StockApes Final Report

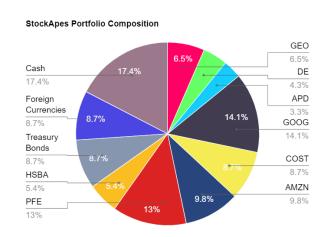
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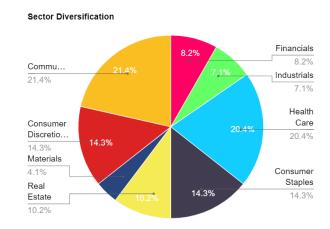
Leader - Abdul-Aleem Mohammed (<u>afaizaanm2007@gmail.com</u>)

Members: Parth Patel, Kris Lau, Grayson Koch, Suyash Bhagwat, Ammar Alashi, Yousif Abdulmahdi

ID Number - 7278308

Total Portfolio Return: 15.55% (as of 11/29/2022)





StockApes Portfolio At a Glance:

Sector	Market Value	% Return	Sector	Volatility (beta)
GEO	\$9101.40	14.20%	Real Estate	0.58
DE	\$5292.00	23.09%	Industrials	1.09
HSBA	\$6090.66	7.71%	Financials	0.50
PFE	\$15,039.00	4.72%	Healthcare	0.68
GOOG	\$15,217.50	3.15%	Communication Services	1.05
AMZN	\$10,619.40	-0.37%	Consumer Discretionary	1.21
COST	\$10.785.00	1.19%	Consumer Staples	0.71
APD	\$3,383.93	21.94%	Materials	0.84

	Portfolio Value	Percentage Return	Cash Balance
Total	\$115,552.32	15.55%	\$39,995.60

(Recommended and Stocktrak portfolios are the same)

Investment Strategy Summary:

"To lose patience is to lose the battle"

-Mahatma Gandhi¹

We, The members of StockApes, like the famous activist Mahatma Gandhi, value the virtues of tenacity and perspicacity. Our portfolio has been based on minimizing volatility to ensure peace of mind for our client while generating immense returns. To cater to Mr. Hjemdal's lifestyle, We believe that 40% of the portfolio should be invested in U.S. bonds, in cash, or in foreign currencies.

Our Unique Investment Strategy:

Mr. Hjemdal is a man who partakes in many cultures and practices, and we strive to diversify our portfolio in the same manner. Our team's strategy provides the passive income our client desires and returns higher than the S&P 500² while our portfolio's volatility remains far lower through under diversification within sectors, nations, and forms of capital.

Advisor Reflection:

"The Wharton Global High School Competition has allowed this team to collaborate effectively while giving them an opportunity to independently expand their knowledge of capital management. Using the current economic climate, they debated and contemplated analysis of investments, and together looked into diverse investments including bonds, foreign currency markets, and stocks. Specifically, they researched and determined what sectors traditionally do well during bear markets. Overall, the competition gave this team the drive and purpose to learn about alternative management possibilities."

^{2 -} Price, M. (n.d.-a). What Is the Average Stock Market Return? The Motley Fool. https://www.fool.com/investing/how-to-invest/stocks/average-stock-market-return/#:~text=The%20stock%20market%20has%20returned

1 - Mahatma Gandhi Quotes About Patience. (n.d.). A-Z Quotes. https://www.azquotes.com/author/5308-Mahatma_Gandhi/tag/patience

Trade Note Analysis

Pfizer Incorporated:

Even though the Covid-19 pandemic is coming to an end, Pfizer plays an integral part in manufacturing vaccines for everyday problems in society such as influenza. The earnings per share ratio for Pfizer has increased over 233% this year with its stock lagging; we believe it will surely gain market value proportionate to its EPS jump.⁴ These reasons, coupled with the fact that it has extremely low volatility, caused us to allocate nearly 15% of our portfolio to this stock.⁴

Amazon.com Incorporated:

While we have lost money on AMZN to date, it was an irresistible buy following a wipeout of 1 trillion dollars in market cap in addition to the 45% drop in valuation year-to-date.⁵ This has exemplified the trend of big technology losing trillions in market cap this year, causing us to invest a combined 25k in Amazon and Google, two of the biggest names in the space. While these stocks won't give explosive returns, they are household names that will continue to grow as well as our client's ambitions.

Deere & Company:

One stock we based our investments into is Deere & Co which fits the personal beliefs of our client, working towards a blue future. Deere & Co is a promising stock that will provide the desired profit over time, and their environmentally friendly innovations would please our client. Deere & Co works extensively to cut back on the use of fertilizer, allowing for a cleaner water supply and a more natural crop yield. It is also the primary stock in our portfolio that we intend to be used for short-term growth because of its low current valuation.

4 - Tech Stocks Are Falling. That's A Bad Sign For The Economy. (n.d.). Time. https://time.com/6226927/tech-stocks-slump-economy-forecast/; 5 - Login. (n.d.). Www.stocktrak.com. https://www.stocktrak.com/trading/equities; 6 - Sustainability | John Deere US. (n.d.). Www.deere.com. Retrieved December 3, 2022, from https://www.deere.com/en/our-company/sustainability



Investing Strategy - Stock Screening:

The way that we attempted to select companies worth investing in was influenced by a multitude of reasons. Earnings per share, cash flow relative to share price, and earnings/sale reports are some of the things that we look at to decide whether a share is worth purchasing. As an example using the GEO group, possesses a price-to-share ratio of 0.68, while between one and two is considered ideal.⁵ This, as well as physical retailers such as COST, are generally undervalued in the aspect of the amount of attention they garner from investors in comparison to their cash flow. Its forward price-to-earnings ratio is also around that of 10, generally believed that this ratio is projected to increase in the future and that the stock is undervalued.⁵ An additional example of our concrete strategy is Google which we purchased at under \$100 a share, the first time in two years the share price had dropped that low. To summarize, we focus on the valuation of the company relative to things such as cash flow and recent fluctuations to select our stocks. Our strategy has done well as only one of our over 2 dozen trades (AMZN) has lost money, and even that is a slight amount that we believe will soon be remedied.⁴

Investing Strategy - Under Diversification within sectors:

A staple of our strategy makeup consists of the fact that we only hold one position per one of the eight sectors that we have invested in. The major sector that we have steered away from has been energy. Oil futures are looking grim even though stocks such as XOM and CVX have grown over 60% this year.⁵

While they have outperformed every other sector this year we believe they will not be able to garner similar returns in the years to come. In every other stock, we have tried to pick the stock most suitable to our client and provide him with long-term returns of over 10% for the next decade and a half. We have purposefully invested in only one stock per sector to stabilize our returns over the next decade to prevent something similar to big tech dropping over 30% this year in our portfolio.⁴ In addition to diversifying between sectors, we coupled this with the niche that we tried to fit the volatility of our stocks into, all our betas being between 0.5 and 1.25. On days the market fell, we tended to gain places in StockTrak far more than on days when the market grew; our ranking was consistently between 20 and 70 throughout most of the competition.⁴

There are various reasons for us only having one stock per sector. One of them is the fact that it is far simpler to manage. We can dictate a selling point for our few short-term stocks with much greater accuracy and efficiency than with an excess of stocks. Therefore, we try to pick out the best stock available in each of our selected sectors and dictate a selling price for it before buying as well as having a replacement ready. An example of this is Boeing Co., which we purchased 70 shares of at \$125 and sold at \$170, we put a portion of that money into Wabash National and some of the other money into Deere and Co., both of which have grown over 30%. While we sold Wabash as it reached its dictated price, we are still holding Deere and Co. All of

these stocks are industrials and this is a sector that we believe is best to hold a volatile stock as opposed to the commonly believed tech sector. Even though big tech is volatile daily, it grows consistently year-over-year, leading the sector which we intend to use primarily to add an element of volatility to our portfolio to be the industrial sector. We intend to keep on selecting a singular Industrial stock (until another sector usurps it for volatility) and use it for short-term growth. These variable short-term investments of at max 15k already have made up around half of our returns and since there is a very low amount of our relative portfolio that we are investing, the risk factor remains low. Even if there was a volatile stock we bought that miraculously dropped 99% the next day, since we only invested 15k into it, we have still made a profit from our initial investment. These not-so-risky investments are backed up by the other 100k of our portfolio with low beta and immense sector diversification, providing steady returns to defend against a possible drop in a particular share. For these reasons, we believe it is unnecessarily time-consuming and distracting to invest in multiple stocks per sector as we already have diversified between countries, market caps, sectors, and volatility.

Investment Strategy - Cash:

Our team has allocated 20k of our portfolio to remain in cash. Some would say that this money is being eaten away due to inflation; on the other hand, we believe that this is cash that Mr. Hjemdal could use for other purposes. In the case study, it is stated that he would like to maintain a fund for up-and-coming entrepreneurs focused on the "blue future.²" We have retained that amount in cash and if he wishes to expand his prospects, he could sell some short-term stocks such as APD or DE soon for quick liquidity; nevertheless, these are stocks that we believe will increase long-term if he chooses not to do so. We are certain that the 5-10k he

wishes to award each year will be easily replenished by our stock returns with the excess building wealth he could use to fund his wellness center in the next 15 years.

Investment Strategy - Foreign Bills:

A major part of our urge to diversify into up-and-coming countries, as Mr. Hjemdal has done so with his diverse upbringing, consists of us investing 10k of our portfolio into foreign currency. We believe the majority of this should go into stable First-world currencies, namely the Swiss Franc. The Franc is a staple for foreigners who wish to invest in a transparent system, this has led to the Franc varying very little and steadily increasing against the dollar by 6 cents this month⁵. According to a study conducted by the EU, The Franc is the most stable in the world and has been so for many decades. While 80% of our allocated 10k should go into the Franc, we believe that it is best for the other 20% to go into a more volatile, short-term currency to ensure some volatility as indicated in the report requirement². The Russian Ruble has been one of the best-performing currencies this year, reaching highs not seen since 2015. While the world opinion of Russia is not at the greatest point right now, this has done nothing but strengthen the currency as more and more companies move out, slashing import-to-export ratios. Russian oil margins have also greatly increased as energy boomed this year. We believe that it would be a profitable endeavor to invest in the Ruble right now and then sell at the peak when western companies begin to re-enter the country following the end of the Russo-Ukrainian war. While we intend for the Franc to be a long-term disaster-resistant investment, it could also be sold at any point alongside the Ruble to provide liquidation for our client.

3- Baltensperger, E., & Kugler, P. (2016). The historical origins of the haven status of the Swiss franc. Aussenwirtschaft, 67(2), 1–30. https://www.econstor.eu/handle/10419/231229

Investment Strategy - Treasury Bonds:

Treasury Bonds, the most reliable source of returns, as this is money lent to the government itself, are something that we have allocated as 10% of our initial investment. In early October, in our midterm report, we stated that the utter maximum of 10k should be placed in I bonds at the record-high rate of 9.62% according to CNBC. Over the next year, this alone will almost certainly replenish 20% of the money Mr. Hjemdal requires for his fund. The remainder of our stocks will work to build him wealth over the next decade and a half that he could use for a down payment on his wellness center. We believe this money should remain in I bonds for at least one year and ideally until inflation drops below the goal of 3% declared by the federal reserve.

Investment strategy - Catering to the Client:

Mr. Hjemdal, a man of infinitely many cultures and practices, is sure to realize our similarly diversified portfolio that has garnered a return of almost 16% percent in the past few months and that will excel in the future. In the next 15 years, we strive to provide him with the capital he desires that will help him continue to better the world. To generate this capital, we have created a portfolio that drives volatility to the minimum while generating high returns. If he were to choose our investment plan, Mr. Hjemdal would be provided with the capital needed to fund his entrepreneurship fund and environmentally friendly hobbies. What we wish for our client is that when he opens his eyes in fifteen years to our portfolio, he will be delighted to see the capital there to help fund the wellness center in his vision.