Brokers, Asset Managers & Exchanges

2024 Year Ahead: A year of inflections & reversions: prefer Alts vs. Brokers

Industry Overview

2024 to be a year of inflections & reversions

The <u>BofA Economics team</u> forecasts a soft landing, pause in Fed rate hikes followed by cuts in 2H24-2025 (ECB cuts too), yield curve steepening, rising defaults and a weaker USD. 60% of global GDP will be facing key elections in 2024. This could have positive implications including more favorable regulatory outcomes under a Republican administration (SEC's equity market structure reform package & DoL Rule) following a period of active rulemaking.

Bond reallocations: Starting Phase 2 & derivative plays

We expect significant AuM shifts with both institutional and retail investors extending duration. This could trigger record inflows into fixed income (vs. outflows in money market) with 60-70% of the bond inflows into passive/ETF strategies. We view this as phase 2 of the credit reallocation theme (phase 1 in 2022-23 was large inflows into short duration products = private credit, money market). We believe there are underappreciated second-derivative plays in businesses that benefit from bond AuM growth (TW & ICE). Fed rate cuts will also stimulate financial market liquidity and help reaccelerate private markets investing/realizations.

Checklists: 7 trends in 2024 & 5 secular themes

7 key trends in 2024: (1) Large increase in fixed income net flows (vs. outflows in money market); (2) Improving Alt retail flows (including real estate); (3) Fed cuts trigger negative EPS revisions at the retail brokers; (4) Deceleration in volume growth at the exchanges; (5) Broad-based rise in defaults could weigh on Alts performance; (6) SEC finalizes equity market structure regulations; (7) Investor sentiment improves in real estate and private equity in 2H24 (whereas insurance NIMs, incentive fee part 1s and nonaccruals emerge as headwinds in private credit).

5 secular themes: (1) Privatization of markets including private credit/bank partnerships; (2) retail Alts (most LT upside, few winners including BX); (3) Independent advice = RIA; (4) Digital advice = online brokerage; (5) Analog to digital conversions (fixed income e-trading, mortgage tech).

Our key Buys, Underperforms & high interest names

Buys: (1) OWL given robust growth trajectory and misvalued stock relative to offensive and defensive qualities; (2) KKR given S&P 500 add, fundraising acceleration and asymmetrical upside potential to EPS; (3) TW – acceleration in revenue growth and share gains from voice; (4) AB – best-positioned for bond reallocations; (5) ICE – rebound in revenue growth from fixed income and mortgage tech into 2025 and strong momentum in futures business (energy share gains from CME). **Underperforms:** SCHW – expect deposit growth & net new assets to continue missing expectations; NDAQ – see downside to LT growth targets and elevated financial leverage prevents optionality (estimate volume decelerations at both NDAQ and CME); Active equity industry – expect migration to passive & privates to continue. **High interest names:** BX – expect rebound in retail flows; APO – focused on credit quality; LPLA – waiting for rate cuts & crowded long.

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Refer to important disclosures on page 34 to 36. Analyst Certification on page 32. Price Objective Basis/Risk on page 26.

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Equity United States Brokers, Asset Managers and Exchanges

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SEC: Securities & Exchange Commission

DOL: Department of Labor AuM: Assets under Management

AuA: Assets under Advisory
RIA: Registered Investment Advisor

NT/LT: Near-term/long-term

NIM: Net interest margin

ECB: European Central Bank

FRE: Fee-related Earnings

BDC: Business Development Company

SPAC: Special purpose acquisition vehicle

AB: Alliance Bernstein

APO: Apollo

BX: Blackstone

OWL: Blue Owl Capital SCHW: Charles Schwab

ICE: Intercontinental

LPLA: LPL Financial

NDAQ: Nasdaq

TW: Tradeweb

Additional information

2024 to be a year of inflections & reversions

High inflation and rapidly rising interest rates created a unique backdrop of cyclical factors for our coverage including broker cash sorting, denominator-effected Alt fundraising and record active fixed income outflows (vs. record money market inflows). The Fed has been draining liquidity from financial markets, which has hurt the asset manager organic growth backdrop and has driven flows into short duration products (cash). We believe 2024 will be a year of inflections and reversions. Accordingly, we have been positioning our industry/stock ratings over the last 12 months (bullish on asset managers vs. more cautious on brokers & exchanges).

Soft landing, lower interest rates & yield curve steepening

The BofA Economics team is expecting a soft landing with a pause in Fed rate hikes followed by eventual cuts by both the Fed and the ECB in 2H24. They expect large declines in short rates (vs. long end) which will steepen the yield curve. Additionally, 60% of global GDP will be facing key elections in 2024 including the US. This could have positive implications including more favorable regulatory outcomes under a Republican administration (SEC's equity market structure package & DoL Rule) following a period of active rulemaking. We also believe artificial intelligence is in the very early innings of improving operating efficiencies within our coverage. The initial benefits can be found in the back-office and sales roles.

Bond reallocations: Starting Phase 2 of credit theme now

The BofA Economics team forecasts the end of Fed rate hikes with cuts anticipated in 2H24 into 2025. We expect this to cause significant AuM shifts across the asset management industry with institutional and retail investors extending duration, which should trigger record inflows into fixed income (vs. outflows in money market). We continue to expect 60-70% of the bond inflows to be derived from passive/ETF strategies (BLK) while active bond managers with strong investment performance will benefit too (AB). We view this as phase 2 of the credit reallocation theme. Phase 1 in '22-'23 was defined by large inflows into short-duration products (private credit, money market) while phase 2 will see large inflows into long-duration fixed income (vs. outflows in money market funds).

Bond reallocations: 2nd derivative plays

The second-derivative trade will be businesses that benefit from bond trading activity and growth in bond AuM. Tradeweb (TW) is the fastest growing fixed income e-trading platform with scale in both credit and rates while Intercontinental Exchange (ICE) operates a large fixed income business across execution, index, data & analytics. Both will see an acceleration in revenue growth with rising fixed income AuM. We also expect the eventual Fed rate cuts to stimulate financial market liquidity and help reaccelerate private market investing/realization activity (KKR).

What could change our view?

- APO (Apollo, Neutral) & LPLA (LPL Financial, Neutral) near identical setups: If markets overreact to deteriorating credit quality (APO & Alts) or Fed rate cuts (retail brokers including LPLA) and overly bullish investor sentiment normalizes, this could improve the attractiveness of names that are well-owned currently but have potential negative catalysts in 2024 (including APO and LPLA). Specifically, we see both APO and LPLA as having a robust profit growth setup in 2025-26.
- Beta & FX with Trads: A stronger (or weaker) equity market could cause us to become more bullish (or less) on the Trads given their high beta sensitivity. The BofA Econ team is also predicting a weaker USD which would benefit the global

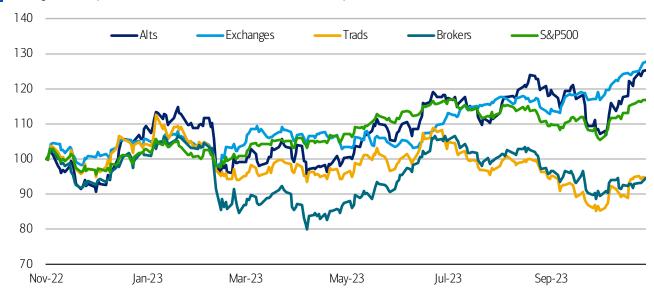


Trads through FX translation, including BLK and AB. While we see lower risk to our absolute call on the exchanges given where volumes are currently, a hard landing would likely cause the exchanges to outperform again next year.

• Default cycle, hard landing with asset managers: The BofA Econ team is forecasting a soft landing and a relatively benign default cycle relative to 2008-10. Nevertheless, we are monitoring credit quality closely across our Alts coverage which could prompt us to become more/less positive on individual names. A hard-landing scenario would drive a worst-case scenario of both defaults (Alts) and beta (Trads), which could cause both verticals to lag in 1H24. The markets have experienced an adverse volatility event in each of the last 4 1Qs with the regional bank crisis last March – we could opportunistically use these events to lighten up on the exchanges or become even more positive on the asset managers.

Exhibit 1: Stock total returns by industry (includes dividends)

Exchanges have outperformed while the brokers and traditionals have underperformed over the last 12 months

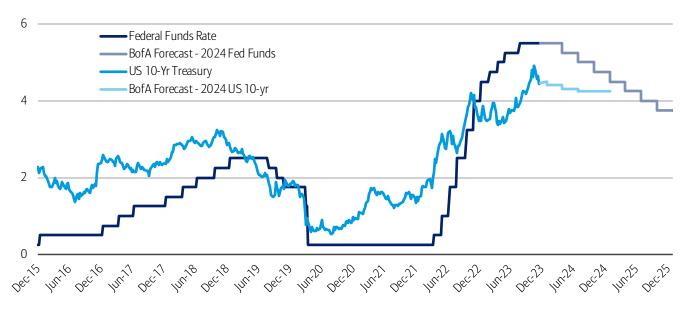


Source: Bloomberg, BofA Global Research



Exhibit 2: Key interest rate benchmarks

Expect Fed rate cuts to begin in June of 2024

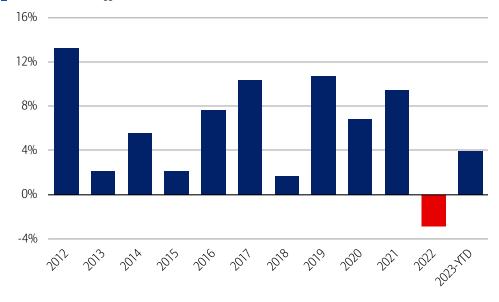


Source: Bloomberg, BofA Global Research Estimates

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Exhibit 3: Global fixed income organic growth %

Bond bear market triggered record net outflows in 2022 and weak active flows in 2023



Source: BofA Global Research, ISS Market Intelligence – Simfund Enterprise

Exhibit 4: Debt heatmap: Migration to (1) fixed income, (2) private credit and (3) money market

Money market was phase 1 but expect a migration to traditional fixed income (majority passive) in phase 2 (2024/25)

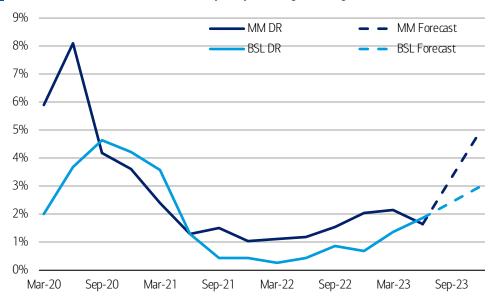
	2015	2016	2017	2018	2019	2020	2021	2022	2023-YTD	2024E	2025E
Money Market	10%	1%	10%	4%	8%	16%	7%	1%	11%	-5%	-5%
Active Fixed Income	0%	6%	8%	0%	8%	5%	8%	-6%	2%	8%	6%
Passive Fixed Income	15%	19%	22%	11%	23%	14%	15%	9%	9%	20%	15%
Private Credit	12%	8%	11%	18%	10%	11%	19%	14%	8%	10%	10%

Source: BofA Global Research estimates, ISS Market Intelligence - Simfund Enterprise

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Exhibit 5: Middle Market vs broadly syndicated loan default rates

Middle market defaults could overtake BSL early next year in a higher for longer rate environment



Source: BofA Global Research, LCD, Proskauer Note: BSL = Broadly syndicated loans

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2024 Checklist - 7 key trends to monitor next year

- 1. Significant improvement in fixed income net flows (vs. deteriorating cash management flows) with 60-70% of the inflows into passive
- 2. Improvement in Alt flows into private wealth channel with private credit gaining momentum and real estate rebounding
- 3. Fed "pause" and expectations for "cuts" drives negative revisions to the interest rate sensitive brokers (and buyside selling)
- 4. Deceleration in volume growth weighs on revenue growth at the exchanges (vs. acceleration in tech/info service businesses)
- 5. Broad-based rise in defaults creates headline risks and weighs on returns for the private market managers (while stocks can shrug this off and outperform if fundamentals heat-up, just like 2H09 and 2H20)
- 6. SEC finalizes its equity market structure proposals with a more favorable outcome for retail brokers and market makers

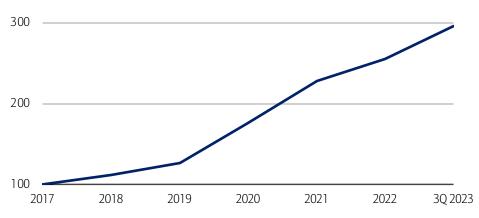


7. Lower interest rates will improve negative sentiment around private equity and real estate relative to private credit and infrastructure (private credit managers could see lower earnings through incentive fee part 1s and insurance NIMs)

Exhibit 6: Private Credit AuM (2017-3Q23, indexed to 100)

Private credit will continue to take share from banks





Source: BofA Global Research, company reports

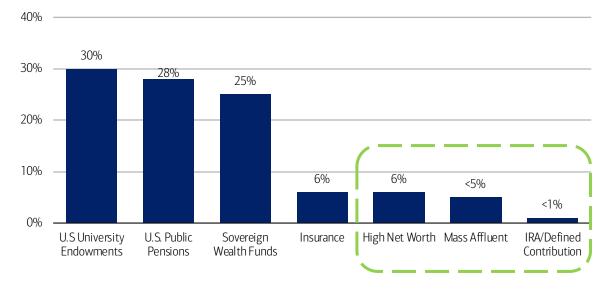
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Five secular themes - consistent

- 1. **Privatization of markets:** Privates & passives continue to gain share from active equities (barbell theme) while private credit, infrastructure and renewables grow faster than private equity
- 2. **Retail Alts:** Ultra high net worth and high net worth investors will continue to raise their allocations to privates while the Alts also increase their focus on the mass-affluent with new vehicle launches and try to crack the 401k code
- **3. RIA:** Breakaway broker trend continues but decelerates modestly; supplies the RIA custodians, independent broker-dealers and RIA aggregators a consistent source of growth
- **4. Online brokerage:** A high value proposition and evolving demographics (younger generations favor communicating with their smartphone vs. in-person) supports the 30Y shift to digital from human, benefiting the online brokers
- **5. Analog to digital conversions:** The mortgage and fixed income businesses remain highly manual and inefficient with electronification still in the earlier innings

Exhibit 7: Alternative investment allocations by client segment

Expect increase in adoption rates across all segments but see the most upside in potential retail

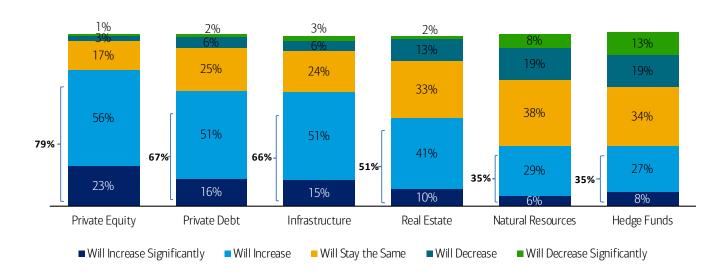


Source: BofA Global Research, Pregin

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Exhibit 8: Preqin Survey on Future Product Allocation (\$Tn)

Institutional investors are looking to allocate additional capital to private markets

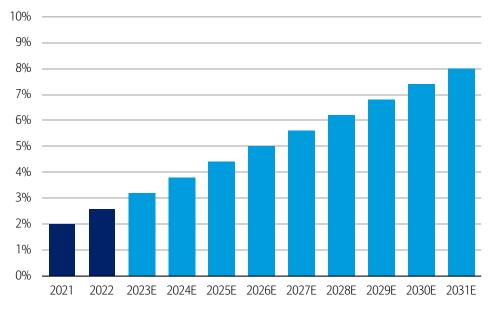


Source: BofA Global Research, Preqin



Exhibit 9: Private Alts share of Retail Wealth

We expect the private alts' share of retail wealth to continue to grow

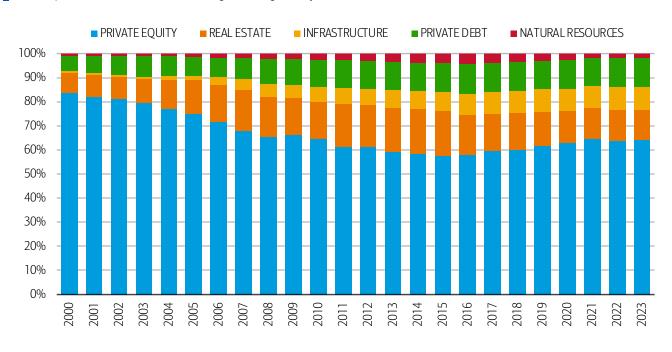


Source: BofA Global Research estimates

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Exhibit 10: Private AuM Mix

We view private debt & infrastructure as having attractive growth dynamics

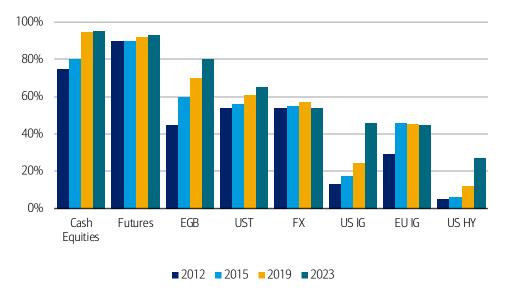


Source: BofA Global Research, company reports



Exhibit 11: Share of Electronic Trading by Asset Class

Markets continue to move to digital but significant runway remains in fixed income segments



Source: Company reports, Bloomberg, S&P Global, FINRA, Bank for International Settlements, BofA Global Research

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BofA stock recommendations

Buys

- Blue Owl (OWL, Buy) ***Top pick*** Fast growth, cheap valuation, high yield. OWL remains the fastest growing name in our coverage with qualities that we think remain underappreciated by the markets. Specifically, most of its AuM is perpetual with very little overall redemption risk and its earnings quality is high as its entirely composed of FRE (versus performance fees). We believe the main risks are incentive fee part 1 declines from lower interest rates, delays in its private BDC IPOs (triggers management fee step-up) and risk to management's aggressive '25 guidance. However, we think all these risks are already more than factored into its low valuation. We attribute its overly depressed valuation to its lack of long-only ownership following its 2021 de-SPAC. As investors meet with management, learn the story and earnings grow, we expect OWL to outperform.
- KKR (KKR, Buy) ***Top large cap pick*** Our 4-point thesis reinforces the asymmetrical upside potential: (1) S&P 500 Index add within six months (next after UBER); (2) Acceleration in organic growth with the beginning of its next fundraising cycle in '24 (led by Global Infrastructure Partners V, a relatively easy raise); (3) Significant asymmetrical upside potential to EPS with improving equity markets via performance fees, investment income/balance sheet and capital market transaction fees; (4) Valuation improvement given its robust organic growth opportunity. The key risk will come from potential defaults and performance as KKR has already had some defaults in 2023. Scale/brand is critical, and we view KKR as #2 in the institutional channel, top 3 in the insurance channel, #1 in Asia and improving in the retail channel (moving from Tier 3 to Tier 2). BX is #1 in institutional and retail channels while APO is #1 in insurance.



- Tradeweb (TW, Buy) Acceleration in growth with competitive advantages and cyclical tailwinds: The secular migration of trading from voice to electronic is the fundamental underpinning for TW's growth trajectory over the next 10 years. Adoption rates still remain low across much of TW's businesses, and TW has also been gaining share from other e-trading competitors. This was driven by its first-mover advantage with several technology protocols (portfolio trading, net spotting), its wider product offering (rates, credit, money market, ETFs) and a desire from market participants to not create another CME-style monopoly in rates and credit (which hurt TW's large competitors). We believe TW still has a significant opportunity to improve its share with small and mid-sized buyside firms relative to its competition. We think the cyclical factors also line-up for TW in 2024 with bond managers getting bigger, launching new funds and trading more. The rebound in liquidity by 2025 from the potential Fed cuts should help too. The key risk is its higher valuation, but we see TW's EPS growing into its premium multiple.
- Intercontinental Exchange (ICE, Buy) Reacceleration in fixed income and mortgage tech: ICE's energy futures business regained momentum in 2023 after supply chain disruptions (Ukraine conflict) in 2022 initially depressed volumes. We see additional upside in its European rates business with interest rates normalizing after 15 years of zero rates. We also think ICE's fixed income business will benefit from the bond reallocations. Its index and execution businesses will benefit first and then eventually its data/analytics will follow (2H24). We also view significant asymmetrical upside to ICE's mortgage tech business from synergies related to the BKI deal and higher refis in 2025 which should rebound with lower rates. Note: ICE could not "sell" the deal to investors for more than 12 months due to its anti-trust dispute with the FTC which was just resolved in September. Now, the company can help educate investors on the significant long-term synergies that the deal provides.
- AllianceBernstein (AB, Buy) Best way to position for bond reallocation theme: In our view, AB is the cleanest way to position for the bond reallocation theme as it has a broad fixed income offering globally and currently has strong investment performance (while also possessing zero cash management AuM, where we expect outflows). AB stock has become more attractive in our view given the sharp decline in its relative valuation in 2023 (from +1STDEV versus peers to -1STDEV) and its visible improvement in its operating margin. Specifically, in December '24, AB's expensive New York City lease at 1345 6th Avenue will roll-off its income statement and save the company \$55M per year. Plus, AB will deconsolidate its low margin research business in 1H24, which will provide a second near-term lift to its operating margin. AB is also the only Trad to have a strategic relationship with a large insurance company. This relationship provides AB with AuM, seed capital and M&A capital which enables higher organic growth.

Underperforms

• Charles Schwab (SCHW, Underperform) – forecast deposit growth & net new assets likely to miss expectations: SCHW's core deposit growth (due to sorting) and its net new assets (due to dis-synergies from Ameritrade acquisition and size) both missed market expectations in 2023, and we think this will continue. We look for sorting to linger in SCHW's RIA business in 2024 with cash allocations continuing to move down into unchartered territory given the wide gap between its cash sweep offering (45bps) and other cash alternatives (5-6%). From our channel checks, we believe RIAs are more actively managing their cash to enhance their client yields, while a new focus on systemic bank risks after the March regional bank crisis was another driver. We also look for cash allocations in the retail channel to decline in 2024 (fixed



income) and likely again in 2025 (equities) as markets move higher and retail chases returns. However, SCHW has a strong upward NIM trajectory as its first repays its expensive FHLB debt, then reduces its CD funding and eventually reinvests its low yielding securities portfolio. Additionally, lower interest rates will reduce SCHW's unrealized bond losses which will improve its excess capital position and could cause share buybacks to return sooner than expected. While SCHW was a very crowded long when we downgraded the stock in January 2023, it's a lot less crowded today and its valuation is also lower, reducing our conviction.

- T. Rowe Price (TROW, Underperform) making the right decisions but **against a very tough backdrop:** In our view, TROW is one of the best active equity managers in the world and commits significantly more resources to its investing effort than peers. This is likely why its funds have outperformed over long time periods. However, most of its revenues are derived from active equity strategies, which is a business that is still facing long-term headwinds from passive and privates. Compounded by cyclical factors (the '22 bear market) and weaker investment performance in its flagship strategies, this has driven its negative organic growth in '22 and '23. However, in 2023, those strategies as well as its growing target date strategies demonstrated strong investment performance. This was critical after the run-off of very strong 2020 performance placed its target date track records at risk. Despite its organic growth issues, the stock trades at a premium to Trad peers on a PE basis and even on an EV-to-EBITDA basis after adjusting for its significant excess capital position. TROW still has better long-only ownership than peers, but this could fade if its net outflows continue in 2024 as we expect.
- Nasdaq (NDAQ, Underperform) see growth targets/expectations at risk: NDAQ uses the network effect from its slow growth cash equities business to cross-sell a variety of information services and software businesses. While these businesses will outgrow its exchange business, we view expectations as high and expect growth to decelerate given channel checks. We also believe NDAQ overpaid for its recent acquisitions, which raised its financial leverage to levels which will prevent capital returns over next year. Additionally, following the decline in the VIX throughout 2023 and several strong volume years since Covid, we believe industry equity/option volume growth will be lower and competition continues to intensify with the migration to dark venues and new exchange launches (MEMX, MIAX).

Exhibit 13: SCHW Liquidity Uses - October 2023 (\$B)

Source: BofA Global Research, company filings

While it is impossible to perfectly calculate client cash realignment, net MMF flows offer a good proxy to track liquidity needs

Liquidity Uses	
Bonds	1.1
ETFs	8.8
Money Market Funds	17.0
CDs	0.1
CDs Total	27.0

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Exhibit 14: SCHW Liquidity Sources - October 2023 (\$B)

Now at more normalized historical cash levels, we don't view cash balances as a repeatable source of liquidity in 4Q23 as they were in 3Q23

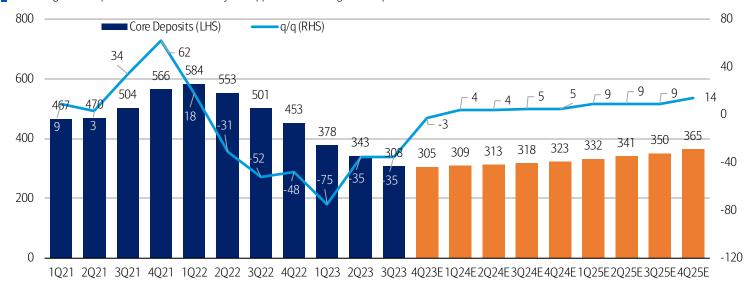
Liquidity Sources	
Equities	3.0
Hybrid	1.5
Mutual Funds	12.2
NNA	5.0
FHLB	?
AFS/HTM Proceeds	?
Cash & cash equivalents	?
Total	21.7

Source: BofA Global Research, company filings



Exhibit 14: SCHW Core deposits (\$B)

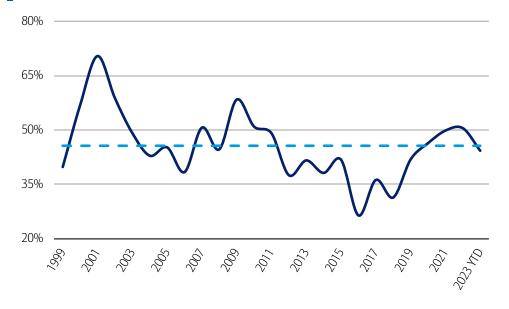
Core deposits declined \$36B q/q in 3Q23; while we believe core deposits will grow organically in 1H24, we think sorting will remain at elevated levels limiting growth and extending the time-period SCHW will have to rely on supplemental funding and this pushes back the securities reinvestment bull thesis.



Source: BofA Global Research, company filings

Exhibit 15: % of total industry US active equity AuM outperforming benchmark (3Y, net of fees)

Investment performance is at its long-term average; this implies >50% of fund managers have underperformed

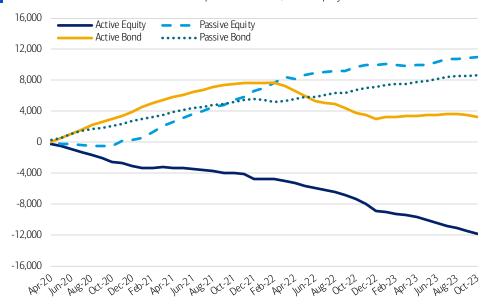


Source: BofA Global Research, Morningstar US domiciled active funds rolling performance as of 11/13/2023; Calculation on a rolling 3Y basis



Exhibit 16: Cumulative industry US net flows by asset class (\$B)

Passive has been dominant since the COVID pandemic started; active equity continues to shrink

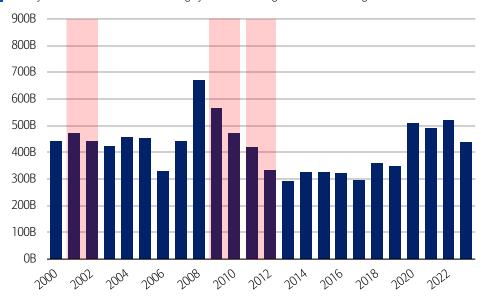


Source: BofA Global Research, ISS Market Intelligence – Simfund Enterprise

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Exhibit 17: Nasdaq's total cash equity volume

History indicates that 2023 will be a tough year for volumes given softness during recoveries



Source: World Federation of Exchanges, CBOE Global Markets, BofA Global Research Note: Market troughs in 2002, 2009, 2011, 2018, 2020

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Names with high interest

Blackstone (BX, Buy): Expect a rebound in retail flows: We believe BREIT's
redemptions will continue to decline in 2024 and expect its redemption limits
to end by 3Q24. Several months after the limits end, we then expect to see a
significant pick-up in sales from key retail platforms as financial advisors
reallocate to BREIT once its open again after significant outperformance over



the last five years. We think this could also signal that BPP (Blackstone Property Partners, Core+ real estate) is on a similar but delayed net flow trajectory while we believe BPP has been halting redemptions since mid-2022. We also look for BXPE (Blackstone's new retail private equity fund) to become a category killer in private equity with BX's retail sales engine running on four cylinders and having a strong track record already. BCRED (BX's retail credit fund) is already flowing well and we expect momentum to continue increasing given the reallocation of retail cash into higher yielding strategies.

- Apollo (APO, Neutral): Wait-and-see with credit quality: We have high visibility into APO's strong FRE and EPS trajectory in 2024. However, this could be altered by rising defaults inside of Athene or a spike in defaults at one of its Alt-insurance peers which could trigger increased regulatory oversite. Given that Athene and the Alt-insurance model has not been stress-tested in a real default cycle yet, we are taking a wait-and-see approach with APO given the expectation that defaults will broadly rise. However, a benign impairment experience at APO could cause its valuation to re-rate up to higher levels in the economic recovery as the consistent organic growth of its differentiated model is rewarded by the markets. We maintain our Neutral rating, with performance in 2024 likely to be impacted by its credit experience.
- Chicago Mercantile Exchange (CME, Neutral): Expect slowing volume growth: After two strong volume growth years, we expect a solid year in 2024 but then significant decelerations in 2025-26. This is driven by our view of long-term futures volumes growth (near nominal GDP = 4-5%) which CME has significantly outperformed in recent years. However, CME's monopolistic pricing power supports a strong RPC trajectory. CME also has a very defensive business model and a track record of stock outperformance in periods of equity market corrections. This downside support needs to be considered but the math of slowing EPS growth and an already high valuation supports our Neutral rating.
- LPL Financial (LPLA, Neutral) Robust long-term organic growth trajectory and ROCA (revenue over client AuA) stability but crowded and visible near-term negative catalyst: We look for buyside selling in shares of LPLA in front of the upcoming Fed rate cutting cycle. This is due to the large contribution from spread revenues at LPLA in combination with a high percentage of hedge fund ownership. However, LPLA has been gaining share and widening its offering, and we believe this supports a robust organic growth trajectory over the next five years.

Exhibit 19: Our BREIT Model

Redemptions peaked in January and have continued to improve q/q through November; we estimate the limits will end in 3Q24 followed by a sales acceleration

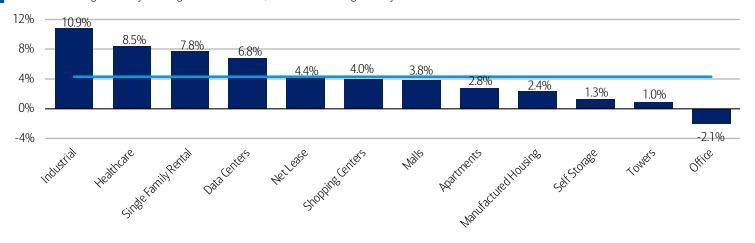
			2023	2024											2024
(\$M)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BofP NAV	65,964	64,178	63,775	63,780	63,352	62,928	63,121	62,782	62,557	62,480	62,454	62,513	62,651	63,735	64,893
Sales	119	116	125	125	125	125	125	125	125	125	125	125	1000	1000	1000
DRIP	84	84	85	85	85	85	85	85	85	85	85	85	85	85	85
Redemption Requests	2,200	1,800	1,800	1,620	1,458	1,312	1,181	1,063	957	861	775	697	628	565	508
% of NAV	3.3%	2.8%	2.8%	2.5%	2.3%	2.1%	1.9%	1.7%	1.5%	1.4%	1.2%	1.1%	1.0%	0.9%	0.8%
Redemptions Filled	1,300	1,200	798	1,276	1,267	646	1,181	1,063	912	861	775	697	628	565	508
% of NAV	2.0%	1.9%	1.3%	2.0%	2.0%	1.0%	1.9%	1.7%	1.5%	1.4%	1.2%	1.1%	1.0%	0.9%	0.8%
% of redemptions filled	59%	67%	44%	79%	87%	49%	100%	100%	95%	100%	100%	100%	100%	100%	100%
Net flow	(1,097)	(1,000)	(588)	(1,066)	(1,057)	(436)	(971)	(853)	(702)	(651)	(565)	(487)	457	520	577
Organic Growth	-1.7%	-1.6%	-0.9%	-1.7%	-1.7%	-0.7%	-1.5%	-1.4%	-1.1%	-1.0%	-0.9%	-0.8%	0.7%	0.8%	0.9%
Ann. Organic Growth	-20.0%	-18.7%	-11.1%	-20.0%	-20.0%	-8.3%	-18.5%	-16.3%	-13.5%	-12.5%	-10.9%	-9.4%	8.8%	9.8%	10.7%
Mark	-1.0%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
EofP NAV	64,178	63,775	63,780	63,352	62,928	63,121	62,782	62,557	62,480	62,454	62,513	62,651	63,735	64,893	66,118

Source: BofA Global Research Estimates, company reports



Exhibit 19: Market weighted Earnings growth by sector (2023-2024)

We forecast the highest one-year FFO growth in Industrial, Healthcare and Single-Family Rentals



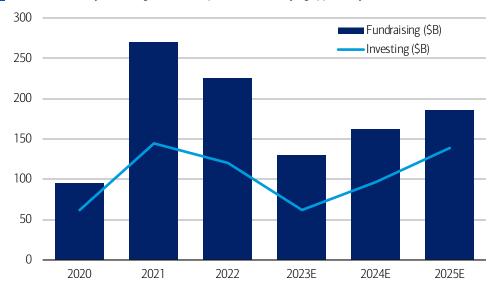
Source: BofA Global Research Estimates

 $Note: Our\ estimates\ use\ normalized\ FFO\ growth\ estimates.\ Net\ Lease,\ Cold\ Storage,\ Data\ Centers\ and\ Towers\ use\ AFFO.$

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Exhibit 20: BX Fundraising vs. Investing (\$B)

View 2023 as the cyclical trough for both; Implies another LT buying opportunity (similar to 2020)

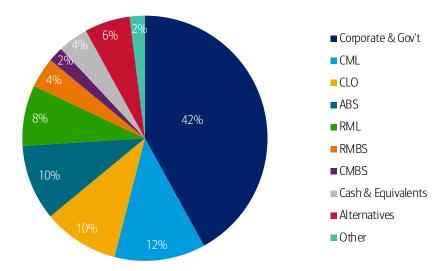


Source: BofA Global Research Estimates, company reports



Exhibit 21: Athene AuM Mix by Asset Class

 $Corporate \& Gov't, CML, CLO \& ABS \ are \ the top \ contributors \ to \ AuM; Rising \ defaults \ could \ increase \ Athene's \ impairment \ levels \ in \ 2024$



Source: BofA Global Research, company reports Note: Corporate includes public and private debt

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Exhibit 23: Asset manager - Insurer partnerships

Blackstone (BX) and Apollo (APO) have multiple partnerships with insurers, while other asset managers only have one partnership

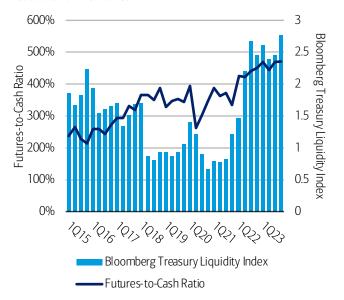
Compan	Partnership Agreement	Insurance Partner
APO	Apollo owns 100% of Athene	Athene
APU	Apollo has a 23.5% economic interest in the equity share capital of Athora	Athora
AB	Strategic partnership with EQH	EQH
	BX owns 9.9% of Corebridge (AIG Life & Retirement)	Corebridge (AIG Life & Retirement)
BX	Strategic partnership with Everlake (Allstate Life & Retirement)	Everlake (Allstate Life & Retirement)
DΛ	BX owns ~6% of Resolution life and has a strategic partnership	Resolution Life
	Strategic partnership with F&G Annuities & Life	F&G Annuities & Life
KKR	KKR owns 63% of Global Atlantic and is expected to acquire the remaining 37% by 1Q24	Global Atlantic
ARES	Wholly owned portfolio company of Ares Capital Corporation	Aspida
CG	CG owns 10.5% of Fortitude RE and has a strategic advisory services agreement	Fortitude RE

Source: BofA Global Research, company reports



Exhibit 23: Treasury market liquidity vs futures-to-cash ratio

Hawkish monetary policy is draining liquidity from cash markets and driving investors toward derivatives

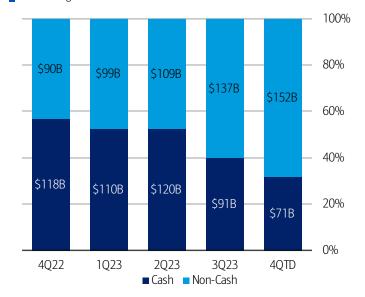


Source: Bloomberg, company reports, BofA Global Research Note: A lower index value = more liquidity; Futures-to-cash ratio is derived from 10Yr Treasury data

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Exhibit 24: CME Clearinghouse cash vs non-cash margin

Higher yields are driving clients' cleared margin into treasuries, which is lower margin for CME



Source: Company reports, BofA Global Research

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BofA recent rating changes - upgraded Alts vs. downgrading Exchanges & rate sensitive Brokers

IBKR was removed from BofA's US 1 List in November '23; OWL was added to BofA's US 1 List in September '23; CME was upgraded to Neutral on 9/6/23; AB was upgraded to Buy on 9/4/23; SCHW was downgraded to Underperform 1/19/23; IBKR was added to BofA's US 1 List in January '23; ICE was upgraded to Buy on 11/17/22; KKR was upgraded to Buy on 11/1/22; NDAQ was downgraded to Underperform on 10/14/22; APO was upgraded to Neutral on 9/23/22

Exhibit 25: EV to NTM EBITDA Valuations

Alts and exchanges have re-rated down over the prior two years

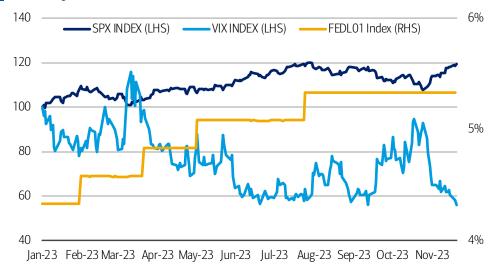


RCC: Bloomberg, Bota Global Research

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Exhibit 26: Key macro variables in 2023 = Markets, Volatility and Rates

 $Higher interest\ rates\ \&\ volatility\ benefited\ the\ brokers\ and\ exchanges\ while\ lower\ equity\ markets\ hurt\ the\ asset\ managers$



Source: Bloomberg, BofA Global Research

Exhibit 28: Comp sheet – Asset ManagementRelative valuations of traditional and alternative asset managers

						Mkt													
					Upside	Сар	AUM		EPS		CAGR		P/E			EV/EBITDA	<u> </u>	PEG	Div Yield
Company	Ticker	Rating	Price	Objective	(%)	(\$B)	(\$B)	2023E	2024E	2025E	25E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2023E
US Traditionals																			
BlackRock	BLK	Buy	748	877	17.2	112.1	9,101	37.05	37.99	43.84	8.8	20.2	19.7	17.1	17.1	16.3	14.2	2.2	2.7
T Rowe Price Group	TROW	Underperform	100	79	-20.9	22.3	1,347	7.31	6.50	6.83	(3.4)	13.7	15.4	14.6	9.3	11.1	10.7	-	4.9
Franklin Resources	BEN	Underperform	25	21	-15.2	12.2	1,374	2.59	2.33	2.59	(0.1)	9.5	10.6	9.6	10.0	10.8	9.9	-	4.9
Affiliated Managers Group	AMG	Neutral	136	144	5.9	4.6	636	18.47	19.77	21.52	7.9	7.4	6.9	6.3	8.2	8.4	8.5	0.9	0.0
AllianceBernstein Holdings	AB	Buy	29	40	39.4	3.2	669	2.54	2.67	3.19	12.1	11.3	10.7	9.0	9.9	9.5	8.0	0.9	8.9
Janus Henderson Group	JHG	Neutral	26	31	18.1	4.3	308	2.32	2.28	2.47	3.2	113	11.5	10.6	7.6	7.6	7.1	3.6	5.9
Cohen & Steers	CNS	-	59	-	-	2.9	75	2.80	2.75	2.96	2.8	20.9	21.3	19.8	17.7	18.8	19.0	7.7	3.9
Victory Capital	VCTR	Buy	32	44	36.4	2.1	154	4.52	4.80	5.50	10.3	7.1	6.7	5.9	7.3	7.1	6.6	0.7	4.0
Virtus Investment Partners	VRTS	-	196	-	-	1.4	163	21.63	22.60	25.74	9.1	9.1	8.7	7.6	5.5	5.2	4.7	1.0	3.6
Brightsphere Investment Group	BSIG	-	18	-	-	0.7	91	1.60	1.77	2.19	16.9	11.0	10.0	8.1	8.0	7.3	6.4	0.6	0.2
WisdomTree Investments	WT	-	6	-	-	1.0	74	0.36	0.42	0.45	12.3	18.0	15.6	14.3	13.1	11.4	10.6	1.3	1.9
Median											8.4	11.2	10.7	9.6	9.6	10.1	9.2	1.1	3.9
Global Traditionals																			
Amundi	AMUN FP	-	57	-	-	12.6	2,141	5.89	6.04	6.58	5.7	9.6	9.3	8.6	7.9	7.6	7.2	1.7	7.1
Schroders	SDR LN	-	402	-	-	8.2	786	0.32	0.34	0.38	8.7	12.5	11.8	10.6	4.3	4.0	3.7	1.4	5.4
DWS Group	DWS GY	-	31	-	-	6.8	938	3.23	3.45	3.88	9.6	9.6	9.0	8.0	4.6	4.6	4.2	0.9	6.9
Abrdn	ABDN LN	-	163	-	-	3.8	630	0.12	0.12	0.13	3.2	13.4	13.7	12.5	13.3	13.8	13.0	4.2	9.0
Man Group	EMG LN	-	210	-	-	3.2	152	0.22	0.34	0.41	36.8	12.2	7.9	6.5	4.1	2.7	2.4	0.2	6.1
Challenger	CGF AU	-	6	-	-	2.7	70	0.48	0.59	0.67	18.4	12.5	10.0	8.9	16.9	15.2	13.7	0.5	3.9
Azimut	AZM IM	-	22	-	-	3.5	63	2.85	2.96	3.16	5.2	7.8	7.5	7.1	5.6	5.2	4.9	1.4	6.8
Ashmore Group	ASHM LN	-	177	-	-	1.6	71	0.10	0.11	0.11	2.9	17.4	16.1	16.4	6.1	6.6	6.7	5.6	9.5
CI Financial	CIX CN	-	14	-	-	1.7	334	3.13	3.53	4.06	13.9	4.5	4.0	3.5	6.0	5.8	5.2	0.3	5.2
Perpetual	PPT AU	-	23	-	-	1.7	12	2.08	1.97	2.25	4.1	10.8	11.4	10.0	7.8	7.2	6.5	2.8	5.9
Platinum Asset Management	PTM AU	-	1	-	-	0.5	2	0.13	0.10	0.09	(17.4)	9.2	12.8	13.5	5.8	7.3	7.4	-	10.6
Jupiter Fund	JUP LN	-	82	-	-	0.6	65	0.12	0.08	0.09	(14.7)	6.8	9.9	9.4	2.7	3.7	3.5	-	9.7
Median											5.4	10.2	10.0	9.1	5.9	6.2	5.9	1.4	6.8
US Alternatives																			
Blackstone	BX	Buy	112	115	2.9	135.2	1,007	3.99	5.66	6.56	28.2	28.0	19.7	17.0	22.1	16.3	14.1	0.7	3.0
KKR & Co.	KKR	Buy	76	75	-0.8	66.9	528	3.38	4.72	5.58	28.5	22.4	16.0	13.5	14.7	11.2	9.3	0.6	0.9
Apollo Global Management	APO	Neutral	91	94	2.9	51.9	631	6.59	7.82	9.35	19.1	13.9	11.7	9.8	9.9	8.0	6.9	0.6	1.9
Ares Management	ARES	Buy	112	111	-0.7	34.3	395	3.57	4.78	6.38	33.7	31.3	23.4	17.5	39.9	28.5	19.5	0.7	2.8
Blue Owl Capital	OWL	Buy	13	17	26.3	19.0	119	0.65	0.81	1.06	27.7	20.7	16.6	12.7	27.0	20.2	13.3	0.6	4.2
Carlyle Group	CG	Underperform	34	26	-24.3	12.4	382	3.18	3.72	3.54	5.5	10.8	9.2	9.7	8.1	7.0	7.2	1.7	4.1
Hamilton Lane	HLINE		98	-	-	5.4	108	3.67	4.34	5.08	17.6	26.6	22.5	19.2	23.7	19.4	17.1	1.3	1.8
Median											28.0	22.9	16.5	13.4	20.1	14.7	12.1	0.7	-
Global Alternatives																			
Brookfield Asset Management	BAM	Neutral	35	37	5.7	57.8	750	1.36	1.51	1.76	13.8	25.7	23.2	19.9	23.7	19.1	16.3	1.7	3.7
Partners Group	PGHN SW	-	1,153	-	-	35.2	131	42.69	49.62	54.74	13.2	27.0	23.2	21.1	23.7	20.2	18.2	1.8	3.4
31 Group	III LN		2.232			27.4	8	4.01	3.88	3.92	(1.1)	5.6	5.7	5.7	5.3	5.4	5.5	-	2.6
Tikehau Capital	TKO FP		20			3.8	37	1.13	1.89	2.24	40.6	17.7	10.6	8.9	14.5	10.5	93	0.3	3.5
Patria Investments	PAX	Neutral	14	16	13.5	2.1	26	1.16	1.50	1.68	20.3	12.2	9.4	8.4	11.7	8.3	7.4	0.5	7.0
														0		0.0		0.5	,

Source: Company reports, Bloomberg, BofA Global Research

For securities unrated by our team, consensus estimates are used for computing forward-looking metrics.

For securities where estimates are partially unavailable, the time horizon is truncated.

All financial metrics are calendarized and quoted in the firm's primary reporting currency.



Exhibit 29: Comp sheet – Capital Markets

Relative valuations of retail brokers, wealth managers, exchanges and market makers

						Mkt												Div
					Upside	Сар		EPS		CAGR		P/E			EV/EBITD#	\	PEG	Yield
Company	Ticker	Rating	Price	Objective	(%)	(\$B)	2023E	2024E	2025E	25E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2023E
International Brokers																		
XP	XP	-	23	-	-	12.8	7.48	9.23	10.57	18.9	15.3	12.4	10.9	11.3	9.0	7.5	0.7	2.2
Hargreaves Lansdown	HL LN	-	718	-	-	4.3	0.67	0.71	0.76	6.2	10.7	10.2	9.5	7.0	6.7	6.2	1.6	5.8
Median										12.5	13.0	11.3	10.2	9.2	7.8	6.9	1.1	4.0
Online Brokers																		
Charles Schwab	SCHW	Underperform	61	54	(11.7)	111.5	3.20	3.70	4.34	16.5	19.1	16.6	14.1	18.5	15.4	13.2	1.0	1.6
Interactive Brokers Group	IBKR	Buy	78	128	64.3	33.0	5.83	6.69	7.32	12.1	13.4	11.6	10.6	12.4	10.8	10.1	1.0	0.5
Robinhood	HOOD	Underperform	9	9	3.2	7.5	(0.61)	0.25	0.51	-	-	34.9	17.1	14.3	12.0	8.1	-	0.0
Median										14.3	16.2	16.6	14.1	14.3	12.0	10.1	1.0	0.5
Wealth Managers																		
Ameriprise Financial	AMP	Buy	353	391	10.8	35.7	29.53	34.56	39.09	15.0	11.9	10.2	9.0	6.4	5.9	5.5	0.7	1.5
Raymond James	RJF	Buy	105	118	12.5	21.9	8.26	9.37	10.28	11.6	12.7	11.2	10.2	6.7	6.6	6.6	1.0	1.6
LPL Financial	LPLA	Neutral	222	259	16.6	16.8	15.58	15.40	21.61	17.8	14.3	14.4	10.3	9.7	9.7	7.6	0.8	0.5
Stifel Financial Corp	SF	-	61	-	-	6.2	4.82	6.26	6.94	20.0	12.7	9.8	8.8	-	-	-	0.5	2.4
Median										16.4	12.7	10.7	9.6	6.7	6.6	6.6	0.7	1.5
US Exchanges																		
Chicago Mercantile Exchange	CME	Neutral	218	219	0.6	78.4	9.33	10.48	10.94	8.3	23.3	20.8	19.9	20.7	18.2	17.4	2.5	3.7
IntercontinentalExchange	ICE	Buy	113	136	20.2	64.8	5.61	5.97	6.79	10.0	20.2	19.0	16.7	18.6	14.8	13.5	1.9	1.5
NASDAQ OMX	NDAQ	Underperform	56	50	(10.1)	32.1	2.74	2.47	2.88	2.6	20.3	22.5	19.3	17.9	16.9	15.8	8.7	1.5
CBOE Holdings	CBOE	Buy	181	186	2.6	19.1	7.72	8.61	9.30	9.8	23.5	21.1	19.5	18.4	16.8	15.7	2.2	1.2
Median										9.0	21.8	20.9	19.4	18.5	16.9	15.7	2.3	1.5
Fixed Income Trading Venue	5																	
Tradeweb Markets	TW	Buy	96	99	2.9	22.6	2.18	2.59	3.04	18.1	44.1	37.2	31.7	31.8	27.5	24.0	2.1	0.4
MarketAxess Holdings	MKTX	-	238	-		9.0	6.60	7.45	8.50	13.5	36.1	32.0	28.0	22.2	19.4	17.3	2.4	1.2
Median										15.8	40.1	34.6	29.8	27.0	23.4	20.7	2.2	0.8
Market Makers																		
Virtu Financial	VIRT	Buy	18	20	11.3	2.9	2.08	2.27	2.74	14.7	8.6	7.9	6.5	6.5	6.4	5.8	0.5	5.3
Flow Traders	FLOW	-	17	-	-	0.9	1.08	1.66	1.92	33.3	15.8	10.3	8.9	10.3	7.2	6.3	0.3	3.5
Median										24.0	12.2	9.1	7.7	8.4	6.8	6.1	0.4	4.4
Global Exchanges																		
London Stock Exchange	LSEG LN	-	8,906	-	-	60.8	3.31	3.70	4.18	12.3	26.9	24.1	21.3	14.7	13.5	123	2.0	1.3
HK Exchanges & Clearing	388 HK	-	277	-	-	45.0	9.46	10.20	10.80	6.9	29.3	27.2	25.7	7.9	7.4	6.9	3.9	3.1
Deutsche Boerse	DB1 GY	-	174	-	-	36.1	9.55	10.08	10.61	5.4	18.3	17.3	16.4	11.2	10.4	9.9	3.2	2.2
B3 SA-Brasil Bolsa Balcao	B3SA3 BZ	-	13	-	-	15.8	0.79	0.88	0.96	10.3	16.9	15.3	13.9	11.2	10.0	8.8	1.5	4.8
ASX	ASX AU	-	58	-	-	7.4	2.51	2.58	2.62	2.1	23.2	22.5	22.2	14.7	14.4	13.9	10.6	3.8
Euronext	ENX FP	-	76	-	-	8.9	5.29	5.86	6.29	9.0	14.4	13.0	12.1	11.4	10.2	9.5	1.4	3.0
Singapore Exchange	SGX SP	-	9	-	-	7.5	0.52	0.51	0.52	0.1	18.2	18.6	18.2	13.8	13.4	12.9	192.4	3.6
TMX Group	X CN	-	29	-		5.9	1.47	1.58	1.70	7.4	19.8	18.4	17.1	13.8	12.9	12.3	2.5	2.5
Median										7.2	19.0	18.5	17.6	12.6	11.6	11.1	2.8	3.1

Source: Company reports, Bloomberg, BofA Global Research

For securities unrated by our team, consensus estimates are used for computing forward-looking metrics.

For securities where estimates are partially unavailable, the time horizon is truncated.

All financial metrics are calendarized and quoted in the firm's primary reporting currency.



Exhibit 30: Alternative Asset Managers Valuation Sheet

We see the highest potential upside in OWL in our alts coverage

Primary Method	Secondary Method
Price to Cash Earnings	SOTP

Ticker	Company Name	Rating	Current Price	Price Objective		Total Retum (incl div)	2025 Cash Earnings	Cash Earnings Multiple	2023 Dividend Yield	Aggressive case	Convservative case
ARES	Ares	Buy	\$112	\$111	-1%	1%	\$4.95	22.5x	3%	\$113.79	\$74.56
BAM	Brookfield	Neutral	\$35	\$37	4%	8%	\$1.63	22.5x	4%	Ų. 13.73	ψ,50
BX	Blackstone	Buv	\$113	\$115	2%	5%	\$5.13	22.5x	3%	\$134.58	\$87.77
OWL	Blue Owl	Buy	\$13	\$17	27%	31%	\$0.87	20.0x	4%	-	-
KKR	KKR	Buy	\$76	\$75	-1%	0%	\$4.98	15.0x	1%	\$74.10	\$52.81
PAX	Patria	Neutral	\$14	\$16	12%	19%	\$1.63	10.0x	7%	-	-
APO	Apollo	Neutral	\$92	\$94	2%	4%	\$8.53	11.0x	2%	\$91.40	\$67.25
CG	Carlyle	Underperform	\$35	\$26	-25%	-21%	\$2.85	9.0x	4%	\$48.08	\$32.11
Median	- [·				4%		15.0x			

Source: Bloomberg, BofA Global Research Estimates

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Exhibit 31: Brokers Valuation Sheet

We see the highest potential upside in IBKR in our brokers coverage

						Total				2025
T: -1	. C N	D-45	Current	Price		Return		Earnings		Dividend
Hicker	Company Name	Rating	Price	Objective	to PU	(inci aiv)	Earnings	Multiple	EBITDA	Yield
IBKR	Interactive Brokers Group	Buy	\$79	\$128	62%	63%	\$7.32	17.5x	18.7x	1%
HOOD	Robinhood Markets Inc.	Under	\$9	\$9	-2%	-2%	\$0.43	3.5x	7.5x	0%
LPLA	LPL Financial Holdings Inc.	Neutral	\$223	\$259	16%	16%	\$21.60	12.0x	7.6x	1%
SCHW	Charles Schwab Corporation	Under	\$62	\$54	-15%	-13%	\$4.34	12.0x	13.2x	2%
AMP	Ameriprise Financial Inc.	Buy	\$355	\$391	13%	15%	\$40.26	10.0x	5.5x	2%
RJF	Raymond James Financial	Buy	\$107	\$118	10%	10%	\$10.71	10.0x	7.7x	0%
Median	1				12%	13%		12.0x	13.2x	

Source: Bloomberg, BofA Global Research Estimates

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Exhibit 32: Traditional Asset Managers Valuation Sheet We see the highest upside to AB in our traditionals coverage

Ticker	· Company Name	Rating	Current Price	Price Objective		Total Return (Incl div)	2025E Earnings	Earnings Multiple	EV / EBITDA	2025 Dividen d Yield
VCTR	Victory Capital Holdings Inc.	Buy	\$32	\$44	37%	42%	\$5.51	7.0x	6.6x	5%
BLK	BlackRock Inc.	Buy	\$761	\$877	15%	18%	\$43.85	20.0x	13.3x	3%
JHG	Janus Henderson Group	Neutral	\$26	\$31	18%	24%	\$2.87	10.0x	6.4x	6%
AMG	Affiliated Managers Group	Neutral	\$136	\$144	6%	6%	\$21.63	8.0x	8.5x	0%
AB	AllianceBernstein	Neutral	\$29	\$40	38%	49%	\$3.20	10.0x	2.8x	11%
BEN	Franklin Resources Inc.	Under	\$25	\$21	-16%	-11%	\$2.56	8.0x	19.1x	5%
TROW	T. Rowe Price Group Inc.	Under	\$101	\$79	-22%	-17%	\$6.83	10.0x	10.8x	5%
Mediar	1					12%		10.0x	9.7x	

Source: Bloomberg, BofA Global Research Estimates

Exhibit 33: Exchange Valuation SheetWe see the highest upside to ICE in our exchange coverage

						Total				2025
			Current	Price	Upside	Return	2025E	Earnings	EV/	Dividend
Ticker	Company Name	Rating	Price	Objective	to PO	(Incl div)	Earnings	Multiple	EBITDA	Yield
CBOE	CBOE Global Markets	Buy	\$183	\$186	2%	3%	\$9.29	20.0x	15.9x	2%
CME	CME Group	Neutral	\$221	\$219	-1%	3%	\$10.93	20.0x	17.7x	4%
	Intercontinental									
ICE	Exchange	Buy	\$113	\$136	20%	22%	\$6.80	20.0x	13.6x	2%
NDAQ	Nasdaq	Underperform	\$56	\$50	-11%	-9%	\$2.88	17.5x	15.9x	2%
TW	Tradeweb	Buy	\$97	\$99	2%	3%	\$3.03	32.5x	24.1x	0%
VIRT	Virtu Financial	Buy	\$20	\$20	10%	16%	\$2.76	7.0x	18.9x	5%
Median	1					3%		20.0x	16.8x	

Source: Bloomberg, BofA Global Research Estimates

Exhibit 31: Individual fund performanceFlagship fund performance has moderated over the last 12 months

WETF DON US MidCap Dividend 3,092 3.092 3.09 54 8.1 -8.3 23.4 -5.4 30.2 -4.8 0.2 -1.6 1.1 -0.8 1.3 4.6 -1.4 -8.2 0.8 3.6 -0.4 ÙÙÙ		Indiv	vidual Fund Performance	Absolute Performance Relative Performance vs Morningstar Category																					
March Marc			Fund Details																						Morningstar
## STTX Overhellmanne* 11027 11 40 10 41 23 72 23 20 27 13 61 22 28 42 31 53 62 11 12 50 UUUUU ## STATES OVERHEAM 11027 11 40 40 21 12 40 40 10 41 40 10 72 ## STATES OVERHEAM 11027 11 40 40 21 11 40 40 21 12 40 40 40 40 40 40 40 4	Ticker	Ticker		AuM (SM)	17	3Y	5Y	10Y	2018	2019	2020	2021	2022	YTD	17	3Y	5Y 1	IOY 20	18 2	019	2020	2021	2022	YTD	_
Mary CTEX Multi-Marager Indians 10,077 31 45 03 13 12 19 10 10 10 10 10 10 10																									
MANY Call M. Sales 10,266 10,266 12,26 20 19 18 59 43 589 41 580 12 20 50 10 10 10 10 10 10 1	AMP	SMGIX		11,432	17.9	9.9	12.4	11.4	-9.0	33.0	22.3	24.3	-18.6	22.0	7.7	2.2	3.0	2.0 -2	.7	4.3	7.2	-1.1	-1.7	9.2	ŬŬŬŬ
May Mary M	AMP	CTRZX	Multi-Manager Total Return	11,047	1.1	-4.9	0.3	1.1	-1.0	9.1	8.5	-1.0	-14.3	-0.2	0.0	-0.5	-0.2 -	0.2 -0	1.4	0.2		-0.2	-1.1	0.1	
Marco Marc																									
MASS Medical Professions																									
APPLIANT MATERIAL REPORT MATER					_										_										
March Could light Mide 13,141 81 62 14 22 65 124 12 25 124 14 15 28 124 14 15 28 14 15		AGDAX																							
MAINAGE Golda English September 1988 Application Applicati																									```
APSW. More Mile International		ANAGX	•																						
MAN MICHAEL Informational value 28001 Ils 7 106 92 65 157 240 85 167 70 138 96 87 52 44 11 25 44 69 88 79 000																									
Section Sect	APAM	ARTIX	International Investor	4,727	7.6	-0.8	3.8	3.1	-10.9	29.2	7.6	9.0	-19.6	5.6	1.7	2.3	-0.5 -	0.8 3	.3	1.3	-15.9	1.5	6.0	0.7	ÙÙÙ
MARION Equity Dividing	APAM	ARTKX	International Value	28,001	18.7	10.6	9.2	6.5	-15.7	24.0	8.5	16.7	-7.0	13.8	9.6	8.7	5.2	3.4 -1	.1	2.5	-0.4	6.9	8.8	7.9	ÙÙÙÙÙ
BIX.M. BHAX. Migh*Yead Bord 1975) 80 11 33 88 33 151 55 55 169 72 81 MIX. Migh*Yead Bord 11,113 40 02 27 32 -38 136 63 69 -417 33 10 -0.1 04 07 08 0.5 26 07 08 0.5 12 000 00 00 00 00 00 00 00 00 00 00 00 0	BLK	MDLOX	Global Allocation	16,713	3.5	-0.3	4.8	4.0	-7.6	17.2	20.8	6.4	-16.0	3.9	0.4	-2.0	1.7	1.0 0	.5	1.3	15.6	-4.8	-3.5	1.2	
BKK BSKN Strätger (nr. Opp 193332 34 03 21 22 08 7,4 69 07 59 21 07 03 08 06 04 07 36 09 05 09 ÚÜÚÚ BK MK MKIQK Tela Reum (nr. 17,557) 37 07 10 1 13 142 95 86 10 145 07 03 07 02 00 08 07 05 02 12 04 0ÚÚ U HI TRAK TELA REUM ENFORM 17,557 1 10 1 13 142 95 86 10 145 07 10 10 10 10 10 10 10 10 10 10 10 10 10	BLK	MDDVX	Equity Dividend	17,488	2.6	8.2	7.2	8.3	-7.4	27.2	3.6	20.1	-4.2	3.1	2.0	-0.4	0.4	D.8 1	.2	2.3	1.0	-6.0	1.8	1.3	
BIK MINI-FAST Parker 11,713 44 0.2 27 3.2 38 136 0.3 69 -117 3.3 10 0.1 0.4 0.1 11 -12 -19 -15 1.6 01 ÛÛÛ BIK MINI-FAST Parker 17,729 0.7 0.5 0.2 1.2 0.4 ÛÛÛ BIK FIRIK FUR Remm Brod 12,596 0.1 4.0 11 18 0.9 97 9.6 0.2 1.25 -1.1 0.1 0.6 0.4 0.3 0.9 15 0.9 0.0 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0																									
BKK MCHANX Tour Remain Horist 173596 0,7 5.1 0.4 13 - 1.2 95 86 - 10 - 14.5 97 0,3 4.7 0.2 0.0 46 0.7 0.5 0.5 0.2 - 1.2 4.6 ÚUÚU HI SYAMX Strengte Wale Fordered 7.757 38 6.6 3.7 58 - 45. 19.4 13 - 1.2 95 86 - 1.0 1.4 5 1.0 1.9 3 - 20. 31.7 0.1 5.5 1.00			•																						
File																									
SHAX Stronget Waller Defided 7.597 88 66 37 58 85 194 81 214 81 -101 93 20 31 -17 01 56 -108 41 -119 01 01 01 01 01 01 01																									
ENN FIRMX Combit Brown Combi																									
BINN MINN Power Find Many Downwork Mark Downwork Many			~																						
Fig.																									7.7
FEIN Minual Discovery 8,76 95 105 61 52 710 244 46 194 50 95 16 30 80 80 95 36 72 19 37 41 ÛÛÛ EN MATR Mistern Core 13,881 10 65 -03 13 -06 104 91 18 -169 -16 104 -15 -04 04 -15 -04 04 -17 -18 -17 -18 -17 -18 -17 -18 -17 -18 -18 -18 -18 -18 -16 -16 -16 -16 -16 -16 -16 -16 -17 -18 -17 -18 -18 -10 -17 -18			,																						
BEN MTK Calfornia Tac Free 12,634 35 23 14 29 03 92 53 18 -103 01 04 -15 05 -16 04 -15 04 04 -15 04 04 04 05 06 04 05 06 04 05 06 04 05 06 04 05 06 04 05 06 04 05 05 06 06 05 05 05 05																									
SHBAX Aggressed Growth Agg	BEN	FKTFX	•	12,634	3.5	-2.3	1.4	2.9	0.3	9.2	5.3	1.8	-10.3	0.1	0.4	0.3	0.6	0.5 -0	1.3	1.2	0.7	-0.6	0.9	0.3	ÙÙÙÙ
No.	BEN	WATFX	Western Core	13,881	0.1	-6.5	-0.3	1.3	-0.6	10.4	9.1	-1.8	-16.9	-1.6	-0.4	-1.5	-0.4	0.4 -0	1.1	2.1	1.6	-0.3	-3.6	-1.0	
March Marc	BEN	SHRAX	Aggressive Growth	4,059	3.9	0.3	2.8	5.3	-8.0	24.2	19.5		-25.5	8.6	-6.3	-7.4	-6.6 -	4.1 -1	.7	-4.5		-17.5	-8.6	-4.1	
March Marc	IVZ	ACSTX				14.2				25.3															
VZ LCEAX Devestified Divided 1,07																									
VIZ SRLV Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septon Septo																									
VZ SPLV SAP SOD Low Vol ETF 8,126 4,907 98 37 31 28 96 60 86 90 279 91.4 241 48 45 34 36 08 11 60 03 03 03 04 01 03 05 00 03 03 03 04 01 01 01 01 01 02 02 02																									
No. Part March																									
HG JABAX Balanced 21960 74 32 70 75 05 224 142 170 167 81 126 02 17 22 64 35 28 31 29 25 \$\bullet\$\b																									
HG JARX Enterprise (US Mid Growth) 16,891 29 38 90 110 -11 351 201 172 -161 41 12 46 19 31 56 28 -171 40 121 20 20 20 20 20 20					_										_										
HG JARX Reside Band (Core Plus bond) 2.612 0.4 -51 0.6 1.2 -1.2 9.5 1.07 -1.0 -1.9 -1.4 -1.4 0.7 0.1 0.2 -0.6 0.6 2.5 -0.2 0.6 -1.2 0.0																									
HG	JHG	JAFIX		2,612	-0.4	-5.1	0.6	1.2	-1.2	9.5	10.7	-1.0	-13.9	-1.4	-1.4	-0.7	0.1 -	0.2 -0	1.6	0.6	2.6	-0.2	-0.6	-1.2	ÙÙÙ
Fig.	JHG	JNRFX	Research	16,875	30.0	6.5	13.1	12.5	-2.8	35.4	32.8	20.4	-30.0	34.0	10.4	2.0	1.9	1.2 -0	1.6	3.7	-2.0	-0.1	0.2	9.5	ŲŲŲ
High Absolute Return Equity 1,139 11.6 0.1 1.4 0.1 -9.0 8.4 5.7 3.0 -12.0 7.1 7.	JHG	JFRDX	Forty (US SMID Growth)	16,162		4.2	13.0	13.3	1.4	36.8	39.1			28.8	6.2	-0.4	1.9	2.0 3				2.4	-3.4		
HIG Absolute Return Fixed Income 26 88 22 20 00 00 00 59 19 123 53 02 25 00 00 00 00 024 08 69 22 ÜÜÜÜÜ		JATTX	Triton (US SMID Growth)							28.3					-0.6	0.2	-0.8	1.0 0	.7	0.6	-8.6	-4.2	4.4	-1.7	ÜÜÜÜ
PIMCO PITAX Total Return S1,115 0.9 -5.2 0.1 0.9 -0.6 7.9 8.5 -1.2 -1.44 -0.5 0.1 -0.8 -0.5 -0.5 0.0 -1.0 0.4 -0.4 -1.2 -0.2 ÛÛ TROW PRGKX Price Growth Fund 46,721 293 22 10.1 11.8 -1.0 30.8 36.9 20.0 -4.01 37.2 9.7 -2.3 -1.0 0.6 1.2 -0.9 21 -0.5 -9.9 12.6 ÛÛ U TROW TREX Blue Chip Growth 53,514 34.5 2.4 10.3 12.5 2.0 30.0 34.7 17.7 -38.6 40.5 1.8 -2.1 -0.8 13. 42. -1.0 -1.2 -2.8 -8.4 15.9 ÛÛ U TROW PRETX Equity Income 15,682 -1.3 91 6.9 7.3 -9.3 26.6 1.3 2.5 -3.3 -3.8 -1.8 -1.2 -1.4 -0.5 0.1 -0.2 -0.7 1.6 -1.4 -0.4 2.7 -2.6 ÛU U TROW PRETX International Stock 13,528 85 -0.7 4.5 4.1 -1.4 2.76 14.1 1.2 -1.6 6.0 2.7 2.4 0.1 0.2 -0.7 1.6 -1.4 -0.4 2.7 -2.6 ÛU U TROW PRETX Retirement 2020 9.584 5.9 1.6 53 56 -4.9 19.4 13.1 1.5 1.2 -1.6 6.0 2.7 2.4 0.1 0.2 -0.1 0.3 -9.3 6.3 9.6 1.2 ÛU Û U TROW TRREX Retirement 2040 11.643 8.8 3.5 7.4 7.5 7.3 24.7 18.1 16.3 -18.9 9.5 1.7 0.4 1.0 1.2 0.5 1.5 3.5 0.9 -1.4 1.9 ÛU Û Û U TROW PRMGK Mid Cap Growth 27.295 4.0 0.7 7.1 9.8 -2.0 3.15 24.2 1.5 1.225 5.6 2.2 1.6 0.1 1.9 4.6 -0.8 -1.3 1.9 5.7 -0.6 ÛU Û Û U VITS HIEMX Emerging Market Oppty 1.0.81 4.385 5.4 0.1 1.9 2.0 -0.5 6.4 4.6 6.6 6.5 5.4 2.1 7.0 6.6 6.0 0.9 -1.4 1.8 0.8 0.5 0.3 3.3 1.0 3.3 3.1 3.3 3.3 3.1 3.3																			_						cocococ
TROW PRGFX Price Growth Fund 46,721 293 22 10.1 11.8 -1.0 30.8 36.9 20.0 40.1 37.2 97. -2.3 -1.0 06 12 -0.9 2.1 -0.5 -9.9 12.6 ÛÛÛ TROW PRFX Equity Income 15,682 -1.3 51.5 4.1 -1.2 -1.3																									
TROW TRBCX Blue Chip Growth 53,514 345 24 103 125 20 300 347 177 386 405 148 2.1 0.8 13 42 -17 0.1 -2.8 -8.4 159 ÛÛÛ TROW PRITX Equity Income 15,682 -13 9.1 6.9 73 -9.3 266 13 257 33 -3.8 -1.8 0.5 0.1 -0.2 -0.7 16 -1.4 -0.4 2.7 -2.6 UÛÛ TROW PRITX International Stock 13,528 8.5 0.7 4.5 4.1 -1.42 27.6 14.1 12 -1.60 6.0 2.7 2.4 0.1 0.2 -0.7 1.6 -1.4 -0.4 2.7 -2.6 UÛÛ TROW PRITX International Stock 21,437 -2.9 -7.6 6.7 10.4 4.0 3.7 5.7 7.7 3.7 2.8 -4.6 6.8 -0.3 2.5 -1.7 -0.1 -0.3 -9.3 6.3 9.6 1.2 ÛÛÛ TROW PRITX Retirement 2020 9.584 5.9 1.6 5.3 5.6 4.9 19.4 13.2 10.5 -1.4 5.8 1.6 13 1.5 1.5 -0.4 3.2 2.4 2.0 -0.3 1.6 ÛÛÛÛ TROW REMOX Mid Cap Growth 27.295 4.0 0.7 7.1 9.8 2.0 31.5 2.4 15.1 -2.2 5.6 2.2 1.6 0.1 1.9 4.0					_										_										
TROW PREDX Equity income 15/682 -13 9.1 6.9 7.3 -9.3 266 13 257 3.3 -0.8 -1.8 0.5 0.1 -0.2 -0.7 1.6 -1.4 -0.4 2.7 -2.6 ÛÛÛ TROW PRIDX International Stock 13,528 8.5 -0.7 4.5 4.1 -1.4 -1.4 2.7 6.1 4.1 1.2 -1.6 6.0 6.0 2.7 2.4 0.1 0.2 -0.1 -0.3 -9.3 6.3 9.6 1.2 ÛÛÛ TROW PREDX Retirement 2020 14,67 -2.9 -2.6 ÛÛÛ TROW TRRDX Retirement 2020 15,68 -1.8																									
TROW PAITX International Stock 13,528 85 -0.7 4.5 4.1 -142 2.76 14.1 12 -16.0 6.0 2.7 2.4 0.1 0.2 -0.1 -0.3 -9.3 -6.3 96 1.2 ÛÛÛ TROW PRNHX New Horizons 21,437 2.9 -7.6 6.7 10.4 40 37.7 57.7 9.7 37.0 2.8 4.6 6.8 -0.3 2.5 10.7 5.4 20.5 -3.5 -8.7 -3.3 ÛÛÛ TROW TRRDX Retirement 2020 9,584 5.9 1.6 5.3 5.6 4.9 19.4 13.2 10.5 -14.7 5.8 16. 13. 15. 15. 10.4 5.8 16. 13. 15. 14.7 5.8 16. 13. 15. 14.7 5.8 16. 13. 15. 14.7 5.8 16. 13. 15. 14.7																									
TROW PRNHX New Horizons			1 7																						
TROW TRRDX Retirement 2020 9,584 59 16 53 56 49 194 132 105 -147 58 16 13 15 15 -0.4 32 2.4 2.0 -0.3 16 ÛÛÛÛÛ TROW RRDX Retirement 2040 11,643 88 35 7.4 75 -7.3 24.7 18.1 16.3 -18.9 95 1.7 0.4 1.0 12 0.5 15 3.5 0.9 -1.4 1.9 ÛÛÛÛ VRTS MILT ROW RPMGX MId Cap Growth 27,295 4.0 0.7 7.1 9.8 -2.0 31.5 24.2 15.1 -2.25 56 2.2 16 0.1 1.9 4.6 -0.8 -13.1 1.9 5.7 -0.6 ÛÛÛÛ VRTS HIBMX Emerging Market Oppty 1,081 4.385 54 0.1 1.9 2.0 -0.5 6.4 4.6 0.6 -5.5 4.2 1.0 0.6 0.6 0.9 -1.4 18.0 8.0 5 -0.3 1.3 ÛÛÛÛÛ VRTS MILT-SECTOR ST.Bd I 4.385 5.4 0.1 1.9 2.0 -0.5 6.4 4.6 0.6 -5.5 4.2 1.7 0.6 0.6 0.0 0.9 -1.4 18.0 8.0 5 -0.3 1.3 ÛÛÛÛÛ VCTR GETGX Sycamore Established Value 16,596 -2.2 10.0 9.0 9.8 -1.0 4.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0																									
RPMGX Mid Cap Growth 27.295 4.0 0.7 7.1 9.8 -2.0 315 242 15.1 -225 56 22 16 0.1 1.9 4.6 -0.8 -1.31 1.9 5.7 -0.6 \(\bar{U}\bar{U}\bar{U}\bar{U}\bar{U}\bar{V}\bar{V}\bar{RTS} HIEMX Emerging Market Oppty 1,081 -0.8 -9.5 0.8 0.5 -1.43 18.3 15.7 -6.4 -2.33 -4.3 -2.9 -6.3 -3.4 -1.2 1.8 -0.7 -1.4 -6.7 -2.2 -8.2 \bar{U}\bar{U}\bar{V}\bar{V}\bar{RTS} PIMSX VRTS Multi-Sector S/T Bd 4.385 5.4 0.1 1.9 2.0 -0.5 6.4 4.6 0.6 -5.5 4.2 1.7 0.6 0.6 0.9 -1.4 1.8 0.8 0.5 -0.3 1.3 \bar{U}\bar{U}\bar{U}\bar{U}\bar{U}\bar{V}\bar{V}\bar{V}\bar{TS} Multi-Sector S/T Bd 4.385 5.4 0.1 1.9 2.0 -0.5 6.4 4.6 0.6 -5.5 4.2 1.7 0.6 0.6 0.9 -1.4 1.8 0.8 0.5 -0.3 1.3 \bar{U}\bar{U}\bar{U}\bar{U}\bar{U}\bar{V}\bar{V}\bar{TS} Multi-Sector S/T Bd 4.385 5.4 0.1 1.9 2.0 -0.5 6.4 4.6 0.6 -5.5 4.2 1.7 0.6 0.6 0.9 -1.4 1.8 0.8 0.5 -0.3 1.3 \bar{U}\bar{U}\bar{U}\bar{U}\bar{U}\bar{V}\bar{TS} GETGX Sycamore Established Value 16.596 -2.2 10.0 9.0 8.8 8.0 -8.8 26.3 4.2 2.9 -1.1 -3.4 -3.4 -3.1 -3.0 0.8 2.2 6.6 5.1 0.3 -1.7 \bar{U}\bar{U}\bar{U}\bar{U}\bar{V}\bar{U}\			Retirement 2020																						
VRTS HIEMX Emerging Market Oppty VRTS PIMSX VRTS Multi-Sector S/T Bd I 4,385 54 0.1 19 20 -0.5 64 4.6 0.6 -55 4.2 17 0.6 0.6 0.5 12 17 0.6 0.6 0.9 -1.4 18 0.8 0.5 -0.3 13 000000000000000000000000000000000	TROW	TRRDX	Retirement 2040	11,643	8.8	3.5	7.4	7.5	-7.3	24.7	18.1	16.3	-18.9	9.5	1.7	0.4	1.0	1.2 0	.5	1.5	3.5	0.9	-1.4	1.9	
NRTS PIMSX VRTS Multi-Sector 5/T Bd I 4,385 5.4 0.1 1.9 2.0 -0.5 6.4 4.6 0.6 -5.5 4.2 1.7 0.6 0.6 0.9 -1.4 1.8 0.8 0.5 -0.3 1.3 ÛÛÛÛÛ ÛÛ VCTR GETGX Sycamore Established Value 16,596 -2.2 10.0 9.0 9.8 -10.4 28.1 7.6 31.2 -3.0 -1.2 0.6 1.2 2.7 3.0 2.5 3.3 4.7 1.8 5.3 -1.7 ŪŪŪŪŪŪ VCTR GOGFX Sycamore Small Company Opp 62,86 -6.7 6.7 6.1 8.0 -8.8 26.3 4.2 24.9 7.1 -3.4 3.1 -3.0 0.8 2.2 6.6 5.1 0.3 -6.7 3.4 -3.8 ÛÛÛÛ VCTR USAN USAA Income 44,476 2.1 -3.7 1.2 2.0 -1.4 11.1 8.2 0.4 -1.4 11.1 8.0 0.8 0.5 0.2 0.2 0.2 0.0 0.8 0.0 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9																									
VCTR GETGX Sycamore Established Value 16,596 -22 100 90 98 -104 28.1 7.6 312 -30 -12 -106 12 27 30 25 33 4.7 18 53 -1.7 UUUUU VCTR GOGFX Sycamore Small Company Opp 62,86 -6.7 6.7 6.1 8.0 -8.8 26.3 42 24.9 -7.1 -3.4 -3.1 -3.0 0.8 22 6.6 5.1 0.3 -6.7 3.4 -3.8 UUUU VCTR USAIX USAA Income 4,476 2.1 -3.7 12 2.0 -1.4 11.1 82 0.4 -13.4 0.6 1.1 0.7 0.7 0.6 -0.8 22 0.1 1.1 -0.1 0.8 UUUU VCTR USAIX USAA Face Exempt Intermediate-Term 3375 3.6 -1.2 1.6 2.2 1.2 7.0 4.7 2.1 -8.1 0.8 0.4 0.4 0.4 0.3 0.4 0.5 0.2 0.3 0.5 0.2 0.2 0.2 UUUUU VCTR CBHIX Victory Market Neutral Income I 2,975 8.8 3.3 3.3 1.1 3.3 2.8 4.8 3.4 -2.6 7.9 0.9 -3.0 0.9 0.9 3.5 2.8 10.0 -3.8 -8.6 1.7 UUUUU WETF DGRW Dividend Growth ETF 10,279 9.0 10.3 11.3 11.7 -5.2 29.5 13.8 24.4 -6.4 10.1 -1.2 2.7 1.9 2.3 1.0 0.9 -1.3 -0.9 10.6 -2.7 UUUUUU WETF XSOE Emerging Market ETF 1,974 7.4 -8.1 2.5 0.0 -1.86 24.2 29.5 -5.5 -2.56 1.0 -1.7 -4.9 0.1 0.0 -2.5 5.1 12.3 -5.8 -4.6 -2.9 UUUUU WETF DXJ Japan Hedged Equity ETF 3,177 3.94 23.8 13.7 10.8 -1.86 2.7 18.3 7.5 3.1 2.8 0.2 -1.6 1.1 -0.8 1.3 4.6 -1.4 -8.2 0.8 3.6 -0.4 UUUUU WETF DDN US MidCap Dividend 3,092 -3.2 9.9 5.4 8.1 -8.3 23.4 -5.4 30.2 -4.8 0.2 -1.6 1.1 -0.8 1.3 4.6 -1.4 -8.2 0.8 3.6 -0.4 UUUUU WETF DDN US MidCap Dividend																									
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Source: Morningstar, BofA Global Research

Note: Performance data as of Nov 13th, AuM as of Sep 30, 2023



Exhibit 32: Stock total returns (including dividends)

 $OWL\ \&\ TPG\ have\ the\ strongest\ 90\ - day\ performance\ versus\ HOOD\ \&\ IBKR\ which\ have\ underperformed$

		Return	Tracker			Annually	
	1M	3M	1Y	3Y	Dec-21	Dec-22	Nov-23
APO	14%	10%	43%	126%	53%	-10%	46%
ARES	8%	10%	46%	166%	78%	-13%	64%
BAM	17%	3%	9%				22%
BX	19%	8%	26%	99%	107%	-40%	49%
CG	19%	10%	16%	26%	78%	-44%	14%
KKR	28%	17%	38%	85%	86%	-37%	51%
OWL	12%	23%	26%		32%	-26%	34%
PAX	9%	0%	13%		-1%	-10%	8%
TPG	31%	33%	9%			-2%	32%
Alts	18%	13%	25%	100%	62%	-23%	35%
CBOE	12%	20%	47%	105%	42%	-2%	45%
CME	4%	7%	32%	39%	29%	-23%	31%
ICE	9%	-1%	11%	13%	20%	-24%	13%
NDAQ	16%	5%	-15%	36%	60%	-11%	-9%
TW	9%	12%	65%	62%	61%	-35%	47%
Exchanges	10%	9%	28%	51%	43%	-19%	26%
AMG	9%	2%	-14%	47%	62%	-4%	-15%
AB	2%	-4%	-23%	11%	56%	-23%	-11%
BLK	22%	9%	4%	10%	29%	-20%	5%
BEN	6%	-7%	-4%	22%	39%	-17%	-7%
IVZ	10%	-8%	-22%	-9%	36%	-19%	-19%
HG	15%	-2%	11%	3%	34%	-41%	16%
TROW	11%	-9%	-15%	-24%	35%	-42%	-7%
VCTR	10%	-2%	20%	72%	50%	-24%	24%
Trads	11%	-3%	-5%	16%	43%	-24%	-2%
AMP	14%	6%	10%	94%	58%	5%	15%
HOOD	-7%	-21%	-10%			-54%	2%
BKR	3%	-12%	5%	54%	31%	-8%	13%
LPLA	3%	-2%	-2%	151%	55%	36%	6%
RJF	12%	4%	-7%	78%	59%	8%	0%
SCHW	13%	-3%	-28%	18%	60%	0%	-31%
Brokers	6%	-5%	-6%	79%	53%	-2%	1%
SPX Index	11%	4%	17%	31%	29%	-18%	21%
Barcap Agg	3%	0%	0%	-14%	-2%	-13%	0%
Coporate High Yield	4%	2%	8%	3%	5%	-11%	8%
Macro	6%	2%	8%	7%	11%	-14%	10%

Source: Bloomberg, BofA Global Research

Exhibit 34: Industry stock total returns (includes dividend)The exchange stocks have outperformed the broker stocks by 14% over the last 90 days

		Retur	n Tracker			Annually	
	1M	3M	1Y	3Y	Dec-21	Dec-22	Nov-23
Alts	18%	13%	25%	100%	62%	-23%	35%
Exchanges	10%	9%	28%	51%	43%	-19%	26%
Trads	11%	-3%	-5%	16%	43%	-24%	-2%
Brokers	6%	-5%	-6%	79%	53%	-2%	1%
SPX Index	11%	4%	17%	31%	29%	-18%	21%
Barcap Agg	3%	0%	0%	-14%	-2%	-13%	0%
Coporate High Yield	4%	2%	8%	3%	5%	-11%	8%
Relative Returns							
Alts	11%	11%	16%	87%	46%	-10%	23%
Exchanges	4%	7%	18%	41%	29%	-6%	14%
Trads	5%	-5%	-13%	9%	29%	-11%	-10%
Brokers	0%	-7%	-13%	67%	38%	14%	-8%

Source: Bloomberg, BofA Global Research



Exhibit 35: Companies mentioned

Companies mentioned in this report

BofA Ticker	r Bloomberg ticker	Company name	Price	Rating
AMG	AMG US	Affiliated Managers	US\$ 136.81	B-2-8
AB	ABUS	AllianceBernstein	US\$ 29.09	B-1-7
AMP	AMP US	Ameriprise Fin.	US\$ 356.29	B-1-7
APO	APO US	Apollo	US\$ 92.7	B-2-8
ARES	ARES US	Ares Management Corp	US\$ 111.81	B-1-7
BLK	BLK US	BlackRock, Inc.	US\$ 756.35	B-1-7
BX	BX US	Blackstone	US\$ 114.28	B-1-7
OWL	OWL US	Blue Ow I Capital	US\$ 13.61	B-1-7
BAM	BAMUS	Brookfield AM	US\$ 36.06	B-2-7
CBOE	CBOE US	Cboe Global Mark	US\$ 180.26	B-1-7
SCHW	SCHW US	Charles Schw ab	US\$ 63.16	B-3-7
CME	CME US	CME Group Inc	US\$ 219.54	B-2-7
BEN	BEN US	Franklin Resources	US\$ 25.63	B-3-7
IBKR	IBKR US	Interactive Brokers	US\$ 78.14	B-1-7
ICE	ICE US	Intercontinental	US\$ 114.24	B-1-7
JHG	JHG US	Janus Henderson	US\$ 26.4	B-2-7
JUHDY	JHG AU	Janus Henderson	A\$ 39.36	B-2-7
KKR	KKR US	KKR & Co. Inc.	US\$ 74.87	B-1-7
LPLA	LPLA US	LPL Financial	US\$ 221.99	B-2-7
NDAQ	NDAQ US	Nasdaq	US\$ 55.9	B-3-7
PAX	PAX US	Patria	US\$ 14.45	B-2-7
RJF	RJF US	Raymond James	US\$ 107.92	B-1-9
HOOD	HOOD US	Robinhood Markets	US\$ 9.32	C-3-9
TROW	TROW US	T. Row e Price	US\$ 102.45	B-3-7
CG	CG US	The Carlyle Group	US\$ 35.18	B-3-7
TW	TW US	Tradew eb	US\$ 94.79	B-1-7
VCTR	VCTR US	Victory Capital	US\$ 32.53	B-1-7
VIRT	VIRT US	Virtu	US\$ 18.26	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 \$144 and is derived from a price to earnings method. We apply an 8.0x multiple to our 2025 estimates, 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 2025E EPS to obtain our \$40 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 2023.

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 \$391 PO is based on 10x EPS multiple on our 2025 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 \$94 price objective for Apollo is derived from an 11x multiple on APO's adjusted 2025E cash earnings. We estimate that APO will continue to trade below the industry mean (9-20x on corporate definition) given its high mix of insurance earnings. Our earnings definition is more conservative than the corporate's as it excludes stock-based compensation.

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 \$111 price objective for Ares Management is derived from 22.5x 2025E 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 \$877 is based on a 20x 2025E 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 of \$115 is based on 22.5x 2025E cash earnings. 22.5x is consistent with BX's recent trading range and reflective of an improved fundamental outlook. 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 \$17 price objective for Blue Owl is derived from 20x 2025E 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 \$37 and is derived from 22.5x 2025E 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 (2025E). 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 2025E EPS to derive our \$186 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 2025E EPS to obtain our PO. We use 12x which is on the low end of its historical range (12.5-15x) driven by (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 (2025E). 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 20.0x multiple on our 2025E EPS to derive our \$219 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 \$21 and is derived from a price to earnings method. We apply an 8x multiple to our 2025 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 \$128 and is derived from a price to earnings method. We apply a 17.5x multiple to our 2025E 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 (2025E). 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 2025E EPS to derive our \$136 PO. Our multiple is equal to ICE's historical average and a small discount to peers despite ICE's superior growth prospects & earnings quality. 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).

Janus Henderson Group (JHG / JUHDY)

Our PO for JHG is US\$31 (AU\$49) and is derived from a price to earnings method. We apply a 10.0x multiple on our 2025E 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 \$75, which is derived from 15x 2025E 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, which is private equity heavy, with this business experiencing multiple cyclical headwinds (returns - inflation & bear market, fundraising - crowded backdrop, denominator effect), insider selling potential, KKR's voting structure, which may prevent an S&P 500 Index add.

LPL Financial Holdings (LPLA)

Our price objective (PO) for LPLA is \$259 and is derived from a price to earnings method. We apply a 12x multiple to our 2025E 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 (2025E). 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 2025E EPS to derive our \$50 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 \$16 is 10x our 2025E 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 \$118 PO is based on 11x EPS multiple on our 2025 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 \$9 for Robinhood is derived from a market cap to revenue method: We apply a 4x multiple to forecasted 2025 revenues 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 \$79 and is derived from a price to earnings method. We apply a 10.0x multiple on our 2025 EPS estimate plus \$11 for TROW's excess capital (and zero debt) to obtain our PO. 10.0x is lower than TROW's 5-year 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 \$26 price objective for the Carlyle Group is derived from a 9x multiple on our 2025E 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.

Tradeweb Markets Inc. (TW)

Our price objective (PO) for Tradeweb is derived from a price to earnings valuation method. We apply a 32.5x multiple on our 2025E EPS to derive our \$99 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 \$44 and is derived from a price to earnings method. We apply an 8.0x multiple on our 25E 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 \$20 PO is formed using a 6x EV-to-EBITDA multiple on our 2025 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.

Analyst Certification

I, Craig Siegenthaler, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

BofA Securities is currently acting as the manager to the open offer by Pegasus Holdings III, LLC in connection with its acquisition of Federal-Mogul Goetze (India) Limited, which was announced on February 23, 2022.

BofA Securities is currently acting as advisor to Lombard International, owned by Blackstone, in connection with the proposed sale of Lombard US and Bermuda, which was announced on August 23, 2022.

BofA Securities is currently acting as buyside advisor to Frontier Tower Associates Philippines Inc, a regional telecom infrastructure platform backed by KKR to acquire a portion of telecoms towers from Smart Communications, a wholly owned subsidiary of PLDT Inc, which was announced on March 17, 2023.

BofA Securities is currently acting as financial advisor to Energy Capital Partners Holdings LP and affiliated entities ("ECP"), minority-owned by funds managed by Blue Owl Capital Inc (formerly Dyal Capital Partners), in connection with its proposed sale of the Company which was announced on September 6, 2023. The proposed transaction is subject to approval by shareholders of Bridgepoint Group PLC. This research report is not intended to provide voting advice, serve as an endorsement of the proposed transaction, or result in the procurement, withholding or revocation of a proxy.



US - Brokers, Asset Managers, & Exchanges Coverage Cluster

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		T. Rowe Price	TROW	TROW US	
		The Carlyle Group	CG	CG US	



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Important Disclosures

Equity Investment Rating Distribution: Financial Services Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	156	53.24%	Buy	94	60.26%
Hold	79	26.96%	Hold	52	65.82%
Sell	58	19 80%	Sell	32	55 17%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

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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 $\geq 10\%$ $\leq 70\%$ Neutral $\geq 0\%$ $\leq 30\%$ Underperform N/A $\geq 20\%$

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