5440 West 110th Street, Suite #300
Overland Park, KS 66211,
+1 (913) 392-9162 | contact@crossroadscap.io

The Four Sun Chariot Horses of 2024

2023 Annual Letter | April 2024


(1)

[1] *Apollo in a Chariot Drawn by Four Horses.* After: Pietro Buonaccorsi (Italian, 1501–1547), Italian, 16th century.

The myth does not point to a fact; the myth points beyond facts to something that informs the fact.

- Joseph Campbell, *An Open Life: Joseph Campbell in Conversation with Michael Toms*

What the wise do in the beginning, fools do in the end.

- Warren Buffett, *The Essays of Warren Buffett: Lessons for Corporate America*

There is no better teacher than history in determining the future. There are answers worth billions of dollars in a 30-dollar history book.

- Charlie Munger, *Poor Charlie's Almanack*

It's an unusual party which gets more exclusive the longer it goes on.

- Jim Grant, *Almost Daily Grant's*, February 2, 2024

God himself helps those who dare.

- Ovid, *Metamorphoses*

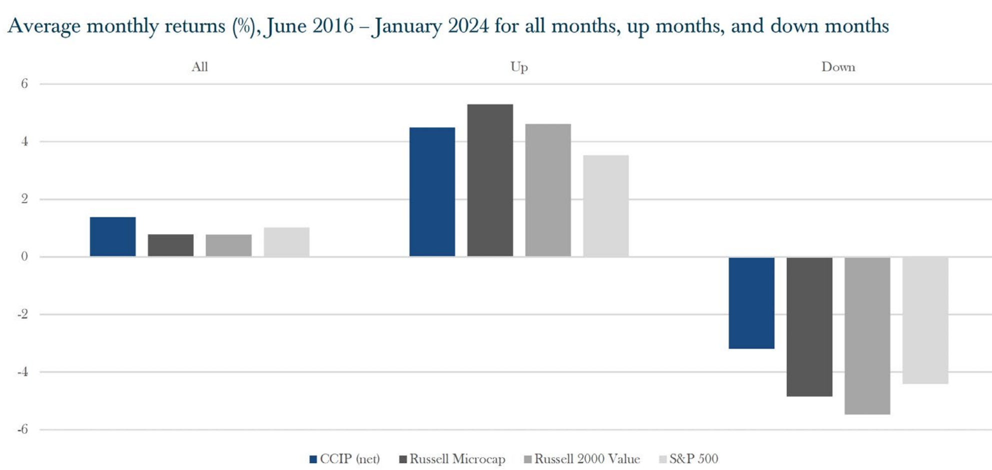
Dear Partners,

When we wrote to you last year, we anticipated that an aversion to risk in 2022 would result in a dispersion of outcomes among equities in 2023, and that our typical outperformance margin (relative to our benchmarks) would likely begin reverting to our historical mean. We were half right. While the reign of mega-cap tech continues despite last year's interest rate-related regime change, we were pleased with our returns in 2023, which clocked in at 25.4% net of all fees and expenses.

To be sure, evaluating our investment performance over anything less than a multi-year time horizon is a relatively pointless endeavor, as it's not the short-term performance of the market or our fund that matters to us. Nonetheless, the Fund's outperformance margin of 10.8% and 16.4% relative to our small-cap benchmarks in 2023 was a solid outcome. Likewise, our returns were on par with the S&P 500's, despite owning none of the "Magnificent Seven"[2] responsible for the bulk of last year's broad market gains. If we exclude the seven AI-driven high-flyers that collectively returned almost 110% for the year, the S&P 500 (or 493) returned only 8.5%. We outperformed that by 16.9%, once again demonstrating the value of uncorrelated, research-intensive stock picking in an index-hugging,[3] increasingly fund flow-driven world.

Of course, Crossroads should continue to do just fine regardless of whether market leadership in mega-cap tech turns out to have a bit more gas in the tank. As 2023 showed, our performance over time correlates to the individual outcomes of our best ideas, rather than the performance of our benchmarks or the market overall. The key insight to understand is that the unlocking of value within our investment portfolio isn't correlated to the stock market, but rather to company-level actions and outcomes. Moreover, now seems like a particularly apt time to remind our partners that secular trends have natural endings and fund flows never go in one direction *ad infinitum*. Markets change and adapt, and rotations happen. So while we held our own in 2023, we know our day in the sun (with the wind at our back) will eventually come.

In the meantime, we're best served by remembering that anything can happen in the short term. Similarly, whatever the future holds, we look to it with confidence, knowing that times like today are ideal for defensive, high active share fund managers with demonstrated lower "downside capture" ratios like Crossroads:



[2] Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla

[3] The sad truth is that "active management" remains largely a joke. If that sounds too harsh, consider that for the vast majority of today's actively-managed equity investment vehicles, "fundamental analysis" begins and ends with choosing which stocks in the S&P 500 to over- or underweight in any given year. Honestly, it would be funny if it weren't so sad.

As far as the underlying drivers of last year's returns, the Fund's largest FY 2023 contributors were Nintendo (6.9%), Company X[4] (6.1%), Vistry Group (5.9%), Tenet Healthcare (3.0%), and Company Y (1.9%). Our biggest detractors for the year were our macro hedges, specifically our opportunistic purchase of S&P puts (-1.6%) discussed in last year's annual letter, and our short positions in select European indices (-1.2%). The outsized returns and lack of material losses among our core investments in 2023 were due to strong execution at our portfolio companies, where the combination of unsustainably cheap valuations, value-unlocking event paths, and continued growth did their thing, propelling solid results despite an extraordinarily narrow market.

We were also helped by better-than-expected macro conditions, as the uncertainty in the trajectory of interest rates and the economy overall began to clear late in the year and evolve to the next stage in the cycle: a peak and an anticipated reduction in interest rates, with the economy appearing to normalize without major job losses. Admittedly, we were surprised by this outcome. It seems the Fed may have successfully engineered a "soft landing" – a best-of-all-worlds "Goldilocks" scenario in which declining inflation, underpinned by moderate growth, sets the stage for the next leg up in the cycle. That's quite the feat considering we're aware of only three other times when the Fed was able to orchestrate something comparable (most notably in the mid-90s under then-Chairman Alan Greenspan). As you might expect, this is one of those relatively rare scenarios where we're happy to be wrong.

We were particularly grateful to be able to leverage the highly volatile price action in the back half of the year to add meaningfully to a few of our favorite positions, two of which have yet to be disclosed as we remain in active accumulation mode. Consequently, we managed to end the year with less risk and a higher expected return threshold than where we started.[5] This wasn't on our bingo card either, but we're hard-pressed to complain, as this is just one of the many reasons why we believe that the Fund remains extraordinarily well-positioned for FY 2024 and beyond.

♦

Turning to long-term performance figures, characterized by signal rather than noise, we see that buying grossly mispriced assets whose merits others have yet to discover continues to deliver.

Indeed, we're proud to report that since inception on June 6th, 2016, the Fund has delivered a gross compounded annual return of 20.3% (16.4% net) through February-end, 2024. This compares to 7.8% for the Russell Microcap index, 7.9% for the Russell 2000 Value index, and 12.1% for the S&P 500. Over just the past five years, the result has been a bit better, with Crossroads posting a gross compounded annual return of 22.1% (17.9% net), versus 5.3% for the Russell Microcap index, 6.2% for the Russell 2000 Value index, and 12.9% for the S&P 500. All in all, this is a fine outcome that gives us tremendous joy to report as we approach our eighth year since first opening our doors.

We'll touch on why we hope to do even better going forward soon enough, but first, here are three things to keep in mind as we prepare for the road ahead in an uncertain world where it's not easy to get one's bearings. First, most long-term equity returns have been earned during easing cycles (good). Second, with markets continuing to rise following their rubber band-like snapback last October, this "not too hot, not too cold"

[4] We have not yet disclosed the names of company X and Y publicly, but we look forward to discussing them on the next quarterly conference.

[5] Here we agree with the New York Yankees pitcher Lefty Gomez, who said, "I'd rather be lucky than good."

economic backdrop has largely been priced in (bad). Third, with a string of hotter-than-expected CPI reports thus far in 2024, the odds of a Fed cut in June could very well have plummeted (who knows?).

Taken together, the above dynamic could result in an unusually wide range of disparate outcomes, both good and bad (how's that for insightful!), creating quite the conundrum for investors seeking to understand how to best position themselves for the economic environment ahead. Nevertheless, we've always believed that the best offense is a good defense. In that vein, the only outcome worth really considering is a scenario where Fed Chairman Powell fails to ensure the center of the "Goldilocks" scenario holds due to a policy error, i.e. a near-term future where inflation and rate related headwinds return in force. In that case, a violent reversal in sentiment and broad market equity values more generally will likely result.

Will it happen? Probably not, given wage growth, while still elevated, is trending down alongside other key indicators we track, but as all intellectually honest investors realize, ultimately, it's impossible to know what the future holds. And as we never tire of repeating, while we can't predict, we can prepare. Practically speaking, that's why we've retained our short exposure to regional banks, as well as companies over-earning in the labor market or overleveraged in the multi-family real estate sector. Collectively, this basket represents the weak links likely to be leading indicators of any broadening stresses within the larger economy. We're also short a few AI charlatans to offset our under-the-radar AI long positions that, unlike our shorts, are actually prime beneficiaries of the deployment of this new technology in the years ahead.

Besides carefully picking our spots (as always), we've focused our short book on companies with premium valuations, declining profitability, and upside-down investment portfolios that are increasingly vulnerable to deposit flight (in the case of regional banks), and companies operating leveraged businesses financed with large amounts of floating debt, where a return to the high-yield market to refinance at today's interest rates means game over. The more upcoming maturities these businesses have – and the bigger the hole in their balance sheets – the better as we rapidly approach the final buzzer.

Consider one large short position in the multi-family real estate sector where we've expressed our view via mispriced LEAPs on perhaps the biggest dumpster fire in the space. If reality comes even close to what our analysis implies, its equity should prove to be worthless in all scenarios save one; an outcome where Chairman Powell initiates an immediate and sustained drop in interest rates akin to what we saw in the pandemic when the Fed Funds rate was taken to zero. And even then, odds are still reasonably good its equity is still a donut. Perhaps we lack creative imagination and they'll find a way to pull a rabbit out of a hat, or we've made some egregious analytical error, but absent that, a double-digit windfall to the Crossroads portfolio seems all but inevitable.

We've also added new short positions in various mega-cap tech ETFs characterized by structural flaws, significant leverage (in a few cases), and extreme concentration in the ecosystems of select members of the "Magnificent Seven" ("Mag7") that are the most exposed to weakening fundamentals – fundamentals driven by idiosyncratic threats that haven't even begun to become properly discounted in their equity values. These positions remain small, but with significant cracks in the foundations of market leaders like Apple and Tesla becoming hard to ignore, we look forward to pressing these positions as these fundamental threats become better known (or quickly cutting our losses if things don't evolve in line with our expectations).

For the moment, these shorts are already in the black despite no changes in market structure related to trends in passive investing and monetary policy, which continue to reward "what's worked" largely based on the self-fulfilling nature these policies generate. That's a great sign, to be sure. However, should a durable trend reversal take hold, and the upward spiral of the last decade and a half suddenly reverse, ensuring a good old-fashioned doom loop follows in the virtuous circle's wake, we'll make great risk-adjusted returns far in excess of those of a more traditional short bet.

Below, we look at what the potential fallout from such a shift might look like.

Potential Headwinds for the "Magnificent Seven" and the Indices

As a reminder, to outperform an index over the long-term, a portfolio must not replicate it. Howard Marks made this point in his legendary investment memo *Dare to Be Great*: "You can't take the same actions as everyone else and expect to outperform." Alas, history shows that when successful investment strategies become popular, they rarely remain safe. That's no small thing considering what's popular today – the "Magnificent Seven," and mega-cap tech more generally – have been popular for roughly 15 years straight, thanks to a winner-take-all-trend propped up by the 0% interest rates that defined that epoch. While it appears the combination of strong earnings growth and high levels of systemic liquidity has overwhelmed the gravitational pull of higher interest rates, we'd humbly propose that just because something that worked in an environment where money was "free" has continued to work in the early days of a new regime, that doesn't mean it always will always be the case.

For that reason alone, we would be wise to internalize the dynamic driving markets since the financial crisis. as it has several implications for the path forward. Seth Klarman has spoken eloquently about the challenges and dangers of investing intelligently in markets like today's, where really everything is manipulated or managed by governments in hopes of driving prices ever higher, and how this robs the risk-averse investor from ever really knowing where things stand. The are no easy answers, but out of all the aspects to consider in this regard, perhaps the most important is that the Mag7 – and mega-cap tech more generally – are (quite literally) the world's most crowded trade. If that sounds hyperbolic, consider that not only do ~99% of active funds today hold the Mag7, but these funds are collectively the most overweight they've been in many years. For example, the Harvard endowment's public portfolio is 70% META and GOOGL,[6] with total tech sector exposure to the tune of 98%! And things don't look any better on the passive side of the divide, where extreme concentration in the few names big and liquid enough to absorb trillions in passive fund flows are owned by pretty much every index fund and ETF ever made. That may be a slight exaggeration, but if it is, it's not by much.

Unfortunately, the situation is much the same if we zoom out to the macro level. With US companies the highest they've been as a percentage of global indices since the early 1970's, any rotation away from the US to the rest of the world will only compound the fallout from a trend reversal. To be clear, we would argue that a permanent US valuation premium relative to the rest of the world is justified, but (a) the current valuation disparity is extreme and seems destined to revert towards its historical mean, and (b) we feel certain that the tripling of the relative valuation multiple that's taken place over the last three decades isn't likely to repeat. Perhaps some will disagree; all we're saying is that having the most concentrated asset exposure (i.e., the Mag7) to the most expensive market in the world today (i.e., the United States) isn't a set up that bodes well for future performance.

It's also clear that, on a market cap-weighted basis, broad market valuations are once again getting uncomfortably stretched (albeit less so on an equal-weighted basis). For example, the top 10 technology stocks in the S&P today trade at ~35x forward earnings, materially outpacing their impressive fundamentals over the last decade. (By comparison, the top 10 technology stocks in the S&P at the peak of the 2000 dot-com bubble traded at ~45x forward earnings.) Another indicator is the price-to-sales ratio of the S&P's information technology sector: It just reached an all-time high, approaching 9x – again, that's 9x *sales*, not earnings. And

[6] https://www.thecrimson.com/article/2024/2/13/HMC-increase-tech-portfolio/

all this is happening while US tech companies are facing growing competitive pressure from China, as we'll soon discuss.

But that's not all. Other obvious indicators that some amount of "irrational exuberance" is embedded in today's market prices abound:

- Cryptocurrencies and so-called "meme stocks" have soared since October.
- The Wall Street Journal has started profiling retail day traders.
- Interest in long/short equity funds (and hence, in fundamental research), is at an all-time low.

We could go on, but for the cherry on top, consider the most famed short seller of all time, Jim Chanos. He announced last November he would be shutting down his fund after a nearly four-decade run. Never one to mince words, Chanos on X last week wrote, "Dogecoin is up 120% in the last month. Doesn't mean things can't get crazier, but investors are not 'cautious' anymore."

We couldn't agree more. We would only add that not only are all the telltale signs of where we are in the current cycle flashing red, but other threats of an entirely new nature also appear to be fast approaching. (For example, the whole philosophical foundation of holistic indexation looks increasingly ridiculous, and we can't help but wonder how that shakes out in the end. But we digress.)

So what's the intelligent investor to do? Well, he'd be wise to recognize the lessons of history: Neither trees nor corporations grow to the sky, and a sea change in market leadership is inevitable.

To be clear, we don't question the absolute quality of the Mag7 as businesses today. In fact, we'd love to own them all at the right price, and maybe someday we will. Nor do we lack proper appreciation for the things that really are different this time around – like power laws, winner-take-most markets, and increasing returns to scale. And we'd be the first to admit that the average quality of the businesses in the S&P 500 today is far higher than in past cycles, warranting a higher multiple (all else being equal). That's all fine and good. We get it. These distinctions *do* make our current environment qualitatively different than those of past high-valuation episodes like the dot-com bubble or the Nifty 50 craze. However, even if one adjusts for these attributes, the Mag7 are still priced for perfection in the absolute best case. So on that basis alone, this is pretty much the opposite of the types of bets we like to make at Crossroads.

Consider the law of large numbers: Over the period from 1953 through 2023, the 10 largest stocks in the S&P 500 in any given year tended to underperform the market in the following decade.[7] That's mainly because once a company has grown massively large, it gets harder for it to keep growing at the same rate. This phenomenon is especially important now, given that the core feature of last year's S&P 500 rally (and pretty much the entire previous 15 years) was the massive outperformance of a handful of exceptionally large technology businesses tied to innovation-related hype.

In 2023, the hype propelling the broad markets higher was "Gen AI", a promising breakthrough technology that has been adopted with shocking speed, capturing the imagination of global investors. The corollary is that the continuation of the market cap-weighted S&P 500's outstanding performance is thoroughly dependent on a relatively small number of soaring trillion-dollar tech stocks continuing to soar. Most active and passive investors alike are counting on these stocks for their future investment gains.

[7] https://www.firstlinks.com.au/history-suggests-magnificent-seven-headed-fall

For a variety of reasons then, we think the odds that such rapid growth will continue are low:

- First, in the rapidly changing tech industry, today's disrupters are tomorrow's disrupted. (Even mighty Microsoft was essentially dead money for about 15 years, until it embraced cloud services under CEO Satya Nadella.)

- Second, even companies that try to surf the next tech wave often end up dead in the water. Think of the massive shakeouts in the computer industry (remember Compaq? Commodore? Sun Microsystems? DEC?) and then among early dot-coms. Not every Ask Jeeves or Excite became a Google. So while we don't doubt that generative AI is a revolutionary technology, we'd be careful about picking winners this early on.

- Third: China. Each of the Mag7 has weak points where its Chinese tech counterpart, backed by the Chinese government, could exert significant pressure on its profitability and growth prospects if so inclined. Also, China could limit or cut off access to its market, **where the Mag7 currently generate over 20% of their aggregate revenue**. And any flare-up between China and Taiwan could jeopardize the ready supply of Taiwanese semiconductor chips that the Magnificent Seven rely so heavily upon. Will China crush US tech companies tomorrow? No. Will its actions over the next several years meaningfully squeeze their valuation multiples? That's much more likely. (More on this later.)

- Finally, there's that law of large numbers again: As a company grows larger, the number of its needle-moving reinvestment opportunities rapidly dwindles. There are also legal complications: When your market cap is measured in trillions of dollars, avoiding antitrust lawsuits is no easy feat (as Apple, Microsoft, and Google can confirm).

At the risk of stating the obvious, all the above factors are a problem for passive and index-hugging active investors hoping for a repeat of past performance in the decade ahead. First off, if history demonstrates anything, it's that big is anything but beautiful when it comes to future performance. Statistically speaking, this can be seen by noting that 9 out of the top 10 largest-cap stocks in the S&P have gone on to meaningfully underperform in the following decade. The authors of the study (cited in footnote #7 above) that found this follow that observation with another commonsense takeaway: Good returns in the face of high valuations require exceptionally long-duration earnings growth, before adding, "when a company already has a substantial market and profit share of the industries in which it operates, unusual growth tends to be significantly harder than normal."

Then there's the fact that the broad market darlings that have propelled such spectacular returns over such long periods of time are almost inevitably victims of their own success. A decade or more of absolute dominance is perhaps the easiest way we know of for a once-great company and culture to lose the sense of purpose and mission that made its success possible. (This recent report by the head of a leading VC firm about Google's Gemini AI debacle provides a great example for those interested.)

So perhaps the first question to ask when analyzing a consensus market darling exhibiting a decade-plus of incredible, uninterrupted growth is: Do these exceptional businesses possess the requisite "wartime culture" to effectively execute against such tall odds? As we mentioned last year in our Google antitrust piece, most companies as dominant and financially successful as the Mag7 are built for peacetime (NVIDIA is a rare exception). The endgame for these once-fearsome organizations (who crushed would-be competitors to the extent that governments had to step in and bring antitrust suits against them) remains the same: The more success they experience, the more complacent they become. In Rocky terms, they've lost the eye of the tiger. And as history has shown, that's a huge problem that usually doesn't end well.

But let's say that the Mag7 do continue to grow at above-average rates over the next decade. Furthermore, let's assume they've maintained the requisite culture to outcompete all comers while avoiding the risks associated with technological obsolescence, race-to-the-bottom economics, or antitrust-driven breakups. Even in this case, investors still need to remind themselves that while price is what you pay, value is what you get. What ultimately matters is never price alone, but the value you receive in relation to price paid. If you're paying a premium that fully discounts extraordinary growth, odds are that investment isn't going to outperform, even if everything plays out according to plan.

Again, just because a business is going to grow the fastest, even flawless execution won't do the bargain-hunting investor any good if the market expects that growth. And that's particularly relevant in a market like today's. With price-implied expectations leaving such little room for error and with starting valuations measured in the trillions in all but Tesla's case, the Mag7 aren't likely to generate returns in excess of what's currently being discounted to leave today's investors with an outstanding payoff.

There are many reasons for this, but if you were ever in need of a reminder of why intelligent investing is simple but not easy, here it is. It also explains our preference for predictability in the businesses we invest in, and why having both the odds in our favor and an unusually large margin of safety in every investment we make is non-negotiable at Crossroads. Our investments need to have enough embedded downside protection to protect us if their realized results fall short of our estimates. Even if Murphy's Law strikes and everything goes wrong, a large margin of safety gives us a better-than-average chance of at least getting our principal back. Of course, we do our best to minimize downside risk through painstaking research, but we also have enough scars on our backs to know the limits of our own knowledge. And ultimately, that's what a margin of safety is all about: protection against both our own ignorance and the randomness of the unexpected.

Similarly, this explains our preference for identifying catalyst-rich event paths in our investments. Catalysts not only accelerate the recognition of underlying value in our investments, they also help protect our capital during downturns by lessening our reliance on the market and the economy for the Fund's investment gains. Moreover, catalysts yield a clear path to value creation (or price discovery), providing a clear understanding not only of what specifically should make the stock work, but when. When skating to where the puck will be, we want to know when the market is likely to finally see the huge gap between price and value that we've identified.[8] Furthermore, catalysts let us monitor progress (or the lack thereof) more effectively over time, which has been indispensable in ensuring we move on when we're wrong well before the crowd catches on. To paraphrase Klarman once again, the last twenty years in this business has taught us time and time again that the avoidance of loss is the surest way to ensure a profitable outcome.

With all that in mind, and with the S&P 500 at 24x trailing earnings, it's hard to argue that the passive alternatives available today offer anything close to the margin of safety we typically require. This lack of passive opportunities should help you understand where our confidence comes from when we say the

[8] As an aside, part of the irony that comes with true believers in the efficient market theory is that while it may be ludicrous in the short-term given the emotional nature of humanity and the inscrutable uncertainty that comes with attempts to predict the future, its bang on over 5 years or longer. Basically Mr. Market can and does get things wrong all the time, but it's equally true to say that over the long run, he always gets it right eventually.

relative value offered by our partnership is superior to that of the average active or passive alternative available to you.

We know you know all these things, but humor us as we continue this elementary walk for a bit longer. We've only got one more point to go, but it's an important one: The average index or mutual fund investor today needs to understand that the competitive landscape is changing for the Mag7, and not in a good way.

The reality is that for most of these companies, war is already knocking at their door – and this time, their primary competition consists of not just non-indexed Chinese companies in select cases, but the Chinese government itself. The history of capitalism amply demonstrates it's hard enough for any company to maintain Mag7-like after-tax operating margins of 30%+ and such high returns on capital in any environment, but it's especially hard when a non-economic actor like the Chinese communist party (CCP) joins the fray. Once that happens, the odds of any market leader successfully navigating the road ahead suddenly go from unlikely to fat chance. In fact, from where we stand it sure seems like the Mag7's margins are the CCP's opportunity, a future we think proponents of the modern index movement aren't prepared for. (More on this in a moment.)

While we could go into immense detail, there are (as we mentioned above) weak points in each of the Mag7's businesses where CCP-backed companies could exert considerable pressure, or have already begun to do so. First and foremost is that Chinese companies can export the excess of their industrial output at breakeven or negative margins with the CCP's blessing and subsidy. Next is Taiwan, a geopolitical flash point that if ignited would impair the Mag7 (and just about any tech company) overnight given their reliance on semiconductor chips. SMIC and other Chinese semiconductor firms are bootstrapping solutions to create 5nm chips without the latest Western tech, and are succeeding to a remarkable degree many would have thought impossible a decade ago. Huawei's new smartphones[9] appear on par with, if not better than, Apple's in some respects, and sell at a fraction of the iPhone's average MSRP. Tesla's sales are flagging as BYD's EVs gain share domestically and look to expand into other, more Western, markets. Other Chinese EV competitors like Xiaomi[10] and Huawei[11] share BYD's growing cost advantage and collectively are coming out with a seemingly endless array of standard new models sporting better tech, longer ranges (300 to 500 miles), more premium features (360-degree cameras, parking assist, built-in voice assistants, etc.), lower price points (by thousands of dollars in most cases), and an aesthetic "sex appeal" so superior to Tesla's Model 3 it honestly shocked us.[12]

We'll wrap with a mic drop already mentioned in the bullet points above: As things stand, over 20% of the Mag7's revenue in total comes from China's *domestic* market. The fortunes of the Mag7 in the decade ahead are inextricably linked to China – and history has demonstrated that the industries China wants to dominate don't make money. Whether it's textiles, cellphones, chemicals, solar panels – you name it – the endgame always remains the same: The industry is quickly commoditized as Chinese companies demonstrate a willingness to compete fiercely and be satisfied with profitability and margins that are a tiny fraction of what

[9] https://www.youtube.com/watch?v=mVdVUb86t8U

[10] https://www.bbc.com/news/business-68672192

[11] https://carnewschina.com/2023/11/28/huawei-launched-luxeed-s7-with-12-4-kwh-consumption-and-self-parking-function/

[12] For the curious, google "Huawei smartphones." Or try "Xiaomi SU7" (often compared to the Porsche Taycan) and "Huawei Luxeed S7" (which makes Tesla's luxury Model X look like a Kia). And people wonder why Apple ditched its car efforts after spending a decade and over $10 billion in R&D! That was probably the best decision Tim Cook has made in years, and he should be congratulated for not giving into the sunk cost fallacy or the pressure from Wall Street.

other global players require, crushing their ability not just to compete, but to merely survive. Investors who ignore this fact do so at their own peril.

The only additional observation we'd reiterate is that the companies leading the competitive charge against our best and brightest (e.g. Huawei, BYD, COMAC, SMIC (Semiconductor Manufacturing International Corporation), and TikTok owner ByteDance, among others) have only recently begun to provide a serious competitive threat to their American, European, and Japanese counterparts. And that's happening not just in China, but in other countries as well, as each competitor continues to naturally evolve towards a more export-oriented future. It's a matter of when, not if, the race-to-the-bottom economics emerging in China start to flow through the Mag7's financial statements.

So how does all this relate to indexation and the embedded returns the broad market will generate over the next decade? If you're asking yourself whether this time will be different, our answer is, "Perhaps, but we doubt it." That's not just because, historically speaking, leaning into the fact patterns outlined throughout this commentary has been a great way to lose one's shirt (as with all long-running trend reversals, the air in the balloon tends to go out much faster than it went in). What makes this time truly different for average index investors is that **rotation within the index won't save them as it has in the past.**

Recall that ever since Vanguard introduced the first index fund in the mid-1970s, the working assumption underpinning all forms of holistic, market cap-weighted indexation was that the S&P was a reasonable mirror of the breadth of the US economy. As we're sure you know well, index funds and sector/theme-based ETFs were originally designed for quick and easy portfolio diversification, as the failure of one firm in an index or portfolio would be reliably offset by the success of another. However, this dynamic of mutually offsetting fortunes no longer holds true for most holistic ETFs and index funds, threatening the very philosophical foundation of the efficient market hypothesis (and passive investing more generally).

That might sound radical, but contemplating how Mag7 dominance of the market cap-weighted S&P 500 makes the threat of Chinese competition a clear and present danger to the average US index investor's future returns will be time well spent. Not only is it likely that the Mag7's Chinese rivals will throttle their growth potential in local Chinese markets in the decade to come, but if they do, the average American index investor won't be able to dodge the impact by relying on the supposed safety of ETFs and index funds.

That's because most of these Chinese counterparts to the Mag7 currently vying for technological supremacy like Huawei, **aren't included in our indexes – or *any* index at all.** And if they are in an index, they aren't represented in sufficient weight to offset the harm (read: destruction in equity value) their ascent will cause the Mag7 - and by extension, the forward return profile of indexes like the S&P 500. Think about the scale of the problem as the combined market caps of the Mag7 represent nearly one-third of the value of the entire US stock market – and that's before considering the negative impact and relative weightings of their supply chains, which, collectively speaking, are considerable.

Our larger point is this: Indexation to the S&P 500 isn't a coherent or effective investment strategy if the Mag7 (which currently make up around 33% of the entire value of US equities) are losing market share and margin to companies that aren't included in it. But even worse, **there is no alternative index one can own that would solve the problem.** The idea that all the average S&P 500 investor needs to do is buy Chinese indices like MCHI or CYNA to keep his portfolio in good shape couldn't be more wrong. We take no joy in telling you about this problem; we're highlighting it only it to help you recognize that (1) it's a high-impact threat lurking below the radar of most in the financial media, despite the implications being relatively self-evident, and (2) simple or practical solutions to it are far more elusive than the general index fund investor appreciates – if he appreciates it at all.[13]

To quickly drive the point home one last time, let's consider the situation at Apple. With 95% of its products currently made in China (which represents ~16% of its global sales and is objectively its most important growth market), we could probably stop here and call it a day. But the point we're trying to make is that it's simply not possible to offset the risk of Apple's continued market share loss in the domestic Chinese market by owning the S&P 500 – or a Chinese ETF for that matter.

Consider Huawei, the company posing the greatest potential threat to the smartphone dominance of Apple and its ecosystem of suppliers. Huawei is a *private* company. That's clearly a problem for investors, given that Apple is arguably the world's most crowded trade, not to mention one of the largest positions in essentially every ETF and index fund on planet Earth.

We repeat: Apple's Chinese counterpart is already creating products in the smartphone space that are equivalent in quality to the iPhone 15. And again, all one needs to do to realize the veracity of these incredible claims is to see the quality of Huawei's high-end smartphones[14] (e.g. the Mate 60 Pro or the soon-to-be-released Mate 70) and the speed at which it's been able unseat Apple[15] to regain its lead since US sanctions first took hold all the way back in 2019. Notably, those sanctions took effect merely a few months after the last time Huawei surpassed Apple in annual smartphone sales. We mention it because while history may not repeat, it certainly rhymes – and with Huawei getting more resourceful and less reliant on Western tech year after year, another round of sanctions won't do much to change Apple's fate. All the old sanctions did was force Huawei to become more resourceful and capable more quickly than it would have without such trade-related protectionism to deal with.

Another point worth reiterating is that China's competitive threats to market darlings like Apple aren't all about exports. They're about the Chinese domestic market, too. Consider that Huawei's Mate 60 Pro is just one of the many products currently flying off the shelves in China thanks to this high-end, home-grown behemoth's capacity to innovate at a breakneck pace – and again, it achieved this despite all the Western sanctions and trade barriers erected to halt its progress. Huawei continues to gobble up local market share in China at a rate that would make Pac-Man blush. And those smartphone-related market share gains of Huawei's should continue throughout 2024 thanks to the launch of the Mate 70 in September, along with the X5, Pocket2, and other new product lines. Apple, by contrast, has no new products set for release in China through year-end.

To quantify these otherwise qualitative statements, consider that Huawei's market share jumped from 9.4% to 16.5% in 2023, in line with its growing production capacity. In contrast, Apple's local market share

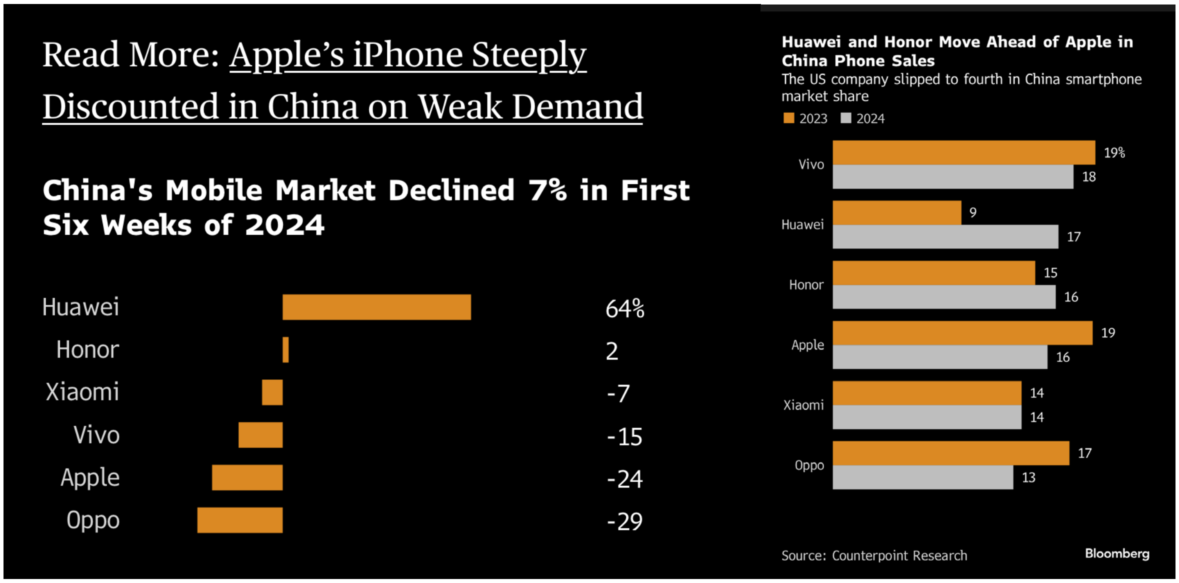
---

[13] The reality is most of them don't have a clue. They remain blissfully ignorant of these emerging risks, fully content with the barn-burning broad-market returns the indices have delivered since the bottom of the Great Financial Crisis. The ubiquitous disclaimer found everywhere in the financial services world that "past performance may not be indicative of future results" hasn't been this incredibly relevant since then.

[14] See, for example, https://www.cnbc.com/2023/12/29/huawei-forecasts-9percent-revenue-growth-in-2023-as-smartphone-sales-surge.html

[15] In fact, this trend is already underway, with third-party research firms finding that Apple's iPhone sales are down 24% year-over-year for the first 6 weeks of 2024. https://www.reuters.com/technology/apples-china-iphone-sales-plunge-24-first-six-weeks-2024-report-says-2024-03-05/

dropped like a rock, from 19% to 15.7% over the same period, with sales plunging 24% despite the company rolling out rare discounts in a counterproductive attempt to juice unit sales.[16] The new year didn't start any better for Apple, as the graphics below make clear:



And if all that wasn't enough, Apple's results should only get worse throughout the rest of the year because the only thing holding back further iPhone market share loss in China (and other markets throughout the world) isn't demand, but supply. This is a revealing data point, as the pace of Huawei's continued market share gains is limited only by its production capacity – and it's a matter of when, not if, more capacity comes online.

The bottom line is that China is coming for Apple and the rest of the Mag7 in the years ahead – and in ways that clearly haven't even begun to be properly discounted in their equity values. If you doubt that, just look at BYD's ability to eat TSLA's lunch last year in its most important market.[17] For those keeping score, China represents ~22% of Tesla's total EV sales – as well as the backbone of its global supply chain.[18] The flood is coming.[19]

And just as in Apple's case, you don't have to take our word for it with Tesla, either. The cold, hard reality facing Tesla was said better and more pithily than we ever could by Elon Musk himself on Tesla's January Q4 earnings call: *"The Chinese car companies are the most competitive car companies in the world… Frankly, I think if there are not trade barriers established, they will pretty much demolish most other auto companies in the world."*

Again, all this is obvious for those willing to look. Certain members of the Mag7 have more time than others to prepare, but all the mature market darlings in mega-cap tech are comparatively challenged, just in

---

[16] See, for example, https://www.cnbc.com/2023/12/29/apple-underperformed-mega-cap-peers-in-2023-due-to-revenue-slide.html

[17] See, for example, https://www.forbes.com/sites/bethkindig/2023/12/07/teslas-china-market-share-continues-to-slide/?sh=57864f89659f

[18] That's another unfortunate trait Tesla shares with Apple, although recent reporting shows that at least Apple is doing something about it by expanding parts of its supply chain in India.

[19] See, for example, https://www.wsj.com/world/china/the-world-is-in-for-another-china-shock-3d98b533?mod=saved_content

different ways, and on slightly varying timelines. That's not a great place to be, even for companies as great as the mighty Mag7.

Before we move on, let's take a quick look at one of the ways we've tried to exploit this situation: Our new short position in XLK, a tech sector ETF. Apple and its suppliers represent a whopping 36% of XLK's NAV. Should Apple prove unable to fend off the emerging threat from Huawei, an outcome we believe to be incredibly likely, a reversion from almost 30x earnings to something closer to 15-20x should follow, given how important China is to Apple's success, both historically and over the next decade. XLK's investors would see an approximate performance headwind of 18% from the fund's Apple-related positions alone. If we were to run the same exercise on the S&P (where Apple and its suppliers represent a cumulative weighting of over ~11%), the headwind to SPY performance is closer to 5-6% should Apple's multiple compress similarly.

Could the continued shift from active to passive overwhelm the negative impact of these dynamics? Possibly, and if so, we'd exit these positions. But so far, Apple and Tesla are down ~6% and ~35% year-to-date, respectively, showing us that not only is price discovery still occurring, but it's occurring in line with our view.

And that's just Apple, and just one ETF. Conducting a similar exercise with the other Mag7 members suggests a 20%+ headwind in the market cap-weighted S&P alone is hardly aggressive. Luckily for investors like us, the rampant growth in passive alternatives in the US capital markets means there are countless ETFs with outsized exposure to at least one, if not all, of the Mag7 – and thus many opportunities for us to express a view on their highly probable future headwinds.

♦

That's the market backdrop against which we're operating in 2024. Yet, as fundamental investors, we look long and hard for positions that give us confidence in their future no matter what happens in the macro environment. The following four give us plenty of conviction – and to prove we're good for references to more than just old Bill Murray comedies,[20] this time we've classed things up with a bit of Greek mythology.

Our Four Sun Chariot Horses of 2024

The ancient Greeks held that Apollo, the god of light and sun, rode across the sky each day in a sun chariot drawn by four horses: Aethon (the Blazing One), Phlegon (the Burning One), Pyrois (the Fiery One), and Eous (the Morning Star, or the Dawn).[21] We think each of these horses represents one of our four most important positions for 2024: three overweighted positions in phenomenal businesses undergoing value-unlocking change, and one smaller, highly asymmetric idea with multiple shots on goal. We've named each one after the sun chariot horse with the most similar attributes.[22]

[20] Longstanding Crossroads LPs may recall that previous annual letters referenced such Murray classics as *Caddyshack* and *Groundhog Day*.

[21] Helios was another Greek sun god, whom many believe drove the chariot, but we're leaving him aside for now.

[22] We'd initially planned calling our top picks the Four Horsemen, but realized that might unfortunately make readers associate them with the apocalypse, rather than with Notre Dame's 1924 backfield.

Let's get started.

Aethon, the Blazing One: Vistry Group (VTY.LN)

First up is Vistry Group, a longstanding position for Crossroads. It's finally arrived on the scene in late 2023 with a stunning transformation and capital return plan after two years of weathering a tough market and integrating a sizable acquisition. The sun chariot horse Aethon, the Blazing One, is the closest parallel to Vistry, which is blazing a path through the UK housing market, becoming its first pure-play capital-light housebuilder.

The UK housing market is egregiously undersupplied to the tune of millions of homes. The country has roughly 24 million homes and needs another 4-6 million, a supply deficit of 20-25%. By comparison, the US has 160 million homes and is likely undersupplied by less than 7 million homes, a deficit of only 5%. (Our US partners have doubtless seen or experienced the affordability crisis in US housing. Now imagine if it were 4-5x times worse!)

Due to regulatory impediments, high capital demands, cyclicality, and now elevated interest rates, new construction has continually failed to rectify the UK's supply/demand imbalance in housing. Only ~220K homes are built per annum, when demand is at least 2-3x that amount. As a result, there is wide support across all levels of the UK government for financial aid to potential homeowners, and for initiatives to increase home construction, particularly of affordable housing.

Against this backdrop, UK homebuilder Vistry Group is transitioning to a pure-play "partnerships" business model that combines the financial and land resources of local authorities and housing associations, the central government, and even financial institutions with those of the homebuilder to create a capital-light home construction enterprise at the center of a virtuous circle for all stakeholders. Unlike traditional homebuilders, "partnerships"-model builders pre-sell over 50% of their homes at affordable prices mostly to cycle-agnostic local councils or housing associations, shortening cash collection times and considerably reducing the business's cyclicality and interest rate sensitivity. Vistry's shift from a hybrid traditional/partnerships housebuilder to a pure-play "partnerships" business will not only make it the UK's largest affordable housing manufacturer, but will also drastically improve its revenue stability and visibility, return on capital, and earnings potential.

The best analogy, valuation comparable, and example of expected returns for Vistry is US-listed NVR. For those unfamiliar with NVR, it's a slow growing, capital-light US housebuilder, which has repurchased over 75% of its shares over the last 30 years. Simply look up its price chart and number of shares outstanding since inception to understand the power of capital allocation. In fact, we'd almost be inclined to write a Vistry thesis by citing NVR's history and adding "but VTY has a longer growth runway and is cheaper at this point in time than NVR was in the 90's."

This isn't an analogy being made by analysts with no skin in the game. Vistry's US shareholders (including many with an activist streak) own over 25% of the company, and they're establishing this "NVR with a posh British accent" framework as we speak. Just last year, they added a former NVR board member to Vistry's board, and they have a long and successful history in UK markets.

NVR's four-part business model is simple, but hard to implement: (1) Scale a pure-play capital-light homebuilding enterprise, (2) generate high returns on capital, (3) have experienced executives manage the cycle and capital allocation, and (4) spend the majority of excess capital on share repurchases.

Vistry has, in the last two years, transformed to cover all four components of this model – and without much market recognition, for reasons we'll go into.

Until very recently, Vistry was valued on traditional homebuilding metrics (BV - Book Value/Land Value) by market participants who remained anchored to historical operations and perceptions. They failed to recognize that the company's shift to a pure-play, capital-light partnerships model meant it should be valued on earnings and/or free cash flow. Even now, Vistry still trades at an incredible discount to normalized earnings, with investors only starting to grasp the business transformation it's undergoing.

Vistry's current price of ~1,250p/share has the market valuing it at ~5x operating earnings, assuming management's guidance of ~22K home completions per annum generating £800M operating income at a 12% operating margin. Given the visibility of the Partnerships business and the well-managed transformation already underway, we believe management's guidance is easily achievable within its 2 to 3-year timeframe.

In addition to having a compelling valuation for a fantastic business, Vistry, through its transformation to a pure-play partnerships model, is freeing up over £1B in cash by repurposing its traditional Housebuilding segment. This cash should be returned to shareholders via buybacks over the next three years. (That's a quarter of its current market cap, or over £325M per annum for ~3 years.) Moreover, as a pure-play partnerships-model business following an NVR playbook, Vistry should be capable of returning even greater amounts of capital to shareholders each year for almost a decade.

The current market mispricing is so acute that our fair value estimate for a worst-case scenario, with no growth or capital returns and valued on an anemic sub-5x EBIT, still comes to 2,300p/share, a ~13% IRR over five years. With a more reasonable estimation of the business and its trajectory, we see a Base Case of 4,850p/share, roughly 4x the current price, for a ~30% IRR over five years. However, should Vistry follow the same path as NVR, shareholder returns would be well above even those of our impressive Base Case scenario.

So how on earth could the business be so mispriced?

First, UK analysts generally look backward, only giving credit for value creation after it happens. In contrast, US investors look forward, buying in anticipation of value creation. As such, the action being undertaken here is applying the insights of NVR's model and then arbitraging that knowledge across the pond given the cultural differences, with the benefit of a large valuation gap as well. De-risking that potentially hazardous analogy is the benefit of stellar management coupled with a prominent US controlling investor base and board members who understand the UK.

Second, the partnerships business model has aroused skepticism among UK analysts and investors because it's never before been implemented in their country. However, capital-light housebuilding is a tried-and-true business model; it's only "new" for UK analysts with no frame of reference. In addition, many market participants and observers fail to recognize that the solution to the UK housing supply deficit lies in a decades-old, tried-and-true approach that was actually implemented post-WWII: council house building (i.e., affordable housing). So Vistry is relying on a business model and a market model that have never before been combined in the UK, and some people don't know what to make of it.

The other main elements of its mispricing are highlighted below:

1. **Unlike traditional homebuilding, the Partnerships business is cycle-agnostic and largely immune to interest rate changes.**

Homebuilding in the UK is quite like homebuilding in the US: Land is purchased, building permits are approved, homes are built, and then those homes are sold to homeowners. This process is capital-intensive, with considerable debt financing for each participant, and thus highly sensitive to interest rates.

By contrast, in the partnerships business model, the homebuilder literally partners with housing authorities and local governments who donate land for regeneration purposes, minimizing the builder's initial capital outlay and providing a large land bank without the risks associated with typical land speculation. The builder then builds a mix of affordable housing, rental units, and private homes on the donated land, incurring costs only for project management, materials, and labor. Over 50% of the homes it builds are affordable homes pre-sold at a lower margin to housing authorities, shortening cash collection cycles and increasing visibility on forward earnings while reducing its exposure to the cyclicality of open-market home demand. The remainder of the rental units or homes are sold either to REITs for rental income or to private homeowners for a slightly higher profit.

Ultimately, less than 25% of Partnership home sales are vulnerable to housing market fluctuations and cycles. For example, Countryside Partnerships, now Vistry's crown jewel, actually *grew* earnings from 2007 to 2010 despite the Great Financial Crisis, and from 2019 to 2022 despite the COVID-19 pandemic. Moreover, given the demand for affordable housing, there are multiple government initiatives providing financial support for homebuyers and builders. As such, the Partnerships business should exhibit steady growth through a cycle by focusing on lower-risk segments of the housing market that have greater cycle-agnostic demand – and thereby enjoying greater operational visibility and lower capital intensity than peers.

2. **Vistry's shift to a partnerships model may on the surface look like a pivot to a lower-margin business, but ROIC improvements are being obscured.**

   In exchange for guaranteed pre-sales of lower-priced homes to local housing associations, the Partnerships division generates a lower operating margin (10%-15%) than traditional homebuilders (20%-25%). However, Partnerships shares the financial risks of its business with multiple stakeholders. As such, it can generate ROIC well above 40% with higher turns on inventory, compared to 20% for private homebuilders. This variance between margins and ROIC of each business type is what keeps many traditional homebuilders away from the partnerships model: It's simply unpalatable to them to move to a lower-margin business, even if the returns on capital are better. And as Vistry's traditional homebuilding segment winds down and its operating margins base out around the partnerships model average of 12%, its ROIC should trend upwards and its capital-light reinvestment runway (as well as excess cash being generated and returned to shareholders) should become apparent, causing a re-rating. At present, traditional homebuilding margins are under pressure (sub-15% operating margins vs. upper teens) given the difficult environment, making the timing of this transition as minimally detrimental to operating margins as it's been in years.

3. **Financial participants are only now beginning to value Vistry on earnings like other capital-light builders, instead of on book value like traditional homebuilders**.

   Traditional homebuilders trade on multiples of book value (1-3x), but capital-light homebuilding businesses typically trade on multiples of operating earnings or cash flow (15-20x). Notably, the biggest traditional UK homebuilders (Taylor Wimpey, Barratt Developments, Persimmon, and Bellway) trade around 0.9x P/B (above 15x P/E). Vistry, now the largest partnerships builder, still trades at a 20% discount to those peers on earnings, though it now trades at premium to book value. This was not the case just 4 months ago, as VTY historically traded at a discount to peers on both earnings and book value. We see this change as evidence that investors are starting to value the company based on its future earnings engine, not its legacy housebuilding business. As Vistry transitions to a pure-play partnerships-model business and continually repurchases shares, investors should increasingly value the business on its (consistent) operating profit and cash flows with a premium on earnings to traditional homebuilders.

4. **Vistry has over a decade to capitalize on the severe UK housing supply imbalance, a longer time horizon than most expect.**

   The UK government has identified the need to build 4.75M new homes to ensure an acceptable standard of living for the majority of its citizens. That's almost 20%-25% of its current housing stock. By comparison, the US needs less than 7M new homes, or only 5% of its current housing stock. Importantly, housing supply and demand in the UK are egregiously out of balance even with the impact of Brexit weighing against net migration into the country. Should a Labour government reverse course on Brexit and allow more immigration from continental Europe, demand for housing (and government financial support) would likely increase.

   Today, roughly 15% of UK homes, or half the 1980s average, belong to public housing entities. The government estimates an increase in homebuilding to 300-340K new homes per annum by 2025 should start to close the housing gap, with roughly half of those being affordable. (Last year, UK homebuilders delivered ~220K new homes, of which ~60K were affordable.) At that rate, the UK's housing supply would meet demand by the mid-2030s. During the 1950s and 60s, when the UK saw its highest levels of homebuilding, units built for local authorities and housing associations amounted to half of total supply increases. Today, these entities claim just a small percentage of new home supply. However, their share is expected to increase as tens of billions of pounds in subsidies are allocated over the next few years, with Vistry's help. The government recognizes what worked in the past and is incentivized to reinvigorate that supply source again. Vistry sees its pure-play Partnerships business delivering ~22K homes per annum specifically addressing this section of the market, up from its current Housebuilding plus Partnerships total of ~17.5K. To meet government projections, Vistry could *increase* its Partnerships building rate above 30K homes per annum and maintain that pace for *at least 10-15 years*.

5. **US investors and a former NVR board member now on Vistry's board promote shareholder-friendly capital allocation and aggressive strategy implementation.**

   Although Vistry is a UK company, activist US shareholders own over 25% of it (through their considerable prior ownership of Countryside). Following its acquisition of Countryside, Vistry indicated its intention to force the market to recognize the Partnerships business's value – and to split the businesses apart, if that recognition was not granted. After a year of board member churn, including the addition of a former NVR board member, management announced that it would unlock shareholder value by redirecting Vistry's traditional Housebuilding resources (such as land, labor, and capital) into the Partnerships division to create a much bigger pure-play partnerships-model business. Additionally, the capital freed up by this transition would let the company return £1B in excess cash to shareholders via a buyback, with another £300M going to reduce debt. Moreover, beyond an initial buyback, management sees capital returns amounting to 50% of its annual operating income. With near-term operating income of £800M expected by 2025, and with considerable stability and growth thereafter, Vistry could, at a minimum, return over £400M per annum to investors, mostly via NVR-style buybacks. (To date, NVR has repurchased over 75% of its shares.) Doing so would result in a buyback yield of ~10% at today's share price.

With all these factors in mind, let's dive deeper into Vistry: its history, business model, management, customers, and suppliers – and let's also look at the overall imbalance in the UK housing market that Vistry faces. All that should provide the background necessary to understand the company and the opportunity.

Corporate History: An Amalgamation of Top-Tier Partnership Businesses; Countryside the Jewel

Vistry Group was created in early 2020 following Bovis Homes' (BVS.LN) acquisition of Galliford Try's (GFRD.LN) Partnerships business and Linden Homes (traditional housebuilding), two separately run franchises. The Bovis and Linden Homes brands had been around since the early 20th century. Galliford Try's Partnerships business included the Drew Smith brand, which it acquired in 2017. While these brands were maintained, Vistry combined their operations and strategies, yielding scale merits.

Countryside Partnerships (CSP.LN) was a similar but smaller builder, and the focus of several US investors, whose original thesis is almost identical to Vistry's today. After Countryside's IPO in 2017, the CEO planned to scale both homebuilding and partnerships then separate the two. After an unfortunate family accident forced the CEO to step down in 2020 just as the businesses achieved scale, an internal hire was promoted who then walked back Countryside's transformation into a pure-play partnerships business.

Activists stepped in and, after a board struggle and potential take-under offer by a large shareholder, Vistry acquired Countryside in a stock-for-stock transaction in 2022. At that time, VTY management stated that if the partnerships business wasn't properly valued by the market, they would separate the two businesses. In 3Q 2023, VTY announced they would repurpose Housebuilding operations to fully scale up Partnerships, creating an even bigger pure-play capital-light housebuilder than Countryside.

Vistry's late-2022 acquisition of Countryside boosted its Partnerships home completions from ~4.5K to ~9K per annum. Additionally, Countryside implemented a modular construction methodology, another key element in NVR's success, building ~5K homes per annum in prefabricated sections. Now called Vistry Works, these facilities are expected to ramp up production, going from ~5K to ~8K homes per annum. Over time, we expect Vistry Works will grow to represent a greater share of Vistry's total completions, driving material, labor, and supply chain efficiencies.

In 2023, Vistry completed ~16K homes: ~6.5K from Housebuilding and ~9.5K from Partnerships. With its transfer to a 100% partnerships-model business, Vistry is expected to increase its total annual output from ~17.5K homes this year to ~22K per annum within a couple of years. Note this is simply a transfer of subcontractors to partnerships houses and not a "ramp up" in the traditional sense. The main goal for Vistry management is to fill its partnerships pipeline to accommodate the total number of subcontractors currently underway on all its completions. (We'll have more on that at the end of this section.)

VTY was set up with two divisions: Housebuilding and Partnerships. Given the transition from Housebuilding, our analysis will stay centered on the Partnerships division.

How does the Partnerships Business Model Work?

In the partnerships model, a public/private partnership between the homebuilder and local government (or an already-established housing authority) is formed, usually as a joint venture (JV). In other instances, the partnership may be a contractual one, where Vistry develops on donated land without forming a separate entity, though the sharing of resources is similar. The typical structure of a partnership, including each partner's role and contribution, is shown below:

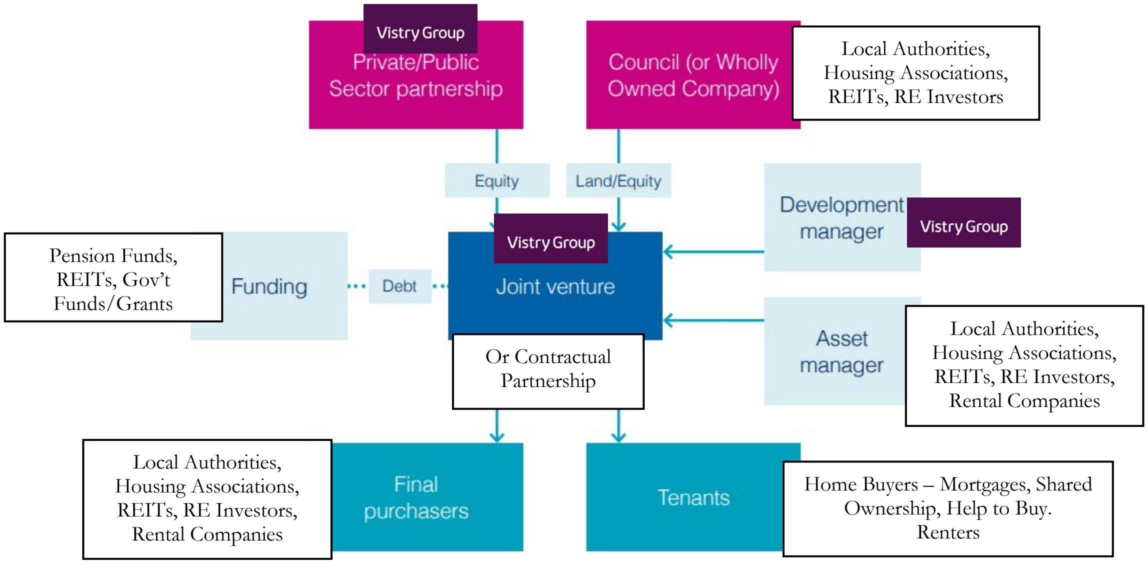


Figure 1: Housing Partnerships - London First. Edits by Author.

Partnership Model Economics

By involving several entities, a partnerships-model homebuilder can reduce the capital intensity of a development and simultaneously de-risk the operation. The table below shows how partnerships model economics differ from traditional housebuilding economics:

Illustrative Returns			
Traditional Model		**Partnership Model**	
Land Costs	£60,000	Land Donated	£160,000
Build Works	£150,000	Build Works	£50,000
Invested Capital	**£210,000**	**Invested Capital**	**£50,000**
Home Price	£300,000	Home Price	£250,000
Gross Margin	30%	Gross Margin	16%
Gross After-Tax Profit	£67,500	Gross After-Tax Profit	£30,000
Plot ROIC	**32%**	**Plot ROIC**	**60%**

With land donated for regeneration or capital provided by a local authority, housing associations, or financial participants, a lower-priced house with lower after-tax profits can yield substantially better returns on capital for Vistry than one built via the traditional business model. The remaining burden of capital at risk is also shared with a national regeneration fund. Vistry receives a priority profit for each project via a final balancing land payment to the local authorities at the end of each project. This allows the value of the final project to be changed so the company can meet its agreed-upon margin targets even in the event of unforeseen cost inflation.

VTY is targeting a company-wide 40%+ ROIC, with plots in London closer to the 60% ROIC represented in our regeneration analysis above.

Given the shorter timeframe of this style of housing development, cost inflation adjustments for small projects are minimal. Contracts for larger developments can have phased viability assessments on non-private home sales that mitigate the impact of inflation via contracted pass-through mechanisms that ensure a base return largely irrespective of increases in building costs and/or land values.

Essentially this is a cost-plus model where margins are negotiated first based on a home price that is in a range of affordability set by the local council/housing association. Price changes to the home afterwards are essentially immaterial as adjustments are focused on maintaining Vistry's modest margins, including inflation.

The only risk to margins is from the sale of homes to private homeowners, which represent less than 25% of Vistry's home completions and are subject to traditional housing market forces. Here the private homes are sold at a higher margin than the pre-sold units, and thus provide only a minimal uplift to margins in the best of times. In a tougher market, they're sold to match margin levels of the homes pre-sold to partners.

Impressive CEO with Phenomenal Track Record; A Singular Entity in the UK

A key part of the "NVR with a posh British accent" model is stellar management. Fortunately, the performance and acumen of Vistry CEO (and now Chairman) Greg Fitzgerald puts him in a league of his own in the UK. He has an excellent operating track record, complete with instances of appropriately aggressive counter-cyclical capital allocation.

Mr. Fitzgerald was previously CEO of Galliford Try from 2005-15 and Bovis Homes in 2017. In 2020, Bovis purchased Galliford Try's Partnerships and Linden Homes brands, which then became Vistry Group. In the early 90s, he led the formation of a housebuilding business with Midas Construction. The business was sold to Galliford Try in 1997, and Fitzgerald subsequently co-founded Gerald Wood Homes, which was also sold to Galliford in 1999.

At Galliford, Fitzgerald led the acquisition of Linden Homes in 2007. Following the GFC, he implemented a £125M rights offering to take advantage of a fall in land prices. This move alone demonstrated his solid grasp of the interplay among capital markets, shareholders, and forward returns. It was a fantastic example of a successful counter-cyclical capital allocation strategy.

After retiring from Galliford in 2015, Fitzgerald founded Baker Estates (of which he still owns 40%) and was offered the CEO role at Bovis Homes to lead a turnaround. He invested £3M of his own capital into the company and turned it into Vistry, essentially purchasing the homebuilding businesses he was already very familiar with. Mr. Fitzgerald has an estimated 20% of his net worth in Vistry. His compensation package totals ~£2.5M, comprised of ~£755K salary and a ~£1.7M equity bonus (~70%).

Robust Demand from Customers Experiencing Severe Shortage of Affordable Homes; Local Authorities Looking to Improve Communities

Vistry's customers include not only homebuyers, but also real estate investors, local authorities, and housing associations who manage affordable (or mixed-tenure) housing developments. At present there are over 1.2M households on council waitlists for an affordable home. Across all tiers of UK housing, there is an estimated shortfall of ~4.75M homes. A typical Vistry Partnerships development is 50-50 affordable/PRS (Private Rent

Sector); of those homes allocated to the PRS, some are sold to REITs or rental companies, with less than 25% sold outright to private homeowners.

Local Authorities and Housing Associations

While housing associations are nonprofits that own and manage affordable housing, local authorities are regional government agencies that control land and public housing in a particular area. These entities have a government mandate to alleviate the housing shortage, but lack funding and know-how. They typically handle the delivery and management of resident and community facilities, and can be not just a homebuilder's customer, but also its regulator and even its source of land on which to build.

During the post-WWII housing boom, local authorities and housing associations were responsible for almost half of the new housing supply in the country. In the 1980s, almost one in three people in the UK lived in social housing. That figure has declined to roughly 15% today, courtesy of the Thatcher-era "Right to Buy" policy, but the government is trying to help social housing make a comeback: Homes England provided ~£1.7B in home ownership grants in 2022, with a 9-to-1 leveraged impact – in other words, the grant money was spent by homebuyers on their 10% down payments. The agency is expected to provide ~£17B in aid from 2023 through 2028.

Many of these authorities and associations are staffed by members of the local community, and as such tend to be highly risk averse. Moreover, they typically solicit bids when choosing a builder, a process that can take years. Criteria for winning a bid typically come down to track record and community engagement. Finally, inadequate planning resources at these entities have been a further bottleneck to developments.

However, Vistry's Partnerships business model incentivizes government authorities to approve housing plans more quickly, since over 50% of a Vistry-built housing development is delivered to these associations and authorities, who are not dependent on interest rates to finance it. In addition, Vistry's solid reputation helps it gain their approval, while its size and experience let it aid them in planning and executing a development. At the same time, smaller builders and new entrants are stymied by the lengthy and difficult approval process, giving Vistry a massive competitive advantage.

Financial/Real Estate Investors

Real estate investment companies are another subset of Vistry's customers. These can be REITs comprised of rental properties, or PE-backed housing funds like those from Blackstone or Regis Group, PLC. A recent Blackstone-backed deal for 2,900 homes at a value of ~£820M shows how these entities can operate at scale. The Blackstone deal was marked at ~£282K per house, with 65% of them sold upfront, and with a cash payment to Vistry of ~20% (£160M). Similarly, UK pension funds have set up funds specifically to allocate capital to such partnership deals. This is a relatively new customer segment, which is growing more rapidly than LA/HAs.

As little as 20%-25% of a development's homes would be sold to these pension funds, REITs, and rental companies, who typically have robust balance sheets and can access interest rate-sensitive debt capital at better rates than private homeowners can.

Homebuyers

The remainder (20-25%) of a Vistry development's homes is sold on the open market to homeowners. For traditional homebuilder developments, this figure is 75%-80%.

Ample Supply and Scale Merits from Being the UK's Largest Partnerships Homebuilder

Vistry has ~130K plots in its land bank (or 6 years' worth, at a ~22K development rate). These include ~60K owned and controlled plots and another ~70K in strategic land (~30K of which were transferred from its Housebuilding segment). Over 40% of Partnerships land comes from the public sector. Land supply consists of not just greenfield plots, but also existing locations in need of regeneration. In London alone, there are over 1M plots out for tender. Around 10% of the land in England is classed as "urban," and 1% has domestic buildings on it, according to the UK National Ecosystem Assessment.

The UK government estimates that there are almost 30K hectares in town and city centers ideally suited to regeneration, which could provide over 1.2M homes. Importantly, Vistry is the sole strategic partner for Homes England, which has £17B and 9K hectares for possible development (1 hectare ≈ 2.5 acres). Other entities, like Network Rail, have over 30K hectares available for regeneration.

Vistry has relationships with over 90 registered providers of affordable housing and over 60 local authorities (out of ~325 in the UK), each of which has either land for regeneration or greenfield. The company's reputation and relationships with these entities should allow for sufficient land acquisition.

Further, under the partnerships business model, these local entities hold the land on their own balance sheets and Vistry's land acquisition costs are minimal to none. Land is provided on a deferred payment basis upon the completion and sale of each project, essentially eliminating inventory/land management risk.

Competition Kept Out via Network of Relationships with Local Authorities

The Partnership brands under Vistry are highly regarded by their customers, due to decades of community engagement and solid operations. This reputation is a considerable advantage in dealing with risk-averse local authorities. Vistry has relationships with ~60 of the ~325 local authorities in the UK, more than any other affordable home/partnerships builder. For instance, Countryside has a track record of successful community engagement spanning over 40 years, and a 40% win rate on all projects it bids for. These relationships generate a supply-side network effect: Each new local authority can more readily trust Vistry because of all the others who already do. VTY is essentially the "platform" connecting all these entities that share the same goal.

Managing community relations is done by an in-house team working closely with local authorities and residents throughout a regeneration project. This can in turn keep out new competitors: It takes years for smaller or new entrants to develop relationships with these overburdened authorities, whereas Vistry coordinates and facilitates its partners' development plans. This time-consuming relationship building demands a skill set completely foreign to traditional homebuilders, which explains the small size of partnerships businesses at traditional firms.

Vistry, even before scaling up its operations, is already the largest affordable housing builder in the UK. Once fully transitioned to a partnerships model, it will be more than twice the combined size of its major competitors' affordable housing businesses. With such a large network and considerably risk-averse client base, Vistry's Partnerships business is highly defensible against new entrants, and is unlikely to be successfully replicated at the same scale. Even though we do expect the handful of smaller partnerships businesses in the UK to do very well, we still think they're unlikely to impact Vistry's growth prospects or competitive positioning.

Market Trends: Undersupply in UK Housing Expected to Continue Despite Government Action

UK Housing/Government Support

The UK government estimates the country needs ~4.75M new homes (an estimated ~20% increase in its housing stock), with about half being affordable, to start closing the housing gap. To eliminate the housing backlog and reach parity with western EU countries on housing metrics, the government estimates it needs at least ~655K new homes per annum over ten years. The pace of construction the government originally targeted to start to close the housing supply gap is 300-340K new homes per annum, with ~150K of those being affordable. Current construction has been running at 220K-240K per annum with ~60K affordable, or about 30% below the required level.

The government has allocated ~£17B to support housing development in 2023, far more than the ~£12B it spent per annum from 2010 through 2018, but still below the £15B-£20B per annum seen in the early 2000s. It expects that each pound of public funds spent on housing will be leveraged ~6x through private market mortgage loans. Notably, at the end of 2022, the government retracted its 300K new housing target, having failed to hit that mark in years. However, with a general election on the horizon and an anticipated Labour Party win, more support for public housing is expected, even considering the UK government's high debt/GDP levels.

Why Now?

We certainly aren't the only managers calling out this investment opportunity. But while we've owned the name (and have been telling almost everyone we know about it) for years, the message hasn't truly resonated until now. At the very least, many put the idea on the backburner, waiting for things to align. Vistry's transformation and buyback announcement in late 2023 was clearly the signal many needed to get involved, and recent share performance has been impressive –but neither the activist shareholders, nor Crossroads, nor anyone else should start patting themselves on the back just yet.

To paraphrase Warren Buffett, the benefits of compounding happen at the end, not the beginning. With Vistry at a critical juncture – several key drivers of equity returns are already firing on all cylinders, but its valuation is still cheap – we're just getting started.

To reiterate the reasons for our enthusiasm at this point in time:

- Partnerships boasts a high ROIC, large and expanding barriers to entry, and a long time horizon for earnings growth, yet it's hidden inside an industry with none of those features.

- Vistry has the best leadership in the housing industry and arguably one of the savviest capital allocators on the island as its CEO and Chairman.

- The company is undergoing a transformation by winding down its traditional Housebuilding segment and repurposing all resources to its Partnerships business, temporarily obscuring its earnings and cash generation potential.

- Vistry plans to return £1B in capital (almost a quarter of its current market cap) to shareholders over the next 2-3 years via buybacks, and 50% of operating earnings going forward. Additionally, roughly £300M of excess cash will be used to wipe out the company's debt.

- It's objectively cheap, at ~5x near-term operating earnings, when it should trade at ~15x.

This year, Vistry should generate £500M+ in operating earnings on ~£4.5B in revenue, putting the company on a valuation of ~7.5x 2024 EBIT. That's well below traditional UK homebuilders at ~12x EBIT. This discount should turn into a premium as a pure-play Vistry Partnerships generates operational and financial performance far more impressive than that of its rivals. Given the superior visibility and earnings stability of its Partnerships business, Vistry is very likely to achieve its near-term £800M operating earnings target in 2-3 years, for a forward valuation of ~5x EBIT (i.e. operating profit), well below that of a truly comparable business, NVR, which typically trades on a normalized 12.5-15x EBIT.

Once Vistry is past the transition stage, we expect it to continue growing revenue at the high end of its 5-8% per annum guidance, with the excess cash from its capital-light operations directed towards shrinking the share base. We anticipate it will hit its ~22K partnerships completion goal by 2025, as it repurposes traditional housebuilding workers to 100% partnerships this year. The company has capacity for ~30K completions per annum, which we expect it to reach by the late 2020s at the latest.

A relatively conservative set of valuation scenarios generate a wildly skewed set of returns, as one would expect given a buyback covering a quarter of the market cap. Even our Downside Case has Vistry coming out ahead despite draconian assumptions. If the company doesn't grow or buy back any more shares after its transition, and still trades at a depressed sub-5x EBIT multiple, it should be worth double what it's trading at today. That's a margin of safety we like.

Our Base Case, which is at the low end of reasonable, runs right down the middle of the road on revenue growth and margin guidance with a terminal value based on a low-double-digit EBIT multiple (notably at the low end of NVR's 12.5-20x historical trading range). In that scenario we still see a chance to quadruple our investment on modest expectations over a five-year timeframe, for an annualized IRR of 30%.

However, we believe this opportunity will play out over a timeframe much longer than five years. So, with the UK housing supply imbalance continuing into the 2030s, we see no reason to exit our position this decade. Instead, we think we'll see something closer to our Upside Case, in which Vistry continues its NVR flight plan over not five, but ten years. Such a scenario could result in a 10x+ return with a potential IRR of ~30% per annum for over a decade. That's truly rarified air.

Importantly, these expectations are contingent on excellent execution and growing the partnerships pipeline, which are the main risks to our thesis. While the operational execution risks have been expertly managed thus far by Mr. Fitzgerald and his team, we think one slide from the latest earnings report should put completion concerns definitively to rest.

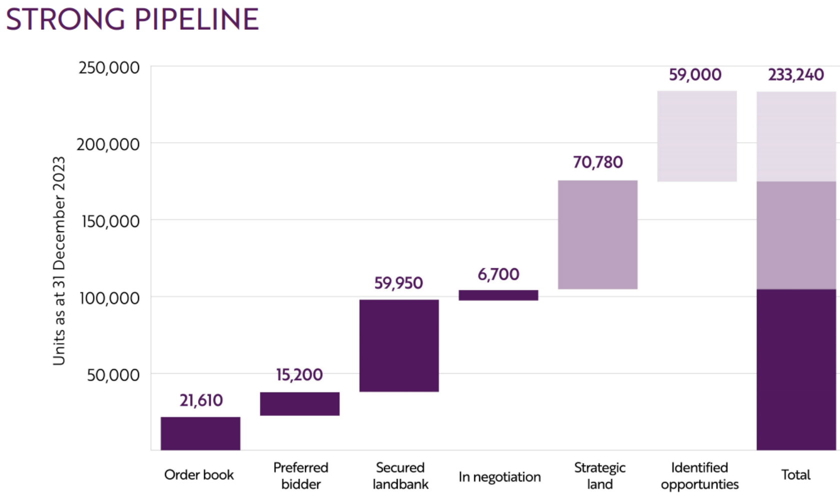


Figure 2: Vistry 2023 Earnings Report.

With over ~235K plots in its Partnerships pipeline, Vistry has ~11 years of work ahead at a ~22K per annum completion cadence. Excluding the "identified opportunities" plots, the company has ~174K plots in the pipeline secured or optioned, equating to almost eight years of completion activity. At the very least, VTY has almost five years of completions (i.e. ~104K plots) already booked. What other companies in any investor's portfolio offer 5-8 years of earnings visibility and substantial capital returns?

We view other risks like government intervention and competition to be of minimal likely impact. Government support for improving housing is widespread, with the recognition that private industry must be involved and generate a sustainable return on investment as well.

♦

<u>Phlegon, the Burning One – Calumet Specialty Products Partners, L.P. (CLMT)</u>

Calumet is a name our partners are certainly familiar with, and given its premier asset is Montana Renewables (MRL), a sustainable aviation fuel (SAF) refinery, we thought Phlegon, the Burning One, was a perfect representation for this particular sun chariot horse.

As discussed in a recent update, in the latter half of 2023 MRL was forced to run at reduced rates while the company replaced a steam drum. This had multiple second-order impacts: 1) with high-cost feedstocks still stored at the facility, MRL had to work this inventory down before it could switch to low-cost feedstock, obscuring its true earnings potential; 2) this in turn slowed the DOE loan process, as the government agency likely wanted to see consistent cash flow generation before signing off; and 3) the DOE foot-dragging then delayed an MRL monetization event.

Offsetting this string of events was the announcement Calumet will convert from an MLP to a C-Corp *prior* to MRL monetization. Notably, the conversion was fair to existing unitholders, with shareholder dilution equating to less than 6% including 2 million warrants struck at $20/share, assuming the shares trade at or above $50/share later this year. The conversion should take place in the next few months following an S-4 filing with the SEC and proxy vote by unitholders.

The conversion to a C-Corp is a key liquidity-driven catalyst, an event set to unlock massive demand for shares from institutions previously unable to invest due to Calumet's MLP structure. Our flexible nature allows us to take advantage of these generally arbitrary, rules-based handcuffs on our larger competitors. We anticipate further forced buying once CLMT gets added to indices later this year. Depending on its market cap, we would expect the company to be included on the S&P 400 Mid-Cap index. In the meantime, with such a concentration of holders and illiquidity of the units on the open market, there is certainly a dearth of buyers until the DOE loan goes through. And even then, based on our own experience with corporate conversions in the past, the tidal wave of new buyers tends to not really show up until a few months after the change in corporate structure is complete.

With all that in mind, MRL appears to be operating as expected, having worked down its high-cost feedstock as of March 2024. Consequently, we expect the facility will show its true potential of $1.25-$1.45 of EBITDA per gallon going forward with all these transitory issues finally behind it. As best we understand it, the DOE loan is in the last stages of the underwriting process, and we expect an announcement in the next month or two.

While there have been concerns the loan might not get issued, the range of outcomes excluding the loan are heavily skewed to the upside.

Additionally, there is a logical fact pattern that also points to MRL sale. The operational downtime of MRL, both scheduled and unscheduled, highlights how volatile a single-asset company's behavior can be, compared to that of a firm with a collection of similar assets. An IPO of a standalone facility would likely have shares trade on the operational and financial vicissitudes of the single asset, possibly resulting in a lower multiple on earnings.

To maximize the value of MRL, then, it would likely need to fit into an existing portfolio of refining assets, whose owner desires SAF exposure and appropriately values the facility on its lower cost of capital. Said another way, for Calumet to quickly de-lever and get the maximum value for MRL, we expect it will sell the SAF facility to a strategic later this year after its conversion to a C-Corp.

If we were just reading the tea leaves of company news that would be one thing, but there's also a tell from Calumet's own behavior that adds to our evidence mosaic: the hiring of their new investor relations director, who has a considerable specialty chemical background with little to no SAF experience. This is on top of CLMT's newly hired CFO from Goldman Sachs, who brings with him an impressive background in specialty chemicals M&A, and who we believe will help ensure maximum value creation.

Now, what is MRL worth? Or the remainder of CLMT, for that matter? While our analysis from our previous annual letter still stands, so does the unit price, trading between $14-$17/unit. The opportunity is still there, and we think it's best to widen our valuation framework and present various scenarios depending on the DOE loan and whether they announced plans to further expand MRL capacity. We assume C-Corp conversion and MRL monetization occur no matter what.

In the event the DOE does *not* come through for MRL, we believe the lower bounds of what Calumet is worth still comes to ~$43/share:

CLMT Standalone Ex DOE Loan	
Value Today:	
SPS + PB + SA	$315
- Less corporate	$70
Normalized EBITDA	**$245**
- Multiple	*10x*
Less: Net Debt	*$1,250*
Implied equity value	**$1,200**
Shares Outstanding (m)	85.5
Intrinsic Value per Unit	**$14**
Current Unit Price	$14
Implied MOC	**1.0x**

MRL Ex DOE Loan	
Ex DOE Loan Value:	
Montana Renewables ("MRL")	$250
Normalized EBITDA	**$250**
- Multiple	*12x*
Less: Net Debt	*$100*
Less: Warburg Preferred MRL Stake	*$426*
Implied equity value	**$2,474**
Shares Outstanding (m)	85.5
Intrinsic Value per Unit	**$29**
Current Unit Price	$14
Implied MOC	**2.1x**

Total Value Ex DOE Loan	
Total Value:	
SPS + PB + SA	$315
Montana Renewables ("MRL")	$250
- Less corporate	$70
Normalized EBITDA	**$495**
- Blended multiple	*11x*
Less: Net Debt	*$1,350*
Less: Warburg Preferred MRL Stake	*$426*
Implied equity value	**$3,674**
Shares Outstanding (m)	85.5
Intrinsic Value per Unit	**$43**
Current Unit Price	$14
Implied MOC	**3.1x**

Notably, this is just above the lower-bound valuation presented in last year's annual letter. This scenario assumes the midpoint of MRL EBITDA guidance and the lower bound of an expected multiple. But we believe this scenario has a low probability of occurring, because we anticipate the DOE loan will ultimately be approved. Management's incentives[23] are so strong in this case that we expect them to extract the maximum value for themselves and investors in what amounts to a triple lift: DOE loan, C-Corp convert, and MRL monetization.

In the unlikely scenario there is the no DOE loan, we suspect CLMT will sell 100% of MRL immediately, as the proceeds from a partial monetization via a sale to a strategic or an IPO won't be enough to properly deleverage the parent in line with the family's goals. This is basically the worst-case scenario (which is still a pretty great outcome in our view) and it's the only explanation that fits the fact pattern and threads all the needles should the DOE loan not come through. It explains the financial concern related to the leverage at Calumet, and it makes sense of the recent personnel changes at CLMT (e.g. the M&A specialties CFO and specialties IR rep mentioned above), which you'd need in place prior to a DOE loan decision in Q2. Similarly, it explains why management has said it told the DOE "No loan, no max SAF." In other words, this isn't management posturing; the reality is that the leverage profile at the parent (i.e., CLMT) means management has no other choice in a "no DOE loan" scenario. Finally, it explains the warrant strikes and, more important, why the CEO would have the confidence to put a giant chunk of his liquid net worth into deep "out-of-the-money" LEAPs. We could go on; we're just saying the shoe fits.

Should the DOE loan go through at the upper end of its expected $600 million to $1 billion range, we see two options for MRL: ~15k bpd as planned or announce an increase to nameplate capacity to ~21.5k bpd, presented below. While this sounds ambitious, we would ask, "If they have the capital, why not go bigger?". The SAF market is nowhere near supply/demand equilibrium, and getting ahead of competitors on capacity expansion is 100% the correct move.

[23] The CEO's ~$150k open market purchase of $20/strike LEAP call options in late 2023 should raise eyebrows.

CLMT Standalone DOE Loan	
Value Today:	
SPS + PB + SA	$315
- Less corporate	$70
Normalized EBITDA	**$245**
- Multiple	*10x*
Less: Net Debt	*$1,250*
Implied equity value	**$1,200**
Shares Outstanding (m)	85.5
Intrinsic Value per Unit	**$14**
Current Unit Price	$14
Implied MOC	**1.0x**

MRL w/DOE Loan	Scenario 1	Scenario 2
MRL DOE Loan Scenario:	*15k bpd*	*21.5k bpd*
Montana Renewables ("MRL")	$500	$700
Normalized EBITDA	**$500**	**$700**
- Multiple	*15x*	*15x*
Less: DOE Loan	*$1,000*	*$1,000*
Less: Warburg Preferred MRL Stake	*$1,065*	*$1,491*
Implied equity value	**$5,435**	**$8,009**
Shares Outstanding (m)	85.5	85.5
Intrinsic Value per Unit	**$64**	**$94**
Current Unit Price	$14	$14
Implied MOC	**4.5x**	**6.7x**

Total Value DOE Loan	Scenario 1	Scenario 2
Total Value:		
SPS + PB + SA	$315	$315
Montana Renewables ("MRL")	$500	$700
- Less corporate	$70	$70
Normalized EBITDA	**$745**	**$945**
- Blended multiple	*13x*	*14x*
Less: CLMT Debt, DOE Loan	*$2,250*	*$2,250*
Less: Warburg Preferred MRL Stake	*$1,065*	*$1,491*
Implied equity value	**$6,635**	**$9,209**
Shares Outstanding (m)	85.5	85.5
Intrinsic Value per Unit	**$78**	**$108**
Current Unit Price	$14	$14
Implied MOC	**5.5x**	**7.7x**

As you can see, with a lower cost of capital, MRL naturally deserves a higher valuation per unit of EBITDA –15x in our view, rather than the 12x multiple in our "Ex-DOE Loan" scenario above. The lower bound of this DOE loan analysis values CLMT equity at $78/share (~5.5x today's price), only modestly above our previous valuation in last year's annual letter. We view this scenario as the most probable.

But should the company indicate it plans to expand not to ~15k, but to ~21.5k bpd with the additional DOE capital, then we expect MRL Max SAF EBITDA generation should increase similarly, to ~$700 million. In this case, Calumet's equity would be worth $108/share, almost 8x today's price. This is a low-probability event, but given the dynamics of the DOE loan, it's possible.

On the varying loan amounts, the 15k bpd Max SAF Scenario 1 presented above would be worth ~5% more should the DOE loan come through at only $600 million, with Scenario 2 off the table. In the event Calumet receives $1 billion but does not announce a nameplate capacity expansion beyond the 15k bpd guidance, a strategic acquirer could pay full price for MRL and extract the low-cost expansion plan in Scenario 2.

To summarize, we take solace that the odds heavily favor a "worst case" outcome where CLMT more than doubles by year end. Better yet, Calumet has several hard catalysts this year set to unlock shareholder value one way or another, enacted by highly-incentivized management. We see a range of outcomes from ~$40/share to ~$75/share, including the off chance of an even better outcome should everything come together in the end.

And there you have it, our second sun chariot horse of 2024.

♦

Our next sun chariot horse is one that was set to fly last year, and now after bouncing back from its stumbles is ready to catch fire once again.

<u>Pyrois, the Fiery One: Alphawave Semi (AWE.LN)</u>

Next up is Alphawave Semi. Out of all the sun chariot horses, Pyrois, the Fiery One, most reminds us of this company's scrappy nature and explosive potential. It's a smaller position for us compared to the other three, but it's fully deserving of an outsized allocation should management deliver on its almost gravity-defying plans.

Last April, we highlighted Alphawave to investors based on the premise that the emergence of ChatGPT and real-world use cases in AI would accelerate an already-established secular trend that the company was exposed to: the continued improvement of (and investment in) advanced computing and networking in data centers. Alphawave was a massively undervalued AI beneficiary hiding in plain sight. Not only that, but with AI increasing compute intensity by 50x, and connectivity speeds only improving by 2-4x, networking would become a bottleneck without substantive re-architecting of the data center. AWE's 'black magic' expertise in connectivity was now mission-critical to these hyperscalers.

A month after our report, Nvidia reported an explosive increase in demand for their GPUs tied to AI investment. The AI boom was off and running. Shortly thereafter, Alphawave disclosed for the first time that ~60% of its pipeline was tied to AI. Our ability to piece together leading-edge information before it hits a firm's financials let us correctly assess the opportunity in AWE.

While some prognosticators claim AI is a bubble, and while many AI firms starting up today will no doubt fail, hyperscalers and their suppliers are the ones most likely to bring actual products to market that impact business and society. This is not only due to their immense financial resources but their massive data pools and the ability to expose their AIs to real people, thus letting them improve it more quickly than others can. Alphawave is a picks-and-shovels company positioned in the most tangible part of the AI boom: data center infrastructure investment, designing custom silicon chiplets or providing IP for AI chips and high-speed networking hardware. And make no mistake, it is indeed a boom: Recent earnings announcements show that Amazon, Google, Microsoft, Oracle, and others are all increasing their data center capital spending, and are expected to continue doing so for the foreseeable future. Even Dell is seeing the impact of AI-related infrastructure spending.

Alphawave Semi has a somewhat tumultuous backstory, but is now emerging from its adolescence. To summarize, the company was founded by three semiconductor engineers/serial entrepreneurs who left Intel after the sale of their previous IP firm to capitalize on upcoming dramatic changes in how semiconductors, data centers, and networks connect to each other. The company went public in the UK in 2021 to avoid US/China trade issues, given that Chinese-run WiseRoad had roughly 7% ownership and a considerable amount of revenue was derived from AWE's Chinese JV WiseWave. The company was bootstrapped with internal capital from the founders, and revenue was anchored by several large Chinese customers gained through friends-and-family connections. A *Financial Times* article in late 2021 seized on these relationships and alluded to impropriety.[24] Shortly after it was published, the stock dropped over 50%, and to this day the FT's (erroneous) allegations still linger. The company soldiered on, and it became evident that management had ambitious goals when Alphawave purchased OpenFive, a custom silicon business, in early 2022. (That's what made us look hard at the name before almost anyone else had.)

OpenFive was originally OpenSilicon, Intel's in-house custom silicon design team which was sold off in the early 00s. OpenFive was bought and sold several times over the past two decades, but was a predominantly US company, so AWE's purchase triggered US political intervention. After a lengthy holding period, the acquisition was approved by the CFIUS in September 2022. We read between the lines of this approval and surmised that Alphawave made concessions to US regulators that would result in a complete pivot in its go-to-market strategy: focus exclusively on western markets and allies, push the Chinese shareholders to sell, exit

[24] We diligently and publicly called out all the points in the FT article that were overstated or just plain wrong. The FT grossly overstated the importance of 'related party' revenue, which was immaterial at the time, and nonexistent today. Additionally, the fact pattern of the relationships between AWE and its original anchor Chinese customers was not truly investigated by the FT. Further investigation would have discovered an above-board transactional relationship. In time, all our work proved out to be correct and allegations of fraud completely misplaced.

the Chinese market, and sell the JV business. In sum, AWE would become a UK company in name only, with headquarters in Toronto, and deriving most of its revenue from US customers. This acquisition signaled the company's desire to move up its customers' value chains and expand from the smaller IP market to the much larger custom silicon market addressing data center networking bottlenecks.

Very soon, we found that our assumptions were correct: Roughly a month after closing the OpenFive acquisition, October 2022, the Chinese investors sold the entirety of their position at ~100p/share. With a clear signal our thesis was playing out, and the forced sellers out of the way, we started building a position.

In early 2023, Alphawave hosted a Capital Markets Day and cited its de-emphasis of the Chinese market and its intent to exit the China JV. With more and more of our thesis proving out, we gained considerable confidence that (1) management knew how to execute and (2) the eventual reduction in Chinese exposure would eliminate the overhang in the shares. While the market negatively reacted to the Capital Markets Day due to lower margins in the near term from the integration of its acquisitions, we added to our position as we looked past the current year and saw a business with bottoming margins and sharply rising growth. The company was guiding to a massive ramp in revenue to $500M by 2025, up from $340-360M in 2023 with operating margins expanding to a conservative 30%.[25] Doug O'Laughlin, founder of Fabricated Knowledge, came out with a complementary report on Alphawave shortly thereafter in March 2023, and kindly cited our work.[26]

Even prior to these events, we had concluded the company could hit over $1 billion in revenue by the late 2020s with operating margins above 40% (still below those of peers Marvell and Broadcom). After their ramp up this year, we would anticipate they scale beyond even our projections, courtesy of the large tide swell in AI-driven data center investment.

While the business was executing well despite the churn that can occur with acquisitions, AWE's financial organization was still in its infancy. That caught up with the company in late April, when its London-based auditors couldn't finish their work in time for listing deadlines. (The delay was due in part to a lack of manpower, but also to AWE's convoluted internal processes after integrating three private market acquisitions over the course of one year.) As a result, Alphawave was forced to delist from the LSE for a few weeks. While it wasn't the only UK company to have this issue, the delisting was a painful event that called into question all the progress it had made. Following the release of audited financials and resumption of trading, the CFO left the company.

Being in close dialogue with the company, we and a few others provided input on what an ideal CFO would look like, and here we tipped our hand: The new CFO had to be someone with semiconductor knowledge, US-based with a plan to get the financial organization reporting more in line with GAAP, and of course, a strong accounting background. In September, the company brought in David Reeder, the former CFO of GlobalFoundries, to lead the board's Audit Committee. Then, in late October 2023, the company hired Rahul Mather, former CFO of a clean energy company who was Senior VP of Finance at Rambus for over five years. Those hires renewed our faith in Alphawave, proving it was serious about never repeating the mistakes of the past.

With all those pieces in place, the company is poised to have an explosive 2024. We always like to invest in companies that are characterized as "value with a catalyst", and AWE delivers. The company is objectively

[25] Keep in mind this guidance was issued well before any investment explosion in AI seen later in 2023.

[26] We can confidently say Doug's work is outstanding, and we recommend subscribing to his Substack. There are few research shops with a better ROI in the semiconductor world.

cheap, trading slightly above 10x ’24 EBITDA while excess costs suppress near-term margins. Its peers trade at least 4-5x higher on ’24 EBITDA, and 8-10x higher when factoring in AWE’s future growth![27]

It also has multiple near-term catalysts. The company should soon:

1. exhibit growth pointing to a $500M revenue run-rate and 30%+ margins,
2. deliver the first of its advanced optical products to anchor customer AWS,
3. divest its Chinese JV, improving margins and its exposure to China,
4. possibly repurchase shares with the excess capital, and
5. have a drama-free 2023 financial report.

In addition, we think the exit of the China JV could be the last step in preparation for a US listing later this year or next.

Proof of AWE’s explosive year is already coming in. In its recent trading report, Alphawave logged bookings of almost $130M in the fourth quarter ($520M annualized), and there are signs of an increasing pace of design wins. We anticipate first-quarter bookings to be flat vs. the preceding Q4, but from our research, the pace of new design activity is higher than it’s been in roughly 20 years. As such, we anticipate a large ramp in bookings starting in the second quarter, and a more visible pipeline of design wins going forward. This level of activity should get the company close to, if not above, a $500M revenue run rate by the end of the year.

Alphawave is already seeing traction for its IP and custom silicon solutions due to its partnership with ARM. The only two connectivity partners in ARM’s Neoverse ecosystem (network of pre-verified IP partners) are Alphawave and Broadcom:

Figure 3: ARM 3Q FY24 Earnings Presentation.

We want to take a moment here to talk a little about ARM and why the Neoverse is important, so let’s connect a few dots here that should explain where AWE fits in.

[27] If management’s highly probable growth plans pan out, AWE actually trades at just ~4.5x EV/EBITDA.

In late 2020, Nvidia announced an agreement to acquire ARM. In 2022, both parties terminated the agreement due to the FTC's suit to block the merger on anticompetitive grounds. Last year, NVDA shares took off, as GPU demand soared far in excess of supply with no scaled alternatives in sight. ARM proceeded to go public in late 2023 and debuted the Neoverse "ecosystem" to expand its offerings. On ARM's latest earnings call, the CEO mentioned the expansion in licensing deals for its AI-specific neural processing unit (NPU) and its new hyperscaler-specific Neoverse CPU IP.

While it's still early days and ARM isn't known for quality GPU IP, we know that Masayoshi Son, the founder of Softbank and majority owner of ARM, is not one to miss out on ambitious goals and high-flying tech valuations. With hyperscalers lamenting their reliance on Nvidia, it's clear to us that Masa plans to build an Nvidia competitor via ARM, with Alphawave as a key partner providing connectivity IP, chiplets, and custom silicon solutions.

Given that context, it's no surprise that Nvidia recently announced its interest in entering the ~$30 billion custom silicon market. That will be a hard sell for Nvidia, as the custom silicon market is growing mainly due to its own customers looking for an alternative source for GPUs and other hardware. It will likely take years, but competition is coming for Nvidia – and AWE will probably end up being part of it. Until then, NVDA is utterly dominant, providing solutions well before their customers even think through first order effects.

Now back to the other catalysts for this year. The first of Alphawave's optical PAM4 and Coherent optical products to AWS are already being delivered, with two other hyperscaler customers in testing. Volumes and revenues should be material by mid-year. Notably, we're hearing that the optical product has power consumption and error rates well below those of the leading optical competitor in the space, Marvell's Inphi division. Alphawave, already following in IPHI's steps, recently hired the former Inphi Senior VP of Sales, Charlie Roach, out of retirement. Should MRVL's Ford Tamer join AWE's board, the message couldn't be clearer. Alphawave could be Inphi on steroids. There are several other players attempting to claim this mantle, but we believe Alphawave is the one truly capable of doing so – so long as it brings a superior optical product to market, which we think should be obvious by the end of 2024.

By mid-April, AWE's full-year 2023 earnings report should be out. With no issues in terms of audits or financial reporting, Alphawave should show proof that it's "all grown up," and can finally leave behind legacy concerns.

Next, we anticipate the company will sell its Chinese JV, WiseWave, later this year. The Chinese JV is running at a negative margin and represents an overhang for the stock price on qualitative measures. Regardless of the price at which they sell out of the JV, the announcement should be viewed positively. And depending on the amount recouped, share repurchases should be on the table to signal to investors that management is serious about addressing the company's undervaluation.

Lastly, we think AWE management also tipped its hand on a US listing. The CFO is based in San Francisco and is expected to remain there, and he's utilizing their auditors' West Coast team as well as the London team. If one were to prepare for a US listing, this is part of the fact pattern one would see.

To highlight not only the absurdity of Alphawave's current low valuation but also the value creation from a US listing, we should compare the company to a US competitor, Credo (CRDO). It's a simple story for investors, but a disadvantaged business given the direction of the industry.

Credo is a connectivity firm with Active Electrical Cables (AECs) being their marquee physical product to data center customers, not to mention SerDes IP. As AI compute pushes connectivity bottlenecks to their extreme, upcoming investment cycles and the need for faster transfer speeds will compress the market for copper cables in favor of optical connections. Credo is behind this curve with increasingly commoditized copper-based products with waning advantages, while Alphawave is ahead, delivering custom silicon solutions, and bringing optical products with shorter and shorter reaches to market. However, CRDO trades at 20x sales (over 80x EBITDA), while Alphawave trades just over 10x EBITDA (3.5x sales) – and that's despite AWE having margins 3x higher than CRDO's!

Even if AWE remains only a fraction of CRDO's valuation, it could result in value creation amounting to several billion dollars, 3-4x its current market cap. We'd argue that as data center infrastructure shifts to more optical connections and custom silicon solutions, Alphawave will move up in the world, competing with the likes of Marvell and Broadcom. Expect to see further proof of Alphawave's competitive positioning this year with clear design and product wins with customers like Microsoft and Google.

To summarize, AWE shares are too cheap by almost any measure, and there are multiple catalysts this year that should cause Alphawave to ignite; one has already come to pass and there are several more on the way. Needless to say, with its potential to catch fire, we think Alphawave is best represented in our sun horse portfolio by Pyrois, The Fiery One.

♦

Finally we come to our biggest, most discussed, and most important sun chariot horse of 2024, which is set for a new era starting this year.

<u>Eous, the Morning Star or the Dawn: Nintendo Co. (NTDOY)</u>

Our last sun chariot horse of 2024 is Nintendo, a business rapidly approaching a critical cash flow and "general investor narrative" inflection point much like Vistry, Calumet, and Alphawave – but in an even more profound way. It's at nothing less than the dawn of a new era, so we've compared it to sun chariot horse Eous, the Dawn.

Nonetheless, the improvement in business quality and return on capital at Nintendo – and the massive value unlock to come – remain broadly underappreciated by investors (the share price's 30% rise over the past twelve months notwithstanding). A successful transition to more powerful hardware at some point in Nintendo's fiscal year is poised to drive a stake through the heart of the "hit-driven cyclical" narrative once and for all, driving a sea change in perception that we expect will catalyze significant risk-adjusted returns over the short, medium, and long term.

Our original thesis came out in April of 2019 as part of our 2018 Annual Letter[28], a time when speaking of such things as Nintendo's "Apple-like" hardware strategy, or its IP monetization via movies and theme parks, triggered consistent laughter among investors. When bringing up these elements in the year 2024, we now hear, "Of course that's what they're doing, that's not a variant view". My, how things change!

As a reminder, we've long believed that most investors have incorrectly judged Nintendo by its history of cyclical "boom-bust" earnings: Every few years, the company launched a new game console that gained popularity, but eventually became obsolete and needed to be replaced. In stark contrast to the consensus view, we argued that this time really was different: Nintendo was aiming to make the Switch an indefinitely-lived platform at the center of a software-based ecosystem, just like Apple's iPhone. The Switch platform would be

[28] https://www.crossroadscap.io/investor-letters/2018-investor-letter

perpetual, ensuring Nintendo's user base would continually grow with each new iteratively-improved version of the hardware, rather than resetting to zero with the launch of an entirely new console as it had in the pre-Switch era.

Similarly, we argued that the Switch's software library would remain evergreen, just like apps in Apple's App Store or games in Valve's Steam service for PCs. In other words, just as lots of different PCs can access Steam, lots of different Switch-family devices would be able to access the Switch game library: While Switch hardware will iterate and improve over time, the Switch software ecosystem is "forever."

Without rehashing all the details,[29] over the past five years our thesis has played out more or less exactly as we hoped. The long-awaited cyclical reversion in Nintendo's sales and profits never came, even though Wall Street's been calling for it since before we even got involved. While our view was considered radical when we first published our thesis, it's gradually gained acceptance as the market's misperception of Nintendo increasingly yields to economic reality. Even so, we think the consensus view still misses the structural implications of Nintendo's ongoing business model transformation despite significant and relentless evidence to the contrary.

In many ways, this has been frustrating. Yet opportunistic investors new to the name, especially those of you with a love for exploiting value unlocking change, should take heart! When it comes to the prospects of the world's reigning video game champion, the best is yet to come. Rather than belabor the delusions of the army of analysts still fighting the last war, we'll simply repeat what we've long known: Nintendo is an "inevitable" now – a high-return secular growth juggernaut that should just keep getting bigger and more profitable with time. Better yet, with Nintendo's IP flywheel finally in full effect, the earnings snowball you were first told about many years ago is not only rolling and getting bigger, but it's set to accelerate as higher-powered hardware drops in the near term and the software release slate normalizes thereafter.

Which brings us to another key reason to celebrate Nintendo's fast-approaching "through the looking glass" moment: It's not just about its dedicated videogame platform business. Nintendo has been taking steps to diversify its income streams for years outside of its core business of videogames by slowly and successfully monetizing its IP via theme parks, movies, and other capital-efficient avenues that are just now beginning to reveal themselves. It's still early innings, mind you, but we're happy to report that years of constant assertions that Nintendo would shy away from properly monetizing its gold-plated portfolio of unrivaled IP look positively ridiculous in hindsight. With the blockbuster success of the Super Mario movie, as well as its theme park and other IP-related initiatives approaching critical mass, Nintendo today has multiple sources of high incremental margin revenue that will begin to snowball over the next several years.

To say the same thing a slightly different way, the quality and visibility of Nintendo's business in early 2024 is radically superior and less risky relative to what it was at any point in its roughly 13-decade history, even if these structural improvements are not broadly appreciated as such. Furthermore, now that Nintendo is armed with the market-leading Switch platform and a self-sustaining IP flywheel on the far side of exit velocity, we remain more confident than ever about its efforts to properly leverage its Apple-like ecosystem of hardware, software, and services across its loyal, 122 million+ strong global customer base.

Just like other analysts and fund managers, we lack a working crystal ball. However, we suspect that as the consensus comes to better understand and appreciate broader industry trends in entertainment,[30] console gaming, and Nintendo's ongoing business model transformation above all (especially the long-term impact

[29] More info can be found in our 2021 Annual Letter, where we provided a long-form update in August of 2022 - https://www.crossroadscap.io/investor-letters/annual-letter-to-investors-2021

[30] https://www.wsj.com/arts-culture/television/hollywood-finds-fresh-characters-and-new-worlds-in-videogames-7358864a?st=frkchmf6u0tyb5t&reflink=article_copyURL_share

of its various idiosyncratic initiatives in visual content and theme parks[31]), an investment at or around today's quote will result in outsized market- and economy-agnostic returns as the spotlight on the giant disconnect between its current price and the quality of its business only gets brighter – —that is, until price and value ultimately converge.

Let's recap why we think Nintendo is slowly but surely sending old bear arguments into permanent hibernation:

1. **Nintendo just printed its highest TTM revenue and operating profit figures in the Switch platform's history, seven years into an aging console "cycle," despite having released only two top-tier first-party "system sellers" over the previous 18 months.**

   This demonstrated stability in revenue and operating profit is even more impressive given that Nintendo's pipeline of first-party software releases was reduced significantly in preparation for the launch of more powerful hardware originally set to debut in early 2022. This is no small thing given that the primary driver of Nintendo's top and bottom lines has always been game sales. Moreover, the lack of software was compounded by new hardware delays, which have forced the company to sit on an increasing pile of unreleased titles while we wait for the Switch 2's reveal and eventual release.

   Of course, it's not just Nintendo's top and bottom lines that stubbornly refuse to cyclically revert. The latest quarterly disclosures showed steady growth in every KPI that matters: Annual playing users (122 million+), Nintendo Switch Online ("NSO") memberships (38 million+), digital sales (up 11.7%), IP Entertainment revenue (up 93% year-on-year), and more all continue heading up and to the right, quarter after quarter, year after year.

   As we've long argued, Nintendo's decision to build an iPhone-style digital ecosystem of software, services, and subscriptions around its Switch platform (alongside its newfound Switch-era policy of continuous software releases) has let the Switch do what no other Nintendo system has ever done: maintain high engagement throughout its life cycle.

2. **Nintendo's Apple-like ecosystem (reinforced by a very Disney-like IP content flywheel) has radically improved the economic resiliency and visibility of Nintendo's revenue and cash flow, de-cyclifying its earnings power in lockstep.**

   Nintendo's ongoing business model transformation will continue to drive consistent revenue and margin growth as it plays out over the next several years (as Nintendo's structural mix shift to digital, online services, and subscription-based sales catches up to those of its peers), propelling sustained operating margin and return on capital expansion just as it has since the Switch era began.

   And yet, despite this unusually high visibility and multitude of price-catalyzing "irons in the fire," the market continues to massively misprice Nintendo – and in particular, its eShop, an App Store-like third-party software and value-added service distribution platform. This is remarkable given the Switch platform's enormous success, but even more now that the eShop is on the cusp of another step-change increase in its earnings capacity (see below) and has a very high probability of generating billions of dollars per year of extremely high-margin incremental revenue at maturity.

   For those on Wall Street, we repeat: Better monetization of the Switch as an "app store platform" marked a major strategic shift in how Nintendo views its core business, and this business is at a key

[31] https://www.wsj.com/lifestyle/travel/universal-disney-theme-park-dominance-a71ba4c6?mod=Searchresults_pos1&page=1

operational inflection point. The structural transformation of Nintendo's business into a unified software-based connected-device ecosystem (where its iterative hardware model serves as a recurring revenue center) was a true game changer for the company. Today, between the ongoing digitization of its software sales and the successful development and customer adoption of Nintendo Switch Online, it's clear that the growth, recurring nature, and high margin profile of digital game sales, subscriptions, and fees from Nintendo's App Store platform justify a much higher valuation – in line with or above those of market-leading video game software developers and/or integrated hardware/software technology platforms.

Again, the eShop has been a thriving distribution channel for *both* Nintendo's own games *and* third-party games[32] for years. Better still, eShop digital software revenue is set to soar over the next few years thanks to a step-change increase in the availability of AAA third-party games and other factors related to the release of higher-powered hardware later this fiscal year. It's a continuation of the trend of software driving sales more than hardware does, which we've seen since the Switch era started all the way back in 2017. (Notably, 2022 was the year when Nintendo's software sales overtook hardware sales for the first time). We think this trend will only become more pronounced as Nintendo's long-term evolution plays out.

Admittedly, Nintendo's eShop couldn't have arrived at a better time, smack dab amid the secular growth of digital game purchases, a trend that should only accelerate at Nintendo in the years ahead as eShop-related afterburners kick in. Recall that before the Switch, Nintendo's iconic video game franchises acted as major "pulls" for consumers to purchase its hardware consoles. These previous consoles were primarily designed to play these iconic games and did not act as content distribution channels as PlayStation and Xbox have from 2013 or so onwards. Rather, the Switch was Nintendo's first platform created to be more than just a console on which users play content; it's also a platform on which they purchase content.

Consequently, the Switch has exhibited a level of longevity in its evergreen content library that we've never seen on previous Nintendo hardware. While third-party A and AA software sales have held up, the bottleneck in AAA games brought about by Nintendo's dramatically underpowered devices over the last 3 years is set to clear with the launch of the Switch 2 driving a large 4- to 5-year upcycle in Nintendo's revenue and earnings, propelled in large part by the explosion in pure-margin fees related to AAA game availability (and related live service and subscription revenue).

3. **With the release of the Switch 2, Nintendo is primed for continued massive margin expansion by reaching a previously untapped market for the company's consoles.**

   This next leg up in Nintendo's normalized earnings power isn't just about a rapidly growing top line; it's also about the enormous fixed cost operating leverage set to kick in alongside the Switch 2 later in Nintendo's current March-end fiscal year. That's leverage its PlayStation and Xbox peers can only dream of given the flaws intrinsic to their niche in console gaming. (Keep an eye out for a deep dive into this question next month!)

   Rather than dunk on these flaws and various unforced errors by Sony and Microsoft, we'll simply point out that Nintendo's already improved ~35% operating margin should expand to 50%+ based on reasonable extrapolations of current trends that have been in place for years. (Operating margins

[32] The Switch has long been the dominant platform for A and AA indie games, with third-party AAA games up next.

normalizing above 50% is a matter of when, not if, in our view, as the secular transition to digital marches on). [33] This is in part thanks to Nintendo's next-generation "Switch 2" being aimed at hardcore, "high-end" gamers. That means that a significant percentage of new active playing Nintendo users will also tend to be higher-ARPU users – gamers attracted by the power of the new hardware, the ability to play their favorite non-Nintendo games the way they were truly meant to be played, and the ability to play new, high-powered Nintendo games both at home and "on the go" in a manner not previously possible. These big spenders will not only meaningfully expand Nintendo's total addressable market, but will help Nintendo's digital sales surge in line with Switch 2 adoption, while putting NSO members, Nintendo's most valuable and dedicated player cohort, on a path to almost doubling in size in the coming years.

Critically, first- and third-party software monetization is set to soar in the years ahead**,** as already alluded to in point 2. Again, digital revenue from the eShop, alongside higher ARPU and subscription growth at NSO, will skyrocket thanks to the deluge of triple-A third-party titles set to be unleashed by the Switch 2's more powerful hardware as well as the roll out of new, higher-priced NSO subscription tiers. The tea leaves could not be clearer about what's coming[34] at this point: The Switch 2 will be competing directly with PlayStation and Xbox by having more third-party AAA games on its platform. Consider this[35] from third-party developer EA.

4. **Nintendo's IP content flywheel is finally in full effect.**

Nintendo isn't just about games anymore. The impact of its new hardware-software ecosystem is being reinforced by the massive free optionality of its rapidly growing IP segment. The company has been taking steps to monetize its IP via theme parks, movies, and other capital-efficient avenues, and these efforts are just now starting to bear fruit. With the blockbuster success of the Super Mario Bros. movie, the Super Nintendo World areas in Universal theme parks, and other IP-related initiatives delivering a very Disney-like network effect, Nintendo's IP segment now has multiple sources of high-margin, annuity-like revenue that collectively have a very high probability of generating billions of dollars per year at maturity.

This obvious earnings power is dancing around waving its arms in investors' faces, and yet it remains valued at less than zero. You'd think that would change now that the IP Entertainment business is firing on all cylinders: The segment's revenue soared 133% year-on-year in Q2 and 93.4% in Q3, mainly due to continued contributions from *The Super Mario Bros. Movie.* The quarter-over-quarter improvements were equally impressive, with IP-based revenue rising from $213 million in Q1 to $366 million in Q2 and $497 million in Q3. And yet all the sell side talks about is how those figures will drop off next year rather than the far more consequential insight that Nintendo's continued success aggressively leveraging its gold-plated portfolio of hit game franchises and characters via movies and other areas of visual content like TV is all but assured at this point.

Given that the SMB movie debuted on Netflix on December 3rd, and that Nintendo holds 100% of the global distribution rights, fiscal Q4 (end-March) results, which are expected to be released in May, should give us a better understanding of what Nintendo can earn on a per-movie basis from future licensing agreements. Perhaps that will clue in the sell side, but we'll refrain from holding our breath. Granted, there will be some lumpiness in visual content's contribution to the IP Entertainment business over the next few years as its feature film business scales to steady state. But who cares? We

[33] The transition to digital is inevitable not just regarding video games, but all entertainment-based physical media. Trends toward digital have been accelerating for years with no hint of slowing down across the entertainment space.
[34] https://twitter.com/genki_jpn/status/1778777035349107188?s=12
[35] https://www.youtube.com/watch?v=VEk6lhbe0UA

now know Nintendo's NCU endgame with 100% certainty. It's honestly hard to overhype how big a deal this is but consider that Shigeru Miyamoto himself confirmed this last November, when he said, and we quote, *"Nintendo intends to work up to a regular release schedule of one movie per year"*.

This easy-to-miss disclosure was tantamount to tipping Nintendo's hat that the visual content subsegment, inclusive of its portion of box office receipts and PVOD/SVOD digital revenues prior to the closure of its theatrical release window, should be worth upwards of $15 billion to Nintendo shareholders. Critically, what's not included in that figure is any contribution from the longer tail of recurring licensing revenue Nintendo will earn from streaming deals like its current one with Netflix, despite the long tail of recurring licensing revenue from its 100% ownership of NCU IP being the far more valuable revenue stream at scale. (Again, Nintendo's next report may give us some concrete data to inform our judgements here). Similarly, that $15 billion dollar estimate ascribes zero value to the network effect on video game and console sales, which we already know is substantial[36] and will only grow once these movie releases are paired with the launch of new first-party "system-selling" software and future iterative hardware (i.e., new/upgraded console launches).

Intriguingly, there are credible whispers, among other clues, that the delay of the Switch 2 was in part about Nintendo's desire to provide just such a match in timing between new hardware and a movie based on new triple-A software, but let's back up a bit. In case you've been living under a rock lately, *Super Mario Bros. The Movie* (Nintendo's first foray outside of video games in decades) grossed $1.4bn at the box office last year, quickly becoming the best grossing video game movie and the second best-grossing animated film of all time. It's continued to capture an outsized portion of family-friendly movie demand long after its box-office run ended in August. Unsurprisingly, Nintendo and Illumination wasted no time following up on this success: On March 10th ("Mario Day," because MAR 10 looks like the name Mario), they officially announced a sequel is in the works, with an April 2026 release date. So with that in mind, we've included a few fun facts to ponder below:

- According to Neilsen, *Super Mario Bros. The Movie* was the 3rd most-streamed movie in 2023, despite not hitting streaming services until August 3rd on Peacock and December 3rd on Netflix. Incredibly, viewers around the world still managed to rack up over 8.8 billion minutes of viewing the hit film by year end. That's crazy, but even more so when you realize all the other films on the top 10 were full-year comparisons (except for Avatar in June and Elemental in September).[37]

- Here's another mind-bending data point to consider: As of the end of its fiscal Q2, Nintendo estimates that *over 170 million people* had seen *Super Mario Bros. The Movie.*

- Demand for the movie remains both massive and stable as we lap its first anniversary. Super Mario has been a top five movie for 27 weeks between its 9 weeks at the top of the US box office and its 18 weeks run as a top 5 film on Netflix, a sure sign of its saying power. We're not counting the many weeks where it was a top-earning film across Amazon, Apple, and other PVOD/SVOD streaming platforms due to a lack of disclosure. As Mario would say, "Wahoo!"

---

[36] Mario game sales increased 30%, with mobile games sales up 40% since the Super Mario movie's release. The potential to drive that multiplier higher through smarter release schedules done in parallel with coordinated marketing campaigns is self-evident as far as the future is concerned.

[37] As a friend pointed out to me, that amounts to *167 centuries* spent watching our favorite Italian plumbers and friends save Princess Peach (well, technically Luigi, in the movie) from the clutches of the evil Bowser. Mama Mia, that's one insane stat!

If Nintendo's recently revealed SMB sequel wasn't enough to get Nintendo fans fired up, the company's November announcement of a live-action motion capture-based movie on its hit video game franchise *The Legend of Zelda* surely was. The latter will be co-financed by Nintendo and Sony Pictures Entertainment, with Sony handling distribution. Production this time around will be shared between Shigeru Miyamoto and legendary producer Avi Arad, the man who turned Marvel Studios into a box office juggernaut. (Arad's more recent success producing Sony's "Spiderverse" series of animated Spider-Man movies suggest he hasn't lost his touch.)[38] Intriguingly, no tentative release date was given in the press release, other than to reassure analysts that it builds on an ongoing discussion that has been taking place for upwards of 10 years about how to best adapt the beloved franchise.

Nintendo's pioneering pairing of the release schedules of its NCU movies with new installments of its marquee franchises in video games should drive marketing, customer acquisition, and related synergies in profound new ways. With no historical parallel to look at to inform our judgement on the ultimate uplift to Nintendo's equity value, we'll have to wait and see before we start sharpening our pencils. It will be material regardless. Not only is Hollywood looking to video games as the next untapped treasure trove for new theatrical releases, but secular demand for family-friendly animated entertainment remains incredibly strong. As a result, the scarcity of ubiquitous, highly-trusted brands with slam-dunk multigenerational appeal all but guarantees Nintendo's IP library in movies and TV will remain highly valuable, both through cycles and over time. And unlike Disney, Nintendo knows the value of its IP content flywheel flows directly from its dedication to its craft and its trusted, globally beloved brand known for differentiated, family-friendly content that both children and parents love. It's all about trust.[39]

Recall Nintendo's larger goal with its movie efforts is to nurture a continuously growing universe of fans, as the more people who encounter Nintendo's characters in one medium, such as theme parks or movies, the more who will likely seek them out in another, such as video games. Of course, low marketing spend has long been a Nintendo hallmark, since its well-known characters and game franchises essentially sell themselves. Nonetheless, better leveraging of the company's IP in novel and creative ways should only enhance this phenomenon, as the flywheel effect from future success in visual content should drive a virtuous feedback loop, meaningfully expanding sales of both its consoles and video games along the way.

At any rate, thanks to its vast library of gold-plated IP and globally-beloved characters and stories, Nintendo's new ventures couldn't have come at a better time: They've arrived right in the midst of a seismic shift in the entertainment industry. The success of *The Super Mario Bros. Movie* has demonstrated as much, proving the value of Nintendo's game franchises to Hollywood and the rest of the industry definitively. Couple that fact with Disney's grossly negligent abandonment of most of its customer base, and Nintendo has a once-in-a-generation opportunity to dethrone the former king of family-based entertainment.

Disney's tragic over-monetization of its best IP and theme parks, combined with a decline in the quality of its storytelling, has not only intensified the erosion of its box office market share, but

[38] We think Arad and Sony Pictures will be every bit as good as Nintendo's partner in animated films, Illumination. That's no faint praise, given the success of the *Super Mario Bros.* movie.

[39] A recent *Wall Street Journal* article makes this point, while unwittingly driving home just how tailor-made this moment is for the big N. See "Hollywood's New Source of Fresh Characters and Worlds," https://www.wsj.com/arts-culture/television/hollywood-finds-fresh-characters-and-new-worlds-in-videogames-7358864a?mod=saved_content

arguably has permanently impaired its brand. In contrast, Nintendo has cared for its IPs with the devotion they deserve, resulting in almost all games from its major franchises receiving overwhelming praise and massive sales over the decades. More important, Nintendo is consciously avoiding making the same mistakes as Disney, keeping its eye squarely on the permanence of its art. If Nintendo's actions over the last 3 decades, as well as more recently with *The Super Mario Bros. Movie,* don't serve as sufficient indication that Nintendo would never sacrifice the quality of its product or willingly fracture its customer base, perhaps Shigeru Miyamoto's thinly-veiled shot call in the aftermath of Nintendo's Zelda movie announcement will: "I realize there are so many Zelda fans, **and we cannot betray their expectations**. That is a big hurdle. But we are ready." Unlike Disney, Nintendo will continue to do what it always does: make content of all kinds that devoted fans of all generations love. That's it.

Finally, Nintendo's theme park operations are also close to revealing just how strong a profit engine the IP segment will be at maturity. Theme parks should blossom into a business worth at least $10 billion in after-tax equity value by the end of our forecast period. This is an area where we've spent considerable time and effort over the last 18 months building relationships with former Universal lawyers and relevant industry creatives. We feel this has been time and money well spent, as it has given us an edge in understanding the likely economics of Nintendo's partnership with Universal. As things stand, we have a good grasp of both how Nintendo stood to benefit initially, and how the terms of trade will likely evolve as Universal's Theme Park division adds Super Nintendo World (SNW) areas in other parks (e.g. its Epic Universe in Orlando in 2025, and in Singapore shortly thereafter) – or by adding more "lands" within existing SNWs (e.g. the planned opening of Donkey Kong Country in Universal Japan's SNW in spring 2024, or the likely near-term announcement of a Legend of Zelda ride at Universal's *Islands of Adventures* Park in Orlando).

Taken together, the above developments are a true game changer, set to vastly improve the quality, stability, and magnitude of Nintendo's future earnings. Between higher software prices ($70), a step-change increase in the availability of third-party AAA games, a much larger, higher-spending active user base, NSO reaching maturity, and the continued mix shift towards digitization of its sales, another 4-5 years of explosive growth in both revenue and profit is all but certain.

In addition, we believe Nintendo's visual content (i.e. movies) and theme park segments are likely worth half its current market cap by themselves once mature. Add in the scarcity value of Nintendo's globally-beloved, family-friendly brand, and the best IP library in an industry where IP is king, and the days of Nintendo trading ex-cash like it's a no-moat cyclical operating on the far side of peak earnings (as it has for most of the last five years) are numbered. A secularly growing, high-incremental-ROIC business with a widening moat and a healthy, growing ecosystem should never trade at a valuation that implies the opposite.

The Consensus Still Hasn't Got a Clue

No Nintendo update of ours would be complete without some commentary on how Wall Street remains clueless about the fundamentals. Listen to the sell side (or even much of the buy side) and you'll hear worries about "intergenerational hardware/software compatibility" or the Switch 2 possibly not being a "hit." Then you'll see the laughably low estimates for hardware sales that flow from these unwarranted concerns. Someone should clue them in that no generation of Nintendo hardware since the NES has failed to clear ~90 million in total unit sales.[40] Even more impressively, no generation or family of its portable consoles has failed to clear 200 million. And yet, the Street fails to understand even the most elementary of these distinctions.

For example, unlike all past Nintendo platforms, the Switch integrates a portable system and a home console system into a single device. As a result, we believe analysts should base their Switch sales estimates on the *combined* portable and home console sales of past generations. That's why comparing the Switch to the ill-fated Wii U is horribly misleading to the point of comedy. The reality is that total Nintendo hardware demand is actually remarkably stable over time.[41] Moreover, the fact that hardware sales have continued to grow despite declining unit volumes, primarily on the back of the Switch OLED's higher price point, suggests there will be a massive surge in hardware revenue when pent-up demand for the Switch 2 meets an estimated $399 price point – especially given that Nintendo has reportedly[42] delayed the Switch 2's release to March 2025 in order to build plenty of inventory for the launch.[43]

According to tech consultancy Omdia, this notoriously conservative company has reportedly[44] told its key manufacturing partners to prepare for annual production capacity of 25 million units, an increase of ~10 million since the Switch era began. This makes perfect sense to us, as it squares beautifully with everything we know. Notably, this report was well before the rumored delay and the underlying rationale was first reported by institutions like Bloomberg and Nikkei. If the reported reasons for the delay are in fact true, presumably Nintendo thinks demand for the console is large enough that 25 million in year 1 won't be enough to get the job done, and thus thinks it would be leaving money on the table (net of the opportunity costs) if it didn't push back the release date to let it pile up enough hardware for a blowout launch. Perhaps Nintendo intentionally leaked misinformation to guarantee the Monday morning surprise of the reveal and release date.

For what it's worth, we continue to believe our 20 million units per year estimate remains is almost trollishly conservative on this basis alone, but the sell sides estimates put that to shame while offering any competent analyst looking for a great laugh exactly that.

In any case, we believe Nintendo could easily sell 35 million Switch 2s in the device's first year on the market, based on replacement demand plus latent demand from "upgraders" (interested in the latest and greatest),[45] to say nothing about the incredible anticipation that's been building and building in the gaming community over the past several years. Whether Nintendo will hit that figure ultimately comes down to supply (i.e. available inventory) at launch; demand isn't in question.

Before moving on, we'd be the first to admit that the latest delay into March of 2025 is somewhat annoying, but it's better than getting caught flat-footed without enough inventory to meet demand, given how important a successful transition is. Our take is that exactly when Nintendo launches the "Switch 2" is irrelevant – what

---

[40] In order of generational hardware sales pre-Switch (low to high): the NES sold 62m, the 3DS & Wii-U sold 89.5m, the GB & N64 (and VB) sold 101m, the GB and SNES sold 101m, the GBA & GC sold 103m, the DS & Wii sold 256m.

[41] We think the odds of the Switch 2 family of devices selling less than 100 million units over the next 5 years are incredibly low, yet that's the consensus sell-side assumption.

[42] According to Nikkei and Bloomberg.

[43] It's apparently not just trying to maximize sales and grow the Switch ecosystem's user base, but also to combat resellers and avoid the widespread shortages we've seen in prior launch years.

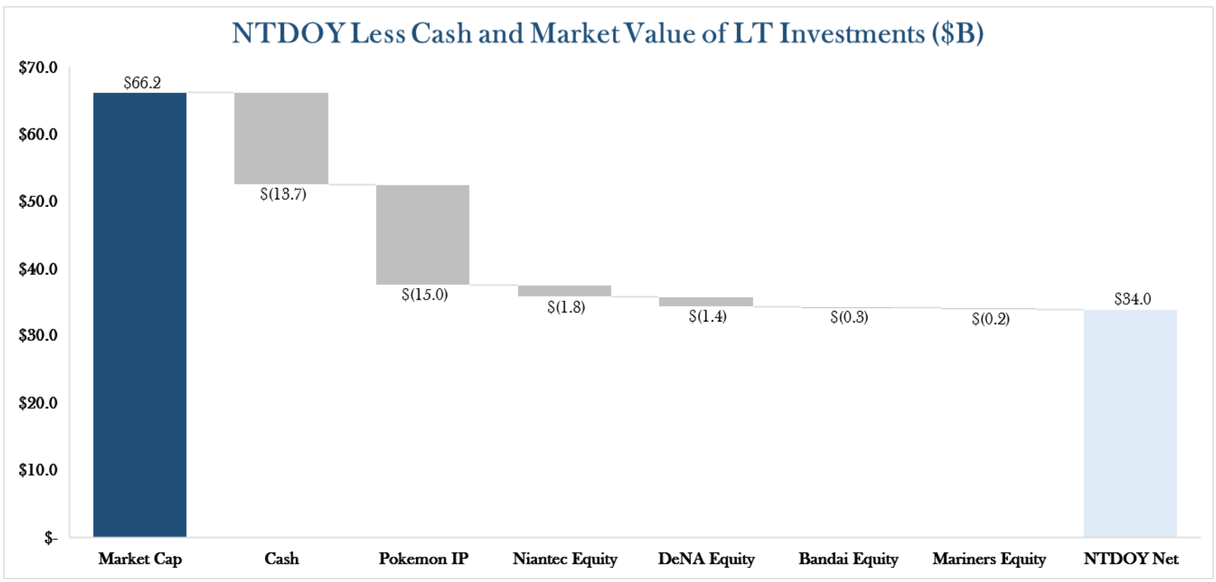
[44] https://www.bloomberg.com/news/articles/2024-01-26/switch-2-nintendo-s-next-gen-console-to-have-8-inch-lcd-screen-omdia-says

[45] If that sounds crazy, rest assured it's anything but: The Wii sold a mind-boggling 50 million units in 2009. Considering the size of the Switch's installed base today, and the multi-year delay of higher-powered hardware, our guess is that probably a quarter to half of the present 122 million-strong user base would like to upgrade/replace at least one of their devices at launch.

matters is whether the hardware is good. To date, all the evidence supports the belief that it will be better than good – it will be great. There is also the fact that Nintendo deserves our trust at this point. In every example of a delay since the Switch era began (the Mario movie, *Zelda: Tears of the Kingdom*, etc.), the results have spoken for themselves.

Valuation: The Best of Both Worlds – Downside Protection, "Slam Dunk" Options to the Upside

The asymmetry on offer in Nintendo's shares remains uniquely attractive. Downside protection is robust, with over 20% of the company's market cap in cash and incremental value in various non-core assets, like a 10% stake in the Seattle Mariners or control ownership of the Pokémon franchise.[46] All told, Nintendo has $13.7 billion in cash and $18.5 billion in non-core long-term investments, with perhaps the most valuable hidden balance sheet asset on earth in The Pokémon Company. That means the risk of permanent capital loss over any meaningful period of time is practically nonexistent at Nintendo's present valuation. As shown in the chart below, netting out its considerable investments leaves Nintendo's standalone value at an implied ~$34 billion:



Just in case it's not clear, we've assigned no value to the $18.5 billion non-core, hidden asset portfolio owned by Nintendo for the purpose of the upside scenario laid out below**.** We've refrained from making any adjustments to Nintendo's market capitalization, not because it's rational or because the tangible value of these assets isn't "real," but because we take it as a given that the market will continue to ignore these sources of embedded value for the foreseeable future.

It also demonstrates just how cheap Nintendo's equity is, even when huge swathes of its increasingly valuable asset base are ignored. Of course, when properly accounted for in our valuation analysis, these assets lower the current multiple and the risk of permanent loss of capital to near zero, resulting in **a truly massive margin of safety** for long-term, business-minded investors like us.

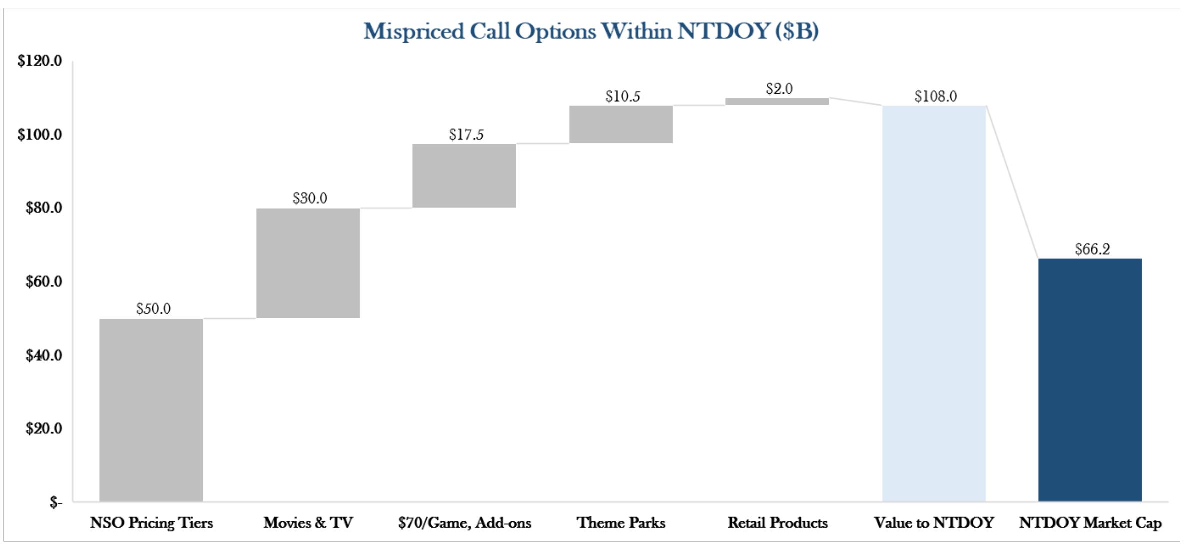
As for upside, we see Nintendo's Switch sales normalizing at ~20 million units per annum, as Switch 2 adoption hits and a replacement cycle takes hold over the longer term. Additionally, we see the active user base growing to over 135 million, with a third of them having NSO subscriptions. The price of those

[46] Nintendo owns the trademarks and other key IP. Its look-through economic stake in *The Pokémon Company* is likely to be much greater than 50% given the value of equity stakes in *Creature's Inc.* and *Game Freak*.

subscriptions should increase, but still remain well below that of rival offerings from Sony and Microsoft. All the while, the trend toward digital downloads should continue, with digital game sales coming to represent over 50% of Nintendo's total game revenue in 5 years. Mind you, every assumption above is extremely conservative to the point of absurdity, the last one most of all. But once again, this valuation exercise aims to reinforce a very simple point: With a moderate multiple on earnings of 20x, we come to a $43/ADR share valuation, or ~220% upside.

But that's not all. Nintendo has multiple "slam dunk" options that continue to be valued at zero, and one is already on the way: If we chalk up the 2.1 and 1.8 tie ratios of the last two years to the collapse in 1P software releases caused by delays in the Switch 2's release and the underpowered nature of the original Switch's decade-old technology, a pre-pandemic tie ratio of at least 3-3.5 should hold true for Switch 2. In fact, early in the original Switch's cycle, the tie ratio got above 4. Our point here is simply that bumping up the digitally adjusted tie ratio to 3.25x (to reflect normalization of first-party and third-party software release pipelines) adds another $1.5-2.0 billion in earnings per annum for FY 25 through 28. Indeed, our most conservative model shows value would increase by $30B – and again, Nintendo's EV today is a mere ~$50B.

Framed another way, there are multiple idiosyncratic levers at Nintendo capable of driving a highly favorable market- and economy-agnostic endgame; levers that are collectively worth almost 2x the company's present market cap despite being "slam dunks," as the chart below shows:



Should these "call options" go deep in the money, Nintendo would be worth much more than our $43/ADR target price, and possibly even over $100/ADR.

Finally, consider that front-running major console launches by 9-12 months has historically been the most surefire way for a Nintendo investor to profit. It would have returned approximately 216%, on average, based on the last 4 launches. And entirely by coincidence, our expected valuation of $43/ADR equates to ~220% upside. In the uncertain world of equity research, it's always reassuring when different methodologies yield a similar outcome. We think any investor who goes long Nintendo today and sells within a few years after the Switch 2's release is likely to generate extraordinary returns.

♦

That concludes our look at four positions we expect to be outsized winners this year – our four sun chariot horses for 2024. We hope you not only enjoyed learning more about them, but also appreciated the touch of Greek mythology!

Conclusion

While we're in the minority, we believe a portfolio of carefully curated, value-oriented investments with catalysts still work in this environment. At the same time, as we've discussed above, we believe the market cap-weighted S&P 500 is unlikely to deliver barn-burning returns indefinitely, putting pressure on index hugging managers should a durable turn in recent trends take hold. We see a near- to medium-term future in which market leadership trends reverse and dispersion returns – in other words, we think we're heading toward a "stock picker's market." We can't say exactly when we'll get there, but we note that equal-weighted indices have tended to materially outperform their market-cap weighted brethren over time – and not by a little, but by a lot, as the chart below of market-weighted S&P performance relative to that of an equal-weighted version shows:

Data from 1957-2023 | Source: Compustat, Standard & Poors.

In short, should the past prove to be prologue, a true return of dispersion may be in the cards over the relative near term. That's great news for a fund like ours, and we'll let GMO's Ben Inkler explain why:

> *If the purpose of a benchmark is to be a fair measuring stick to determine whether a manager has skill, a market capitalization-weighted index is not a good benchmark for most active managers, and this becomes increasingly true as the index becomes more concentrated. History suggests that the next decade is likely to see a reversal of the recent pattern with the capitalization-weighted version of the S&P 500 underperforming the equal-weighted version. In such an environment, active managers will suddenly look much better versus the S&P 500 and other capitalization-weighted benchmarks.*

But even if things stay the way they are, current market conditions are pretty good for unconstrained, event-driven stock pickers like us who make good tactical use of options and operate in highly inefficient market niches. As always, we'll remain flexible and opportunistic in our search for value. But the reality is that valuation spreads are historically wide in our favorite asset class, small-cap value, with the most potential today in foreign markets, where valuations have hit unsustainable extremes just as our holdings are approaching cash flow and capital return inflection points.)

We believe now more than ever before is the time to go where the competition isn't, by hunting for value-unlocking change amidst the smaller, less-liquid, non-domestic fare outside the indexation- and interest rate-related vortex. Fortunately, at Crossroads, that kind of stock picking is our bread and butter. In fact, we'd argue that non-indexed small-cap value is the last grossly inefficient niche in which skilled investors with a small asset base can possess a real edge – and better yet, the edge on offer for those capable of skillful, intelligent risk bearing grows with each passing day. There's less analyst coverage, and thus less information flow, in small-cap "special situations" today relative to any point over the last couple of decades. There's less competition from other investment firms, and less faith in the virtues of the asset class as a whole – and therefore, there's more career risk associated with how 99% of active managers are evaluated than perhaps ever before.

After 15 years of small caps relentlessly underperforming relative to large caps, we understand more than most why plenty of retail and institutional investors alike would rather not bother with them as an asset class. The reflexivity of the vicious feedback loop over the last decade and a half has truly been something to behold. It's gone on so long that we have a hard time remembering what operating in an environment where the wind is at our back even looks like. Our old friend Harris Kupperman described the dynamic perfectly:

> *Think back over the last decade and look at value stocks. At first, it was a slow drip, then an undertow, followed by a complete torrent of selling – that selling has never really subsided. As value-based funds have underperformed, they've gotten redemptions, forcing more selling and more underperformance. This underperformance then leads to market cap-weighted index funds selling additional shares, leading to more underperformance and more redemptions. The vicious cycle has continued for a decade now, and still seems to be ongoing in many ways. Amazing opportunities have been created in its wake.*

So we're not dismayed by small-cap value investing falling out of fashion. To the contrary, we're thrilled. The more active value managers who throw in the towel, the more opportunities there are for us to exploit. We're reminded once again of how in the movie *Forrest Gump*, a storm destroyed all the shrimp boats docked in the harbor. Only Forrest rode out the storm and emerged successful, with his competitors eliminated and the entire catch to himself.

Our point is that market cycles are inevitable, and are self-correcting over a long enough timeline. Occasionally they go to great extremes, like what we've seen in small-cap value this time around. In such cases, most investors extrapolate recent trends into the future indefinitely, only to eventually find out that the old rules still apply. So while it's true that we're still riding out the storm, that's great news for investors willing to look out three to five years instead of just a few months or quarters. In fact, we're in what we believe to be the second or third inning of a sustained breakout relative to our benchmarks and remain highly enthusiastic about allocating capital to attractively priced small cap assets thanks to a rapidly diminishing competitive environment that should only get better over the near term.

In closing, we can't recall any time in recent memory where avoiding mature market darlings that the crowd believes can't lose has been more important. If you believe, as we do, that investors tend to pay a very high price for a cheery consensus, then risk-averse investors unwilling to bet on recent trends continuing forever has little choice but to diverge from the herd by avoiding a conventional investment profile. They must blaze their own trail, despite an unusually tricky macro environment with little in the way of easy answers.

Fortunately, following the herd isn't our style. In direct opposition to the industry standard playbook and 99% of our competition, Crossroads was built from the ground up with an unconventional mindset and practices that promote long-term outperformance and the prudent compounding of wealth. Consider our approach to concentration and picking our shots. Rather than run a broadly diversified portfolio, we spend our time and effort on a small number of truly exceptional ideas that should do well whatever the future holds. This approach sometimes requires patience, but it's easy to be patient when we're backed by LPs who share our long-term investment philosophy and who think and act like we do. Our intrinsic alignment of interests also reinforces the selection of investments that have highly certain prospects and a low likelihood of permanent loss, ensuring our portfolio is meaningfully less risky relative to active and passive alternatives while still daring to be great every step of the way.

As always, please contact us with any questions as they come. It remains a true pleasure to go to work every day on behalf of such a wonderful group of like-minded partners. We remain lucky beyond measure. We may not know exactly what the future holds, but we know that much for sure.

With our best regards,

Ryan O'Connor — Founder and Portfolio Manager

Daniel Prather, CFA — Director of Research

Crossroads Capital, LLC