LIVE OAK
PRIVATE WEALTH®

Year-End Letter December 31, 2022

In my 53 years in the investment world, I've seen a number of economic cycles, pendulum swings, manias and panics, bubbles and crashes, but I remember only two real sea changes. I think we may be in the midst of a third one today.

-Howard Marks, Oaktree Capital
"Sea Change"; December 13, 2022

Market Review
Market Statistics as of 12/31/2022

Index	2022 4th Quarter	2022 12 Months
DJIA	16.01%	-6.86%
S&P 500	7.56%	-18.11%
S&P 500 (equal weight)	11.64%	-11.45%
S&P Mid Cap	10.78%	-13.06%
Russell 1000/Growth	2.20%%	-29.14%
Russell 1000/Value	12.42%	-7.54%
Russell 2000	6.23%	-20.44%
NASDAQ Comp.	-0.79%	-32.54%
Long-Term Treasury Bonds	-0.39%	-28.30%
Inv Grade Corp Bonds	3.53%	-15.44%
Gold	8.41%	0.36%
3 Month T-Bill	0.84%	1.46%

Despite a strong fourth-quarter rally, the S&P 500 Index fell by 18.11% in 2022. This represented the worst year for the index since 2008 and the fourth worst year since World War II. There was nowhere to hide from the carnage, as 30-year treasuries were down 28.3%, and investment-grade bonds fell by 15.44%. The "everything rally" fueled by easy money policies from central bankers around the world ended abruptly as fighting inflation took center stage. The Fed has raised the federal funds target rate by 425 basis points in just nine months, the fastest pace in modern history. Looking at data going back to 1928, there were only five years when the S&P 500 and the 10-year treasury both posted negative returns: 1931, 1941, 1969, 2018, and 2022. There has been only one occasion when the S&P 500 and 10-year treasury both had losses of greater than 10%, and that was in 2022. The 60/40 portfolio[1], which has long been a favorite for investors seeking income and growth, would have lost 16% in 2022. According to Vanguard[2], this was the worst return for the 60/40 strategy since 2008, and the second worst on record since 1976. At the lowest point this year, according to the Financial Post[3], the S&P 500 had shed $11 trillion in market cap value: to give that perspective (even if not directly comparable), $11 trillion is the entire economic output of Japan, Germany, and Canada combined.

[1] 60% S&P 500 index and 40% Bloomberg U.S. Aggregate Bond Index
[2] Barron's, *Don't Give Up on the 60/40 Portfolio. How to Rebuild It;* December 2022
[3] Financial Post, *A Year of Pain: Investors Struggle in a New Era of Higher Rate;* December 1, 2022

Value equity strategies have fared much better this year, as evidenced by the Russell 1000 Value Index's outperformance of the Russell 1000 Growth Index by 21.6% for the year ending 12/31/2022. The only positive sector of the markets for 2022 was energy, which gained 59.05%. The worst-performing sectors for the twelve months were communication services (-40.42%), consumer discretionary (-37.58%), information technology (-28.91%), and real estate (-28.45%). The S&P 500 Equal Weight Index has outperformed the market cap-weighted S&P 500 Index for the year by 6.66%, as market participants rotated out of the mega-cap technology names. Foreign markets (in U.S. $ terms) also struggled with the MSCI ACWI (ex-U.S.) Index down by 15.57%, and the MSCI Emerging Markets Index down by 19.74% for the twelve months ending 12/31/2022.

The S&P 500 is currently trading at approximately 16.7 times forward earnings estimates, essentially in line with the 25-year average of 16.8 times. However, we must point out that corporate earnings remain at risk and forward earnings are extremely difficult to predict in a recessionary environment. While the solid fourth-quarter rally was undoubtedly impressive, we believe it is too early to conclude that the bear market is over. Bear markets certainly create opportunities for long-term investors, and we continue to search for new investment opportunities on a stock-by-stock basis. Firmwide, our strategy of buying high-quality businesses at reasonable valuations remains our course of action. As always, we will attempt to use market volatility to our advantage, buying weakness and utilizing strength to reposition the portfolio as opportunities arise.

Paradigm Shift (noun) - *a fundamental change in approach or underlying assumptions* (*Oxford Languages*)

For the last fifteen years, investors have grown accustomed to zero interest rates and essentially "free money". The original intent of the "zero interest rate policy" was to help pull the economy out of the Great Financial Crisis in 2008. This emergency level of rates was accompanied by quantitative easing, which was essentially a bond-purchasing program by the Fed to inject additional liquidity into the economy. Low rates, coupled with this massive liquidity, stimulated economic growth and strong equity markets. Rather than normalizing rates after the economy recovered, the Fed continued to hold rates near all-time lows. On March 15, 2020, the Fed once again took rates to zero in response to the COVID-19 crisis. Investors were forced further into the equity markets as yields on conservative fixed-income investments were negligible, making stocks the only chance to earn any reasonable return on their money. Corporate America also adjusted to the "zero interest rate policy" by using cheap money to replace equity on the balance sheet with low-cost debt to boost earnings on a per-share basis. The insanity surrounding interest rates peaked two years ago, with negative-yielding debt totaling over $18.4 trillion in Europe and Japan. Today the worldwide sum of negative-yielding debt has declined to approximately $254 billion. Modern Monetary Theory proponents began to attract more attention as the belief that any nation with the ability to produce fiat currency[4] can simply create more money without any consequences.

Fast forward to today. Central bankers globally have found that there are consequences to zero interest rate policies and quantitative easing. Easy money, supply chain issues related to COVID-19, and the war in Ukraine all helped drive inflation to forty-year highs. The inflation genie was let out of the bottle, and now they must try to rein it back in. The Fed also began to reduce (or unwind) its balance sheet in March of 2022 in a further effort to fight inflation. In August of 2022, Fed Chair Jerome Powell warned that "American households can expect to experience pain" as the Fed aimed to bring down inflation. It is estimated that U. S. households lost nearly $7 trillion in net worth in 2022.

It is still unclear as to what the consequences will be from the Fed policy mistakes that were made over the past couple of decades. An economic recession is likely, which has negative consequences for most Americans. There will also be significant changes for investors as we move forward. While many expect the Fed to begin to lower rates later in the year, it is our belief that the base interest rate will remain higher

[4] Fiat currency is a government-issued currency that is not backed by a physical commodity, such as gold or silver, but rather by the government that issued it *(Investopedia)*.

for longer. This has ramifications for all aspects of investing. With a higher "risk-free" rate, the game changes dramatically. In The Economist Magazine[5], Alex Funk of Schroders stated: "T.I.N.A is dead and has been replaced by T.A.R.A: There Are Real Alternatives." Funk points out that "the increase in the risk-free rate affects how you think about private assets, equities, bonds, credit, everything." The T.I.N.A. acronym stood for "There Is No Alternative," implying that with interest rates hovering near zero and bond yields so low, stocks represented the only asset class for investors seeking "real" returns. The excesses created by the easy money Fed of Greenspan, Bernanke, Yellen, and Powell (first three years) have essentially been purged from the system.

We are hopeful that moving forward, market values will be determined by "price discovery", largely determined by interactions between buyers and sellers rather than by the Federal Reserve. We welcome the fact that, once again, there will be alternatives to equities. As portfolio managers for high-net-worth individuals, we view this normalization of interest rates as a positive and necessary development. It would not surprise us to see the equity markets in a trading range where active investment strategies outperform passive strategies. Passive investing was a big winner from the zero-interest rate policy over the last fifteen years. Corporate allocation of capital will likely be impacted as buybacks may make less sense at higher levels of interest rates. Going forward, many equity investors may opt for balanced strategies now that the fixed-income portion of the portfolio will no longer be a drag on total returns. While the past year has been challenging, the Investment Team at Live Oak Private Wealth has been actively discussing this "new paradigm" and its implications for our clients.

LIVE OAK PRIVATE WEALTH GROWTH STRATEGY
COMMENTARY & THOUGHTS

"This has been a train crash waiting to happen…. money now has a cost….you can't just throw money at unprofitable businesses….you need to have a much more sensible allocation of capital".

-Alexandra Morris, Chief Investment Officer, Norway's Skagen Funds

Our sleeve of high-quality growing businesses, especially our technology and communications ones like Microsoft, Apple, and Alphabet/Google, had a tough year stock price-wise. But the quote from Warren Buffett: "price is what you pay, value is what you get" fits appropriately at year-end 2022, as these businesses offer good value. Our philosophical strategy of staying invested in high-quality businesses with durable competitive advantages has served us well over time with companies like VISA, HCA Healthcare, and Charter Communications. The normalization of interest rates and resulting multiple compression for these businesses' stock prices do not deter us from their long-term attractiveness. Fortunately, we do not have a growth style "mandate", which many institutional funds do, and therefore have to own stocks like Tesla, Shopify, and PayPal.

In our first quarter letter of 2021, we used Nvidia, Shopify, and Tesla as egregious examples of stocks trading at 20 times sales and that those types of valuations are often an indicator of market over ebullience. Boy, were they ever! Our philosophy of owning businesses that would be considered "economic high ground" or trophy oceanfront property has produced dividends over the years with solid compounded returns. Brookfield Asset Management, AON PLC, Moody's Corp. and, of course, Berkshire Hathaway might not fit comfortably into the growth or value factor. Still, we feel they fit well into your portfolio.

In today's world or by today's standards, we would be considered "old school" style investment managers. Money managers are what we used to be called. We still perform fundamental security analysis with a keen eye on an investment's valuation. We do traditional due diligence. We actually go into Target stores to see a problem firsthand, if any. Recently fear of missing out (FOMO) and easy cheap money, and indexation to a degree, has led to due diligence all but being ignored. How else can one explain the SPAC implosion,

[5] The Economist, *When the Tide Turns: Rising Interest Rates & Inflation Have Upended Investing";* December 8, 2022

tech stock meltdown, FTX and crypto? Decades of easy money and a lack of traditional yield from safe alternatives have left many in the markets vulnerable to erosion of investment standards, especially the due diligence process and risk-reward analysis. The single hottest investment class over the past couple of years has been venture capital. Older veteran Silicon Valley VCs now say there has been a gradual erosion of standards as giant institutions clamored for return and witnessed eye-popping returns. They allocated large sums to unproven businesses at egregious valuations without appreciating the Zero Interest Rate Policy freak show we have been operating in.

In the context of "you never know who is swimming naked until the tide goes out"… the CEO of crypto exchange FTX, Sam Bankman-Fried, is desperately looking for a towel. FTX, barely three years old yet valued at $32 billion at its peak, filed for bankruptcy in mid-November. Ironically, Mr. Bankman-Fried was featured on the cover of *Fortune Magazine* in August of this year. Magazine covers typically will capture a moment in time and what a moment in time it has been. Recall in these letters that during the middle of 2021, we raised caution flags regarding the speculative behavior regarding crypto and bitcoin. The FTX meltdown, along with the majority of the cryptocurrency asset class decline, is another example of too easy monetary policy for too long and the resulting speculative frenzy. Institutional and individual investors, chasing yield and return aligned with the big venture capitalists, moved swiftly to allocate large sums of investor money, putting aside some customary oversight safeguards.

For those of us who have avoided the cryptocurrency field entirely and venture capital (up to this point), the FTX Crypto Exchange implosion is yet another example of how dependent certain assets are on the confidence of market participants, especially when these assets have no cash flow and therefore cannot be valued using traditional methods. Ditto for meme stocks, like GameStop or Carvana, Peloton or Zoom. Gambling and speculating on hot stocks like these, or cryptocurrencies like Bitcoin, are not part of Live Oak Private Wealth's ethos or DNA. LOPW has an extreme aversion to permanent loss of capital that can occur when speculating versus investing. Investing in businesses with wide, deep moats, priced attractively, gives us a margin of safety which is our north star.

LIVE OAK PRIVATE WEALTH GROWTH STRATEGY
FOURTH QUARTER PORTFOLIO ACTIVITY

As the markets melted further in October, we increased our position in Danaher at $257.00. We felt that Danaher's moat of limited cyclicality in their healthcare and life sciences businesses should hopefully allow for continued solid margins coupled with growing revenue. Danaher, in a vacuum, against the S&P 500, screens expensive, yet we feel that it deserves its premium multiple due to its differentiated business model and high recurring revenue. Strong secular drivers in biologics, chromatography and genomics should continue to create significant long-term growth opportunities.

We made several tax-related trades at year-end, mostly Ardagh Metal Products, Disney, and Charter. Despite the volatility, there were no other portfolio changes or activities during the quarter. The volatile fourth quarter reinforces our belief that investing remains the most extreme version of competitive learning. Fortunately, we love our craft of analyzing businesses and attempting to construct logical portfolios. The pain we encounter on a daily, weekly or (like 2022) yearly basis, we endure because we love this business, and you are counting on us. Speaking of loving the business…. Happy 99th birthday to Charlie Munger, Warren Buffett's investor sidekick. Charlie turns 99 on January 1st, 2023!

Philosophically we, on the growth team, align with notable U.K. investor Terry Smith, of Fundsmith, who claims their firm follows three key pillars:

1. Buy good companies
2. Don't overpay
3. Do nothing

We don't purposefully do nothing, but inaction can be a decision. We evaluate and appraise our companies frequently, and many times we are perfectly content to continue owning the business, even during highly volatile periods. We prefer to judge our investments by what is happening with their business and what is reflected in their financial statements rather than by the share price.

Just this fourth quarter alone, we participated in day-long investor conferences with Lowe's and United Health, where we were able to hear firsthand from management how the businesses were performing. We also tuned into several conference events where many of our investees, such as Wells Fargo, Danaher, and Ardagh Metal Products, met with sector analysts and investors and updated us on their business prospects.

Bill was fortunate to be able to attend the MOI Global Latticework Conference in New York in November and was treated to enlightening and informing presentations from notable investors Howard Marks of Oaktree and Tom Russo of Gardner Russo. Live Oak Private Wealth prides itself on performing deep due diligence and pursuing lifelong learning, which hopefully will continue to drive us to better decision-making and investment outcomes.

Largest Stock Price Percent Changes
Live Oak Private Wealth Growth Strategy

Our thoughts on positions that had the most positive impact on the strategy for the period ending 4Q2022

HCA Healthcare (HCA) (+30.56%)
HCA remains the largest acute-care hospital chain in the U.S. Blessed with attractive geographic locations; the company should continue to benefit from positive demographic factors. HCA just turned in another solid quarterly report, and while labor cost inflation (nurses) remains a challenge, the company's large scale gives it continued growth opportunities ahead.

Raytheon Technologies (RTX) (+23.38%)
RTX, the diversified aerospace and defense company formed by the merger of United Technologies and Raytheon, continues to make steady progress toward its ambitious post-merger goals. The company's Pratt & Whitney engine division benefits from robust travel, especially coupled with Airbus. The missile business continues to push ahead as global cross-border conflicts remain. The U.S. recently upped its military assistance to Ukraine, which should help RTX enjoy another good year.

Mastercard (MA) (+22.29%)
Mastercard is the second largest payment processor in the world behind VISA (which we also own). Mastercard will process well over $6 trillion in purchase transactions this year, leading to another year of robust profits. Mastercard's stock price, along with Visa, saw increased growth in processed transactions as spending continues to bounce back from pandemic-related impacts. There remains a tremendous runway ahead for future growth in electronic payments.

Markel (MKL) (+21.52%)
Markel is one of our fondest portfolio holdings. Based in Richmond, VA, Markel is primarily a property and casualty insurer, yet they focus on narrow niches with adept underwriting skills. Markel's investments, that back future claims, are more equity-oriented than most insurance companies, and the 2022 bear market hampered the shares. The company should benefit going forward as interest rates normalize, equity markets recover, and insurance pricing remains firm. We are looking forward to attending their annual investor event in May 2023.

Comcast (CMCSA) (+19.23%)
Comcast is a media conglomerate consisting of cable (TV & internet), NBC Universal and Sky, the dominant TV provider in the U.K. Comcast had a nice quarter, recovering from a lousy year, as short-term oriented investors seem relieved that the number of broadband internet subscribers held fairly stable. Comcast has been aggressively buying back stock with its excess free cash flow, and as longer-term investors, we are comforted by the necessary utility-like nature of internet access.

Our thoughts on positions that had negative or the least positive impact on the strategy for the period ending 4Q2022

Walt Disney Co. (DIS) (-7.90%)
We are all familiar with the "House of Mouse": Disney. What you may not fully appreciate is the staggering amount of money the company has invested in its streaming platform, Disney +. So far, the company has seen large losses from its streaming business, and at the same time, the linear TV business is suffering from lower affiliate fees. All this suffering has led to Bob Iger returning as CEO. The parks and resorts business remains very robust, and the Disney franchise and its characters should continue to offer some growth almost into perpetuity. If Iger can slow the bleeding with Disney+, Disney's stock should enjoy a rebound in 2023. Large, well-known activists are circling as well.

CarMax (KMX) (–7.77%)
CarMax sells, finances, and services used cars through a chain of over 230 stores and growing. Revenues have compounded 13% since 2000 because of its success with customer-friendly sales practices, technology, and its own finance arm. Obviously, the car business is cyclical and not immune to a recession. And evidently, everyone bought a used car in 2021, so demand is off. But KMX stands to benefit as weaker competitors Carvana and Vroom become less relevant, leading to market share gains and even greater scale.

Google/Alphabet (GOOG) (-7.72%)
Everyone is familiar with the search and media giant Google. Google, along with its "FAANG" cousins, has enjoyed an incredible run for the last several years as very low-interest rates, coupled with tremendous growth, propelled the shares. Macro-uncertainty is now affecting ad revenue, and the company continues to spend unabated, especially on people and high-risk bets. Multiple compression coming from higher interest rates has been the primary culprit. Hopefully, as 2023 progresses, inflation and rates will moderate, and an economic "softish" landing will prove a better environment for the shares.

Apple (AAPL) (-5.98%)
We are all familiar with, and fans of our iPhones, iPads, and Air Pods, and this company's competitive advantage is a force to be reckoned with. As the leader of the "FAANG gang", multiple compression from higher interest rates, coupled with uncertainty related to China's supply chains, affected the shares this quarter and year. Don't underestimate the Apple ecosystem's effects on customer loyalty, engagement, and retention. There is runway ahead for growth as Apple is still innovating with Apple Pay, Apple Watch, and Apple Air Tags, not to mention the sticky services revenue attached to all of these.

CVS Health Corp (CVS) (-2.29%)
CVS Health is now an integrated healthcare services company incorporating Aetna Insurance and CVS, and its myriad of pharmacy operations. The company is re-thinking its highest and best use for its 10,000 retail stores while enjoying 24 million members of its insurance arm. CVS is investing heavily in caregiving services, integrating it deeper within its insurance and pharmacy segments, which should accelerate bottom-line earnings growth late in 2023. We remain optimistic about CVS, especially its compelling valuation at year end.

LIVE OAK PRIVATE WEALTH CLASSIC VALUE STRATEGY
COMMENTARY & THOUGHTS

"Inflation is wonderful for value stocks. If you go back over the last hundred years, any decade where we had inflation higher than 4% for a decade, value historically beat growth by anywhere from 6% per year for the decade to 10% per year for the decade."

-Rob Arnott-Research Affiliates

During 2022 the Russell 1000 Value Index outperformed the Russell 1000 Growth Index by 21.6%. This past year was the first time value had beaten growth since 2016. Although the valuation gap between growth and value narrowed in 2022, value currently remains at a significant discount to growth (see chart below). The fundamental landscape has changed, and as discussed earlier, the "free money" days appear behind us. There is a growing conviction that the Fed will keep rates higher for longer, which favors value investing styles. As explained by Gabe Solomon of T. Rowe Price, "Rising inflation/interest rates tend to support value because the profit from value stocks typically comes sooner, whereas growth stocks are typically more profitable further into the future. As inflation picks up and interest rates rise, future profits have to be discounted at a greater rate, making them worth relatively less today."

Index	Price/Earnings	Price/Book Ratio	Dividend Yield
Russell 1000 Value	13.9	2.5	2.16%
Russell 1000 Growth	21.1	10.0	1.01%

A 2021 research report from T. Rowe Price, *Did You Miss the Rotation from Growth to Value?* [6] suggests that growth/value performance cycles tend to last for several years. The report, compiled by the T. Rowe Price Equity team, looked at growth and value returns dating back to 1926 and concluded that, on average, the value cycle lasted approximately 64 months, while the growth cycle lasted around 45 months. The last growth cycle lasted approximately fifteen years, the longest on record. It would seem logical to assume that the current rotation to value is in the early innings. In addition, "bear markets" have historically been accompanied by leadership changes. A rotation from mega-cap companies (heavily dominated by technology) is currently underway and appears to have further to go. The technology sector was down 28.9% in 2022, yet still trades at 20.2 times earnings, above the twenty-year average of 18.0 times earnings. At year-end, despite the swoon in price, the tech sector had an S&P 500 weight of 25.7%, compared with an average weighting of just under 18% for the past fifteen years. In summary, historical data and the current economic backdrop seem to support "value" over "growth" over the coming year. We believe our disciplined value strategy positions our clients well in what may continue to be a challenging environment.

LIVE OAK PRIVATE WEALTH CLASSIC VALUE STRATEGY
FOURTH QUARTER PORTFOLIO ACTIVITY

During the fourth quarter (11/16/2022), we sold Dollar Tree Stores from our tax-exempt accounts at $165.69 and swapped into shares of Target Corporation at $154.60. We continued to hold Dollar Tree in taxable accounts in an attempt to ease the 2022 tax burden on our clients. While we remain constructive on Dollar Tree and the turnaround, we felt Target shares were more compelling as the shares had declined by some 35% due to supply chain-related inventory issues. We expect Target, led by CEO Brian Cornell, to see earnings recover in the coming year. We have also made a number of tax-related trades in taxable accounts, where we may double a position with the intention of selling the original share purchase in 31 days to establish a tax loss. We also sold some of our positions in the fourth quarter for tax losses with our intent to repurchase the shares after 31 days. Given the challenging year in the markets, it was our belief that tax harvesting would be beneficial. We would expect some tax-related repurchases to continue into early 2023.

[6] T. Rowe Price, *Did You Miss the Rotation from Growth to Value?;* Terry Davis, February 2021

Largest Stock Price Percent Changes
Live Oak Private Wealth Classic Value Strategy

Our thoughts on positions that had the most positive impact on the strategy for the period ending 4Q2022

Boeing (BA) (+57.33%)
Boosted by recent contract wins, Boeing shares increased by over 57% in the fourth quarter. Production and deliveries of the 737 Max are recovering, and customers are also receiving deliveries of the 787 Dreamliner. At a recent investor day, Boeing management guided 2023 free cash flow to \$3 to \$5 billion and 2025/2026 free cash flow to approximately \$10 billion. Boeing shares remain at a large discount to the all-time high of \$446 per share reached in 2019.

Invesco Ltd (IVZ) (+31.31%)
Invesco shares rallied in the quarter despite disappointing 3rd quarter earnings. Asset management company shares are highly correlated with market direction, and a strong market rally in the fourth quarter would likely translate into higher assets under management (AUM) for Invesco. Invesco continues to focus on expense control and debt reduction. Invesco shares trade at approximately 12 times earnings and yield 3.8%.

Merck (MRK) (+28.83%)
Merck's third-quarter earnings came in ahead of expectations, fueled largely by growth in Keytruda sales. The blockbuster cancer drug continues to show strength across its key markets, and analysts expect the drug to remain a key driver of Merck moving forward. Merck shares trade at 15 times earnings and yield 2.6%.

JP Morgan (JPM) (+28.14%)
JP Morgan shares rallied in the quarter despite disappointing third-quarter results. We believe the banks are already discounting recessionary credit losses. Under the leadership of CEO Jamie Dimon, the bank continues to successfully enter new markets and gain market share. JP Morgan's high-quality shares trade at only 10 times earnings and yield approximately 2.9%.

TJX Companies (TJX) (+24.93%)
TJX earnings topped estimates for the third quarter despite slightly lower revenues. TJX has a unique business model and stands to benefit from the retail glut from mass merchandisers and retail woes from companies such as Bed, Bath and Beyond. We first bought TJX shares early in the pandemic when most stores were shut down. In the coming year, TJX earnings are projected to increase by 10-15%, in a year that will be challenging for the industry.

Our thoughts on positions that had negative or least positive impact on the strategy for the period ending 4Q2022

Warner Bros Discovery (WBD) (-17.57%)
Warner Brothers Discovery shares had a dismal year after the spin-off by AT&T in early April. Shares tumbled during the quarter as the company reported weak results largely due to a weak ad market. The company has a massive amount of valuable content from the Warner Brothers studio, HBO, Discovery Network, and Turner Television Network. Warner Brothers is on track to roll out its direct-to-consumer app combining HBO Max and Discovery+ in the first half of 2023. WBD's healthy free cash flow is expected to be used to deleverage the balance sheet over the next few years.

Walt Disney Co (DIS) (-7.90%)
Disney shares declined in the fourth quarter as the company missed expectations, largely due to weakness at Disney +. Disney's theme parks reported robust growth, and operating income doubled from the previous year. It should be noted that in late November, Disney replaced CEO Bob Chapek with Bob Iger, who ran

Disney for fifteen years before retiring in 2020. The weak share price at Disney has recently attracted activist investor Nelson Peltz of Trian Fund Management. Peltz has formally launched a battle for a board seat to rescue Disney from what he called a "crisis from overspending on the streaming business". We like the idea of being invested alongside Peltz, who has a long history of creating shareholder value. Disney shares are also owned by Live Oak Private Wealth's Growth Strategy.

Alphabet (GOOGL) (-7.76%)
Alphabet's third-quarter earnings were down 27% to $13.9 billion, while revenues climbed 6% to $69.1 billion. YouTube's growth slowed due to competition from TikTok. In addition, concerns over a weak ad market have weighed on the shares in recent months. Alphabet's balance sheet is rock solid, with approximately $116 billion in cash versus $14.7 billion in long-term debt. We believe the shares are extremely attractive at essentially a market multiple of around 18 times trailing earnings. Shares of Alphabet are also a holding of the Live Oak Private Wealth Growth Strategy.

Roche Holding AG ADR (RHHBY) (-4.69%)
Roche is a Swiss-based company that is a market leader in biotechnology and diagnostics. In 2021, Roche used its strong balance sheet to repurchase 53 million of its shares held by Novartis. The firm's best-selling pharmaceutical products include a number of oncology therapies from wholly-owned Genentech. Roche shares declined approximately 20% in the past year and, we believe, represent great value at approximately 14 times earnings. Roche shares are also owned in the Live Oak Private Wealth International Strategy.

Volkswagen AG (ADR) (VWAGY) (-3.69%)
German-based Volkswagen has a broad array of brands, including Audi, Porsche, Bentley, Lamborghini, Volkswagen, Skoda and Seat. In September, Volkswagen sold 25% of its equity stake in Porsche in an initial public offering, with half of the proceeds paid to shareholders via a dividend. The remaining funds will be used to help fund the transition to electric vehicles. The shares of VWAGY appear attractive on a sum-of-the-parts basis, and we believe the IPO of Porsche will be the catalyst that unlocks value in the shares.

LIVE OAK PRIVATE WEALTH INTERNATIONAL STRATEGY COMMENTARY & THOUGHTS

Despite a nice fourth-quarter rally, the MSCI-ACWI Index lost 18.36% for 2022. It was another difficult year for international stocks as rising rates and other macro factors strengthened the U.S. dollar. To close out the year on a very sour note, we finally concluded, very late, that China proved to be uninvestable. At the end of October, when China's top political body, the Politburo Standing Committee convened, Chinese leader Xi Jinping delivered a show of force. The show of force was a leadership reshuffle, stacking the deck with communist loyalists versus other key politicians seen as more favorable to market-friendly policies. We felt this show of uncompromising force against some of the best Chinese growth companies and against capitalism would most likely further insulate China's drive for self-reliance and most likely will be negative for overall growth.

We have been wrong from the beginning in our assessment of these potential geopolitical risks in China and our allocation to four growth-oriented Chinese (tech-type) e-commerce stocks. This latest shakeout was too much for us to swallow, and we, like many others (it seems), sold out of all our Chinese exposure. We despise capitulating into such a rout. We are experienced enough not to have found ourselves in this position, as we should have faced the facts that the markets were telling us throughout 2021 and 2022 that the risks outweighed the rewards. We were dead wrong in our assessment that the below-market valuations in our four positions discounted the geopolitical and macro risks in China.

Many will say this is why investing overseas is difficult. They are right to a degree. But with valuation discrepancies this wide compared to the U.S. – we believe it would be a mistake to dismiss the currently available opportunity set. With 8 billion in the worldwide population, approximately 350 million, or only 4.5%, reside in the U.S. Over 50% of the global population lives in the Asian region alone. Outside the U.S., there are many financially healthy growing businesses with strong competitive positions. Our aim is to own more of these going into 2023. We would not be surprised if international stocks outperformed U.S. stocks as a whole in 2023.

LIVE OAK PRIVATE WEALTH INTERNATIONAL STRATEGY
FOURTH QUARTER PORTFOLIO ACTIVITY

In October, we opted to close out our four positions in Chinese technology and e-commerce companies: Alibaba, TenCent, JD.com, and Baidu. We allocated most of those proceeds into additional Ferguson, Holcim, and Taiwan Semiconductor shares.

In our view, Ferguson (FERG) remains well positioned in its plumbing and HVAC business due to the balanced exposure to both residential and non-residential end markets, as well as the non-discretionary nature of maintenance and repair and ongoing renovation upgrades. The company's balance sheet and geographic focus are much improved versus prior down real estate cycles.

Holcim (HCMLY) is truly a global business specializing in cement, ready-mix concrete, and aggregates (crushed rock). Having just completed a successful transformation, we believe the company is growing nicely from resilient demand and innovation, especially new sustainable value-added products. We are comforted further by the company's free cash flow generation and rising return on invested capital.

Taiwan Semiconductor (TSM) is the world's largest dedicated chip foundry with an illustrious customer base that includes Apple, Advanced Micro, and Nvidia. Fortunate to have developed cutting-edge process technology, TSM enjoys higher margins than competitors and possesses tremendous scale. TSM is forecasting 15-20% earnings growth and yet trades for a below-market multiple.

At the European Investing Summit October 11th – 13th, we listened to and participated in 15+ European company presentations. We were especially keen on pitches from investors related to stocks we already own and admire, such as Lanxess, Holcium, and Ferguson.

At the risk of repeating ourselves, the international markets continue to offer many opportunities, in our opinion. Valuations are much cheaper in Europe and emerging markets. Diverging monetary policy and economic backdrops, as well as investors having little allocated abroad, could allow international equities to outperform. The current very strong U.S. dollar could weaken somewhat if inflation is peaking and the U.S. Fed is close to its terminal rate.

Largest Stock Price Percent Changes
Live Oak Private Wealth International Strategy

Our thoughts on positions that had the most positive impact on the strategy for the period ending 4Q2022

Siemens AG (SIEGY) (+40.53%)
Siemens is a well-known European blue-chip industrial conglomerate specializing in factory automation, railway equipment, electrical distribution, and medical equipment. As the world has become more digital, the company is gaining share with its leading portfolio of industrial automation hardware and software. With increasing electrification globally and greener energy initiatives, the company's smart infrastructure offerings offer tailwinds for growth. Additionally, medical imaging equipment (CT scanners, etc.) is well positioned due to increased global healthcare demand.

Lanxess AG (LNXSF (+39.66)

Lanxess is a leading specialty chemical company with core businesses in the development, manufacturing, and marketing of chemical intermediaries, additives, specialty chemicals, and plastics. The company has been in a multi-year transformation away from lower margin commodity chemicals when the Russian/Ukraine conflict disrupted Europe. Worries about the consistent flow and price of natural gas in Europe have been a major drag on the stock, and fortunately, that concern is abating somewhat, as are hard-landing recession risks in Europe.

Airbus Industries (EADSY) (+38.15%)

Airbus is a major global aerospace and defense firm that designs and manufactures commercial and military aircraft. In their cozy duopoly with Boeing, the two capture the overwhelming majority of commercial planes with 130 seats and up. Airbus is well positioned to benefit from emerging market growth in revenue passenger miles and continued market replacement cycles for the popular and valuable narrow-body aircraft. Supply chain constraints and European recession worries abated somewhat this quarter.

Safran SA (SAFRY) (+35.68%)

Safran designs, develops, and manufactures jet aircraft engines. Safran is a 50% owner with GE Aerospace of CFM, a joint venture which manufactures engines used by Boeing and Airbus. The company has successfully understood the importance of the narrow-body aircraft market, and its engines have propelled the company to grow nicely. All of these engines are required to be serviced, and as miles flown recover from the pandemic, Safran stands to benefit.

Entain PLC (GMVHY) (+34.78%)

Entain, based in the U.K., operates in the sports betting industry along with DraftKings. The company's largest unit is BetMGM (which is 50% owned by MGM) and has a significant share (25%) of the U.S. market. The U.S. market for sports wagering continues to grow as states look for additional incremental revenue sources. Liquidity (trading volume) for the stock is low, and European recession risks dramatically affected Entain's stock price this year. We remain optimistic, especially given MGM's interest in the company. Recall Entain turned down two offers of purchase by MGM at higher prices.

Our thoughts on positions that had negative or the least positive impact on the strategy for the period ending 4Q2022

Spotify (SPOT) (-8.52%)

Stockholm, Sweden-based Spotify is one of the world's largest music streaming providers, with over 150 million subscribers (Bill being one of them). In an ever-changing music industry coupled with the popularity of podcasts, Spotify can continue to grow from various network effects that enable subscriber growth. The shares have struggled mightily as multiples came crashing down with interest rate increases and the market's perception towards companies with no earnings. SPOT is the only business in our portfolio that is not yet profitable due to its massive investment spending. We believe that at these valuations, we have optionality to the upside.

Roche Holdings (RHHBY) (-4.69%)

Roche is a Swiss biopharmaceutical and diagnostic company that specializes in a variety of oncology therapies and point-of-care diagnostics. The company's leading-edge drug portfolio puts Roche in a unique position to grow global healthcare with more personalized and hopefully more cost-effective treatment in oncology. Blessed with a large R&D budget, Roche's pipeline of new novel drugs is robust, especially late stage. Slightly similar to our investment in Danaher, the unique in-house collaboration between its diagnostics and drug development groups gives Roche an advantage in personalized cancer treatments.

Daikin Industries LTD (DKILY) (-1.31%)
Daikin is possibly a company you have never heard of, yet they are the world's largest manufacturer of air conditioners. Domiciled in Japan, Daikin has been challenged for several years due to pandemic supply chain issues out of China. HVAC businesses benefit from an increasing installed base, so a slowing real estate economy can have impacts, but we are encouraged by data from the International Energy Agency (IEA) that A.C. demand is projected to triple by 2050 due to economic growth in emerging markets. On top of that, the most recent Inflation Reduction Act passed by Congress in 2022 enhances two tax credits that reward "green" A.C. updates to your house.

ICON PLC (ICLR) (+5.70%)
ICON is a contract research organization (CRO) that provides drug phase development and clinical trial services to drug and biotech companies. ICON is more exposed to late-stage (Phase 2 and 3) clinical trials, which are more complex and lend a competitive edge to Icon. The CRO business enjoys steady demand from big pharma as research and development spending is not that economically cyclical, and government and educational funding for medical research remains somewhat recession resistant.

Nestle (NSRGY) (+6.02%)
Nestle has been in Bill's legacy portfolio long before the inception of Live Oak Private Wealth. Most are familiar with and use many products from the company. You may not appreciate that 150-year-old Nestle is the largest food and beverage manufacturer in the world by sales. They own 20% of the French cosmetics firm L'Oréal and are the second largest pet food company in the world. The breadth and diversity of products and its geographic reach are immense, and its global distribution network and entrenched supply chain relationships render the company one of the top platforms with a global scale. We participated in Nestle's Investor Day in Barcelona (virtually, unfortunately) and came away quite confident in the long-term opportunities for the company's growth.

FINAL THOUGHTS

So, as we close out a very challenging year, we can be inspired going into 2023 with two new intriguing and exciting developments: (1) ChatGPT and (2) nuclear fusion. Many of us have been fascinated by ChatGPT, the artificial intelligence chatbot. Developed by AI power player OpenAI (with Microsoft as an investor), the online tool lets you type questions using natural language, to which ChatGPT gives conversational answers derived from vast volumes of information (data) on the internet. We tried it out recently by asking the chatbot – "what is the difference between the value investing style and growth?" It answered:

> *Value investing and growth investing are two different styles of investing that seek to generate returns by buying and holding securities for a long period of time.*
>
> *Value investing is a style of investing that involves buying securities that are believed to be undervalued by the market. Value investors look for companies that are trading at a price that is lower than their intrinsic value, with the expectation that the market will eventually recognize the company's true value and the price will rise. Value investors typically focus on financial metrics such as price-to-earnings ratio, dividend yield, and return on equity when selecting securities.*
>
> *Growth investing, on the other hand, is a style of investing that involves buying securities in companies that are expected to grow at an above-average rate. Growth investors look for companies that are growing their revenue and earnings at a fast rate than the market average and are willing to pay a premium price for their shares. Growth investors may focus on metrics such as revenue growth, earnings growth, and the potential for future growth when selecting securities. In general, value investing tends to be more conservative, as it focuses on buying undervalued securities that have a margin of safety. Growth investing, on the other hand, tends to be more*

aggressive, as it involves buying securities in companies that are expected to grow at an above-average rate, often at a premium price.

Amazing. Frank couldn't have said it better himself! No wonder ChatGPT gained 1 million users in 5 days.

Equally intriguing and exciting is that after 60 years of scientific experiments and physics challenges, an army of lasers inside the National Ignition Facility of the Lawrence Livermore National Laboratory successfully produced a nuclear fusion reaction. By replicating the fusion that powers stars and the sun, the result of the experiment would be a giant step forward in a quest for near-limitless clean energy. Scientists have described nuclear fusion as the holy grail of energy production.

So, in a year of not many positive financial developments, we have two beneficial and fascinating evolutions. Two more examples of why you never want to short USA Inc. and to remain positive in the long term.

So, we opportunistically look forward to a new year in 2023. Hopefully, the bear market will run its course, and the lows we witnessed in October will prove to be the bottom. We can't know. When studying investment history and looking at past bear markets, the data and conditions that are typically consistent with a bottom, unfortunately, haven't been reached yet. We may have seen a peak in reported inflation (in this cycle,) and maybe interest rates are closing in on a peak (but likely not headed down), but we haven't seen the earnings deterioration that is typical of bear markets (yet). History would show this is needed for a true bottom. 2023 may bring with it lower corporate earnings as the lag effects from 2022 affect margins. There is a better-than-decent chance that stock prices have already sniffed this out, and we won't see a repeat of 2022.

What we can feel fairly certain about is that the incredible tailwinds of declining interest rates for the last 40 years have abated, and globalization is slowing or reversing. We enter 2023 with a paradigm shift. The silver lining in this significant shift is that now investors can invest more rationally without seeming like they are in a house of mirrors. As rates normalize further, decent risk-adjusted returns from fixed income will allow many conservative investors not to have to chase yield and experience undue volatility by carrying a slightly higher allocation to fixed income.

That is about all we are willing to forecast because, typically, the biggest risks are the ones no one sees coming. In January 2020, we were unaware of the risks of Covid, and a year ago, we were vaguely concerned about Russia/Ukraine. As they say, "risk is what is left over when you think you've thought of everything."

With certainty, we do know one thing: 2023 will be a great opportunity to sit down with your Live Oak Private Wealth advisors and review your specific investment goals and see firsthand how you are tracking toward your plan. It might be an opportune time to adjust or re-calibrate your specific asset allocation to better match your goals and tolerance for volatility, especially now that fixed income is investable again. We are proud to be a part of a very talented team of financial professionals steeped and experienced in comprehensive wealth planning and management.

We feel one of our most important functions as investment managers is communicating with you. As we turn the page on a new year, we are adjusting the cadence of these investment commentary letters. First, not that much happens every ninety days with our investees and, at times, we struggle to come up with reasons and words as to why one of them was up or down meaningfully when typically, it is just short-term market volatility. So, you will see us move to three letters per year going forward, unless there is something significant to report on. This also allows others on our team to communicate with you on other important aspects of your financial life, such as pre-retirement planning, trust and estate planning, family wealth transfer dynamics, insurance, and more. Live Oak Private Wealth prides itself on being a comprehensive wealth advisory firm, and there are many aspects of your wealth that are equally, if not more so, important to your financial well-being. Be on the lookout for additional communications from our financial planners and trust and estate specialists.

Live Oak Private Wealth proudly operates and adheres to all compliance regulations from the Securities and Exchange Commission (SEC). One notable, important change with the SEC requirements/protections this year relates to SMS texting with your wealth advisor. We all understand and appreciate the convenience and efficiency of texting, but we have been asked to communicate to you a change regarding these message communications. Our team would prefer for you to use a direct phone call or email (which is archived) when communicating with your advisor. Still, to the extent you wish to communicate via SMS text to your advisor, he or she will be giving you a different number to text to that is separate/different from their personal cell phone number. The messages will be delivered to their phones the same way but come in/out through a compliance-approved app on the advisor's phone, which will be archived. Thanks for your understanding as we transition to these new numbers.

The "business" of Live Oak Private Wealth is very solid, enjoying another year of growth, notwithstanding the challenging public markets. Much of our success is because of you, and we are grateful for your willingness to compensate us for something we love to do and is so important to us all.

Our "A" team of Amy, Andy, Angel, Bill Collier, Connor, Daniel, Jan, Missy, Laura, and Terry, along with us, looks forward to a happy, prosperous, and healthy new year.

We all look forward to our continued shared success together.

With warmest regards,

Frank G. Jolley, CFA
Co-Chief Investment Officer

J. William Coleman, III
Co-Chief Investment Officer

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