E			2025E		
	New	Old	% Delta	New	Old	% Delta	New	Old	% Delta
AMP	7.84	7.89	-1%	35.47	34.57	3%	39.14	39.11	0%
HOOD	0.02	0.03	-33%	0.30	0.22	36%	0.47	0.48	-2%
IBKR	1.54	1.60	-4%	7.01	6.69	5%	7.44	7.32	2%
LPLA	3.30	3.36	-2%	15.75	15.26	3%	20.81	20.19	3%
RJF	2.02	2.02	0%	9.44	8.82	7%	10.64	10.23	4%
SCHW	0.57	0.65	-12%	3.14	3.29	-5%	3.55	3.93	-10%
Average	-	-	-4%	-	-	3%	-	-	0%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 10: BofA price objective changes for the alternative asset managers

Among the alternative asset managers, we see the most upside in KKR, OWL, and TPG

	PO			Return			
	New	Old	% Delta	Price	Upside	Div Yield	Total Return
APO	112	94	19%	97	17%	2%	19%
ARES	141	111	27%	119	19%	3%	22%
BAM	44	37	19%	39	12%	3%	15%
BX	135	115	17%	122	11%	4%	15%
CG	31	26	19%	40	-22%	4%	-17%
KKR	109	75	45%	82	32%	1%	33%
OWL	21	17	24%	15	44%	5%	49%
PAX	18	16	13%	15	21%	9%	30%
TPG	47	33	42%	40	18%	5%	23%
Average	-	-	27%	-	16%	3%	20%

Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 11: BofA price objective changes for the exchanges

Among the exchanges, we see the most upside in ICE, CBOE and TW

	PO			Return			
	New	Old	% Delta	Price	Upside	Div Yield	Total Return
CBOE	197	186	6%	176	12%	1%	14%
CME	194	219	-11%	198	-2%	4%	2%
ICE	153	136	13%	128	20%	1%	21%
NDAQ	55	50	10%	57	-3%	2%	-2%
TW	105	99	6%	94	12%	0%	12%
VIRT	22	20	10%	19	14%	5%	19%
Average	-	-	6%	-	9%	2%	11%

Source: Bloomberg, BofA Global Research

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Exhibit 12: BofA price objective changes for the traditional asset managers

Among the traditional asset managers, we see the most upside in AB, VCTR and BLK

	PO			Return			
	New	Old	% Delta	Price	Upside	Div Yield	Total Return
AB	47	40	18%	32	48%	9%	57%
AMG	172	144	19%	148	16%	0%	16%
BEN	23	21	10%	29	-21%	4%	-17%
BLK	1034	877	18%	792	30%	3%	33%
IVZ	20	14	43%	18	12%	5%	17%
JHG	35	31	13%	29	20%	5%	25%
TROW	93	79	18%	107	-13%	5%	-9%
VCTR	52	44	18%	33	58%	4%	62%
Average	-	-	20%	-	19%	4%	23%

Source: Bloomberg, BofA Global Research

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Exhibit 13: BofA price objective changes for the brokers

Among the brokers, we see the most upside in RJF and IBKR

	PO			Return			
	New	Old	% Delta	Price	Upside	Div Yield	Total Return
AMP	447	391	14%	378	18%	2%	20%
HOOD	12	10	20%	12	-1%	0%	-1%
IBKR	146	128	14%	87	68%	0%	68%
LPLA	276	242	14%	234	18%	1%	18%
RJF	141	118	19%	111	27%	0%	27%
SCHW	54	54	0%	66	-18%	2%	-16%
Average	-	-	14%	-	19%	1%	19%

Source: Bloomberg, BofA Global Research

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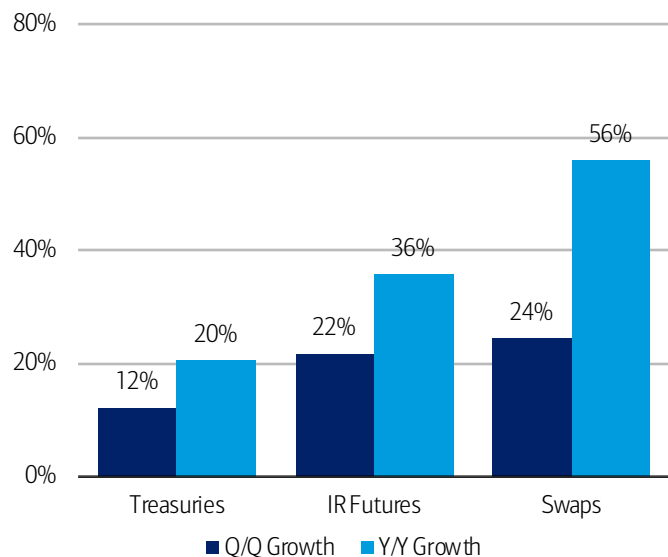
Exchanges & Market Structure

Rates platforms benefit from inflation turning point

4Q23 is being viewed by markets as a turning point in the global battle against inflation, and rates platforms have been large beneficiaries, especially rates derivatives. After a full year of rapidly raising interest rates to tame inflation, 4Q23 appears to have marked a new chapter in monetary policy. In October, inflation rates in both the US and Europe dropped significantly, coming in below expectations and hitting a two-year low in both cases. CPI in the US and UK was flat m/m in October while consumer prices in the Eurozone rose just 0.1% m/m. Following the news, the implied probability of further rate hikes in the United States fell from 30% to under 5%, indicating that the market believes inflation has been tamed. As we turn the page on the post-Covid inflation battle, rates traders have been actively repositioning their portfolios. Rates cash, swaps and futures were all up double digits sequentially and y/y (Exhibit 14). Rates derivatives (swaps, futures) have been the largest beneficiary due to better relative liquidity in the derivatives markets vs cash lately (Exhibit 15). In our exchange coverage, we expect CME and TW to see the largest macro tailwinds in 4Q23. Rates has constituted 52% of TW's revenue YTD, and we forecast it rising 11% q/q in 4Q23. As for CME, rates contributed 32% of its revenue YTD, and we are modeling a 23% sequential increase.

Exhibit 14: Interest rate product volume growth in 4Q23

The inflation turning point drove robust volumes across products

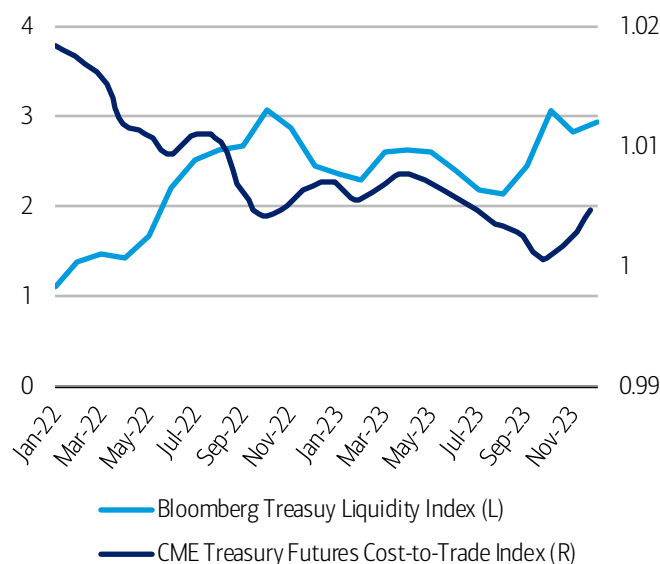


Source: Company reports, Futures Industry Association, NY Federal Reserve, and BofA Global Research

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Exhibit 15: Liquidity conditions in rates cash and derivatives

Derivatives are demonstrating the most growth because of their increasingly favorable liquidity relative to cash



Source: Company reports, Bloomberg, BofA Global Research

Note: A lower value indicates better liquidity.

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CME: Taking their foot off the pricing pedal

After getting more aggressive on pricing last year, CME now appears to be reversing course. Last year, CME pushed through its largest transaction fee increases since going public. The RPC in energy and equity index futures (which together comprise nearly half of total transaction fee revenue) increased by 14% and 20% respectively. CME followed-up these increases with additional sizable price hikes in market data as well as collateral management. Although these price changes appeared to be successful and did not noticeably hinder volumes, CME now appears to be backtracking. At the end of November, CME communicated its 2024 pricing schedule, which will take effect in February. Our analysis of the fee schedule indicates that the price increases are meaningfully less than last year. There was no price increase for rates, and we forecast only a LSD% increase for the other asset classes excluding agriculture (for which we

forecast a HSD% increase). We expect management to provide firmer guidance on pricing on the earnings call, and we anticipate that the stock's post-earnings performance will hinge heavily on those comments. In light of the new fee schedule, we have moderated our pricing forecast and revised down our long-term EPS estimates. Our PO falls 11% to \$194 from \$219.

Exhibit 16: 2024 headline price changes for key CME products

With the exception of agriculture, the changes appear to be quite modest

Product Name	Product Code	Asset Class	% of Asset Class Volume	Change in Headline Member Pricing	Change in Headline Customer Pricing
SOFR	SR3	Rates	37%	0%	0%
Treasuries	(several)	Rates	51%	0%	0%
Equity index e-minis	(several)	Equity	45%	3%	4%
Equity index micros	(several)	Equity	34%	0%	0%
WTI	CL	Energy	44%	0%	0%
Natural Gas	NG	Energy	19%	0%	7%
Corn	CL	Agriculture	29%	22%	0%
Soy	S, 07, 06	Agriculture	35%	22%	0%
Gold	GC	Metals	38%	0%	3%
Copper	HG	Metals	17%	0%	3%

Source: Company reports, BofA Global Research

Note: All prices are for Globex, which is generally the largest venue/transaction type. All prices are for futures.

There are discounts and rebates for hitting specific volume tiers or utilizing specific trading strategies. These are not reflected in the headline pricing above.

% of asset class volume accounts for the product's aggregate contribution in 2023, which is larger than subset of tiers shown in the rightmost columns.

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VIRT: Expect subdollar trading to hurt market making revs

In addition to ongoing headwinds from low volatility and waning retail engagement, the emergence of subdollar trading is likely to hurt VIRT's market making revenues in the quarter. Virtu's Oct/Nov 605 data indicates a meaningful decline in volumes (down 11% from 3Q23 and 6% y/y) as well as record low spreads (down 1% sequentially and 2% y/y). We attribute this poor performance early in the quarter primarily to the ongoing lull in volatility. This was the second weakest equity volatility quarter since the pandemic (only 3Q23 was worse) with volatility down 39% y/y. We also suspect that retail investors are being pulled away from cash equities and into other asset classes, namely crypto where volumes grew 90% sequentially. On its face, December appears to be a better month. Off-exchange tape volume was up 17% m/m in December, the market rallied, and retail volumes should see positive seasonality around the holidays as people take time off work and have more time to trade. We believe these positive indicators drove the stock's outperformance last month (up +13%). However, we note that December marked an all-time record for subdollar trading (trading in stocks whose price is under \$1) and that subdollar trading was strong throughout the quarter. In December, subdollar trading accounted for 15% of consolidated volume, up from 11% in November and just 8% last year. Subdollar trading is problematic for market makers because the capture on subdollar trades tends to be much lower than for trading in NMS stocks due to differing tick sizes. Specifically, the minimum tick size for NMS stocks is \$0.01 whereas it is \$0.0001 for subdollar stocks. Due to the combination of weak quarterly volume and the adverse subdollar mix shift, we are lowering our 4Q23 VIRT EPS 25% to \$0.39 from \$0.52 and anticipate downside risk to the stock around earnings. That said, we believe that the subdollar trading trend is a fad and is likely to be short-lived. We also continue to expect stabilization in retail engagement and a comeback in volatility in 2024. Therefore, we reiterate our Buy rating.

Retail Brokers

Interest-rate sensitivity is key focus

Following record levels of cash sorting in 1H23, net deposit outflows have decelerated. While we expect sorting to linger hurting core deposit growth, investors have turned their focus to interest-rate sensitivity with the futures market now predicting 6 cuts through 2024. We calculate the most rate-sensitive names to be LPLA, IBKR and RJF while SCHW, AMP and HOOD remain less so due to longer duration balance sheet (SCHW), diversified revenue streams (AMP) or high beta exposure (HOOD).

SCHW: Still faces LT headwinds after NT run-up

SCHW saw positive price action following the release of its Oct/Nov monthly releases showing a deceleration and subsequent inflection in transactional sweep cash in tandem with the Fed's decision to pause rate hikes for a third time with markets now predicting 6 cuts through 2024. Investors seem to view SCHW as liability-sensitive, predicting cuts will help the broker by 1. Lowering the cost of its expensive ST funding costs including FHLB and CDs; 2. Helping to erase some of the mark-to-market losses on its AFS securities portfolio leading to buybacks sooner than initially expected. While we are less bearish on the stock, we still believe LT headwinds will weigh earnings and subsequently valuation as themes play out. SCHW reported +1.9% annualized NNA growth in Oct+Nov as the brokerage deals with attrition from its integration with AMTD. We look for NNA growth to remain below LT historical averages (+4-5% vs. +5-7%) as more advisors make the decision to repaper and add more custodial relationships while also facing more competition from new and differentiated offerings (LPLA/GS/RJF/Innovayte). SCHW has yet to onboard AMTD's "active trader" cohort which should transition in a few months. SCHW faces further competitive pressures in its retail segment from growing competition offering sleek user-interfaces (HOOD/Webull) as well as lower pricing and sophisticated tools for higher-productivity traders (IBKR). While lower interest rates increase SCHW's 2024/25 EPS, we question whether the market is correctly valuing normalized earnings as lower rates ultimately lead to a lower reinvestment opportunity subsequent FHLB/CD paydown and limits further NIM expansion in the case SCHW "missed" their high-potential reinvestment window.

RJF: low val and less rate-sensitive than given credit for

RJF is currently trading at 11.5x consensus 2025 adj. EPS, on the low end of its 11-17x historical range under the assumption of peak-ish earnings. We believe RJF is better positioned for lower rates than its given credit for as capital markets deal activity begins normalizing and the broker has additional levers to mitigate the negative interest-rate impact. While the CM segment reported pretax losses the last 3 quarters, RJF marked an inflection point last quarter (\$7M vs. \$34M q/q loss) and we expect profitability this quarter already seeing green shoots as markets adjust to higher rates and deferred comp winds down. With futures market now pricing in 6 cuts through 2024, we estimate a ~\$1.05 run-rate EPS impact per -100bps move in Fed Funds (-\$1.58 total impact from rates). This analysis does not include the scenario that RJF reinvests floating-rate loans (77% of book) into fixed-rate or migrates its third-party bank contracts (\$16B) onto its balance sheet (better monetization) which we view being likely following the first cut. We also believe the positive market impact from lower rates on asset management segment and PCG asset levels (further aided by robust +5-7% NNA growth) is largely ignored leading to positive earnings revisions as earnings in the cutting environment play out.



Traditional Asset Managers

Positive markets provide tailwind to Trad EPS

We forecast ~6% average upside to 4Q23 consensus EPS estimates for the Trads as better than expected equity market returns (plus positive FX translation) provide a tailwind for Trad management fees. Upside to management fee expectations as well as performance fees (for which Trads generally provide conservative guidance) should drive up EPS revisions through 4Q23 financial results. While the beta tailwind supports positive 4Q23 income statements across the Trads, we forecast low organic growth across traditional/active due to both secular (passive/ETF rotation) and seasonal (elevated tax-loss harvesting) factors. While the averaging math prevents the beta/FX tailwind from providing a significant lift to 4Q23 management fees, it will raise 2024 EPS. From a net flow standpoint, we continue to expect ETF/passive and fixed income to win the lion's share of inflows and for this theme to accelerate in 2024. However, the rotation from active to passive and large rebalancings into cash/fixed income should mainly benefit AB and BLK with less organic growth opportunities for the rest of the industry.

BLK: Forecast >\$100B LT net flows in 4Q23

After two softer net flow quarters (2Q/3Q23), we look for BLK's LT net flows to be above +\$100B in 4Q23 which is a significant positive inflection from 3Q23 (LT net outflows of \$12.6B). We view this as strong given the backdrop and relatively weaker flows at most of its peers. Positive 4Q23 flows will largely be driven by BLK's iShares business (ETFs) with December flows being seasonally strongest historically. iShares inflows in 4Q23 are largely attributable to equity and fixed income (relatively even split). Specifically, as of December 7th, iShares saw +\$34B inflows into equities, +\$26B in fixed income, and +\$2B in commodities. BLK's money market business (95% institutional) has trended positively in 2023 and we estimate BLK has generated +\$40B of net inflows in the quarter (vs. +\$15B in 3Q23). While we estimate BLK's LT organic growth will be +3% in 2023, we expect a flow re-acceleration in 2024 largely driven BLK's industry leading bond ETF business as we look for passive to win 60-70% of the fixed income rebalancing wave through 2025. Separately, we estimate modest upside to the 4Q23 consensus EPS given positive beta (management fees) and net gains on investments (Envestnet is up 17% in 4Q23) which is a lower quality item.

TROW: Upside to consensus EPS but \$30B of net outflows

TROW's negative organic growth is expected to deteriorate further in 4Q23 with net outflows accelerating to \$30B vs. \$17B in 3Q23 and we estimate the majority of outflows will come from TROW's active equity business. From TROW's October and November monthly AuM releases, preliminary net flows were -\$19B and the company guided to >\$10B of net outflows again in December. Despite the negative organic growth set-up in 4Q23, we estimate upside to current consensus estimates given positive markets lifting management fees, incentive fees, and non-op income. Additionally, TROW has exceeded expectations on expense management and we expect its 2023 adjusted operating expense growth (x-OHA comp) will fall at the low end of its guidance range of 2-4%.

Alternative Asset Managers

Summary of 4 key metrics for 4Q23

In 4Q23 we expect (1) in-line fundraising, (2) low investing activity but improving outlook, (3) strong blended returns and (4) soft realizations but improving outlook. By asset class, we look for resilience in credit & insurance fundraising versus weakness in private equity and real estate. We expect in-line fundraising vs. 3Q23 but improving activity in 2024. Returns in the private markets should be stronger as public markets performed well during 4Q23 (but PE stakes have generally lagged). Investing will be mixed but improving Q/Q and dependent on timing of closes. We project soft realizations given many asset managers are unwilling to sell. We are hopeful that transaction activity (investing + realizations) will continue to improve in 2024 driving positive EPS revisions and accelerating growth as capital markets reopen.

Blackstone (Buy): Few carry generating realizations

Although realization and investing activity will likely remain muted, we forecast an EPS beat and stronger inflows in 4Q23 on the back of a RE final close and stronger credit inflows. We estimate BX will have higher inflows in 4Q23 vs. 3Q23 (\$30B vs. \$25B) with most inflows in their credit and real estate businesses. The company announced a final close for Strategic Partners Real Estate VIII in November, as well as \$2.7B of inflows in BCRED through December 6. BX's investing activity is trending softer in 4Q23 with NIPSCO, Highgate, Quality Care India, and the Permira Holdings acquisition of Ergomed being the largest transactions we are tracking. BX's public returns are in-line with 3Q23 (estimate 2% in 4Q23 vs. 4% in 3Q23), but we are not tracking many carry generating realizations for BX in 4Q23. Of the realizations we are tracking, many of them, including the Bellagio, Simply Self Storage and Hotel Investment Partners are sales from BREIT and are not carry-earning events. We forecast upside to the Street's consensus EPS estimate (\$1.02) for BX in the fourth quarter of 2023, as we project \$1.14 of EPS in 4Q23.

KKR (Buy): Closing both the MetLife & Global Atlantic transactions

While KKR's fourth quarter results will be driven by its two large recent transactions (MetLife & Global Atlantic's remaining stake), the narrative around 2024 will center on its upcoming flagship fundraising cycle. We expect KKR will have strong inflows (\$28B in 4Q23 vs. \$14B in 3Q23), primarily due to the MetLife transaction which should add \$13B of AuM in 4Q23. We also project \$6B of inflows from Global Atlantic and SMAs. The final closes of Global Impact II and Next Generation Technology should bring additional inflows before the flagship fundraising cycle kicks off in 2024 with Infra V. KKR's public holdings were up 9% in the quarter, and we believe their private performance will be up 3-4%, as public markets have experienced positive returns in the quarter. While returns were strong, we believe KKR's investing activity will be flat (Simon & Schuster, Circor, Chase Corp, Singtel and USI Insurance Services deals have closed in 4Q23). We also expect in-line realization activity in 4Q23 vs. 3Q23 (\$10.3B vs. \$10.9B). The largest realizations we are tracking are from the A-Gas M&A exit and the Kokusai Electric IPO, which generated a 14x MOIC. KKR maintained 40% ownership of the Kokusai stock (which is up 60%+ since the IPO). In 4Q23, we are forecasting FRE of \$627M and EPS of \$0.96 for KKR. Lastly, during the fourth quarter KKR completed its acquisition of the remaining 37% of Global Atlantic for \$2.7B, now owning 100% of the insurance company.

Earnings & PO Revision Summary

1. Exchanges & Market Structure

CBOE Global Markets (CBOE, Buy): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS to \$2.06/\$9.10/\$10.07 from \$1.98/\$8.61/\$9.29 due to a resumption in index options growth. After showing signs of decelerating earlier this year, CBOE's index options suite posted another strong quarter of growth at 11% q/q. We have accordingly revised up our estimates for index options growth going forward. Our PO increases to \$197 from \$186. Our PO is now based on 2026 earnings (from 2025), and we lowered our multiple from 20x to 17.5x to offset the impact of our earnings roll.

CME Group (CME, Neutral): Lowering EPS and PO

We lower our 4Q23/2024/2025E EPS to \$2.33/\$10.07/\$10.42 from \$2.36/\$10.48/\$10.93. We lower our longer-term estimates due to CME's backtracking on pricing. The recently announced 2024 pricing changes were more modest than last year and our expectations. Our PO falls to \$194 from \$219. Our PO is now based on 2026 earnings (from 2025), as we lower our multiple from 20x to 17.5x to offset the impact of our earnings roll.

Intercontinental Exchange (ICE, Buy): Increasing EPS and PO

We revise our 4Q23/2024/2025E EPS to \$1.31/\$6.05/\$6.85 from \$1.31/\$5.97/\$6.80. While we maintain our 4Q23 estimate, we increase our estimates for 2024/25 to reflect improving fundamentals in both the fixed income and mortgage business. Fixed income net flows have been positive in 2H23, and we expect a further acceleration as retail chases higher yields before rates fall. Additionally, we are more constructive on the origination business as rates finally begin falling. The 30Y fixed rate has fallen 10% over the course of 4Q23. Our PO increases to \$153 from \$136. Our PO is now based on 20x multiple on 2026 earnings (from 2025).

Nasdaq (NDAQ, Underperform): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS to \$0.68/\$2.81/\$3.21 from \$0.63/\$2.48/\$2.88. The upward revision was mostly attributable to beta (via the indexing business). We also modestly revise up our Adenza estimates to reflect recent management comments. Our PO increases to \$55 from \$50. Our PO is now based on 2026 earnings (from 2025), and we lower our multiple from 17.5x to 15x to offset the impact of our earnings roll.

Tradeweb (TW, Buy): Increasing EPS and PO

We increased our 4Q23/2024/2025E EPS to \$0.64/\$2.62/\$3.03 from \$0.57/\$2.59/\$3.03 due strong volumes in rates and credit. The volume gains are attributable to share gains, favorable macro and end-of-year tax loss harvesting. This upward revision was partially offset by a downward revision to swaps FPM given ongoing unfavorable mix shifts as well as higher expected compensation expense. Given the strength of 4Q23 results, we now expect TW's 4Q23 adjusted operating expenses to land at the high end of their \$670-\$695 guide. Our PO increases to \$105 from \$99. Our PO is now based on 2026 earnings (from 2025), and we lower our multiple from 32.5x to 30x to offset the impact of our earnings roll.

Virtu (VIRT, Buy): Decreasing 4Q23 EPS but raising PO

We revise our 4Q23/2024/2025E EPS to \$0.39/\$2.25/\$2.83 from \$0.52/\$2.28/\$2.76. The Oct/Nov disclosures indicate that Virtu is on track for its lowest quarterly volume and capture since the pandemic. Although the industrywide cash equity volumes were up meaningfully in December and the stock has rallied, we believe elevated levels of subdollar trading has inhibited Virtu's ability to capitalize on those volumes. Nevertheless, given our outlook for higher volatility and positive beta, we raise our longer-term EPS estimates. Our PO increases to \$22 from \$20. Our PO is now based on 2026 EBITDA (from 2025), and we lower our multiple from 6x to 5.5x to offset the impact of our earnings roll.

2. Retail Brokers

AMP (Buy): Minor changes to EPS but raising PO:

We adjust our 4Q23/2024/2025E adj. EPS to \$7.84/\$35.47/\$39.14 from \$7.89/\$34.57/\$39.11 driven by minor tweaks in cash sweep revenue and insurance segment revenue sources. Our PO increased to \$447 (previously \$391) as we are now valuing AMP on 2026 estimates (previously 2025).

HOOD (Underperform): Raising EPS and PO

We increase our 4Q23/2024/2025E adj. EPS to \$0.02/\$0.30/\$0.47 from \$0.03/\$0.22/\$0.48 due to changes in our net interest revenue and client activity levels. Our PO increases to \$12 (previously \$10) as we are now valuing HOOD on 2026 adj. EBITDA multiples (vs. 2025 previously). We also lower our multiple to 7x (previously 8x).

IBKR (Buy): Raising EPS and PO

We lower our 4Q23/2024/2025E adj. EPS estimates to \$1.54/\$7.01/\$7.44 from \$1.60/\$6.69/\$7.32 driven by increases in commissions and margin loan usage. Our PO increases to \$146 (previously \$128) as we are now valuing IBKR at 17.5x 2026E adj. EPS (previously 2025E).

LPLA (Neutral): Raising EPS and PO

We increase our 4Q23/2024/2025E adj. EPS estimates to \$3.30/\$15.75/\$20.81 from \$3.36/\$15.26/\$20.19 due to minor changes in growth and beta assumptions. Our PO increases to \$276 (previously \$242) as we are now valuing LPLA at 11x 2026 adj EPS (previously 12x 2025E).

RJF (Buy): Increasing EPS and PO

We increase our 1Q24/2024/2025E adj. EPS estimates to \$2.34/\$9.91/\$11.12 from \$2.23/\$9.29/\$10.71 driven by changes in beta and net interest income assumptions. Our PO increases to \$141 (previously \$118) as we are now valuing RJF at 11x 2026 adj. EPS (previously 2025E).

SCHW (Underperform): Decreasing EPS; maintain PO

We decrease our 4Q23/2024/2025E adj. EPS estimates to \$0.67/\$3.55/\$3.97 from \$0.75/\$3.70/\$4.34 due to changes in asset management fee compression and IEA levels. Our PO is maintained at \$54 as we are now valuing SCHW on 2026 adj. EPS (previously 2025E).

3. Traditional Asset Managers

AllianceBernstein (AB, Buy): Raising EPS and PO

We increase our 4Q23/2024/2025E EPS to \$0.64/\$2.95/\$3.41 from \$0.62/\$2.67/\$3.20 due mostly to improved operating margin estimates. Our PO increases to \$47 from \$40 which is derived from a 12.5x multiple on our 2026 EPS estimate (previously 2025 EPS) and implies 56% 12-month total return potential.

Affiliated Managers Group (AMG, Neutral): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS estimates to \$6.07/\$20.98/\$22.95 from \$5.83/\$19.86/\$21.63 mostly due to positive market action since our last revision and a higher p-fee estimate. Our PO rises to \$172 from \$144 which is derived from an 8.0x multiple on our 2026 EPS estimate (previously 2025) less \$29 due to AMG's elevated financial leverage relative to peers (\$1.1B in net debt).

BlackRock (BLK, Buy): Increasing LT EPS and PO

We raise our 4Q23/2024/2025E EPS estimates to \$8.94/\$41.58/\$45.68 from \$8.94/\$37.99/\$43.85 due mostly to positive markets (beta) and FX while we also slightly increased our 2024 organic growth estimate. Our PO increases to \$1034 from \$877 which is derived from a 20.0x multiple on our 2026 EPS estimate (previously 2025) which implies 30-35% 12-month total return potential.



Franklin Resources (BEN, Underperform): Increasing EPS and PO

We increased our F1Q24/2024/2025E EPS estimates to \$0.55/\$2.49/\$2.86 from \$0.52/\$2.23/\$2.56 mostly driven by positive markets and higher p-fee expectations. Our PO increases to \$23 from \$21 which is derived from an 8.0x multiple to our 2026 calendar year EPS estimate (formerly 2025 calendar year EPS) which implies -17% 12-month total return potential.

Invesco (IVZ, Neutral): Raising EPS and PO

We raise our 4Q23/2024/2025E EPS estimates to \$0.38/\$1.76/\$1.85 from \$0.33/\$1.40/\$1.47 mostly due to positive markets (beta) although we slightly reduce our organic growth forecasts. Our PO increases to \$20 from \$14 which is derived from a 10.0x multiple on our 2026 EPS estimate (previously 2025) and we no longer subtract \$1 (improved financial leverage). Our PO implies 16.5% 12-month total return potential.

Janus Henderson (JHG, Neutral): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS estimates to \$0.59/\$2.61/\$2.98 from \$0.54/\$2.40/\$2.87 due mostly to positive markets (beta). Our PO increases to \$35 from \$31 which is derived from a 10.0x multiple on our 2026 EPS estimate (previously 2025) plus \$2 given JHG's excess capital position, implying 25% 12-month total return potential.

T. Rowe Price (TROW, Underperform): Raising EPS and PO

We raise our 4Q23/2024/2025E EPS estimates to \$1.61/\$7.97/\$8.00 from \$1.43/\$6.49/\$6.83 mostly due to better management fees (positive beta) while we slightly reduce our organic growth forecast. Our PO increases to \$93 from \$79 which is derived from a 10.0x multiple on 2026 EPS (previously 2025) plus \$11 for TROW's excess cash, implying 9% 12-month total return potential.

Victory Capital Management (VCTR, Buy): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS estimates to \$1.16/\$5.16/\$5.76 from \$1.15/\$4.79/\$5.51 mostly due to positive markets (beta). Our PO increases to \$52 from \$44 which is derived from an 8.0x multiple on our 2026 EPS estimate (previously 2025 EPS), implying 61% 12-month total return potential.

4. Alternative Asset Managers**Apollo (APO, Neutral): Increasing EPS and PO**

We increase our 4Q23/2024/2025E EPS to \$1.77/\$8.01/\$9.48 from \$1.75/\$7.81/\$9.35 due to a slight increase in SRE. Our PO increases to \$112 from \$94 which is derived from a 11x multiple on our 2026 EPS estimate (previously 2025 EPS).

Ares (ARES, Buy): Maintaining EPS and increasing PO

We update our 4Q23/2024/2025E EPS to \$1.12/\$4.77/\$6.39 from \$1.12/\$4.78/\$6.38. Our PO increases to \$141 from \$111 which is derived from a 22.5x multiple on our 2026 EPS estimate (previously 2025 EPS).

Blackstone (BX, Buy): Decreasing EPS and increasing PO

We decrease our 4Q23/2024/2025 EPS to \$1.14/\$5.25/\$6.48 from \$1.15/\$5.66/\$6.56 driven by a decline in our management and transaction fee estimates as well as lower fee related performance revenues. Our PO increases to \$135 from \$115 which is derived from a 22.5x multiple on our 2026 EPS estimate (previously 2025 EPS).

Blue Owl (OWL, Buy): Increasing EPS and PO

We slightly increase our 4Q23/2024/2025E EPS to \$0.19/\$0.84/\$1.12 from \$0.18/\$0.81/\$1.07 following an upward revision to our fundraising forecast. Our PO increases to \$21 from \$17 which is derived from a 20x multiple on our 2026 EPS estimate (previously 2025 EPS).

Brookfield Asset Management (BAM, Neutral): Increasing LT EPS and PO

We slightly decrease our 4Q23/2024E EPS to \$0.34/\$1.47 from \$0.35/\$1.51 but increase our 2025 EPS to \$1.77 from \$1.75. Our 2025E EPS increased due to higher base management fees and lower direct costs. Our PO increases to \$44 from \$37 which is derived from a 22.5x multiple on our 2026 EPS estimate (previously 2025 EPS).

Carlyle (CG, Underperform): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS to \$0.83/\$3.91/\$3.89 from \$0.80/\$3.72/\$3.54 driven by upward revisions in our management fee estimates and downward revisions on our cash-based compensation projections. Our PO increases to \$31 from \$26 which is derived from a 10x multiple on our 2026 EPS estimate (previously 9x 2025 EPS).

KKR (KKR, Buy): Increasing LT EPS and PO

We decrease our 4Q23/2024E EPS to \$0.96/\$4.70 from \$0.96/\$4.72 driven by an upward revision in realized performance income compensation. However, we increase our 2025 EPS to \$5.73 from \$5.57 due to higher realizations, transaction fees and investment income. Our PO increases to \$109 from \$75 which is derived from a 17.5x multiple on our 2026 EPS estimate (previously 15x 2025 EPS).

Patria (PAX, Neutral): Increasing LT EPS and PO

We decrease our 4Q23E EPS to \$0.34 from \$0.36 due to lower realized performance fees and increase our 2024/2025E EPS to \$1.59/\$1.74 from \$1.50/\$1.67 driven by higher management fees and realized performance fees. Our PO increases to \$18 from \$16 which is derived from a 10x multiple on our 2026 EPS estimate (previously 2025 EPS).

TPG (TPG, Buy): Increasing EPS and PO

We increase our 4Q23/2024/2025E EPS to \$0.44/\$2.38/\$2.80 from \$0.42/\$2.14/\$2.62 following an adjustment to our class A share count assumption, which increased the expected accretion from the Angelo Gordon deal, and higher expected realizations. Our PO increases to \$47 from \$33 which is derived from a 15x multiple on our 2026 EPS estimate (previously 12.5x 2025 EPS).

1. Fundraising

Fundraising is the most important metric for the alternative asset managers because it drives FRE and therefore valuation. We track fundraising activity through publicly disclosed fundraising announcements from company filings, press releases and SEC filings. Furthermore, we track funds and forecast when the next vintage will be in market based on estimates that firms go to market when the prior fund is 60-70% deployed. Through this detailed approach, we are able to estimate changes in fundraising levels across our coverage.

Exhibit 17: Apollo fundraising tracker

We project an additional \$18B of inflows in 4Q23 in Athene

Apollo Global										
Total AuM (\$B)			Fundraising Pipeline							
			Fund Name	Comments	2023					FY 2023
					1Q	2Q	3Q	4Q		
Fundraising	3Q23	2023	Insurance Vehicles & Direct Lending							
Private Equity	\$1.5	\$10.40	Athene	Fixed Annuity Business (US), Targeting \$60B in 2023	\$11,927	\$18,714	\$13,000	\$18,000	\$61,641	
Real Estate	\$1.7	\$4.9	Athora	Fixed Annuity Business (EU), primarily inorganic growth; 13 EUR in 1Q24	--	--	--	--	\$0	
Credit	\$15.6	\$108.9	Catalina	P&C Reinsurer, minority stake, primarily inorganic growth	--	--	--	--	\$0	
Total (\$Bn)	\$18.8	\$124.1	ADIP Equity Capital	ADIP I - \$3.25B; ADIP II raised \$3B through 2Q23; ADIP II expected to be bigger than previous fund	\$2,000	\$1,000	\$200	\$200	\$3,400	
			Credit Funds & SMA's							
			Financial Credit Investment V	Not in market yet. FCI IV raised \$1.1B (2021)	--	--	--	--	\$0	
Flagship Funds & Re-Insurance Deals			Structured Credit Recovery V	Not in market yet. SCRF IV raised at \$2.6B (2017)	--	--	--	--	\$0	
Private Equity	Vintage	Raised	Aircraft Financing	\$540M ABS issue in 2Q21; \$560M Navigator Aviation Fund I in 2Q21	--	--	--	--	\$0	
Fund VII	2008	\$15.0	Apollo Total Return Fund	Open-Ended, Evergreen, Actively Managed Multi-Sector Credit Fund	\$400	\$400	\$400	\$400	\$1,600	
Fund VIII	2013	\$18.0	CLO	Collateralized Loan Obligations	\$393	\$0	\$935	\$935	\$2,262	
Fund IX	2017	\$25.0	Strategic Origination Fund II	Not in market yet. ASOP I closed at \$2.35B in 3Q20	--	--	--	--	\$0	
ATH Deals	Years	AuM	Accord Series	Accord V closed at \$2.4B in 4Q22; Accord VI expected to start raising 2H23	--	--	\$500	\$500	\$1,000	
Voya	2018	\$19.0	APO Debt Solutions	Non-listed credit BDC	\$202	\$398	\$581	\$600	\$1,781	
Lincoln Re	2018	\$8.0	ABF Franchise	Invests in assets from Atlas (CS Securitized Product Group)	\$37,000	--	--	\$200	\$37,200	
Generali Belgium	2018	\$8.0	Apollo Clean Transition Capital	Launched with \$4B in 2Q23, partially debt.	--	\$2,000	--	--	\$2,000	
Jackson National	2020	\$27.0	SMA's & Other	Separately Managed Accounts	\$2,307	\$6,720	\$4,000	\$4,000	\$17,027	
GE	2020	\$1.7	Real Assets							
Lockheed Martin	2021	\$4.9	US Real Estate Fund IV	US RE Fund III raised \$1B in 4Q21.	--	--	--	--	\$0	
JCPenney	2021	\$2.8	Infrastructure	AIOF II closed at \$2.5B in 1Q22; Now raising AIOF III; \$4B target; Launched in 1Q23 but no close yet	--	--	\$750	\$750	\$1,500	
Lockheed Martin	2022	\$4.3	Asia Real Estate Fund II	Asia RE Fund I closed at \$678M (2017)	--	--	--	--	\$0	
AT&T	2023	\$8.1	Griffin	\$6.5bn acquisition in May, 2022. Consists of a diversified real estate interval fund and a diversified credit interval fund	\$260	\$243	\$250	\$250	\$1,003	
Athora Deals	Years	AuM	European Principal Finance IV	EPF IV raised \$3B so far; EPF III raised \$4.4B; Opened 4Q21	\$270	\$687	\$700	\$700	\$2,357	
AXA Germany	2023	\$20.0	Private Equity							
			Clean Transition Fund	Successor to ANRP, last vintage closed at \$3.5B (2016); Targeting 3Q23 launch	--	--	--	\$500	\$500	
			Secondaries (\$3)	Poached a team from BLK that raised their last fund at \$3B; Launched with \$4B in 3Q22 and began accepting third-party capital in 2Q23	--	\$700	\$700	\$700	\$2,100	
			Fund X	Targeting \$22B; Raised \$16B (1Q23) ; Fund IX closed at \$25B (2017); \$20B final close in July	\$1,000	\$4,000	--	--	\$5,000	
			Hybrid Value Fund III	Not in market yet. HVF II closed at \$4.6B in 2Q22	--	--	--	--	\$0	
			Impact Fund II	Not in market yet. Impact Fund I closed at \$1B in 4Q22	--	--	--	--	\$0	
			AAA	Open-ended retail-focused strategy launched in 2Q22	\$400	\$600	\$800	\$1,000	\$2,800	
Total AuM \$642B			APO Commitments / Inflows		\$56,15	\$35,46	\$22,81	\$28,73	\$143,17	
			Total Commitments / Inflows (Model Estimates)		9	2	5	5	1	
3Q23 Inflows			\$32.9		\$56,76	\$34,99	\$32,93	\$32,00	\$156,69	
					9	0	6	0		

Source: BofA Global Research estimates, Company data, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 18: Ares fundraising tracker

Ares is raising the majority of its large flagships in 2023/24

Ares Management

Total AuM (\$B)			Fundraising Pipeline						
			Fund Name	Comments	2023				
					1Q	2Q	3Q	4Q	FY 2023
Fundraising	3Q23	2023	Credit Group						
Credit	\$15.2	\$48.2	U.S. Direct Lending	PCS II (2020) closed with \$5.1B; PCSII will be back in 2Q24 SDL II (2018) closed with \$8B; SDL III in market & first-closed in July; Expected to exceed prior vintage; \$5.1B in equity raised through 2Q	\$1,400	\$4,100	\$5,100	\$2,000	\$12,600
Private Equity	\$0.0	\$2.1	BDCs	Includes ARCC & ASIF; ASIF I launched with \$1.5B in 2Q23	\$1,100	\$800	\$1,200	\$1,500	\$4,600
Real Estate	\$1.0	\$5.0	European Direct Lending	Ares Capital Europe V, LP. ("ACE V") raised \$13.2B; ACE VI first-closed in 1Q23 and has raised \$8.6B in equity through 2Q23; Final close in early 2024 Includes open-ended Path Finder Core, SMAs, Path Finder draw down funds	\$4,500	\$5,000	\$3,000	\$3,000	\$15,500
Secondary	\$0.3	\$2.8	Alternative Credit	Pathfinder I (2020) raised \$3.7B; Path Finder II first-closed with \$3.5B in 2Q and has a \$6.5B hardcap; Pathfinder II final close of \$6.6B in October 2023	\$3,100	\$2,400	\$4,000	\$2,000	\$11,500
Strategic Initiatives	\$2.0	\$9.2	CLOs	Targets 2-4 US CLOs and 1-3 European CLOs per year. Size of a CLO issue is \$300-700MM	\$500	\$0	\$700	\$800	\$2,000
Total (\$Bn)	\$18.5	\$67.3	Sports, Entertainment & Media II	SEM I (2021) raised \$3.7B	--	--	--	--	\$0
			Other Credit Funds	Additional equity and debt commitments to various funds	\$700	\$300	\$500	\$500	\$2,000
			Asian Special Situations	Fund V (2018) raised \$2.7B; SSG Fund VI is in market and has raised \$1.1B through 2Q	--	\$100	\$500	\$500	\$1,100
			Asian Secured Lending	SSG Secured Lending Opportunities III (2020) raised \$1.6B	--	\$100	\$200	--	\$300
Flagship Funds			Private Equity Group						
Fund	Vintage	Raised	Special Opportunities	ASOF II (2021) raised \$7.1B	--	--	--	--	\$0
SDL II	2021	\$14.0	Corporate Private Equity	ACOF VI (2020) raised \$5.7B	\$100	--	--	\$2,000	\$2,100
			Real Assets Group						
ACE V	2020	\$13.2	U.S. Equity	Includes Black Creek	\$500	\$1,000	--	\$500	\$2,000
SDL	2018	\$0.9	U.S. Debt	Includes secured income and enhanced income Ares European Property Enhancement Partners III (2021) raised \$1.8B	\$200	\$500	\$500	\$500	\$1,700
ACOF VI	2020	\$5.7	European Equity	Euro RE VI (2022) raised \$1.6B	--	--	--	--	\$0
EF V	2018	\$2.0	Infra	Infra Debt Fund IV (2018) raised \$4B Ares Climate Infra Partners II in market had a partial first-close of \$500M in 2Q	--	\$500	\$500	\$300	\$1,300
SSG Fund V	2018	\$1.9							
			Secondary Solutions Group						
			Private Equity Secondaries	Fund XVII (2021) raised \$2.4B	--	--	--	--	\$0
			Real Estate Secondaries	Fund VIII (2016) raised \$3.3B; Fund IX first-closed in 4Q21 and raised ~\$2.7B through 3Q23 Newly registered, continuously offered, non-traded, closed-end fund that intends to invest through secondary market fund investments	\$200	\$100	\$200	\$600	\$1,100
			Private Markets Fund	Fund II (2021) raised \$915M.	\$100	--	\$100	\$100	\$300
			Infra Secondaries III	First-time fund; JV with Mubadala	--	--	--	\$200	\$200
			Credit Secondaries		\$900	--	--	\$300	\$1,200
			Strategic Initiatives						
			Ares Acquisition Corporation "AAC" II	SPAC	--	\$500	--	--	\$500
			Insurance	Reallocation of gross new commitments sub-advised by Ares vehicles and included within other strategies	\$2,700	\$2,000	\$2,000	\$2,000	\$8,700
Total AuM \$400B			ARES Commitments / Inflows		\$16,000	\$17,400	\$18,500	\$16,800	\$68,700
3Q23 Inflows			Total Commitments / Inflows (Model Estimates)		\$16,005	\$17,380	\$21,722	\$17,000	\$72,107

Source: BofA Global Research estimates, Company data, Bloomberg

Note: Estimates cover equity & debt commitments, excluding acquisitions

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Exhibit 19: Blackstone fundraising tracker

BCP IX expected to raise through 2023

Blackstone

Total AuM (\$B)			Fundraising Pipeline		2023				
			Fund Name	Comments	1Q	2Q	3Q	4Q	FY 2023
Fundraising	3Q23	2023	Private Equity & Infrastructure						
Private Equity & Infra	\$9.4	\$26.5	BCP IX	BCP VIII Closed at \$25B (2020); BCP IX raised \$16.6bn through 2Q23; Targeting low 20s; Final close early next year Launched in November; First close likely in 2H23; Targeting \$10 billion (inclusive of co-invest); Final close of \$5.2B in August	\$361	\$1,077	\$2,000	\$500	\$3,937
Real Estate	\$5.3	\$25.3	Tactical Opportunities IV	Growth I final close at \$4.5B in 1Q21; Growth II first close was 2Q22; Raised \$4B through 2Q; Targeting \$8B	\$737	\$1,622	\$2,441	\$500	\$5,300
Credit & Insurance	\$9.2	\$47.6	Growth Equity II	BCP Asia II raised \$6.7B (3Q21 vintage); Not in market yet	\$529	--	\$500	\$500	\$1,529
HF/GP Stakes	\$2.0	\$7.6	BCP Asia III		--	--	--	--	\$0
		\$107.							
Total (\$Bn)	\$26.0	0	Core Private Equity III	Core Private Equity II (1Q21) raised in 82B; Back in market 2H24	--	--	--	--	\$0
			Energy IV	Energy III (1Q20 vintage) raised \$4.4B; Fund IV first-closed in 2Q23	--	\$2,055	\$1,000	\$1,000	\$2,000
Flagship Funds			Life Sciences VI	Fund V raised \$4.6B (1Q20 vintage); Comes back early next year	--	--	--	--	\$0
	Vintage	Raised	Infrastructure Partners	Expect a ramp in 2H23 given strong performance in 1H23	\$1,676	\$713	\$1,500	\$1,500	\$5,389
Private Equity	2010	\$150	Strategic Partners X	PE secondaries fund, SP IX Closed at \$22B (4Q21)	--	--	--	--	\$0
BCP VI	2016	\$190	Strategic Partners IX	PE Secondaries; Closed in 1Q23 at \$22.2B (4Q21 vintage)	\$904	--	--	--	\$904
BCP VII	2020	\$250	Other private equity	SMAs, Co-investments	\$349	\$3,073	\$2,000	\$2,000	\$7,422
	Vintage	Raised	Real Estate						
Secondaries	2019	\$11.0	BREP X	BREP X (3Q22) closed at \$30.4B in 1Q23	\$1,600	--	--	--	\$1,600
SP VIII	2022	\$22.0	BREP Europe VII	BREP Europe VI Closed at 9.5B EUR (2019); targeting similar size for VII; Accelerated partial first close in 2Q23, expect the rest in 3Q23	--	\$1,300	\$2,500	\$500	\$4,300
	Vintage	Raised	BREP Asia IV	Asia III (1Q22) raised \$8.2B; Target expected to be \$9.0B	--	--	--	--	\$0
Real Estate	2015	\$16.8	BREDS V	Blackstone Real Estate Debt (BREDS) IV - \$8.0B (3Q22); BREDS V targeting to raise similar to previous fund; ~\$4B raised so far; Expect final close in 2Q24	\$2,087	\$202	\$1,000	\$1,000	\$4,289
BREP VIII	2019	\$20.5	Real Estate Secondaries VIII	Announced final close on \$2.6B for Strategic Partners Real Estate VIII.	--	--	--	\$500	\$500
BREP IX	2022	\$30.4	BREIT	Nontraded REIT	\$5,500	\$791	\$791	\$750	\$7,832
	Vintage	Raised	Core Plus Strategies	Expect more in 2H23 than 1H23	\$2,513	\$2,285	\$1,000	\$1,000	\$6,798
Real Estate Europe	2013	\$7.0	Other Real Estate	Primarily Insurance SMAs; Expect more in 2H23 than 1H23	\$5,346	\$3,961	\$4,500	\$5,500	\$19,307
BREP Europe IV	2016	\$8.0	Credit & Insurance						
BREP Europe V			Long Only/MLPs (Harvest)		\$500	\$500	\$500	\$500	\$2,000
			Global Direct Lending	Includes new global direct lending strategy launched in 1Q23 targeting \$10B first vintage	\$3,091	\$1,649	\$2,000	\$2,000	\$8,740
			BCRED	Includes GSO Euro Senior Debt III which first-closed in 1Q23; €4.5B prior vintage	\$3,209	\$4,051	\$3,000	\$3,000	\$13,260
			CLO	Raised \$32B in 2021	\$4,005	\$599	\$418	\$1,000	\$6,022
			Credit Mezzanine IV	\$7.5B target; Not in market	--	--	--	--	\$0
			BGREEN III	Hit \$7.1B hard cap in August	\$1,200	\$1,300	\$300	--	\$2,800
			Other credit & insurance	Primarily Insurance SMAs; Expect more in 2H23 than 1H23	\$4,585	\$4,204	\$3,000	\$3,000	\$14,789
			Hedge Fund/GP Stakes						
			Hedge Fund Solutions	BPS - fund of fund product	\$2,168	\$1,382	\$2,000	\$2,000	\$7,550
			GP Stakes III	GP Stakes II closed at \$5.6B; Comes back early 2024	--	--	--	--	\$0
Total AuM \$1,018B			BX Commitments / Inflows		\$40,35	\$30,76	\$30,45	\$26,75	\$128,32
			Total Commitments / Inflows (Model		9	3	0	0	2
3Q23 Inflows	\$25.3	Estimates)			\$40,36	\$30,11	\$25,34	\$30,29	\$126,11
					0	5	4	1	0

Source: BofA Global Research estimates, Company data, Bloomberg

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Exhibit 20: Carlyle fundraising tracker

Expect CJP V tentative launch in 4Q23

Carlyle Group

Total AuM (\$B)			Fundraising Pipeline						
					2023				
			Fund Name	Comments	1Q	2Q	3Q	4Q	FY 2023
Fundraising	3Q23	2023	Private Equity						
Private Equity	\$2.4	\$10.1	CP VIII	CP VII (2Q18) closed at \$18.5B; CP VIII smaller than CP VII; Raised \$14.6B through 2Q; 3Q21 first close; Final close in 3Q23	\$200	\$199	\$300	–	\$699
Credit	\$3.6	\$12.7	CEP VI	CEP V (4Q18) raised €6.4B; CEP VI - targeting €7.5B	–	–	–	\$0	\$0
Investment Solutions	\$4.3	\$13.7	CETP V	CETP IV (3Q19) closed at €1.4B; CETPV final closed at €3.2B in 1Q23	\$48	–	–	–	\$48
Total (\$Bn)	\$10.2	\$36.5	CJP V	CJP IV (4Q20) closed at 258,000JPY; Tentative launch in 4Q23	–	–	–	\$1,500	\$1,500
			CAP VI	CAP V (2Q18) closed at \$6.6B; CAP VI launched in 1Q23; Will be smaller than CAP V	\$1,800	\$100	\$1,000	\$1,000	\$3,900
			NGP XIII	NGP XII (3Q17) closed at \$4.3B; NGP XIII targeting \$2.5B, launched in 4Q22; North of \$1B through 2Q	\$1,000	–	\$500	\$500	\$2,000
Flagship Funds									
NA PE	Vintage	Raised	Renewable & Sustainable Energy Fund II	Predecessor raised \$0.8B; Targeting \$1.6B fundraise; First close in 1Q23; Raised \$91M through 2Q	\$200	\$400	\$400	\$400	\$1,400
CP BI	2014	\$1.3Bn	CRP X	CRP IX (4Q21) closed at \$8B; CRP X to begin raising in 4Q23/1Q24	–	–	–	–	\$0
CP VII	2018	\$19Bn	Core Plus RE	Open-ended	–	\$100	\$150	\$150	\$400
European PE	Vintage	Raised	Other		\$152	–	–	–	\$152
CEP IV	2014	4Bn EUR	Global Credit						
CEP V	2018	6Bn EUR	Carlyle Aviation Partners	SASOF VI to begin raising in 2H23; SASOF V (2021) closed at \$1B	–	–	–	\$400	\$400
Asian PE	Vintage	Raised	Fortitude RE	Only additional capital raised	–	–	–	\$0	\$0
CAP IV	2014	\$4Bn	CLOs		–	\$889	\$812	\$1,500	\$3,200
CAP V	2018	\$7Bn	CTAC	Continuously offered, unlisted interval fund	\$177	\$268	\$268	\$500	\$1,212
			BDCs	Carlyle Secured Lending Fund (NDAQ: CGBD), Carlyle Credit Solutions (CARS)	–	–	–	–	\$0
			CCOF III	CCOF II (4Q20) raised \$4.6bn; CCOF III plans to raise 8.5bn, started Feb-23; Raised \$2B through 2Q23	\$1,800	\$156	\$1,000	\$1,000	\$3,956
			Other	SMA	–	\$888	\$1,500	\$1,500	\$3,888
			Investment Solutions						
			ASF VIII	Fund VII (2020) was \$6.8B; First close in 2Q23; \$12-13B target	–	\$1,500	\$1,500	\$1,000	\$4,000
			ACF IX	Fund VIII (2021) was \$3.6B; First Close in 1Q23; \$4.25B target	\$800	\$800	\$800	\$800	\$3,200
			Other	SMA	\$700	\$1,800	\$2,000	\$2,000	\$6,500
					\$6,87	\$7,09	\$10,22	\$12,25	\$36,45
Total AuM \$419B			CG Commitments / Inflows		7	9	9	0	5
			Total Commitments / Inflows (Model Estimates)		\$6,94	\$7,17			\$29,94
3Q23 Inflows			\$6.3		3	8	\$6,322	\$9,500	

Source: BofA Global Research estimates, Company data, Bloomberg

Note: Estimates cover equity commitments only, excludes commitments related to Fortitude transactions

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Exhibit 21: KKR fundraising tracker

KKR does not have large flagships in market in 2023

KKR											
Total AuM (\$B)			Fundraising Pipeline								
					Fund Name	Comments	2023				
							1Q	2Q	3Q	4Q FY 2023	
Fundraising	3Q23	2023	Private Equity								
Private Equity	\$0.8	\$5.2	Americas XIV		Americas XIII closed at \$17.7B in 2Q22; Launch next year		--	--	--	--	\$0
Real Assets	\$4.3	\$13.6	Asian Fund V		Asian Fund IV closed at \$15B in 2Q21; Launch 2024-25		--	--	--	--	\$0
Credit & Liquid	\$7.9	\$46.2	European Fund VII		European Fund VI closed at \$8B in 1Q23		--	--	--	--	\$0
Total (\$Bn)	\$13.0	\$65.1	Global Impact II		Global Impact fund I - \$1.2B (2Q20); Raised \$2.0B so far; Launched 2Q21. Closed at \$2.8B - Nov23	\$113	\$92	\$400	\$380	\$985	
			Next Generation Technology Growth Fund III		Last Vintage - \$2.2B (1Q20); \$2.52B raised as of May; Launch about 1Q22. Closed at \$3B - Oct23	\$166	\$96	\$100	\$380	\$742	
Flagship Funds			Core PE		Open-ended	\$6	--	--	--	--	\$6
North America PE	Vintage	Raised	Ascendant		Small-cap buyout fund; \$2.7B raised through 2Q; Launched in 1Q22; \$5B target	\$64	\$821	\$200	\$200	\$1,285	
Americas XII	2017	\$13.9	Retail PE Vehicle		Only one platform so far; Might be a quarter or two of exclusivity	--	\$450	\$600	\$600	\$1,650	
Americas XIII	2021	\$18.4	Other		Co-investments, SMAs	\$0	\$533	--	--	\$533	
European PE	Vintage	Raised	Real Assets								
European V	2019	\$6.3	Real Estate Credit Opps. Partners III		RE Credit Opps Partners II (3Q19) raised \$950M	--	--	--	--	\$0	
European VI	2023	\$7.3	Real Estate Partners Americas IV		RE Partners Americas III (1Q21) raised \$4.3; Targeting \$4B	--	--	\$750	\$750	\$1,500	
Asian PE	Vintage	Raised	Real Estate Partners Europe III		Real Estate Partners Europe II (1Q20) raised \$2.2B	--	--	\$500	\$500	\$1,000	
Asian Fund III	2017	\$9.0	Real Estate Partners Asia II		Real Estate Partners Asia I (3Q19) raised \$1.7B	--	--	\$250	\$250	\$500	
Asian Fund IV	2021	\$15.0	Asian Infrastructure Fund II		Fund I closed at \$3.9B (1Q20); \$5.7B through 1Q23; First close was 3Q22	\$75	\$70	\$70	\$70	\$285	
			Global Infrastructure V		Global Infrastructure IV (3Q21) raised \$17B	--	--	--	--	\$0	
			Core Infrastructure		Open-ended	\$267	\$267	\$267	\$267	\$1,068	
			Retail Infra Vehicle		Launched in May	--	\$350	\$400	\$400	\$1,150	
			KREST		Interval fund	\$61	\$61	\$61	\$61	\$61	
			Other		Primarily Global Atlantic, Co-investments, SMAs	\$2,210	\$1,865	\$2,000	\$2,000	\$8,074	
			Credit & Liquid Strategies								
			Lending Partners IV		Lending Partners III (2Q17 vintage) closed with \$1.5B; \$2B hard cap; Expect first close in 2H23	--	--	\$400	\$400	\$800	
			Lending Partners Europe III		Lending Partners II closed with \$837M in 2Q19; Expect first close in 2H23	--	--	\$200	\$200	\$400	
			Asset-Based Finance Partners II		ABFP I closed with \$2.1B in 2Q22; Expected to launch in 4Q	--	--	--	\$500	\$500	
			Asia Credit Opportunities Fund II		Fund I closed with \$1.1B in 2Q22	--	--	--	--	\$0	
			Dislocation Opportunities Fund II		Fund I closed with \$2.8B in 2Q20	--	--	--	--	\$0	
			Hedge Fund Partnerships		PAAMCO-Prisma, Marshall Wace, Blackgold Capital, Acion Partners	\$500	\$500	\$500	\$500	\$2,000	
					FS KKR Capital Corp, KKR Credit Income Fund, KKR FS Income Trust						
			BDCs & UITs		KKR FS Income Trust is in market for as much as \$5B and has raised \$425M so far	\$360	\$425	\$425	\$425	\$1,635	
			CLOs			\$795	\$336	\$757	\$1,000	\$2,888	
			Insurance		MetLife Transaction Expected to generate \$13B in 4Q23, Global Atlantic - coinvestment vehicle	--	\$2,400	--	\$13,000	\$15,400	
			Other		Primarily Global Atlantic & SMAs	\$7,060	\$4,318	\$6,000	\$6,000	\$23,378	
Total AuM \$534B			KKR Commitments / Inflows			\$11,677	\$12,584	\$13,881	\$27,883	\$66,025	
3Q23 Inflows	\$13.6		Total Commitments / Inflows (Model Estimates)			\$11,677	\$12,783	\$13,629	\$28,175	\$66,264	

Source: BofA Global Research estimates, Company data, Bloomberg

Note: Estimates cover equity commitments only, includes commitments related to Global Atlantic transactions

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Exhibit 22: OWL fundraising estimates

We expect OWL Fund VI to close in 4Q23

OWL											
Total AuM (\$B)			Fundraising Pipeline								
							2023				
							1Q	2Q	3Q	4Q	FY 2023
			Fund Name	Comments							
Fundraising	3Q23	2023	GP Stakes								
Direct Lending	\$2.8	\$8.0	Dyal VI	Dyal V raised \$12.9B; Dyal VI first close anticipated for 4Q23 or 1Q24		-	-	-	\$2,000	\$2,000	
GP Stakes	\$0.2	\$2.9	Dyal HomeCourt Fund I	Launched 3Q21		\$300	-	-	-	\$300	
Real Estate	\$0.9	\$4.6	Other	Co-Invest		-	\$200	\$200	\$200	\$600	
Total (\$Bn)	\$3.9	\$15.5	Direct Lending								
Flagship Funds			ORCC IV	Institutional non-traded BDC; Fundraising closed in 2Q22		-	-	-	-	\$0	
			OCIC	Retail non-traded BDC; Earn fees on gross assets (including leverage)		\$594	\$788	\$914	\$1,200	\$3,496	
Fund	Vintage	Raised	ORTF II	Institutional non-traded BDC; Raised \$4B through 2Q; Goal of \$5B in equity; Earns fees on gross assets (including leverage); Draws down capital; Don't expect additional lumpy flows		\$557	\$22	\$50	\$50	\$679	
Dyal VI	2022	\$12.9	OTIC	Non-traded BDC		\$174	\$199	\$295	\$200	\$868	
ORCC II	2017	\$1.4	Owl Rock Diversified Lending Fund I	Open End, every 3 years LPs have option to roll forward or opt out		\$600	\$512	\$500	\$500	\$2,112	
ORTF	2018	\$3.2	First Lien Fund II	\$1.2B first vintage (2018); Fund II launched 3Q21; \$2B target; \$400M Raised so far per Prequin		-	-	\$245	-	\$245	
			Opportunistic Lending Fund II	\$1.9B first vintage (2020); Back in market in 3Q		-	-	\$300	\$300	\$600	
			Other	SMAs, Co-Invest		-	-	\$500	\$500	\$1,000	
			Real Estate								
			Oak Trust	Additional wirehouses expected to join in the year		\$311	\$300	\$310	\$300	\$1,221	
			Fund VI	Hardcap of \$5B; \$4B target; \$3.5B raised through 2Q. Final close in 2H		\$1,200	\$700	\$558	\$900	\$3,358	
			Other	SMAs, Co-Invest		-	\$100	-	-	\$100	
			Secondaries								
			Strategic Equity Fund I	Expected to launch in 2H23		-	-	-	\$200	\$200	
Total AuM \$157B			OWL New Capital Raised / Total Fundraise			\$3,736	\$2,821	\$3,872	\$6,350	\$16,779	
3Q23 Inflows			Total Commitments / Inflows (Model Estimates)			\$3,79	\$2,86	\$2,92	\$4,25	\$13,83	
						9	3	6	0	8	

Source: BofA Global Research estimates, Company data, Bloomberg

Note: Estimates cover only equity commitments

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2. Investing

Investing activity is an important metric because the pace of deployment determines how quickly funds will come back to market. We generally assume that as soon as funds are 60%+ invested the next vintage will start raising. We track investment activity through publicly disclosed capital markets transactions that we gather from company press releases, various news articles and SEC filings.

Exhibit 23: Apollo investing tracker (\$M)

We expect 4Q23 closes in Vonovia SE, Modern Aviation, The Restaurant Group and others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
APO				
1Q23		4,100	820	
2Q23		5,950	1,190	
3Q23		6,884	1,377	
4Q23		6,733	2,199	
Pending		19,224	3,237	
Completed Transactions				
1Q23	Western Digital	900	180	Semiconductor
1Q23	WM Morrisson Debt	-	-	Retail
1Q23	Atlas Air	3,200	640	Transportation
2Q23	Cengage	500	100	Technology
2Q23	Brightspeed	300	60	Technology
2Q23	Air France-KLM	530	106	Airline
2Q23	Suedewo (Vonovia)	1,000	200	Real estate
2Q23	AT&T	2,000	400	Telecommunication
2Q23	Health Manamagement International	-	-	Healthcare
2Q23	Wolfspeed (Debt)	1,250	250	Semiconductor
2Q23	Intermodal Tank Transport	-	-	Logistics
2Q23	United Living	370	74	
3Q23	Air France-KLM	559	112	Airline
3Q23	Accent	-	-	Recycling and waste
3Q23	Trinseo	-	-	Speciality material
3Q23	Hydria	-	-	
3Q23	Composite Advanced Technologies	-	-	Compressed gas logistics
3Q23	Global Schools Group	190	38	Education
3Q23	Arconic	5,200	1,040	Aerospace
3Q23	Worthe Real Estate Group	480	96	Studio
3Q23	Kimbell Royalty Partners	455	91	Oil and Gas
3Q23	Petsmart	-	-	Pet retailer
4Q23	CLO Management Contracts from Gulf Stream Asset Management	2,800	1,400	Asset Management
4Q23	Kelley Leasing Partners	-	-	Equipment leasing
4Q23	Redfin	250	63	Real Estate
4Q23	Air France - KLM	1,500	300	Aviation
4Q23	Concord	500	100	Entertainment
4Q23	WattEV	-	-	Freight electrification
4Q23	Vonovia SE	1,060	212	Real Estate
4Q23	Modern Aviation	-	-	Aviation
4Q23	The Restaurant Group	623	125	Restaurant
Potential Transactions				
1Q24	Secured Aviation loans - Standard Chartered	920	184	Aviation
1Q24	Univar	8,100	1,620	Commodity and Specialty Chemicals Distributor
TBD	ABC Technologies Inc.	40	8	Industrials
TBD	Torrent Pharma	1,000	200	Pharmaceuticals
TBD	Applus Services SA	-	-	Industrial testing
TBD	Renaissance New York Times Square Hotel	165	33	Hotel
TBD	Oyo	660	132	Hospitality
TBD	Multiple NAV loans	4,000	800	Asset Management
TBD	BDO Partners	1,300	260	Accounting
TBD	IGT Gaming	-	-	Gaming
TBD	Scandinavian airline SAS	-	-	Airline
TBD	Lecta SA	-	-	Paper/Soft Products
TBD	Warburg Pincus	1,000	-	PE
TBD	Stonegate Pub Co.	789	-	Pub Chain
TBD	Wolfspeed, Inc	1,250	-	Semiconductors

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

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Exhibit 24: Ares investing tracker (\$M)

We expect 4Q23 closes in NXT capital, X-Energy among others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
Ares				
1Q23		375	75	
2Q23		3,800	730	
3Q23		11,725	800	
4Q23		946	194	
Pending		1,170	234	
Completed Transactions				
1Q23	WHP Global	375	75	Retail
2Q23	PadWest (ABS Portfolio)	3,500	670	ABS portfolio
2Q23	Extreme reach	-	-	Logistics
2Q23	Real Estate Debt investment London - 2 Properties	300	60	Real Estate
3Q23	Inter-Miami	75	75	Sports
3Q23	Virgin Voyages	550	-	Cruise
3Q23	Altafiber	600	-	Telecommunications
3Q23	Chelsea	500	100	Sports
3Q23	American Technologies, Inc	-	-	Construction
3Q23	Dynamic Renewables	-	-	Full-service developer, owner and operator of waste management
3Q23	Vinci Partners	100	25	Asset Management
3Q23	Hyland Software	3,400	-	Software
3Q23	Hanger	-	-	Healthcare
3Q23	Modigent	-	-	Heating, Cooling & Ventilation Equipment and Services
3Q23	Priority Waste	-	-	Environmental Services
3Q23	Finastra Group	5,300	-	Software
3Q23	Markerstudy	1,200	600	Insurance
4Q23	Interstate Waste Services	-	-	Recycling services
4Q23	Brsk Limited	111	22	Telecommunications
4Q23	Consolidated Precision Products	285	-	Aerospace part manufacturer
4Q23	Burnham RNG	-	-	Renewable Natural Gas
4Q23	Thoma Bravo Debt Package for NextGen Healthcare	200	50	Asset Management
4Q23	InvoCare Australia	104	-	Consumer Services
4Q23	X-Energy	80	80	Energy
4Q23	NXT Capital	166	42	Asset Management
Potential Transactions				
1Q24	Baxter (Buyout Financing)	1,170	234	Pharmaceutical
1Q24	VetPartners	-	-	Veterinary chain

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 25: Blackstone investing tracker (\$M)

We expect 4Q23 closes in NIPSCO and Quality Care India among others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
Blackstone				
1Q23		729	146	
2Q23		18,741	3,813	
3Q23		5,122	564	
4Q23		4,091	899	
Pending		27,363	2,799	
Completed Transactions				
1Q23	Justin Bieber's music portfolio	200	40	Music
1Q23	R Systems	359	72	Technology
1Q23	Citywalk Mall	-	-	Real Estate
1Q23	Allcargo	170	34	Transportation
2Q23	FTV Capital	-	-	
2Q23	Industrial REIT	880	176	Real Estate
2Q23	Care Hospital	800	160	Hospital
2Q23	International Gemological Institute	568	114	Gems
2Q23	3 Japanese Hotels	191	38	Hotels - Real estate
2Q23	Emerson Asset Stake	9,700	1,940	Climate Technologies
2Q23	Sutro Biopharma (Royalty Deal)	140	28	Pharmaceuticals
2Q23	Invenergy Renewables Holdings LLC	1,000	200	Renewables
2Q23	Astaris Capital Management	150	30	Hedge fund
2Q23	Cvent	4,500	900	Media

Exhibit 25: Blackstone investing tracker (\$M)

We expect 4Q23 closes in NIPSCO and Quality Care India among others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
2Q23	Industrial Park	162	32	Warehouse
2Q23	New tradition media	650	195	Advertising
3Q23	73 Strings	-	-	Valuation and portfolio monitoring solutions
3Q23	Student housing platform	322	64	
3Q23	CoreWeave	2,300	-	Specialized cloud provider
3Q23	AEP renewables portfolio	1,500	300	
3Q23	Trackon Couriers Private Limited	-	-	Logistics & Distribution
3Q23	Groove Labs Inc.	-	-	Software
3Q23	Ceres Terminals	1,000	200	
4Q23	Properties in London and Edinburgh	449	90	Real Estate
4Q23	10 properties in Copenhagen	-	-	Real Estate
4Q23	24 properties in Sweden	106	21	Real Estate
4Q23	4 properties in Chicago	137	27	Real Estate
4Q23	Highgate	293	-	Hospitality
4Q23	Banner	10	-	Internet
4Q23	Stampli	61	-	Software
4Q23	NIPSCO	2,150	645	Oil and Gas
4Q23	Quality Care India	580	116	Healthcare
4Q23	Permira Holdings acquisition of Ergomed	305	-	Asset Management
Potential Transactions				
1Q24	Groupe Premium	400	80	Wealth management company
1Q24	Amicus Therapeutics Inc.	430	30	Biotech
1Q24	KIMS Healthcare Management Ltd	700	140	Healthcare
1Q24	Rover Group, Inc (ROVR)	2,300	460	Internet Media & Services
1Q24	Sony Payment Services	280	56	Financial Technology
2Q24	Adevinta	13,174	-	Information Technology
2Q24	Civica	2,500	500	Software
TBD	Housing units in UK	819	164	Real Estate
TBD	Growatt Technology	1,500	338	Solar Equipment
TBD	Film-and-TV Studio	350	-	Studio
TBD	Energy Exemplar	500	100	Energy
TBD	Pink Floyd Music Limited	500	150	Music
TBD	Walt Disney India	-	-	Entertainment
TBD	Lazeo	-	-	Aesthetic medicine services
TBD	HealthComp	1,500	300	Healthcare
TBD	Northern Indiana Public Service Company	2,410	482	Oil and Gas

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 26: Carlyle investing estimates (\$M)

We expect 4Q23 closes in Park County and Meopta among others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
CG				
1Q23		650	265	
2Q23		400	80	
3Q23		2,531	2,346	
4Q23		2,109	468	
Pending		3,053	711	
Completed Transactions				
1Q23	VLCC	300	120	Consumer
1Q23	Jasper Therapeutics	-	5	Biotechnology
1Q23	Acrotech	-	-	Services
1Q23	Aspen Power	350	140	Energy
2Q23	Two tower	100	40	Real estate
2Q23	iRobot Corp	200	-	Tech
2Q23	PNB Housing	100	40	Real estate
3Q23	Captrust	-	-	RIA
3Q23	Advent International	-	-	Fashion
3Q23	Evolution Funding	-	-	Auto finance platform
3Q23	Anthesis	-	-	Sustainability
3Q23	CoreWeave, Inc	2,300	2,300	Software
3Q23	Soleno Therapeutics, Inc	6	6	Pharmaceuticals



Exhibit 26: Carlyle investing estimates (\$M)

We expect 4Q23 closes in Park County and Meopta among others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
3Q23	CapFinancial Partners, LLC	-	-	Financial Services
3Q23	Katy Perry's music rights	225	40	Entertainment
4Q23	Park County	800	160	Media
4Q23	One point	538	-	Business Support Services
4Q23	Farmfront Irrigation Group	-	-	Agribusiness
4Q23	Meopta	771	308	Optics
Potential Transactions				
1Q24	Iwasaki Electric	247	49	Lighting
1Q24	Quest Global	500	200	Engineering services
1Q24	VietJet	550	110	Airline
1Q24	Seiko PMC	221	44	Paper and Ink chemicals
1Q24	Norwest Equity Partners and Norwest Mezzanine Partners	-	-	Private Equity
1H24	Minnesota Timberwolves (NBA) and Minnesota Lynx (WNBA)	920	184	Sports Franchise
TBD	Medtronic PLC	-	-	Medical Device
TBD	Ri Happy Brinquedos S/A	15	3	Retail
TBD	Exiger	600	120	Software
TBD	Affinity Education	-	-	Childhood Education

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 27: KKR investing tracker (\$M)

We expect 4Q23 closes in Circor, Singtel and others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
KKR				
1Q23		5,275	1,055	
2Q23		2,886	637	
3Q23		6,423	275	
4Q23		7,012	1,345	
Pending		29,467	5,780	
Completed Transactions				
1Q23	ContourGlobal	2,100	420	Renewables
1Q23	Vodafone's Towers Arm	1,600	320	Telecommunications
1Q23	Serentica Renewables	400	80	Renewables
1Q23	Clinisupplies	-	-	Medical Devices
1Q23	Hitachi Transport System	975	195	Transportation
1Q23	Hyatt Regency in Tokyo	-	-	Real Estate
1Q23	Greevolt	200	40	Renewables
1Q23	Bushu Pharma	-	-	Healthcare
1Q23	Groudworks	-	-	Repair and water management company
2Q23	SunPower	550	110	Renewables
2Q23	CoolIT	200	100	Data centre cooling
2Q23	FGS	420	84	Communication
2Q23	Namsan Building	187	37	
2Q23	Restaurant365	68	14	Software
2Q23	S&P Global's Engineering Solutions Business	975	195	Technology
2Q23	2 Industrial Properties - AZ GA	250	50	Properties
2Q23	Finnish Residential Properties	236	47	Real estate
3Q23	LEAP India	-	-	Pallet Pooling
3Q23	Revel	123	25	Car Subscription
3Q23	Sempra Infrastructure	-	-	Infrastructure
3Q23	Reliance Industries	1,000	250	Retail
3Q23	Freeman - Sparks	-	-	Global brand experience
3Q23	Arcension	-	-	Internet
3Q23	Finastra Grop Holdings	5,300	-	Software
3Q23	Flint Group	-	-	Printing
3Q23	Industrial Physics	-	-	Test and measurement instrumentation
4Q23	Simon & Schuster	1,620	324	Publishing
4Q23	SCOTT logistics	-	-	Logistics
4Q23	Coriolis Pharma	-	-	Pharmaceuticals
4Q23	Circor	2,000	400	Aerospace
4Q23	Potter Global Technologies	-	-	Industrial
4Q23	Consolidated Precision Products	285	-	Aerospace part manufacturer

Exhibit 27: KKR investing tracker (\$M)

We expect 4Q23 closes in Circor, Singtel and others

Date	Target	Deal Value (\$M)	Equity Value (\$M)	Sector
4Q23	Chase Corp	1,300	260	Specialty chemicals
4Q23	Frontier Biosolutions	-	-	Financial Services
4Q23	Singtel	807	161	Telecommunications
4Q23	USI Insurance Services	1,000	200	Insurance
Potential Transactions				
1Q24	Cotiviti	6,500	1,300	Healthcare Technology
1Q24	OMS Group	400	80	Sub-sea cable
1Q24	GreenSky	100	-	Consumer lending
1Q24	Eugin	540	108	Healthcare
FY24	SBI Holdings JV	-	-	Asset Management
TBD	Zenob	750	150	EV fleet and grid-scale battery storage specialist
TBD	Precipart	-	-	Precision components
TBD	Telecom Italia SpA	12,200	2,440	Telecommunications
TBD	Freyr Battery	500	100	Industrials
TBD	Vattenfall's Unit	3,300	660	
TBD	PNC Road projects	1,100	220	Infrastructure
TBD	PangeaCo	-	-	Telecommunications
TBD	Wittur	82	16	Elevator parts company
TBD	Bausch Health Companies Inc.	600	120	Pharmaceutical
TBD	OHB	373	-	Aerospace
TBD	TalkTalk Telecom Group	92	-	Telecommunications
TBD	Curalie GmbH	-	-	Healthcare
TBD	Greenvolt	1,300	260	Renewable energy
TBD	Smart Metering System	1,630	326	Energy infra
TBD	Unizo Holdings	-	-	Hospitality

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

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3. Returns

Returns are important for the Alternative asset managers because they generate accrued carry which eventually translates into future realizations (DE) and drives their investment performance. We track the performance of the public portfolios and apply a blended mark that takes into account the growth of the private portfolio as well. This gives us visibility into fund performance and market appreciation for the quarter.

Exhibit 28: Apollo public company marks

We look for positive PE returns in 4Q23 and strong performance from Apollo's public portfolio

APO								
09/29/23					12/29/23			
Segment & Portfolio Co	% Change	Price	Shares (M)	Total Amount (\$M)	% Change	Price	Shares (M)	Total Amount (\$M)
Private Equity								
ADT	0%	6.00	498	2990	14%	6.82	498	3398
Synnex	6%	99.86	35	3515	8%	107.61	28	3061
Rackspace	-14%	2.35	130	305	-15%	2.00	130	259
Sun Country	-34%	14.84	15	228	6%	15.73	11	179
Global Business Travel Group	-24%	5.50	26	141	17%	6.45	26	166
Vallourec	3%	12.23	65	798	27%	15.52	65	1012
DEMIRE	-35%	1.41	98	138	-17%	1.17	98	115
Taboola.com	22%	3.79	40	150	14%	4.33	40	171
Hilton Grand Vacations	-10%	40.70	30	1233	-1%	40.18	30	1217
Private Equity Public Holdings Total Value				\$9,497				\$9,580
	% Public	20%	Public Performance	-2%	% Public	15%	Public Performance	9%
	% Private	80%	Private Performance	1%	% Private	85%	Private Performance	3%
Private Equity Total Value Increase (est)				0.5%				3.9%

Source: BoFA Global Research estimates, Bloomberg, Company filings

Footnote: the percentage change in value for privates is our estimate

BoFA GLOBAL RESEARCH

Exhibit 29: ARES public company marks

We look for positive PE returns in 4Q23 (but this is a smaller business for ARES)

ARES								
09/29/23					12/29/23			
Segment & Portfolio Co	% Change	Price	Shares (M)	Total Amount (\$M)	% Change	Price	Shares (M)	Total Amount (\$M)
Private Equity								
Frontier Communications	-16%	15.65	39	604	62%	25.34	39	978
Savers Village	-21%	18.67	135	2514	-7%	17.38	135	2340
Albertsons Cos Inc	4%	22.75	10	235	1%	23.00	10	237
California Resources	24%	56.01	3	151	-2%	54.68	3	148
Private Equity Public Holdings Total Value				\$3,504				\$3,704
	% Public	22%	Public Performance	-18%	% Public	15%	Public Performance	6%
	% Private	78%	Private Performance	2%	% Private	85%	Private Performance	3%
Private Equity Total Value Increase (est)				-2.4%				3.4%

Source: BoFA Global Research estimates, Bloomberg, Company filings

Footnote: the percentage change in value for privates is our estimate

BoFA GLOBAL RESEARCH

Exhibit 30: Blackstone public company marks

We look for positive PE returns in 4Q23 (BX also sold its Embassy Office REITs during the quarter)

BX								
09/29/23					12/29/23			
Segment & Portfolio Co	% Change	Price	Shares (M)	Total Amount (\$M)	% Change	Price	Shares (M)	Total Amount (\$M)
Private Equity								
Cheniere Energy	17%	54.19	109	5884	-8%	49.79	109	5406
Gates Industrial Corp	-14%	11.61	114	1318	16%	13.42	99	1322
Energy Transfer	10%	14.03	153	2150	-2%	13.80	153	2115
MPLX	5%	35.57	45	1600	3%	36.72	45	1651
Bumble	-11%	14.92	42	624	-1%	14.74	42	616
London Stock Exchange	-6%	100.50	24	2412	18%	118.36	4	473
PG & E CORP	-7%	16.13	48	776	12%	18.03	48	867
Diamond Back Energy	18%	154.88	8	1231	0%	155.08	8	1233
FirstEnergy	-12%	34.18	58	1971	7%	36.66	58	2114
Chesapeake	3%	86.23	13	1092	-11%	76.94	13	975

Exhibit 30: Blackstone public company marks

We look for positive PE returns in 4Q23 (BX also sold its Embassy Office REITs during the quarter)

BX								
Targa Resources	13%	85.72	6	535	1%	86.87	6	543
Western Midstream Partners	3%	27.23	18	477	7%	29.26	18	513
Corebridge Financial Inc	12%	19.75	63	1237	10%	21.66	63	1357
Pembina Pipeline Corp	-4%	30.15	10	316	14%	34.51	10	362
Patterson-UTI Energy Inc		13.84	33	453	-22%	10.80	33	354
Enterprise Products	4%	27.37	21	565	-4%	26.35	21	544
Private Equity Public Holdings Total Value				\$23,047				\$20,445
	% Public	14%	Public Performance	4%	% Public	17%	Public Performance	2%
	% Private	86%	Private Performance	1%	% Private	83%	Private Performance	3%
Private Equity Total Value Increase (est)				1.4%				2.8%
Real Estate								
Embassy Office Parks REIT	2%	3.62	224	809				
Real Estate Public Holdings Total Value				\$809				\$0
	% Public	5%	Public Performance	2%	% Public	1%	Public Performance	
	% Private	95%	Private Performance	2%	% Private	99%	Private Performance	3%
Real Estate Total Value Increase (est)				2.0%				3.0%

Source: BofA Global Research estimates, Bloomberg, Company filings

Footnote: the percentage change in value for privates is our estimate

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Exhibit 31: Carlyle public company marks

We look for positive PE returns in 4Q23

CG								
Segment & Portfolio Co	09/29/23				12/29/23			
	% Change	Price	Shares (M)	Total Amount (\$M)	% Change	Price	Shares (M)	Total Amount (\$M)
Private Equity								
Zoom Info	-35%	16.40	37	601	13%	18.49	37	678
Quidelortho Corp	-12%	73.04	12	910	1%	73.70	12	918
MKS Instruments	-20%	86.54	3	301	19%	102.87	2	204
Vitru	10%	17.59	6	110	-10%	15.76	6	98
Private Equity Public Holdings Total Value				\$1,923				\$1,899
	% Public	10%	Public Performance	-21%	% Public	6%	Public Performance	7%
	% Private	90%	Private Performance	1%	% Private	94%	Private Performance	3%
Private Equity Total Value Increase (est)				-1.3%				3.2%
Real Assets								
Talos Energy	19%	16.44	15	247	-13%	14.23	15	213
Real Assets Public Holdings Total Value				\$247				\$213
	% Public	15%	Public Performance	19%	% Public	15%	Public Performance	-13%
	% Private	85%	Private Performance	1%	% Private	85%	Private Performance	3%
Real Assets Total Value Increase (est)				2.2%				1.5%

Source: BofA Global Research estimates, Bloomberg, Company filings

Footnote: the percentage change in value for privates is our estimate

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Exhibit 32: KKR public company marks

We look for positive PE returns in 4Q23 (we are tracking the strongest returns in KKR's public portfolio)

KKR								
09/29/23					12/29/23			
Segment & Portfolio Co	% Change	Price	Shares (M)	Total Amount (\$M)	% Change	Price	Shares (M)	Total Amount (\$M)
Private Equity								
Brightview Holdings	8%	7.75	30	233	9%	8.42	30	253
Applovin	55%	39.96	40	1598	0%	39.85	40	1594
PropertyGuru	-18%	3.66	43	159	-9%	3.34	43	145
Endeavor	-17%	19.90	4	89	19%	23.73	4	107
BridgeBio Pharma	53%	26.37	31	819	53%	40.37	31	1254
JB Chemical	24%	17.83	80	1427	9%	19.52	80	1562
Kokusai Electric					71%	21.76	100	2177
PHC Holdings	-4%	10.21	45	460	0%	10.20	45	459
China Outfitters Holdings LTD		0.01	250	2	-9%	0.01	250	2
Latitude Group Holdings		0.76	260	198	5%	0.80	260	207
PT Nippon Indosari Corpindo		0.09	1600	145	-17%	0.07	1600	120
Indus Towers		2.31	70	161	4%	2.39	70	167
ZILD Group	53%	1.54	300	461	-18%	1.26	330	415
Private Equity Public Holdings Total Value				\$5,751				\$8,461
	% Public	10%	Public Performance	33%	% Public	10%	Public Performance	9%
	% Private	90%	Private Performance	1%	% Private	90%	Private Performance	3%
Private Equity Total Value Increase (est)				4.2%				3.6%

Source: BofA Global Research estimates, Bloomberg, Company filings

Footnote: the percentage change in value for privates is our estimate

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4. Realizations

Of the four key metrics we track, realizations (sales of portfolio assets) are the least important given that stronger results drive down future earnings (pull-forward). Furthermore, the market attributes a lower multiple to PRE compared to FRE given that it is driven by lower quality performance fees and investment income (not repeatable). We track realizations through company press releases, various news articles and SEC filings.

Exhibit 33: Apollo realization tracker

We are tracking follow-on offerings in Sun Country and Ventia

Apollo Global Management Monetization Activity Tracker									
BoA Estimates Exit Equity Amount						BoA Estimates Net Realized Carry			
	M&A	FOs	IPOs	Total		M&A	FOs	IPOs	Total
1Q23	\$0	\$500	\$0	\$500		\$0.00	\$0.05	\$0.00	\$0.05
2Q23	\$0	\$300	\$1,000	\$1,300		\$0.00	\$0.03	\$0.09	\$0.12
3Q23	\$0	\$500	\$0	\$500		\$0.00	\$0.05	\$0.00	\$0.05
4Q23	\$300	\$845	\$0	\$1,145		\$0.00	\$0.00	\$0.00	\$0.00
Completion Quarter	Announced Date	Target			Exit Equity Amt (Est. \$M)	MOIC Est.	Cost Basis	Net Real Perf Fees	Net Cash Earnings
M&A Exits									
3Q23	12-Sep	Arcion Revitalization							
3Q23	24-Aug	Broad Reach Power							
4Q23	3-Oct	Schoolmessenger			\$300	2.0x	\$150	\$0	\$0.00
TBD	15-Aug	Yellow Corp							
Follow-On Offerings									
1Q23	25-Jan	TD Synnex			\$500	2.0x	\$250	\$28	\$0.05
2Q23	15-Feb	Sun Country			\$100	2.0x	\$50	\$6	\$0.01
2Q23	8-Mar	Ventia			\$200	2.0x	\$100	\$11	\$0.02
3Q23	1-Jul	TD Synnex			\$500	2.0x	\$250	\$28	\$0.05
4Q23	12-Dec	Sun Country			\$65	2.0x	\$32	\$0	\$0.00
4Q23	10-Oct	TD Synnex			\$670	2.0x	\$335	\$0	\$0.00
4Q23	2-Nov	Ventia			\$110	2.0x	\$55	\$0	\$0.00
Dividend Recaps									

Exhibit 33: Apollo realization tracker

We are tracking follow-on offerings in Sun Country and Ventia

Apollo Global Management**Initial Public Offerings**

TBD	14-Apr	Clubcorp	\$4,500	2.0x	\$2,250	\$248	\$0.42
TBD	7-Jul	Ridgeback Resources	\$383	2.0x	\$191	\$21	\$0.04
TBD	20-Dec	Aspen Insurance					
2Q23	11-Jan	Lottomatica	\$1,000	2.0x	\$500	\$55	\$0.09

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 34: Ares realization tracker

We are tracking no realizations in 4Q23

Ares Management**Monetization Activity Tracker**

	BoA Estimates Exit Equity Amount					BoA Estimates Net Realized Carry			
	M&A	FOs	IPOs	Total		M&A	FOs	IPOs	Total
1Q23	\$0	\$0	\$0	\$0		\$0.00	\$0.00	\$0.00	\$0.00
2Q23	\$0	\$338	\$130	\$468		\$0.00	\$0.05	\$0.02	\$0.07
3Q23	\$0	\$0	\$0	\$0		\$0.00	\$0.00	\$0.00	\$0.00
4Q23	\$0	\$0	\$0	\$0		\$0.00	\$0.00	\$0.00	\$0.00
Completion Quarter	Announced Date	Target			Exit Equity Amt (Est. \$M)	MOIC Est.	Cost Basis	Net Real Perf Fees	Net Cash Earnings
M&A Exits									
Follow-On Offerings									
4Q22		IEA		\$217	2.0x	\$109	\$16		\$0.03
2Q23		Frontier Communications		\$23	2.0x	\$11	\$2		\$0.00
1Q24		Cureton Front Range LLC							
2Q23		AZEK		\$315	2.0x	\$158	\$23		\$0.05

Dividend Recaps**Initial Public Offerings**

TBD	Hornbeck Offshore Services
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Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

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Exhibit 35: BX realization tracker

We are tracking 4Q23 exits in Bellagio and Hotel Investment Partners among others

Blackstone Group Monetization Activity Tracker								
	BoFA Estimated Realizations					BoA Estimates		
	PE	RE	Net Realized Carry					
	Amt	Amt				Total		
1Q23	\$639	\$8,822	\$9,461			PE	RE	Total
2Q23	\$2,502	\$2,130	\$4,632			\$0.03	\$0.09	\$0.12
3Q23	\$1,313	\$2,292	\$3,605			\$0.09	\$0.05	\$0.13
4Q23	\$1,021	\$3,427	\$4,448			\$0.05	\$0.00	\$0.06
Completed Quarter	Announced Date	Target		Exit Amt (Est. \$M)	MOIC Est.	Cost Basis	Net Real Perf Fees	Net Cash Earnings
Private Equity M&A Exits								
3Q23	1-Sep	Schenck Process Food and Performance Materials		\$730	2.0x	\$365	\$40	\$0.03
4Q23	22-May	SCHENCK		\$730	2.0x	\$365	\$40	\$0.03
2Q23	15-May	IBS Software		\$450	2.0x	\$225	\$25	\$0.02
2H23	5-Jul	Ultrera Drilling Technologies		\$370	2.0x	\$185	\$20	\$0.02
TBD	5-Jul	Geo-Young		\$2,000	2.0x	\$1,000	\$110	\$0.09
Real Estate M&A Exits								
1Q23	1-Dec	MGM Grand & Mandalay Bay		\$5,500	1.3x	\$4,231	\$105	\$0.00
1Q23	7-Mar	London Waterfront complex		\$722	2.0x	\$361	\$30	\$0.00
1Q23	10-Mar	Vivint		\$2,600	2.0x	\$1,300	\$107	\$0.09
2Q23	27-Apr	Japan logistics portfolio		\$400	2.0x	\$200	\$17	\$0.01
2Q23	6-Jun	JW Marriott San Antonio		\$800	2.0x	\$400	\$33	\$0.00
2Q23	26-Jun	Industrial Property		\$930	2.0x	\$465	\$38	\$0.03
3Q23	13-Jul	2 RE properties		\$92	2.0x	\$46	\$4	\$0.00
3Q23	24-Jul	Simply Self Storage		\$2,200	2.0x	\$1,100	\$0	\$0.00
4Q23	5-Aug	DC Office		\$244	2.0x	\$122	\$0	\$0.00
4Q23	25-Aug	Bellagio		\$950	2.0x	\$475	\$0	\$0.00
4Q23	31-Oct	Hotel Investment Partners		\$1,400	2.0x	\$700	\$0	\$0.00
TBD	20-Sep	Butlin's		\$300	2.0x	\$150	\$12	\$0.01
TBD	7-Nov	PRI Operating		\$2,000	2.0x	\$1,000	\$83	\$0.07
TBD	3-Feb	Spanish Buildings		\$379	2.0x	\$190	\$16	\$0.01
TBD	7-Jul	6 RE properties in NYC						
TBD	21-Jun	Spanish Loan Portflio		\$2,190	2.0x	\$1,095	\$90	\$0.07
TBD	30-Aug	11 RE properties		\$143	2.0x	\$71	\$6	\$0.00
PE Follow-on Offerings								
1Q23	14-Mar	Sona BLW Forgings		\$597	3.0x	\$199	\$44	\$0.04
1Q23	7-Mar	LSE		\$362	2.0x	\$181	\$15	\$0.01
2Q23	17-May	LSE		\$1,653	2.0x	\$827	\$68	\$0.06
2Q23	23-May	Gates Industrial		\$399	2.0x	\$199	\$16	\$0.01
3Q23	7-Sep	LSE		\$583	2.0x	\$292	\$24	\$0.02
4Q23	7-Dec	Gates Industrial		\$169	2.0x	\$84	\$7	\$0.01
4Q23	27-Dec	Alight		\$123	2.0x	\$61	\$5	\$0.00
RE Follow-on Offerings								
4Q23	19-Dec	Embassy REIT		\$833	2.0x	\$417	\$46	\$0.04
Initial Public Offerings								
TBD	7-Jul	Ridgeback Resources		\$383	2.0x	\$191	\$21	\$0.02
TBD	5-May	Cirsa						

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 36: CG realization tracker

We are tracking 4Q23 exits in Saverglass, Assala Energy, NSM Insurance and Citrix Systems

Carlyle Group								
Monetization Activity Tracker								
	BofA Estimate					BofA Estimate		
	Exit Equity Amount					Net Realized Carry		
	M&A	FOs	IPOs	Total	M&A	FOs	IPOs	Total
1Q23	\$700	\$250	\$0	\$950	\$0.52	\$0.00	\$0.00	\$0.52
2Q23	\$1,550	\$285	\$0	\$1,835	\$0.06	\$0.04	\$0.00	\$0.10
3Q23	\$4,740	\$0	\$0	\$4,740	\$0.35	\$0.00	\$0.00	\$0.35
4Q23	\$1,800	\$150	\$0	\$1,950	\$0.13	\$0.02	\$0.00	\$0.15
Completion Quarter	Announced Date	Target		Exit Equity Amt (Est. \$M)	MOIC Est.	Cost Basis	Net Real Perf Fees	Net Cash Earnings
M&A Exits								
1Q23	2-Dec	Oyatsu Co.		\$400	2.0x	\$200	21	\$0.06
1Q23		Money Square Holdings		\$200	2.0x	\$100	10	\$0.03
1Q23		Exits from NGP XI		\$100	2.0x	\$50	5	\$0.01
1Q23		Paradigm Precision					150	\$0.42
2Q23	5-May	Traxys		\$300	2.0x	\$150	16	\$0.04
2Q23	2-Feb	Titan Acquisition Holdings		\$1,000	2.0x	\$500	52	\$0.00
2Q23	6-Mar	PrimeFlight Aviation		\$250	2.0x	\$200	5	\$0.01
3Q23	20-Jun	Tap Rock & Hibernia		\$4,700	2.0x	\$2,350	122	\$0.34
3Q23	13-Jul	The City Bin Co		\$40	2.0x	\$20	2	\$0.01
4Q23	5-Sep	Saverglass		\$600	2.0x	\$300	31	\$0.09
4Q23	14-Jun	Assala Energy		\$200	2.0x	\$100	10	\$0.03
4Q23		NSM Insurance (Pet business)		\$800	2.0x	\$400	0	\$0.00
4Q23		Citrix Systems		\$200	1.4x	\$143	6	\$0.02
1Q24	23-Jun	Neptune		\$1,633	2.0x	\$817	85	\$0.24
TBD	30-Oct	Every Man Jack						
TBD	6-Nov	Tokiwa						
Follow-On Offerings								
1Q23		One Medical		\$250	2.0x	\$125	13	\$0.00
2Q23	2-Jun	MKS Instrument		\$199	2.0x	\$100	10	\$0.03
2Q23	30-May	Delhivery		\$86	2.0x	\$43	4	\$0.01
4Q23		MKS Instrument		\$150	2.0x	\$75	8	\$0.02
1Q24	20-Nov	McDonald's China		\$1,800	6.7x	\$269	159	\$0.44
Initial Public Offerings								
TBD	20-Jun	Saudi Domino's Pizza operator						

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 37: KKR realization tracker

We are tracking M&A exits in A-Gas, Australian Venue, and others

KKR & Company									
Monetization Activity Tracker									
	BofA Estimate					BofA Estimate			
	Exit Equity Amount					Net Realized Carry			
	M&A	FOs	IPOs	Total		M&A	FOs	IPOs	Total
1Q23	\$1,007	\$0	\$0	\$1,007		\$0.04	\$0.00	\$0.00	\$0.04
2Q23	\$0	\$1,337	\$0	\$1,337		\$0.00	\$0.05	\$0.00	\$0.05
3Q23	\$1,560	\$894	\$0	\$2,454		\$0.06	\$0.04	\$0.00	\$0.10
4Q23	\$2,730	\$0	\$721	\$3,451		\$0.11	\$0.00	\$0.05	\$0.16
Completion	Announced				Exit Equity	MOIC	Cost	Net Real	Net Cash
Quarter	Date	Target			Amt (Est. \$M)	Est.	Basis	Perf Fees	Earnings
M&A Exits									
1Q23	2-Feb	Knowbe4			\$647	2.0x	\$324	\$23	\$0.03
1Q23	15-Feb	Astrea Bioseperations							
1Q23	6-Mar	Weststar			\$280	2.0x	\$140	\$10	\$0.01
1Q23	6-Mar	4 Self Storage Properties			\$80	2.0x	\$40	\$3	\$0.00
2H23	19-Mar	X-Elio			\$2,000	2.0x	\$1,000	\$70	\$0.08
TBD	12-Sep	Aventus							
TBD	18-Nov	Westbrick			\$1,130	2.0x	\$565	\$40	\$0.04
TBD	19-Oct	Virescent			\$300	2.0x	\$150	\$11	\$0.01



Exhibit 37: KKR realization tracker

We are tracking M&A exits in A-Gas, Australian Venue, and others

KKR & Company							
3Q23	26-Jul	Rbmedia	\$1,000	2.0x	\$500	\$35	\$0.04
3Q23	27-Sep	Slayback Pharma LLC					
3Q23	29-Sep	Industrial real estate sale	\$560	2.0x	\$280.0	\$20	\$0.02
4Q23	17-Aug	A-Gas	\$1,270	2.0x	\$635	\$44	\$0.05
4Q23	18-Sep	GreenCollar					
4Q23	2-Oct	50 industrial properties	\$560	2.0x	\$280	\$20	\$0.02
4Q23	24-Aug	Australian Venue Co	\$900	2.0x	\$450	\$32	\$0.04
Follow-On Offerings							
2Q23	1-Jun	Aplovin	\$642	2.0x	\$321	\$22	\$0.03
2Q23	23-May	US foods	\$694	2.0x	\$347	\$24	\$0.03
3Q23		Aplovin	\$894	2.0x	\$447	\$31	\$0.04
Initial Public Offerings							
4Q23	6-Sep	Kokusai Electric	\$721	14.0x	\$52	\$47	\$0.05
TBD	1-Feb	Optiv Security	\$3,000	2.0x	\$1,500	\$105	\$0.12
TBD	18-Feb	BMC					

Source: BofA Global Research estimates, Company data, Press reports, Bloomberg

BofA GLOBAL RESEARCH

Glossary

AUM: Assets under management
 FPM: Fee per Million
 DE: Distributable earnings
 FPM: Fee per Million
 FRE: Fee related earnings
 IPO: Initial public offering
 Q/Q: Quarter over quarter
 ST/LT: Short-term/Long-term
 MOIC: Multiple of invested capital
 PE: Private equity
 SRE: Spread related earnings
 NIM: Net interest margin
 RE: Real Estate
 NMS: National market system
 CPI: Consumer price index

AMG Affiliated Managers
 AB AllianceBernstein
 AMP Ameriprise Fin.
 APO Apollo
 ARES Ares Management Corp
 BLK BlackRock, Inc.
 BX Blackstone
 OWL Blue Owl Capital
 BAM Brookfield AM
 CBOE Cboe Global Mark
 SCHW Charles Schwab
 CME CME Group Inc
 BEN Franklin Resources
 IBKR Interactive Brokers
 ICE Intercontinental
 IVZ Invesco
 JHG Janus Henderson
 KKR KKR & Co. Inc.
 LPLA LPL Financial
 NDAQ Nasdaq
 PAX Patria
 RJF Raymond James
 HOOD Robinhood Markets
 TROW T. Rowe Price
 CG The Carlyle Group
 TPG TPG Inc
 TW Tradeweb
 VCTR Victory Capital
 VIRT Virtu



Exhibit 38: Companies mentioned

Companies mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
AMG	AMG US	Affiliated Managers	US\$ 148.33	B-2-8
AB	AB US	AllianceBernstein	US\$ 31.84	B-1-7
AMP	AMP US	Ameriprise Fin.	US\$ 377.99	B-1-7
APO	APO US	Apollo	US\$ 96.72	B-2-8
ARES	ARES US	Ares Management Corp	US\$ 118.67	B-1-7
BLK	BLK US	BlackRock, Inc.	US\$ 792.36	B-1-7
BX	BX US	Blackstone	US\$ 121.53	B-1-7
OWL	OWL US	Blue Owl Capital	US\$ 14.63	B-1-7
BAM	BAM US	Brookfield AM	US\$ 39.29	B-2-7
CBOE	CBOE US	Cboe Global Mark	US\$ 175.61	B-1-7
SCHW	SCHW US	Charles Schwab	US\$ 65.82	B-3-7
CME	CME US	CME Group Inc	US\$ 197.83	B-2-7
BEN	BEN US	Franklin Resources	US\$ 29.08	B-3-7
IBKR	IBKR US	Interactive Brokers	US\$ 87.01	B-1-7
ICE	ICE US	Intercontinental	US\$ 127.65	B-1-7
IVZ	IVZ US	Invesco	US\$ 17.86	B-2-7
JHG	JHG US	Janus Henderson	US\$ 29.23	B-2-7
KKR	KKR US	KKR & Co. Inc.	US\$ 82.42	B-1-7
LPLA	LPLA US	LPL Financial	US\$ 234.17	B-2-7
NDAQ	NDAQ US	Nasdaq	US\$ 56.89	B-3-7
PAX	PAX US	Patria	US\$ 14.85	B-2-7
RJF	RJF US	Raymond James	US\$ 110.94	B-1-9
HOOD	HOOD US	Robinhood Markets	US\$ 12.14	C-3-9
TROW	TROW US	T. Rowe Price	US\$ 107.39	B-3-7
CG	CG US	The Carlyle Group	US\$ 39.5	B-3-7
TPG	TPG US	TPG Inc	US\$ 39.8	C-1-7
TW	TW US	Tradeweb	US\$ 93.85	B-1-7
VCTR	VCTR US	Victory Capital	US\$ 32.99	B-1-7
VIRT	VIRT US	Virtu	US\$ 19.33	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Affiliated Managers Group (AMG)

Our price objective (PO) for AMG is \$172 and is derived from a price to earnings method. We apply an 8.0x multiple to our 2026 estimate, less \$29 due to AMG's elevated financial leverage relative to peers to obtain our PO. We apply an 8.0x multiple which is a discount to the peer group average of 10x given prospects for lower revenue organic growth which will translate into below average EPS growth.

Risks to our PO are (1) continued elevated net redemptions from AMG's quant businesses which would weigh on the company's organic growth trajectory and (2) inability to find acquisition candidates at attractive valuations especially in private markets.

AllianceBernstein (AB)

Our price objective (PO) is derived from a price to earnings method. We apply a 12.5x multiple on our 2026E EPS to obtain our \$47 PO. 12.5x is in line with the company's five-year average but represents a premium to its traditional/active peer group excluding BlackRock. We think that AB's improving business mix/organic growth trajectory could support a higher valuation in the future if AB's total net flows rebound in 2024.

Downside risks to AB: (1) active to passive rotation + industry fee pressure, (2) AB's business model is procyclical and is impacted from market prices, (3) Bernstein's research business faces secular pressures relating to industry consolidation, (4) AB has soft investment performance in its active equity business, (5) its large APAC franchise faces risks related to a potential US-China decoupling and a China-Taiwan conflict.

Upside risks: (1) improving net flows, (2) investment performance (improving since June 16), and (3) favorable markets.

Ameriprise Financial (AMP)

Our \$447 PO is based on 10x EPS multiple on our 2026 EPS estimate. Given that AMP operates three different business lines that offer different qualities (growth, volatility, capital), we derive our price objective using a sum-of-the-parts framework accounting for peers in life insurance (7-10x), traditional asset management (8-16x, excluding BlackRock) and wealth managers (11-17x).

Downside risks are (1) equity markets on assets under management (AuM), assets under authorization (AuA), and variable insurance products/guarantees, (2) lower interest rates in 2024 (impact on net interest margin), (3) credit risks, including investment portfolio and reinsurance counterparties.

Apollo Global Management (APO)

Our \$112 price objective for Apollo is derived from a 11x multiple on APO's adjusted 26E cash earnings. We estimate APO will continue to trade below the industry mean (7-25x) given its high mix of insurance earnings.

Upside risks are S&P 500 index addition (estimate 2023), inorganic growth announcements for Athene, rate sensitivity of Athene's variable rate assets, and defensive organic growth.

Downside risks are credit risk at Athene and a pick-up in annuity surrenders with higher long-term interest rates.

Ares Management Corp (ARES)

Our \$141 price objective for Ares Management is derived from 22.5x 2026E cash earnings. Our definition of cash earnings uses the company's distributable earnings



metric and adds back stock-based comp. Our multiple is in-line with the stock's current valuation and at the higher end of the range of Alt peers (9-20x on corporate definition). However, it is higher than ARES's historical range (5Y average = 18x) as the stock was undervalued before 2020, partly due to its partnership structure (pre C-Corp conversion) and lack of long-only/passive ownership. Risks to our PO: investing backdrop more challenging, adverse macroeconomic scenarios, US and international tax reform and succession planning.

BlackRock, Inc. (BLK)

Our PO of \$1034 is based on a 20x 2026E EPS multiple. This is slightly lower than the mid-point of where the stock has traded over the last 12-18 months (17 to 24x range on next 12 month EPS). The asset manager stocks are currently trading at a wide range (5-42x) with an average of 15x EPS and our PO assumes BLK maintains its historical premium (especially relative to the traditional asset managers given BLK's higher growth prospects).

Risks to our PO are (1) capacity and regulatory issues created by size, (2) negative markets or market-driven mix shift (divergent beta), (3) fee pressure (pricing cuts).

Blackstone (BX)

Our price objective (PO) for Blackstone is \$135 and is derived from 22.5x 2026E cash earnings. Our definition of cash earnings uses the company's distributable earnings metric and adds back stock-based comp expense. Risks to our PO are a weaker macro and capital markets backdrop, legal and political risk, increased regulation and tax reform, key person risk and a unique corporate structure.

Blue Owl Capital (OWL)

Our \$21 price objective for Blue Owl is derived from 20x 2026E cash earnings. Our definition of cash earnings uses the company's distributable earnings metric and adds back stock-based comp. Our multiple is in line with the mid-point of the industry range (7-25x). We view OWL's earnings quality as higher than peers given its very high mix of fee-related earnings, permanent capital AuM composition and higher growth trajectory.

Risks to our PO: investing backdrop more challenging (intensifying competition in private debt), lending to technology companies, Part 1 fees included in FRE, variable dividend payout, tax receivable agreement, secondary sale risks from large owners (Neuberger Berman), corporate structure (voting rights), merger integration (Oak Street), adverse macroeconomic scenarios and US and international tax reform.

Brookfield Asset Management (BAM)

Our price objective (PO) for BAM is \$44 and is derived from 22.5x 2026E cash earnings. This multiple is a premium to Alt peers given BAM's FRE-rich EPS. Our definition of cash earnings uses the company's distributable earnings metric and adds back stock-based comp expense.

Risks to our PO are a weaker macro and capital markets backdrop, legal and political risk, increased regulation and tax reform, key person risk, and its unique corporate structure.

Cboe Global Markets (CBOE)

Our primary valuation metric for US Exchanges is price to long-term earnings (2026E). We focus on long-term EPS because we prefer to normalize for any near-term factors, and it also provides credit for an additional two years of growth. We apply a 17.5x multiple on our 2026E EPS to derive our \$197 PO. Our multiple is based on the assumption that CBOE trades in line with its peer group despite its higher growth trajectory.

Downside risks are (1) migration to dark venues and negative growth in cash equities, (2)

credit & liquidity risks via its clearinghouse, (3) reliance on third-party index providers (SPX contract with S&P renews in 2032, (4) Intensifying competition in multi-listed options market (including MEMX launch).

Charles Schwab Corp. (SCHW)

Our price objective (PO) for SCHW is \$54 and is derived from a price to earnings method. We apply a 12x multiple on our 2026E EPS to obtain our PO. We use 12x given (1) elevated sorting will continue through mid-2023, (2) "bank" risks would weigh on SCHW's multiple and (3) forecast net new assets to slow over the near-term.

Risks to our PO are an extension of the Fed hiking cycle positively affecting SCHW's securities portfolio reinvestment opportunity and muted sorting activity.

CME Group Inc (CME)

Our primary valuation metric for US Exchanges is price to long-term earnings (2026E). We focus on long-term EPS because we prefer to normalize for any near-term factors, and it also provides credit for an additional two years of growth. We apply a 17.5x multiple on our 2026E EPS to derive our \$194 PO. Our multiple is based on the conservative assumption that CME trades in line with its peer group despite its lower growth prospects/earnings quality.

Downside risks are (1) depressed volumes, (2) lower earnings quality due to high transactional revenue composition, (3) mature markets and high market share stifling further growth, (4) trading at a premium to higher growth peers and (5) secular transition away from oil/fossil fuels where CME has high share.

Upside risks are (1) improving/elevated interest rate volumes due to quantitative tightening/inflation, (2) defensive qualities which drive stock outperformance in equity market drawdowns (e.g., 1Q22), (3) futures rollouts on additional retail brokerages, and (4) potential for share gains in select markets: base metals after the LME debacle and cash after the DTCC cross-margining proposal is implemented next year.

Franklin Resources (BEN)

Our price objective (PO) for BEN is \$23 and is derived from a price to earnings method. We apply an 8x multiple to our 2026 EPS estimate to derive our PO. Our 8x multiple is in-line with the active/traditional peer group excluding BLK.

Upside risks to our PO are: (1) a future equity bull market and tighter credit spreads could improve BEN's investment performance, (2) its expanding Alts business could offset its traditional outflows and benefit its fee rate, (3) future M&A could provide EPS accretion, (4) although we view its excess capital as mostly depleted after its M&A spree, BEN's tax shield may be undervalued by markets.

Downside risks are: a deterioration in investment performance and net flows.

Interactive Brokers (IBKR)

Our price objective (PO) for IBKR is \$146 and is derived from a price to earnings method. We apply a 17.5x multiple to our 2026E EPS to obtain our PO. Our multiple of 17.5x was chosen as we are valuing IBKR off of cyclically peak profits, and compares to the low end of IBKR's historical valuation range (17.5-30x).

Risks to our PO are: changing industry dynamics in China and US regulatory risks with regard to payment for order flow.

Intercontinental Exchange (ICE)

Our primary valuation metric for US Exchanges is price to long-term earnings (2026E). We focus on long-term EPS because we prefer to normalize for any near-term factors,

and it also provides credit for an additional two years of growth. We apply a 20x multiple on our 2026E EPS to derive our \$153 PO. Our multiple is equal to ICE's historical average and a small premium to peers in light of ICE's superior growth prospects. We look for ICE's valuation to re-rate higher from current levels as mortgage origination volumes bottom. Additionally, ICE's accelerating earnings growth and improve earnings quality support a higher valuation.

Risks are: (1) elevated financial leverage, (2) subdued listings activity, (3) contrarian capital allocation decisions (eBay, BKI).

Invesco (IVZ)

Our price objective (PO) for IVZ is \$20 and is derived from a price to earnings method. We apply a 10x multiple to our 2026E EPS to obtain our PO. 10x is modestly above its five-year average (7.5x). It's also in line with its large cap traditional peer group (x-BLK).

Risks to our PO are (1) fee rate pressures, (2) sustainability of positive net flows, (3) dis-synergy risk arising from future M&A transactions, (4) elevated financial leverage, and (5) soft investment performance in its traditional business.

Janus Henderson Group (JHG)

Our PO for JHG is \$35 and is derived from a price to earnings method. We apply a 10.0x multiple on our 2026E EPS plus \$2 (given JHG's excess capital position) to obtain our PO. 10.0x is consistent with the company's five year average and is in-line with its traditional/active peer group. However, we note that the JHG stock has a premium to other outflowing traditional firms due to the takeout potential and other positive factors relating to its activist shareholder.

Downside risks: (1) potential for net redemptions given traditional/active heavy business mix and cyclical headwinds, (2) lack of negative sentiment due to concerns related to the activist and (3) elevated valuation relative to other outflowing traditional asset managers. Upside risks: (1) takeout, (2) accretive M&A and (3) buybacks.

KKR & Co. Inc. (KKR)

Our price objective for KKR is \$109 and is derived from 17.5x 2026E cash earnings. Our definition of cash earnings uses the company's distributable earnings metric and adds back stock-based comp. We apply the multiple on our normalized cash earnings forecast for KKR's asset management business.

Downside risks: Strong capital deployment activity in the frothy years (2020-21), valuation complexity with FRE, expense allocations, insurance business and capital intensive model, business model is private equity heavy and this business is experiencing multiple cyclical headwinds (returns - inflation & bear market, fundraising - crowded backdrop, denominator effect), insider-selling potential, KKR's voting structure may prevent an S&P 500 Index add.

LPL Financial Holdings (LPLA)

Our price objective (PO) for LPLA is \$276 and is derived from a price to earnings method. We apply a 11x multiple (previously 10x) to our 2026E to obtain our PO. Its closest public comps currently trade at 8-11x consensus EPS. but we think that LPLA offers a higher growth trajectory and its business model is less capital intensive. We raised our multiple given a deceleration in client cash sorting movements.

Risks to our PO are sustainability of its long-term growth, revenue pressure from maturing fixed contracts, soft deposit demand from third party banks, risk of Fed rate cuts, and elevated financial leverage.

Nasdaq (NDAQ)

Our primary valuation metric for US Exchanges is price to long-term earnings (2026E). We focus on long-term EPS because we prefer to normalize for any near-term factors, and it also provides credit for an additional two years of growth. We apply a 15x multiple on our 2026E EPS to derive our \$55 PO on NDAQ. Our multiple reflects a slight discount on NDAQ's recent historical average given the recent earnings quality reduction and our expectation for decelerating growth.

Upside risks are (1) a bull market could revive listings activity and drive revenue gains in indexing from beta, (2) a prolonged Democratic administration could enable SEC Chair Gensler to complete his equity market structure reforms and move volumes back onto exchanges, (3) the secular trend toward derivatives (vs. cash) could offset the downward normalization in options trading, and (4) NDAQ's new crypto custody business could enhance growth.

Downside risks are (1) NDAQ's premium valuation, (2) MEMX's entrance into the options market, (3) retail investor disengagement, (4) decelerating Market Tech sales, (5) SEC Chair Gensler's inability to complete his market structure agenda during his administration, and (6) volume headwinds as we transition toward a bull market.

Patria (PAX)

Our price objective of \$18 is 10x our 2026E cash earnings estimate. Cash earnings is defined as distributable earnings after tax less equity-based comp. The 10x multiple is around the mid-point of where the alternative asset manager universe currently trades and is in-line with where the PAX stock has traded lately.

Downside risks to our PO: macroeconomic conditions and geopolitical factors, key person risk and corporate governance.

Upside risks to our PO: organic growth, M&A and a stronger realization backdrop.

Raymond James Financial (RJF)

Our \$141 PO is based on 11x EPS multiple on our 2026 EPS estimate. Given that RJF operates four different business lines that offer different qualities (growth, volatility, capital), we derive our price objective using a sum-of-the-parts framework accounting for peers in wealth management (15x), traditional asset management (9x), capital markets (7x), and traditional banking (9x). This multiple is at the bottom of its 5Y historical range (11-20x), given a conservative stance on market conditions.

Downside risks are (1) breakaway broker theme threatening organic growth (2) cash sorting (3) challenging market backdrop for active management and capital markets.

Robinhood Markets (HOOD)

Our price objective (PO) of \$12 for Robinhood is derived from a EBITDA multiple method: We apply a 7x multiple to forecasted 2026 EBITDA to obtain a valuation which we then discount back one year to obtain our PO. Our multiple is based on peers. We also no longer include excess cash as we are including net interest revenue generation from that cash and wish to avoid double counting.

Upside risks to our PO are: expansion of cryptocurrency offering, entrance into international markets, and new product launches.

Downside risks to our PO are: US regulatory risks regarding payment for order flow, continued reversal of pandemic related tailwinds, and decelerating growth potential given its high market share within its addressable market.

T. Rowe Price (TROW)

Our price objective (PO) for TROW is \$93 and is derived from a price to earnings method. We apply a 10.0x multiple on our 2026 EPS estimate plus \$11 for TROW's excess capital (and zero debt) to obtain our PO. 10.0x is lower than TROW's 5Y average multiple of 15.0x, which is due to our reduced forward growth estimate for EPS/AuM.

Upside risks to our PO are (1) strong fundraising activity at Oak Hill which would improve TROW's future organic growth, (2) acceleration in international expansion which would help net flows, (3) improving margins following the new partnership with FIS, (4) reversal in the negative net flow trend following the formation of TRPIM.

Downside risks to our PO are (1) pricing pressure, (2) elevated net redemptions in its 401k business, (3) deterioration in investment performance, or (4) disruption to the company's investment culture.

The Carlyle Group (CG)

Our \$31 price objective for the Carlyle Group is derived from a 10x multiple on our 2026E cash earnings estimate. Our cash earnings definition reduces stock-based comp from the company's distributable earnings definition. Our multiple is lower than peers due to an expected deceleration in growth and emerging fundraising challenges.

Upside risks to our PO include (1) \$80B+ of dry-powder which CG can deploy into a cheaper asset backdrop, (2) earnings quality improvement (FRE was 50% of EPS in 1H22), (3) future acquisitions of FRE rich & scalable platforms, (4) visibility into near-term EPS given announced exits and record accrued carry, and (5) Fortitude's deployment of \$4B in excess capital.

TPG Inc (TPG)

Our \$47 price objective for TPG is derived from 15x 2026E cash earnings. Our multiple is in-line with the industry range (7-25x). Despite recent underperformance in the alternative asset manager stocks, we are attracted to the qualities of TPG's model (high growth, fee-related earnings rich, capital lite) and its opportunity to expand its model horizontally into new white spaces (credit, life sciences, infrastructure, retail vehicles).

Risks to our PO: (1) End of the growth, tech & healthcare bull markets, (2) Succession-planning, (3) Fund V and VI performance issues, (4) Valuation of the closest comp = CG, (5) Tax receivable agreement, (6) Lower permanent capital mix, (7) Lack of retail distribution, (8) Macroeconomic backdrop.

Tradeweb Markets Inc. (TW)

Our price objective (PO) for Tradeweb is derived from a price to earnings valuation method. We apply a 30x multiple on our 2026E EPS to derive our \$105 PO. Our multiple is supported by TW's recent valuation range and assumes TW maintains a premium to the US exchanges due to higher visibility into its long-term growth trajectory combined with its defensive qualities.

Risks are (1) competitive pressures intensifying (MKTX, Bloomberg, ICE, Trumid), (2) a high mix of transactional revenues, (3) secular pressure to trading commissions (although TW's commissions are still a low % of bid-ask), and (4) a high valuation relative to slower-growth peers.

Victory Capital Holdings, Inc. (VCTR)

Our price objective (PO) for VCTR is \$52 and is derived from a price to earnings method. We apply an 8.0x multiple on our 26E EPS to obtain our PO. 8.0x is in-line with VCTR's 5Y average and its traditional peer group (x-BlackRock).

Downside risks to our PO are (1) migration to passive, indexing and automated investing.

(2) Declining fee rate due to organic mix shift (NEC acquisition will help), (3) Elevated financial leverage (due to M&A), (4) Secondary stock sales from two private equity owners (Crestview, Reverence), (5) Finding the next acquisition candidates given its refocus into more competitive verticals, (6) Key man risks.

Virtu Financial (VIRT)

Our \$22 PO is formed using a 5.5x EV-to-EBITDA multiple on our 2026 EBITDA forecast. Over the last 5 years, VIRT has traded at a multiple of 5-10x and its exchange peers currently trade at a rich premium of 15x. Risks to our thesis include: (1) Intensifying competition in equities and strong rivals (including powerhouse Citadel Securities), (2) Continued cyclical pressures from tight monetary conditions, (3) Extreme volatility that dampens opportunities or drives losses, (4) Adverse regulatory outcomes, (5) Lack of scale in options markets and (6) Elevated financial leverage.

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US - Brokers, Asset Managers, & Exchanges Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	AllianceBernstein	AB	AB US	Craig Siegenthaler, CFA
	Ameriprise Financial	AMP	AMP US	Craig Siegenthaler, CFA
	Ares Management Corp	ARES	ARES US	Craig Siegenthaler, CFA
	BlackRock, Inc.	BLK	BLK US	Craig Siegenthaler, CFA
	Blackstone	BX	BX US	Craig Siegenthaler, CFA
	Blue Owl Capital	OWL	OWL US	Craig Siegenthaler, CFA
	Cboe Global Markets	CBOE	CBOE US	Craig Siegenthaler, CFA
	Interactive Brokers	IBKR	IBKR US	Craig Siegenthaler, CFA
	Intercontinental Exchange	ICE	ICE US	Craig Siegenthaler, CFA
	KKR & Co. Inc.	KKR	KKR US	Craig Siegenthaler, CFA
	Raymond James Financial	RJF	RJF US	Mark McLaughlin, CFA
	TPG Inc	TPG	TPG US	Craig Siegenthaler, CFA
	Tradeweb Markets Inc.	TW	TW US	Craig Siegenthaler, CFA
	Victory Capital Holdings, Inc.	VCTR	VCTR US	Craig Siegenthaler, CFA
	Virtu Financial	VIRT	VIRT US	Craig Siegenthaler, CFA
NEUTRAL				
	Affiliated Managers Group	AMG	AMG US	Craig Siegenthaler, CFA
	Apollo Global Management	APO	APO US	Craig Siegenthaler, CFA
	Brookfield Asset Management	BAM	BAM US	Craig Siegenthaler, CFA
	CME Group Inc	CME	CME US	Craig Siegenthaler, CFA
	Invesco	IVZ	IVZ US	Craig Siegenthaler, CFA
	Janus Henderson Group	JHG	JHG US	Craig Siegenthaler, CFA
	LPL Financial Holdings	LPLA	LPLA US	Craig Siegenthaler, CFA
	Patria	PAX	PAX US	Craig Siegenthaler, CFA
UNDERPERFORM				
	Charles Schwab Corp.	SCHW	SCHW US	Craig Siegenthaler, CFA
	Franklin Resources	BEN	BEN US	Craig Siegenthaler, CFA
	Nasdaq	NDAQ	NDAQ US	Craig Siegenthaler, CFA
	Robinhood Markets	HOOD	HOOD US	Craig Siegenthaler, CFA
	T. Rowe Price	TROW	TROW US	Craig Siegenthaler, CFA
	The Carlyle Group	CG	CG US	Craig Siegenthaler, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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