

Cliff's Perspective

2035: An Allocator Looks Back Over the Last 10 Years¹ January 2, 2035

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Well, sitting here in the year 2035 and looking back at our endowment's returns for the last decade is not a pleasant task.² World markets have been subpar and our performance relative to world markets has been simply terrible. Hard times are never pleasant. But they have one upside. We can learn from them.

U.S. Equities

First, it turns out that investing in U.S. equities at a CAPE³ in the high 30s yet again turned out to be a disappointing exercise.⁴ Today the CAPE is down to around 20 (still above long-term average). The valuation adjustment from the high 30s to 20 means that despite continued strong earnings growth, U.S. equities only beat cash by a couple of percent per annum over the whole decade, well less than we expected.

Bonds

Inflation ran 3-4% for the decade and U.S. bonds were a bit subpar (i.e., lower real returns than over their long-term history). But they were not a total disaster, and clearly not as bad versus their historical norms, as U.S. equities.⁵ In other words, inflation proved inertial and averaged a bit above central bank targets. But yields fortunately priced in somewhat of a buffer. It seems the massive public spending and the debt and deficits they entail is just starting to be priced into bond yields.⁶ Likely reflecting the fiscal situation, real yields are now higher

¹ Narrator: "A better title would be 'Ex Post Diversification Porn', but that would not have survived the censors."

² Narrator: "This could be written from the perspective of many different institutional investor types, not just endowment funds."

³ Cyclically Adjusted Price to Earnings Ratio

⁴ Narrator: "While the point estimate that high valuations lead to lower than normal expected returns is solid, it is also true that we have too few long-term periods to see statistically very significant results."

⁵ Narrator: "The drift up in yields over the decade contributed to the repricing of U.S. equities as investors continued to fail to fight the fed model.

⁶ Narrator: "You didn't think we'd get our fiscal act together this decade, did you?"

than ten years ago, but are still not super high. Markets (and we) are very confident that going forward this will not be a huge problem (ever ever ever).⁷ But, then again, who cares about any of this, bonds are boring.⁸

International Equities

Of course, after being left for dead by so many U.S. investors, the global stock market did better with non-U.S. stocks actually turning in historically healthy real returns (like 5-6% per annum over cash). It turned out that, just as we thought, the U.S. really did have the best companies (most profitable, most innovative, fastest growing) and this indeed continued in this last decade. But it also turned out that paying an epic multiple for the U.S. compared to the rest of the world mattered somewhat more than we thought, and international diversification, as we knew it would one day, did eventually work.⁹ It turns out there was indeed a price at which European stocks made sense. That was news to us.¹⁰ Luckily, we removed non-U.S. stocks from our benchmark back at the beginning of '25 so this differential did not affect our benchmark-relative performance this last already painful decade, only our, well, you know, actual performance.

Private Equity

Public equity performance hurt, particularly in the U.S. which was our entire equity benchmark by 2025, but we knew public stock markets are sometimes volatile.^{11,12} That said, in all honesty, we had hoped for much more protection from this volatility from our extensive (like half the portfolio at the peak) allocation to privates.¹³ Alas, sadly, and totally unforeseeably,¹⁴ it turned out that levered equities are still equities even if you only occasionally tell your investors their prices (and when you do, you do not really move prices that much). Disappointing, but PE acting like equities would have been tolerable if they had actually outperformed public markets, but they underperformed!¹⁵ It seems that eventually, and a 10-year disappointing market counts as "eventually," even privates have to be (mostly) marked-to-market. We really did not see this underperformance coming. After all, the prior 30 years saw much higher IRRs on private equity than total returns on public equity.¹⁶ What we didn't count on, I mean who could see this coming¹⁷, was this outperformance reversing. I mean, what better way is there to estimate what will happen in the future than looking at what happened in the past!?^{18,19}

One super-subtle tipoff we missed was that, like us, every allocator in the world loved privates back then precisely because it didn't seem that they ever went down a lot—even when the equity market fell sharply. Laundering our volatility made life so much more pleasant and our investments so much easier to live with! Unfortunately, it also turned out that "more pleasant," especially when everyone is engaged in pursuing the same kind of "more pleasant," has a cost.²⁰ So at the end of the day, a lot of managers got paid a **** ton of money for less-than-equity returns, with at-least-as-high-as-equity risk, just so allocators could feel safe in their jobs and to make sure

⁷ Narrator: "You know who disagrees and says it will eventually be a problem? Math. That's who. But, it turns out we are all collectively pretty bad at forecasting when 'eventually' comes."

⁸ Narrator: "They are only boring if you invest in them traditionally. They are not boring in, say, risk parity or levered 60/40 portfolios which both, in this last decade, resumed their long-term pattern of outperforming unlevered, conventional stock/bond combinations of corresponding volatility, admittedly mostly because bonds were not as subpar as equities."

⁹ Narrator: "They didn't know it at all, and in fact claimed it was dead."

¹⁰ Narrator: "Put differently, over this decade 'American exceptionalism' in innovation << 'American exceptionalism' in overvaluation."

¹¹ We also knew we had to diversify away from our portfolio of AAPL and NVDA <cough> <cough> I mean the S&P 500.

¹² Narrator: "Private equity is not diversification and not an 'alternative investment;' it is highly correlated, long-only equity. It may or may not be great, but it ain't a real 'alt'."

¹³ Narrator: "They actually drew efficient frontiers in 2024 showing public equities with an expected volatility of 17% and private equities with an expected volatility of 8%. Nobody should ever ever do that."

¹⁴ Narrator: "It was ridiculously obviously foreseeable."

¹⁵ Narrator: "As far as they can tell, as you know, they still don't know the exact prices."

¹⁶ Narrator: "These are not comparable calculations."

¹⁷ Narrator: "Again, it was really easy to see coming by 2025."

¹⁸ Narrator: "The rearview mirror, even over the long term, is often not just a bad but a backwards method to estimate future returns."

¹⁹ Narrator: "Actually this outperformance may not have even happened in the past, but then again it might have. It is not as undisputed as many think."

²⁰ Narrator: "What the author means is things that are pleasant, like fake low volatility/beta by being an ostrich, have a positive "feature" that you pay up for through a higher upfront price yielding a lower expected return; while things that are unpleasant have a "bug" that you get paid for bearing through a lower price / higher expected return. It is likely that looking back over the prior 30 years, private equity returns benefited from bearing this bug, but over the last 10 years they were hurt by paying up for that same illiquidity that had become a feature. While it's nice the author sees it now, one would wish the author of this note had noticed this before, not after the fact."

others thought they were on the cutting edge of investing.²¹ That was a pretty large payment, like many hundreds of billion dollars over 10 years industry-wide, from our collective investors to our collective managers, just to make our allocator lives easier!²² A lot of the people who made this allocation decision are not around anymore, so I guess the laundering did kinda work out for some of them.

The final blow was when it turned out that private credit, the new darling by 2025, was just akin to really high fee public credit (and the SRTs private credit loved proved we all learned nothing from CDOs²). Like private equity vis-a-vis public equity, private credit turned out to be at least as risky as its public counterpart—and after much higher fees, performed worse.²³

Crypto

Particularly galling was what happened to us in crypto. Prior to 2025 we had stayed away. We had thought it guite silly that just leaving computers running for a really long time created something of value.²⁴ But when Bitcoin hit \$100,000 we realized we had missed out on the next big thing and that leaving computers running really did build digital gold (and we "learned" that scarcity of something leads to anything scarce going up forever, even if it's useless²⁵). Around this time we were spending a lot of time triumphantly screaming "FEEYAT" to each other like a drinking game, as if shouting it louder and more often made it more insightful.²⁶ To be clear, we also kept telling ourselves, and anyone who would listen, that it was not crypto per se we really loved but just "blockchain technology." Oddly though the only way we could express our love of the technology, again not really any true love for crypto itself, was by speculating in crypto. So, in a bold move for an institutional investor, we added a 5% benchmark allocation in late-2024 at a bitcoin price of \$100,000, and when the very next year it went up to \$250,000 on rumors of the government starting a "strategic bitcoin reserve"²⁷ and a single Elon Musk tweet, we doubled up. Ten percent of the portfolio baby! Today, 10 years after our first allocation and 9 years after we doubled up, bitcoin is at about \$10,000. There are still some diehards. Frankly, the only thing that worked for us in this space was our splitting the 10% crypto allocation 90% bitcoin and 10% into the only cryptocurrency that ended up being worth anything substantial by 2035.²⁸

Of course, we gave back any gains from our ingenious 10% Fartcoin²⁹ allocation when many of our active stock pickers loaded up on the stock of a levered bitcoin play. It turned out that paying double the very high price of bitcoin for essentially a bitcoin closed-end fund wasn't the "arbitrage" we were told it was.^{30,31} Also, it turned out bitcoin didn't actually have a "vield," at least in the sense anyone ever has used the word "vield" since the Roman

²¹ Narrator: "None of this meant the private equity managers were (and are) not great at what they do. They were pretty good at choosing what companies to buy, but again that's just active stock picking (and a cure for the historic difficulty in active stock picking turned out not to be 'pay the managers a ton more for it'). What they uniquely brought and still bring to the table is the ability to make the companies they purchase better. That's a form of alpha that if you can pull it off is nicely uncorrelated to the markets and unavailable to non-PE managers (and the one part of PE that perhaps does qualify as 'alt'). It is a form of "sweat equity." Unfortunately, whatever alpha this provided was not enough to overcome that private markets were way overcrowded by 2025 (again, as the bug of illiquidity became a feature leading to lower future expected returns) and the fees, summing up their near infinite additive variety, were way way too high."

²² Narrator: "To be fair, they also thought that even if the volatility laundering was fake, that they'd be better investors, swooping in to buy cheap assets when everyone else was panicking, because of the Valium induced marks. They weren't."

²³ Narrator: "The claims of some private credit managers to have realized a Sharpe ratio of 10.0 turned out to be gigantically overstated and actually the wrong sign. Who would have thought that providing loans to unrated, middle market companies actually had credit risk and volatility?"

²⁴ Narrator: "A personal note, your narrator tried this in 1980 on his TRS-80 with cassette drive. He wrote a program in Basic with a simple loop printing out RND numbers. It turned out these were disappointingly worthless."

²⁵ Narrator: "Nope, it's (scarcity) x (useful) x (fairly priced) that works. This has been known since at least Hammurabi."

²⁶ Narrator: "There are plenty of problems with traditional finance and fiat currencies – see the earlier discussions of budget deficits and bond yields. But that does not make any alternative to it automatically worth trillions." ²⁷ Narrator: "Some argued that this made about as much sense as the government starting a 'strategic Powerball reserve' but were tragically

ridiculed and driven into exile."

²⁸ Yes, only Fartcoin has held up over the decade, for reasons we could not say (Narrator: "The reason is God has a sense of humor"). So, just now, as of 2035, we have switched our whole crypto allocation to it. Fool us twice, shame on we!

²⁹ In 2027, finally bowing to pressure, Fama and French added a 6th factor to their 5-factor model. No, it was not finally the momentum factor. It was "Fartcoin minus everything else," aptly known as the SBP factor ("silent but profitable"). I mean, the people had spoken.

³⁰ Narrator: "There was a chance, however slim, that bitcoin really did turn into money (you see, your narrator isn't a total cynic). But there was never any real chance that paying 2x the going rate for bitcoin would work out well."

³¹ Narrator: "One of the common arguments you hear from cultists, excuse me, investors who liked buying bitcoin at 2x bitcoin is 'oh yeah, I dare you to short the stock.' That amounts to saying 'we are so insane we can break you before we go to zero.' Sadly, it has some truth to it. But it is not even close to an argument that they are actually right. It is the equivalent of telling people not to play Russian Roulette and them responding 'oh yeah, prove it by beating us at it!"

Empire. This one we do not even feel bad about. I mean, our active stock pickers listened to the crypto oracle leading this firm who, to our knowledge, had absolutely no history of loading up on and grossly overselling bubbles, and nobody else with any credibility told us we shouldn't.^{32,33,34}

Active Management

Moving on, the fact that we ran our public equities through active managers also stung (on top of the levered bitcoin stock debacle). There are a few reasons. First, active management always (net of fees and trading costs) underperforms passive indices. We fought Sharpe's law and the law won. Second, we chose the wrong active managers! It turns out that just because the whole of active management axiomatically always underperforms, this does not mean some subsets do not systematically take alpha from other subsets (Sharpe's law does not apply to subsets). It was the old-fashioned idea of buying profitable, low-risk, fairly- or cheaply-priced companies that worked over 2025-2034.³⁵ But, sadly, by 2025 we had fired all those types of managers despite the spread between "cheap" and "expensive" stocks still being quite high (it had peaked in early 2021) especially in the, wait for it, super expensive U.S. We did that despite some of the most prescient and good-looking people telling us the opportunities in this old-fashioned subset of active management looked better than normal (if short-term scarier, as markets swung away from fair value more violently and for longer). After we fired the others, our remaining active managers bought the unprofitable, volatile, share-issuing, expensive stocks in the U.S. on top of our all-new all-U.S. equity benchmark, adding insult to injury! ³⁶

Liquid Alts

We also abandoned trend-following strategies <u>after</u> they made only a little money for the decade-plus following the Global Financial Crisis (we added them right <u>after</u> they helped a lot in the GFC). We got rid of the last allocation right <u>before</u> we really needed them in 2022 (yes, a bit earlier than the period this note covers).³⁷ Turns out we never added them back. We should have. Trend following often does quite reasonably in a long-term disappointing market like the last ten years, and <u>usually helps protect you</u> from the downturns that occur in any market over ten years, particularly in an extended subpar one. This last decade they again provided both services. In addition, they often do extra well when markets are volatile. And, of course, we have seen quite a few episodes of high volatility over 2025-2034 as markets retrenched their way to more typical valuation levels and the world's fiscal situation slowly got a little more real. These readjustments are never easy! Well, there is a bright side. At least for once we did not change our mind based on 3-5 year performance (we could have gotten back in once it started to work for a few years, but for once we resisted chasing)! You see, we can be disciplined.³⁸

Unfortunately, unlike trend following which we abandoned, the other major kind of risk-mitigation which we stuck with hurt us. That is, direct "tail-hedging" by buying options. While it protected us from a few very short-lived sharp downturns, which was fun, the non-stop bleed from the options premium made it a 10-year loser. It did not even protect us from the few 1-2 year ugly bear markets³⁹ within these last 10 years, as the bleed was too big and the

³⁸ Narrator: "In this case they should have chased performance. Not chasing is more of a guideline than a rule."

³² Narrator: "Warren Buffett, Eugene Fama, and a ridiculously long list of other brilliant and honest old fogeys told them. In contrast, Larry Fink launched an ETF."

³³ While as fiduciaries we only invested for financial gain, we did take some satisfaction in the assurance given to us that Bitcoin would bring world peace and free mankind of the slavery brought by FEEYAT, and cure many other ills we formerly thought outside the realm of money, even if we never understood how that would actually happen and the messiahs of crypto never really explained it (Narrator: "They were making it up, and didn't even have a good fake explanation."). Also, for the record, 1 BTC indeed still equals 1 BTC even if now it is just 1/25th the value (in FEEYAT) from when we doubled up at its \$250,000 peak. We were told 1 BTC = 1 BTC was all the crypto cult cared about (even if they lived and loved to measure it in FEEYAT). So, given that identity is still true, we have that going for us, which is nice.

³⁴ Narrator: "Please note, your narrator may or may not have a position on related to this discussion, and in fact any of the assets discussed in this piece. Do not trade yourself based on anything you read in one snotty 'I was right about everything' pretend blog. Do the work!" ³⁵ Narrator: "Like most decades."

³⁶ As part of this shift in active managers we bought Cathie Woods's ETF. We thought it was great one-stop shopping, yet it actually underperformed every single year for the last decade (which, you know, is hard to do). It was the apotheosis of short "factor" investing buying expensive, unprofitable, super high beta, serial share issuers, etc. So in that very bad sense it was indeed one-stop shopping. We simply did not realize how backwards it was (Narrator: "It was really obvious way before 2025"). Oddly, despite the performance, and despite a world that usually chases performance, her AUM only went up all decade. Talk about loyal investors! Rumor has it she's taking her entire investor base to a retreat in Guyana soon.

³⁷ Yeah, making less than they usually make for that 10+ years was disappointing, but they did not lose money, just made a lot less than passive equity beta, which, you know, is always awesome and you never need protection from (Narrator: "Until it isn't and you do.").

³⁹ Ironically these 1-2 year bear markets were mostly the result of private equity finally having to both mark-to-market and then sell into

non-linear big payoff from options does not always come if the bear is steady and <u>long-lived</u>, as opposed to sharp and fast. We don't even feel bad about this one, as who could've seen protection-buying tail-risk hedging failing in a long-term disappointing market?⁴⁰

Oh, while I'm not sure what category to put this in (liquid alts?), we also, after a long-term experiment, fully abandoned "risk parity" investing by the end of 2024. We did this mostly as it failed to beat U.S. 60/40⁴¹over the long term.⁴² Well, I do not need to tell you that given U.S. stocks underperformed the world, bonds delivered better risk-adjusted returns than equities, and commodities finally had a decent if not stellar decade, this was another ill-fated decision.⁴³

Finally, of course we still had a small (dwindling but small) allocation to more traditional hedge funds, mostly longshort equity funds. We had assumed they would act as a real diversifier during some of the most painful periods for equity markets. They partially did. Unfortunately, nobody told us that they were about a 0.50 beta (not the 0.00 we assumed) and about 0.85 correlated to equity markets (not the 0.00 we assumed).⁴⁴ I should note that one exception was a handful of the most well-known 'multi-strat' hedge funds that by 2025 had really started to dominate this market. They paid their people a ton, charged a ton, fired their people if they had a down hour-anda-half, hedged out factor risk even if it was great factor risk,⁴⁵ and all that worked for them again.⁴⁶ They actually did manage to maintain some very high risk-adjusted returns this last decade, if not huge total returns and certainly more useful for us as an endowment than for a taxable investor.⁴⁷ The only problem was there was only so much capacity to go around, and these guys actually maintained discipline about it, so we could only move the dial a bit by owning them. But in a super-tough decade we will take this modest win!

Looking to the Future

Well, going forward we have learned our lessons. We have moved our equities back to a global benchmark and are now overweight outside the U.S.⁴⁸ We are never ever investing in privates again⁴⁹ despite them now being starved for capital and the deals looking very cheap.⁵⁰ Moreso, going forward we are only investing in value stocks despite value spreads now being decently below under historical norms. Finally, we are sticking with Fartcoin. You have to dance with the one that brung ya! You will have to pry our Fartcoin from our cold dead burns.

As I said at the start, the only upside of tough times is we can learn from them.⁵¹ Here's to a far better 2035-2044.

weakness. We got unlucky both ways! (Narrator: "That wasn't luck.")

⁴⁰ Narrator: "The answer is anyone who has ever examined these strategies could see that possibility. Not all the time of course, but over long-term history, and again this last decade, you get paid for bearing, not off-loading, 'black swan' risk. Insurance is costly, not free, both in theory/common sense and in empirical result."

⁴¹ A 60%/40% weighted average of S&P 500 and 40% US 10Y Treasuries

⁴² Narrator: "That was not the long term."

⁴³ Narrator: "This is your occasional reminder that risk parity can do fine in many rising rate scenarios."

⁴⁴ Narrator: "They were repeatedly told."

⁴⁵ Narrator: "Some traditional factor investors did diversify into strategies more similar to what some multi-strats presumably pursue as part of what they do: machine learning, alternative data, shorter horizon, etc."

⁴⁶ Narrator: "Ex ante your narrator never would have thought this a good strategy. And it failed for many. But amazingly, some of the best consistently made it work. Even your narrator can be wrong sometimes!"

⁴⁷ Narrator: "It remained crucial to run investments for taxable investors in a tax-aware manner for most of the decade until in his third term President Trump abolished all taxes (of course, only for those making <u>more</u> than a certain amount)."

⁴⁸ Narrator: "Of course the U.S. is now about the same valuation as non-U.S. and is still higher quality than other geographies, so this likely won't work either."

⁴⁹ Full disclosure: it will be quite a while until we are rid of the ones we have.

⁵⁰ Narrator: "The feature is now a bug again and privates once again make a lot of sense."

⁵¹ Narrator: "They did not do so."

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