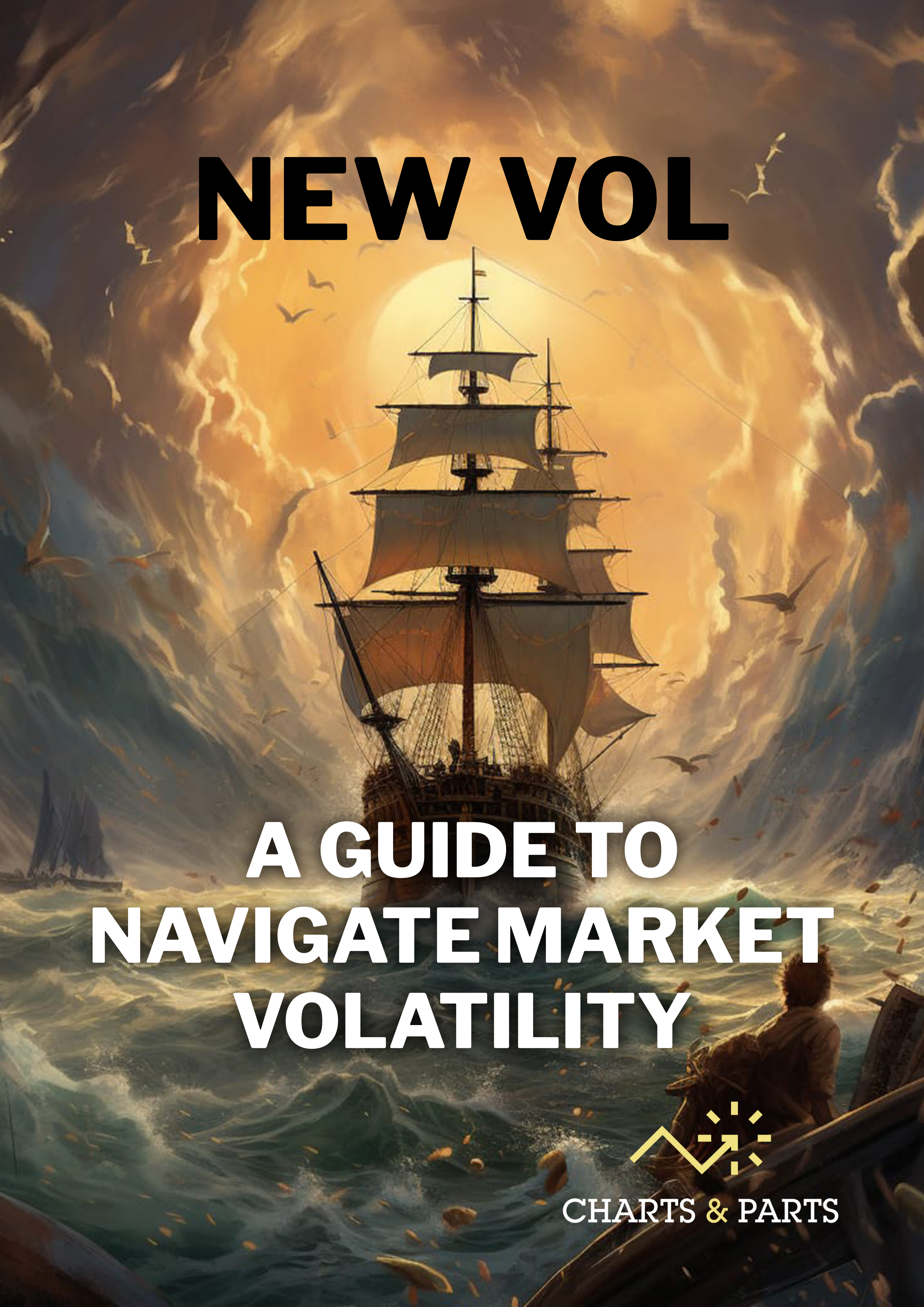
NEW VOL



A GUIDE TO NAVIGATE MARKET VOLATILITY

CHARTS & PARTS

CONTENTS

03
Intro

05
Cracking the Volatility Puzzle

08
Exploring Solutions

15
The Volatility Landscape

21
A New Definition of Volatility

27
Conclusion

INTRO

Welcome to “New Vol: A Guide to Navigate Market Volatility.” In this e-book, we embark on a journey to simplify the complex world of risk and volatility and offer you a practical strategy to navigate the ever-changing landscape of financial markets.

Volatility is an inherent part of the financial world, and its impact on our investments and financial well-being cannot be ignored. However, traditional approaches to managing risk often fall short in the face of systemic shocks and market disruptions. That’s where “New Vol” comes in.

Our goal is to bridge the gap between financial risk and the solution set of building personal resilience, as advocated by Peak Prosperity. We redefine volatility from a market decline to something much larger—a systemic shock that can upend our lives. By shifting our perspective and adopting an insurance strategy approach to risk management, we can better protect ourselves and enhance our quality of life.

Are you ready to explore the world of market volatility and embark on a path to personal resilience? Let’s dive in and discover the power of “New Vol.”

CRACKING THE VOLATILITY PUZZLE

INTRO

We've planted the seed for our volatility journey. We discussed in our initial note – Volatility is Here to Stay. We talked about the risky nature of the 60/40 stock/bond portfolio. And we even shared a potential solution with the multi-asset approach to portfolio management. Now it is time to take a deeper dive into the unknown.

THE GREAT DEBATE

There has been an ongoing debate as to whether or not volatility is an asset class. Intuitively, it makes sense that it is. We can see volatility in the charts and in options prices (implied volatility) and in our P&L. But there is something about volatility that is still hard to pin down. For this reason, we are calling vol an elusive asset class.

One could ask – Why should I even care? Why waste time on this topic if it is so complex and hard to capture? All fair questions, but when we see global assets moving in sync, and it feels like correlations keep inching higher (everything moving together), we tend to want hedges of sorts. For these reasons and more, we favor the exploration of volatility.

STATE OF PLAY

Due to the complexity of the topic, we have some of the sharpest minds in the business providing research, ideas, and hedging alternatives against the volatility monster. After the 1987 crash, the tail funds became all the rage. The tail funds in their simpler form will buy puts on the market. This is an expensive alternative, and we now have several other funds, strategies, and products to access volatility. There are several volatility ETFs (Exchange Traded Funds), we have volatility funds, VIX options, VIX futures, and several new products and players incorporating optionality into their portfolios to help manage risk.

The volatility space has an interesting tailwind, as assets into the above strategies continue to grow. It could have a lot to do with the volatility genie coming out of the bottle in February 2018, when the market moved fast enough to have the XIV (a volatility fund) shut down. That marked the end of an extreme low-point in volatility in the general markets. The volatility trends are higher, the increase in rates and inflation support the “newer” vol trend, and the recent day-to-day action makes volatility a bit more palpable.

We now have more volatility and more solutions. That is the good news. The challenge is to figure out what works and what fits our portfolios.

OUR JOURNEY

We (at C&P) have been exploring volatility for 30-years: studying, teaching, and managing derivatives risk for large banks and institutions. It is our beat. The world of the unknown makes this fun and imaginative. “Tail talk” is a popular topic and gets a lot of attention both inside and outside the markets arena. One of our goals at C&P is to try to simplify to better understand volatility. We’ll try to have some fun as we take you on a journey towards volatility solutions.

EXPLORING SOLUTIONS

INTRO

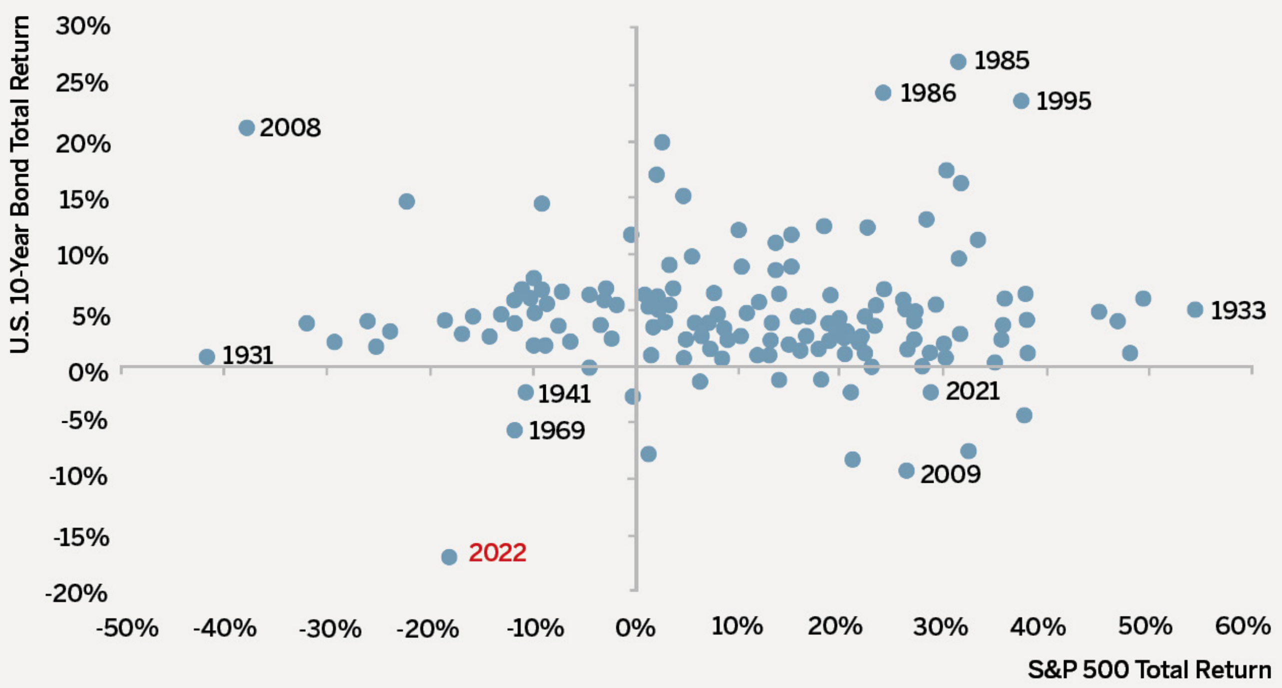
We are on a journey to better understand the elusive asset class of volatility, especially as the market volatility remains palpable. There are lots of crazy chart patterns out there, and we highlighted a few fun ones in our recent piece "Charts &...CHARTS!". The chaos is visible.

We are taking on a herculean task of finding volatility solutions and fighting this market monster. After all, we have insurance against our homes, our health, and our cars – why not try to insure our portfolios? Many want the insurance, but unfortunately, it's not as easy (or cheap) as it looks. Portfolio insurance was all the rage in 1987...until it backfired and was a major catalyst for the one-day 22% correction.

At C&P, one of our objectives is to attempt to simplify the complex world of volatility. We will make generalizations, give analogies, and draw over-simplified conclusions to get a point across. The data is out there, and people are good at spinning data and time-frames any which way to support their case. We will talk in broader strokes to simplify. At the risk of sounding trite, we will push the journey forward. Now that we got our disclaimer out of the way, let's dig in.

THE 2022 CASE STUDY

It's often easiest to understand a concept when we look at the extremes. Last year (2022) was challenging, as both stocks and bonds had big down turns. The 60/40 portfolio logged one of its worst years on record.



Now let's see how the asset class of volatility performed, as many portfolios and positions were shredded. Here are the 2022 returns for the largest volatility exchange traded products:

VXX: down 24%

VIXY: down 25%

VIXM: unchanged

These are complex vehicles with some serious rocket-science math. If you want to hear for yourself how complex this world is, you can listen to the trailer for the latest launch of the S&P 500 Futures Defined Volatility Indices here: https://www.spglobal.com/spdji/en/index-tv/article/a-dynamic-approach-to-volatility-management.

Yes, 2022 was an outlier year, and yes, we can come up with a pile of excuses as to what happened with each of these volatility funds. But the bottom line is – they did not offer the protection one would expect. Maybe this year will be different.

We will give a shout-out to the VIX Index, which was up almost 26%

in 2022, and we will address the VIX later. It is worth mentioning that there are many other volatility products fighting to stand-out amongst this elusive group, as there appears to be room for improved solutions.

LET'S TAKE A STEP BACK

It all starts with awareness. What are we dealing with here? We know the markets are risky, and we are trying to find some trades, products and ideas that offer some type of protection in a down market. In order to better understand what is happening, we need to break this elephant down and take one small bite at a time.

A good place to start is to look at the relationship between the markets and the economy. It makes sense that a strong economy would lift all boats. If the economy is strong, then that should lead to a strong market. That used to be the case, but this relationship has broken down. The example we like to use is the hot-air balloon, with the balloon being the economy and the basket as the markets.

A growing economy used to lift the markets. But with the financialization of the planet, the roles are reversed: the markets are now the balloon. The markets need to keep being filled with hot air to keep the economy afloat.

Another favorite analogy is the tug-o-war between inflation and deflation. In the 2008 GFC (Great Financial Crisis) the market wanted to deflate...and it did (prices were going down). To offset this deflation, The Treasury implemented a massive inflationary jolt and a $700B TARP (Trouble Asset Relief Program). Our over-simplified version is The Fed managed this balancing act between inflation and deflation over the years, and they did it beautifully for a long while. The deflationary forces kept building with all the debts and deficits, as the inflationary QE (Quantitative Easing – AKA money printing, and more specifically and properly known as the creation of currency units) became all the rage globally. Both complex systems of inflation and deflation kept growing, which also means that the risks also grew...exponentially.

We can now better understand how the relationship between the economy and the markets have broken down. Whenever the markets turned south, there was apparently too much at stake and the "money printer" was turned on to make sure the markets (thus economy) did not fail. We transitioned into a period where good news is bad news and vice versa. A key question became, "How long can this game last?" Some market specific questions became, "What are we hedging? How are we hedging? And why are we hedging?"

Hello Covid! The Covid action was extreme and happened fast. In a few short weeks the markets collapsed, and in order to save the deflationary day, the inflationary jolts were massive: rates to zero and QE-infinity. It now appears this beautiful symmetry and balancing act has broken.

BUT WE STILL NEED HEDGES

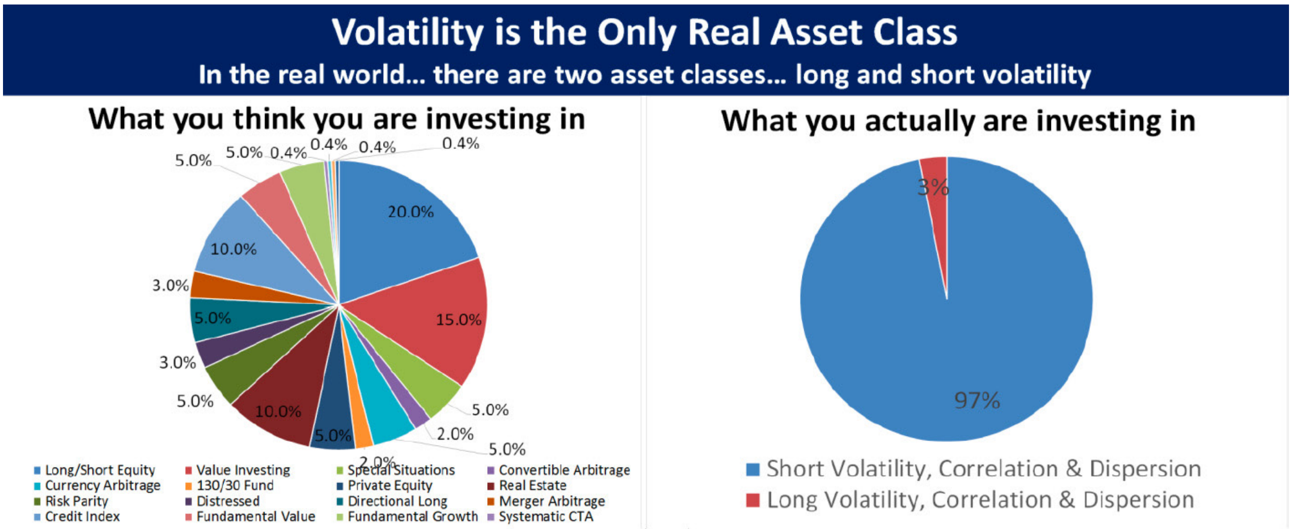
We are left trying to solve the volatility puzzle with questions like, "What are we hedging and how?" We still want volatility in our portfolios to hedge our downside exposure, right? After all, we do think volatility is an asset class, right?

We must reference our friend and sharpest mind in the volatility business, Christopher Cole of Artemis. We are huge CC fans and want to share a couple of our favorite CC charts and parts here. A favorite quote:

There is a tiresome debate as to whether or not volatility is an asset class. Let me end that debate: volatility is the ONLY asset class.
– Christopher Cole.

11

A favorite chart:



The above chart highlights the strong correlation between all asset classes and supports the need for hedges. We think we are diversified by owning many different assets, but in periods of extreme market stress, the volatility monster destroys all. Said another way, it is important to incorporate long volatility into your portfolio in some way, shape, or form.

THE JOURNEY CONTINUES

Given those CC words of wisdom – how can't we include volatility in our multi-asset model? This is the journey we are on. The fun part is that we see the volatility in the journey itself. We now have chaos in the markets, wide discrepancies in the return data for volatility instruments, and a story line that is challenging to hold onto. We will try our best to keep things simple and entertaining, with an eye towards solutions.

A PARTING THOUGHT AND A HINT

Here is the ChatGPT definition of volatility:

> PA
>
> Define volatility.

> Volatility refers to the degree of variation or fluctuation in the price of a financial instrument, security, or market index over a specified period. It is commonly used as a measure of risk or uncertainty in financial markets. High volatility indicates rapid and significant price changes, while low volatility suggests relatively stable and consistent price movements. Volatility can be caused by various factors, such as market sentiment, economic conditions, political events, and company-specific news. In finance, volatility is often measured using statistical methods, such as standard deviation or average true range.

We can instantly see why this is a herculean task. The definition of volatility is anything but brief and concise…and understandable. Our simple hint – this is not a math problem.

THE VOLATILITY LANDSCAPE

INTRO

We have now concluded that the markets have taken over the economy and that a growing economy is dependent on the markets rising. We also concluded that the symmetry between the inflationary and deflationary forces has been broken. We've been able to balance the extreme deflationary forces of debt with constant inflationary injections (QE). This balance produced an epic 10-year rally since the great financial crisis, but the balancing act is over. The Covid jolt and the massive move in rates have broken it.

The major tool to fight deflation has been the money printer and the creation of debt. Through the creation of currency units (QE), the world has kept rates artificially low. We choose the word "artificially" with great intent. Through QE, we are manipulating a web of complex systems as if we are in control. Due to the ever-growing forces of inflation and deflation, and due to the global nature of these issues, and due to the multitude of other systems and markets impacted (think interconnectedness), we need to be open to the thought that maybe, just maybe, we are not in full control. For this reason, we want to explore the concept of chaos and how it affects our portfolios, as well as our lives.

Let's take things to the next level. Let's assume we have entered a part in the story where things can spiral out of control. Let's tweak the definition of risk, and instead of the risk being a decline in the markets it is something more (violently) systemic like the Ice-9 (a freezing of the system) or a Crack-up Boom (a race to get out of paper currencies, click here for further reading) we discussed in our SVB Solution Set. Through this New Vol lens, new solutions are needed. But first, let's set the table.

CURRENT VOLATILITY SOLUTIONS

Options and volatility can be our friend. There is a spectrum to everything, and options can be as risky or as benign as you'd like, from wild speculation to customized solutions. Interestingly, the volatility space as an asset class has been growing as the general markets have struggled. Volatility products have gained assets, which makes sense given that the inflation genie is out of the bottle and the major bullwhip effect from our responses to Covid.

We see new products and solutions with "hedged equity" portfolios and a number of new players and platforms to help navigate through this paradigm shift towards higher volatility. These hedged equity portfolios are traditional portfolios with embedded option positions. That is the good news. The challenge is back to - what are we hedging, why are hedging, and how much does it cost? Remember that equities only made up 20% of our multi-asset portfolio (see post here). We still have a lot of other risks to contend with. For this reason, let's circle back to the world of insurance.

A simple and powerful insurance concept that resonates with us here at C&P is for investors to insure the small risks and let the insurance company assume the big risks. A practical example of this would be for us (the insured) to choose higher deductibles to get the lower premiums. We can handle the risk of a "small accident" and pay out of pocket if this were to happen. But, if we are in a more serious accident (with injuries and lawsuits), the insurance company has us covered.

Now we want to take this same concept and apply it to our portfolios, the markets, and life in general.

THE VIX IS A WINNER BUT NOT A SOLUTION

A favorite market gauge of measuring risk and volatility is the VIX. The VIX index is a real-time market index representing the market's expectations of future volatility. The VIX index is popular for two main reasons. First, it gauges the level of perceived risk in the “”markets””. Second, because the VIX index is replicable in the listed options market (the VIX is calculated by using a series of listed SPX options - for further explanations of the VIX click here), the options on the VIX index are extremely liquid and active. Because market makers can directly hedge their VIX option exposure through this series of SPX options, the risks are well defined, thus managed. We will not get too far into the mechanics of this index, but it is worth highlighting a couple of concepts. Skip to the next section if your head starts to hurt from this abbreviated VIX lesson.

There are futures and options on the VIX index. On the surface, these VIX products appear to offer solid protection against a portfolio. In our 2022 example and analysis of volatility hedges, the VIX index was up roughly 26%. So, in 2022, the market was down and the VIX was up, thus the VIX index did what it was supposed to do – offer protection against a market decline. That is the good news. The challenge is that the VIX is very difficult to “trade”. The VIX is difficult to size, scale, monitor, and monetize against a given portfolio. Let's look at an example.

Assume the market has a really big down day and the VIX goes from 20 to 40. The VIX is now 40, but because it is widely believed that things will eventually stabilize (mean-reverting tendencies), the VIX options will be priced based on a future VIX price of 35. And if the market does in fact stabilize and the VIX goes back to 35, the options may now be priced off a 30 VIX. If that is not confusing enough, it's important to note that all of this action can take place over just a couple of trading sessions. So, in this scenario, you can see how difficult it would be to exit/monetize your portfolio hedge with the VIX derivatives (futures and options). Then we get into the concepts of how many VIX options do we need (position sizing), and we should also mention that if the market gets more volatile, these options are more expensive and less liquid.

As you can see, the VIX is very nuanced and technical, which is also why we do not favor this index for any longer-term hedges. The VIX is a great trading vehicle, as it is liquid for shorter-term speculations, but when it comes to portfolio construction, we are leaving the VIX out of the solution set.

NEW DEFINITIONS NEEDED

We are inching our way towards new solutions. We want protection, as we can see and feel the chaos. But the current solutions are more complex then the volatility problem we are trying to solve. We can trade volatility explicitly through the VIX and accept all the nuance. Or we can trade volatility implicitly through these newer products, but the results are unproven, the costs are not clear, and they are not a full portfolio hedge.

This is where we broaden our lens. We need to change definitions. Rather than trying to protect against volatility and the market going lower, let's look for protection against a shock to the system that causes something bigger than just a market hiccup. We want a hedge against chaos. We are exploring the unknown. We refer back to the Ice-9 and our Crack-up Boom examples as potential outcomes. Ice-9 is a scenario where all the leverage and interconnectedness causes the entire system to seize. And the crack-up boom is a race to convert all fiat/currency, as the currency is rapidly losing purchasing power.

Just like our insurance example, we can view a market correction as the smaller risk, and the bigger and more dangerous risk we need to protect against is a really big down move that may cause a market freeze, or a global currency crisis, or a market shut-down for any/many other reasons.

Again, this is a thought experiment. We are building an awareness to where we are in the story and exploring new ideas. We've had this solution the whole time, but in order to implement, we needed to change definitions. We need to adjust our expectations where nothing should surprise. We have set the table for our outside the box idea of building personal resilience. The journey continues.

A NEW DEFINITION OF VOLATILITY

INTRO

We assume and conclude that volatility is: hard to measure, potentially very expensive to "buy", and difficult to monitor, scale, and monetize. We've also made a case that the "systems" we are dealing with are complex at best and broken at worst. We ask ourselves questions like: What are we hedging? Why are we hedging? What is the real cost of this hedge? The bottom line and answer to all is the same – "I'm really not sure".

The better question becomes – is there a better hedge?

A NEW DEFINITION OF VOLATILITY: "NEW VOL"

We have arrived at our destination. In order to implement our solution, we changed the definition of volatility itself: from a decline in the market to a "systems failure". With our new definition, we try to hedge against one of the many snowflakes that can start the next avalanche. We are hedging against a system-wide catastrophe that would make our day-to-day living more challenging and uncomfortable.

Our new definition puts us in search of protection from market disruptions, systemic shocks, and chaotic outcomes that such an event would bring. All of a sudden the left tail (a 50% correction) does not sound that bad. We are now less afraid of the well-known left tail, which we have already seen three times since 2000, and our bigger concern is all the other related risks and potential outcomes of our Ice-9 (systems freeze) and Crack-up Boom (a race to convert fiat into real assets) type scenarios.

HAT TIP TO CHRIS MARTENSON & PEAK PROSPERITY

A goal of NEW VOL was to bridge the gap between the financial markets and the Peak Prosperity solution set of Personal Resilience & Parallel Systems (PRPS). In their book "Prosper", Peak Prosperity has given us a blueprint to build our PRPS, which includes not just the financial bucket, but seven other buckets of capital (material, living, social, time, cultural, emotional, and knowledge) that are equally important, and possibly even more important, if/when SHTF.

WHEN THE SHTF

Since we had a hard time defining, qualifying, trading, and managing the risk of a market decline, let's go after the big risk. The real risk. The dangerous risk. This NEW VOL lens is at the intersection of financial hedges and work/life hedges. Let's stick with the extreme scenarios (Ice-9 & Crack-up-Boom) to make a point. And let's reiterate our disclaimer – this is not a prediction, simply a thought experiment.

Let's hedge our bets and invest in our most basic needs: food, water, and energy. Like most things in life, there is a spectrum to these investments. Let's lay them out:

Food: the spectrum of a deep pantry on one side to productive farmland on the other with lots of ideas, tools, and skills in-between.
Water: everything from storing clean water and rotating it for use (free insurance) to water rights or a well on your property.
Energy: there's solar, generators, power walls, and a lot more I do not know.

A SIMPLIFIED CASE STUDY

ASSUMPTIONS: an individual with $1M net worth – a $500k home ($300k mortgage and $200k in equity), a $750k portfolio, and $50k in a checking account to cover expenses.

NEW ALLOCATION: we allocate 10% towards our new PRPS solution set and invest $100k in our basic needs of food, water, and energy. $100k can get you a lot, but there is always more we can do.

THE GOOD: we have real quantifiable insurance against a systemic shock. We have hedged food, water, and energy to give us additional time to think and respond. We can sleep better at night.

THE CHALLENGE: our investments are reduced by $100k. Retirement MAY get pushed out as a result. The markets can continue to grow without “an avalanche”, and then we feel we have made a bad decision and wasted our time and money.

THE CONCEPT OF TIME: time is a critical element in this story. Skills and mastery take time. Is time more important when things are “normal” or is time more valuable when SHTF? Just like investing, we can take smaller bites and build. No need to make a $100k investment into productive farmland without a plan…or a clue.

OUTSIDE THE BOX CONCEPTS: we have less exposure to the “”markets”” in case a correction occurs. We are closer to the Earth and our living systems – all of which can bring a richer meaning to life and community. We are more in control of our own lives.

CONCLUSION: a side-by-side analysis between our conventional market hedges and our NEW VOL hedges leads us to believe that there IS merit to investing in basic needs.

THE CLOSE

We are not predicting doom or selling fear porn. We try to look at possible outcomes and solutions. We absorb the smaller risk of a market decline, and “buy insurance” against something “bigger” happening. The best part about our new hedge is that it can enhance the quality of our lives and protect at the same time.

CONCLUSION

Throughout this series, we have explored the complexities of volatility, challenged traditional perspectives, and emphasized the importance of building personal resilience. We have seen how volatility can impact our investments and financial well-being, and we have delved into various volatility solutions.

By shifting our perspective and adopting an insurance strategy approach to risk management, we can better protect ourselves and enhance our quality of life. We have learned that resilience goes beyond financial preparedness and extends to other areas of our lives, such as material, social, cultural, time, living, emotional, and knowledge capital.

Keep embracing the power of “New Vol” and its transformative potential in your life.

Best regards,

Charts & Parts

CHARTS & PARTS

EXTRA PARTS (FOR A DEEPER DIVE)

PEAK PROSPERITY: Dr. Chris Martenson is an information scout who shares a blueprint to build personal resilience. The PP tribe is large and growing. https://peakprosperity.com/

ARTEMIS CAPTIAL: Christopher Cole is a brilliant mind when it comes to convexity, and his writing is intense and unparalleled. And we love his taste in art. https://www.artemiscm.com/

MIKE MALONEY: Mike has a series called Hidden Secrets of Money, which is world-class. Here's a link to the first episode: https://www.youtube.com/watch?v=DyV0OfU3-FU

LIFE ON YOUR TERMS (LOYT): Kris Kluver has been an amazing life coach and friend, and the LOYT name speaks for itself. https://lifeon-yourterms.com/

REBEL CAPITALIST: George Gammon is a best-in-class global macro player. He goes where they ain't, breaks it down for all to understand, and has a contagious laugh. https://www.youtube.com/@RebelCapitalistChannel

AT THE HELM

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WHAT WE DO: Charts and Parts is a markets channel focused on RISK FIRST with an eye on solutions. We believe that a risk-first approach is critical for successful investing, and we strive to provide you with the necessary tools and knowledge for you to make informed investment decisions.

WHO WE ARE: We believe in transparency and giving our readers an in-depth understanding of the risks and opportunities involved in the markets. Our team has decades of combined experience in the financial markets, where we studied, taught, and managed risk. Charts and Parts is dedicated to helping investors achieve their financial goals by helping them ask the right questions.

We welcome fresh thoughts and ideas:
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August 2023