BofA SECURITIES

U.S. Insurance

Reinsurance: pricing may be at a peak, but valuation definitely in a trough

Price Objective Change

12 February 2024

Equity
United States
Insurance

Joshua Shanker
Research Analyst
BofAS
+1 347 821 9017
joshua.shanker@bofa.com

Grace Carter, CFA
Research Analyst
BofAS
grace.carter@bofa.com

Joseph Tumillo, CFA
Research Analyst
BofAS
joseph.tumillo@bofa.com

Cyril Onyango
Research Analyst
BofAS
cyril.onyango@bofa.com

Everest loss reserve charge leave investors insecure

With 4Q23 results, Everest recorded $392mn reserve strengthening charge principally related to its general liability insurance exposures from 2016-2019. Investors were caught off-guard, given a triumphant investor day event in November. The peer group shares traded down in sympathy with Everest, and it may take some time to restore investor confidence in P&C reserve adequacy after 5 notable companies incurred loss reserve charges in 4Q23. Arch (who has yet to report 4Q23) is best-in-class in liability lines loss pick conservatism over 20 years, and RenRe has a 30-year track record of sizable loss reserve releases; notably higher-than-peer initial loss picks in recent accident-years; and protection from an (albeit diminishing) adverse development cover.

Valuation ratios making historic lows

EG and RNE are trading 5-6x 2025 consensus EPS in a tape where the S&P 500 and large-cap P&C insurance trade at 18-19x and 10-11x respectively. The reinsurance discount represents a foreshortened multiple because of peak pricing/earnings; however, the reinsurers also trade at multi-decade lows on price-to-book relative to onshore peers with Everest at 1.1x book trading at sub-50% the price-to-tangible book multiple of the large-cap peers. RenRe trades at 1.3x or a historical low of 55% of the peers.

Re compounding book far more quickly than primary P&C

Consensus EPS for 2024 implies 19%, 22% and 21% returns on beginning of period tangible equity for Arch, Everest and RenRe compared with 15%, 17% and 21% at Chubb, Travelers and W.R. Berkley. For those arguing this ROE advantage is merely a function of temporarily peak pricing, we would note that the reinsurers broadly defined have tended to compound tangible book more quickly than their primary counterparts over the long-term including poor performers weeded out by survivorship bias.

The “peak” isn’t so “peakish”

While we acknowledge that property-catastrophe reinsurance pricing may be at a peak or near-peak level, we would also suggest that the descent from the peak may be a slow one, with attractive prop-cat lasting into the early 2010s from a peak last set in 2006. We would also argue that a major catastrophe event in the $100bn+ range (which will likely occur at some point) could catalyze fear and consume enough industry capital to drive pricing notably beyond the currently perceived “peak.” We believe Arch, Everest and RenRe will have a smaller share of that $100bn+ disaster than commonly believed.

Lowering POs following AXIS and Everest reserve charges

Investor skepticism naturally increases following an admission of under-reserving for prior-year loss activity and rectifying it with large singular charges. In this vein, we are raising the P/E multiple discount vs. industry to 35% for AXIS (from 25%) and Everest (from 20%), which causes their POs to drop to $70 and $446, respectively ($76 and $551 prior). We remain confident in reserve adequacy for Arch and RenRe, but a decline in the peer 2025 P/E multiple to 10.6x from 10.7x causes us to reduce our RenRe PO to $310 ($313 prior). Despite near-term concerns, these stocks all boast healthy potential upside and remain Buy-recommended.

Refer to important disclosures on page 20 to 24. Analyst Certification on page 19. Price Objective Basis/Risk on page 18. **12658064**

Timestamp: 12 February 2024 05:00AM EST

Everest and the 4Q23 reserve charge

With its 4Q23 results, Everest Group announced a $392 million charge to supplement its loss reserve position in its primary insurance segment principally related to general liability claims related to the 2016-2019 accident-years. This clearly came as a surprise to investors as the stock traded down 7.7% on the day (in a largely flattish S&P 500 tape), falling as much as 10.5% at one point. There are several layers of concern to this charge.

1. **Souring on a formerly "clean bill of health."** New senior management joined the company in 2020 with a comprehensive reserve review conducted in 4Q20. The conclusion was that loss reserves for its reinsurance liabilities were deficient by $400 million and the loss reserves for insurance liabilities were adequate. This came as a surprise to investors. Industry participants and observers were well-aware of perceived industry loss cost inflation from commentary among various other management teams (most notably Chubb's, CNA's and W.R. Berkley's), but also Everest was regarded as conspicuously over-growing into the soft market pricing of 2016-2019 with a two-year written premium CAGR of 27% gross/20% net in 2016-2017. When brought in from the outside, new management teams are typically awarded some grace in increasing loss reserves upon assuming their new roles, arguing that they are entitled to assuming greater conservatism and to "fix" any mistakes left by their predecessors. Then-new CEO Juan Andrade and then-new CFO Mark Kociancic chose not to fortify the primary insurance loss reserves with investors essentially concluding that nothing additional would need to be done. A reserve charge at that time would probably not have incurred the same negative reaction as the 4Q23 charge did.

2. **Particularly poor timing.** On November 14, Everest hosted its triennial investor day event. The general theme was the triumphant execution of the company's previous 2021-2023 three-year plan first laid out on June 23, 2021. The main takeaway from the event was "closing the books" on the successful 2021-2023 execution and shifting focus to the 2024-2026 plan. Through mid-November minor and major catastrophe was mild, which continued to be the case through year end. Investors had little reason to expect a major disappointment with 4Q23 results.

3. **Uncertainty about other loss reserves.** Loss cost inflation (whether driven by inflationary trends broadly or by the perceived social inflation of escalating jury and court costs) was in focus during 2020-2023 for insurance companies and 2H21-2023 for the global economy at large. The inflation of losses first estimated in 2016-2019 put through the distorting lens/transfiguration of 2020-2023 inflating costs is the driver of Everest Re's $392 million charge. However, it is reasonable for investors to be concerned that **losses first estimated in 2020-2022** also have the potential to be enlarged by 2020-2023 inflation. Further, insurance carriers are directly impacted by losses from coverage they offer, while **reinsurance carriers are one step removed** from the claims process. Loss patterns occurring to the primary carrier can emerge on a lagging basis. If Everest's insurance liabilities are underestimated, investors will be concerned about the reinsurance liabilities as well. Management has said that strong pricing power in 2020-2023 acts as a mitigating factor regarding 2016-2019 loss inflation leaking into 2020-2023, but the activities of pricing the product (underwriter-driven) and estimating the losses (actuary-driven), while related, are not necessarily congruent. The company also notes higher limits and tighter terms on coverages in 2020-2023 relative to 2016-2019. This should almost certainly provide some comfort that the loss inflation more acutely impacted pre-2020 accident-years. Nonetheless, investors don't have the tools to see in action how these limits and terms mitigate creeping claims.

4. **Assessing the "cookie jar."** While Everest incurred a charge for an incremental $392 million of loss reserves to its smaller insurance book, it also released $397

million worth of reserves from its reinsurance book largely related to short-tailed property lines and mortgage insurance. Few insurance-focused investors would likely doubt that the results for the mortgage reinsurance business would turn out remarkably redundant. Primary mortgage insurance underwriters were forced to reserve for significant losses from 2H20-2H21 associated with the CARES Act (U.S. COVID19 Federal relief package), and these loss reserves were proven superfluous. It was largely a question of "when," not "if" these reserves would be released. However, just as a $400 million reserve charge in 4Q20 improved the loss reserve position at Everest, the $397 million release in 4Q23 depleted that position. By definition, the reinsurance segment has less potential for redundancy today than it had at the end of 3Q23.

The loss reserve insecurity that Everest has garnered with the company's 4Q23 Insurance segment reserve charge is not unique to this company. In 4Q23 alone, four other notable companies made efforts to fortify general liability reserves: AXIS, Cincinnati Fin'l, Markel and Selective. These efforts aren't even unique to the five companies with 4Q23 reserve charges. Most all P&C peers are suffering from adverse loss development from the 2016-2019 accident years, but like the $397 million reserve release at Everest, it is being hidden by reserve releases from more recent accident-years as the combination of overbooked catastrophe losses from 2020-2023, pandemic-era claims ultra-low frequency and specifically earmarked COVID19 reserves are released as redundant. Further, workers' compensation claims continue to produce frequency far below expectations. For Everest and the industry more broadly, the question is which will run out first: the recent short-tailed redundancies or the more distant longer-tailed deficiencies?

> Investor concerns about the adequacy of long-tailed P&C insurance loss reserves are completely reasonable. Multi-year loss under-reserving cannot be solved via pricing alone.

On June 17, 2022, we published the note, "U.S. Insurance: "Inflation now" vs. "inflation later": why personal lines over commercial lines" where we took the contrarian position that loss cost inflation for short-tailed lines like personal auto insurance could be solved in short order through pricing actions, but longer-tailed lines would increasingly confound a simple pricing solution over a finite timeframe. Investors are currently experiencing the "inflation later" effect.

Investors can make two arguments with regards to major loss reserve fortifications. Insurance management teams like Everest or AXIS—following a major charge taken in a given quarter—would like investors to understand that these reserve fortifications are taken seriously. Companies do not want to revisit this stumble again, and so investors should be assured of the extreme conservatism following these additions. Skeptics will likely argue what is commonly seen as "the cockroach theory": where there is one loss event, there will be more to follow. We tend to believe the former: these losses have come as an embarrassment to management, and they have a rigorous desire to put it behind them. However, there is generally only one cure for this understandable skepticism: time. While investors concerns should span the P&C industry broadly, they will likely often focus their attention on the companies that have made errors. AXIS and Everest will be targets of investor concerns over reserve adequacy for some time, in our view. As such are increasing our P/E multiple discount on these names to 35%. The large-cap P&C peer multiple is currently 10.6x 2025 consensus EPS (down from 10.7x the last time we set the RNR price objective, which explains its decline despite an unchanged discount factor).

Exhibit 1: Price objective adjustments to "offshore" reinsurance/specialty P&C peers
We are increasing the discount factor for valuing AXIS and Everest following sizable reserve charges in 4Q23.

						New		Old	
Company	Ticker	Recent close	Upside to PO	Dividend yield	BofA 2025 EPS	PO	P/E Discount	PO	P/E Discount
Arch Capital	ACGL	$83.46	14%	0.0%	$8.90	$94.00	0%	$94.00	-10%
AXIS Capital	AXS	$60.16	19%	3.0%	$10.15	$70.00	35%	$76.00	25%
Everest Group	EG	$353.76	29%	1.9%	$65.05	$446.00	35%	$551.00	20%
RenaissanceRe	RNR	$225.94	39%	0.7%	$36.70	$310.00	20%	$313.00	20%

Source: Bloomberg and BofA Global Research estimates

BofA GLOBAL RESEARCH

If time is the only factor that can reasonably cause skeptical investors to reduce their skepticism, it might be useful for the companies to engage in the one behavior that can reduce that time span: repurchasing one's own shares. Both AXIS and Everest have said that they would consider share repurchase if it made sense but also applaud what they believe to be a very attractive insurance and reinsurance marketplace. They have generally argued that deploying capital into the business is their respective best use of capital.

> A sincere share repurchase initiative could mitigate some concerns over reserve adequacy and signal to investors that a capital-intensive company finds its own shares its best use of capital at the current valuation.

AXS shares currently trade at 5.6x consensus 2025 EPS, parity with current book value and a 10-15% discount to year-ahead book value. EG shares currently trade at 5.1x consensus 2025 EPS, 1.1x current book value 5-10% discount to year-ahead book value. If management is as confident about the adequacy of loss reserves as they say, we believe share repurchase would currently produce better shareholder returns and ultimately better stock performance compared with incremental deployment of capital into the businesses. We have modeled share repurchase initiatives beginning for AXIS in 1Q24 and for Everest in 2Q24, but the amounts we have modeled are small compared with our estimation of the amount of capital these companies would generate.

How much of a P/E multiple discount is justified?

Shares of Everest Group and RenaissanceRe currently trade at about 5-6x 2025 consensus EPS. (AXIS, while considered an immediate peer, has not benefitted materially from peakish property-catastrophe reinsurance pricing, but also trades at similar P/E multiples to Everest and RenRe.) Arch Capital, which is more diversified than Everest or RenRe, trades at a higher multiple of 10x, though we believe this higher multiple still fail to reflect better-than-consensus earnings power. We contend that Arch deserves to trade, at minimum, in parity with the large-cap P&C peers 2025 P/E multiple is currently 10.6x. Since launching operations in 2001, Arch has compounded book value at 15% CAGR, making it the best-in-class operator in the U.S.-listed insurance industry over the past 20+ years.

In theory, price-to-earnings multiples tend to reflect how many times an investor should pay for an ostensibly recurring stream of cash flows/earnings to justify the cost of tying up monies during a particular macroeconomic/interest rate backdrop. When a company is perceived as having temporarily depressed earnings for any of various reasons (e.g., a large catastrophe event occurring, temporarily depressed revenue growth or margins, underearning on investment returns, etc.), one might argue that a premium multiple on those earnings should be paid as they underrepresent the run-rate expectations for earnings/cash flow generation. Likewise, when earnings power is perceived as elevated, investors might argue that they should pay a discounted multiple as the elevated earnings should not be perceived as recurring. Some will argue that this is the case today: because some view property-catastrophe reinsurance pricing as being at a peak (including margins and earnings power), they argue that discount P/E multiples are justified for reinsurers whose current earnings are perceived by them to be elevated.

> The P&C insurance carriers generally perceived as “reinsurers” trade at notable P/E multiple discounts to their “onshore”/“primary” counterparts. In our view, a nearly 50% P/E multiple discount for Everest and RenRe (and even AXIS) appears unwarranted.

How much of a discount is justifiable is a question that requires nuance and speculation. We acknowledge that reinsurance earnings tend to be more volatile than primary P&C insurance earnings, and that reinsurers tend to be once removed from the underlying liabilities, whereas the primary insurers face the risk directly (and perhaps desire to keep the best risks for themselves). That said, we also believe that a reinsurer has the potential to build a more efficient and broader risk portfolio in a way that is less available to primary insurers. In our price objective valuations, based upon historical discounts alongside some judgment, we value underwriters like Everest and AXIS at a 35% discount to the large-cap P&C P/E multiple given immediate concerns around reserve adequacy. We value Arch at parity, and we value RenRe at a 20% discount. Arch (who has yet to report 4Q23) is best-in-class in liability lines loss pick conservatism over 20 years, and RenRe has a 30-year track record of sizable loss reserve releases; notably higher-than-peer initial loss picks in recent accident-years; and protection from an (albeit diminishing) adverse development cover from Tokio Fire & Marine. In our view, the current near-50% discount for the P/E multiple at Everest and RenRe seems extreme both in terms of representing the historical bottom and because we do not regard current earnings power nearly as peak-ish as the current deep discount suggests.

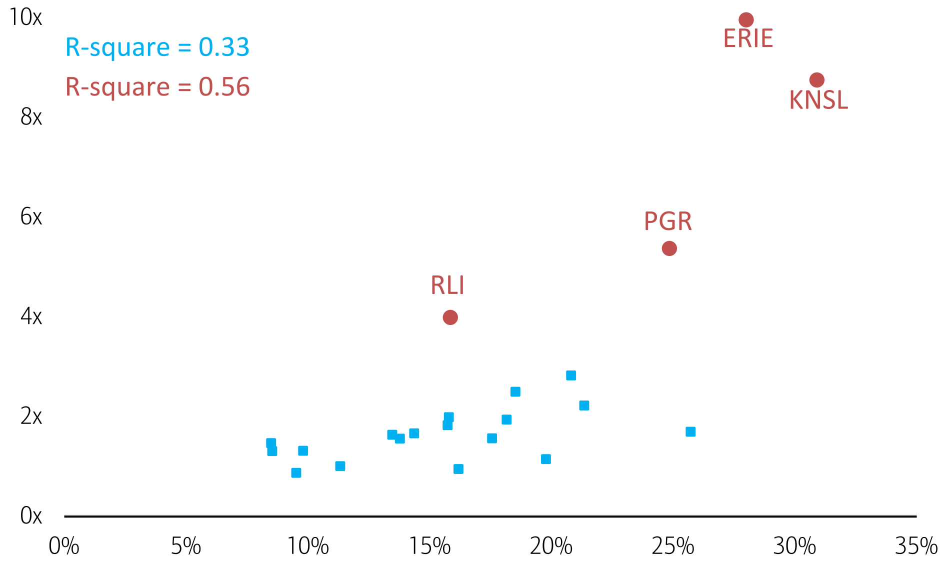
Price-to-book value considered

Arguments for and against price-to-book

Many investors prefer using price-to-book multiples for valuing insurance companies. Arguably, companies with higher returns on equity should trade at higher price-to-book multiples. While this makes sense in theory, we have generally disliked this common valuation trope. Typically, in making sense of this valuation, investors create a scatterplot considering the ROE along the x-axis and the price-to-book multiple along the y-axis to represent the relationship.

Exhibit 2: ROE vs. price-to-book valuation for P&C insurers

We are using consensus 2024 EPS as a % of 3Q23 book value per share excl. AOCI as a proxy for ROE (x-axis) and 3Q23 book value per share excl. AOCI as the y-axis. The R-square for the top 24 U.S.-listed P&C insurers by market capitalization is a low 0.56. Excluding the high value outliers—ERIE, KNSL, PGR and RLI—the R-square for the 20-member peer group is an extremely low 0.33.



Source: Bloomberg and company filings

BofA GLOBAL RESEARCH

The relationship among the constituent pairs in this graph are not terribly valuable, in our opinion. We find this methodology creates a graph with a very low r-square correlation factor. Also, price-to-book valuation multiple theory tends to make no difference between two companies with similar ROE profiles but very different growth rates. The faster growing company ought to trade at a premium, but this growth is not visible when looking at ROE alone.

Currently, the "reinsurers" (this nomenclature tends to ignore their non-reinsurance businesses as well as ignoring reinsurance subsidiaries among those viewed as primary P&C companies) trade at historically low price-to-book multiples relative to their primary insurance counterparts. Whereas one might argue that a notably trough earnings multiple is warranted during peak pricing/earnings periods, it is harder to make the argument that perceived-as-peak pricing/margins ought to command notably trough multiples of book. After all, at the earnings peak, a company will arguably most quickly be growing its book value. In 2002, when pricing was peaking, these same businesses traded at peak price-to-book multiples, not trough multiples. One can argue that a price-to-book multiple should remain consistent across the pricing cycle, but to fall as margins and the pace of book value growth improve seems counter to the pace at which the company is increasing its capital. That is to say, to value the company at a price-to-book value below historical norms quickly compounds into extreme undervaluation as the company bolts on additionally robust book value growth quarter after quarter.

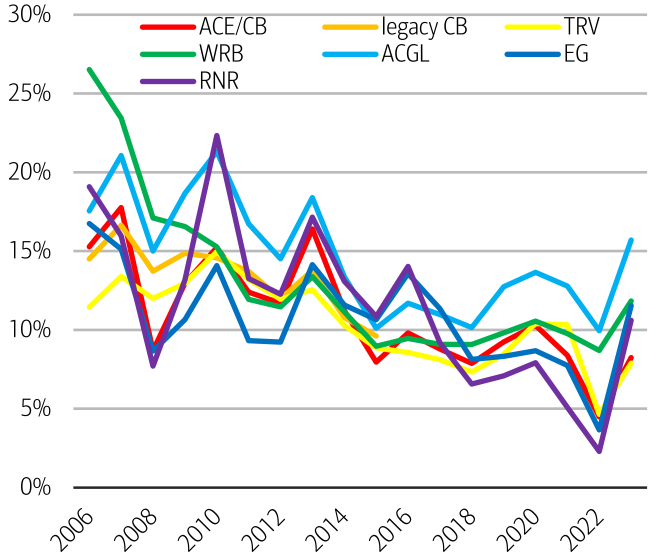
> Whereas peak earnings are not sustainable and perhaps warrant a discounted P/E multiple, book value growth accelerates during peak margins and a discounted P/B multiple at that time seems unwarranted.

Arch, Everest and RenRe each have their unique valuation histories (recounted in detail further below), and their price to book valuations have seen very different trajectories over time. Arch, as a startup in 2001, spent a long time earning the esteem of investors to a point where it has tended to boast a more premium valuation multiple in recent years. Everest has spent two decades rarely being viewed as a premium compounder of capital if its long-term price-to-book valuation is the measuring stick. RenRe was viewed as among the preeminent franchises in the property and casualty spaces for many years with a best-in-class high multiple valuation, but that valuation and presumably that reputation have fallen out of favor in recent years. Each of these companies has compounded book value at a healthy pace over the past 20 years. However, each of them currently trades at a steep price-to-book multiple discount compared to their past valuations; at a present time when book value may be growing more quickly than it has in 20 years.

> The offshore Bermuda specialty stocks currently trade at a steep price-to-book multiple discount compared to their past valuations; at a present time when book value may be growing more quickly than it has in 20 years.

Further, we would argue that reinsurance has been undeservedly viewed as a poorer compounder of capital compared to primary commercial P&C. Averaging Arch, Everest and RenRe represents better compounders of capital over the long-term than Chubb, Travelers and W.R. Berkley. Some will argue that, by using best-in-class examples like Arch, Everest and RenRe, our methodology is flawed by survivorship bias. The past is filled with numerous poorly executing “offshore specialty insurance/reinsurance” whose volatility and poor book value compounding is ignored when highlighting Arch, Everest and RenRe. This is partly true. To name a few relics of poor past execution and performance — Aspen, Flagstone, IPC, Montpelier, etc. — an investor with a long memory of the industry might recall these companies as those who could not compound book value above their cost of capital, who executed with unacceptably high levels of earnings volatility and who ultimate were taken out by stronger competitors at virtually no premium to book value. This is factually true, and the presence of these companies and others created a persist drag on the average book value growth in a market-weighted index of the “offshore” peer group’s earnings power.

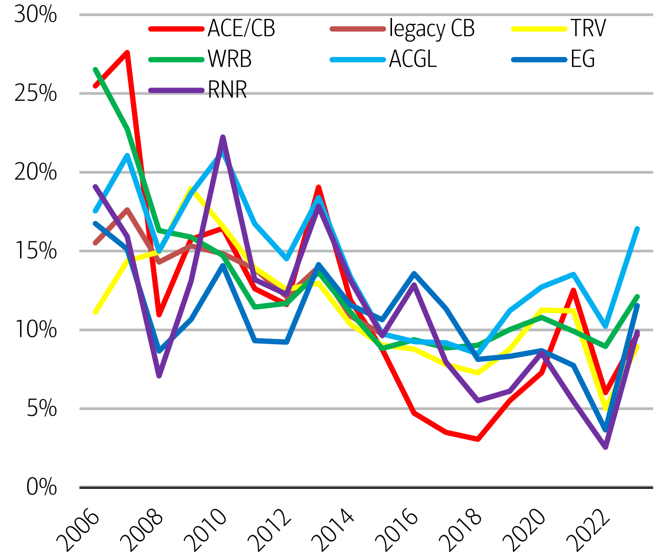
Exhibit 3: Five-year trailing BVPS CAGR including dividends
When viewed over the long-term the best-in-class "reinsurers" (blue, indigo, violet) have grown book value per share at a pace at or arguably above the best-in-class large-cap primary insurers.



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 4: Five-year trailing tangible BVPS CAGR including dividends
When viewed over the long-term the best-in-class "reinsurers" (blue, indigo, violet) have grown tangible book value per share at a pace at or arguably above the best-in-class large-cap primary insurers.



Source: Company filings

BofA GLOBAL RESEARCH

However, it is also true that using Chubb, Travelers and W.R. Berkley as metonymies for the large-cap U.S.-listed primary P&C insurance space has deep survivorship bias. It ignores the essential bankruptcy/government rescue of AIG—that largest market cap stock in the sector—during the global financial crisis. Similarly, it ignores the collapse of Hartford stock as it needed a bailout from the Federal Reserve to stay afloat during the same time frame. It ignores the investment losses at Allstate arising from the mortgage-backed insurance crisis during the global financial crisis as well as the sovereign debt crisis a few years later. It ignores the collapse of XL during the global financial crisis as well as the fundamental risk management failures in the wake of Hurricanes Harvey, Irma and Maria in 2017.

> Whether one wishes to compare the reinsurance group against primary insurance using best-in-class survivors or a broader market-weight index of all the names, investing in reinsurers has done at least as well as primary insurance over the long-term whether tracking stock performance or book value growth.

In fact, if one creates two equal-weighted indices for P&C peer group performance, with one focusing on the SMid-cap reinsurance/offshore names (Allied World, Alterra, Arch, Aspen, AXIS, Endurance, Everest, Flagstone, IPC, Max, Montpelier, PartnerRe, Platinum, RenRe, Transatlantic, Validus as well as ACE and XL when they were majority reinsurance) and one focusing on large-cap primary names (AIG, Allstate, legacy Chubb, Hartford, Safeco, St. Paul, Travelers as well as ACE/Chubb and XL when they were majority primary insurance), reinsurers—good and less good alike—have delivered better value for shareholders over the long-term. We have run these types of analyses in previous notes including this one from September 22, 2022 and this one from November 15, 2022.

Yes! Let's cherry-pick the worst years

Some reinsurance-skeptical investors will point out that operational performance for reinsurers has been poor over the past few years. We would argue that focusing on "the past few years" decidedly stacks the deck against reinsurers who have faced two material and related headwinds to their operational performance. One of the major sources of long-term earnings generation for "offshore" companies has been transferring property-catastrophe risk from the primary insurance companies to the reinsurers. The past few years has severely challenged that earnings stream.

- **Repeated mega cat losses.** First, over the past seven years, extreme property-catastrophe loss events have occurred with seeming relentlessness, causing hundreds of billions of dollars in losses. 2017, 2018, 2020, 2021 and 2022 were each hundred billion plus insured catastrophe loss years. Major loss events include Hurricanes Harvey, Irma and Maria in 2017, Typhoon Jebi and unprecedented California wildfires in 2018 and the second biggest single loss event in insurance history—Hurricane Ian in 2022. In 2Q23 the industry experienced the most extreme U.S. convective storm insured loss activity in history (which was felt more acutely in primary insurers' income statements than reinsurers'). There have certainly been high catastrophe loss years in the past—1992, 2005, 2011, etc.—but the string of consecutive high catastrophe years seems largely unprecedented.

- **Trough catastrophe reinsurance pricing.** Second, from the mid-2010s through 2022, the market price for assuming property-catastrophe reinsurance risk was at a historic bottom. With interest rates at the bottom of a 40-year bull market for bonds, alternative capital providers plowed money into catastrophe bonds and insurance-linked securities (ILS) causing the price of property-catastrophe risk to increasingly be tied to the bond markets as opposed to the insurance markets. Arguably, reinsurers could be accused of underwriting catastrophe exposure at a price below fair value. In the face of multi-year extreme catastrophe loss activity, the price to reinsure that catastrophe risk remained stubbornly low. This was both a headwind for reinsurance providers and a tailwind for primary insurance companies who were able to offload their catastrophe risks at prices arguably below fair value.

As such, reinsurance companies were, on the one hand, forced to assume exposures at prices that perhaps under-appreciated the multi-year return to the capital put at risk; but also, the "bill came due" with consecutive years of extreme loss payments. And so, some investors want to measure the experience of the reinsurers from 2017-2023, call it "normal," and argue that these "offshore" companies deserve to trade at a steep discount to their large-cap primary P&C counterparts.

We think this is an unfair test that makes it near impossible for "offshore"/reinsurers to excel. **BUT LET'S DO IT ANYWAY.** From 2017-2023, best-in-class large-cap primary P&C carriers Chubb, Travelers and W.R. Berkley delivered a book value per share CAGR of 7.2%, 6.9% and 10.1%, respectively. By comparison, the "offshore" reinsurers—Arch, Everest and RenRe—beset by cycle-trough pricing power and multi-year extreme catastrophe loss experience delivered a book value per share CAGR of … about 13% (has yet to report 4Q23), 8.3% and 7.1%, respectively. Our reading of these numbers indicates to us that, put up against a near multi-year worst case scenario for these companies, they were able to grow book value at least as well as the primary large-cap insurers that trade at a much higher price-to-book multiple valuations.

Exhibit 5: Comparing recent operational execution among large-cap primary P&C insurers vs. offshore "reinsurers" during "the rough patch"

The past seven years, until 2023, were beset with subpar reinsurance pricing as well as significant catastrophe activity. Yet, the operational performance of reinsurers seems on-par, if not better than onshore large-cap primary P&C counterparts.

	2017-2023 BVPS CAGR		2017-2022 BVPS CAGR		2023 return on beginning equity		2023 op. return on beginning equity		Est. 2024 return on beginning equity		Est. 2024 op. return on beginning equity	
	Reported	Tangible	Reported	Tangible	Reported	Tangible	Reported	Tangible	Reported	Tangible	Reported	Tangible
Chubb	7.2%	8.8%	5.2%	6.9%	15.6%	26.4%	14.1%	21.9%	15%	25%	14%	22%
Travelers	6.9%	7.4%	5.2%	5.3%	13.9%	17.2%	11.6%	13.8%	17%	20%	15%	18%
W.R. Berkley	10.1%	10.2%	8.8%	9.0%	20.5%	21.0%	16.8%	17.2%	21%	22%	19%	19%
Arch	*13%*	*15%*	10.0%	10.8%	*24%*	*25%*	*22%*	*24%*	19%	20%	18%	18%

Exhibit 5: Comparing recent operational execution among large-cap primary P&C insurers vs. offshore "reinsurers" during "the rough patch"

The past seven years, until 2023, were beset with subpar reinsurance pricing as well as significant catastrophe activity. Yet, the operational performance of reinsurers seems on-par, if not better than onshore large-cap primary P&C counterparts.

	2017-2023 BVPS CAGR		2017-2022 BVPS CAGR		2023 return on beginning equity		2023 op. return on beginning equity		Est. 2024 return on beginning equity		Est. 2024 op. return on beginning equity	
Everest	8.3%	8.3%	4.0%	4.0%	23.0%	23.0%	21.1%	21.1%	22%	22%	19%	19%
RenRe	7.1%	6.6%	0.7%	0.8%	41.4%	43.7%	34.3%	35.9%	21%	23%	21%	23%

Arch numbers for 2023 are estimated as the company has not yet reported 4Q23 results.

Source: Company filings and BofA Global Research estimates

BofA GLOBAL RESEARCH

(Some eagle-eyed skeptics might protest that the "offshore" companies received a sizable boost to book value in 4Q23 in the form of deferred tax assets granted by the island of Bermuda as a seeming consolation for the country's plan to adopt a 15% income tax in 2025 to comply with the OECD Global Minimum Tax initiative. This is definitely true. However, we would also note that the "onshore" companies received a substantial book value boost in 4Q17 when the U.S. passed the Tax Cuts and Jobs Act. Further, Chubb's 4Q23 book value also benefitted from the Bermuda 2025 tax changes.)

Exhibit 6: Comparing current price-to-book valuation among large-cap primary P&C insurers vs. offshore "reinsurers"

Despite equivalent to better operational performance, reinsurers trade at a notable discount.

	Current price-to-book multiple				Price-to-book multiple in one year assuming consensus EPS and no price appreciation	
	Reported	Tangible	Ex-AOCI	Tang. Ex-AOCI	Ex-AOCI	Tang. Ex-AOCI
Chubb	1.66x	2.75x	1.56x	2.48x	*1.4x*	*2.1x*
Travelers	1.99x	2.40x	1.77x	2.09x	*1.6x*	*1.9x*
W.R. Berkley	2.73x	2.80x	2.44x	2.49x	*2.3x*	*2.3x*
Arch	*1.8x*	*1.9x*	*1.7x*	*1.8x*	*1.5x*	*1.5x*
Everest	1.12x	1.12x	1.05x	1.07x	*0.9x*	*0.9x*
RenRe	1.33x	1.45x	1.35x	1.48x	*1.1x*	*1.2x*

Arch numbers for 2023 are estimated as the company has not yet reported 4Q23 results.

Source: Company filings, Bloomberg and BofA Global Research estimates

BofA GLOBAL RESEARCH

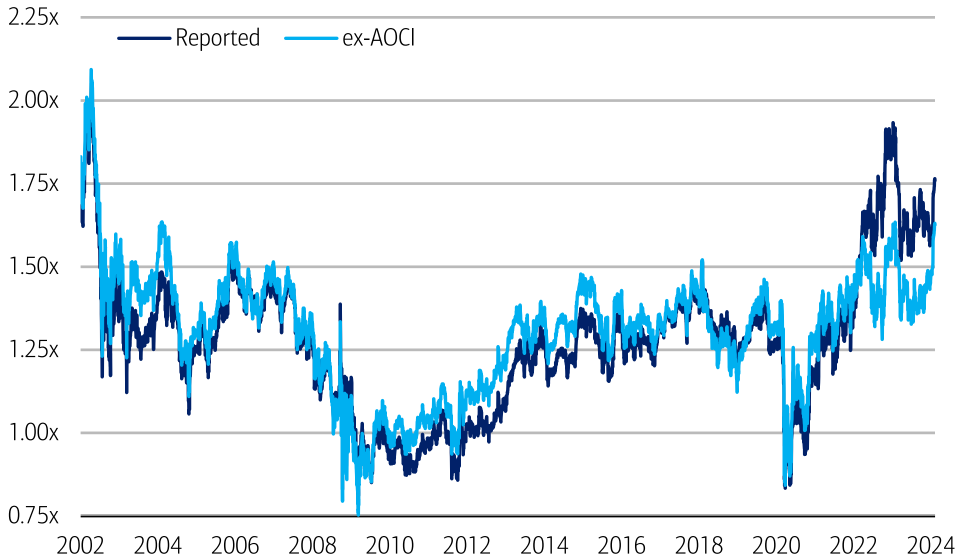
All in, against the backdrop of a near worst-case scenario, the offshore companies kept pace in earning on behalf of shareholders. Further, we would argue that these companies are poised to grow book value in 2024 at a pace at least as good as their primary insurance counterparts, but they can be purchased at massive price-to-book multiple discounts. We believe consensus EPS forecasts for reinsurers underestimate current earnings power, but let's assume that a) consensus number are accurate and b) share price is essentially unchanged over the next 12 months. One year from now the price-to-book multiples for these "offshore" companies will be radically lower than they are currently, while the P/B multiples for their primary counterparts will remain in 2x+ territory.

Historical P/B valuation

Some might argue that paying 1.8x book for Arch or 1.3x for RenRe does not feel like a deep value opportunity (though this argument is harder to reject for Everest trading at 1.1x book or 0.9x estimated year ahead book). There is some context that investors ought to consider. First, primary P&C insurance price-to-book valuations are the highest they have been since 2002. There are some real differences with 2002. Chiefly: a) We do not believe the pricing trends in 2024 are nearly as attractive as they were in 2002. b) interest rates are not nearly as high as they were in 2002. c) Balance sheets are not nearly as overstated today as they were in 2002. Back in 2002, the balance sheets were still materially underestimating 1997-2001 losses. 4Q23 loss reserve charges for AXIS, Cincinnati Fin'l, Everest, Markel and Selective would seem to argue that loss reserves for 2016-2019 and inflationary loss trends more broadly are understated for a number of companies today, though we don't believe the underestimation is nearly as extreme as it was in 2002. With this in mind, one can observe that investors have decided to award these stocks with their highest valuation multiples (on price-to-book) in over 20 years.

Exhibit 7: Market-cap weighted average price-to-book valuation for large-cap primary P&C peers

The chart below represents a blended average of the trading multiple of ACE/"new" Chubb, "legacy" Chubb, St. Paul Cos., Travelers and W.R. Berkley. Trading multiples are as high as they have been going back to 2002.

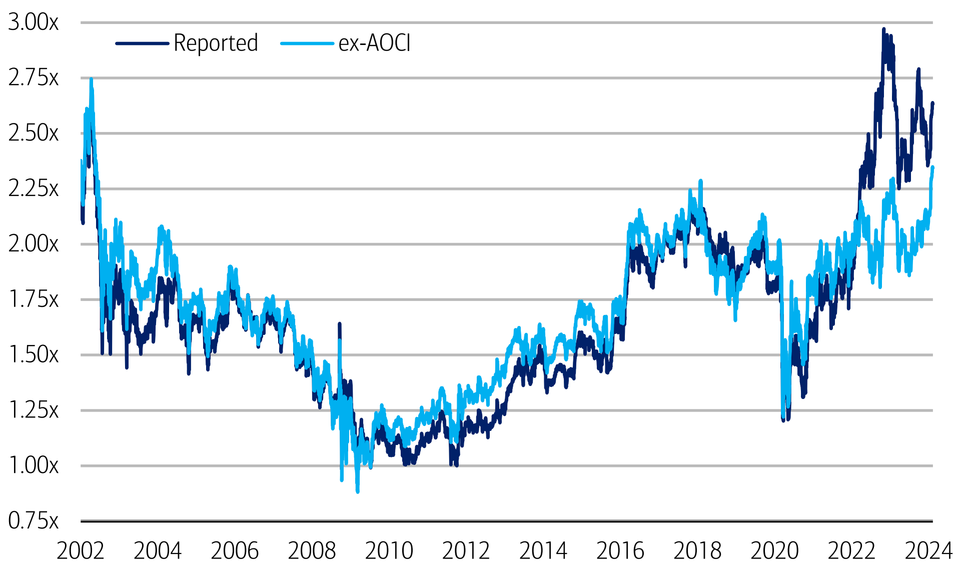


Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

Exhibit 8: Market-cap weighted average price-to-tangible book valuation for large-cap primary P&C peers

The chart below represents a blended average of the trading multiple of ACE/"new" Chubb, "legacy" Chubb, St. Paul Cos., Travelers and W.R. Berkley. Trading multiples are as high as they have been going back to 2002.



Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

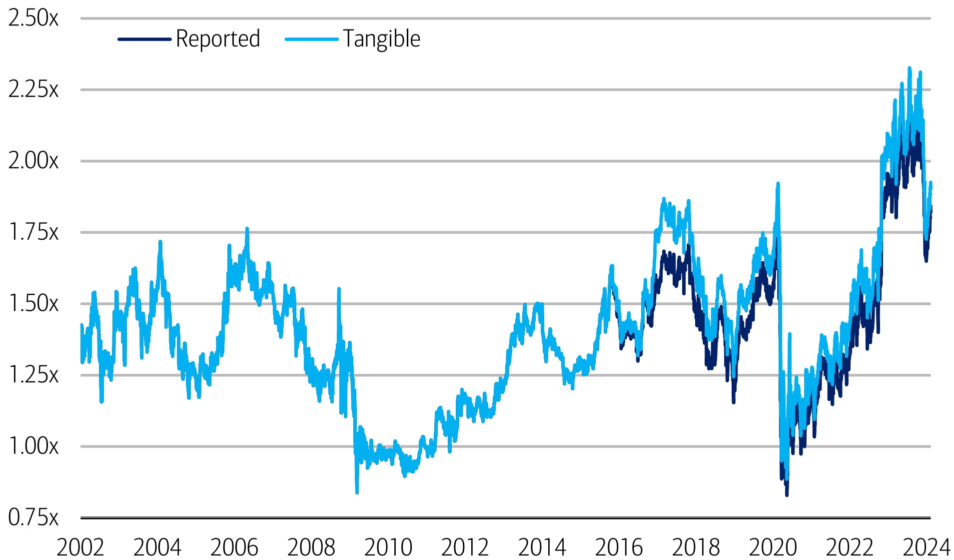
With this context as background, it is worthwhile to see where Arch, Everest and RenRe trade relative to their respective histories. As mentioned above, they each have different stories and so the context of their experience is probably germane when estimating whether valuations are trough-like or sensible.

Arch Capital Group

Arch Capital was formed in October 2001 in the wake of the World Trade Center terrorist attack on September 11, 2001. Current CEO Marc Grandisson appears to be among the first three employees at the company, hired as Chief Actuary of Reinsurance according to an 8-K filed on November 8, 2001. While some of its early employees were generally well-known to investors, including former Zurich North America CEO Dinos Iordanou (first head of its insurance business and its first "true" group CEO), retired F&G Re Chairman and CEO Paul Ingrey (first head of its reinsurance business) and former W.R. Berkley COO John Vollaro (first group CFO), the business itself was an unknown entity when initially formed and seeking its first public equity capital raise in March 2002.

Exhibit 9: Price-to-book valuation history for Arch Capital Group

Arch's current price-to-book multiple does place it at a historical peak, briefly touched just before the COVID19 pandemic began.



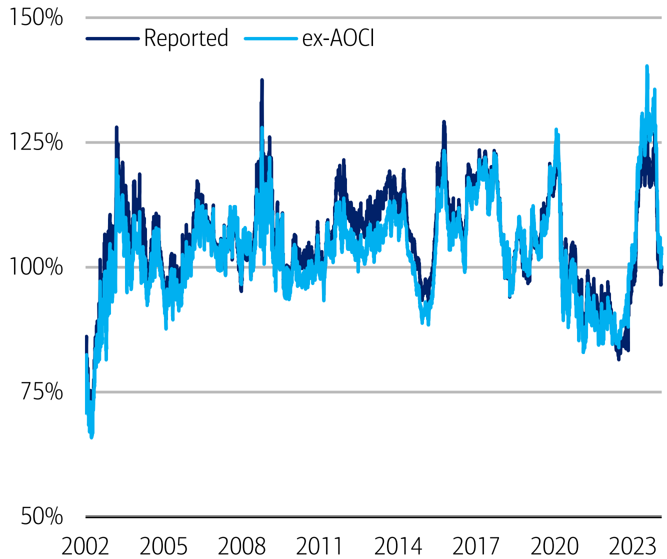
Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

Over the intervening 22 years, Arch has consistently delivered top-tier returns on capital relative to the peer group while having less-than-peer exposure to multi-decade bullish equity market in its investment portfolio. In the 2010s, the superior results of the company began to get recognized in a premium valuation for ACGL stock. In 2023. In March 2013, Arch announced its intention to enter the primary U.S. mortgage insurance market through the acquisition of CMG and the operating platform of the PMI group. The regulatory aspects of the acquisition took longer than expected (closing in late January 2014). Arch significantly expanded its footprint in mortgage insurance with its acquisition of AIGs United Guaranty at the end of 2016. Skeptics argued that mortgage insurance was a "lower multiple business" relative to Arch's legacy businesses, arguing for multiple compression in its valuation. However, the mortgage insurance business produced notably superior-to-peer earnings for Arch, and ACGL stock generally resisted these predictions until the outbreak of the COVID19 pandemic in early 2020. For the first time since its early days and a brief period in 4Q14-1Q15, Arch stock traded at a material discount to the primary large-cap insurance peer group for an extended period across 2Q20-3Q22. The resurgent pricing in reinsurance markets beginning with January 1, 2023 renewals restored ACGL's premium valuation (near the all-time relative peak in July 2023). However, that peak was short-lived, and ACGL's can currently be bought at essentially no premium to the primary peer group and near the modal floor of the long-term range.

Exhibit 10: Arch Capital price-to-book multiple relative to large-cap P&C peers

While Arch shares are approaching all-time highs in terms of price-to-book multiple valuation, 90-100% of the value of the large-cap peers has tended to provide a relative floor with the exception of the pandemic period.

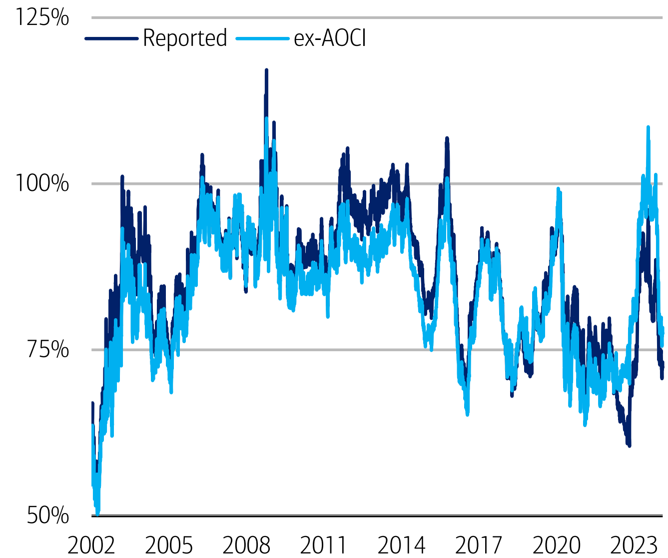


Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

Exhibit 11: Arch Capital price-to-tangible book multiple relative to large-cap P&C peers

While Arch shares are approaching all-time highs in terms of price-to-tangible book multiple valuation, 60-70% of the value of the large-cap peers has tended to provide a relative floor.



Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

While Arch shares are approaching all-time highs in terms of price-to-book multiple valuation, 90-100% of the value of the large-cap peers has tended to provide a relative floor with the exception of the pandemic period. This where shares are trading today.

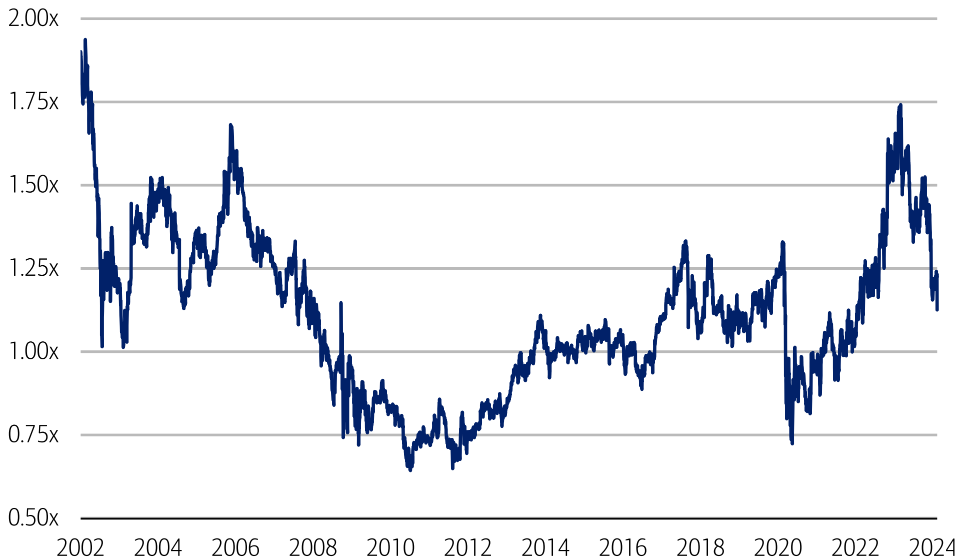
Everest Group

In contrast with Arch, whose story was that of a startup that became embraced as a premium capital generator over 20 years, Everest has never achieved that cache and valuation premium despite healthy capital generation. Unlike many of the SMid-cap offshore specialty insurer/reinsurers in the ’00s, Everest was not a startup and instead had legacy liabilities reaching deep into the past including 1997-2001 liability losses and asbestos claims from many years past. Overcoming past losses from 2001 and earlier weighed on returns for several years. Looking back to Exhibits 3 and 4, one can clearly seek that Everest’s book value per share growth (including dividends) lagged peers in the ’00s. Soft market insurance and reinsurance pricing for much of the 2010s weighed on valuation. However, in the aftermath, of the significant property-catastrophe losses associated with Hurricanes Harvey, Irma and Maria in 3Q17, Everest was briefly perceived as having best-in-peer-group execution due to a much lower-than-expected exposure to the storms. The “victory lap,” however, was short-lived. In 2Q18, Everest reviewed its estimates and determined it underestimated its exposure to those storms by 50-100%, tainting investor sentiment around the stock.

We may be seeing this experience revisited following 4Q23 earnings results. In 3Q19, Everest announced long-term Chubb veteran was recruited as CEO elect upon the imminent retirement of then CEO Dom Addesso. Everest additionally recruited then SCOR CFO Mark Kociancic. The new management team seemed largely embraced as being the right team to improve the company’s reputation among investors. Concluding the first year of the new management’s tenure in 4Q20, the company determined its reinsurance reserves were deficient by $400 million with no need to reenforce reserve adequacy within the smaller primary insurance business, despite significant growth in that business during the soft market years of 2016-2019. Fast forward to 4Q23, just off the heels of a December investor day event, triumphant in its successful execution of the company’s three-year 2021-2023 plan, Everest surprised investors with a $392 million adverse development charge for the primary insurance book (neatly matched by a nearly equally sized $397 million reserve release in reinsurance, essentially neutralizing the 4Q20 reinsurance reserve fortification). This charge comes at a cost to how successfully current management is executing its plan, and, for many investors, helps justify why Everest trades at a discount multiple.

Exhibit 12: Price-to-book valuation history for Everest Group

Shares of Everest current trade at about 1.1x book or approximately 0.9x year-ahead book.



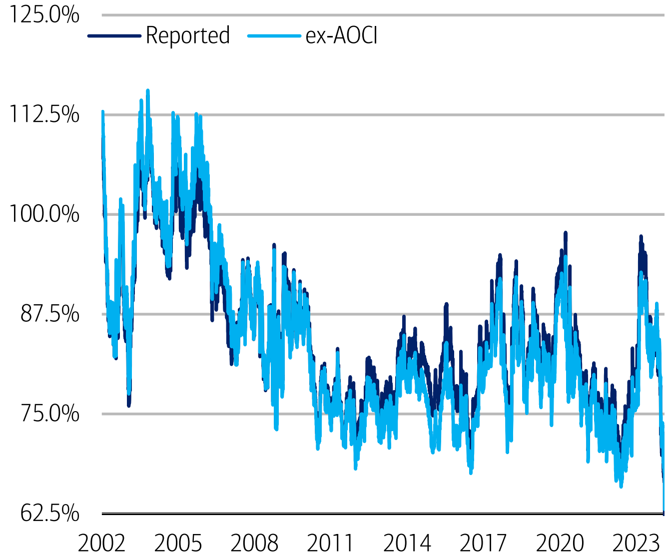
Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

This persistent discount, however, has provided a hidden benefit for Everest. Unlike its subpar book value per share growth in the '00s, Everest's book value per share growth has been healthy in the 2010s. Given that the stock traded in-line or at a discount to book value for almost a decade from 2Q08-3Q16, it provided a very easy opportunity to buy back its own shares. At a deeply discounted valuation, Everest reduced its share count by 34% over that 8 ½-year stretch. (This is not an outsized level of share count reduction over that time frame—Arch, -37%; ACE/"new" Chubb, -2%; "legacy" Chubb, -38%; RenRe -37%; Travelers, -53%; and W.R. Berkley, -26%—but Everest was able to execute its buyback at valuations instantly accretive to book, while also paying a 2%+ dividend per share unlike some peers with lower dividend yields that could have freed more capital for buybacks). With the stock currently trading at below year ahead book, management would seem to have that opportunity once again. When asked about the appetite/opportunity for share repurchase on the 4Q23 earnings conference call, management argued that it evaluates the merits of deploying capital into buybacks regularly but also noted that the current marketplace offers such attractive opportunities for deployment into the business. Despite this seeming dismissal of doing buybacks currently, we are assuming a repurchase effort beginning in 2Q24.

Exhibit 13: Everest price-to-book multiple relative to large-cap P&C peers

Everest shares currently trade at an all-time discount to the large-cap P&C insurance peers on a price-to-book basis

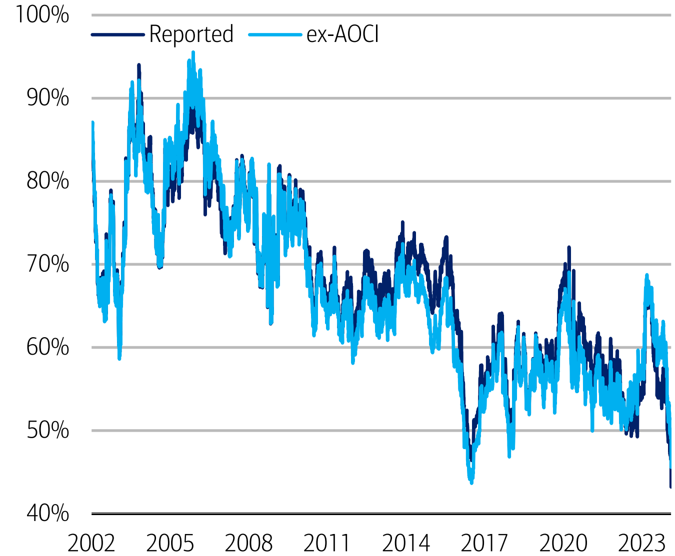


Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

Exhibit 14: Everest price-to-tangible book multiple relative to large-cap P&C peers

Everest shares currently trade at an all-time discount to the large-cap P&C insurance peers on a price-to-tangible book basis



Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

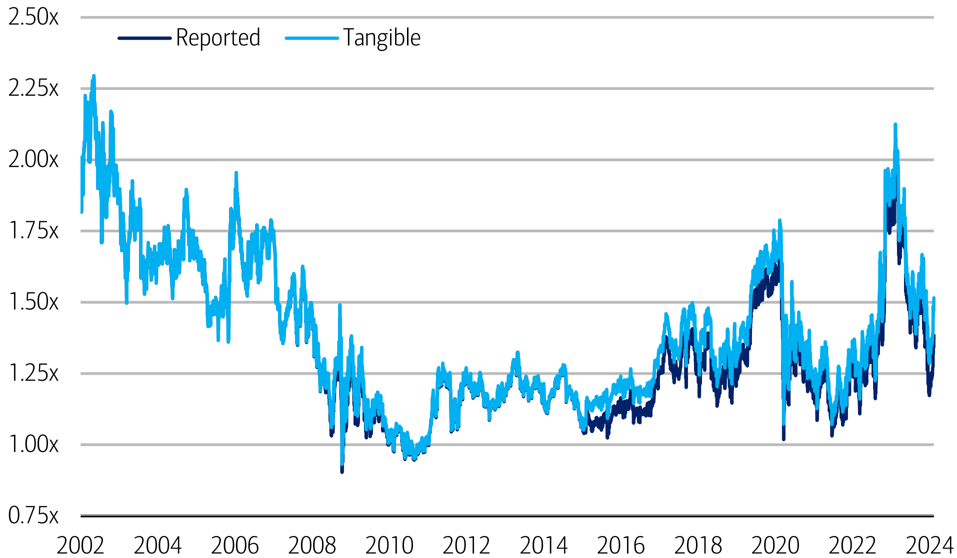
We would note that Everest shares currently trade at 1.1x book (reported and tangible are the same as there is no goodwill) at a time when the large-cap primary P&C peer group is trading at 1.6x reported book and 2.3x tangible book (both excluding AOCI). The current price-to-book multiple discount for Everest shares is **greater than at any previous point** in the company's trading history.

RenaissanceRe

In many ways, RenRe's trading history is the inverse of Arch's. RenRe was formed in 1993 in the wake of Hurricane Andrew's mega-catastrophe destruction in 1992 as a more or less monoline property-catastrophe reinsurer. The company held its initial public offering in 3Q95. Through its first 6 ½ years as a publicly owned company ending 2001, RenaissanceRe delivered compounded book value per share growth (with dividends) of 21.3% including a 17.8% ROE in 2001 despite the $20 billion plus insured industry losses associated with the 9/11 terrorist attack on the World Trade Center. As Warren Buffett wrote in Berkshire Hathaway's letter to shareholders from 3Q01, "A mega-catastrophe is no surprise: One will occur from time to time, and this will not be our last. We did not, however, price for *manmade* mega-cats, and we were foolish in not doing so. In effect, we, and the rest of the industry, included coverage for terrorist acts in policies covering other risks – and received no additional premium for doing so." Unlike Berkshire Hathaway and much of the rest of the reinsurance industry, RenRe did price for such an occurrence and largely avoided exposure (a mere $48 million of exposure to the, up till then, the worst single loss exposure event in insurance history). RenRe's reputation as arguably the best operator in the industry was solidified. While reinsurers traded at a persistent discount to primary insurers, RenRe managed to trade at premium multiple into 2013.

Exhibit 15: Price-to-book valuation history for RenaissanceRe

Upon off a bottom at year-end 2023, shares of RenRe currently trade at about 1.35x book value and 1.5x tangible book value. Broadly, this seems like a middling valuation based on the long-term history.



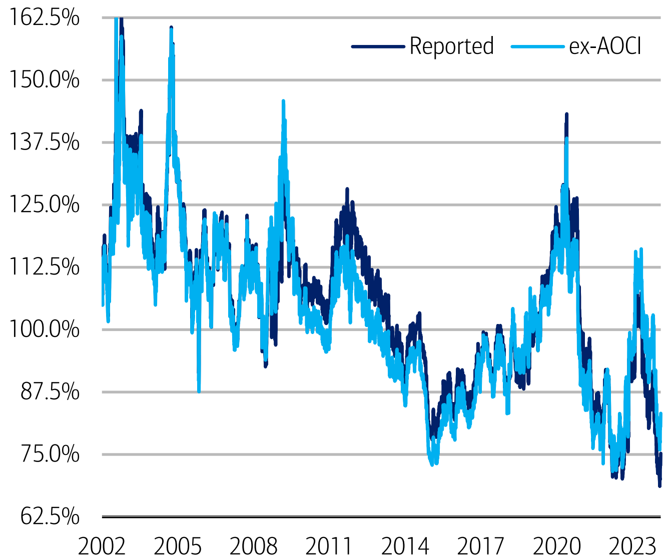
Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

However, a 40-year bull market for bonds would ultimately undo that premium valuation. In August 2011, the U.S. Treasury was downgraded to double-A by S&P, which catalyzed the fourth decade of generally persistent year-over-year declines in interest rates. Those declines became super-charged by the loose money policies during the COVID19 pandemic. With interest rates low, fixed income investors sought out previously underpenetrated corners of the market, and insurance-linked securities (ILS) became a material competitor to the rated balance sheets of property-catastrophe reinsurers. The volatile catastrophe markets that had driven RenRe's outperformance for its first two decades of operation became disintermediated by fixed income investors seeking fixed income-like returns. Additionally, the 2017-2023 period clustered multiple years of high catastrophe activity atop one another. Finally, the surge in interest rates during 2022, left insurers with large mark-to-market investment losses (many of which RenRe chose to realize and deploy into higher yielding securities). From year-end 2016 to year-end 2022, RenRe's book value per share growth including dividends was essentially flat (slightly positive due to a mid-2020 equity raise done at a premium to book), though, in some ways, this was a "coiled spring" with almost 60% book value per share growth in 2023.

Exhibit 16: Everest price-to-book multiple relative to large-cap P&C peers

While shares of RenRe trade at an average multiple of book relative to its history, they are essentially trading at an all-time bottom relative to the valuation of the large-cap primary P&C peers.

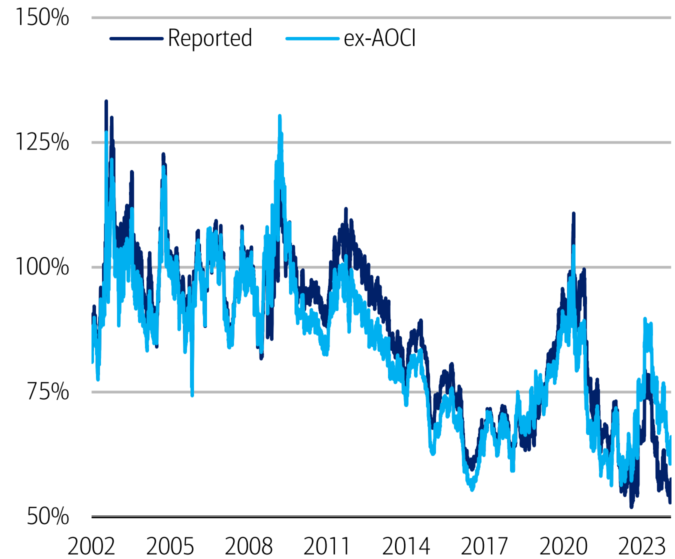


Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

Exhibit 17: Everest price-to-tangible book multiple relative to large-cap P&C peers

While shares of RenRe trade at an average multiple of tangible book relative to its history, they are essentially trading at an all-time bottom relative to the valuation of the large-cap primary P&C peers.



Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH

Currently, shares of RenRe trade at about 1.35x book or 1.5x tangible book. However, with the large-cap primary P&C peer group trading at 1.6x reported book and 2.3x tangible book (both excluding AOCI), the current price-to-book multiple discount for RenRe shares (20% on reported book and 40% on tangible book) is at a near all-time low (which was set a couple weeks ago).

Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ACGL	ACGL US	Arch Capital	US$ 83.46	B-1-9
AXS	AXS US	Axis Capital	US$ 60.16	B-1-7
EG	EG US	Everest Group Ltd	US$ 353.76	B-1-7
RNR	RNR US	RenaissanceRe	US$ 225.94	B-1-7

Source: BofA Global Research

Price objective basis & risk

Arch Capital (ACGL)

Our price objective is $94 is based on parity with the large-cap P&C peer year-ahead P/E multiple (10.6x) on our 2025 EPS forecast. While there is no impact from a Bermudian income tax in 2024, we are also reducing the multiple by the impact we expect such a tax to have in 2025. This is a premium to the historical trading range (90% of the peer group P/E) given Arch's above-average growth, margin outlook and tactical capital management strategy.

Downside risks are depression-like scenarios leading to a collapse in homeownership rates, however, Arch does have $3 billion of collateralized reinsurance protection, partly mitigating this material risk. While Arch had been generally under-exposed to natural catastrophe losses in recent years, the company has been recently increasing its exposure to such events as the price of underwriting that risk has been increasing.

Axis Capital (AXS)

Our price objective of $70 represents a 35% discount to the P/E multiple of the U.S. P&C insurance peer group (10.6x). This steeper-than-peer discount we believe to be warranted in a period of management and strategy transition. It is also exacerbated by reserve insecurities following several 4Q23 loss reserve fortifications in the peer group. Still, despite the sizable discount, there is still material upside to our price objective. We believe the company's investment portfolio is particularly well-positioned for the inverted yield curve environment. Additionally, we believe fears of a 4Q23 reserve charge have been weighing on the stock, and, now that this charge has been formalized with a 4Q23 pre-announcement, we might expect a re-rating as we get past 2023 numbers, though this will likely take time to be realized.

Upside risks are an acquisition of AXIS at a premium valuation, lower-than-expected catastrophe losses, and favorable prior-year reserve development.
Downside risks are higher-than-expected catastrophe losses, reserve charges, and further elevation in casualty loss cost trends.

Everest Group Ltd (EG)

Our price objective of $446 is based on 65% of the year-ahead multiple for large cap property and casualty (P&C) peers (10.6x). The 35% discount is based a modestly lower relative compared with where RE has traded in the past, which we also find likely/appropriate given the greater earnings volatility associated with the reinsurance subsector. It is also exacerbated by reserve insecurities following several 4Q23 loss reserve fortifications in the peer group. While there is no impact from a Bermudian income tax in 2024, we are also reducing the multiple by the impact we expect such a tax to have in 2025.

Downside risks are pressure from lower interest rates causing a decline in earnings power and potentially leading the company to miss our EPS expectations, volatility associated with catastrophes also creates the risk of missing or exceeding our EPS outlook, and lawmakers enacting what the industry sees as a retrospective change in coverage to insurance contracts, enfranchising virus-triggered business interruption.

RenaissanceRe (RNR)
Our $310 PO is based on a 20% "reinsurance/offshore" discount to the 2025 large-cap peer P&C year-ahead P/E multiple (10.6x) on our 2025E EPS forecast. We view a discount as appropriate as reinsurance is viewed as a derivative market with less upside in an improving market for P&C underwriting margins.

Downside risk is presented by the pressure from lower interest rates causing a decline in earnings power and potentially leading the company to miss our EPS expectations. The volatility associated with catastrophes also creates the risk of missing or exceeding our EPS outlook.

Analyst Certification

I, Joshua Shanker, 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 Financial Advisor to Arch Financial Holdings UK Ltd in connection with its proposed sale of its stake in Castel Underwriting Agencies Ltd to Ryan Specialty Holdings Inc, which was announced on December 21, 2023.

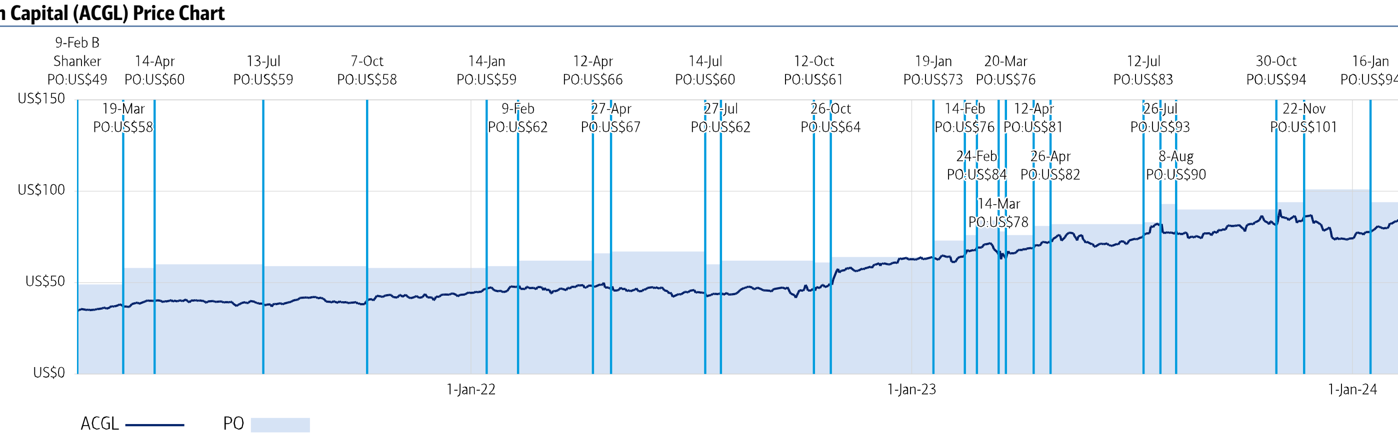
US - Insurance Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Aflac	AFL	AFL US	Joshua Shanker
	Allstate Corp.	ALL	ALL US	Joshua Shanker
	American International Group	AIG	AIG US	Joshua Shanker
	Arch Capital	ACGL	ACGL US	Joshua Shanker
	Assurant	AIZ	AIZ US	Grace Carter, CFA
	Axis Capital	AXS	AXS US	Joshua Shanker
	BRP Group, Inc.	BRP	BRP US	Joshua Shanker
	Cincinnati Financial Corporation	CINF	CINF US	Grace Carter, CFA
	Corebridge Financial	CRBG	CRBG US	Joshua Shanker
	Everest Group Ltd	EG	EG US	Joshua Shanker
	Intact Financial	YIFC	IFC CN	Grace Carter, CFA
	Intact Financial	IFCZF	IFCZF US	Grace Carter, CFA
	MetLife	MET	MET US	Joshua Shanker
	Progressive	PGR	PGR US	Joshua Shanker
	RenaissanceRe	RNR	RNR US	Joshua Shanker
	The Hartford	HIG	HIG US	Joshua Shanker
	Voya	VOYA	VOYA US	Joshua Shanker
	W.R. Berkley	WRB	WRB US	Joshua Shanker
NEUTRAL				
	Aon	AON	AON US	Joshua Shanker
	Brown & Brown	BRO	BRO US	Grace Carter, CFA
	Lincoln National	LNC	LNC US	Joshua Shanker
	Marsh McLennan	MMC	MMC US	Joshua Shanker
	Principal Financial Group	PFG	PFG US	Joshua Shanker
	Prudential Financial	PRU	PRU US	Joshua Shanker
	The Hanover	THG	THG US	Grace Carter, CFA
	Trupanion	TRUP	TRUP US	Joshua Shanker
	Unum	UNM	UNM US	Joshua Shanker
UNDERPERFORM				
	Arthur J. Gallagher & Co.	AJG	AJG US	Joshua Shanker
	Chubb Ltd	CB	CB US	Joshua Shanker
	CNA Financial	CNA	CNA US	Joshua Shanker
	Goosehead Insurance Inc.	GSHD	GSHD US	Joshua Shanker
	Selective	SIGI	SIGI US	Grace Carter, CFA
	Travelers Cos	TRV	TRV US	Joshua Shanker
	Willis Towers Watson	WTW	WTW US	Joshua Shanker

Disclosures

Important Disclosures

Arch Capital (ACGL) Price Chart

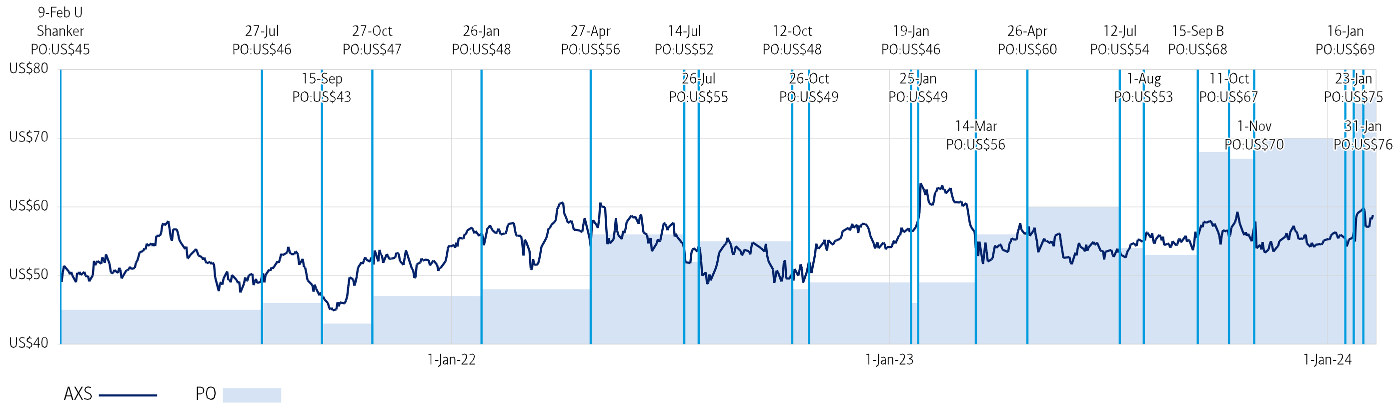


B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Arch Capital (ACGL) Price Chart

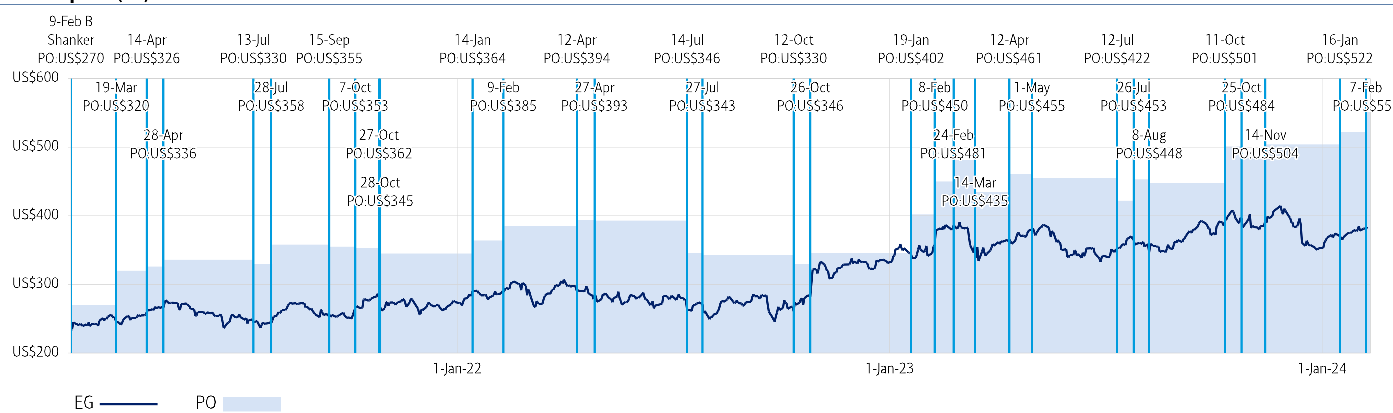
Axis Capital (AXS) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

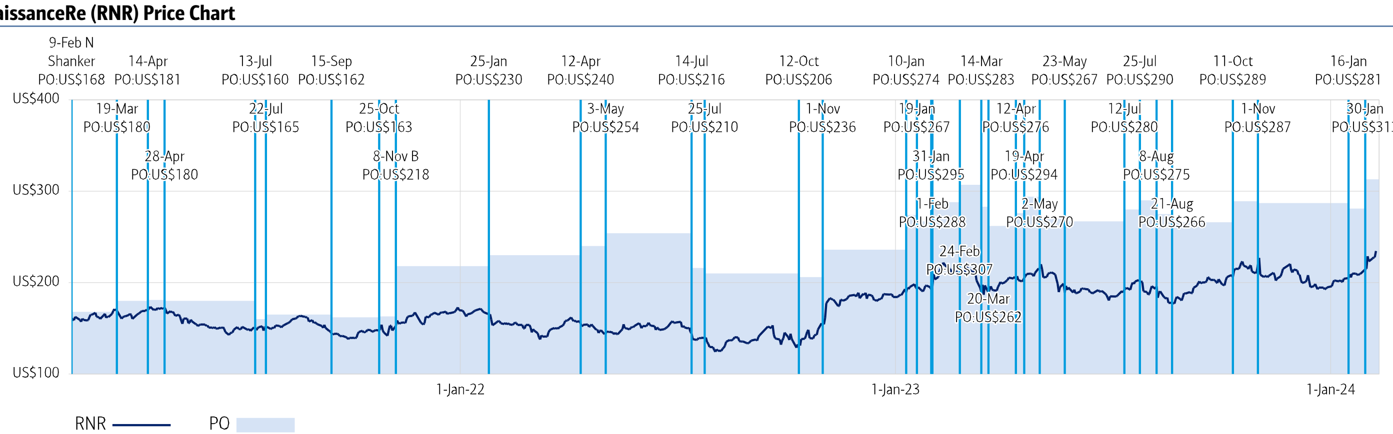
Everest Group Ltd (EG) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

RenaissanceRe (RNR) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

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.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.
BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Arch Capital, Axis Capital, Everest Group Ltd, RenaissanceRe.
BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Renaissance Re.
The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Arch Capital, Axis Capital, Renaissance Re.
BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Arch Capital, Axis Capital, Everest Group, Renaissance Re.
The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Arch Capital, Axis Capital, Everest Group.
BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Arch Capital, Renaissance Re.
BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Arch Capital, Axis Capital.
BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Arch Capital, Axis Capital, Renaissance Re.
BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Arch Capital, Axis Capital, Everest Group Ltd, RenaissanceRe.
The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Arch Capital, Axis Capital, Everest Group, Renaissance Re.
BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.
Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.
The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.
Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.
Refer to BofA Global Research policies relating to conflicts of interest.
"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.
Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:
BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name,

regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:
ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.