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Stock Market Simulation

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By

Ezra Barboza

Sage Fredrich

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Approved by Professor Dalin Tang, Project Advisor

This report represents the work of two WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on the web without editorial or peer review.

Abstract

This project was a sixteen-week stock market simulation using data from the real-life US stock market with a 15-minute delay. The main goal of this project was to achieve a basic grasp of how the stock market operates. This was done through research of the history of the stock market, looking at different investment strategies, and the simulations themselves. The second goal was to complete analysis during the simulations and change investments depending on the behavior and volatility of the stock market. Two different investment methods were used: Growth Investing, and Trend Investing. Stock simulations started at \$100,000 each and varied on starting companies. At the end of the sixteen weeks the returns for the simulated growth strategy were -4.19% (loss), and the returns for the simulated trend strategy was better at -0.07966% (loss). The total return of the S&P 500 index was 9.79% (gain) over the same time period of the simulation. The results from the simulations showed that trend investing resulted in less loss compared to growth investing. Although neither strategy was able to have profitable results when compared to the S&P 500, this IQP project provided its participants with new trading experiences that will be able to benefit them in their future investments.

Acknowledgments

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Table of Contents

Abstract	2
Acknowledgments.....	3
List of Figures	7
List of Tables	8
Chapter 1: Introduction.....	11
1.1 Goals, Scope, and General Plan.....	11
1.2 History of the Stock Market.....	11
1.3 Factors Influencing the Stock Market.....	13
1.3.1 Macroeconomic factors	13
1.3.2 Microeconomic factors	14
1.4 Stock Market Indices	15
1.4.1 Standard and Poor’s 500 Index (S&P 500)	15
1.4.2 Dow Jones Industrial Average Index (DJIA).....	16
1.4.3 Nasdaq Composite Index (NASDAQ).....	17
1.4.4 The Russell 2000 Index (RUT).....	18
1.5 Recent Event Impacting Stock Market	19
Chapter 2: Stock Trading Methodologies.....	21
2.1 Stock Market Simulation Program.....	21
2.2 Trend Investing Strategy	25
2.3 Growth Investment Strategy	25
Chapter 3: Selected Companies	27
3.1 Growth Investing.....	27
3.2 Trend Investing	29
Chapter 4: Growth Investing Simulation	32

4.1 Week One (9/25-9/29)	32
4.2 Week Two (10/2-10/6).....	34
4.3 Week Three (10/9-10/13).....	36
4.4 Week Four (10/16-10/20).....	37
4.5 Week Five (10/23-10/27)	39
4.6 Week Six (10/30-11/3).....	40
4.7 Week Seven (11/6-11/10)	41
4.8 Week Eight (11/13-11/17)	42
4.9 Week Nine (11/20-11/24)	43
4.10 Week Ten (11/27-12/1).....	44
4.11 Week Eleven (12/4-12/8)	45
4.12 Week Twelve (12/11-12/15)	46
4.13 Week Thirteen (12/18-12/22).....	46
4.14 Week Fourteen (12/25-12/29).....	47
4.15 Week Fifteen (1/1-1/5).....	48
4.16 Week Sixteen (1/8-1/12)	49
4.17 Summary	50
Chapter 5: Trend Investing Simulation.....	51
5.1 Week One (9/25-9/29)	51
5.2 Week Two (10/2-10/6).....	52
5.3 Week Three (10/9-10/13).....	54
5.4 Week Four (10/16-10/20).....	55
5.5 Week Five (10/23-10/27)	56
5.6 Week Six (10/30-11/3).....	57
5.7 Week Seven (11/6-11/10)	58
5.8 Week Eight (11/13-11/17)	59

5.9 Week Nine (11/20-11/24)	60
5.10 Week Ten (11/27-12/1).....	61
5.11 Week Eleven (12/4-12/8).....	62
5.12 Week Twelve (12/11-12/15)	63
5.13 Week Thirteen (12/18-12/22).....	64
5.14 Week Fourteen (12/25-12/29).....	65
5.15 Week Fifteen (1/1-1/5).....	65
5.16 Week Sixteen (1/8-1/12)	66
Chapter 6: Analysis and Comparison	68
6.2 Analysis of Growth Investing Strategy	69
6.3 Analysis of Trend Investing Strategy.....	70
6.4 Comparison Analysis of Growth & Trend Investing	71
Chapter 7: Conclusion.....	73
References.....	74

List of Figures

Figure 1.1 S&P 500 Index Market Summary from 1982 to 2023 [8]	16
Figure 1.2 DJIA Index Market Summary from 1983 to 2023 [10].....	17
Figure 1.3 NASDAQ Index Market Summary from 1983 to 2023 [12].....	18
Figure 1.4 The RUT Index Market Summary from 2004 to 2023 [14]	19
Figure 2.1 Stock Market Simulator Portfolio Page [21]	22
Figure 2.2 Stock Market Simulator Trade Page [22].....	23
Figure 2.3 Stock Simulator Research Page [23]	24
Figure 2.4 Stock Simulator Research Page Continued [23].....	24
Figure 3.1 ACM Research Stock Over the Past Year [31]	28
Figure 3.2 Global-E Online Stock Over the Past Year [33].....	29
Figure 3.3 NVIDIA Corp Stock Over the Past Year [35].....	30
Figure 3.4 Alphabet Inc Class A Stock Over the Past Year [37].....	31
Figure 4.1 Growth Investing Account Value: End of Week One (9/25-9/29)	34
Figure 4.2 Growth Investing Stock Information Week One (9/25-9/29).....	34
Figure 5.1 Trending Investing Stock Information: End of Week One (9/25-9/29).....	51
Figure 5.2 Trending Investing Account Value: End of Week One (9/25-9/29).....	51
Figure 6.1 S&P 500 Market Summary (6 Months) [38]	69
Figure 6.2 Total Asset Value: Growth Investing	70
Figure 6.3 Total Asset Value: Trend Investing.....	71
Figure 6.4 Total Asset Value: Growth Vs. Trend.....	72

List of Tables

Table 4.1 Growth Investing Portfolio Transactions Week 1 (9/25-9/29)	33
Table 4.2 Growth Investing Portfolio Investment Status Week 1 (9/25-9/29)	33
Table 4.3 Growth Investing Portfolio Transactions Week 2 (10/2-10/6)	35
Table 4.4 Growth Investing Portfolio Investment Status Week 2 (10/2-10/6)	35
Table 4.5 Growth Investing Portfolio Transactions Week 3 (10/9-10/13)	36
Table 4.6 Growth Investing Portfolio Investment Status Week 3 (10/9-10/13)	37
Table 4.7 Growth Investing Portfolio Transactions Week 4 (10/16-10/20)	38
Table 4.8 Growth Investing Portfolio Investment Status Week 4 (10/16-10/20)	39
Table 4.9 Growth Investing Portfolio Transactions Week 5 (10/23-10/27)	39
Table 4.10 Growth Investing Portfolio Investment Status Week 5 (10/23-10/27)	40
Table 4.11 Growth Investing Portfolio Transactions Week 6 (10/30-11/3)	41
Table 4.12 Growth Investing Portfolio Investment Status Week 6 (10/30-11/3)	41
Table 4.13 Growth Investing Portfolio Investment Status Week 7 (11/6-11/10)	42
Table 4.14 Growth Investing Portfolio Transactions Week 8 (11/13-11/17)	42
Table 4.15 Growth Investing Portfolio Investment Status Week 8 (11/13-11/17)	43
Table 4.16 Growth Investing Portfolio Transactions Week 9 (11/20-11/24)	43
Table 4.17 Growth Investing Portfolio Investment Status Week 9 (11/20-11/24)	44
Table 4.18 Growth Investing Portfolio Transactions Week 10 (11/27-12/1)	44
Table 4.19 Growth Investing Portfolio Investment Status Week 10 (11/27-12/1)	45
Table 4.20 Growth Investing Portfolio Investment Status Week 11 (12/4-12/8)	45
Table 4.21 Growth Investing Portfolio Investment Status Week 12 (12/11-12/15)	46
Table 4.22 Growth Investing Portfolio Investment Status Week 13 (12/18-12/22)	47
Table 4.23 Growth Investing Portfolio Investment Status Week 14 (12/25-12/29)	48
Table 4.24 Growth Investing Portfolio Investment Status Week 15 (1/1-1/5)	49

Table 4.25 Growth Investing Portfolio Transactions Week 16 (1/8-1/12)	50
Table 4.26 Growth Investing Portfolio Investment Status Week 16 (1/1-1/5)	50
Table 5.1 Trend Investing Portfolio Transactions Week 1 (9/25-9/29).....	52
Table 5.2 Trend Investing Portfolio Investment Status Week 1 (9/25-9/29).....	52
Table 5.3 Trending Investing Portfolio Transactions Week 2 (10/2-10/6).....	53
Table 5.4 Trending Investing Portfolio Investment Status Week 2 (10/2-10/6).....	53
Table 5.5 Trending Investing Portfolio Transactions Week 3 (10/9-10/13).....	54
Table 5.6 Trending Investing Portfolio Investment Status Week 3 (10/9-10/13).....	54
Table 5.7 Trending Investing Portfolio Transactions Week 4 (10/16-10/20).....	55
Table 5.8 Trending Investing Portfolio Investment Status Week 4 (10/16-10/20).....	55
Table 5.9 Trending Investing Portfolio Transactions Week 5 (10/23-10/27).....	56
Table 5.10 Trending Investing Portfolio Transactions Week 5 (10/23-10/27).....	56
Table 5.11 Trending Investing Portfolio Transactions Week 6 (10/30-11/3).....	57
Table 5.12 Trending Investing Portfolio Investment Status Week 6 (10/30-11/3).....	58
Table 5.13 Trending Investing Portfolio Transactions Week 7 (11/6-11/10).....	58
Table 5.14 Trending Investing Portfolio Investment Status Week 7 (11/6-11/10).....	59
Table 5.15 Trending Investing Portfolio Transactions Week 8 (11/13-11/17).....	59
Table 5.16 Trending Investing Portfolio Investment Status Week 8 (11/13-11/17).....	60
Table 5.17 Trending Investing Portfolio Investment Status Week 9 (11/20-11/24).....	60
Table 5.18 Trending Investing Portfolio Transactions Week 10 (11/27-12/1).....	61
Table 5.19 Trending Investing Portfolio Investment Status Week 10 (11/27-12/1).....	61
Table 5.20 Trending Investing Portfolio Transactions Week 11 (12/4-12/8).....	62
Table 5.21 Trending Investing Portfolio Investment Status Week 11 (12/4-12/8).....	62
Table 5.22 Trending Investing Portfolio Transactions Week 12 (12/11-12/15).....	63
Table 5.23 Trending Investing Portfolio Investment Status Week 12 (12/11-12/15).....	63
Table 5.24 Trending Investing Portfolio Transactions Week 13 (12/18-12/22).....	64

Table 5.25 Trending Investing Portfolio Investment Status Week 13 (12/18-12/22).....	64
Table 5.26 Trending Investing Portfolio Investment Status Week 14 (12/25-12/29).....	65
Table 5.27 Trending Investing Portfolio Transactions Week 15 (1/1-1/5).....	66
Table 5.28 Trending Investing Portfolio Investment Status Week 15 (1/1-1/5).....	66
Table 5.29 Trending Investing Portfolio Investment Status Week 16 (1/8-1/12).....	67

Chapter 1: Introduction

1.1 Goals, Scope, and General Plan

This IQP project is a stock market simulation where we get to know what the stock market is, how it functions, and how one could invest wisely to make better profit. The stock market is a marketplace for shares of companies to be bought and sold. The main interest of this project is to collect data on the performance rate for two selected strategies that are commonly used in stock market trading. The two trading strategies are: growth investing and trend investing. Throughout this IQP we will get acquainted with the stock market and will get the knowledge to be able to successfully navigate the stock market. During the initial two weeks of the IQP, research will be conducted to gather the background knowledge needed to proceed. This will consist of stock market history, potential investment methods, trends, and terms. This will be the foundation for going forward with the stock market simulation analysis that will be conducted. The simulation will take place over 16 weeks using growth investing and trend investing. Both will start with the same amount of money, allowing us to compare the simulation each week. After the 16-week simulation, the next three weeks will be dedicated to an in-depth examination of the results, focusing on finding factors contributing to the successes or failures of each simulation. The overarching goal is to arm novice investors with the essential tools and insights necessary to navigate the stock market successfully in the future.

1.2 History of the Stock Market

Belgium had the first stock exchange in 1531 in Antwerp. However, they did not have stocks like the ones known today so this stock exchange exclusively handled promissory notes and bonds. The first modern joint-stock companies came about in the 1600s when the East India

companies were formed. They issued stocks that paid dividends on multiple sea voyages, used to export goods from the East, rather than one at a time. This meant larger scale voyages and bigger profits for investors [1]. The Dutch East India Company is thought to be the first to issue shares of stock to the public, creating the world's first IPO, initial public offering. The Dutch East India Co was created in 1602 alongside the Amsterdam Stock Exchange, which is known to be the oldest stock exchange that is still functioning [2].

The British East India Company, founded in 1600, was a government-backed monopoly, which gave it a huge advantage over the competitors. With the financial boom in England there were no rules when it came to issuing shares. This allowed companies and individual businesspeople alike to jump at the opportunity to make a wealth of fortune by doing nothing other than issuing shares. Most notably the South Sea Company (SSC). The SSC was able to make a fortune from investors before a single ship left for the voyage. Even the most outlandish claims that had slim to no chance of being profited from were invested in. However, the fun did not last as the SSC saw themselves with truly little profit and therefore not able to pay any of the dividends. Resulting in a crash and the government ban on issuing shares that was in effective until 1825 [1].

The first London stock exchange, the LSE (London Stock exchange), was formed in 1773 and was bound by the previously mentioned law restricting shares. However, the New York stock exchange, formed 19 years later in 1792, while not the first stock exchange in the U.S., became the biggest. The NYSE's location on Wall Street attributed its dominance, with Wall Street being the heart of business and trade at the time [1].

1.3 Factors Influencing the Stock Market

The performance of the stock market is influenced by a complex interplay of numerous factors. These factors can be categorized into two main groups: Macroeconomic factors and microeconomic factors. Each of them plays a role in determining stock prices and overall market behavior.

1.3.1 Macroeconomic factors

One of the most important macroeconomic indicators for the stock market is the Gross Domestic Product (GDP) [3]. A nation's economic output is a fundamental driver of stock market performance. A growing GDP typically signals a robust economy, giving investors' confidence and pushing stock prices higher. While a shrinking GDP typically signals a weakening economy, having investors lose confidence and lowering stock prices. Another critical macroeconomic factor is the Inflation Rate. Inflation is the rate at which prices for goods and services rise, it can have a strong effect on the stock market. While moderate inflation can be seen as generally good and healthy. When rapid inflation occurs, the consumer purchasing power can erode, dampening investor sentiment [4]. Consumer Confidence is based on consumer sentiment surveys, which they how pessimistic or optimistic consumers feel about the economy. Low consumer confidence leads to decreased spending, negatively affecting businesses, and in turn the stock market. When Consumer confidence is high the opposite will happen, leading to increasing spending, benefiting businesses while also having an impact of the stock market.

1.3.2 Microeconomic factors

For the microeconomic side, the Supply and Demand of products can fluctuate a great deal, allowing for change for the stock market, for investors this may also offer a bandwagon effect having an over-reaction snowball effect for certain events such as in 1987 when a little bad news created an avalanche making the stock market fall 25% [5]. The stock market can normally recover quickly when these events happen, it is simply people following suit when prices fall or rise. Corporate Earnings are a primary driver of stock prices. When companies can have reports exceeding their expected earnings their stock prices will often rise. On the contrary when companies report earnings that have underperform their expected earnings their stock prices may fall. Industry Trends are a significant part of the stock market. Specific sectors or industries may underperform or outperform the broader market due to specific industry factors, advancements in technology, or shifts in customer preferences. Social media or News can have an immediate effect on a company's stock price. Some examples include new product launches, management changes, legal issues, mergers and acquisitions, consumer praise and backlash [4]. This will affect the Market Sentiment psychological factor based on news and rumors which will cause short term fluctuations in stock prices. Market Liquidity is another macroeconomic factor which is how easy it is to buy a stock without it significantly affecting their price, depending on the liquid ability it can show the market stability [4].

In conclusion, the stock market reflects on the broader economy, being shaped by a myriad of factors, both macroeconomic and microeconomic. None of these factors operate by themselves in isolation; they can influence and interact with each other in complex ways. As we can see, market behavior can be influenced by speculation investor behavior the broader economy and even psychological factors. This makes it challenging to predict the stock market movements.

Understanding the interplay of these factors is essential for making informed investment decisions in an ever-changing and dynamic financial landscape.

1.4 Stock Market Indices

A stock market index is a number which is a combined price (often weighted) of selected companies. Investment managers use indexes as benchmarks for performance reporting and investors to guide portfolio allocations. Examples of the most followed indexes in the U.S. are the S&P 500, Dow Jones Industrial Average, Nasdaq Composite, and the Russell 2000 index [6].

1.4.1 Standard and Poor's 500 Index (S&P 500)

Launched in 1957, the S&P 500 index consist of 500 of the top companies in the U.S. stocks that are chosen by market capitalization, making it free float capitalization weighted [7]. With the S&P 500 index representing 80% on the total value of the U.S. stock market it is considered the one of the most in-depth gauges of large U.S. stocks. Figure 1.1 gives a price chart for the S & P 500 for the past 30 years. While investing in the S&P 500 itself is not possible with it being an index, any of the companies that use it as a benchmark are able to be invested into [6]. The S&P 500 was currently at \$4,457.49 [8].

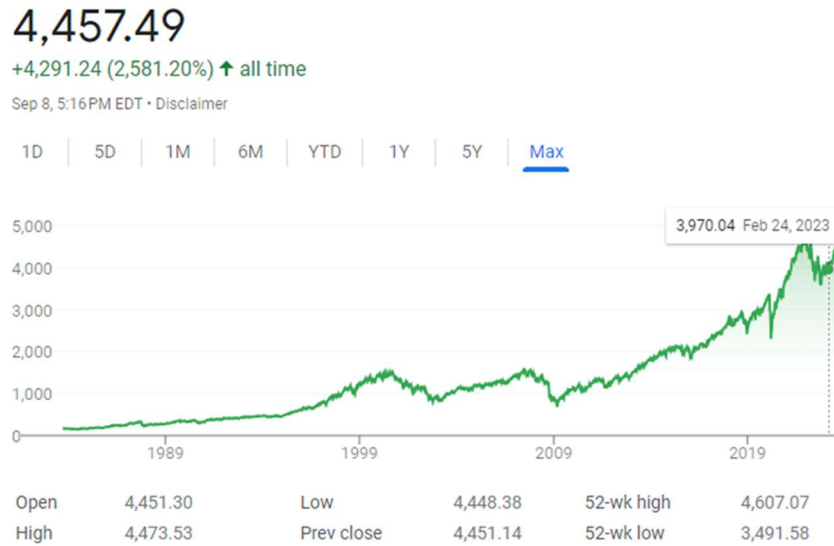


Figure 1.1 S&P 500 Index Market Summary from 1982 to 2023 [8]

1.4.2 Dow Jones Industrial Average Index (DJIA)

Formed in 1882, Dow Jones & Company is one of the largest business and financial companies in the world. Dow Jones, which was three people, created the DJIA which continues to be one of the most-followed stock indexes. Figure 1.2 presents the Dow Jones & Company’s stock market trend over the past 30 years. It has companies such as Boeing, Microsoft, Apple, Coca-Cola. Originally the DJIA consisted of companies specializing in railroads, cotton, gas, and the like, however it is still used as an essential indicator for the U.S. economy [9]. The DJIA is price weighted and represents about 25% of the value of the U.S. stock market, with stocks of 30 large and influential companies in the U.S [6]. The DJIA was currently at \$34,576.59 [10].

34,576.59 ↑ 2,720.94% +33,350.88 Max

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1D 5D 1M 6M YTD 1Y 5Y MAX



Figure 1.2 DJIA Index Market Summary from 1983 to 2023 [10]

1.4.3 Nasdaq Composite Index (NASDAQ)

Nasdaq, the world's first automated stock exchange, opened in 1971 under NASD. It is a market capitalization-weighted index used as a global electronic marketplace for buying and selling securities with more than 5,000 companies that are large technology companies [11]. Figure 1.3 shows NASDAQ's price trend over the last 30 years. The NASDAQ was currently at \$13,761.53 [12].



Figure 1.3 NASDAQ Index Market Summary from 1983 to 2023 [12]

1.4.4 The Russell 2000 Index (RUT)

The Russell 2000 Index, launched in 1984, is a market index consisting of two thousand small-cap companies. Figure 1.4 is the Russell 2000 Index's price trend over the past 17 years. It is used as a benchmark for measuring the performance of small-cap mutual funds [13]. The RUT was currently at \$1,851.54 [14].

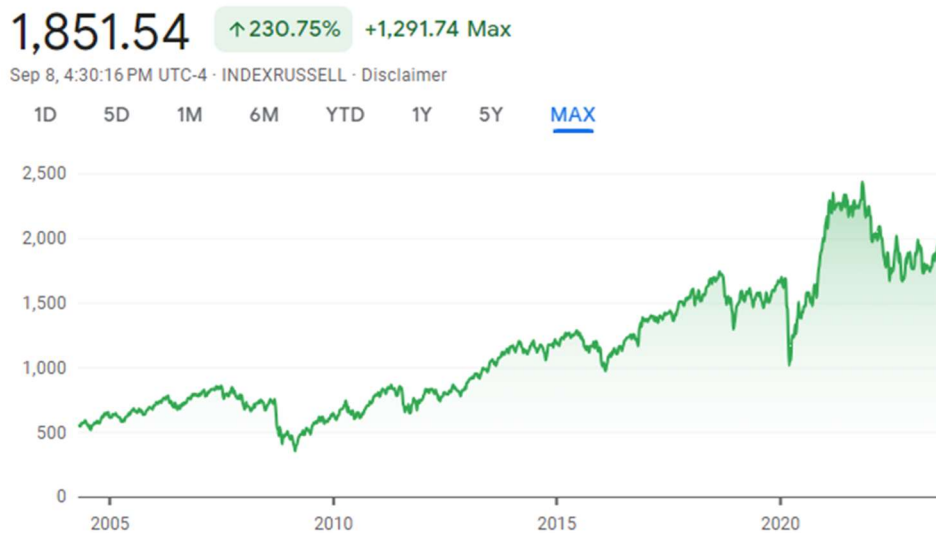


Figure 1.4 The RUT Index Market Summary from 2004 to 2023 [14]

1.5 Recent Event Impacting Stock Market

The COVID-19 pandemic had a massive impact on the global stock markets. During the early months of 2020 it became apparent that the pandemic would be extended. Global stock markets showed sharp and rapid declines [15]. On such indicators as the S&P 500 and the DJIA there could be observed a 10% decline from the recent highs [16]. This was driven from fear and uncertainty of the economic impact of the restrictions placed by lockdown people. The volatility of the stock markets increased, daily price swings became more abrupt and frequent as investors would react to news about how the virus spread, the government responses, and through economic data. Not all sectors were affected equally though, industries such as travel, hospitality and even energy saw huge losses and due to lockdown and travel restrictions. On the other hand, companies related to healthcare and big technology companies FAANG (Facebook, apple, Amazon, Netflix, alphabet) had their stock prices surged during the pandemic. For technology companies their powerful performance was contributed by e-commerce, remote work, and accelerated adaptation

of digital technologies [17]. For the health sector, investors saw the opportunity and potential earnings for as vaccines developed, and many health care professionals and environments were needed [18]. It had a positive impact on the market sentiment, vaccine breakthroughs were often followed by market rallies as investors anticipated the return to more normal economic conditions.

Chapter 2: Stock Trading Methodologies

2.1 Stock Market Simulation Program

The stock market can be a daunting and hard to navigate space for beginners. With the constant moving parts and the unpredictability of the stock market, it is quite easy to inadvertently lose a large amount of money. This is why a stock market simulation is extremely useful for novice traders. Simulations allow beginners to learn about the stock market without the risk involved. The simulations available currently range from simple trading strategies and basic offerings and more sophisticated platforms that offer things such as forex trading. Some popular simulations are How the Market Works, Wall Street Survivor, and Investopedia's Stock Simulator. These options are most suitable for people new to trading and are looking to learn the basics and how to get started [19].

While looking for a suitable simulation, a few key factors were kept in mind. The simulators that could accurately simulate the actual market, pull from the current relevant data in the stock market and keep track of the steps taken during the simulation process were considered the most. Investopedia's Stock Simulator stood out the most. In Investopedia's simulator a user can get familiar with things such as stock, options, cryptocurrency and executing trades. As well as being able to track the value of the portfolio it lets a user compare their results to other active investors [20]

Upon creating an account, each user was given \$100,000 in virtual money to buy virtual shares that were equivalent to real shares. Users can view their portfolio, research investment choices, execute a trade, learn important stock market topics, and play stock market games through the homepage of the simulator [21].

Starting with the portfolio page, this was where the user can view their total account balance, an overview of their current gains and losses of the day, and their current positions as well as the current value of said positions. It also includes a more extensive performance history, and the users rank among fellow Simulator investors [20]. The stock simulator portfolio page is shown below in Figure 2.1.

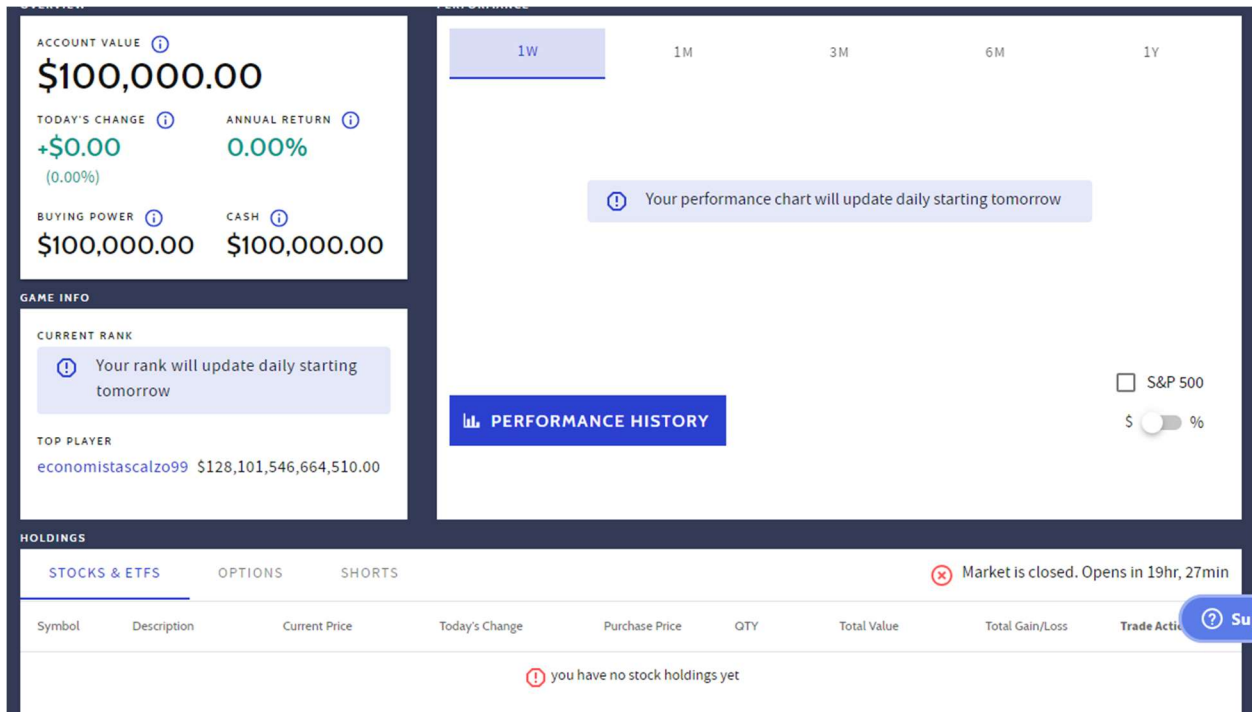


Figure 2.1 Stock Market Simulator Portfolio Page [21]

Continuing with the Trade section of the Simulator, this allows for executing trading orders. The user will select whether they were making a stock or option trade. Once a ticker symbol is specified by the investor a price quota and chart will appear to show the current price of the stock searched for. The options for the stock were buy, sell, short, and buy to cover. The investor will then choose which action they wish to do [20]. In addition to executing stocks, the trade tab

shows the users account value, buying power, cash available, whether the Market is open or closed and if closed when it opens next [22]. The trade section can be seen in Figure 2.2 below.

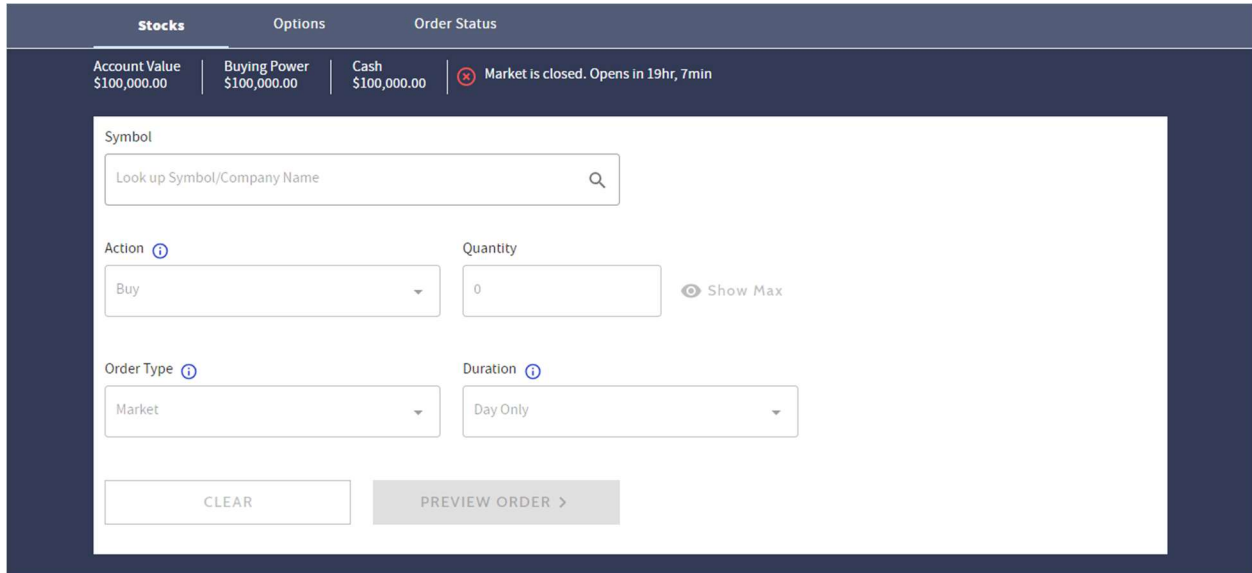


Figure 2.2 Stock Market Simulator Trade Page [22]

Next is the Research tab. In this section stocks can be researched to decide whether they were promising investment choices or not. It includes both fundamental analysis and technical analysis of stocks. The user can click on the ticker symbol of any stock they were interested in and can view a complete summary, company profile, and fundamental data on the selected stock. As well as that its stock screener allows more narrowed down search results with specific attributes [20]. The research tab can be viewed in Figures 2.3 and 2.4 below.

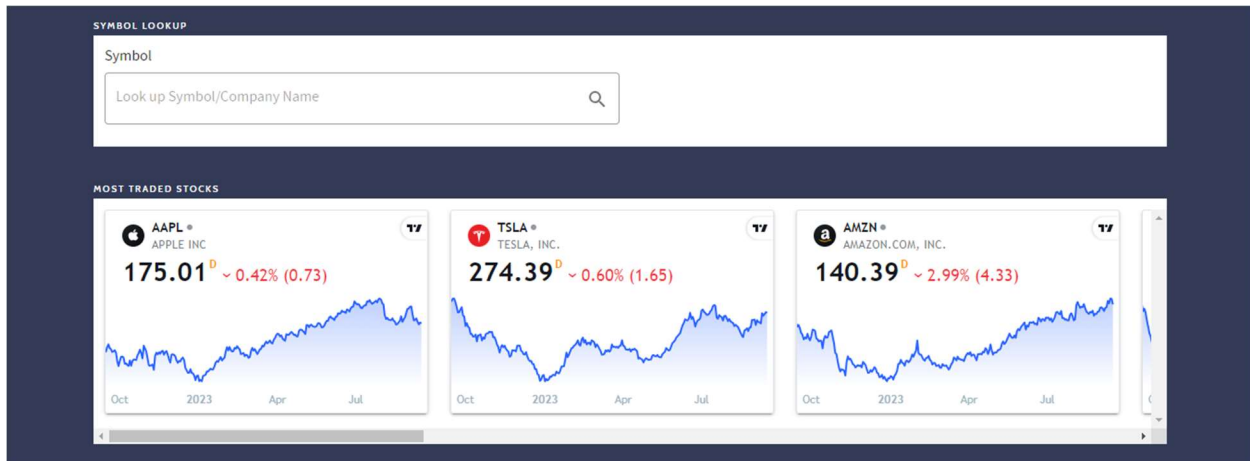


Figure 2.3 Stock Simulator Research Page [23]

The screenshot shows the 'STOCK SCREENER' interface with a table of 8003 matches. The table is sorted by 'Most capitalized' and includes a 'Filters' button. The table columns are: TICKER, PRICE, CHG %, CHG, TECHNICAL RATING, VOL, VOLUME*PRICE, MKT CAP, P/E, EPS (TTM), EMPLOYEES, and SECTOR.

TICKER	PRICE	CHG %	CHG	TECHNICAL RATING	VOL	VOLUME*PRICE	MKT CAP	P/E	EPS (TTM)	EMPLOYEES	SECTOR
AAPL ^E	175.01 USD	-0.42%	-0.73 USD	Sell	109.259M	19.121B	2.736T USD	29.41	5.98 USD	164K	Electronic Technol
MSFT ^E	330.22 USD	-2.50%	-8.48 USD	Neutral	37.68M	12.443B	2.453T USD	34.10	9.72 USD	221K	Technology Servio
GOOG ^E	138.30 USD	-0.50%	-0.69 USD	Buy	48.959M	6.771B	1.738T USD	29.26	4.75 USD	190.234K	Technology Servio
AMZN ^E	140.39 USD	-2.99%	-4.33 USD	Buy	102.908M	14.447B	1.44T USD	111.64	1.27 USD	1.541M	Retail Trade
NVDA ^E	439.00 USD	-3.69%	-16.81 USD	Sell	50.683M	22.25B	1.084T USD	106.05	4.18 USD	26.196K	Electronic Technol
TSLA ^E	274.39 USD	-0.60%	-1.65 USD	Buy	133.688M	36.684B	870.912B USD	77.85	3.87 USD	127.855K	Consumer Durable
BRK.A ^E	559499.99 USD	-0.40%	-2240.00 USD	Buy	8.343K	4.668B	803.078B USD	9.37	59732.00 USD	383K	Finance
META ^E	300.31 USD	-3.66%	-11.41 USD	Buy	28.13M	8.448B	772.746B USD	35.01	8.64 USD	86.482K	Technology Servio
LLY ^E	575.66 USD	-2.70%	-15.95 USD	Buy	5.941M	3.47B	546.471B USD	81.22	7.10 USD	39K	Health Techno...

Figure 2.4 Stock Simulator Research Page Continued [23]

Moving on, the learn section gives how-to articles and valuable information regarding the stock market to further prepare beginner investors. It includes information such as stock basics, stock research tips, managing a portfolio, and an intro to options [24].

The last section is the games tab. This was where users can compete in friendly competition against friends and other investors using the simulator to further get a feel for the actual stock market. A player's performance can be compared to other players as well [20].

2.2 Trend Investing Strategy

Trend investing is a strategy that is based on the fundamental principle that the markets tend to exhibit persistent trends over time [25]. It is rooted in the belief that past price movements often contain valuable insights into future price directions. What trend investors will do is seek to find and identify these trends, then capitalize on them by buying assets that have been on an upward trajectory and selling assets that have been experiencing a downtrend [26].

To successfully invest in trends, the key lies in recognizing and riding these trends for as long as they persist. Using indicators such as moving averages, relative strengths, and trendlines, to identify the direction and strength of trends [25]. Then a trend is established the investors will enter a long position (buying) that will rise or short positions (selling) in assets that is expected to decline [26].

Trend investing can be applied to different asset classes for our simulation we will be focusing on stocks. Trend investing is often associated with short-term trading strategies, such as day trading and swing trading, but it can also be used for long-term investing as it can be used for trend-following principles to inform their asset allocation decisions. The approach aims to capture the potential profits that can arise when market momentum is in favor of the investor's position [25]. However, it is essential to acknowledge that trend investing carries the same risk as all investment strategies, as trends can reverse abruptly, leading to potential losses if not managed carefully. Research and risk management are critical components to trend trade successfully.

2.3 Growth Investment Strategy

Growth investment strategy has a dynamic approach centered around maximizing long-term capital appreciation. It focuses on assets, with the potential for substantial growth in value.

At its core, this strategy seeks to find companies or sectors that are poised for rapid expansion and increased profitability. The principles of growth investment are meticulous company selection, a long-term investment horizon and a strong willingness to embrace the risk and volatility involved [27].

The most critical part in growth investment strategy is in the meticulous selection of companies, with prospects of robust growth. These companies will often be found in expanding sectors and will possess qualities such as new innovative products and services, while also being able to demonstrate the ability to increase earnings.

Successfully executing a growth strategy can yield numerous advantages. It can lead to increased revenue, improved profitability, expanded market share, and opportunities for cost efficiencies and economies of scale [27]. Moreover, growth often attracts talent, investors, and additional resources, which can further fuel expansion. However, growth strategies come with challenges. Rapid expansion can strain resources, and missteps can result in financial setbacks. Companies must carefully assess market opportunities, manage risks, and ensure their infrastructure and operations can support increased scale.

In conclusion, a growth strategy is a cornerstone of business success, empowering organizations to thrive and evolve in a dynamic marketplace [28]. It requires a clear vision, calculated risk-taking, and the flexibility to adapt to changing circumstances. Whether through market expansion, innovation, a well-executed growth strategy empowers businesses to reach new heights and maintain competitiveness in an ever-evolving world.

Chapter 3: Selected Companies

3.1 Growth Investing

When searching for a suitable stock for our growth investing strategy, there were a few things that need to be kept in mind. We're looking for companies that have an innovative product or service that is very much in demand currently. The companies that show an increase in revenue and earnings at a higher rate than average is also preferred. These companies tend to be heavily rewarded by the market, resulting in considerable profit for shareholders [29]. However, growth stocks decreased significantly in 2022 when the economy declined, and the interest rates increased. With the market still recovering, this has made selecting stocks that were showing promising growth a bit difficult to find [30]. Nevertheless, we have narrowed down to two companies to invest in, ACM Research, Inc. and Global-E Online.

Starting with ACM, they sell cleaning equipment to the semiconductor industry, which produces microprocessors and memory chips for computers and the like. ACM's cleaning equipment was used to maintain the integrity of said microchips. While ACM's stock declined in 2022, they were now on the increase with recent promising sales along with strong EPS gains [30]. With technology being an overall profitable industry coupled with ACM's recent potential, this seems like a promising company to invest in. ACM's stock price over the past year can be seen below in Figure 3.1 [31].



Figure 3.1 ACM Research Stock Over the Past Year [31]

Moving on to Global-E Online, they provide merchants with the necessary tools to deliver a localized shopping experience tailored to anywhere international customers might be buying from. Their provided services help with international selling and buying. With international e-commerce growing twice as fast as domestic commerce and Global-E's revenue increase by over 1000% since 2018, Global-E was looking to be a good potential investment. Although Global-E's stock did take a hit last year, their momentum through 2023 so far was reassuring [32]. Below, in Figure 3.2, was Global-E's stock over the past year [33].



Figure 3.2 Global-E Online Stock Over the Past Year [33]

3.2 Trend Investing

NVIDIA Corporation (NASDAQ: NVDA) was a strong candidate for trend investing due to its leadership in the semiconductor industry, notably in GPUs. These GPUs were central to emerging trends like AI, data centers, and autonomous vehicles [34] NVIDIA's track record of innovation and consistent growth was noteworthy, driven by its substantial investment in R&D and adaptability to evolving technologies. The company's capacity to stay ahead of the curve positions it favorably for long-term potential. Below is figure 3.3 of NVIDIA Corp's stock over the last year [35].

416.10 USD

+293.82 (240.28%) ↑ past year

Closed: Sep 22, 7:59 PM EDT • Disclaimer

After hours 415.87 -0.23 (0.055%)

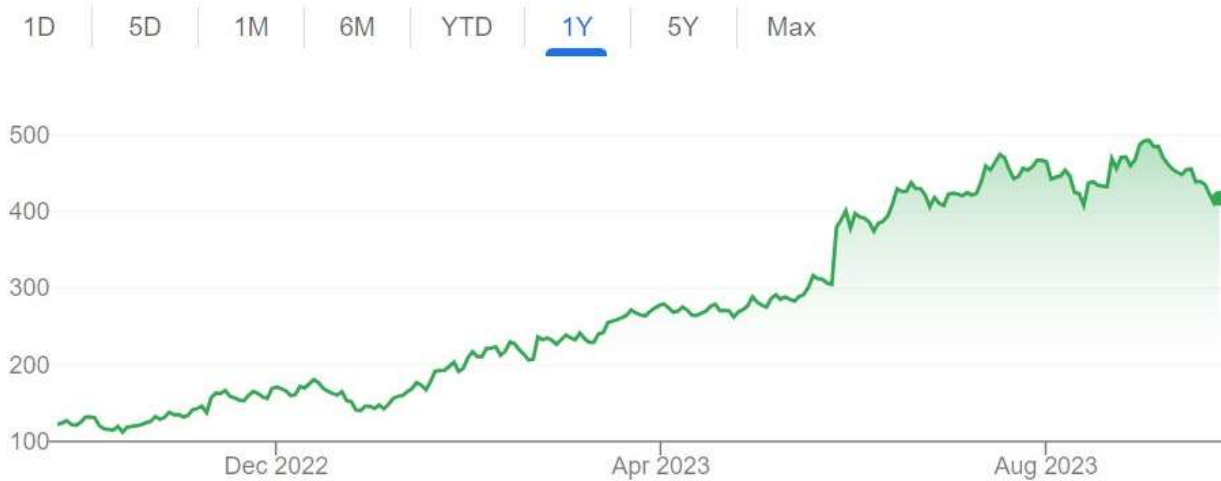


Figure 3.3 NVIDIA Corp Stock Over the Past Year [35]

The growing demand for high-performance computing, accelerated by trends like deep learning and cloud computing, offers a significant growth opportunity for NVIDIA. Their GPUs were widely utilized in these applications, making them a critical player in the ongoing tech revolution [34]. Moreover, NVIDIA's strategic acquisitions, such as ARM Holdings, broaden their market reach and reduce risk. This diversification enhances the company's long-term prospects for investors. NVIDIA's industry leadership, innovative focus, and alignment with high-growth tech trends make it an appealing choice.

Alphabet Inc. (NASDAQ: GOOG) was an appealing choice due to its alignment with several prominent trends, making it an attractive option for traders looking to capitalize on short to medium-term price movements.

First, Google's dominance in the digital advertising industry aligns with the ongoing shift of advertising budgets from traditional media to online platforms. This trend has shown resilience over the years, offering traders consistent opportunities to capitalize on Google's ad-driven revenue. Google's core search and cloud computing businesses were part of the enduring tech revolution [36]. Trend traders often look for companies at the forefront of technology, and Google's continual innovation and investments in these areas contribute to its appeal. Below is figure 3.4, showing Alphabet Inc Class A's stock over the last year [37].



Figure 3.4 Alphabet Inc Class A Stock Over the Past Year [37]

Google's subsidiary, YouTube, was a pivotal player in the video streaming industry, a sector experiencing significant growth. With the increasing demand for online video content, Alphabet's involvement positions it well for trend to profit from this upward trajectory.

Chapter 4: Growth Investing Simulation

For our growth investing simulation it's important to keep up to date on the performance of the chosen stocks and to adapt accordingly. With this strategy, the buying and selling of shares will happen throughout the simulation based on the stock's performance. In the beginning of the week ACMR and GLBE had \$2200 and \$5600 worth of stock respectfully. The shares were purchased every morning when the stock market opened.

4.1 Week One (9/25-9/29)

During week one, batches of stock were purchased throughout the week. The first batch was 3 shares in GLBE and 6 shares in ACMR, roughly \$100 of cash value in each stock. The next day the second batch was purchased, 20 shares in both stocks. Then the last batch, purchased on 9/29, was 200 shares in both stocks. These purchases and their values can be seen below in Table 4.1. Along with our transactions table we have an Investment Status table. This summarizes the status of our investments at the end of the week. It includes the total value of the stock, that value compared to last week's value and our total asset value for our portfolio. This can be found below in Table 4.2.

Table 4.1 Growth Investing Portfolio Transactions Week 1 (9/25-9/29)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
9/25/2023							\$100,000	
9/27/2023	ACMR	Buy	\$17.36	6	\$104.13	\$0.00	\$99,895.87	\$0.00
9/27/2023	GLBE	Buy	\$37.15	3	\$111.45	\$0.00	\$99,784.42	\$0.00
9/28/2023	ACMR	Buy	\$18.20	20	\$364.00	\$0.00	\$99,420.42	\$0.00
9/28/2023	GLBE	Buy	\$39.22	20	\$784.40	\$0.00	\$98,636.02	\$0.00
9/29/2023	ACMR	Buy	\$18.16	200	\$3,631.00	\$0.00	\$95,005.02	\$0.00
9/29/2023	GLBE	Buy	\$39.61	200	\$7,921.00	\$0.00	\$87,084.02	\$0.00

Table 4.2 Growth Investing Portfolio Investment Status Week 1 (9/25-9/29)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$18.16	-	\$18.11	226	\$4,091.73	(\$7.40)	
GLBE	\$39.61	-	\$39.74	223	\$8,862.02	\$45.17	
Summary	Total Cash	\$87,084.02		Total Market Value	\$12,953.75	Total Asset	\$100,037.77

At the end of the week, we ended with \$87,084.02 in total cash and \$100,037.77 in total account value. Meaning we made a net profit of \$37.77, with a total loss of \$7.41 (-0.18%) from ACMR and a total gain of \$45.17 (0.51%) from GLBE. These results can be viewed in Figure 4.1 and Figure 4.2.

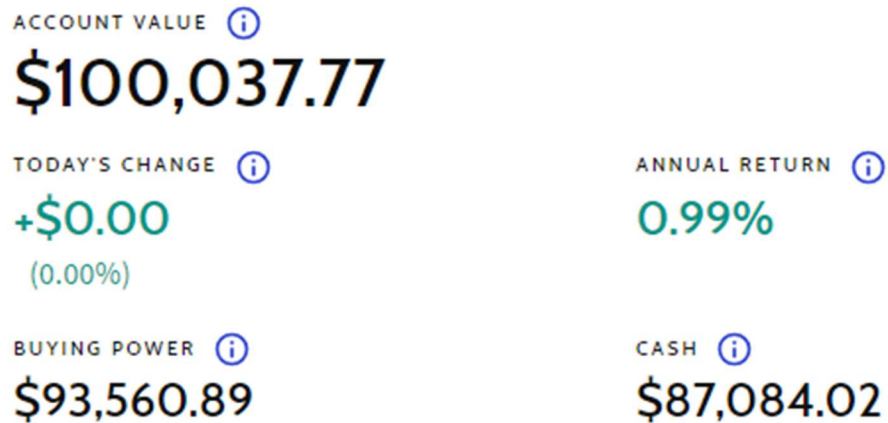


Figure 4.1 Growth Investing Account Value: End of Week One (9/25-9/29)

TOTAL VALUE	\$12,953.75	
TODAY'S CHANGE	\$0.00 (0.00%)	TOTAL GAIN/LOSS
		\$37.77 (0.29%) ↑

ACMR	\$4,091.73	-0.18% ↓
GLBE	\$8,862.02	0.51% ↑

Figure 4.2 Growth Investing Stock Information Week One (9/25-9/29)

4.2 Week Two (10/2-10/6)

Week two started out strong with both stocks, ACMR and GLBE, on an upward trend. However, they started to decline later in the week, forcing us to start selling as the week progressed. By the end of the week, we sold all shares of ACMR. ACMR will continue to be monitored to see if it was worth buying back into. The transaction history for week two can be viewed below in Table 4.3. The end of week investment status can be viewed in Table 4.4.

Table 4.3 Growth Investing Portfolio Transactions Week 2 (10/2-10/6)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/2/2023	ACMR	Sell	\$18.22	15	\$273.30	\$0.90	\$87,357.32	\$0.90
10/2/2023	GLBE	Buy	\$39.60	500	\$19,800.00	\$0.00	\$67,557.32	\$0.90
10/2/2023	ACMR	Buy	\$18.32	400	\$7,328.00	\$0.00	\$60,229.32	\$0.90
10/2/2023	GLBE	Sell	\$39.28	400	\$15,712.00	(\$128.00)	\$75,941.32	(\$127.10)
10/2/2023	ACMR	Buy	\$18.32	600	\$10,992.00	\$0.00	\$64,949.32	(\$127.10)
10/3/2023	ACMR	Buy	\$18.34	500	\$9,170.00	\$0.00	\$55,779.32	(\$127.10)
10/3/2023	GLBE	Sell	\$38.50	300	\$11,550.00	(\$330.00)	\$67,329.32	(\$457.10)
10/4/2023	ACMR	Sell	\$17.24	1000	\$17,240.00	(\$1,100.00)	\$84,569.32	(\$1,557.10)
10/4/2023	GLBE	Buy	\$37.21	1000	\$37,210.00	\$0.00	\$47,359.32	(\$1,557.10)
10/4/2023	GLBE	Buy	\$37.28	600	\$22,368.00	\$0.00	\$24,991.32	(\$1,557.10)
10/5/2023	ACMR	Sell	\$17.53	711	\$12,463.83	(\$575.91)	\$37,455.15	(\$2,133.01)
10/6/2023	GLBE	Buy	\$38.21	700	\$26,747.00	\$0.00	\$10,708.15	(\$2,133.01)

Table 4.4 Growth Investing Portfolio Investment Status Week 2 (10/2-10/6)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$18.34	\$18.11	\$18.67	0	\$0.00	(\$1,604.60)	
GLBE	\$38.21	\$39.74	\$38.21	2323	\$88,761.83	\$1,036.81	
Summary	Total Cash	\$10,708.15		Total Market Value	\$88,761.83	Total Asset	\$99,469.98

The S&P 500 was now down -0.61% since our first week. Week two ended with our Start-to-Date return being -0.53%. With the continued loss this week, new stocks may have to be sought out.

4.3 Week Three (10/9-10/13)

Starting week three we decided to invest in ACMR once again since it seemed to be increasing and it yielded positive results in the beginning. However, towards the end of the week we saw a drop in profits once again. The transaction history and profits for week three can be viewed in Table 4.5. The investment status at the end of week three can be viewed in Table 4.6.

Table 4.5 Growth Investing Portfolio Transactions Week 3 (10/9-10/13)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/9/2023	GLBE	Sell	\$36.89	1000	\$36,890.10	(\$1,320.00)	\$47,598.25	(\$3,453.01)
10/10/2023	ACMR	Buy	\$18.37	400	\$7,348.00	\$0.00	\$40,250.25	(\$3,453.01)
10/10/2023	GLBE	Sell	\$37.44	500	\$18,720.00	(\$385.00)	\$58,970.25	(\$3,838.01)
10/10/2023	ACMR	Buy	\$19.44	1000	\$19,440.00	\$0.00	\$39,530.25	(\$3,838.01)
10/10/2023	GLBE	Buy	\$38.09	500	\$19,045.00	\$0.00	\$20,485.25	(\$3,838.01)
10/11/2023	GLBE	Sell	\$36.79	700	\$25,753.00	(\$910.00)	\$46,238.25	(\$4,748.01)
10/11/2023	ACMR	Buy	\$20.14	300	\$6,042.00	\$0.00	\$40,196.25	(\$4,748.01)

Table 4.6 Growth Investing Portfolio Investment Status Week 3 (10/9-10/13)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$20.14	\$18.67	\$18.99	1700	\$32,283.00	(\$547.00)	
GLBE	\$38.09	\$38.21	\$35.27	623	\$21,973.21	(\$4,470.52)	
Summary	Total Cash	\$40,196.25		Total Market Value	\$54,256.21	Total Asset	\$94,452.46

The S&P 500 was now down -0.50% since our first week. At the end of week three we had a Start-to-Date return of -5.55%. With these results we decided to investigate a few other potential growth stocks. We were currently researching Costco's stock COST and Tidewater Inc's stock TDW.

4.4 Week Four (10/16-10/20)

During week four, we decided to invest in two new growth stocks, Costco (COST) and Tidewater Inc., as they were said to have good prospects for growth. However, they yielded less than ideal results by the end of week four. The stocks maintained a consistent downward trend resulting in little to no transactions being made in the last half of the week. The S&P 500 was now up 0.74% since our first week. Week four ended with an Start-to-Date return of -15.15%. The transactions of week four can be viewed below in Table 4.7. Week four's investment summary is below in Table 4.8.

Table 4.7 Growth Investing Portfolio Transactions Week 4 (10/16-10/20)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/16/2023	GLBE	Sell	\$34.92	300	\$10,476.00	(\$951.00)	\$50,675.25	(\$5,699.01)
10/16/2023	ACMR	Sell	\$18.96	1000	\$18,960.00	(\$1,180.00)	\$69,635.25	(\$6,879.01)
10/16/2023	TDW	Buy	\$69.43	500	\$34,715.00	\$0.00	\$34,920.25	(\$6,879.01)
10/16/2023	COST	Buy	\$569.69	50	\$28,484.50	\$0.00	\$6,435.75	(\$6,879.01)
10/16/2023	TDW	Sell	\$67.97	300	\$20,391.00	(\$438.00)	\$26,826.75	(\$7,317.01)
10/16/2023	GLBE	Buy	\$36.09	400	\$14,434.00	\$0.00	\$12,392.75	(\$7,317.01)
10/18/2023	GLBE	Sell	\$35.53	400	\$14,212.00	(\$224.00)	\$26,604.75	(\$7,541.01)
10/18/2023	COST	Buy	\$573.92	50	\$28,695.75	\$0.00	(\$2,094.01)	(\$7,541.01)

Table 4.8 Growth Investing Portfolio Investment Status Week 4 (10/16-10/20)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$20.14	\$18.99	\$17.90	700	\$12,530.00	(\$793.00)	
COST	\$573.92	-	\$553.05	100	\$55,305.00	(\$1,875.25)	
GLBE	\$36.09	\$35.27	\$35.00	323	\$11,305.00	(\$414.21)	
TDW	\$69.43	-	\$70.43	200	\$14,086.00	(\$238.00)	
Summary	Total Cash	(\$2,094.01)		Total Market Value	\$93,226.00	Total Asset	\$84,849.96

4.5 Week Five (10/23-10/27)

Week five continued the downward trend that we saw previously in week four. Almost every single day resulted in money loss. With these outcomes in mind, we decided to sell about half of every stock we invested in for growth investing. The transaction history for week five is presented in Table 4.9. This week's investment history can be found below in Table 4.10.

Table 4.9 Growth Investing Portfolio Transactions Week 5 (10/23-10/27)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/23/2023	COST	Sell	\$554.14	50	\$27,707.00	(\$989.00)	\$25,613.00	(\$8,530.01)
10/24/2023	GLBE	Sell	\$34.95	161	\$5,626.95	(\$183.54)	\$31,239.95	(\$8,713.55)
10/27/2023	ACMR	Sell	\$17.29	500	\$8,645.00	(\$1,425.00)	\$39,884.95	(\$10,138.55)
10/27/2023	COST	Sell	\$547.60	25	\$13,690.00	(\$658.00)	\$53,574.95	(\$10,796.55)
10/27/2023	GLBE	Sell	\$33.32	81	\$2,698.92	(\$224.37)	\$56,273.87	(\$11,020.92)
10/27/2023	TDW	Sell	\$68.50	100	\$6,850.00	(\$93.00)	\$63,123.87	(\$11,113.92)

Table 4.10 Growth Investing Portfolio Investment Status Week 5 (10/23-10/27)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$20.14	\$17.90	\$17.29	200	\$3,458.00	(\$427.00)	
COST	\$573.92	\$553.05	\$547.60	25	\$13,690.00	(\$218.00)	
GLBE	\$36.09	\$35.00	\$33.32	81	\$2,698.92	(\$280.21)	
TDW	\$69.43	\$70.43	\$68.50	100	\$6,850.00	(\$386.00)	
Summary	Total Cash	\$63,123.87		Total Market Value	\$26,696.92	Total Asset	\$89,820.79

The S&P 500 was now down -2.32% since our first week. Week five closed with an Start-to-Date return of -10.18%. There was a high likelihood that we will be pulling out of all the stocks come week six due to the lack of profits being made.

4.6 Week Six (10/30-11/3)

During week six we saw a rise in stocks compared to week five. Out of all of them it seems that the stock GLBE had the most consistent growth this week. Due to this, we were planning on buying a more substantial number of shares in GLBE, as we sold most of our shares last week. As for the other stocks, we were planning on leaving them where they were now, at least for the beginning of week seven. They haven't shown as much growth as we would like. The S&P 500 was now down -3.97% since our first week. The end of week six yielded an Start-to-Date return of -9.56%. Transaction history for week six is in Table 4.11. Investment status for week six is in Table 4.12.

Table 4.11 Growth Investing Portfolio Transactions Week 6 (10/30-11/3)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/31/2023	ACMR	Sell	\$13.23	150	\$1,983.75	(\$1,036.50)	\$65,107.62	(\$12,150.42)
10/31/2023	COST	Buy	\$552.39	25	\$13,809.75	\$0.00	\$51,297.97	(\$12,150.42)
10/31/2023	GLBE	Buy	\$34.20	100	\$3,420.00	\$0.00	\$47,877.87	(\$12,150.42)

Table 4.12 Growth Investing Portfolio Investment Status Week 6 (10/30-11/3)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$20.14	\$17.29	\$15.11	50	\$755.50	(\$718.75)	
COST	\$552.39	\$547.60	\$561.12	50	\$28,056.00	\$556.25	
GLBE	\$34.20	\$33.32	\$37.08	181	\$6,711.48	\$592.56	
TDW	\$69.43	\$68.50	\$70.39	100	\$7,039.00	\$189.00	
Summary	Total Cash	\$47,877.87		Total Market Value	\$42,561.98	Total Asset	\$90,439.85

4.7 Week Seven (11/6-11/10)

During week seven, there was no activity in terms of transactions. The stocks have continued to decrease in price making it difficult to find the right time to sell. The S&P 500 was now up 1.24% since our first week. Week seven ended with an Start-to-Date return of -10.01%. Starting week eight we were planning on sell all our current stock if we see any rise in prices. The investment status can be viewed below in Table 4.13.

Table 4.13 Growth Investing Portfolio Investment Status Week 7 (11/6-11/10)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$20.14	\$15.11	\$17.03	50	\$851.50	\$96.00	
COST	\$552.39	\$561.12	\$577.12	50	\$28,856.00	\$800.00	
GLBE	\$34.20	\$37.08	\$35.18	181	\$6,367.58	(\$343.90)	
TDW	\$69.43	\$70.39	\$60.35	100	\$6,035.00	(\$1,004.00)	
Summary	Total Cash	\$47,877.87		Total Market Value	\$42,110.08	Total Asset	\$89,987.95

4.8 Week Eight (11/13-11/17)

For week eight, very little trading was done. Most of the out stocks consistently went down throughout the week. However, we saw an increase in Costco's stock, COST, and were able to sell our shares for about a \$2,000 profit compared to when we bought them. We currently have less shares than we would like to have in our remaining investments, GLBE and TDW, however we were going to wait for signs of the stocks peaking before we buy more. The S&P 500 was now up 2.23% since our first week. Week eight ended with a total asset value of \$89,858.62 and an Start-to-Date return of -10.14%. For next week we were planning to start researching some other stocks that we could possibly buy into to increase our investment level.

Table 4.14 Growth Investing Portfolio Transactions Week 8 (11/13-11/17)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
11/13/2023	ACMR	Sell	\$16.86	50	\$843.13	(\$164.00)	\$48,721.00	(\$12,314.42)
11/15/2023	COST	Sell	\$596.73	50	\$29,836.50	\$2,217.00	\$78,557.50	(\$10,097.42)

Table 4.15 Growth Investing Portfolio Investment Status Week 8 (11/13-11/17)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
ACMR	\$20.14	\$17.03	\$17.68	0	\$0.00	(\$96.00)	
COST	\$552.39	\$577.12	\$577.15	0	\$0.00	(\$800.00)	
GLBE	\$34.20	\$35.18	\$30.52	181	\$5,524.12	(\$843.46)	
TDW	\$69.43	\$60.35	\$57.77	100	\$5,777.00	(\$258.00)	
Summary	Total Cash	\$78,557.50		Total Market Value	\$11,301.12	Total Asset	\$89,858.62

4.9 Week Nine (11/20-11/24)

We chose to buy a majority of our shares in COST and also buy shares in AAPL. The S&P 500 was now up 4.66% since our first week. Our Start-to-Date return at the end of week was -3.61% and our total asset this week was \$96,393.55. The transaction history for week ten is below in Table 5.16. Investment status for week nine is in Table 5.17.

Table 4.16 Growth Investing Portfolio Transactions Week 9 (11/20-11/24)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
11/21/2023	COST	Buy	\$579.75	100	\$57,975.00	\$0.00	\$20,582.50	(\$10,097.42)
11/21/2023	AAPL	Buy	\$190.92	50	\$9,546.05	\$0.00	\$11,036.45	(\$10,097.42)

Table 4.17 Growth Investing Portfolio Investment Status Week 9 (11/20-11/24)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
COST	\$579.75	\$577.15	\$591.36	100	\$59,136.00	\$1,161.00	
AAPL	\$190.92	\$189.69	\$189.97	50	\$9,498.50	(\$47.55)	
GLBE	\$34.20	\$30.52	\$31.60	181	\$5,719.60	\$195.48	
TDW	\$69.43	\$57.77	\$58.13	100	\$5,813.00	\$36.00	
AMCR	\$20.14	\$17.68	\$17.30	300	\$5,190.00	(\$6,111.12)	
Summary	Total Cash	\$11,036.45		Total Market Value	\$26,221.10	Total Asset	\$96,393.55

4.10 Week Ten (11/27-12/1)

We chose to sell our stocks in COST to gain a profit of \$1,353. The S&P 500 was now up 5.67% since our first week. Our Start-to-Date return at the end of week was -2.23% and our total asset this week was \$97,769.57. The transaction history for week ten is below in Table 4.18. Investment status for week ten is in Table 4.19.

Table 4.18 Growth Investing Portfolio Transactions Week 10 (11/27-12/1)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
12/1/2023	COST	Sell	\$593.28	100	\$59,328.00	\$1,353.00	\$70,364.45	(\$8,744.42)

Table 4.19 Growth Investing Portfolio Investment Status Week 10 (11/27-12/1)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
COST	\$579.75	\$591.36	\$596.25	0	\$0.00	(\$59,328.00)	
AAPL	\$190.92	\$187.97	\$191.24	50	\$9,562.00	\$9,562.00	
GLBE	\$34.20	\$31.60	\$36.52	181	\$6,610.12	\$890.52	
TDW	\$69.43	\$58.13	\$61.75	100	\$6,175.00	\$362.00	
AMCR	\$20.14	\$17.30	\$16.86	300	\$5,058.00	(\$132.00)	
Summary	Total Cash	\$70,364.45		Total Market Value	\$27,405.12	Total Asset	\$97,769.57

4.11 Week Eleven (12/4-12/8)

We chose not to trade any of our assets this week resulting in a profit of \$0. The S&P 500 was now up 5.89% since our first week. Our Start-to-Date return at the end of week was -2.23% and our total asset this week was \$97,010.10. Investment status for week eleven is in Table 4.20.

Table 4.20 Growth Investing Portfolio Investment Status Week 11 (12/4-12/8)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AAPL	\$190.92	\$191.24	\$195.71	50	\$9,785.50	\$223.50	
GLBE	\$34.20	\$36.52	\$34.15	181	\$6,181.15	(\$428.97)	
TDW	\$69.43	\$61.75	\$58.79	100	\$5,879.00	(\$296.00)	
AMCR	\$20.14	\$16.86	\$16.00	300	\$4,800.00	(\$258.00)	
Summary	Total Cash	\$70,364.45		Total Market Value	\$26,645.65	Total Asset	\$97,010.10

4.12 Week Twelve (12/11-12/15)

During week twelve we decided to hold all our current shares instead of selling. We saw a good amount of positive unrealized gain/loss, making our asset value at the end of the week total \$99,082.75. The S&P 500 was now up 9.09% since our first week. Our Start-to-Date return at the end of week was -0.92%. By the end of the week all our stocks had promising profit potential. Our investment status for week twelve can be viewed below in Table 4.21.

Table 4.21 Growth Investing Portfolio Investment Status Week 12 (12/11-12/15)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AAPL	\$190.92	\$195.71	\$197.58	50	\$9,879.00	\$93.50	
GLBE	\$34.20	\$34.15	\$39.30	181	\$7,113.30	\$932.15	
TDW	\$69.43	\$58.79	\$63.56	100	\$6,356.00	\$477.00	
ACMR	\$20.14	\$16.00	\$17.90	300	\$5,370.00	\$570.00	
Summary	Total Cash	\$70,364.45		Total Market Value	\$28,718.30	Total Asset	\$99,082.75

4.13 Week Thirteen (12/18-12/22)

Week thirteen saw more growth in the value of our investments. We decided not to sell yet as to wait for the peaks of our stocks. Our total asset value this week was \$99,949.92. The S&P 500 was now up 10.10% since our first week. Our Start-to-Date return at the end of week was -0.05%. The investment status for week thirteen is in Table 4.22.

Table 4.22 Growth Investing Portfolio Investment Status Week 13 (12/18-12/22)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AAPL	\$190.92	\$197.58	\$193.60	50	\$9,680.00	(\$199.00)	
GLBE	\$34.20	\$39.30	\$39.87	181	\$7,216.47	\$103.17	
TDW	\$69.43	\$63.56	\$71.30	100	\$7,130.00	\$774.00	
ACMR	\$20.14	\$17.90	\$18.53	300	\$5,559.00	\$189.00	
Summary	Total Cash	\$70,364.45		Total Market Value	\$29,585.47	Total Asset	\$99,949.92

4.14 Week Fourteen (12/25-12/29)

Our stock value continued to rise in week fourteen. A few stocks saw negative unrealized gain/loss; however, our assets still grew overall. Week fourteen saw a total asset value of \$100,240.98. The S&P 500 was now up 10.48% since our first week. Our Start-to-Date return at the end of week was 0.24%. Week fourteen's investment status is below in Table 4.23.

Table 4.23 Growth Investing Portfolio Investment Status Week 14 (12/25-12/29)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AAPL	\$190.92	\$193.60	\$192.53	50	\$9,626.50	(\$53.50)	
GLBE	\$34.20	\$39.87	\$39.63	181	\$7,173.03	(\$43.44)	
TDW	\$69.43	\$71.30	\$72.12	100	\$7,212.00	\$82.00	
ACMR	\$20.14	\$18.53	\$19.55	300	\$5,865.00	\$306.00	
Summary	Total Cash	\$70,364.45		Total Market Value	\$29,876.53	Total Asset	\$100,240.98

4.15 Week Fifteen (1/1-1/5)

During week fifteen there was an unexpected dip in our stock value resulting in a majority negative unrealized gain/loss. Due to this dip, we ended up not selling when we were planning to. This week's total asset value decreased to \$98,215.80 compared to last week. The S&P 500 was now up 8.77% since our first week. Our Start-to-Date return at the end of week was -1.80%. The investment status for week fifteen is below in Table 4.24.

Table 4.24 Growth Investing Portfolio Investment Status Week 15 (1/1-1/5)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AAPL	\$190.92	\$192.53	\$181.20	50	\$9,060.00	(\$566.50)	
GLBE	\$34.20	\$39.63	\$37.35	181	\$6,760.35	(\$412.68)	
TDW	\$69.43	\$72.12	\$69.43	100	\$6,943.00	(\$269.00)	
ACMR	\$20.14	\$19.55	\$16.96	300	\$5,088.00	(\$777.00)	
Summary	Total Cash	\$70,364.45		Total Market Value	\$27,851.35	Total Asset	\$98,215.80

4.16 Week Sixteen (1/8-1/12)

Week sixteen started off with us selling all our shares in ACMR, GLBE, and TDW. We got a total of \$708.33 in profit from those shares. We decided to buy into the stock Toronto Dominion Bank, TD, due to the potential peak we noticed. We bought 300 shares in TD. We also ended up buying 700 shares in TDW later in the week. We saw a dip in stock value in the middle of the week that continued to the end of the week. The total asset value at the end of the week dropped to \$93,053.66. The S&P 500 was now up 10.80% since our first week. Our Start-to-Date return at the end of week was -7.19%. The transaction history, Table 4.25, and the investment status, Table 4.26, can be found below.

Table 4.25 Growth Investing Portfolio Transactions Week 16 (1/8-1/12)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
1/2/2024	ACMR	Sell	\$19.01	300	\$5,703.00	(\$339.00)	\$76,067.45	(\$9,083.42)
1/2/2024	GLBE	Sell	\$39.13	181	\$7,082.26	\$892.33	\$83,149.71	(\$8,191.09)
1/2/2024	TDW	Sell	\$70.98	100	\$7,097.50	\$155.00	\$90,247.21	(\$8,036.09)
1/10/2024	TD	Buy	\$61.90	300	\$18,570.00	\$0.00	\$71,677.21	(\$8,036.09)
1/10/2024	TDW	Buy	\$66.50	700	\$46,550.00	\$0.00	\$19,752.66	(\$8,036.09)

Table 4.26 Growth Investing Portfolio Investment Status Week 16 (1/1-1/5)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AAPL	\$190.92	\$181.20	\$185.92	50	\$9,296.00	\$236.00	
TD	\$61.90	\$64.46	\$60.05	300	\$18,015.00	\$18,015.00	
TDW	\$66.50	\$69.43	\$65.70	700	\$45,990.00	\$39,047.00	
Summary	Total Cash	\$19,752.66		Total Market Value	\$73,301.00	Total Asset	\$93,053.66

4.17 Summary

By the end of the simulation the growth investing method did not yield great results. We started with \$100,000 of total assets and we ended with \$93,053.66 in total assets. Our Start-to-Date return was -7.19%. We lost a total of \$6,946.

Chapter 5: Trend Investing Simulation

5.1 Week One (9/25-9/29)

During the first week, a single batch of each stock was purchased. The batches for both stocks GOOGL and NVDA, 100 shares each. GOOGL was about \$132 per share and NVDA was about \$432 per share. NVDA stock's current price was \$434 so for each stock there was about a \$2 increase this resulted in a total gain of \$212 for our NVIDIA Corp investment. GOOGL current stock price was \$130 from our initial purchased price it has loss \$2 in value. This turns into a total loss of \$212. Our total for GOOGL stock was now \$13,086. The total value of our NVDA shares was now \$43,499. The results can be seen in Figure 5.1. The total value of our trending investing account has increased by \$2 to now be \$100,002. shown in Figure 5.2. Transaction history for week one is in Table 5.1. Investment status for week one is in Table 5.2.

Symbol	Description	Current Price	Today's Change	Purchase Price	QTY	Total Value	Total Gain/Loss
GOOGL	Alphabet Inc - Ordinary Shares - Class A	\$130.86	\$0.00 (0.00%) ↓	\$132.96	100	\$13,086.00	-\$210.00 (-1.58%) ↓
NVDA	NVIDIA Corp	\$434.99	\$0.00 (0.00%) ↓	\$432.87	100	\$43,499.00	\$212.00 (0.49%) ↑

Figure 5.1 Trending Investing Stock Information: End of Week One (9/25-9/29)

ACCOUNT VALUE ⓘ	\$100,002.00
TODAY'S CHANGE ⓘ	+\$0.00 (0.00%)
ANNUAL RETURN ⓘ	0.24%
BUYING POWER ⓘ	\$71,709.50
CASH ⓘ	\$43,417.00

Figure 5.2 Trending Investing Account Value: End of Week One (9/25-9/29)

Table 5.1 Trend Investing Portfolio Transactions Week 1 (9/25-9/29)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
9/28/2023	-	-	-	-	-	-	\$100,000.00	\$0
9/28/2023	NVDA	Buy	\$432.87	100	\$43,287.00	\$0	\$56,713.00	\$0
9/28/2023	GOOGL	Buy	\$132.96	100	\$13,296.00	\$0	\$43,417.00	\$0

Table 5.2 Trend Investing Portfolio Investment Status Week 1 (9/25-9/29)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$432.87		\$434.99	100	\$43,499.00	\$212.00	
GOOGL	\$132.96		\$130.86	100	\$13,086.00	(\$210.00)	
Summary	Total Cash	\$43,417.00		Total Market Value	\$56,585.00	Total Asset	\$100,002.00

5.2 Week Two (10/2-10/6)

Week two had started with both NVDA and GOOGL, on an upward trend, and they seem to be continuing it for now. We kept investing in both stocks as they seem to be performing very exceptionally. The S&P 500 was now down -0.61% since our first week. Our Start-to-Date return at the end of week was 4.25% and our total asset this week was \$104,245.02. The transaction history for week two can be viewed below in Table 5.3. Investment status for week two is in Table 5.4.

Table 5.3 Trending Investing Portfolio Transactions Week 2 (10/2-10/6)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
-	-	-	-	-	-	\$0	\$43,417.00	\$0
10/2/2023	NVDA	Buy	\$440.30	40	\$17,612.00	\$0	\$25,805.00	\$0
10/2/2023	GOOGL	Sell	\$131.21	20	\$2,624.20	(\$35.00)	\$28,429.20	(\$35.00)
10/2/2023	GOOGL	Buy	\$133.43	40	\$5,337.38	\$0	\$23,091.82	(\$35.00)
10/3/2023	NVDA	Buy	\$448.76	20	\$8,975.10	\$0	\$14,116.72	(\$35.00)
10/3/2023	GOOGL	Buy	\$133.46	50	\$6,673.00	\$0	\$7,443.72	(\$35.00)
10/4/2023	NVDA	Buy	\$436.34	5	\$2,181.70	\$0	\$5,262.02	(\$35.00)
10/6/2023	GOOGL	Buy	\$137.54	40	\$5,501.60	\$0	(\$239.58)	(\$35.00)
10/6/2023	NVDA	Buy	\$454.77	30	\$13,643.10	\$0	(\$13,882.68)	(\$35.00)

Table 5.4 Trending Investing Portfolio Investment Status Week 2 (10/2-10/6)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$454.77	\$434.99	\$457.62	195	\$89,235.90	\$3,325.00	
GOOGL	\$137.54	\$130.86	\$137.58	210	\$28,891.80	\$918.02	
Summary	Total Cash	(\$13,882.68)		Total Market Value	\$118,127.70	Total Asset	\$104,245.02

There seems to be a consistent spike during the start of the week so we will wait until Wednesday to start trading for next week.

5.3 Week Three (10/9-10/13)

Week Three had NVDA and GOOGL peaked during the mid-week where I first purchased for this week. They then went back down in pricing, both being where the stocks were at the beginning of the week. We kept investing in both stocks but our shares in GOOGL might have to be sold and replaced with another share next week. The S&P 500 was now down -0.50% since our first week. Our Start-to-Date return at the end of week was 3.06% and our total asset this week was \$103,058.47. The transaction history for week three can be viewed below in Table 5.5. Investment status for week three is in Table 5.6.

Table 5.5 Trending Investing Portfolio Transactions Week 3 (10/9-10/13)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/11/2023	NVDA	Buy	\$461.96	20	\$9,239.20	\$0.00	(\$23,121.88)	(\$35.00)
10/11/2023	GOOGL	Buy	\$139.93	100	\$13,992.50	\$0.00	(\$37,114.38)	(\$35.00)
10/13/2023	NDVA	Buy	\$469.60	10	\$4,696.00	\$0.00	(\$41,810.38)	(\$35.00)

Table 5.6 Trending Investing Portfolio Investment Status Week 3 (10/9-10/13)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$469.60	\$457.62	\$454.61	225	\$102,287.25	(\$883.85)	
GOOGL	\$139.93	\$137.58	\$137.36	310	\$42,581.60	(\$302.70)	
Summary	Total Cash	(\$41,810.38)		Total Market Value	\$144,868.85	Total Asset	\$103,058.47

Week three concluded with our account total being \$103,058.47. We may buy into shares with AMZN or UNH.

5.4 Week Four (10/16-10/20)

Week Four NVDA and GOOGL back down in pricing. We sold all of our shares in GOOGL. We also bought shares in UNH as they seemed to be doing well. The S&P 500 was now up 0.74% since our first week. Our Start-to-Date return at the end of week was -6.58% and our total asset this week was \$93,417.70. The transaction history for week four can be viewed below in Table 5.7. Investment status for week four is in Table 5.8.

Table 5.7 Trending Investing Portfolio Transactions Week 4 (10/16-10/20)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/16/2023	UNH	Buy	\$540.65	10	\$5,406.52	\$0	(\$47,216.90)	(\$35.00)
10/20/2023	GOOGL	Sell	\$136.29	310	\$42,248.35	(\$1,128.40)	(\$4,968.55)	(\$1,163.40)
10/20/2023	NFLX	Buy	\$401.20	20	\$8,024.00	\$0	(\$12,992.55)	(\$1,163.40)

Table 5.8 Trending Investing Portfolio Investment Status Week 4 (10/16-10/20)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$469.60	\$454.61	\$413.87	225	\$93,120.75	(\$9,166.50)	
UNH	\$540.65		\$527.03	10	\$5,270.30	(\$136.22)	
NFLX	\$401.20		\$400.96	20	\$8,019.20	(\$4.80)	
Summary	Total Cash	(\$12,992.55)		Total Market Value	\$106,410.25	Total Asset	\$93,417.70

Week four concluded with our account total being \$93,417.70. We will investigate selling our stocks next week.

5.5 Week Five (10/23-10/27)

In Week Five, With the stock we have losing us money we decided to sell. We sold all of our shares in NFLX, NVDA, and UNH. The S&P 500 was now down -2.32% since our first week. Our Start-to-Date return at the end of week was -8.45% and our total asset this week was \$91,547.95. The transaction history for week five can be viewed below in Table 5.9. Investment status for week five is in Table 5.10. We will wait until the following week to purchase more stocks.

Table 5.9 Trending Investing Portfolio Transactions Week 5 (10/23-10/27)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/26/2023	NFLX	Sell	\$404.74	20	\$8,094.80	\$70.80	(\$4,897.75)	(\$1,092.60)
10/26/2023	NVDA	Sell	\$405.14	225	\$91,156.50	(\$14,503.50)	\$86,258.75	(\$15,596.10)
10/26/2023	UNH	Sell	\$528.92	10	\$5,289.20	(\$117.30)	\$91,547.95	(\$15,713.40)

Table 5.10 Trending Investing Portfolio Transactions Week 5 (10/23-10/27)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
Summary	Total Cash	\$91,547.95		Total Market Value	\$0.00	Total Asset	\$91,547.95

5.6 Week Six (10/30-11/3)

For the beginning of week six we started with no stocks and waited to see if any trends were emerging for the week. On 10/31/2023 we purchased shares in Amazon and Microsoft as both of their stock prices seem to be going on an upward. Both stocks were in an upward trend for the remainder of the week. During 11/3/2023 we investigated NVIDIA again and decided to put a good amount of our remaining total cash into them. The S&P 500 was now down -3.97% since our first week. Our Start-to-Date return at the end of week was -5.06% and our total asset value this week was \$94,945.16. For next week we will be looking into companies such as NVIDIA's competitor AMD. The transaction history for week six is below in Table 5.11. Investment status for week six is in Table 5.12.

Table 5.11 Trending Investing Portfolio Transactions Week 6 (10/30-11/3)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
10/31/2023	AMZN	Buy	\$132.75	300	\$39,825.00	\$0	\$51,722.95	(\$15,713.40)
10/31/2023	MSFT	Buy	\$338.85	100	\$33,885.00	\$0	\$17,837.95	(\$15,713.40)
11/3/2023	NVDA	Buy	\$443.87	40	\$17,754.80	\$0	\$83.15	(\$15,713.40)

Table 5.12 Trending Investing Portfolio Investment Status Week 6 (10/30-11/3)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$443.87		\$450.05	40	\$18,002.00	\$247.20	
MSFT	\$338.85		\$352.80	100	\$35,280.00	\$1,395.00	
AMZN	\$132.75		\$138.60	300	\$41,580.00	\$1,755.00	
Summary	Total Cash	\$83.15		Total Market Value	\$94,862.00	Total Asset	\$94,945.15

5.7 Week Seven (11/6-11/10)

For the beginning of week seven we kept hold of all of our shares. On 11/8/2023 we sold our shares in Amazon, while the company's value has been increasing we decided that NVDA would be a better investment at the time. So we used the proceeds from the AMZN sell to fund our NVDA purchase. The S&P 500 was now up 1.24% since our first week. Our Start-to-Date return at the end of week was 0.64% and our total asset this week was \$100,640.50. The transaction history for week seven is below in Table 5.13. Investment status for week seven is in Table 5.14.

Table 5.13 Trending Investing Portfolio Transactions Week 7 (11/6-11/10)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
11/8/2023	AMZN	Sell	\$141.74	300	\$42,522.00	\$2,697.00	\$42,605.15	(\$13,016.40)
11/8/2023	NVDA	Buy	\$464.08	90	\$41,767.15	\$0	\$838.00	(\$13,016.40)

Table 5.14 Trending Investing Portfolio Investment Status Week 7 (11/6-11/10)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$464.08	\$450.05	\$483.35	130	\$62,835.50	\$3,313.55	
MSFT	\$338.85	\$352.80	\$369.67	100	\$36,967.00	\$3,082.00	
Summary	Total Cash	\$838.00		Total Market Value	\$99,802.50	Total Asset	\$100,640.50

5.8 Week Eight (11/13-11/17)

During mid-week we decided to sell our NVDA investment to turn some profit. This also worked in our favor as NVDA started to lower in value in the following days as it seems to reach its peak during the mid part of some weeks. We will look into other stocks to invest in during the next week. The S&P 500 was now up 2.23% since our first week. Our Start-to-Date return at the end of week was 1.42% and our total asset this week was \$101,417.41. The transaction history for week eight is below in Table 5.15. Investment status for week eight is in Table 5.16.

Table 5.15 Trending Investing Portfolio Transactions Week 8 (11/13-11/17)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
11/15/2023	NVDA	Sell	\$489.19	130	\$63,594.41	\$3,264	\$64,432.41	(\$9,752.10)

Table 5.16 Trending Investing Portfolio Investment Status Week 8 (11/13-11/17)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
MSFT	\$338.85	\$369.67	\$369.85	100	\$36,985.00	\$18.00	
Summary	Total Cash	\$64,432.41		Total Market Value	\$36,985.00	Total Asset	\$101,417.41

5.9 Week Nine (11/20-11/24)

We decided not to add any more to our portfolio this week as it was a holiday week and we do not know how the market will fluctuate. The S&P 500 was now up 4.66% since our first week. Our Start-to-Date return at the end of week was -1.83% and our total asset this week was \$98,175.41. Investment status for week nine is in Table 5.17 below.

Table 5.17 Trending Investing Portfolio Investment Status Week 9 (11/20-11/24)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
MSFT	\$338.85	\$369.85	\$337.43	100	\$33,743.00	(\$3,242.00)	
Summary	Total Cash	\$64,432.41		Total Market Value	\$33,743.00	Total Asset	\$98,175.41

5.10 Week Ten (11/27-12/1)

We investigated NVIDIA again and decided to put a good amount of our remaining total cash into them, it was not the right call in hindsight, and we will be selling next week. The S&P 500 was now up 5.67% since our first week. Our Start-to-Date return at the end of week was -0.25% and our total asset this week was \$99,748.81. The transaction history for week ten is below in Table 5.18. Investment status for week ten is in Table 5.19.

Table 5.18 Trending Investing Portfolio Transactions Week 10 (11/27-12/1)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
11/27/2023	NVDA	Buy	\$484.07	130	\$62,929.10		\$1,503.31	(\$9,752.10)

Table 5.19 Trending Investing Portfolio Investment Status Week 10 (11/27-12/1)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
NVDA	\$484.07	\$477.76	\$467.65	130	\$60,794.50	(\$2,134.60)	
MSFT	\$338.85	\$337.43	\$374.51	100	\$37,451.00	\$3,708.00	
Summary	Total Cash	\$1,503.31		Total Market Value	\$98,245.50	Total Asset	\$99,748.81

5.11 Week Eleven (12/4-12/8)

We sold off all our shares in both MSFT and NVDA on Monday and then purchased AMZN, META, and TSLA. All our stocks have shown us positive unrealized gain/loss, so we may hold on to them for a while. The S&P 500 was now up 5.89% since our first week. Our Start-to-Date return at the end of week was 0.14% and our total asset this week was \$100,137.15. The transaction history for week ten is below in Table 5.20. Investment status for week ten is in Table 5.21.

Table 5.20 Trending Investing Portfolio Transactions Week 11 (12/4-12/8)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
12/4/2023	MSFT	Sell	\$366.57	100	\$36,657.00	\$2,772	\$38,160.31	(\$6,980.10)
12/4/2023	AMZN	Buy	\$144.71	344	\$49,780.24		(\$11,619.93)	(\$6,980.10)
12/4/2023	NVDA	Sell	\$460.77	130	\$59,900.10	(\$3,029)	\$48,280.17	(\$10,009.10)
12/8/2023	META	Buy	\$323.09	100	\$32,309.00		\$15,971.17	(\$10,009.10)
12/8/2023	TSLA	Buy	\$240.27	50	\$12,013.50		\$3,957.67	(\$10,009.10)

Table 5.21 Trending Investing Portfolio Investment Status Week 11 (12/4-12/8)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
AMZN	\$144.71	\$147.03	\$147.42	344	\$50,712.48	\$932.24	
META	\$323.09	\$324.82	\$332.75	100	\$33,275.00	\$966.00	
TSLA	\$240.27	\$238.83	\$243.84	50	\$12,192.00	\$178.50	
Summary	Total Cash	\$3,957.67		Total Market Value	\$96,179.48	Total Asset	\$100,137.15

5.12 Week Twelve (12/11-12/15)

We started week twelve off with shares in all our stocks. By the end of the week, we had ended up selling all our shares. We made around \$2,000 in profit from our stocks sold this week. This put us at an overall total asset value of \$100,143.37 at the end of the week. The S&P 500 was now up 9.09% since our first week. Our Start-to-Date return at the end of week was 0.14%. The transaction history for week twelve can be seen below in Table 5.22. Our investment status can be found in Table 5.23.

Table 5.22 Trending Investing Portfolio Transactions Week 12 (12/11-12/15)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
12/12/2023	TSLA	Sell	\$236.79	50	\$11,839.50	(\$174)	\$15,797.17	(\$10,183.10)
12/12/2023	AMD	Buy	\$135.48	100	\$13,548.00		\$2,249.17	(\$10,183.10)
12/14/2023	AMD	Sell	\$137.60	100	\$13,760.00	\$212	\$16,009.17	(\$9,971.10)
12/14/2023	AMZN	Sell	\$147.05	344	\$50,585.20	\$805	\$66,594.37	(\$9,166.14)
12/14/2023	META	Sell	\$333.09	100	\$33,309.00	\$1,000	\$99,903.37	(\$8,166.14)
12/14/2023	HD	Buy	\$351.21	200	\$70,242.00		\$29,661.37	(\$8,166.14)
12/14/2023	HD	Sell	\$352.41	200	\$70,482.00	\$240	\$100,143.37	(\$7,926.14)

Table 5.23 Trending Investing Portfolio Investment Status Week 12 (12/11-12/15)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
Summary	Total Cash	\$100,143.37		Total Market Value	\$0.00	Total Asset	\$100,143.37

5.13 Week Thirteen (12/18-12/22)

Week thirteen did not see much activity. In the beginning of the week, we bought into META as it was showing a promising trend. We made about \$1,000 in profit this week from selling META once again. By the end of the week, we only had shares in TSLA left and will continue to hold them until they peak. This week left us with a total cash of \$24,444.87 and a total asset value of \$100,206.87. The S&P 500 was now up 10.10% since our first week. Our Start-to-Date return at the end of week was 0.21%. Below is our transaction history, Table 5.24, and our investment status, Table 5.25, for week thirteen.

Table 5.24 Trending Investing Portfolio Transactions Week 13 (12/18-12/22)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
12/19/2023	META	Buy	\$348.44	200	\$69,688.00		\$30,455.37	(\$7,926.14)
12/19/2023	META	Buy	\$345.58	50	\$17,279.00		\$13,176.37	(\$7,926.14)
12/19/2023	META	Sell	\$352.43	250	\$88,107.50	\$1,141	\$101,283.87	(\$6,785.64)
12/19/2023	TSLA	Buy	\$256.13	300	\$76,839.00		\$24,444.87	(\$6,785.64)

Table 5.25 Trending Investing Portfolio Investment Status Week 13 (12/18-12/22)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
TSLA	\$256.13	\$253.50	\$252.54	300	\$75,762.00	(\$1,077.00)	
Summary	Total Cash	\$24,444.87		Total Market Value	\$75,762.00	Total Asset	\$100,206.87

5.14 Week Fourteen (12/25-12/29)

Week fourteen did not see any transactions. We decided to just hold out TSLA shares as we did not know how the holidays would affect the state of the stock market. Our TSLA shares went down in value this week. We will continue to monitor the stock until it peaks, and we can hopefully sell. Week fourteen ended with a total asset value of \$98,988.87. The S&P 500 was now up 10.48% since our first week. Our Start-to-Date return at the end of week was -1.02%. This week's investment status can be found in Table 5.26.

Table 5.26 Trending Investing Portfolio Investment Status Week 14 (12/25-12/29)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
TSLA	\$256.13	\$252.54	\$248.48	300	\$74,544.00	(\$2,295.00)	
Summary	Total Cash	\$24,444.87		Total Market Value	\$74,544.00	Total Asset	\$98,988.87

5.15 Week Fifteen (1/1-1/5)

For week fifteen we ultimately decided to sell our shares in TSLA although we did not end up seeing a peak in the stock. After selling TSLA we investigated a new stock, Johnson & Johnson, JNJ, and decided to buy about \$100,000 worth of shares as we saw great potential for profit. By the end of the week, we had already seen a rise in unrealized gain/loss with our total asset value increasing to \$99,145.47 compared to last week. The S&P 500 was now up 8.77% since our first week. Our Start-to-Date return at the end of week was -0.86%. Week fifteen transaction history is below in Table 5.27. Investment status is below in Table 5.28.

Table 5.27 Trending Investing Portfolio Transactions Week 15 (1/1-1/5)

Date of Transaction	Symbol	Buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
1/2/2024	TSLA	Sell	\$246.05	300	\$73,815.00	(\$3,024)	\$98,259.87	(\$9,809.64)
1/2/2024	JNJ	Buy	\$159.69	615	\$98,209.35		\$50.52	(\$9,809.64)

Table 5.28 Trending Investing Portfolio Investment Status Week 15 (1/1-1/5)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
JNJ	\$159.69	\$156.74	\$161.13	615	\$99,094.95	\$885.60	
Summary	Total Cash	\$50.52		Total Market Value	\$99,094.95	Total Asset	\$99,145.47

5.16 Week Sixteen (1/8-1/12)

During week sixteen we decided to just hold on to our JNJ shares as they were showing a steady growth in our asset value. At the end of the week our total asset value was \$99,920.37. The S&P 500 was now up 10.80% since our first week. Our Start-to-Date return at the end of week was -0.08%. Our investment status can be found below in Table 5.29.

Table 5.29 Trending Investing Portfolio Investment Status Week 16 (1/8-1/12)

Symbol	Purchase Price	End of Last Week Price	End of Week Price	End of Week Shares	Market Value	Gain/Loss	Total Asset Value
JNJ	\$159.69	\$161.13	\$162.39	615	\$99,869.85	\$1,660.50	
Summary	Total Cash	\$50.52		Total Market Value	\$99,869.85	Total Asset	\$99,920.37

5.17 Summary

By the end of the simulation the trend investing method yielded almost net neutral results. We started with \$100,000 of total assets and we ended with \$99,920.37 in total assets. Our Start-to-Date return was -0.07966% . We lost a total of \$79.63.

Chapter 6: Analysis and Comparison

Chapter 6 delves into a comprehensive analysis of the investing strategies used during this 16-week simulation. growth and trend investing. Throughout this chapter, we evaluate the effectiveness of these strategies using metrics, such as total return on investment, portfolio value, and individual stock performance.

In this analysis, growth investing was centered on identifying companies with potential for long-term growth and capital appreciation, while trend investing capitalizes on persistent market trends. Furthermore, the chapter provides the possible strengths and weaknesses of growth and trend investing, offering insight for beginner investors seeking a method to fit their goals and risk tolerance.

The results of our investment methods were compared to the S&P 500 since it was a good indicator of how the stock market did. During our 16-week simulation the S&P 500 has seen an overall increase in value. Over the course of our 16-week simulation the S&P 500 saw a 9.79% increase. The market summary for the S&P 500 over the last 6 months can be found below.

S&P 500

5,026.61

↑ 11.96%

+536.89 6M

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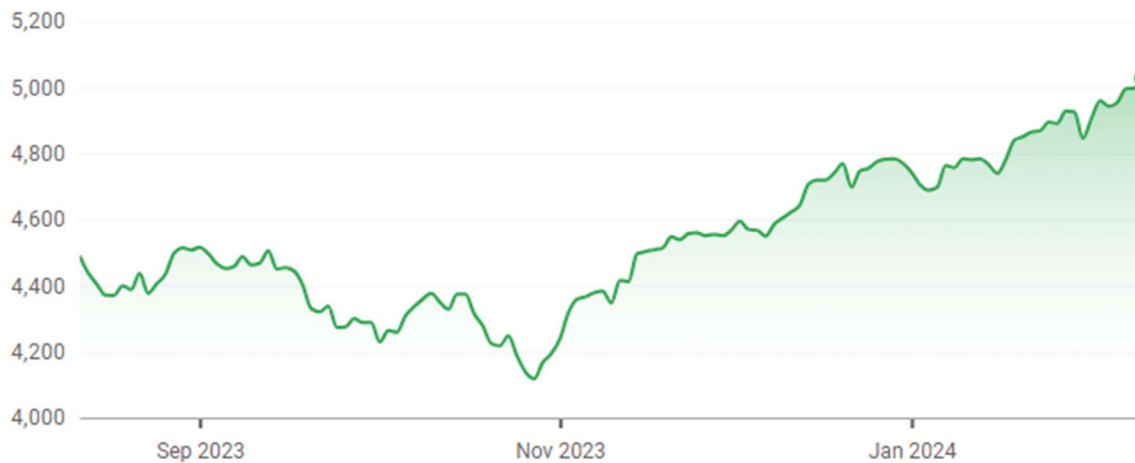


Figure 6.1 S&P 500 Market Summary (6 Months) [38]

6.2 Analysis of Growth Investing Strategy

The simulation using the growth investing strategy yielded less than satisfactory results. The only weeks where there was a profit made were week 1 and week 14. The growth investing method lost a total of \$6,946, which is equivalent to 6.94% of the total \$100,000 we started with. This result makes this method a failure. We found this method to be unreliable. It can yield great results but there were very slim chances of this method bringing profit. This method is better for an investor looking for a high risk, high reward strategy. Underneath you can see the timeline for Growth Investing in Figure 6.2.

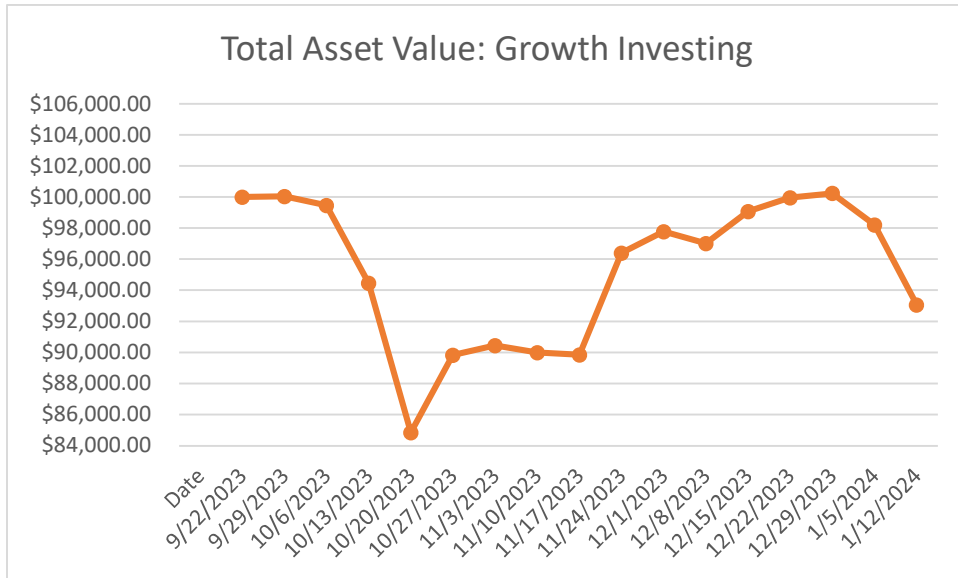


Figure 6.2 Total Asset Value: Growth Investing

6.3 Analysis of Trend Investing Strategy

The simulation using trend investing yielded much better results than growth investing. The trend investing method lost a total of \$79.63, which is equivalent to 0.07963% of the total \$100,000 we started with. This result makes this method a failure. We found this method to be decently stable. It can yield good results but without proper care the results will be slow. This method is better for an investor looking for a low risk, low reward strategy. Underneath you can see the timeline for Trend Investing in Figure 6.3.

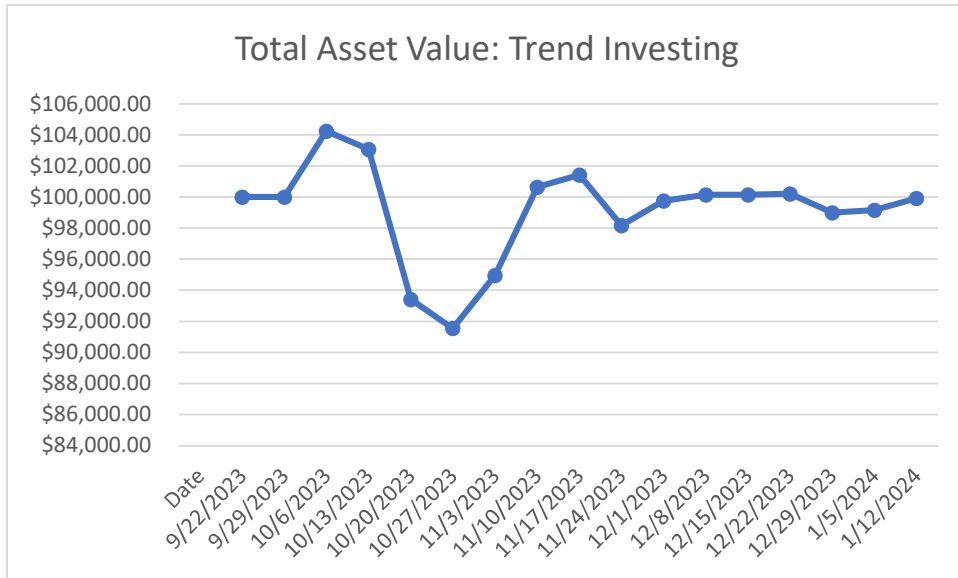


Figure 6.3 Total Asset Value: Trend Investing

6.4 Comparison Analysis of Growth & Trend Investing

Both strategies: growth and trend investing during our simulations saw negative returns as talked about in Chapter 6. Growth Investing had a start-to-end return of 93.06% meaning that 6.94% of the starting \$100,000 was lost. Trend Investing had a start-to-end return of 99.92037% meaning that 0.07963% of the starting \$100,000 was lost. Below is the comparison of both of our investment strategies in Figure 6.4.

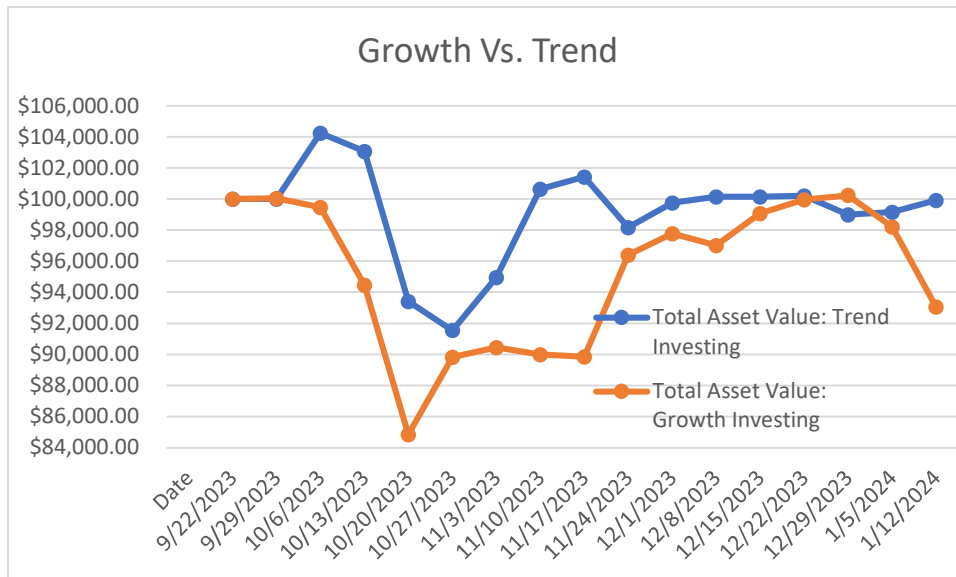


Figure 6.4 Total Asset Value: Growth Vs. Trend

As we see from Figure 6.4 both investing strategies had declined in the month of October, this also holds true for the S&P 500 during that time (Figure 6.1). A phenomenon dubbed the October effect or Mark Twain effect [39]. It refers to the psychological anticipation that the market is more at risk to crash during October, the stigma stays as events such as the Stock Market Crash of 1929, and Black Monday of 1987 happened in the month which is also known for being spooky or eerie in western cultures i.e. Halloween.

During November both of our investing strategies saw an increase in total asset value, and then leveled out in December. Both strategies were close to having similar value right until the end of December and through the start of January when Growth Investment had a significant reduction in total asset value. While Trend Investment saw a slight upwards trend, although not enough to break through its loss by the end of the simulation.

Chapter 7: Conclusion

Based on our results from Chapter 6 we have concluded that of our chosen methods trend investing was overall the most effective. While it did lose money as well, we believe, in different circumstances, this method could have been much more effective than it was. In hindsight the dip in value the stock market saw in October 2023 might have had a big part in hindering the success of this method. Despite these outside factors affecting our results we consider our goals accomplished.

Our first goal for this IQP was to get a novice grasp of actual stock market fundamentals through first completing background research of the stock markets history, our different stock market investment strategies, which companies or industries we would be looking to invest in, and of course the volatility and behavior of the stock market itself. The next goal would be to evaluate our selves throughout the simulation by analyzing the market each day and what companies we had invested in to try and determine if we need to change our current investments or to hold depending on what investment strategy we were using for the respective simulation.

This project has given us valuable insight into how the real stock market works and how rewarding financial success or how devastating financial hardship can be. We will be able to apply this knowledge to future stock market endeavors as well as give other beginner investors a starting point to begin their stock market journey.

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