January 24, 2025

Dear Sequoia Shareholders:

Sequoia Fund's results for the quarter and year ended December 31, 2024 appear below with the results of the S&P 500 Index for the same periods:

Through December 31, 2024	Sequoia Fund	S&P 500 Index
Fourth Quarter	-0.04%	2.41%
1 Year	20.79%	25.02%
3 Years (Annualized)	2.37%	8.93%
5 Years (Annualized)	10.67%	14.51%
10 Years (Annualized)	8.02%	13.09%
Since Inception (Annualized)**	13.32%	11.36%

The performance data for the Fund shown above represents past performance and assumes reinvestment of dividends. Past performance does not guarantee future results. The investment return and principal value of an investment in the Fund will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted. Performance data current to the most recent month- end can be obtained by calling SS&C GIDS, Inc. at (800) 686-6884.
***Inception Date: July 15, 1970.*

Sequoia Fund returned 20.79% in 2024, versus 25.02% for the S&P 500. Since the Investment Committee began managing the Fund in June of 2016, Sequoia and the S&P 500 have compounded at 12.33% and 14.87%, respectively.

Our goal is to outperform the S&P 500 over the long term. From June 2016 through the end of 2021, the Fund and the S&P 500 compounded at a nearly identical 18.2%. Since then, the Fund has fallen behind the S&P 500.

In the end, the scoreboard will indicate clearly whether we accomplished our goal of beating the market. Along the way, though, our job requires us to maintain an even keel. We must acknowledge and consider the market's momentary judgments, but we must not reflexively take them as fact. When we reflect in this manner, we feel confident about the Fund's prospects.

We currently see a stock market that is far from cheap, rising at rates that are simply unsustainable in the long term, and extremely narrow by historical standards. Remarkably, a mere seven stocks accounted for nearly two thirds of the S&P 500's return in 2023 and half of its return in 2024. The "Magnificent Seven" now comprises over a third of the Index.[1] The market has never been – not at the peak of dot-com bubble, not during the heyday of the Nifty Fifty, not even in the final days of the Roaring Twenties – this concentrated.[2]

The Magnificent Seven is an undeniably impressive collection of businesses, all of which we have studied. It is certainly possible that their shares deliver long-term, market-beating returns from here. However, with two exceptions,

[1] Data sources: Standard & Poor's and FactSet. Contribution calculated using starting year weights and stock price change as compared to S&P 500 index price change.
[2] Goldman Sachs Global Macro Research, "Market Concentration: How Big a Worry?," Top of Mind, Issue 133 (2024): 8.

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we are unwilling to make that bet at current prices. We like great businesses, but we do not like prices that demand exceptional outcomes.

The company-by-company approach we take to managing the Fund has produced a portfolio that we prefer to the Magnificent Seven-heavy one embodied by the S&P 500. This preference is making it hard for us to outperform the market. To wit: the S&P 500 market capitalization-weighted Index, our benchmark, was up 25.0% this year and 26.3% last year, whereas the S&P 500 equal-weighted Index was up 13.0% and 13.8% over the same periods. These two indices do not move in lockstep, though if history is any guide they will converge over the longest term. Right now, the cumulative outperformance of the market capitalization-weighted Index is greater than we have seen in 25 years.[3]

We will not be thrown off by this dynamic. There always have been and always will be companies and accompanying trends that we, sometimes thankfully and sometimes regretfully, choose not to invest behind, and there will inevitably be periods of time when these companies and accompanying trends are leading the market.

What ultimately matters, though, is not whatever might be going on outside our portfolio at any given point in time, but rather the wisdom of the decisions we make inside the portfolio. These are highly company-specific decisions, and it is impossible to prove anything about them in the moment. The market sometimes acknowledges the wisdom of a decision in relatively short order, while in other cases it cedes the point only after long-term fundamentals settle the matter.

Rolls Royce is a good example. At the end of 2019, its share price stood at 234 pence (US $3.11). Several months later, in the depths of the pandemic, the share price reached a low of 39 pence (US $0.50). Fast forward to today, and the shares are at an all-time high of 612 pence (US $7.56), up 17-fold from the bottom and up over two-and-a-half-fold from year-end 2019. Rolls Royce is now the Fund's single largest holding.

To be sure, Rolls Royce endured an unusually challenging set of circumstances over the past few years. The global pandemic reduced global flying hours by 90%. The financial pain was acute, and near-term business visibility was extremely low. However, it was obvious, or should have been, that the situation was temporary. Flying hours would eventually recover and with them Rolls Royce's business. This is precisely what has happened. We submit that the market simply got Rolls Royce wrong at the bottom.

Of course, not every investment entails such a wild ride. The point, though, is that whatever trends and dynamics might be driving market returns this or that year, there are always high-quality businesses trading for less than intrinsic value. Identifying and capitalizing on these opportunities requires elbow grease, keen analysis, and a level head. It is not an easy task, but it is a doable one.

We remain 100% focused on making sound assessments of individual businesses and investments. We pay little attention to whether we are "underweight" or "overweight" this or that sector, and we certainly do not target exposure to the Magnificent Seven or whatever the market leaders of the day might be.

We are also realistic about long-term returns. Making predictions about the market is dangerous, but we are willing to make this one: in the longest term, it will not compound at over 25%, as it has over the past two years. We will go further: in the longest term, it will not compound at 15%, as it has since June 2016, and which puts it roughly 20% above its 50-year annualized return. The market's compound is ultimately constrained by the growth of corporate profits and, even more fundamentally, the growth of the economy.

What goes for the market compound also goes for the Fund's compound. In the long term, the Fund's compound will be driven to a significant extent by the fundamental performance of the businesses we own. If we are doing our job and buying businesses for less than intrinsic value, the Fund will compound somewhat faster than the businesses

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[3] Data sources: Standard & Poor's and FactSet. Based on 2-year and 5-year rolling annual total returns of the S&P 500 Index and the S&P 500 Equal Weight Index.

themselves grow. In that case, we should get a long-term compound that pleases, both on an absolute basis and relative to the S&P 500.

In fact, this describes well the drivers of the Fund's longest-term performance. Over multiple decades and through multiple portfolio management regimes, the Fund has "missed" more trends than it has caught. Nevertheless, business growth and price discipline got the job done.

We firmly believe that we are currently executing our strategy as crisply as ever. Recent refinements to our process have increased productivity and, more importantly, are keeping us even more squarely focused on investments that are in our strike zone.

Our investment process ultimately manifests in the portfolio, which at year-end was comprised of twenty-two companies. The Fund is concentrated, but at the same time spans a variety of industries, business models, and geographies. The underlying businesses are all high-quality and attractively priced relative to their competitive position, operational prowess, and likely earnings growth.

As usual, the Fund's top ten holdings account for the majority of invested capital, totaling 63.3% at year-end. To a significant extent, these ten holdings will likely drive the Fund's long-term performance. We offer a summary of each of these investments at the end of this letter.

In a reflection of our confidence in the portfolio, turnover in the Fund was low last year, at approximately 7%. This relatively small amount of activity can be bucketed into exits, trims, adds, and new positions.

Exits this year included Carmax and Lumine. The Fund received a small allotment of shares in Lumine through a mid-2023 spin-off out of Constellation Software. Lumine's business is very similar to, albeit much smaller than, Constellation's. We sold our Lumine shares this year after the company's valuation expanded to over 45 times our estimate of forward earnings.

We exited our investment in Carmax in staged fashion over the course of this year. As we explained in last year's letter, Carmax remains a high-quality used-car operator with an enviable multi-decade track record of growth. The company continues to refine its omnichannel business model. We believe Carmax's omnichannel transformation is strategically sound, but the magnitude and pace of investment has pressured earnings to a greater extent than we anticipated.

Carmax also continues to wrestle with a weak used-car market. This situation is sure to normalize, but there is no guarantee that it will do so quickly, nor is there any guarantee that a general economic downturn will not sap used-car demand in the meantime.

We ultimately decided to exit our investment in Carmax given the evolving business model, cyclical exposure, and a valuation that we view as fair but not compelling.

Notable trims this year included Taiwan Semiconductor, SAP, Jacobs Solutions, Capital One Financial, and Rolls Royce. We continue to be invested in each of these companies, and we remain confident in their prospects going forward. Below, we discuss two of the larger trims.

Taiwan Semiconductor's share price soared 90% this year, prompting us to trim our position in the fourth quarter. This share price performance was a function of strong and improving fundamental performance as well as an accompanying inflection in investor sentiment. The company's revenues and profits grew on the order of 30% this year, as an industry-wide cyclical soft patch naturally hardened and gave way to a boom in demand among AI-centric datacenters. Since our investment in Taiwan Semiconductor over five years ago, the company has only strengthened its already strong position. It is an excellent company with a bright outlook. In acknowledgment of the geopolitical tension around Taiwan, we trimmed our position at an expanded but still reasonable valuation. The resulting weighting feels more appropriate given the balance of risk and reward.

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SAP's share price climbed nearly 60% in US dollar terms this year, as the company turned in a very strong fundamental performance and investors raised their expectations. It now looks clear that SAP has a several-years-long runway of double-digit topline and bottom-line growth ahead of it as it converts its huge and loyal installed base of enterprise software customers from on-premise licenses to various flavors of cloud-based subscriptions.

The extensive research we did in 2020 and 2021 led us to believe in, and ultimately bet on, this outcome. We are grateful to the management team, which has done a far better job than we could have reasonably hoped for, and which is poised to create a lot of value over the coming years. We sold some of our shares this year because they had appreciated so much more rapidly than the underlying business had grown. We retain a majority of our shares because SAP is a vital, enduring kind of business, and we know a good management team usually delivers happy surprises to shareholders.

Notable adds this year included Universal Music Group, Charter Communications / Liberty Broadband and Eurofins. Below, we discuss two of the larger adds.

We added to our position in Universal Music Group after the shares swooned, by as much as 23% at one point, in response to a mid-year earnings release that was in the aggregate positive, but did reveal slower than expected growth in paid streaming revenue in the second quarter.

Some market participants now seem to fear that paid streaming, which has been a primary growth driver for Universal Music Group over the past several years, is nearing maturity. Based on our research, we conclude otherwise. Paid streaming has gone mainstream in certain, but not all, developed markets. In developing markets, paid streaming is just getting going. Furthermore, we believe that the average retail price of paid streaming will increase over time, through both like-for-like price increases and product segmentation. Higher average retail prices for paid streaming mean more revenue for Universal Music Group.

Stepping back, we continue to believe that we are in the relatively early days of the digital music era. Paid streaming is currently where most of the money is for the music industry, but giant and growing digital platforms – like Meta's Instagram and Reels, YouTube's long-form video and Shorts, and TikTok – represent large opportunities. Music has already proliferated widely across these platforms, and the labels just need to keep working towards commercial agreements with these platforms that more fully compensate for use of this intellectual property. Recent developments on this front have been, in the main, encouraging.

Given the critical role that music labels play in the music ecosystem, we believe Universal Music Group will directly and assuredly benefit from the long-term growth of monetized digital music. We would note that the three "major" labels, of which Universal Music Group is the largest and most profitable, collectively control approximately two thirds of all the commercially relevant music in the West.

As you may recall, the Fund's existing investment in Charter Communications is through our shareholdings in Liberty Broadband, a holding company whose primary asset is a 28% stake in Charter. We added to our investment in Charter this year, though this time around we bought shares in Charter itself. There are reasons to prefer Liberty Broadband over Charter, and vice versa, but our investment in both securities is predicated on Charter's business.

With over 30 million subscribers across 41 states, Charter is the second largest cable operator in the United States. The company provides a variety of services, but given trends over the past many years, it is broadband, an essential service in this day and age, that is now the linchpin of the offering.

Charter has faced a few different challenges over the past three years, but most concerning was the entry of fixed wireless into the broadband market. We have spent considerable time working to understand fixed wireless and the threat it might pose. The short of it is that we believe fixed wireless is here to stay but will remain in the end a niche product. Fixed wireless is inferior to wired broadband, and on a fully loaded basis it does not make economic sense for the companies providing it. Wireless players are offering it because they happen to find themselves with excess capacity.

However niche fixed wireless is, it is negatively and noticeably impacting cable subscriber growth. The fact is the broadband market is relatively mature. Accordingly, we have tempered our growth expectations for Charter. However, Charter's valuation in the spring of this year reached a level that implied a perpetually declining business, which did not square with our fieldwork. Share price performance and fundamental business results since our recent purchases have been promising.

Finally, we initiated one new position this year, specifically in ICON plc. The company is one of the world's largest Contract Research Organizations (CROs). ICON and the CRO industry more generally run clinical trials on behalf of biopharmaceutical companies. Drug development is an inherently costly and risky proposition. On average, it costs over $1 billion to develop a single drug, and only 10% or so of drugs that enter clinical trials ever reach commercialization.

For many years, large pharmaceutical companies have increasingly outsourced their clinical trials to CROs, which focus exclusively on this activity and whose global scale promotes cost efficiency. Smaller biotechnology companies, which tend to be cash-strapped, and which also tend to lack the internal infrastructure necessary to support clinical trials, outsource to CROs at even higher rates.

As a result, the CRO industry has grown faster than underlying biopharmaceutical industry development spend for many years. This trend has been moderating over time, though with roughly half of development spend still insourced, we believe outsourcing penetration still has some room to run.

The biopharmaceutical industry encompasses thousands of players, but industry spend is quite concentrated. Just 10 biopharmaceutical companies account for approaching half of industry development spend. ICON's business is similarly concentrated. As a result, pipeline developments or changes in outsourcing strategies at ICON's larger customers can have a noticeable impact on the company's financials.

This is precisely what happened to ICON this year. Demand from two of the company's largest customers weakened noticeably. This situation was exacerbated by malaise in the broad biotech funding environment and general softness in large pharmaceutical development spending. These brewing negative developments came into particularly sharp focus with the release and discussion of third quarter earnings. The shares promptly headed south, and at one point were down as much as 47% from an all-time high reached just months earlier. We took notice. We acquired our shares way off the highs and, more importantly, at what we consider an attractive price.

ICON is still expected to grow, albeit modestly, its revenue and earnings this year and next year. In any case, we believe ICON's long-term business fundamentals remain fully intact. The company is one of a few massively scaled players in the CRO space. Heated and healthy debate around drug pricing will inevitably continue, but society's demand for life-changing drugs is insatiable, and the science has never been more promising. It is difficult to know which drugs will be the next winners, or which companies will come up with these winners, but CROs, particularly a large one like ICON, will inevitably play a significant role in developing them.

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In team news, Patrick Dennis, our Chief Financial Officer, was elected partner at the end of the year. Pat joined Ruane, Cunniff in 2017 and has distinguished himself from day one through not only his finance-oriented capabilities, but also a can-do attitude that is particularly valued at a small firm like ours. We are thrilled to have him as our partner.

As we communicated in a Fund update this October, Chase Sheridan has been dealing with a health issue for several years now. Due to the increasing demands it is placing on his time and his desire to spend more time with his family, Chase decided to step down from his positions as a member of the firm's Management and Investment Committees. Chase continues to be an analyst at the firm. The Investment Committee is now reduced to three members: Arman, John and Trevor.

Though his responsibilities have changed, Chase continues to play an important role in nurturing the culture that serves as the foundation of our firm. We now benefit from his insights less frequently than we would prefer, but they remain as valuable as ever. He also continues to find time to mentor our younger analysts, a part of the job about which he has always been passionate and generous. We are so very fortunate and proud to call Chase our partner and friend.

As ever, we are grateful for your partnership and loyalty. It is an essential ingredient of the long-term investment strategy handed down to us by Bill and Rick. We feel not only a responsibility, but also a calling to perpetuate this strategy to your long-term benefit.

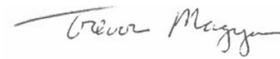
We look forward to seeing you in-person at our upcoming Investor Day on Thursday, May 15th. It will be held once again at the Times Center, at 242 West 41st Street in Manhattan. Look for more details in the coming weeks. In the meantime, we wish you and yours health and happiness in the new year.

Sincerely,

The Ruane Cunniff Investment Committee

Arman Gokgol-Kline

John Harris



Trevor Magyar

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Sequoia Top 10 – Dec 31, 2024

Rolls-Royce
(8.9% of Sequoia's capital at year-end, 86.1% total stock return in 2024)

Shares in Rolls Royce surged 86% in US dollar terms in 2024, bringing its impressive two-year cumulative return to over 535%. We expect the company's revenue will have grown in the mid-teens in 2024, with earnings per share and free cash flow growing faster at roughly 30% and 70%, respectively.

This year, flying hours across Rolls' fleet of installed engines finally eclipsed 2019 levels, which of course helped fundamental business performance. However, ongoing market share gains and an accompanying improvement in the mix of the company's installed base of engines are now reasserting themselves as the key drivers of business growth. To remind, Rolls is delivering more than one out of every two engines entering service on new widebody aircraft and nearly two out of every three engines powering large cabin business jets. These more modern and more powerful engines produce more revenue than the older and less powerful engines that drive the bulk of the company's business today.

Rolls continues to evolve its pricing strategy. The company is now aiming not just to capture inflation, but also to price more to value in a way that is a win-win for the company and its customers. We expect this pricing strategy will pay dividends for years to come.

We expect Rolls' Civil Aerospace segment will have produced an operating profit margin exceeding 16% in 2024, versus the 11.5% margin it reported in 2023. Ongoing share gains and improvements in mix have certainly helped, but there is no doubt that CEO Tufan Erginbilgic and his team are running the business more crisply and urgently than it has ever been run. We believe margins can continue to increase from current levels on account of fundamental drivers and continued strong execution.

Outside of Rolls' core Civil Aerospace business, the news continues to be good. While we expect the Defense segment will have grown only nominally in 2024, major new program wins in recent years bode well for the future. The change in the US administration may, or may not, lead to volatility in defense spending, but regardless, it is worth remembering that Rolls is also a leading defense contractor in the UK and Europe, where we are currently seeing a generational increase in spending in response to Russia's invasion of Ukraine.

We expect Rolls' Power Systems segment will have grown profits by double-digits in 2024, thanks to operational improvements and strong AI-driven demand for backup power systems for datacenters, where Rolls has a leading market share.

Finally, we have Rolls' small-modular-reactor nuclear business. The business is nascent but continues to show signs of promise. In October, Rolls was selected to build small-modular-reactor nuclear power plants in the Czech Republic and was down-selected as a finalist in the UK, Sweden, and the Netherlands.

Rolls is currently our largest investment. At the current share price, it trades for a low-to-mid-twenties multiple of our estimate of forward cash earnings per share and a high-teens multiple when we adjust for the significant but temporary negative impact of industry-wide supply chain issues as well as its currency hedge book. We consider this an attractive valuation, though we trimmed our investment modestly in the fourth quarter as its weighting approached 10%.

Intercontinental Exchange
(7.8% of Sequoia's capital at year-end, 17.5% total stock return in 2024)

Shares in Intercontinental Exchange rose 17% in 2024. Despite the persistence of one of the worst mortgage origination markets in decades, the company's reported results were solid. We expect revenue and earnings per share will have grown by roughly 16% and 8%, respectively, in 2024.

As a reminder, Intercontinental has made substantial moves in the mortgage technology space over the past few years. In late 2020, the company acquired Ellie Mae, the largest US mortgage origination software platform, for $11 billion. Just a few years later, it completed its $12 billion acquisition of Black Knight, the largest US mortgage servicing software platform. These strategic acquisitions put Intercontinental at the center of the US mortgage ecosystem, with over 50% of all new mortgages passing through the Ellie Mae system and over 50% of all existing US mortgages serviced by Black Knight's system.

We expect Intercontinental's mortgage segment revenue, which accounts for roughly 20% of total company revenue pro forma for the Black Knight acquisition, will have been down slightly in 2024. However, we believe the company's mortgage strategy is sound and offers a solid foundation for long-term growth once the clouds over the mortgage market clear.

Intercontinental's other two segments – Exchanges and Fixed Income & Data Services – continue to perform well. We expect Intercontinental's Exchange segment, which is the company's largest business division, will have grown revenues by double-digits in 2024. In particular, Intercontinental's energy exchange franchise has been buoyed by ongoing geopolitical shifts, especially the globalization of natural gas. With more producers reaching suppliers over greater distances, the demand for hedging has increased, benefiting trading activity.

A key part of Fixed Income & Data Services is a fixed-income pricing and reference data offering sold to asset managers. The rising interest rate environment had pressured demand for this offering, and therefore the overall segment results, in recent years. This year, the business is back on track. We expect Fixed Income & Data Services will have grown core revenue at a mid-single-digit organic growth rate in 2024.

Overall, when we consider the long-term growth prospects for the earnings stream in the aggregate as well as the deep moats that extend across Intercontinental's various businesses, we are happy owners of our shares at a low-twenties multiple of our estimate of forward earnings.

Formula One
(7.7% of Sequoia's capital at year-end, 46.8% total stock return in 2024)

Shares in Liberty Media Formula One, the tracking stock through which we own the Formula One motorsport league, rose 47% in 2024. We expect revenue and earnings per share will have grown over 20% and over 30%, respectively, in 2024. It helped that two new races were added to the calendar this season, though revenues across promotion, media rights, sponsorship, and on-site all grew on a per-race basis as well.

As we have long maintained, the long-term return we will ultimately realize from this investment will be primarily determined by the overall health and vibrancy of Formula One as a sport and a spectacle. On both fronts, it was a good year.

We continue to see on-track benefits from changes to technical, racing and financial regulations that were part of the last Concorde renewal and that were specifically intended to increase sporting parity. As compared to recent years, the 2024 season was quite exciting. While Red Bull's Max Verstappen once again captured the driver's championship, the points gap between Verstappen and the runners-up tightened noticeably this season. Furthermore, seven different drivers won races in 2024, the first time in twelve seasons we have had that many unique winners. What is more, the team championship came down to the final race and Red Bull, who had dominated last season, was not even in the hunt. In case you do not follow the sport, McLaren bested Ferrari to win the championship.

Formula One also continued to develop its promotion, media and sponsorship capabilities and businesses in 2024. This was most apparent in sponsorship, where Formula One signed a new 10-year multi-category sponsorship deal with luxury group LVMH for a rumored annual fee approaching $100 million, significantly larger than the league's previous top sponsorship deal.

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Beyond sponsorship, there were the aforementioned two additional races. With the calendar likely to stick to 24 races for the foreseeable future, continued strong demand for race hosting could well result in larger and more lucrative promotion deals over time, for both traditionally high-paying "fly away" race venues and core European locations.

Formula One also continues to increase its exposure and attract new fans. *F1*, a movie starring Brad Pitt, is due to be released this summer. Meanwhile, Amazon Prime Video is working on *One*, a scripted series based on Formula One, due to be released sometime in 2026.

The wind remains at Formula One's back. It is an impossible-to-replicate global sports league and spectacle that we continue to believe has the potential to be a much bigger business in the years to come.

Our investment in Liberty Media Formula One is now likely to involve more than just Formula One. In April, Liberty Media Formula One announced its agreement to acquire 86% of Dorna Sports SL, the parent of MotoGP, for roughly €3.8bn. MotoGP has a distinct identity, but in effect it is Formula One for motorcycles. With 150 million fans to Formula One's 500 million, MotoGP is the second largest motorsport in the world. MotoGP features 11 teams, each of which races custom-designed bikes from leading motorcycle OEMs including Ducati, Honda, KTM and Yamaha.

MotoGP looks a lot like Formula One did when Liberty Media, with our participation, acquired it in 2017. MotoGP has a passionate following, but the ecosystem is not entirely healthy. Team economics are stressed, and the sport has had only limited success in globalizing itself. It remains too reliant on its core European markets in general and Spain and Italy specifically.

Liberty plans to leverage into MotoGP a few of the same individuals who were instrumental to the turnaround of Formula One. This includes Chase Carey, who recently returned to the fold as an executive board member of Liberty Media Formula One, and Sean Bratches, who led Formula One's commercial operations from 2017 to 2020. We are realistic about just how big MotoGP can become, given inherently more limited interest in two-wheeler motorsports. However, we do see the opportunity for a good financial return over time.

The MotoGP deal is currently being scruitinized by competition authorities in Europe. The investigation has delayed the closing of the acquisition from the end of 2024 to sometime in 2025, and there is a risk that the deal may not close as originally envisaged or at all.

Lastly, we note that the Liberty Media complex underwent a significant restructuring towards the end of this year. As part of this restructuring, Liberty Media CEO and Formula One Chairman Greg Maffei will be departing. He will be replaced by Derek Chang, a current Liberty Media board member who was previously the CEO of NBA China and a colleague of Chase Carey's when Carey ran DirectTV. Further, Liberty Media is converting Liberty Media Formula One from a tracking stock that owns an economic interest in the underlying operating subsidiary to an asset-back company that owns Formula One outright. We always anticipated that such a conversion would occur at some point, and we are pleased with this development.

We note that Formula One has its own operational management team, led by CEO Stefano Domenicali. The Liberty Media restructuring, inclusive of Greg Maffei's departure, does not directly impact this team. Greg Maffei gets credit for identifying the opportunity at Formula One and for assembling an operating team that has propelled the business forward and the share price along with it, but his role at Formula One was more strategic than operational. Derek Chang has significant and relevant experience in global sports, is already intimately familiar with Formula One, and has a strong working relationship with former Formula One CEO Chase Carey and key shareholder John Malone. All of this sets him up for success.

At the current share price, Liberty Media Formula One trades for approaching 30 times our estimate of the company's cash earnings power per share prior to the close of the MotoGP deal. The stock is certainly not cheap, but we remain comfortable with our holdings given the unique nature of the business and the solid growth we expect out of it over the long term.

Constellation Software
(7.6% of Sequoia's capital at year-end, 24.3% total stock return in 2024)

Constellation Software shares appreciated 24% in US dollar terms in 2024, roughly in line with the 20%+ full-year growth in revenue and earnings power per share we expect to see when it reports its final quarter of the year.

In recent years, we've had big goings-on to cover at Constellation. In 2023, the company spun off the Lumine Group and made a few "headline," multi-hundred-million-dollar acquisitions. The year before that, Constellation made its biggest acquisition ever, the $700 million acquisition of a business now named Altera. And the year before that, Constellation did its first ever spin-and-acquisition. By comparison, 2024 was relatively quiet, with the company completing one multi-hundred-million-dollar carve-out in May.

And yet, through the first nine months of this year Constellation deployed, across hundreds of acquisitions, virtually all the roughly $1 billion or so of cash flow it generated. When we first bought shares about a decade ago, $1 billion was a sum we looked forward to the company deploying over multiple years. A single multi-hundred-million-dollar deal was big news back then. As Constellation has grown and developed, it has built formidable organizational capabilities that now make the remarkable seem mundane. They have trained hundreds of people to scour the globe looking for software acquisitions. Nothing is too small or too large. The watchword is ROIC, and the obsession is to put the group's capital to work at the highest possible return.

As they have for several years, Constellation's shares currently trade at a little over thirty times immediate earnings. As we noted in last year's letter, this rich multiple presents a riddle for the long-term investor. It means that our returns have seen a benefit from multiple expansion that is subject to market sentiment and not likely to add to our returns from this point. While we are mindful of the valuation, we remain steadfast in our conviction that this is a special company on a run that is not over.

Alphabet
(6.5% of Sequoia's capital at year-end, 36.0% total stock return in 2024)

Alphabet stock appreciated 36% in 2024, roughly in line with the growth we expect in the company's earnings per share for the full year. The company can achieve that remarkable level of profit growth by growing revenue about 15%, containing cost growth to only half that, and repurchasing a couple percent of its shares outstanding.

That said, there was a lot more to think about in 2024 than the simple math of revenue and profit growth. In August, Alphabet received an unwelcome liability ruling in the Search antitrust trial brought by the Department of Justice. The judge's ruling took issue in particular with Google's default search agreements with Apple and Android phone makers. Predictably, the Department of Justice is now publicly arguing for a laundry list of remedies that goes well beyond Google's default search agreements and Google is expected to appeal. Barring a settlement, it will take at least a few years for the case to wend its way through the court system. We take comfort in the fact that even if the judge decides Google cannot pay Apple to be the default search engine, Google will still be the best search engine and will save over $25 billion per year in payments to Apple. That said, we are monitoring the situation closely because regulatory interference can interact with market forces in unexpected ways.

The fact of the matter is that Search, which Google has indeed led for over a decade, is changing all the time. Search happens in a lot of places, not just Google.com. Amazon has built an over-$50-billion retail search business to rival Google's $200 billion in search ads revenue. Others like TikTok and OpenAI are now getting into the game. What is different about these newest competitors is that their Large Language Models offer a new kind of user interface that promises to fundamentally alter the Search experience. While the competitive situation in Search has gotten noticeably more dynamic, Google's incumbency position and world-renowned AI skills should allow the company to take the lead in developing Large Language Model-based Search features and infusing them into the Search experience.

We were pleased to see Alphabet make strong progress in AI products throughout the year. As a user of Google Search, you may have noticed new "AI Overviews" at the top of your results. These overviews use Google's Large Language Models to deliver direct answers drawn from their superior Search results. The company says this feature results in more searches and better user satisfaction. Google has rolled out "AI Overviews" to more than 1 billion monthly average users, putting AI instantly into the hands of many more users than competitors like ChatGPT. Gemini, Google's state-of-the-art Large Language Model, has now just about reached technical parity with rival OpenAI's latest available model, even after conceding a head start when the race began in late 2022.

Outside of the language realm, which is so pertinent to Search, Google notched many other AI wins. The company's top AI executive, Demis Hassabis, and a colleague won 2024's Nobel Prize in Chemistry for AlphaFold, an AI model which predicts protein folding structures. By commercializing the technology for drug discovery, Demis aims to build a new multi-hundred-billion-dollar business. Waymo, Alphabet's AI-aided self-driving vehicle project, also made substantial progress in 2024, launching in San Francisco, Los Angeles, and Austin, with imminent plans to launch in Atlanta, Miami, and Tokyo. At the end of 2024, the company released a study with Swiss Re showing that the 25 million autonomous miles logged by Waymo were roughly 10x safer than if they'd been driven by human drivers.

While we expect Search and AI to drive most of Alphabet's future prospects, YouTube and Google Cloud very much grew into their own in 2024. Nielsen data showed YouTube grew to over 10% of US TV viewing, becoming the first streaming platform to reach double digits, faster than second-place Netflix. Between ad revenue and subscriptions, YouTube grew about 20% to over $50 billion. Google Cloud revenue grew about 30% to over $40 billion and continued to notch higher profitability. These two businesses are now of a size such that their growth accounts for about half of the total company's, and we see plenty of runway ahead for them.

In 2024, we were especially heartened to see the company continue to grow revenue nicely and invest for more growth without adding much headcount and expense. We laud management for this achievement and believe this is a pedal they haven't pushed to the floor yet. Alphabet shares trade for a little over 20 times forward earnings, a level we deem attractive given the likely growth of the business and a competitive position that, though it now needs a new sort of defending, is still undeniably strong.

Charles Schwab
(5.6% of Sequoia's capital at year-end, 9.2% total stock return in 2024)

Shares in Charles Schwab rose 9% in 2024. Despite improvements on certain key metrics, including most notably cash sorting, Schwab's earnings remained pressured this year, with earnings per share up low single digits in 2024.

It was not even two years ago that Schwab found itself being compared on Twitter and in the popular business press to Silicon Valley Bank and other banks that were teetering amidst the regional banking crisis. Our view then was that the analogy was, for multiple significant reasons, fundamentally flawed. In fact, we took advantage of the weakness by adding to our investment near the lows in the spring of 2023. At this point, Schwab's viability is no longer up for debate.

The focus has turned, more appropriately, to Schwab's fundamentals. Over the course of 2024, the rate at which clients "sorted" out of low-yield Schwab Bank sweep accounts and into higher-yielding money market funds slowed considerably. In fact, balances at Schwab Bank increased for three consecutive months this fall. It is too early to declare "sorting" a truly done deal, but we are hopeful that we are getting close to the transactional cash floor.

A stabilization in Schwab Bank balances is welcome, but the company continues to face headwinds on the asset side of its book. For starters, while Schwab's securities portfolio is rolling over into the current, higher rate environment, it is doing so slowly. Also, Schwab is still carrying $50 billion of high-cost supplementary funding that was, strictly speaking, never necessary.

The punchline is that Schwab's deposits have declined much faster than its assets have repriced, which is pressuring the company's net interest revenue relative to what it "should" be in a rate environment like the current one. Keep in mind, though, that higher interest rates really ought to be good for Schwab's earnings power in the long run, even if they have not been yet. As shareholders, we were rooting for an end to Zero Interest-Rate Policy for years. Of course, precisely how much Schwab benefits from higher interest rates in the long run will depend on exactly when and where they level out.

At the operational level, the big news this year was that Schwab finished transitioning TD Ameritrade accounts over to the Schwab platform. In total, Schwab converted over 17 million accounts, making this integration the biggest in the history of the industry.

Schwab had warned that these TD account conversions would drive an uptick in client churn, and indeed recent results suggest they did. For several quarters, Schwab's net new asset growth was noticeably below its historical range of +5-7%. Schwab says this weakness is directly and solely attributable to these TD account conversions. More specifically, the company claims that net new asset growth at the legacy Schwab platform is in line with long-term averages. We find the company's explanation plausible and are encouraged by a bounce in net new asset growth during the month of December, but we will be tracking net new asset growth closely in the coming quarters.

This year also marked a period of significant transition for Schwab's leadership team. Longtime CEO Walt Bettinger will be succeeded by former President Rick Wurster, and longtime CFO Peter Crawford was succeeded by Mike Verdeschi, who previously spent over 30 years at Citibank. People matter, which is why we call out these changes, though we take comfort from Schwab's generally consistent, long term-oriented strategy. These new leaders will make important decisions, but they will have time to find their footing.

At the current share price, Schwab trades for a low-teens multiple of our expectation of earnings per share out a few years. We believe that Schwab will remain the preeminent public wealth management platform in the US and that the stock will generate an attractive long-term return across a range of long-term interest rate scenarios.

Universal Music Group
(5.4% of Sequoia's capital at year-end, -8.7% total stock return in 2024)

Shares in Universal Music Group declined 9% in US dollar terms in 2024. In contrast, fundamental performance was, in our view, strong. We expect the company will have grown earnings double-digits in 2024. Shares declined from their August highs on the back of a mid-year earnings release that was in the aggregate positive but did reveal slower than expected growth in paid streaming revenue in the second quarter.

In our view, the market has overreacted to this report. Paid streaming has gone mainstream in certain, but not all, developed markets. Paid streaming penetration is highest in the US, UK and Scandinavia, the last of which is, not uncoincidentally, Spotify's home turf. Subscriber growth in these most penetrated markets has naturally slowed, but it has not stopped. Furthermore, there are several other sizeable developed markets – Germany, France, Japan, and Australia, among others – in which paid streaming penetration lags. There is room for penetration to increase significantly in these markets, even if they never catch up with the three leading markets. Finally, we have developing markets, which the music industry historically had never monetized. Paid streaming penetration in developing markets is low, but it is increasing. We believe developing markets will be an important part of the paid streaming landscape, not today or anytime soon, but eventually and assuredly.

We will not venture to predict precisely how paid streaming penetration will evolve on a market-by-market basis, but we are confident the global base of paid streaming subscribers will grow nicely over the next several years and beyond.

We also believe that the paid streaming product is substantially under-monetized today. In the US, subscribers pay $10.99/month for all-you-can-eat access to nearly all music ever made in the West. In the product's first decade of

existence, the streaming platforms have, on average, only taken a single $1 price increase. In inflation-adjusted terms, per capita music spend in the US today is still only half of what it was at its 1999 peak during the compact disc era.

We believe streaming platforms can, and therefore consider it an inevitability that they will, raise like-for-like prices. We also expect streaming platforms, in partnership with labels like Universal Music Group, to find ways to price-discriminate in constructive fashion. As it currently stands, all paid streaming subscribers, casual listeners and superfans alike, pay the same price. We understand that the industry is developing higher-priced products to address the interests of these superfans. We do not expect like-for-like price increases to occur in metronomic fashion, nor do we expect that the industry will immediately settle on the most effective tiering strategy. Over time, though, we think the average retail price of paid streaming will increase, to the benefit of Universal Music Group.

As you may have noticed, Universal Music Group found itself in the headlines this year when it pulled its content from TikTok. Universal Music Group felt TikTok was not doing enough to protect its intellectual property and not paying enough for it. TikTok and Universal Music Group came to an agreement in early May, which included intellectual property protections, particularly around AI-generated music, and somewhat improved commercial terms.

While industry observers have different takes on what this showdown was all about and who "won," we are encouraged by the direction of travel. Giant and growing digital platforms like TikTok – and also Meta's Instagram and Reels as well as YouTube's long-form video and Shorts – represent large opportunities for the music industry. Music has already proliferated widely across these platforms, and the labels just need to keep working towards commercial agreements with these platforms that more fully compensate for use of this intellectual property. The labels are already working with Meta and YouTube in more of a partnership-like fashion, and we see the TikTok dust-up and subsequent resolution as consistent with this broader trend.

In December, Universal Music Group announced its planned acquisition of Downtown Music, a leading US-based artist services platform for roughly $775 million. While we are still relatively early in our research of this transaction, our understanding is that Downtown brings a best-in-class solution set to creators and independent labels that will serve to round out Universal Music Group's current artist services offering. The Downtown acquisition comes on the heels of a series of other smaller acquisitions that have given Universal Music Group additional heft in various developing markets. Our research indicates these acquisitions are both strategically and financially sound.

During the second half of the year, we took advantage of weakness in Universal Music Group's shares to add to our investment at a low-twenties multiple of our estimate of forward earnings. We deem this an attractive valuation for a business that controls an enormous portfolio of non-substitutable intellectual property and that is poised for significant growth as we progress further into the digital music era.

UnitedHealth Group
(4.8% of Sequoia's capital at year-end, -2.4% total stock return in 2024)

Shares in UnitedHealth Group were down slightly in 2024. For two years in a row, shares of our healthcare juggernaut have lagged significantly. In terms of the company's reported results, this year was fine. Revenue and earnings per share grew roughly 8% and 10%, respectively.

The environment for managed care has gotten tougher since the pandemic. During the pandemic, delayed medical care and generous reimbursement adjustments from the government combined to boost margins across the industry. Over the past two years, utilization normalized more strongly than anticipated and the government got stricter about oversight and less generous with reimbursement adjustments. As a result, managed care margins, particularly in Medicare Advantage and Medicaid, have come under noticeable pressure.

UnitedHealth navigated these challenges reasonably well. Despite bumps in specific business lines and a cyberattack on Change Healthcare that cost $3 billion, the company still delivered satisfactory growth. Over the past two years, the company has compounded revenue and earnings per share at 11% and 12%, respectively.

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As you almost certainly know, this year also saw the tragic killing of Brian Thompson, one of UnitedHealth's most senior executives. This deplorable act rekindled a legitimate, even if not always civil, debate over the US healthcare system, with which many people are understandably frustrated. The system is undeniably expensive and structurally different than systems in other developed countries. For instance, we rely disproportionately on employee-sponsored health plans, which means that most Americans who utilize care do not pay for it directly. Our system also effectively requires third-party companies to oversee care and manage costs, whereas in most other developed countries these tasks are handled, for better or for worse, by the government.

Managed care companies have a legal and moral responsibility to oversee care and manage costs in a methodical and justifiable manner. When and where they fail to do this, they should be held to account. It remains a fact, though, that the design of the current US healthcare system requires someone to do this work. We acknowledge that our investment in UnitedHealth is subject to policy risk. However, while we can imagine policy scenarios that negatively impact the business, we continue to be confident that the basic structure of the US healthcare system, however imperfect it may be, will remain intact.

Over many years, UnitedHealth has demonstrated an ability to navigate challenges while consistently compounding earnings at a low-to-mid-teens rate. Today, the company trades for a mid-to-high-teens multiple of our estimate of forward earnings, a valuation we view as eminently reasonable given the quality and resilience of its business.

Elevance Health
(4.6% of Sequoia's capital at year-end, -20.7% total stock return in 2024)

Shares in Elevance were down 21% in 2024. Like our shares in UnitedHealth, Elevance's shares have lagged the Index over the past two years. In contrast to UnitedHealth, though, Elevance's fundamental performance was weak this year. We expect the company's revenue to have grown low-single-digits this year, whereas we expect earnings per share to have been flat.

Elevance is the largest for-profit operator of Blue Cross Blue Shield plans in the U.S. With 45 million insured lives and operations anchored in 14 states, the company is nearly as large as UnitedHealth from a patient coverage perspective. However, unlike UnitedHealth, Elevance is still building out its non-insurance capabilities – including most notably its pharmacy benefit manager, CarelonRx, and its care delivery & technology unit, Carelon Services – which should boost long-term growth.

The flipside of relatively more diversification in the future is relatively less diversification at present. This year, this relative lack of diversity stung. Medicaid, which in normal times is the company's second-largest profit center, will be near break-even. Historically, Elevance posted Medicaid margins at or above a segment-specific target of 2-4%.

It is the pandemic unwind that is currently roiling the Medicaid market generally and Elevance's Medicaid business specifically. During the pandemic, the government suspended income verification and other eligibility reviews for Medicaid. Enrollment in the program swelled from 71 million at the end of 2019 to over 94 million by early 2023. Starting in the middle of 2023, the government began to reinstitute its verification processes. As expected, Medicaid membership declined. The real problem, though, is that the rapid departure of generally healthier members left behind a pool of generally higher-acuity, and therefore costlier members for which the states have not fully, or even mostly, adjusted their rates.

Elevance was hit particularly hard by this dynamic due to its specific member mix and, we strongly suspect, less-than-perfect underwriting. While the situation within Elevance's Medicaid business is not ideal, we believe it will resolve, eventually and inevitably. The states may unfortunately rely primarily on lagging data when setting Medicaid rates, but they generally adhere to well-established actuarial practices designed to ensure that rates are sufficient.

As already noted, we believe Elevance itself also deserves some of the blame for the weakness in its Medicaid business this year. This comes on the heels of recent missteps related to Medicare Star Ratings, which have not yet impacted

results but will likely weigh on Medicare Advantage revenue and margins in 2025 and 2026. Elevance's franchise remains strong, and the business is fundamentally solid, but we confess that we are disappointed by execution within the government segment in recent years.

Elevance currently trades at less than 11 times our estimate of forward earnings that we believe are, for reasons discussed above, depressed. We took advantage of share price weakness in the fourth quarter and added modestly to our investment. We believe Elevance's earnings will grow at a solid rate in the years to come as margins in the government business recover and as the company continues to develop its portfolio of care delivery & technology services and sells them into other Blue Cross Blue Shield plans across the country.

Eurofins Scientific
(4.4% of Sequoia's capital at year-end, -20.9% total stock return in 2024)

Shares in Eurofins were down 21% in US dollar terms in 2024, marking the third consecutive year of decline. Fundamentals, however, showed meaningful improvement. We expect the company's revenues and adjusted earnings per share will have grown by 7% and by over 35%, respectively, in 2024.

Over the past few years, Eurofins' results have been pressured by predictably declining demand for COVID testing services. The company moved with admirable speed in ramping up this business as the pandemic took hold, and it went on to generate billions of dollars in high-margin COVID testing revenue. Almost all this revenue has now disappeared. We are all better off for Eurofins' agility, even if the trip back down has not been fun.

The inflationary environment of the past few years has also negatively impacted Eurofins' results. Inflation hit the company's European business particularly hard. Margins in this region were down quite significantly in the second half of 2022 and first half of 2023. Since then, Eurofins has been focused on restoring European margins through a combination of price actions, business selection, and restructuring, and we began to see fruits of this labor in 2024.

As COVID testing declined and inflation surged, Eurofins happened to be ramping up investment in two key IT projects that have further pressured margins. The first IT project involves moving to a new, more decentralized, and therefore more secure IT footprint that should reduce the risk of a repeat of the 2019 cyber-attack. The company is in the middle of the transition right now, which means it is running duplicate systems and incurring all the extra cost of doing so. This cost pressure will surely reduce when Eurofins unplugs its old system. The second IT project is a rewrite of the company's proprietary Laboratory Information Management Systems. We are less confident this project will be completed in the immediate future, but we believe the associated cost headwinds will eventually turn into tailwinds.

This year was actually more normal than any Eurofins has seen since before the pandemic. More specifically, the company's 2024 results were the first ones not muddied by COVID-related comparisons or by the cyber-attack. Margins partially recovered this year, even in the face of the aforementioned IT projects as well as a weakening of the biopharma end-market. We believe Eurofins can achieve its 2027 margin target, as the European business restores profitability and as company-wide IT-cost headwinds abate.

The noise has been loud lately, but at the deepest level Eurofins is unchanged. It is a large, diversified, and radically decentralized testing business that operates in myriad markets growing at healthy rates and that is run by founder-owner Gilles Martin, who has more skin in the game than anyone else. We have been investors in Eurofins since early 2019. If we are right about where full-year 2024 results land, the company will have compounded revenue and adjusted earnings per share at approximately 11% and 12%, respectively, over the 2018-2024 period.

At the current share price, Eurofins trades at a mid-teens multiple of our estimate of forward earnings and a near single-digit multiple of likely 2027 earnings. We believe the shares represent compelling value, and we added modestly to our investment in the fourth quarter. It would seem we are not alone in this view. Eurofins recently accelerated its share repurchase program, and Martin himself is acquiring additional shares through his personal investment vehicle.

Disclosures

Please consider the investment objectives, risks and charges and expenses of Sequoia Fund Inc. (the "Fund") carefully before investing. The Fund's prospectus and summary prospectus contain this and other information about the Fund and are available at www.sequoiafund.com or by calling 1-800-686-6884. Please read the prospectus and summary prospectus carefully before investing. Shares of the Fund are distributed by Foreside Financial Services, LLC (Member FINRA).

Sequoia Fund, Inc. – December 31, 2024	
Top Ten Holdings*	
Rolls Royce Holdings	8.9%
Intercontinental Exchange, Inc.	7.8%
Liberty Media Corp. – Formula One	7.7%
Constellation Software, Inc.	7.6%
Alphabet, Inc.	6.5%
Charles Schwab Corp.	5.6%
Universal Music Group	5.4%
UnitedHealth Group, Inc.	4.8%
Elevance Health	4.6%
Eurofins Scientific SE	4.4%

** The Fund's holdings are subject to change and are not recommendations to buy or sell any security. The percentages are of total net assets. An investment in the Fund is not a deposit of a bank and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Shares of the Fund may be offered only to persons in the United States and by way of a prospectus.*

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment):

Management Fees	*1.00%*
Other Expenses	*0.11%*
*Total Annual Fund Operating Expenses***	*1.11%*
*Expense Reimbursement by the Adviser***	*(0.11%)*
*Net Annual Fund Operating Expenses***	*1.00%*

*** It is the intention of Ruane, Cunniff & Goldfarb L.P. (the "Adviser") to ensure the Fund does not pay in excess of 1.00% in Net Annual Fund Operating Expenses. This reimbursement is a provision of the Adviser's investment advisory contract with the Fund and the reimbursement will be in effect only so long as that investment advisory contract is in effect. The expense ratio presented is from the Fund's prospectus dated May 1, 2024. For the year ended December 31, 2023, the Fund's annual operating expenses and investment advisory fee, net of such reimbursement, were 1.00% and 0.89%, respectively.*

The Fund is non-diversified, meaning that it invests its assets in a smaller number of companies than many other funds. As a result, an investment in the Fund has the risk that changes in the value of a single security may have a significant effect, either negative or positive, on the Fund's net asset value per share.

The S&P 500 Index is an unmanaged capitalization-weighted index of the common stocks of 500 major US corporations. The Index does not incur expenses. It is not possible to invest directly in the Index.