

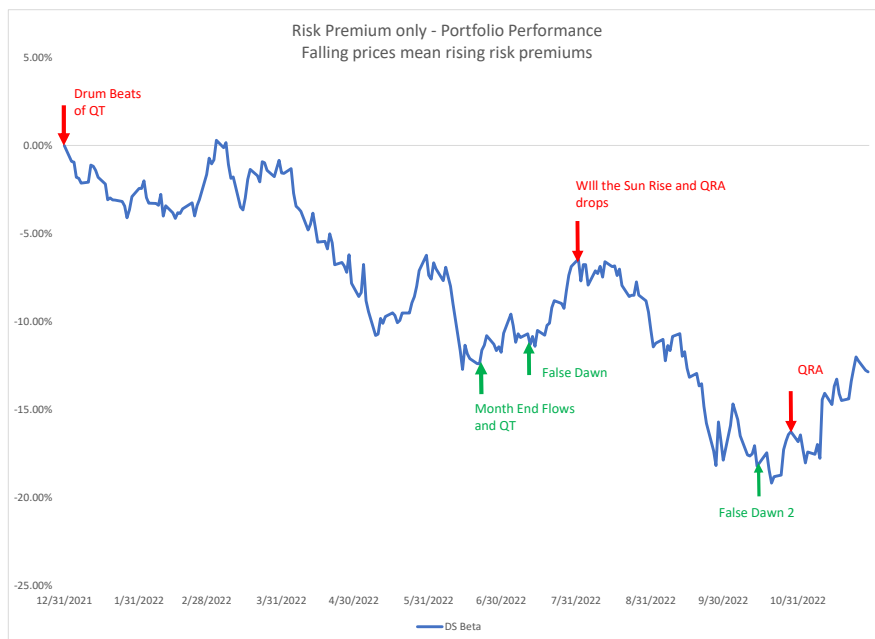
The Damped Spring Report

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

11/30/2022

You would have to believe in magic to believe current market prices. We know that magic is just sleight of hand to divert the eye as the magician steals your wallet. Investors have been tricked into driving up asset prices in a way that leaves very low potential for the future to evolve to allow each of these asset prices to perform well individually. As a group the frenzy for all assets has also driven up multi asset portfolios to unsustainable price levels as they run into even more powerful QT headwinds in the next two quarters. We are pounding the table that assets as a group are a short. In addition, there are very few paths that will allow equities to outperform bonds in the US over the next year.

Chairman Powell will make comments at the Brookings Institute today. Over the following two days data will be released on both employment and inflation. While we have little confidence that any of these comments or data will be a catalyst for a negative reaction in asset prices immediately, we feel strongly that stocks are extremely rich and bonds while looking more attractive in certain scenarios are massively overbought due to momentum trading strategy unwind.



Economic Overview

Our outlook for 2023 is that inflation will be killed by a Fed willing to finish the job. We think the Fed has done a lot and if necessary, will do what it takes. Our view has two basic paths.

- The “over did it” case - The Fed will hit a terminal rate of 5% in 2023 and hold at that rate for an extended period which along with the hit to wealth of further asset price declines due to quantitative tightening will generate a meaningful recession, job losses, and demand destruction. Thus, well and truly killing inflation.
- The “higher for longer” case - Despite the tightening impacts mentioned above the economy doesn’t respond. Fed doesn’t pause for long if at all before hiking rates to a substantially higher terminal rate.

We think markets are currently priced for two “Magical paths”

- Soft landing case - Inflation magically falls without a recession or at least without a meaningful loss in jobs, the impact of QT is mild, and the Fed can then tweak rates up and down when necessary.
- The Pivot Case - The Fed hikes a few more times and a mild recession with modest job losses magically kills inflation.

The difference between our paths and the magical paths is a fundamentally based framework on what causes inflation and what sort of pain is needed to kill inflation.

Inflation depends on demand exceeding existing supply. In order for demand to be strong spenders must be able to

- Use savings
- Borrow easily at an attractive rate
- Earn more money from wages

We recognize savings are running low from the massive fiscal spend of 2020 and 2021. Yet consumers have both the ability to borrow and the willingness to lever up due to a tight job market and rising wages. Therefore we are focused on the need to hit the job market to kill inflation.

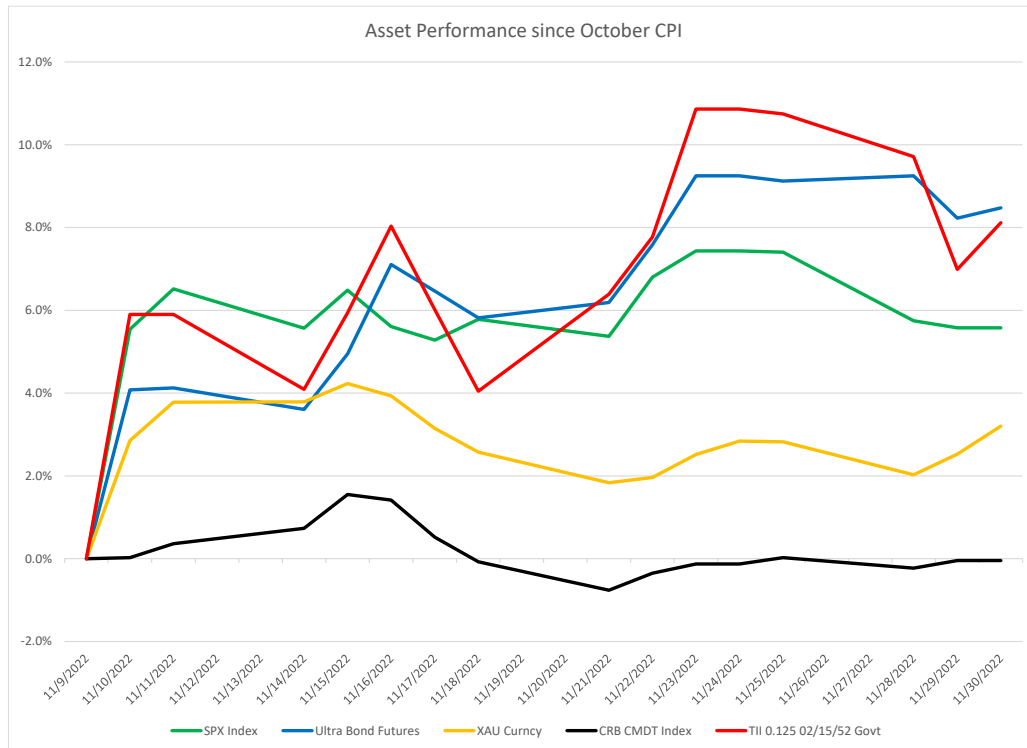
In an economy where most consumer, government, and corporate leverage is at low interest rates and of long duration. Rate hikes are far less effective and need to be more aggressive (which they have been) and the QT channel must also contribute by hitting wealth. Those two forces will need to work in concert until demand destruction occurs. As spending slows, jobs will be lost as one person’s spending is another person’s income. That cycle will ultimately reduce inflation.

We have seen little evidence of this cycle yet. It may lag and we could imagine that the rest of the hiking cycle and weak asset prices have begun to impact the economy hence the “over did it” case. But those two forces must cause pain for inflation to die. There has been virtually no pain in the US economy. There is no soft landing or mild recession which kills inflation. That is a slight of hand trick that

appears to have shifted market pricing on the extrapolation of some recent soft data. Hey, if inflation magically disappears current market pricing is quite reasonable. We just don't believe in magic.

Magical Pricing?

Since the low CPI inflation print, long term asset markets have rallied significantly.



For Gold and Equities most of the rally happened on the day of the release. For Long term Nominal Bonds and TIPS the peak was a week ago during the Thanksgiving week sessions. Why is this magical pricing? Well, for long term nominal and real interest rates to fall there are three potential drivers:

- Falling growth expectations
- Falling inflation expectations
- Contracting risk premiums

For equities to rally as well that eliminates falling growth expectations as equities are pro-growth leaving:

- Falling inflation expectations
- Contracting risk premiums

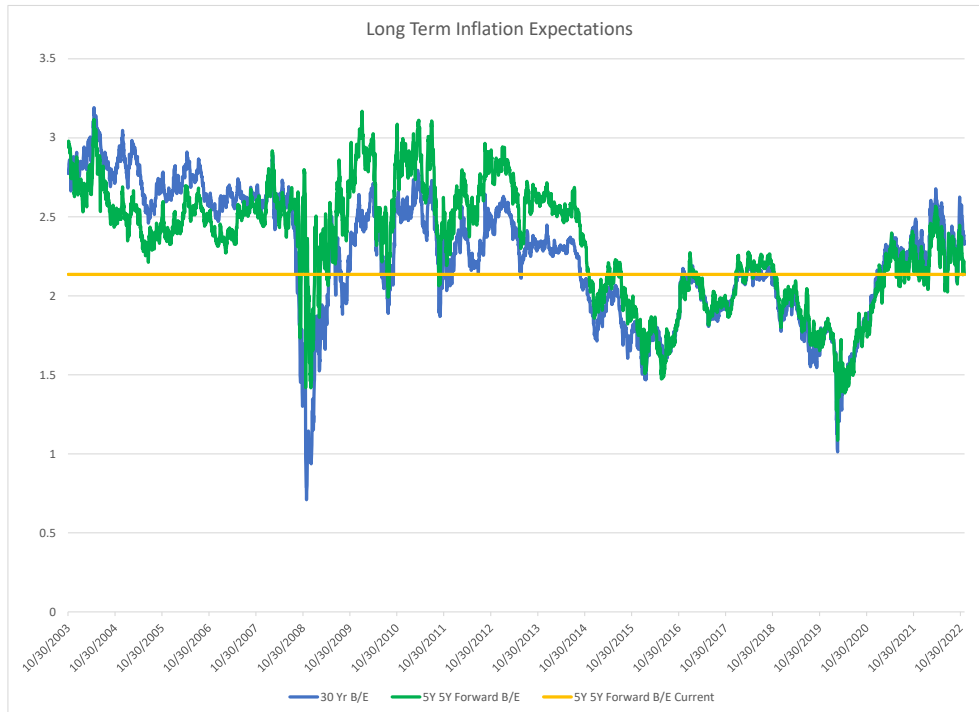
Gold can rally due to its principal drivers

- Falling real rates
- Falling credibility of central banks to manage tail risks
- Contracting risk premiums

Long-term inflation expectations did fall 15-20bp.



This isn't magical. The inflation print was weak. Is this a long-term trend? Or more properly with 5y/5yr inflation expectations now at 2.15% Is there room for a further rally in nominal bonds?



Sure, a deep recession with job loss could drive inflation expectations quite a bit lower. But without such an event it is hard to see a ton of upside on Bonds. With an event, it is hard to see any upside at all for equities. For a portfolio of bonds

and stocks, inflation expectations seem to support magical pricing in aggregate but only modestly.

The magical pricing must be caused by risk premium contraction. Only this can fully explain all assets that carry risk premiums to be up since the inflation print.

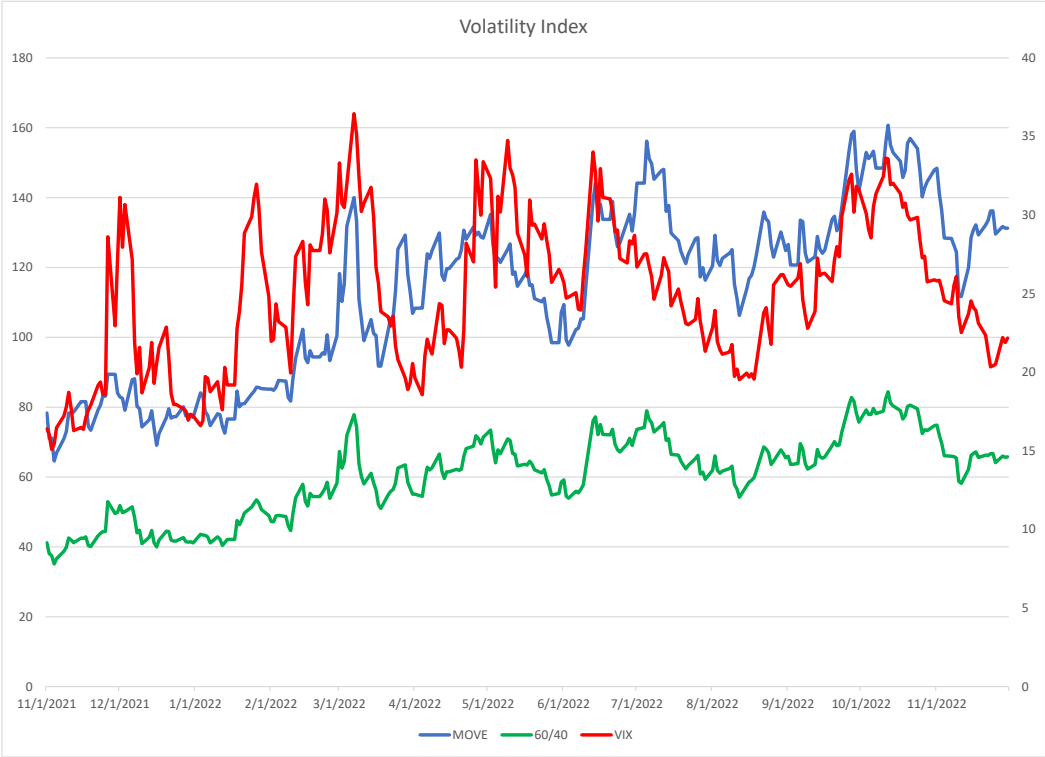
Risk Premium Magic

Our framework for the drivers of risk premiums includes

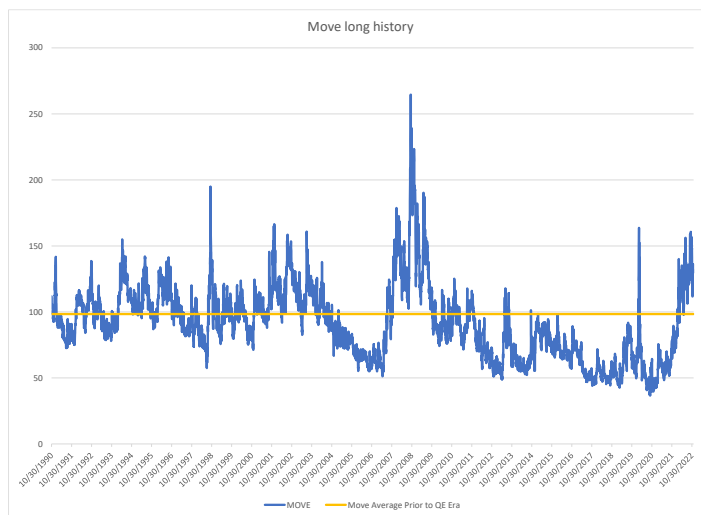
- The demand for assets from investors with money and credit vs the supply of financial assets
- Expected portfolio volatility and risk

We have been reporting on the supply conditions of financial assets extensively in our work. Most recently the Treasury announced a much larger than expected deficit for Q4 and Q1 and left coupon supply higher than expected while using both its TGA balance and extensive bills issuance to fund the balance of the deficit. This announcement placed a fair amount of pressure on assets ahead of the CPI print. The issuance is coming and any sort of tax revenue slowing will compound the problem but this overhang has magically been ignored. **Investors have levered up or covered shorts ahead of large and impactful supply.**

Portfolio risk expectations could also have fallen which would lead to a willingness to lever up portfolios and contract risk premiums.



So far equity vol has fallen but rates vol has risen and a rough aggregate portfolio vol measure indicates no change in short-term vol expectations. Perhaps VIX at 20 is not the great buy that most think it is and in fact it's a great sell. That's what you would have to believe if you were levering up a portfolio today. Though it is possible that rates vol has room to fall. Let's zoom out. It's not magical to bet Move could fall to the long term (Pre QE average). But that is the bet.



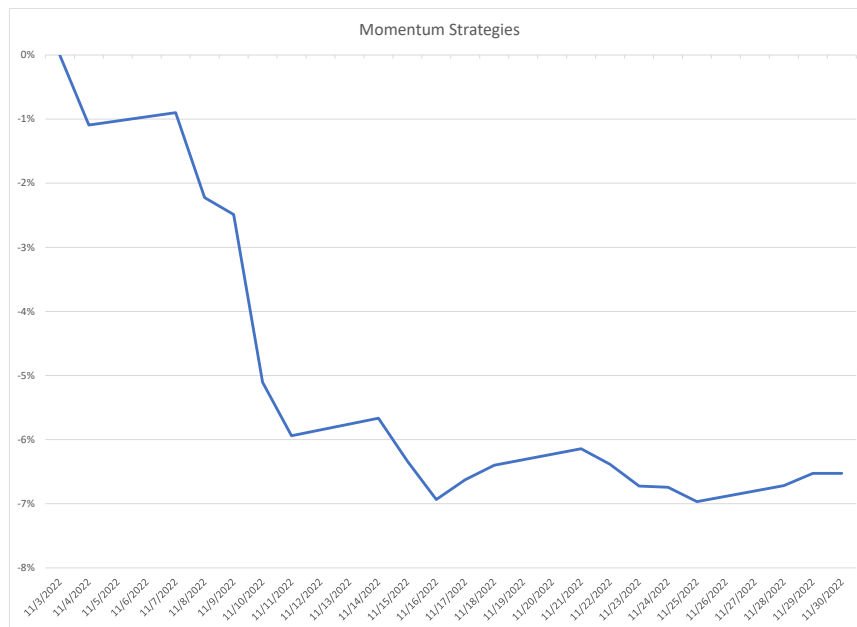
We have a forward looking desired portfolio leverage measure that we believe vol targeting funds and portfolio construction teams across the world use to determine their leverage. The tool uses expected future asset volatility and expected future asset/asset correlation to estimate portfolio risk.



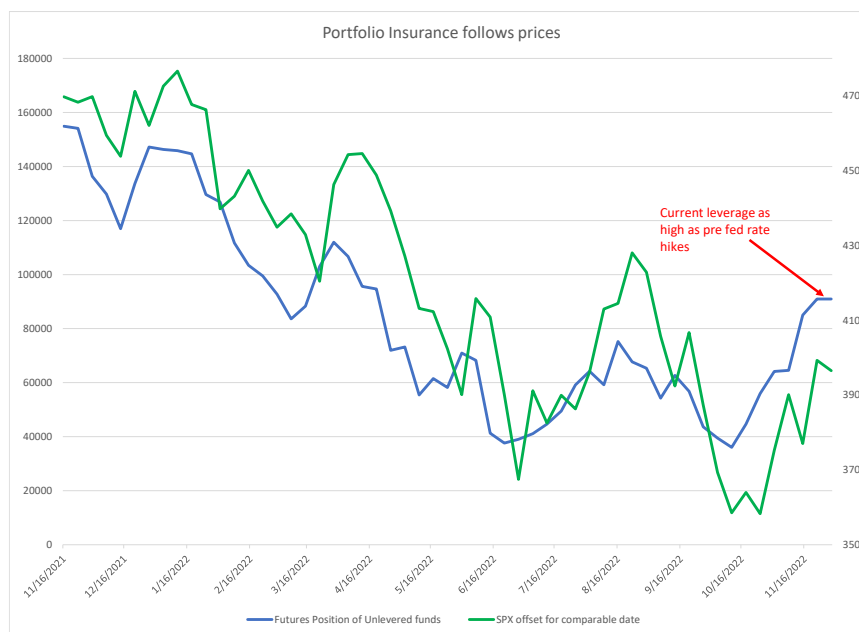
This metric is currently at its post covid high. Portfolio risk is expected to be very high. Portfolios "Should" be the least levered they have been since the crisis began. This all makes sense to us. But it also flies in the face of risk premiums contracting. In fact, quite the opposite.

What is going on? In any one month or two animal spirits can drive investor behavior. What we did see is a sharp rally and shift of momentum in bonds. We

know that momentum investors were massively short bonds. It was the trade of the year. Not only the CTA funds who explicitly follow momentum as a strategy but also many other systematic and discretionary investors who use momentum as a factor were offside. Our data shows they have largely covered their rates exposure as is confirmed by the performance flat lining after a drawdown



We have also followed equity funds which have resorted to old-fashioned portfolio insurance strategies given the poor experience hedgers of long equities have had rolling long term put options over the recent years.



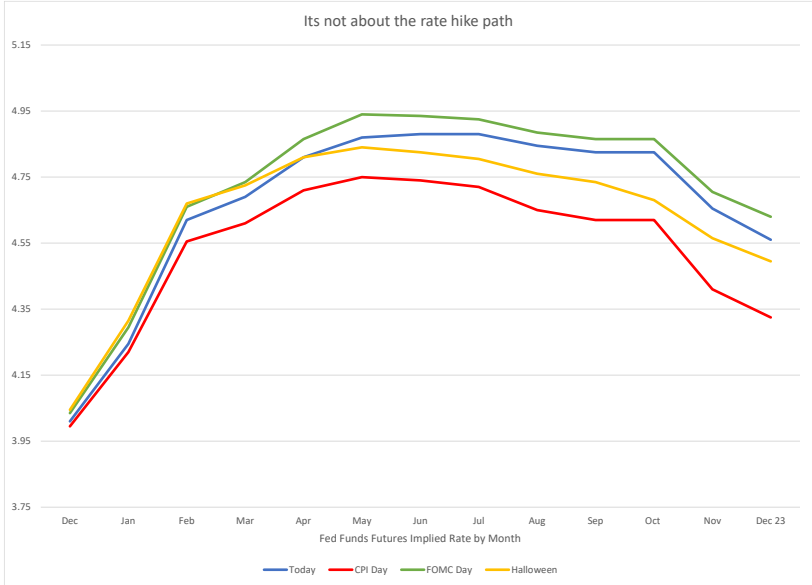
When adding up the flow picture and the desired leverage outlook the buying is consistent with risk premium contraction. In addition, the degrossing of momentum strategies has transferred some short duration positions to investors

who may have derided as well. However, the equity demand is a serious red flag and desired portfolio risk levels suggest a retracement in equities will be sharper than many expect if animal spirits shift the other way and new equity buyers demand a larger concession given the expected risks.

What about hikes and pivot?

We have focused our attention on long term asset performance since the CPI. Today Chairman Powell will speak and given his lever is rate path its is sensible to review the action on the extreme front end of the curve. A significant shift in the path of interest rates clearly would have an implication for risk premiums as the cost of money is a key element for demand for long-term assets. That said, long term bond yields are heavily inverted after this move and short term funding rates are going higher. Either forced short covering of bonds (like we think) or very aggressive falling growth expectations (which aren't supported by equity pricing) would be adequate for future rallies in long term bonds given the negative carry required to hold levered positions. But let's look at the chart of rate path.

A sharp move to a lower terminal rate has almost completely retraced. "Magical", "over did it", or "higher for longerer", pricing are still all possible given the moves in STIR. Support for any of our four scenarios is as valid on FOMC as they are today. What matters isn't the specific path because the current path could generate all possible economic outcomes. The question is whether Powell will do what it takes and generate a recession or get extremely lucky and have a magical scenario play out.



In Synthesis, the next three days are important and if Powell surprises by being dovish market reaction could be extreme. Nonetheless we are looking well past the cool cpi of two weeks ago and any weak data this week to what needs to happen to kill inflation. It's not magic. Its pain.

Pain felt by asset holders and by the labor market. We don't have a strong view on the short end of the curve. We think it's possible that enough has been done to cause a severe recession. But we won't know for many months. If a meaningful recession doesn't begin to develop in Q1 the Fed will hike more than is priced. If it does show up stocks are grossly overvalued.

Current Portfolio and Performance

We will be refreshing the portfolio in the days to come based on the outcome of data. Same basic views with changes in strikes and expiries

Assumed Portfolio size	\$	100,000,000				
LTD P/L	\$	44,345,473				
Total Return		44.35%		YTD Return		13.06%
Today's Date		11/30/2022		Portfolio Created		4/15/2019
Date	Position	Entry Price	Amount	Worst case loss	MTM	P/L
10/20/2022	CLZ23 95/105 Call Spread	2.1	476	\$ 1,000,000	1.6	\$ (238,095)
10/31/2022	SPX Jan 3600 Put	75	267	\$ 2,000,000	30	\$ (1,200,000)
11/3/2022	NDX Jan 10500/10000 Put Spread	158	127	\$ 2,000,000	62	\$ (1,215,190)
11/1/2022	ZB Jan 122/124 Call Spread	0.90625	-9	\$ 1,000,000	1.5	\$ (542,857)
11/3/2022	ZB Jan 117/114 Put Spread	0.78125	13	\$ 1,000,000	0.09	\$ (884,800)
11/16/2022	ZN Jan 112 Put	0.71875	28	\$ 2,000,000	0.76	\$ 114,783
11/8/2022	USDJPY 147/150 Call Spread 2/8/2023 Call	0.61	163,934,426	\$ 1,000,000	0.29	\$ (524,590)
11/14/2022	GBPUSD 1.17/1.14 Put Spread	0.74	135,135,135	\$ 1,000,000	0.79	\$ 67,568