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Where do we go from here?

Many of us have been remote working from suburban areas over the summer, surrounded by nature. The trees, plants, lawns are all green - as is the market. Why are all the trees green? And what does this have to do with investing?

We all know from science class that trees absorb sunlight and convert this using chlorophyll to grow and to transform carbon dioxide into carbon (the mass of the tree) while generating oxygen.

But why are all the plants green? Plants are green because they reflect back more of the green wavelength than other parts of the spectrum. Much of the energy the sun radiates is in the green wavelength. So why is it that plants have evolved to largely avoid the most energetic and useful part of the available spectrum?

If plants absorbed the entire range of light, they would appear black, but because plants reflect (i.e., don't use) some of the green portion, they appear green. We have observed this phenomenon for a long time, but recently scientists from the University of California and University of Glasgow have discovered why this is so (nicely summarized in Quanta Magazine[1]). The reason plants reflect back green is that those energetic green photons are too volatile for the photosynthesis process. It turns out that atmospheric conditions such as clouds can reduce steady transmission of green photons creating risky variability and uncertainty for plants seeking a stable supply of energy. Plants evolved to reduce their dependency on the highly energetic but volatile green wavelengths and instead focus on the more stable (albeit less energetic) red and blue parts of the light spectrum.

Does this sound familiar? Plants have discovered that mitigating the effects of rainy days is optimal for long term survival. Similarly, investors who prepare for and mitigate the effects of "rainy days" are likely to thrive and survive long-term.

The evolutionary solution for photosynthesis is to shift toward absorbing more of the red and blue photons and fewer (but not zero) of the green photons. The successful plant has a highly evolved system for regulating the amount of green photons it absorbs to avoid the damaging spikes and drops that affect the green part of the sun's energy.

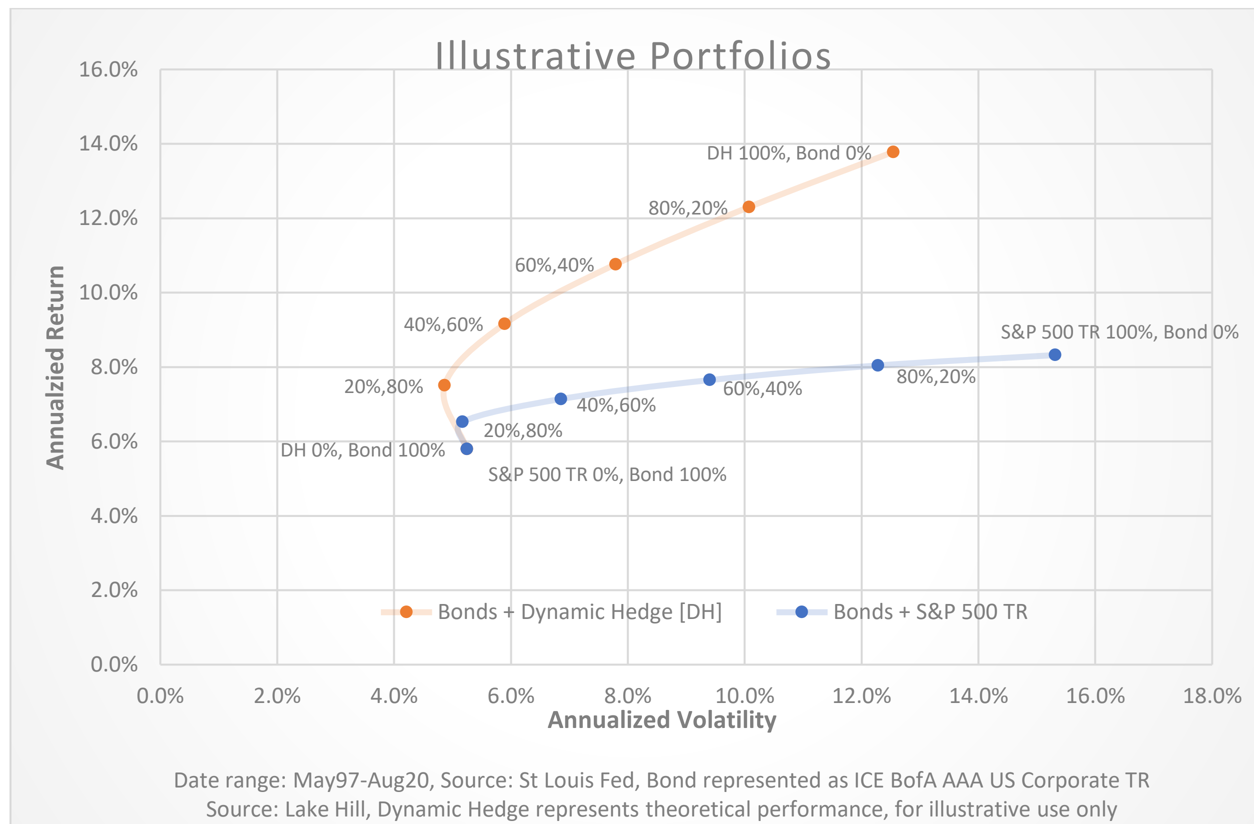
A similar "shift" can be beneficial to investors. Adding an options and futures overlay to a portfolio can shift returns to provide smoother outcomes. This allows investors to participate in the upside while reducing the risk of being stopped out when an extremely volatile downside event occurs. It can allow investors to survive and thrive.

The difficulty lies in doing it correctly. Most option overlays are costly and ineffective because they aren't dynamic processes like those we observe in nature. This is because just avoiding risk won't generate returns. Just buying put options without a plan is like blocking out 100% of the green photons – the plant will die. If your option overlay lacks a plan for monetizing gains, cutting losses, and re-optimizing the option positions, your portfolio won't keep up. Instead, it will wither over time.

[1] https://www.quantamagazine.org/why-are-plants-green-to-reduce-the-noise-in-photosynthesis-20200730/

Lake Hill's Dynamic Hedge strategy is an equity replacement strategy that uses index options to shift portfolio returns and make them asymmetric. Dynamic Hedge is designed to provide downside risk mitigation through a dynamic process in which option positions are re-optimized as markets move over time. The advent of electronic markets and automation have completely changed the game. With the right tools, one can now manage many option positions simultaneously across multiple strikes and expirations. This is new and beneficial. It helps one stay invested using a disciplined process because it can reduce the drawdowns which are so painful.

Below we show a simple comparison using the last 20 years of data. It is a familiar return/volatility scatter plot. We compare various weighted portfolios of Equities & Bonds with portfolios of Dynamic Hedge & Bonds. By replacing Equities with Dynamic Hedge, overall returns increase for the same volatility but, more importantly, the downside volatility is mitigated, allowing investors to stay the course.



Date range: May97-Aug20, Source: St Louis Fed, Bond represented as ICE BofA AAA US Corporate TR
Source: Lake Hill, Dynamic Hedge represents theoretical performance, for illustrative use only

We are currently in the midst of a storm. We don't know how it will play out. The upcoming elections, social turmoil, booms and busts of previously stable industries add to increased uncertainty and risk. Now is the time to both hedge risk and take advantage of the upside. The world has changed. Those who do not invest with the correct wavelength will be left behind.

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE PERFORMANCE. DATA IS SUBJECT TO REVISION WITHOUT NOTICE.

IMPORTANT INFORMATION REGARDING THE INFORMATION PROVIDED HEREIN:

HYPOTHETICAL AND BACKTESTED PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS.

FOR CUSTOMERS TRADING OPTIONS, THESE FUTURES CHARTS ARE PRESENTED FOR INFORMATIONAL PURPOSES ONLY. THEY ARE INTENDED TO SHOW HOW INVESTING IN OPTIONS CAN DEPEND ON THE UNDERLYING FUTURES PRICES; SPECIFICALLY, WHETHER OR NOT AN OPTION PURCHASER IS BUYING AN IN-THE-MONEY, AT-THEMONEY, OR OUT-OF-THE-MONEY OPTION. FURTHERMORE, THE PURCHASER WILL BE ABLE TO DETERMINE WHETHER OR NOT TO EXERCISE HIS RIGHT ON AN OPTION DEPENDING ON HOW THE OPTION'S STRIKE PRICE COMPARES TO THE UNDERLYING FUTURE'S PRICE. THE FUTURES CHARTS ARE NOT INTENDED TO IMPLY THAT OPTION PRICES MOVE IN TANDEM WITH FUTURES PRICES. IN FACT, OPTION PRICES MAY ONLY MOVE A FRACTION OF THE PRICE MOVE IN THE UNDERLYING FUTURES. IN SOME CASES, THE OPTION MAY NOT MOVE AT ALL OR EVEN MOVE IN THE OPPOSITE DIRECTION OF THE UNDERLYING FUTURES CONTRACT.

FUTURES, OPTIONS AND DERIVATIVES PRODUCTS INHERENTLY INVOLVE SUBSTANTIAL LEVERAGE AND ALSO GREATLY INCREASE THE RISK OF LOSS. THERE IS NO ADDITIONAL PORTFOLIO LEVERAGE APPLIED TO GENERATE THE RETURNS.

RISK FACTORS: HEDGE FUNDS AND MANAGED ACCOUNTS HAVE CERTAIN INHERENT RISKS ASSOCIATED WITH THEM, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

(I) THE FUNDS AND MANAGED ACCOUNTS ARE SPECULATIVE AND INVOLVE VARYING DEGREES OF RISK, INCLUDING SUBSTANTIAL DEGREES OF RISK IN SOME CASES;
(II) THE FUNDS AND MANAGED ACCOUNTS MAY BE LEVERAGED AND MAY ENGAGE IN OTHER SPECULATIVE INVESTMENT PRACTICES THAT MAY INCREASE THE RISK OF INVESTMENT LOSS; (III) THE FUNDS' AND MANAGED ACCOUNTS PERFORMANCE MAY BE VOLATILE; (IV) AN INVESTOR COULD LOSE ALL OR A SUBSTANTIAL AMOUNT OF HIS OR HER INVESTMENT; (V) THE INVESTMENT MANAGERS HAVE TOTAL TRADING AUTHORITY OVER THE FUNDS, THE FUNDS ARE DEPENDENT UPON THE SERVICES OF THE INVESTMENT MANAGERS, AND THE USE OF A SINGLE ADVISOR COULD MEAN LACK OF DIVERSIFICATION AND, CONSEQUENTLY, HIGHER RISK; (VI) THE FUNDS MAY HAVE VARYING LIQUIDITY PROVISIONS AND LIMITATIONS AND THERE IS NO SECONDARY MARKET FOR INVESTORS' INTERESTS IN ANY OF THE FUNDS AND NONE IS EXPECTED TO DEVELOP; (VII) THERE ARE RESTRICTIONS ON TRANSFERRING INTERESTS IN THE FUNDS; (VIII) THE FUNDS' FEES AND EXPENSES MAY OFFSET THE FUNDS' TRADING AND INVESTMENT PROFITS; (IX) THE FUNDS MAY NOT BE REQUIRED TO PROVIDE PERIODIC PRICING OR VALUATION INFORMATION TO INVESTORS WITH RESPECT TO INDIVIDUAL INVESTMENTS; (X) THE FUNDS ARE NOT SUBJECT TO THE SAME REGULATORY REQUIREMENTS AS MUTUAL FUNDS; AND (XI) THE FUNDS ARE SUBJECT TO CONFLICTS OF INTEREST.

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