



Stock Market Game

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# Table of Contents

<b>Executive Summary</b>	1
<b>Analysis of Portfolio Performance</b>	1
<b>Rationale</b>	3
Research conducted prior to selection of stocks and funds	3
Strategy used to diversify investment portfolio	6
Description of how selected stocks and funds fit strategy	7
<b>Conclusions and Findings</b>	8
Explanation of strategy effectiveness	8
Proposed changes in strategy for future investments	9
<b>Charts/Diagrams of Portfolio Performance</b>	10
<b>Bibliography</b>	11



# Executive Summary

## Portfolio Overview

On an initial investment of \$100,000, UKR Investments had a return of 76.83% over a trading period of approximately three months. This success secured us 2<sup>nd</sup> place in the North Atlantic Region. Our portfolio consisted of stocks, bonds, mutual funds and ETFs. That being said, capital was not allocated evenly as our stocks and ETFs made up majority of our investments.

## Investment Objectives & Research

We initially established the investment objectives of attaining large profits, managing higher levels of risk and diversifying our portfolio. The next step was research; this was one of the major reasons why we were so successful. By looking into factors such as volatility, history and size of securities, we were able to shortlist investment opportunities. Both technical and fundamental analyses were significant aspects when formulating a strategy to assess stocks. Chart patterns and indicators, such as the double bottom pattern and Bollinger Bands, were useful tools in drawing conclusions for our technical analysis. Usage of financial statements and ratios were key when assessing fundamentals for each company.

## Diversification & Trading Strategy

The method we used to attain such a large profit was swing trading with a focus on analyzing trends and chart patterns. This strategy is especially useful for short term investment periods, which included our competition as it took place over the duration of only three months. By managing certain amounts of risk in the form of volatility, we were able to maximize our returns with a majority of short positions. We diversified our portfolio to include an assortment of securities in different international markets, such as Greece (DCIX) and China (UGPIX). Each of these investments also varied in terms of their economic sector (ranging from basic materials to consumer goods) and market capitalization. We focused on having a low degree of interdependence between sectors to ensure that failure in one industry would not negatively impact all our securities. Ultimately, this was what allowed us to maintain an efficient balance between risk and return.

## Future Improvements

It is crucial to note that our strategy included substantial amounts of risk, which is not optimal when investing in the real world or with a long term focus. A few changes would need to be implemented in our strategy in order to make it more suitable for this. Some ways are to invest in a greater number of stocks, pick different securities or allocate more capital towards mutual funds to further diversify. The selection method of our stocks would also differ as a position trader; we would rely more on long-term analyses. This includes emphasis on a company's fundamentals and certain technical indicators, such as a Relative Strength Indicator with a longer period.

## Analysis of Portfolio Performance

Through the use of various financial instruments such as stocks, bonds and mutual funds, we were able to accumulate a total of \$76,834.05 in profits. Our trading took place over a span of around three months, from September 6th to December 16th. Our aggressive growth portfolio reflected an overall return of 76.83% on our initial investment of \$100,000, which placed us third worldwide. The S&P 500 rose 5.55% during our investment period, which means that we had a 71.28% return over the S&P.

Type of Security	Ticker Symbol	Profit/Loss in \$
Stock	DCIX	3,160.26
ETF	TVIX	23,429.45
Stock	SAEX	12,673.53
Stock	AAPL	(5.94)
Mutual Fund	UGPIX	(23.44)
Bond	TR_912810QQ4	(159.23)
ETF	UVXY	37,446.94

*This table shows the returns of each security held in the duration of the competition.*

As seen above, the exchange traded funds of UVXY and TVIX provided the largest returns while our bond and mutual fund were the least profitable. This speaks to the common saying - there's no reward without risk. This ideology was what inspired us to invest majority of our money into ETFs and stocks rather than mutual funds and bonds. Our initial plan consisted of investing 10% in bonds, 10% in mutual funds, 40% in stocks and 40% in ETFs, but as time passed, we saw more opportunity in our positions on the ETFs and allocated more funds towards them. These significant holdings of UVXY and TVIX both traced the VIX, which is known as the volatility or "fear" index. This index generally has an inverse relationship with the S&P 500 - as one rises, the other falls by half the amount. Since the S&P 500 ultimately rises as time passes, the VIX decreases overall at a much greater percentage.

All the stocks we invested in turned out to be bearish, yet for various different reasons. Apple was the one stock we had chose to buy, yet it turned out to suffer from large revenue deficits. This continued as its fourth quarter earnings report was revealed, which led to a subsequent fall in their stock price. DCIX stands for Diana Containerships, a business that deals with the marine transportation of goods. A large spike in their share price occurred in November, due to the US elections promising tax cuts and looser regulations, which meant future growth for shipping companies. The stock quickly became overbought and the artificial inflation began to correct itself as time went on, lowering the price. Lastly, SAEX is the ticker symbol of SAExploration, a company that provides logistical support and data for the extraction of natural resources. In this case, investors did not have too much confidence in the company because of the increasing amount of debt they faced, causing share price to decline. Fortunately, we were able to make an overall profit on our stocks as our positions for both DCIX and SAEX were short.

Our bonds and mutual funds both underperformed and provided losses; fortunately we did not invest too much in either of them as both securities made up less than 5% of our portfolio. Although our strategy ended up being successful, it would not be recommended for a long term trading strategy.

## **Rationale**

### ***Research conducted prior to selection of stocks and funds***

Each security in our portfolio was thoroughly analyzed through the use of either technical or fundamental analysis prior to being invested in. Our main strategy was to research companies we were familiar with as well as look for securities that experienced moderate percentage change daily, as these relatively volatile stocks had high potential for profits.

Before holding any company's stock, we first looked through the most recent annual or quarterly report that had been released. The charts below show some of the key ratios that we used in determining each company's financial position. Since our trading period was short term, we were mainly concerned about the liquidity and profitability ratios. Apple is a fundamentally strong company, containing ratios that generally exceed the industry average. Coupling this with a market capitalization of over \$700 billion, we believed that buying their shares would offer stability and steady gains for our portfolio. Furthermore, the iPhone 7 had released around this time period, which we thought could have a bullish effect on the share price.