Stock Market Investment Assignment Jarah D Macfarlane FINC 3400, Bo Han

Returns

In the time of trading, my portfolio returned -8.73%, compared to the 6.1% return of the S&P 500. This calculates the adjusted return of -14.83%. However I don't think these calculations show the necessary returns. Given the recent economic data around the inflation measures (The CPI was up 4.2% YoY as of the end of this month) and the barely noticeable risk free rates (3 month t-bill RF rate equaling .02%) our returns will be individually different if we risk adjust. I used the CPI-U to calculate the 2 month inflation rate, given that I live in a city I felt this was appropriate. From the calculation I found the effective 2 month inflation rate to be .09%. Couple this with our risk free rate of .02% we have a total risk free adjusted return of 5.0% for the S&P 500, and a real risk adjusted return for my portfolio of -9.83%. Thus my true adjusted return vs. the S&P 500 is still the same at -14.83% yet as we can see both returns were worsened by the effects of inflation and risk free rates.

Trading Philosophy

I will begin by stating that I am starting this paper at around 9PM on Sunday March 28th a day before class begins. I hope this ages well. I am writing this now because it is directly related to my trading strategy to spend as much time fully invested in the market as possible, and not trying to move in and out of it. To quote Mark Hanna's character (played by the amazing Matthew McConaughey) in the Scorcese film *The Wolf of Wall Street*,

"Number one rule of Wall Street. Nobody - and I don't care if you're Warren Buffet or if you're Jimmy Buffet - nobody knows if a stock is going to go up, down, sideways or in circles."

While this may be a slight digression, my point is that picking stocks and trading is an incredibly hard thing to do. One may be able to outperform for a few weeks, a month, maybe even a few years but eventually the market catches up. The evidence from countless studies is remarkably uniform, and that is the longer you go, the exponentially smaller chance of beating the S&P's long run annualized return of 10% per year is. This is why in my personally managed portfolios I allocate over 50% of all funds to a broad market S&P 500 index and the rest into ETFs that track specific sectors like real estate, bond markets and cryptocurrencies. I try to pick stocks and trade as infrequently as possible just because the probabilities are simply not on my side, especially given my younger age and desired holding period (35+ years). Since the time horizon for this

assignment is only 9 weeks and the money is not real I will stray slightly from the boring yet incredibly effective strategy of index investing somewhat. To avoid the pitfalls of picking individual stocks I will utilize indexed ETFs for the majority of my positions yet will give full descriptions of my reasoning for their choices in the later section. Thus I will try to construct a 9 week portfolio to outperform the basic S&P Index based on current macroeconomic conditions and monetary policy, sector weighting and emerging rotations and select valuation metrics and fundamental analysis to identify short targets. I do think staying fully invested in the majority of the course will provide the best returns if my initial analysis proves correct so starting Monday March 29th I will fully invest the 100,000 the simulation has given me. I plan to hold most positions until the end of the quarter, making necessary slight tweaks and the eventual buying to close my shorts. Albeit not flashy or fascinating I believe this is the most empirically sound strategy and hope it will be acceptable for the project. Here goes nothing.

Sources of information

As an adamant personal investor I rely on many different platforms, publications and media sources to acquire the information I need to make solid investments. For general economic information and macro trends I read businessweek and watch CNBC. I also use a few platforms for equity market analysis and news, these being StockRover, Atom Finance and Robinhood (to a certain extent). Marketwatch is good for daily news and important policy updates as is the bloomberg notifications I have on my phone. However for the most up to date info I use twitter. I have a few favorite accounts that follow the markets and macro environment but my favorite is GAR capital. Twitter allows me to hear about any earnings beats, M&A's, Index additions, Fed policies and much more as they occur, which helps me feel totally caught up. Most of all however when looking at companies to invest in, I read their financials. Income statement, Balance Sheet, Statement of Cash Flows, 10k, all of it. Wholistically you can get a pretty full picture of how the business is operating from these four documents.

Position Overviews

My first and most basic positions came in the form of cryptocurrency trusts. Cryptocurrencies were not allowed in this market simulation, which is unfortunate as they are the highest returning asset YTD. In theory I believe there are a few very basic reasons every investor should hold Bitcoin (BTC) and Ethereum (ETH), the most important being they are a pure inflation hedge. If the past two years have taught investors anything it is that the federal government is willing to do whatever is needed to keep the economy afloat and that includes pumping unprecedented amounts of money into the global financial system, not once, not twice but three separate times. While i'm not against fiscal stimulus, I think the stimulus packages passed were absolutely overkill and the United States economy will experience inflation similar to the 8-10% seen yearly in the 80's during the upcoming half decade. Inflation is inevitably going to set in, history

will show any economy with massive amounts of money supply increase eventually experience this. Both sold by Grayscale the GBTC and ETH trusts function to track the price of Bitcoin and Ethereum by letting investors buy into a closed end fund with right to large amounts of the aforementioned cryptos held by the issuer.

Riding on the coattails of inflationary pressure, the federal reserve will undoubtedly have to provide a rate hike. Interest rates have never, I repeat, never been lower than they are now. The second this happens I believe a few things will occur in the market. Firstly the incredibly overvalued meme stocks will go, followed by the SPAC's, followed by a moderate correction to the overall markets with tech and high multiple growth equities being hit hardest. In periods of "bubbles" markets are likely to experience often very volatile and manic movements in some stocks. Before the dot com bust you would see tech names double or triple on IPO days. People could literally get rich quick. Every time this kind of behavior occurs I become very cautious, especially of those equities. This is why I have taken two short positions, one in GameStop, because its shares aren't in any world worth anything more than \$40. Secondly I have shorted an ETF of pre-acquisition SPAC's, because I am of the opinion that SPAC's are incredibly speculative and have only come to attention due to the red hot nature of the market this past year.

There is one S&P sector that I think will outperform over the next few months, regardless of interest rate numbers, inflation or anything else. That sector is Industrials and here's why. As President Biden ramps up vaccination, the economy will undoubtedly begin to reopen and this will shift investment capital away from stay at home, tech based options to real world open economy infrastructure. President Biden also plans to unveil a green infrastructure stimulus bill aimed at helping the economy become more sustainable as we reopen. Although there are a few individual companies that are more enticing than others I do not have the time or adequate industry knowledge to do due diligence on them. Thus I have decided to buy the whole industrial index, ticker XLI. It is also worth noting that as inflation sets in and interest rates possibly rise, industrials will serve to benefit. Industrial manufacturing and capital expenses are often fixed in comparison to the variable expenses incurred by many tech market leaders. Thus when interest hikes occur, bottom lines for tech will be pressured and while inflationary revenue growth may offset this a bit, Industrials top and bottom lines will both expand. This is my rationale for the sector's outperformance.

Finally my last position is one sector I expect to continue to outperform as it has the last few years and that is residential housing. The US home construction ETF tracks the largest listed American companies that build homes. Since the pandemic began, homeowners have gained over 1 Trillion dollars in new equity due to increased demand. There has also been a striking outflux of owners from major urban cities. The suburban single family home is making an incredible comeback and I think it is one to stay, based on the societal trends from the pandemic.

This position is the least rooted in solid macro and fundamental analysis and is more of an observation call, so it will be the smallest one I take.

Performance

Well here we are, about 2 months later, Thursday May 28th. Things didn't turn out like I'd hoped. I actually held the number 1 position for a period of a few weeks, yet it didn't hold. As sad as it is, you can do all the fundamental analysis you'd like, but over the short term markets are not efficient.

Starting with the positions that underperformed for me, we will begin with my GameStop short. This was in fact my biggest position, having ballooned to 28% of my portfolio by the end of the simulation. The GameStop saga is truly something to see, and I have no doubt books will be written on it. At the time of writing the stock trades at \$240, a nice 33.49% more than when I shorted it. On any valuation measure, it is not worth more than \$20, but that was where I erred. I payed too much attention to prevailing fundamental analysis and not public sentiment. I do still believe the market will sort this one out and what goes up must come down, just didn't have enough time. I would hold this short.

Secondly my Bitcoin trust ticker GBTC, underperformed. I took a 33.07% loss at the time of writing. This one I am actually happy about. I am a firm believer in the future of cryptocurrency and Bitcoin is the bellwether of the next generation of DeFi. Healthy corrections are good for any asset, and I added to my personal crypto holdings on this dip. I can live with it.

In total those were my two big losing positions, and in hindsight I can live with the loss. I came in expecting these positions to be volatile, and they proved me right. In the end I think my analysis is sound, and that the market will figure it out eventually.

My winning positions performed soundly as I expected them too. The industrial and housing ETFs returned both around 7%. This was quite satisfactory and I would expect them to outperform moving forward. The Ethereum trust returned me an awesome 36.7% position, due to increased institutional and retail interest in the crypto before the rollout of the new DeFi protocol for Eth2.0. I was happy with this position as well and think it will continue to outperform as Ethereum becomes more applicable. Lastly my second short returned me 0.35%, just slightly above breakeven. This position was a bet against the SPAC market, a new phenomenon that allows low grade companies to go public without the necessary vetting of the IPO process. It is just an example of the "froth" we are experiencing in the market due to massive amounts of fiscal stimulus and new money entering the market. It won't last, no super successful company ever goes public this way, and I expect as valuations come down a little and the market balances itself, the SPAC mania will fade away. I would hold this short.

What I've learned and how this will affect me in the future

Biggest thing I've learned is that the Efficient Market Hypothesis is a slow working beast, with many bugs in its programs. I have no doubt that my analysis is correct, but 9 weeks is simply not enough time for the market to sort it out. I believe it was Benjamin Graham who once said that in the long run the market is a weighing machine, but over the short term it is a voting machine. I have also learned and seen in effect that for most people taking complex strategies is too much of an emotional toll. Even in a simulation taking these risky, high beta positions scared me and I can't imagine what that would be like with real money. In order to be a very successful investor you have to have iron guts and a steadfast head on your shoulders. There can be no second guessing your due diligence, even if it puts you in a very contrarian position. It is these investors who win, and that's the kind I want to be.

Finally this simulation has shown me that I indeed want to work in asset management for the remainder of my life. The markets are an infinitely intricate and challenging puzzle and there's nothing more I would like to do than analyze them. I am hoping to begin with writing, either small research reports or a newsletter or something like that. Quant stuff is not really my style so I'll focus on the fundamental and secular analysis and see how that pans out. So far at SU this has been my favorite class and I look forward to more finance classes in my future.