Lake Hill

lakehillgroup.com 101 Avenue of the Americas New York, NY 10013 212-792-6672

June 18 2020

The day-traders and the stock market

Last weekend I dropped by a local Restaurant/Brewery for curbside pick-up. The owner came out to greet me and chat. He was excited to tell me that he was making a ton of money - more than ever before. I said it must be because folks still want to drink, so he is profiting without all the traditional overhead of running a fully staffed restaurant.

He smirked and said "What?, no, it has nothing to do with the shutdown….I took all my money and bought stocks! They only go up! …I'm thinking of shutting down and investing full time!"

It scared me. It reminded me of bitcoin or the tech bubble again.

It is now June 2020 and the market had historic bull market gains after an equally historic bear market loss. Some are predicting a continued rally while others are predicting new market lows.

Some investors locked in losses on the low, others profited from buying the dip. Some were able to hedge the tail event in March but gave it all back in April. Others have tried to avoid losses by investing in CTA's, risk-parity funds, bonds, alternatives, private-equity, options collars, or other forms of diversification only to find that they don't prevent drawdowns. Many investors who invest in simple low-cost index funds overrode their long-term strategy and underperformed the index.

This is clearly a big problem.

Many pensions, endowments, family offices and other long-term investors want the potential upside of the equity markets but can't stomach or afford the losses that might occur in the interim. Many investors will be simply "tapped out" if the equity markets drop significantly. This is not an issue of skill, market efficiency, performance versus a benchmark or the right mix of cash, bonds and stocks, all of which can be perfectly reasonable investments. The problem is that it is just too painful for most people to stick with. The pundits say "invest in equities for the long term", "stocks historically do this, that or the other". It's very easy for them to say, yet it may be impossible to do consistently over time when your life savings are on the line.

Question:

How can one keep to a disciplined long-term investment plan when the potential for extreme losses lurks in the background?

Answer:

Invest with the correct insurance. We are not predicting a black-swan event. We are not predicting new lows or new highs. We don't know. We do know that investing with discipline is critical. Life insurance, homeowner's insurance, crop insurance all can make sense if they help keep you in the game.

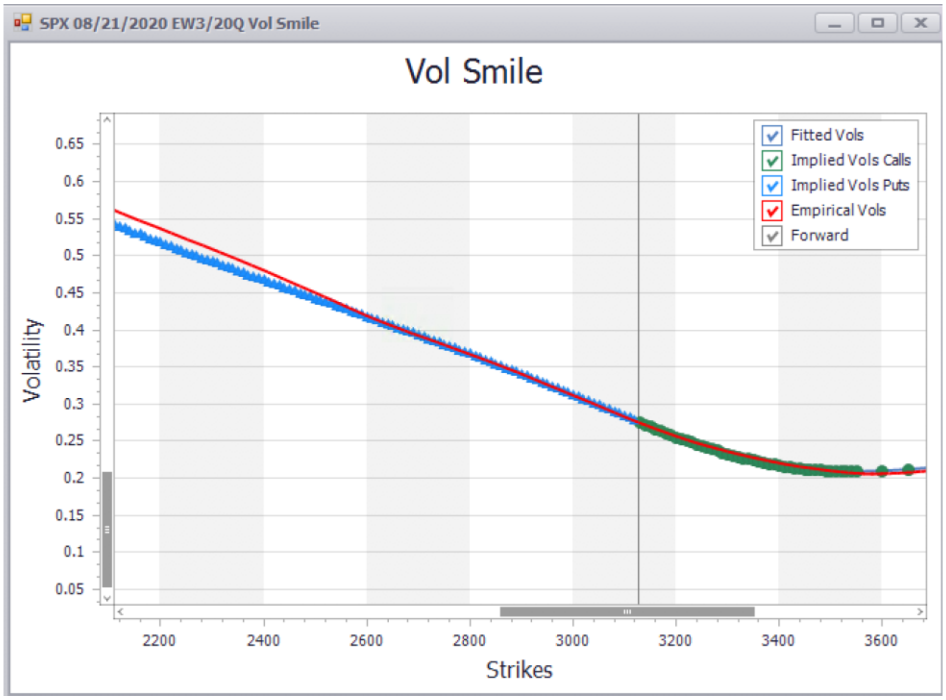
Options and Futures are a form of insurance. These products have been around since the dawn of civilization (see paper), yet most who trade them fail to profit from using them. This is because it is too easy to trade. Anyone can short calls or puts and claim they are monetizing the Volatility Risk Premium (see paper). Anyone can buy a ratio put spread and claim they have a "tail hedge". Just because anyone can click on a screen doesn't mean anyone can be successful at it. (see paper). One key reason for failure is that many investors do not understand the amount of time and number of trades one needs for the option strategy (long or short options) to pay off.

A Clear solution:

Use modern technology to continuously scan all the options in the S&P500 Index (there are over 20,000 strikes to choose from). Have a method of determining the fair value of an option and compare each option price with its fair value. Run a large scale optimization to select the best set of options to be long or short on any given day given your risk profile or portfolio objective. There are potentially millions of possible option combinations, so make sure you have a lot of computational power. Hedge the option positions daily to both monetize opportunities and maintain the correct insurance. Update the pricing and probabilities tables every day. Execute in the most automated low-cost fashion and repeat this process every day. Even though options - like insurance - can be expensive (the VIX is all over the place), one can still skew the odds to minimize costs while finding the best combination of options both long and short. Maintain this program over time and the odds of success can be in your favor.

Example:

This is a screenshot from our systems showing the implied volatility and corresponding fair-value volatility for S&P500 Index August options. Our systems indicate that while all options appear cheap, some are more expensive than others, which provides opportunities to own optionality at low prices.



As a result, we have been a net buyer of out-of-the-money puts for several months. We were even a buyer when the market was 30% lower and VIX was over 60. These options seemed cheap to us, and our hedging activity has kept up with the cost of owning them so that the net profit/loss of owning them has been negligible. It may very well be that the puts are offered cheaply because everyone believes the market won't go down again. Perhaps. However, for the right price we will gladly buy them - especially if our hedging activity pays for them when they don't end up in the money.

Result:

Lake Hill Dynamic Hedge is a kind of equity replacement program. It buys and sells S&P500 Index options in such a way as to participate in the upside while reducing the odds of losses in downside scenarios. We have automated the process in order to minimize human emotion while being cognizant of changing market conditions. Ultimately, Dynamic Hedge is composed of both long and short call and put option positions across a range of strikes in near term S&P500 Index options. The option positions are updated and hedged in a daily re-optimization process. Why buy a put without a plan when a different combination of options costs less and has a higher payoff? The key is to have the appropriate technology and experience to implement your insurance plan correctly. The details of the program can be complex. The specifics of which are reviewed in great detail with each client that is chosen to partner with us. The program has been battle tested to solve a specific need.

However, it will only work for a select group of investors:

It requires the intellectual and emotional discipline to stick to it. Discipline means determining in advance how long it should take and what the variability should be along the way. Discipline means not becoming too euphoric when things are going well and not despairing when things are going poorly.

Options have been around for a long time. Opportunities to buy or sell them does not represent an arbitrage. The "edge" in the options market is the difference between what an option is worth and what it pays off over time (see paper). "Alpha" capture opportunities arise from risk transfer, not complicated options theory. Option investing is an odds-based business where only a few succeed over time.

There are plenty of businesses that continue to profit over time. The edge of many businesses are well known and have stood the test of time. This does not mean it is easy or simple to capture that edge, or that anyone can do it. It takes more than a formula. There is no easy way to write a bestselling novel or create a transformative piece of art. For example, winemaking has been around since the dawn of civilization. All one has to do is plant the seeds, grow the vines, and ferment the grapes, right? The formula is well known. However, if you are impatient and dig up the vines at the first sight of trouble, you actively destroy the benefits. One needs years of time and discipline to let the vines create value. Wine making - a business that has been around for millennia - continues to create and destroy fortunes even though it is a business that theoretically should be efficient and is well understood.

This is true of any endeavor in life. Staying healthy requires lifelong discipline. Staying competitive requires lifelong discipline. Generating and maintaining wealth requires lifelong discipline.

Here are four simple guidelines that you should consider before you invest in Lake Hill Dynamic Hedge:

1. Demonstrate that you are already a success in your chosen profession, whatever it might be. This involves doing your job in a disciplined manner. Are you disciplined?

2. Use a small portion of your savings to be a disciplined investor in a basic index fund. One interesting statistic from index investors is that most who invest in broad based index funds underperform the

index. We believe this is not due to academic arguments of passive vs active nor market efficiency. It is because most investors who invest in index funds are not disciplined. They sell out when panic sets in, only to then buy after the market rallies. Basically, they sell low and buy high and completely undermine the benefits of owning a passive index fund. One must invest and stick to it. If you do not have a portion of your savings in an index fund and/or are unable to actually remain disciplined, do not move on to the next stage. Revert to point 1 and keep working hard at your day job.

3. Alternatives and other investments are not a panacea against losses and volatility in the market or in life. If you cannot handle the variability of the market, investing in alternatives is not likely to help because it also requires discipline.

4. Options and futures are easy to trade. If implemented correctly they can provide enormous benefit in the form of protecting the downside, adding income, or simply changing the expected return distribution of your portfolio. Having insurance or enhancing the yield on your portfolio may make it easier to stick to the discipline required to successfully invest in an index fund (see section 2 above). Like any endeavor, the key is in doing it correctly.

Did you miss out on the rally? Are you concerned the market will take a serious drop? Are you underperforming your benchmark? Is your hedging activity too costly? Would you like to change the odds to increase the likelihood of success?

If so, Lake Hill Dynamic Hedge may be the appropriate solution.

Past Performance is not indicative of future performance. Data is subject to revision without notice.

Important information regarding the information provided herein:

HYPOTHETICAL 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 AND FOREX 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.

This document does not constitute an offer of any commodities, securities or investment advisory services. Any such offer may be made only by means of a disclosure document or similar materials which contain a description of material terms and risks. This document, which has been furnished on a confidential basis, is exclusively for the use of the person to whom it has been delivered, and it is not to be reproduced or redistributed to any other person without the prior written consent of Lake Hill Capital Management LLC. This information is for use by sophisticated or institutional investors only and should not be the basis of any investment decision. Additional information is available upon request. This investment may not be suitable for all individuals. No investments or services mentioned or described herein are available to "private customers" as defined by the UK Financial Conduct Authority or to anyone in Canada not a "Designated Institution."