

The Damped Spring Report

“Shifts in growth, inflation, risk premium and positioning all lead to opportunities in markets”

8/26/2025

Always own beta!

At Damped Spring we dedicate ourselves to making sense of the world and what is priced-in to markets to generate 1–6-month absolute returns uncorrelated to stocks, bonds, and market portfolios. We print 2-3 DSRs per month because economic data, policymaker actions, and market prices change rapidly. However, our highest passion is beta. We love collecting term premium in a low cost, relatively passive and diversified long-only portfolio. Beta is the only free money available in markets and can be harvested by anyone with capital to invest.

Alpha is hard. To generate uncorrelated absolute returns, we must take that return from someone else. That someone else is likely smarter than us and has more resources than we do. Furthermore, active trading costs money! Market makers feast on active traders and “tax” away any alpha we may have.

Beta is passive and easy. It is also boring. Beta does not change much and, if designed well, can enable slow wealth accumulation with minimal drama. Writing about beta is even more boring and so we rarely do so. However, since our founding, we have published on our website our passive beta benchmark and our modestly active “smart beta” portfolio. We also regularly advocate that individual investors stop trading and instead just “Always own Beta.”

In this DSR, we write about beta and raise some (hopefully) interesting questions about whether and how to rebalance our current beta portfolio to a more resilient one for the next decade. We began to rebalance our beta in 2025 based on two clear themes, which we cover below.

We will start, so as not to bore our readers, by describing our current trio of beta portfolios, how our current smart beta portfolio is weighted, and the big questions we have and the actions we will likely take in the weeks and months to come based on our answers to those questions. Then, the boring part: We will provide a foundation for why beta is free money, what a good beta portfolio is like, and the major principles that dominate and constrain our smart beta portfolio rebalancing. We will give you what we think is the home base portfolio and how we make sure we do not stray too far from home in our SmartBeta process.

Today's DS Smart Beta Portfolio and the passive DS Beta Trio.

Damped Spring is not a market leader in passive beta. We try to keep things simple. Our beta portfolios employ an 80/20 rule, whereby we get 80% of the way to the goal of an optimal beta portfolio and consider it close enough. In the boring section below, we review the history of beta investing. Well-read clients will recognize that we rest on the shoulders of legends in our beta portfolio construction. A few of these legendary beta providers also offer their highly sophisticated and excellent products as investment vehicles for individual and institutional investors. We prefer their stuff to our own. That said, ours is quite low cost, easy and "good enough" for our 80/20 rule.

DS Beta US

When we founded Damped Spring, we created our most simple beta portfolio. DS Beta was a US-only five ETF portfolio designed simply to express our view of a good beta portfolio. We have renamed that portfolio DS Beta US.

DS SmartBeta

A few years ago, we introduced DS SmartBeta. We designed this portfolio to tweak the holdings of DS Beta US in two ways:

- We adjusted the relative weightings of its 5 ETFs by as much as 25% underweight or overweight.
- We deleveraged or leveraged the amount of assets we hold (as a percent of AUM) with a range of 50% Assets/50% Cash to 130% (leveraged) Assets.

This portfolio blends (not necessarily a good thing) some of our faster-moving alpha signals with our passive fully invested DS Beta US. So far, it has been exactly what we designed it to be, i.e., a little better than DS Beta US. Home Base is 100% Assets in our benchmark mix available on our Website.

DS Protect

In 2023 we introduced our DS Protect portfolio. This was a "break glass emergency" sort of portfolio, designed to be implemented if policy makers gave up on fighting inflation or raised the inflation target. We shifted some of DS SmartBeta assets into and then out of DS Protect during 2023's "Banking Crisis." We have 10% of DS Smart Beta allocated to DS Protect today. This portfolio is composed and weighted to provide limited risk premium collection but maximum purchasing power protection. It has 1/3 GLD, 1/3 Global Equities and 1/3 Global Inflation Protected bonds. In retrospect, this was by far the best portfolio to own since 2023 and one of our key questions is whether we should increase the allocation going forward.

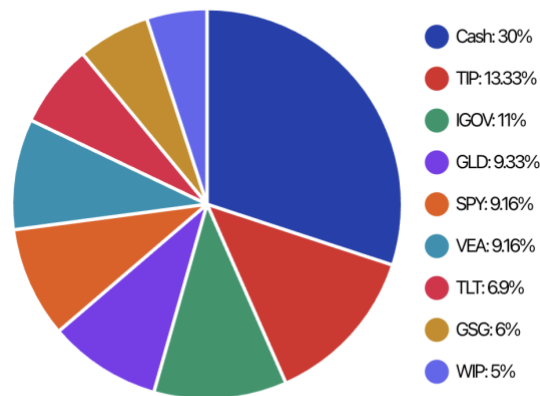
DS Beta ROW (Rest of World)

In early 2025, we decided it was time to “get out” of our overweight in USD Assets for our beta portfolios. We added simple exposures to ROW stocks, nominal and inflation protected bonds and funded it by cutting similar USD asset holdings.

Today's DS SmartBeta

Our current DS SmartBeta allocation is 30% Cash, 30% DS Beta US, 30% DS Beta ROW, and 10% DS Protect. The specific ETF holdings are in this pie chart. All else equal, we rebalance periodically following our rules to avoid churn and transaction costs and maintain these allocations:

Portfolio Allocation



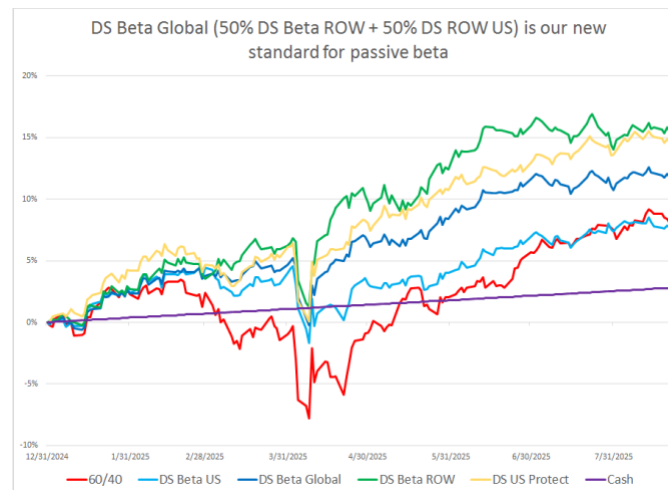
The big issues we are considering

Over the past 5 years the world has radically changed. While throughout modern history claims of radical changes occurring have mostly been noise for developed market investors, we humbly believe that “this time may be different.” Our approach to the radical changes we see is mostly to sit on our hands as we have been through a lot of alleged radical changes personally and studied more. But we are now acting on certain changes we see and considering acting on others to position our beta allocations to make for a more resilient beta portfolio for the next decade.

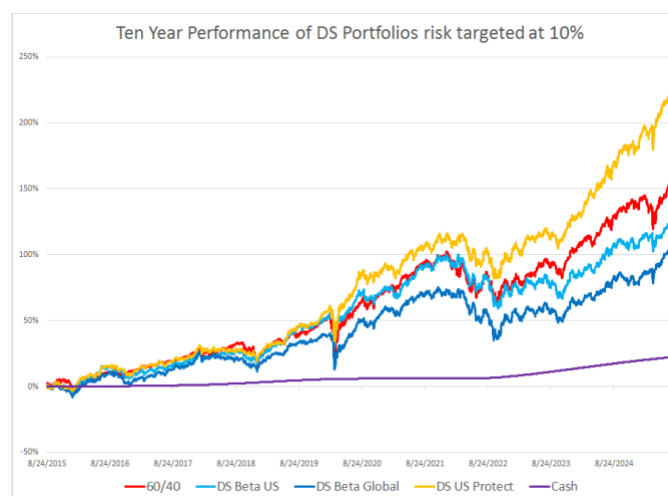
Get Out

Since the 2024 election (and particularly since inauguration) global investors have been divesting long-term USD asset holdings and adding ROW holdings, largely because the US was already massively overweight in the global market portfolio

and policymakers were making holding assets in USD less attractive. In our [“Get Out” DSR \(here\)](#), we described this dynamic in more detail and acted to “get out” of our entirely 100% US asset weighted DS Beta US to our new standard of DS Beta Global, which is composed of 50% DS Beta US and 50% DS Beta ROW. We think the front-running of this phase of Get Out is largely over but believe the secular pressures will continue and that a beta portfolio that is 50% USD is probably still too much to be resilient in the next decade. **We expect to reduce USD assets modestly (as we are still a touch overweight) and expect the secular action will result in poor relative performance of USD and USD assets for the next five to ten years:**



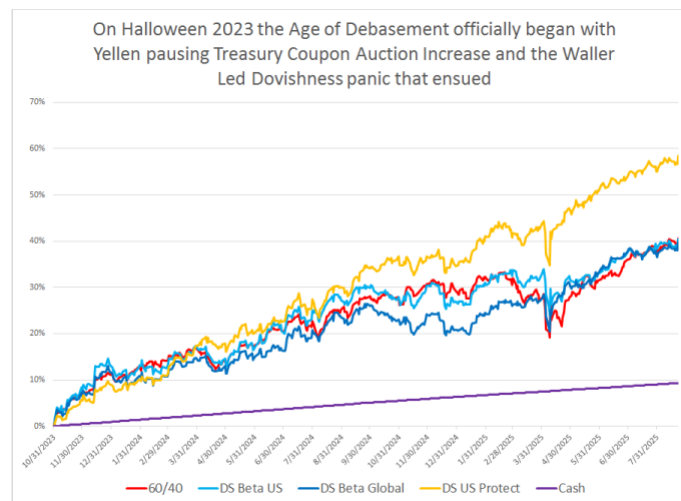
Over the past 10 years, DS Beta Global lagged as USD strength and inflows from around the globe to US Stocks pushed DS Beta US and 60/40 higher. We expect convergence between the light blue and dark blue line:



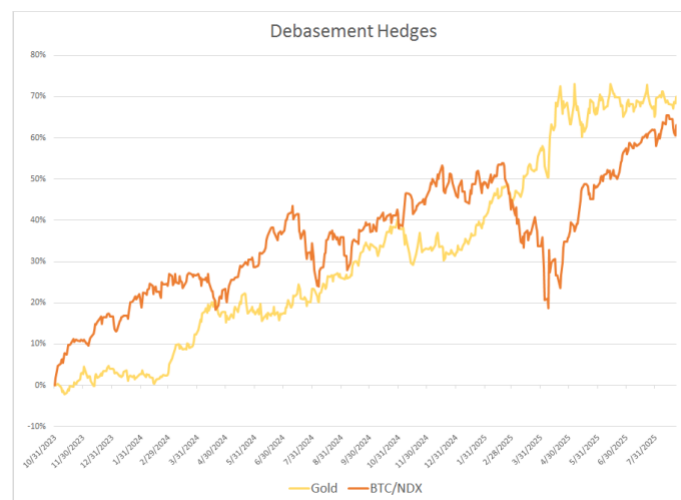
Debasement

If you looked at the graphs above, we have a guess about what you are thinking: What is DS Protect? DS Protect is a low-risk premium collection portfolio that holds shorter-term TIPS and a ton of gold. DS Protect is designed to protect purchasing

power from fiat debasement. It is not a pro inflation portfolio *per se*, but rather a portfolio designed to work if policymakers no longer care about inflation. While the Fed, and other global central banks, ostensibly care about inflation, the Fed has ceded a major lever of monetary policy to Treasury. In addition, they have panicked and eased guidance whenever markets dip or data modestly disappoints. Treasury, on the other hand, was (and remains) politically incentivized to run the economy hot. During spring 2023, policymakers tipped their hand by massively overdoing the response to the “tempest in a teacup” SVB banking crisis. That was the first tell. On Halloween 2023, after a sharp market selloff due (in our view) due to a substantial increase in duration issuance that was announced in August, the full tell was obvious as the Treasury delayed further coupon issuance increase. At the time, we said, “hold your nose and buy all assets,” which worked across all assets for almost a year. Since then, market performance has skewed towards debasement assets and DS Protect has been the star beta allocation. If you did not own gold (or crypto for those who like that stuff), you have underperformed:



Interestingly, all forms of DS Beta have gold at 10-33% allocation, but the 60/40 performed just as well in this debasement as its higher allocation to equities offset the lack of gold:



Since Halloween 2023, gold has broken out and become a one-way trade. In early summer 2025, we reduced cash by 10pts and added 10pts of DS Protect to our portfolio:



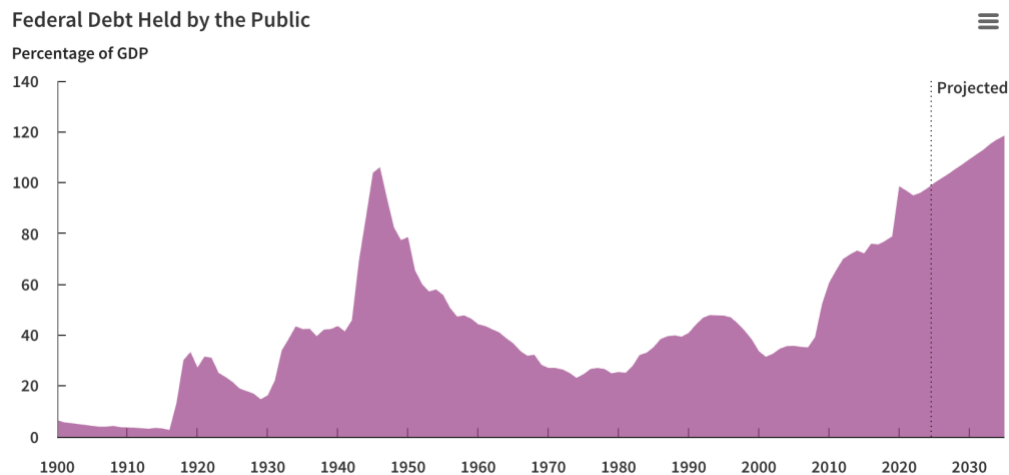
We have written extensively about the pressures on policymakers who must choose between debasing spot money or future money [here](#). We see no reason to think that this secular trend will not continue. We have made a first step toward a DS Smart Beta that holds a substantial amount of DS Protect but (like the “get out” theme mentioned above), the first phase of this secular trend may have run its course in the short term. We do not consider the Jackson Hole speech last Friday to be anything that further damages already damaged policymaker credibility, but we do see some probability that the replacement of Jay Powell and/or the November QRA could ignite a second phase. **If we see what we need to see, we will again allocate another slug to DS Protect from cash or DS Beta US holdings.**

Nominal Bonds

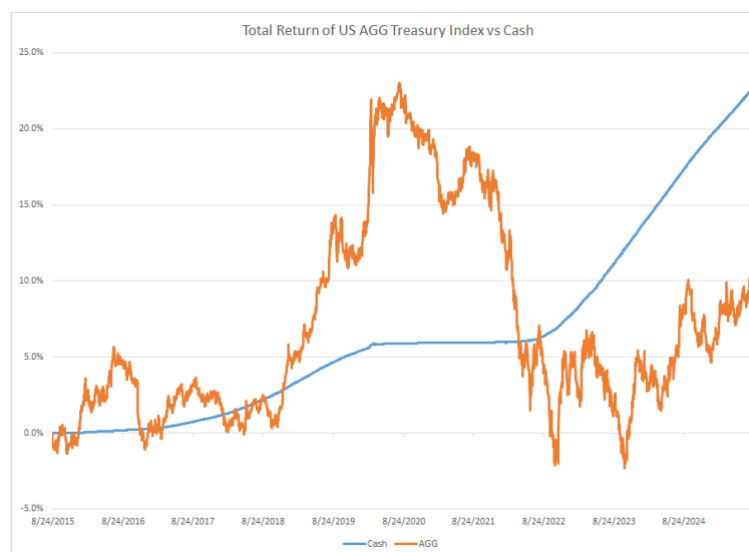
Debasement and nominal bonds are opposite sides of the same coin. That coin is fiat currency. As mentioned in the linked DSR above, policymakers can choose to debase their currency or protect their long-term bond market but not both and, without radical policymaker changes, are likely to fail in protecting both. Like gold, nominal bonds have been a key part of all DS Beta standard formulations. For many decades, even preceding and during the inflationary 1970s, bonds have been a reliable collector of risk premiums, generating an excess return over cash, and (as we will describe in the boring section below) have mostly provided reliable meaningful positive returns in disinflationary and slowing growth environments. While it is likely that current bond prices will provide some protection to a beta portfolio, we are simply not confident that over the next decade policymakers will be willing (or able) to continue to protect “future money” at the expense of “spot money” debasement. It seems to us that owning fewer nominal bonds in a beta

portfolio while owning more gold is a good combination to make a more durable long-term beta portfolio.

There has been a meaningful change over the last five years. Is it a tipping point change? We think it could become one but that is yet to be known. The change is the 20 point rise in US Debt to GDP, ongoing 7% of GDP deficits, increasing debt to GDP projections, and the fact that most of this new debt has been financed with (spot money-like) bills versus longer-term notes and bonds, all of which has led to spot money debasement and a huge overhang of future money. That overhang is our greatest concern for nominal bonds in our beta portfolio. We think the CBO projection for another 20pts of debt to GDP increase over the next ten years is conservative.



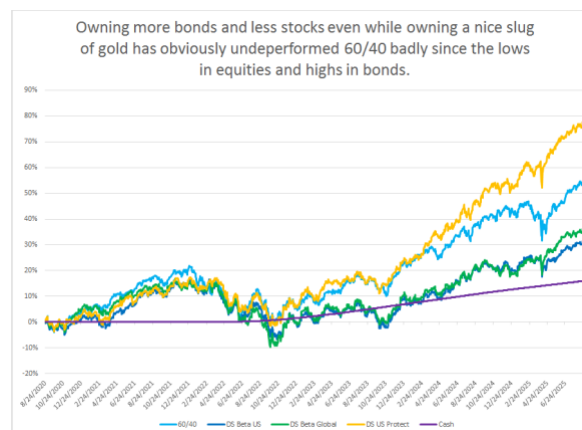
After Powell was forced to pivot from Auto Pilot QT in 2018, bonds rallied hard through the Covid lows in an absolute bubble. The unwind of that bond bubble was swift and severe, ending on Halloween 2023 when the policymakers shifted to debasement.



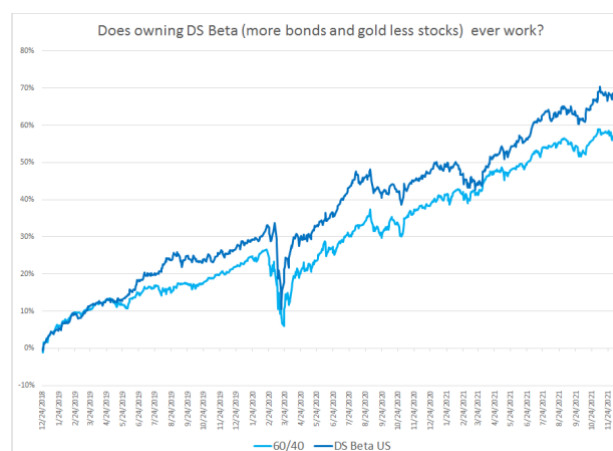
But even if you bought the absolute low in bonds in late October 2023, returns since have only modestly outperformed cash:



Owning bonds has been a terrible trade since Covid. The 60/40 portfolio massively outperformed Risk Parity and DS Beta-like investments as the equity exposure was much larger and bond exposure somewhat smaller:



Given the overhang and the potential for policymakers to shift their focus from protecting future money at the expense of debasement, one must wonder whether to own nominal bonds at all. The answer is because sometimes they really help.



As a portfolio diversifier that is also expected to collect risk premiums, the case for bonds is just not particularly compelling. A strong economy (particularly one with higher or sticky inflation) will likely cause bonds to meaningfully underperform cash and drag on performance. That is okay and normal. In a substantial disinflationary slowdown, bonds will undoubtedly shine compared to stocks. What is different this time is that, regardless of the economic climate, bonds face a huge headwind from the growing US debt, the overhang of terming out bills, and now over two years of policymakers choosing to allow the currency to debase to protect bonds. The best bondholders can hope for at this stage is ongoing protection from policymakers via issuance strategy, YCC or QE. We know that all those choices will debase spot money and thus are very difficult choices for policymakers to make. **We will be looking at policymaker action and lean toward reducing nominal bond exposure on any meaningful rally (or perhaps sooner) to move asset allocations toward anything but bonds.**

AI

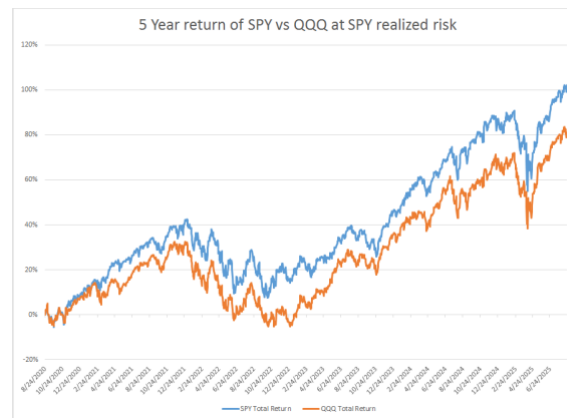
On January 10, 2023, the world radically changed. Instantly, everyone (including our grandmothers) became aware of ChatGPT and the pending AI revolution. Markets reacted quickly and the AI theme has persisted for two and a half years:



For DS Beta, the impact of this radical change makes us wonder if we should be adding more AI exposure. When looking at returns over the past five years, SPY gave us almost identical returns to QQQ with less volatility. Of course, swapping to QQQ on 1/8/2023 would have been smart, but DS Beta is passive:

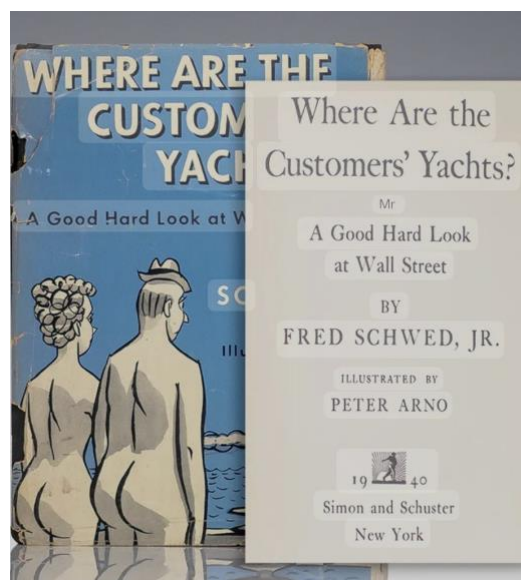


QQQ was also more 1.3x more volatile, so, assuming equal risk, we would have underperformed by swapping years ago:



Nonetheless AI presents a radical change. Our thoughts are mixed on whether to react to this change. Our biggest concern is not whether AI stocks are overvalued or undervalued. Our biggest concern is whether the customers of the AI picks and shovel sellers are going to underperform as they spend to avoid being disrupted. We also have concerns about the sustainability of the AI spend short term. To the extent that end customers of AI providers decide to slow spending for whatever reason, AI stocks will suffer more than their customers' businesses. Here are some comments on both concerns. One which Andy wrote in his [public twitter feed](#) and the other is a reprint of @danielsimyoni work in the last DSR. **Net net, we are likely to move some of our SPY position into QQQ to uptick our AI winners exposure and downtick our AI losers exposure.**

The stock market reminds me of Fred Schwed in 1940. In this case, the companies that sell AI picks and shovels and AI services are the Brokers and everyone buying their services are the customers:



The 1940 example rings true to me as "the customers" are convinced that the services provided by "the brokers" will let the customers beat their competitors. "Keeping up with the Joneses" has motivated Americans as long as I can remember. Brokers tapped that competitive spirit, but, of course, only the brokers won. The customers just played a negative expected value game. It has been 85 years since Schwed wrote his book and, folks, it still applies. "The brokers" have changed (though many of the OGs are still around and even stronger) and the new brokers have names like Saylor, Robinhood, Coinbase, PolyMarket, or now CME/FanDuel, but the systematic overcharging for useless financial advice and constant encouragement to attempt to beat the market or risk losing out to the Joneses remains just as strong.

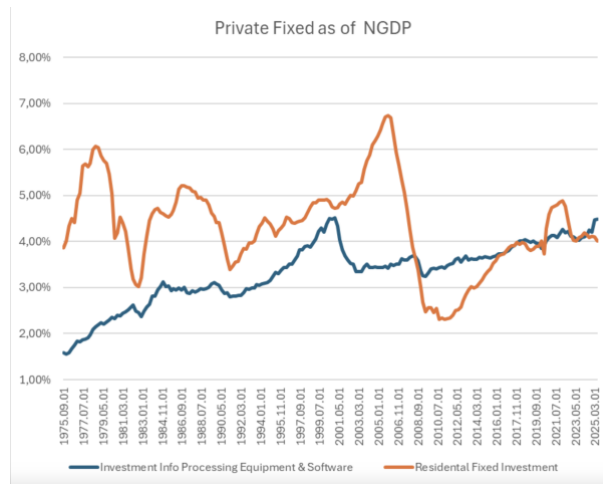
What does this have to do with AI? The customers are all of us. We are now in a phase in AI deployment where we fear for our future as an employee or as a non-AI corporation. We fear we will be disrupted by this technology, and we try to beat the Joneses by rushing to spend on AI services. A US corporation in any business at all is worried, and, when worried, it is easier for it to spend whatever resources it can muster to stay competitive in the new AI world. Not surprisingly the benefit accrues to the "Brokers." You know their names: NVDA, Semis, hyperscalers, and PLTR. Their yachts are ginormous compared to the yachts of the OG Brokers. But the customers are in just as much of a pickle. It has been 85 years of brokers profiting at the expense of customers. Is AI as I described, a new way to profit from the customers? If so, it has only been 2.5 years. As shown above, since the singularity it has been a big move. But I see little chance that, despite valuation wiggles that may occur, that the customers will stop trying to beat the Joneses and risk being completely disrupted in the next five years. If the Smiths keep spending, the AI Brokers will outperform the AI customers. In this case, up-ticking exposure to the winners and down-ticking exposure to the losers makes sense.

AI Spend (Thanks @Danielsimonyi)

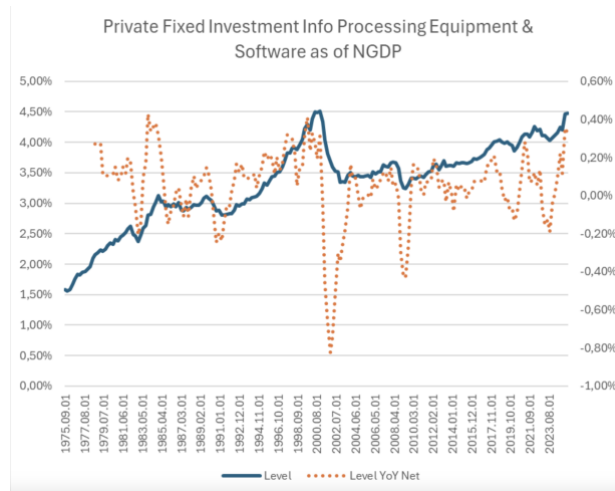
Ahead of NVDA earnings, anything even slightly circumspect about AI seems likely to be foolish. Nonetheless, we are increasingly concerned about the sustainability of spending by end-users on AI tools, which fuels hyperscale investment, which fuels picks and shovel seller earnings.

The most directly measurable impact of AI and data centers is reflected in private fixed investment in information processing equipment and software, although the full impact is probably higher. This category accounts for around 4.5% of GDP, with both 1Q25 and 2Q25 showing strong contributions to real GDP growth. However, this pace is likely unsustainable going forward. The sharp acceleration in AI capex is likely behind us, and the recent growth rate may not be maintained. Any sustained weakness in final demand will certainly affect future investment, as AI demand ultimately depends on business revenues and profits, which are tied to nominal GDP. Realized and forecasted capex remain elevated, while free cash flow and cash and cash-equivalents are declining for hyperscalers.

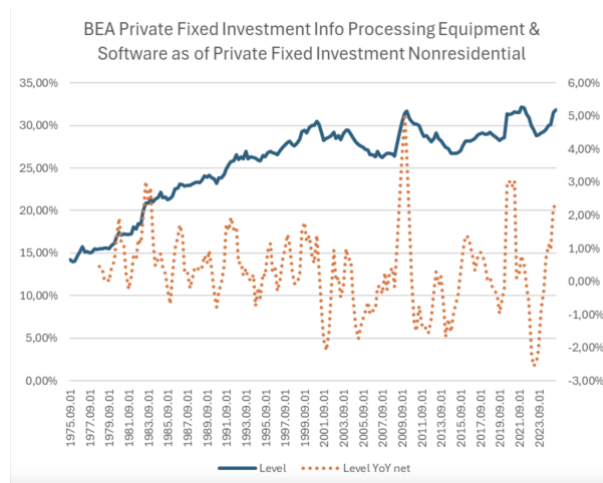
Tech investment has soared:



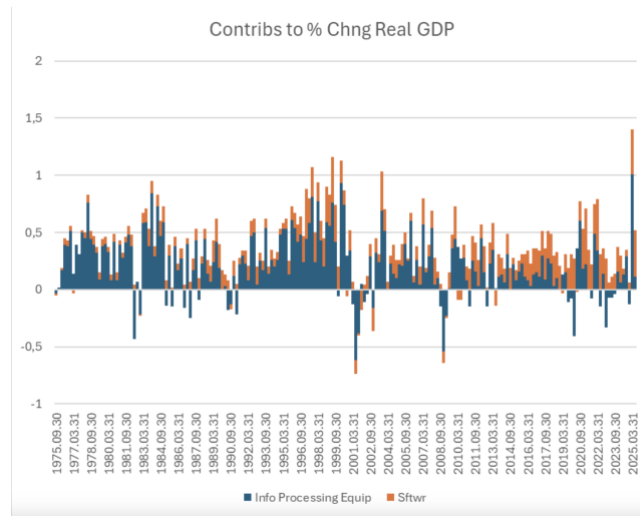
And growth is steep recently:



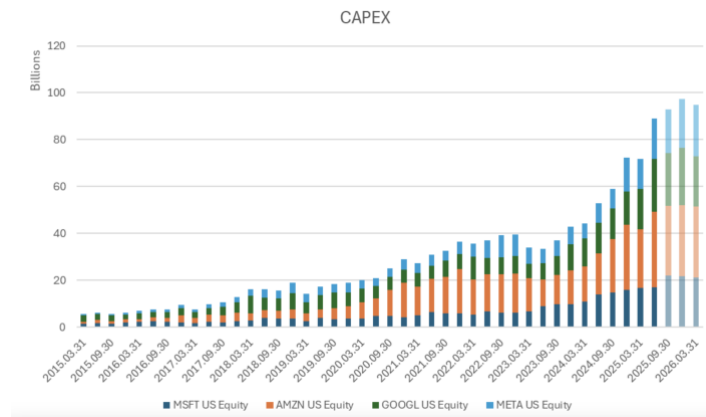
As a share of fixed investment, AI is squeezing out other spend:



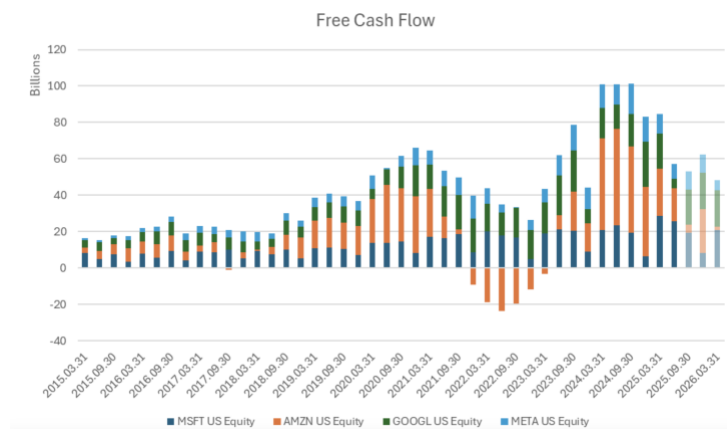
AI spend has been a major driver of GDP, at a pace above the tech bubble:



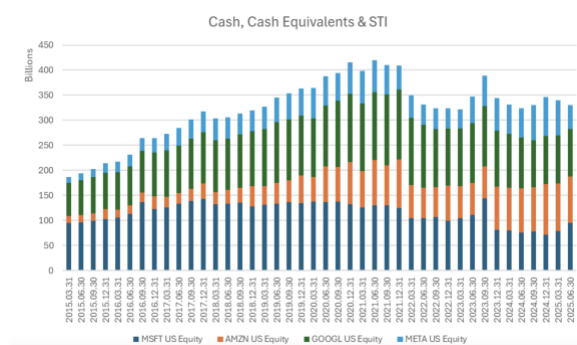
The hyperscalers are making massive capex, which may pause at current high levels:



The spend is eating into Free Cash Flow. Share buybacks are also a sizable and potentially competing drain on cash:



On balance sheet cash peaked long ago:



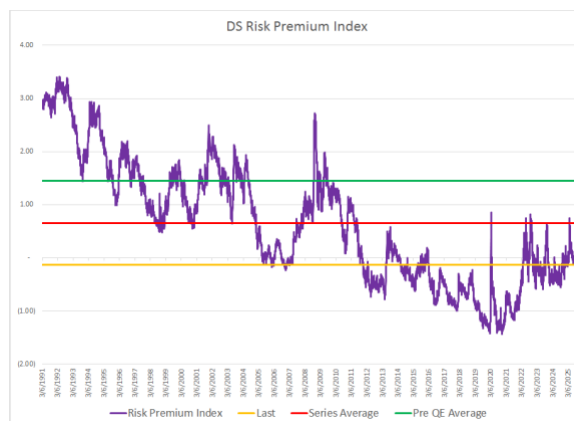
These are the biggest companies in the world with deep resources, but nonetheless they depend on continuing customer spending to continue their investments in picks and shovels. At some point, these companies will also have to balance share repurchase activities with AI spend. A slowdown for the AI companies' customers has risk to the AI thesis, which we genuinely like. But this revolution is not a straight line, and the economy is counting on sustained GDP contribution from AI capex to stay aloft.

Thankfully, DS Beta has exposure to AI picks and shovel sellers. **Do we need more? Do we need less AI customer exposure? We think the answer to both these questions is yes and are prepared to act opportunistically.**

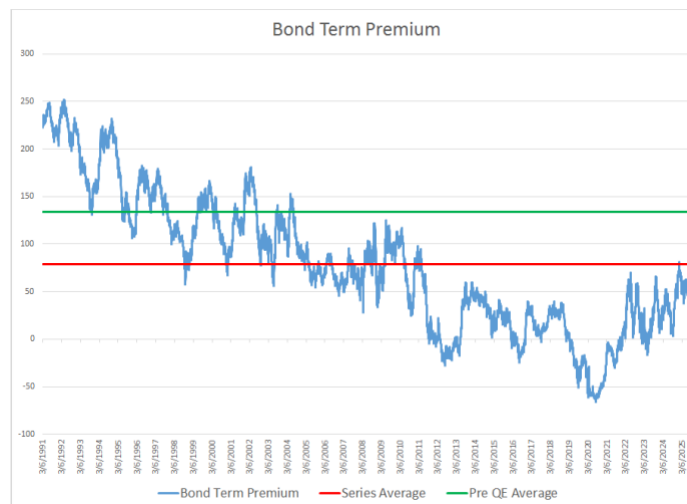
Cash or Assets

Home base asset allocation for DS Smart Beta is 100% invested with zero cash. At that allocation, we think we are at our risk target. We raise cash when we do not like forward expected asset returns and leverage our portfolio when we think forward asset returns are attractive. Our range of permitted cash or asset holdings is floored at 50% and capped at 130%. We currently do not like asset prices and are 30% cash. We consider many factors when setting our level of asset holdings.

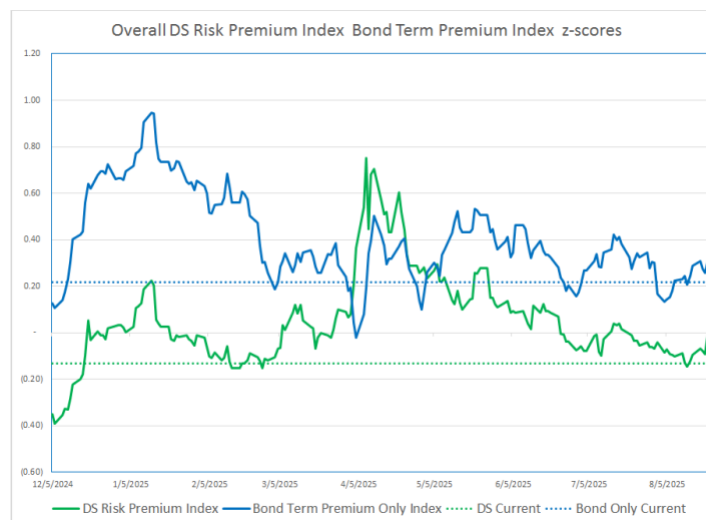
Our broad risk premium index shows risk premiums modestly tight compared to our full history yet extremely tight when the QE era is removed from the sample:



Bond term premiums have a similar picture:



Zooming in to recent history:



Our view is risk premiums are more likely to rise than fall, causing asset prices to underperform cash, but that is a short-term view. When we consider the implication of the levels of risk premiums available in the markets and the potential drivers for expansion or contraction over the next five years, we see very little chance of significant risk premium contraction without aggressive actions by central banks to buy long-term assets or the private sector deploying a meaningful amount of leverage to buy assets.

We have outlined the headwinds facing bonds due to supply dynamics. That headwind is clearly part of our expectation for expansion of term premiums. However, the nuance about bonds is that, to the extent that they have become increasingly unreliable as an anti-growth disinflationary asset, their inclusion makes portfolios in general less balanced, and a less balanced portfolio should be deleveraged in general.

We are in the position of having to balance humility with a strongly held view that assets are pretty darn unattractive relative to cash. Humility would have us get back to target risk over time to our "Home Base". Our strong view would have us maintain our cash holdings and even raise cash today. **Unless we see aggressive action by policymakers to support the bond market, in whatever way they come up with, or, begin to see meaningful leveraging up from the private sector, we will not increase our asset holdings in the near term.** We have already increased DS Protect holdings and ROW holdings relative to the US, so if US policymakers surprise us and cut coupon issuance or start QE, we are long gold and more equities relative to other assets in our holdings. **If we are surprised, we will react quickly, although any surprise we can think of is likely to result in further deployment of our cash to DS Protect and DS Beta ROW.**

The boring part

After describing all our concerns about major shifts that may need to be addressed to create a more resilient long only portfolio, it is now time for the boring part. Why invest in a long-only portfolio of assets in the first place? Let's start with savings. There is no God-given mandate for people to save. We could consume every penny we earn. Many people are unable to save at all. Some people subsist on their earnings and government subsidies. Some borrow to spend and create negative savings. Cultures differ in terms of their savings. Also, international trade creates forced savings in cultures with trade surpluses and less saving in countries with trade deficits. Government budget deficits create forced savings in the private sector. All these things happen all at once. Nonetheless the desire to save for those who are able is clear. People save to have money:

- For a rainy day, in case of a job loss or unexpected expense.
- For a known near-term large expense or debt repayment, like a down payment on a house or college educations for their children.
- For future consumption when they retire and no longer have income besides investment income.
- To pass on to charities or heirs upon their death.

So, given that people save money, the question is: what is the best way to save? The simplest and least risky way to save is with Money Market Funds, Bank Deposits, or T-Bills. From now on, we will call that cash. Cash pays interest, in part to compensate cash savers for the daily hit to purchasing power that inflation causes. On that note, we are going to stay out of the weeds regarding whether that compensation is adequate or not by comparing investment portfolio returns in excess of cash returns.

The question becomes: why invest in long-term assets instead of cash? The reason to invest in assets is because they are risky and compensate you for that risk by providing excess returns relative to cash. An expected excess return over cash is called a risk premium. **A long-only portfolio offers free money because it collects risk premiums over time.**

Risk premium 101

What is risk premium? It is the extra return offered to someone with cash to buy an asset with market risk. Cash can be spent today. Cash can be used to pay off debt today or saved today in a bank or MMF or under a mattress. An asset that has market risk is not cash. Unlike cash, an asset bought today can change in value tomorrow. The reason assets require a higher expected return is because of this feature/bug. Everyone who wants cash has the same group of people (savers and banks) from whom to get cash. Those who want cash compete for the cash by offering excess returns over cash to induce someone to buy their asset. Cash represents a floor return for all investors because it is a widely available zero risk alternative. No risk premium offered? No cash available to you.

How can all assets have a risk premium when some assets go up and some go down each day, month, and year? This is a good question. It's about expectations. At this very moment, all assets have a risk premium. Someone currently owns every asset, and they think it will go up. Unfortunately, we cannot know which assets will go up. If we did, everyone would move to those assets and push up the price. However, as of this very moment, all future expectations for assets are priced in for this discussion. Sure, some assets will go up and some will go down based on changes in fundamental economic outcomes and expectations of changes. But what is important is that, despite the moves, things that go down go down less and things that go up go up more because they collect risk premium.

How much risk premium does each asset get? Two factors dominate the risk premium of each asset:

- How risky is the asset?
- What is the idiosyncratic and market-wide supply of assets and demand from savers?

Risk

The less market risk, the less risk premium. A one-year Treasury will have little risk premium, while a meme stock will have a lot. The simple concept is that all assets should have the same risk-adjusted return. In other words, a higher risk asset should have a higher expected return than a lower risk asset. The expected return should scale linearly with the risk. If this were not true and one could generate higher risk-adjusted returns in a specific asset, money would flow into the asset and arbitrage away the excess. It is important to realize that all assets have a return that is greater than the return on cash because assets carry market risk and no one would buy them with cash if they had a negative expected return versus cash.

(We will briefly sidetrack this section to say there are some assets that are so important to investors for diversification purposes and in such short supply that it is possible if not certain that assets exist with a negative risk premium. Gold has historically offered negative excess returns versus cash for this reason.)

We have said that all assets have a risk premium and that risk premium scales with market risk, such that the expected risk adjusted return of all assets is the same. Before we address what influences the level of risk-adjusted returns, we will mention what we mean by risk. What we mean by risk is amorphous and pinning it down precisely will not really help much. It is some combination of future expected volatility and future drawdown risk. But we do not really know, so it's just a concept.

Supply and Demand

We have said that all risk-adjusted returns are the same. But what drives the level of risk-adjusted return that investors can achieve, and are issuers willing to pay, for cash? In today's world, the supply of risk assets and the demand from investors has been especially important. The level of market wide risk premium is driven by the availability of cash (money and credit) versus the supply of assets (which includes real and financial assets). When cash is plentiful and issuers of debt and equity need little cash, risk premiums tend to be low. When cash is tight and/or issuers are looking to sell a lot of debt and equity, risk premiums tend to be high.

(For the equity guys: Risk premium is inverse to multiples. Higher risk premiums equal lower multiples. For the credit gals: Risk premium is directly related to credit spreads. Rates guys: Risk premium is imbedded in both real rate products and nominal rate product yields.)

When we track risk premiums, we focus on expected asset risk, asset portfolios, and the availability of money and credit to hold and buy assets versus the risk-adjusted supply of assets looking for cash.

Why diversify?

Harry Markowitz described Modern Portfolio Theory in 1952. We cannot say it better than he did and recommend reading [this article](#). But we will give a quick summary.

Diversification serves several important purposes in investing, based on both mathematical principles and practical risk management:

Risk Reduction Without Sacrificing Returns - The core benefit comes from combining investments that do not move in perfect lockstep. When one asset falls, others may hold steady or rise, smoothing out your overall portfolio performance. This is not just about avoiding losses - it is about achieving more predictable returns over time.

The Mathematics of Correlation - Different assets respond differently to economic events. Stocks might fall during a recession while bonds rise as investors seek safety. TIPS or gold might perform well during inflation while nominal bonds struggle. By holding assets with low or negative correlations, you can reduce portfolio volatility without necessarily reducing expected returns.

Protection Against Unforeseen Events - No one can predict which sectors, regions, or asset classes will outperform in any given period. Technology stocks dominated the 2010s, but energy led in 2022. International markets lagged the US for over a decade, then outperformed in 2017 and 2022. Diversification ensures you participate in winners while limiting damage from losers.

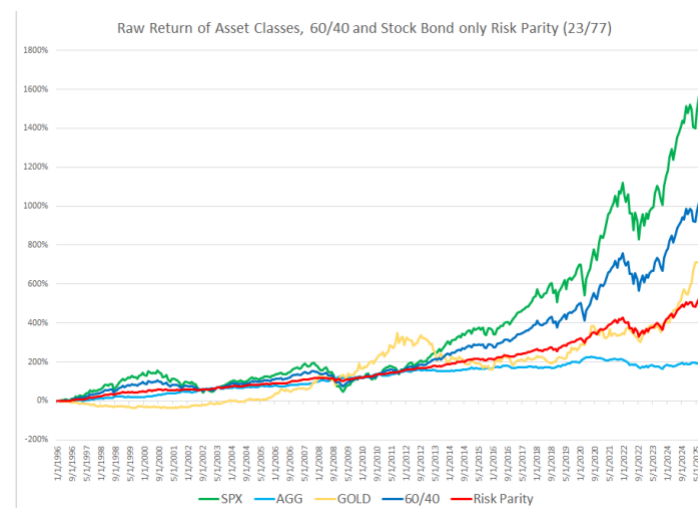
Time Horizon Benefits - Diversification becomes more powerful over longer periods. While a concentrated portfolio might outperform in any single year, a diversified approach typically provides more consistent compound growth over decades. This is especially valuable for retirement savings where you cannot afford major setbacks late in your career.

Behavioral Advantages - Diversified portfolios experience smaller drawdowns, making it easier to stay invested during market stress. Investors with concentrated positions often panic and sell at the worst times. Smoother performance helps maintain discipline.

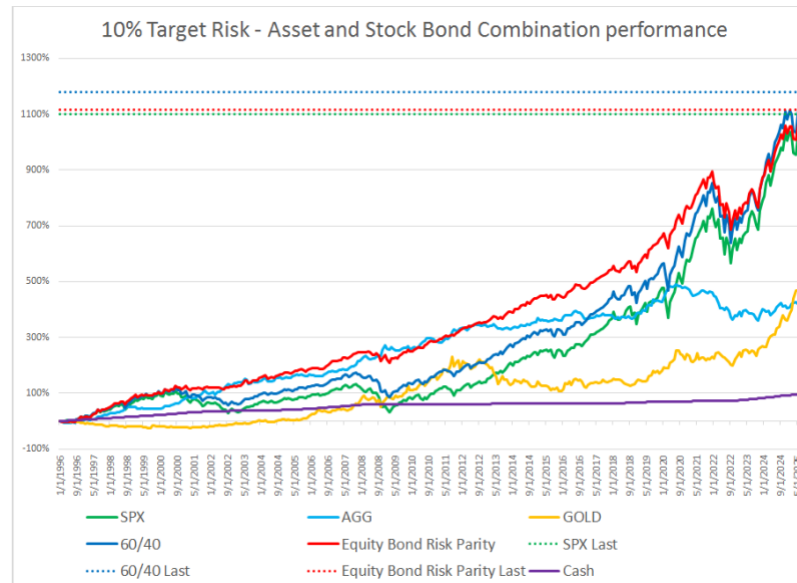
Limits and Considerations - Diversification is not free. By diversifying you reduce risk and drawdown but if you diversify with assets that have lower risk (like adding bonds to an equity-only portfolio), you reduce risk but may reduce overall expected portfolio returns. However, this cost can be offset by leveraging up the less risky portfolio to the original target risk. With the use of prudent leverage, one can generate a higher absolute return with less risk. Leverage has a bad reputation, but we are not referring to the sort of speculative leverage that gets degenerate investors in trouble.

The goal is not to maximize returns in any single period, but to improve the risk-adjusted returns over your investment timeline while maintaining the emotional ability to stay the course and maintain your risk target to generate the highest possible long-term absolute returns.

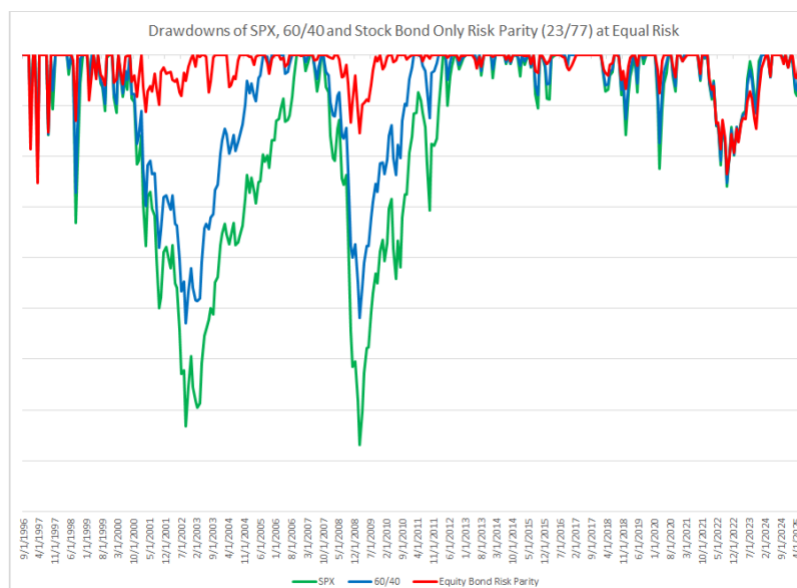
So that is the concept of diversification. How has it done over the last 25 years? To illustrate the point that buying a risk asset and holding it for 25 years without diversification generates the highest return, let's look at raw returns.



60/40 and even this simple stylized risk parity of 23% Equities and 77% Bonds are far less risky than SPX alone. Using moderate leverage and set at the same risk target, the benefit of diversification over 25 years can be seen clearly. Equities still do great but any of these formulations also do quite well:



However, when squinting at the green line and even the dark blue 60/40 line, massive drawdowns have occurred. Using the same risk target, the drawdown of the equity bond risk parity is dramatically better in most years and just as bad in the post-Covid bond bubble pop.



This section is designed to show the concepts of diversification. 60/40 is hardly diversified while the stylized version of risk parity shown is much much more diversified than described here.

Why target a risk level?

The question should be, Why not? Currently, most money managers assess their clients' risk preferences via a questionnaire. The idea is to establish a risk target. Once determined, investors' expectations can be better managed about expected returns, ex ante portfolio volatility, and drawdown risk, so when things go badly investors hopefully can avoid emotionally exiting their long-term plan. For the person managing the money (whether a DIY personal investor or a professional portfolio manager) a risk target helps a manager size positions, seek real diversification, properly leverage (or hold cash), and be aware of potential drawdown risk. **We will not spend much time on the concept but strongly recommend that every investor understand themselves and how they may react in adverse portfolio situations.**

Here is our view on setting a risk target. There is a level of change in wealth that

1. Is absolute noise.
2. Is slightly annoying.
3. Pisses one off but does not cause upset or any real pain or stress.
4. Causes a loss of sleep.
5. Causes an action to ease the pain.
6. Causes a life changing loss.
7. Causes a loss so horrible that one cannot ever recover one's current lifestyle.

These levels are personal to everyone. But we assure you everyone has levels like this. We have learned that 5-7 are not something we are willing to experience. We have experienced a level 5 event often and close to a level 6 and do not want to have that experience again. So, we operate somewhere in the range of 3-4. This range places us at a risk target we can manage, and we accept the expected return that is consistent with that level of risk. We do not want to be all-in. Staying in the game is much more important.

If you have never experienced a level 4 or 5, it is fair to say you are not taking enough risk but ideally you do not have to experience them and can just imagine them. The risk of experiencing a level 5 event is that it could turn into a level 6 event (which could be a life changing loss) or a level 7 event (which would be a loss so horrible you could not recover to anything like your current lifestyle).

All those risk levels are out there for you to experience, and we encourage you to really understand that and hold a portfolio that takes risk but does not allow for 6-7 at all. Even an unlevered portfolio is shockingly levered when you consider your future liabilities of paying for your lifestyle and your family's education etc.

Leverage versus risk

Leverage is a bad word. If you say that you are going to borrow money to invest, people will be concerned. These same people will also buy a house with a reasonable mortgage and think nothing of it. They will own concentrated stock

portfolios with 40% annual price volatility when you are talking about leveraging a long index fund position at 1.5x.

The important part of portfolio management is having a portfolio with the risk that you wish and the holdings you want to own. The way we start is to build a portfolio of assets we want. Then we back test the range of possible future prices for that portfolio. As mentioned above, the measures that really matter are volatility and drawdown, although there are others. Volatility is the up and down swings over a measurement period. We use a few measurement periods, including daily, weekly, monthly, and annually. Drawdown is the size of a fall in a portfolio from any point to a lower point. It is important because when investors are in drawdown, emotions can affect judgement. We want to plan to avoid drawdowns that would force us to sell to ease the pain. This aspect of risk is important when we discuss leverage because of something called a margin call.

Ok, so we have the portfolio we want, but it is too volatile for us. It either swings too rapidly or has historic drawdowns we do not like. The upside of a more volatile portfolio is that its "expected" return is higher. But if it is too risky, it must be deleveraged. How does one deleverage? Simple: sell a slice of the portfolio until the risk is to your liking. Remember to sell each thing you have proportional to its size in your portfolio. Done! Now you have the portfolio that maximizes your return, expresses your investment view and you can live with the risk.

We started with needing to deleverage (keep some cash holdings) in a portfolio to meet your risk objectives to show that it is the risk objectives that matter most. But there are many portfolios that one can hold that do not have enough risk even if every penny of cash is spent. For us, DS Beta looks like that sort of portfolio. It is pretty low risk and, at best, barely meets our risk target. But for you it may be something completely different. The way to maximize return, express your view, and still maintain your risk level is through leverage. Put simply, that is buying more assets than you have cash to pay for. Oh boy. Now we must be cautious.

Many forms of leverage in the financial markets can result in margin calls that disrupt one's portfolio and require risk trimming, which is not part of the investment strategy. However, before we jump into security selection as a method of handling margin calls, let us step back up. If you have designed your portfolio to meet your risk goals, you should have structured the portfolio so that the possibility of a margin call is extremely remote.

Let us use an example. In the US, one can easily open a margin account. A \$100,000 account can control (for example only; check your broker's rules), \$150,000 of ETFs. However, if you bought \$150,000 of ETFs and the portfolio value dropped a penny, you would now have to deposit whatever loss you took or face a forced liquidation or margin call. If you keep cash in some other account to meet margin calls, that amount already must be included in your calculation of risk and leverage and expected return, so you are deleveraged. If your risk limit portfolio was not \$150,000 but instead was \$120,000, the chance of a margin call drops radically. If you lose 50% on your portfolio, it is now worth \$60,000 and your equity is \$40,000, with the result that you remain in compliance in your margin

account and avoid a margin call. Obviously that loss is 1.2x what you would have lost if unlevered, but you were prepared ex ante. The point is that one can leverage a portfolio and be confident that one will not be forced out of a position via a margin call.

Let us now jump into security selection and structure. There are a lot of tradeoffs when choosing how to lever a portfolio. They include:

- Considering an alternative asset.
- Transaction costs and fees.
- Borrowing costs.
- Unwanted exposures.
- Your experience using various products.

Considering an alternative asset

The easiest way to add risk is to buy something closely related to what you want to buy that is riskier than what you want. The best example is buying a 30Y bond when you might otherwise want a 10Y note. The two Treasuries are not the same but are highly related. Another example is buying a single semiconductor stock instead of the semi index. The former is riskier than the index but expresses the view.

Transaction Costs and Fees

There are many prepackaged leveraged investments. We strongly recommend avoiding leveraged ETFs for long-term investing. They trade off badly on all our criteria. Transaction cost and fees are also high.

Borrowing costs

This is a big one. Know what you pay for your leverage. For a one year holding, the benchmark "fair" borrowing cost is 1-year SOFR. That rate is currently about 3.3%. If you leverage your portfolio with any margin loan, future, or option, you should expect to pay 3.3% over the next year. However, that is before retail markup. Margin loans for retail accounts are notoriously high. They quote the rate on an overnight basis so the benchmark for comparison is about 4.33%. We have seen margin costs of 10% or higher, a level that means one cannot leverage via margin loans.

Know your margin cost. If you are paying a sizeable retail markup, consider using futures and options which have an embed leverage cost closer to institutional levels. The reason is that futures and options "borrowing costs" are arbitrated by those who can borrow and lend at fair value. This is a benefit to you.

Unwanted exposure

Many of you can trade options but not futures. While futures provide only desired exposure, options can be used for leverage but have some undesired exposures.

The straightforward way to get prudent leverage is to use deep in the money call options. The price of that call is going depend on two things:

- 1-year interest rate (your cost of leverage).
- Extreme tail risk.

Because the option is deep in the money, the tail risk may be low but will always be something you are paying for that you do not want. What you will be left with is a 2x leveraged position in the asset you want with institutional margin cost.

Product knowledge

We strongly recommend not using products you do not understand. If you want leverage and have high retail margin costs, you may be tempted to try options or futures. Take it slow. Understand your own situation and make the tradeoffs within your scope and risk parameters.

Balance

Every asset class has its own response to its own idiosyncratic market factors, overall market factors, and sensitivity to macroeconomic outcomes. We will outline some of the thinking and the practical realities for investors in the history section below, but the concepts are worth highlighting here.

Let us continue with equities and bonds to keep it simple and focus on a single macroeconomic driver. Equities outperform bonds when growth exceeds expectations and underperform when growth does not meet expectations. If you want to argue with that statement, feel free to pick any driver that will cause one asset to outperform the other.

We have described risk targets and how leveraging a low-risk asset can achieve the same level of risk and expected return as holding an unleveraged position in a high-risk asset. The SPX is about 3x more volatile than a US Agg US Treasury Mutual fund. It also has 3x the expected return. Those facts imply that a 60/40 portfolio is long 60% of total in a 3x more volatile asset. In other words, not only are you unbalanced toward equities by the 60 versus the 40, but you have much more risk in equities. This is not very balanced. To get to risk parity, in which each asset has the same risk contribution, the notional ratio of equities to AGG is roughly 25/75.

DS Beta uses the principles of risk parity, but when those principles are applied the way we describe above, it does not necessarily result in a portfolio that is balanced to macroeconomic factors.

Let us assume bonds are very sensitive to changes in growth and that equities are less sensitive. The 60/40 portfolio has much more of its risk allocated to equities and, despite the lower sensitivity to growth, the 60/40 portfolio is likely pro-

growth. On the other hand, the risk parity portfolio of 25/75 is almost certainly anti-growth.

DS Beta starts with a risk parity framework and then solves toward a balance of anti-growth/pro-growth exposures and anti-inflation/pro-inflation exposures. The inventor of this concept was Bridgewater Associates, and we are not even close to matching the sophistication or quality of the All Weather Fund, which is now offered in an ETF. Frankly, it is better than DS Beta by a lot. Nonetheless, we use DS Beta as our form of beta because it is simple and gets the 80% right while not worrying about the last 20% to perfection. There is no perfection.

History

The understanding of portfolio construction has evolved over the past 75 years and is still evolving. A timeline of notable accomplishments is below:

1952

Harry Markowitz publishes the paper on which all further work relies, Modern Portfolio Theory, which introduces diversification, risk targets, and the efficient frontier.

1970-1981

Harry Browne focused on adding inflation assets as a diversifier to the traditional 60/40 portfolio. In 1981, he formalized these ideas into the "Permanent Portfolio."

1990's – 2000's

Bridgewater Associates and AQR create their own versions of portfolios designed to improve upon both the 60/40 and the Permanent Portfolio. Bridgewater pioneered All Weather and AQR Risk Parity. These funds changed the game by offering institutional clients a better smarter beta.

2021- Today

The popping of the bond bubble has caused significant underperformance in bond-heavy All Weather and Risk Parity Portfolios, raising legitimate questions that we focused on above about the place of nominal bonds in investor portfolios over the next decade.

The Global Market Portfolio

Back when Harry Markowitz created Modern Portfolio Theory, the Global Market Portfolio was quite different than it is today. Back then, government debt (besides war debt) was a small proportion of the market portfolio. It is not surprising that the 60/40 Portfolio has been a durable concept for investors for decades. It somewhat matched the available assets in the Global Market Portfolio.

By the 1970s, gold became legal to own in the United States, and yet, aside from a short-term frenzy, did not become a normal allocation for investor portfolios.

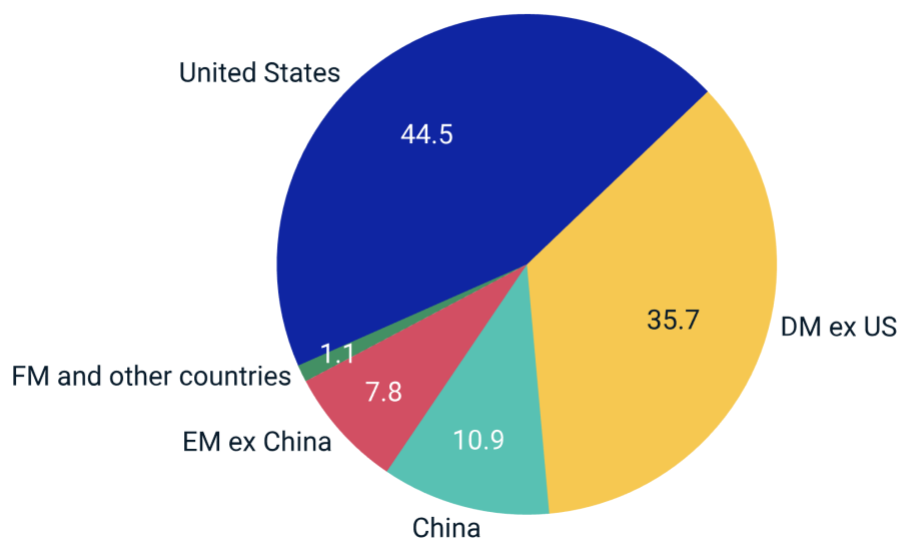
Up through Covid, the proportion of government bonds had risen significantly, but in response to Covid that proportion exploded higher. Recently the Market Portfolio looked like this according to MSCI. Only 40% of the Market Portfolio is Public Equities and yet conventional portfolios demand 60%:

Where asset-class composition stands

	Full global market portfolio		Free-float adjusted	
	Market cap (in USD trillions)	Relative size (in %)	Market cap (in USD trillions)	Relative size (in %)
Total	270.7	100%	213.3	100.0%
Fixed Income	141.5	52.3%	115.6	54.2%
Public Equity	108.1	39.9%	76.6	35.9%
Private Real Estate	8.4	3.1%	8.4	3.9%
Listed Real Estate	4.8	1.8%	4.8	2.3%
Private Equity	3.5	1.3%	3.5	1.7%
Listed Infrastructure	3.3	1.2%	3.3	1.5%
Private Credit	0.6	0.2%	0.6	0.3%
Unlisted Infrastructure	0.4	0.2%	0.4	0.2%

The Global Market Portfolio offers global investors a 44.5% allocation to US assets. Nonetheless, US investors who rarely invest in public markets outside of the US (and to a large extent global investors) have crowded into US assets and equities in particular:

Regional composition of the investable global market (%)



This crowding into equities relative to fixed income and US equities relative to ROW equities (despite the Global Market Portfolio having different allocations) suggests a few things. It is possible that the crowd will remain overweight US equities and underweight ROW bonds, expecting continued low supply of US equities and high supply of ROW bonds. We see that flow and get the idea of sticking with the overweight and underweight but wonder if free money is offered in the underweights, and whether, if that free money begins to get collected, the shift back to the global market portfolio weightings could generate large distortions in asset prices and currencies.

In the end, the Global Market Portfolio IS the portfolio that is owned by the world. It has become closer to risk parity and much less pro-growth over the past 50 years. It is worth thinking about how this all evolves over the next decade.

Synthesis

Always own beta. That is the synthesis. Down a level, own a diversified portfolio balanced to a full range of potential future outcomes. Mostly, stay at your risk target with your savings but consider the evolving world.

If you are overweight US Assets and USD, begin to opportunistically “get out” and head to ROW DM assets held in local currencies.

Own more gold and other debasement assets than you have in the past.

Own fewer nominal bonds. This one is important because without nominal bonds a portfolio is much riskier in a growth slowdown. Consider owning more TIPS.

Own more AI software, hardware, and services providers and less of their customers.

Hold meaningful cash given that asset returns are likely to be quite low over the next decade.

If prices change a lot, rebalance back to normal beta.

Alpha is hard, beta is free money. Always own beta.

Current Portfolio and Performance

Assumed Portfolio size		\$	100,000,000				
LTD P/L		\$	84,036,197				
Total Return			84.04%	YTD Return in excess of cash			13.98%
Today's Date			8/25/2025	Portfolio Created			4/15/2019
Date	Position	Entry Price	Amount	Worst case loss	MTM	P/L	Open/Closed
7/21/2025	SPX 9/30/2025 5970/5870/5770 Put Butterfly	2.20	2273	\$ 500,000	1.25	\$ (215,909)	Open
7/24/2025	SPX 9/19/2025 6300/6200 Put	22.80	526	\$ 1,200,000	11.85	\$ (576,316)	Open
7/30/2025	SPX 10/17/2025 6250/5750 Put Spread	71.85	139	\$ 1,000,000	41.55	\$ (421,712)	Open
8/4/2025	NDX 10/17/2025 22500/21500 Put Spread	164.90	61	\$ 1,005,890	126.05	\$ (236,985)	Open
7/3/2025	SFRM6	96.62	2400	\$ 2,000,000	96.69	\$ 618,000	Open
7/30/2025	6AZ25 AUD 10/3/25 .65 puts	0.0108225	924	\$ 1,000,000	0.0076000	\$ (297,760)	Open
7/30/2025	GCZ25 10/28/25 DTE 3200 PUT	33.4	150	\$ 500,000	13.9	\$ (291,916)	Open
8/14/2025	6JZ5 JPYUSD 10/2/2025 .0068/.0071 Call Spread	0.0000990	404	\$ 500,000	0.000087	\$ (63,131)	Open
				Risk	8.2%	6.20%	