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Bachelor Thesis

Netflix Stock Trading Strategy

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Thesis title

Netflix stock trading strategy

Objectives of thesis

Netflix stock trading strategy

The objective of this thesis is to check profitability of trading strategies as well as analyzing and forecasting the price movement using the historical market data of Netflix stock.

Methodology

Netflix stock trading strategy

This thesis consists of two parts, literature review and practical part. For both parts, outside sources are used. On the practical part of the thesis, three types of indicators are employed; trend, momentum and volatility along with data including open, high, low, close, Adj-close and volume from 2017 to 2022.

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60 – 80

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Bulkowski, Thomas N. Encyclopedia of chart patterns. New Jersey: John Wiley & Sons, 2005. ISBN 978-0471668268

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Schwager, Jack D. Getting started in technical analysis. New York: John Wiley & Sons, 1999. ISBN 0471295426

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Declaration

I declare that I have worked on my bachelor thesis titled "Netflix stock trading strategy" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 14.03.2023   Nathnael Mulatu

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Netflix Stock Trading Strategy

Abstract

This bachelor thesis aims to check the profitability and feasibility of trading strategies and long-term profitability by using the technical approach of analysing the historical data of NFLX, Inc. The thesis is divided into three main parts these are: methodology, literature review, and practical part. The most important part of this thesis is the methodology part which lay a foundation for processing and completing the practical part of this thesis. It includes an introduction to technical indicators and their formulas used to calculate, as well as methods for evaluating performance and results from the selected technical indicators. In addition, some important knowledge about the stock market, different types of analysis, trading, charts, price action, and money management is included. Based on all the information provided, my own process and final results are available in the practical part. To develop trading strategies, technical indicators are selected, and a loss-control system was employed. Furthermore, a different strategy without using technical indicators a "buy & hold" strategy was included for the sake of comparison. The results of these strategies show how they performed and respond along with stop loss as well as the right parameters that in turn could help determine if trading Netflix, Inc stock is profitable or not.

Keywords: Netflix, indicator, stock, technical analysis, trading strategy, buy & hold, swing and position trading

Netflix Stock Trading Strategy

Abstrakt

Cílem této bakalářské práce je ověřit ziskovost a proveditelnost obchodních strategií a dlouhodobou ziskovost pomocí technického přístupu analýzy historických dat společnosti NFLX, Inc. Práce je rozdělena do tří hlavních částí, kterými jsou: metodika, přehled literatury a praktická část. Nejdůležitější částí této práce je metodologická část, která je základem pro zpracování a dokončení praktické části této práce. Zahrnuje úvod do technických ukazatelů a vzorců, které se používají k jejich výpočtu, a také metody vyhodnocování výkonnosti a výsledků z vybraných technických ukazatelů. Dále jsou zde zahrnuty některé důležité poznatky o akciovém trhu, různých typech analýz, obchodování, grafech, price action a money managementu. Na základě všech poskytnutých informací je v praktické části k dispozici vlastní postup a konečné výsledky. K vypracování obchodních strategií jsou vybrány technické ukazatele a byl použit systém kontroly ztrát. Dále byla pro srovnání zahrnuta jiná strategie bez použití technických ukazatelů strategie "buy & hold". Výsledky těchto strategií ukazují, jak fungovaly a reagovaly spolu se stop lossem, jakož i správnými parametry, které by zase mohly pomoci určit, zda je obchodování s akciemi společnosti Netflix, Inc. ziskové, či nikoli.

Klíčová slova: Netflix, akcie, technická analýza, obchodní strategie, koupit a držet, swing a poziční obchodování

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List of Abbreviation

NYSE	New York Stock Exchange
NASDAQ	National Association of Securities Dealers Automated Quotation
MA	Moving Average
SMA	Simple Moving Average
EMA	Exponential Moving Average
MACD	Moving Average Convergence/Divergence
ATR SL	Average True Range Stop Loss
NFLX, INC	Netflix, Incorporated
IPO	Initial Public Offering
DJIA	Dow Jones Industrial Average
DJT	Dow Jones Transportation Average

1 Introduction

Since the end of the great recession in 2008 that shocked the world, the stock market has recovered incredibly. As of 2022, the global stock market worth has grown exponentially over the span of 11 years hitting a 464% growth from $25 trillion in 2009 to $116.78 trillion in this year. The two biggest stock exchange out there in the world are the New York Stock Exchange (NYSE) and the National Association of Securities Dealers Automated Quotation (NASDAQ). These two stock exchange giants hold the combined 54% of the world's stock market value making over 41 trillion in market capitalization. The next seven big global stock exchanges are Japan, China, Euronext, London, Hong Kong & Saudi & Canada. (Barry D. Moore, 2023)

Modern Trading has become more and more popular around the world over the years changing the lives of the many. But as they say, "There are two sides to every coin" it does not come without its limitation. If one entre the stock market without the knowledge and expertise, he or she might as well throw their money in to the sea. Because as volatile as the stock market could be, one could lose their money faster than they could make it.

New York Stock Exchange (NYSE)

Established in 1792 New York Stock Exchange is the largest and most popular stock exchange in the world located in lower Manhattan in New York city. It holds market capitalization of $22.77 trillion. It provides a marketplace allowing investors to buy or sell millions of company stocks or other securities in which the transactions are directly with market participants through a specialist. (Hayes A. , 2023)

National Association of Securities Dealers Automated Quotation (NASDAQ)

NASDAQ is the second largest stock exchange in the world based in New York City. It is the heart of the world's largest tech companies like Apple, Microsoft, Amazon, Tesla, Nvidia and Google. Here the market participant transactions are through dealers, and over 3700 stocks are listed with market capitalization over $16.24 trillion. Netflix (NFLX, Inc on NASDAQ exchange) has a market capital of over $140 billion. (Hayes A. , 2023)

2 Objective and Methodology

This part of the thesis contains the main objective of the thesis as well as information about the methods that are used to accomplish the practical part of the thesis.

2.1 Objective

The main objective of this thesis is to check the profitability and feasibility of trading strategies and long-term profitability by using the technical approach and analysing the historical data of Netflix stock over the course of 5 years (2018-2022). To achieve this goal different trading strategies were employed as well as a method of controlling losses was applied. A "Buy & Hold" which is a strategy without using technical indicator is also used in this thesis for the sake of comparison to check how effective and profitable the trading strategies are to that of holding Netflix stock position for a long period of time. The results will help to have some understanding on how well the trading strategies performed and how they respond to additional parameter as well as equity curve fluctuation in the given 5 years.

2.2 Methodology

In this thesis, indicators that are employed are moving averages including simple moving average (SMA) and exponential moving average (EMA), moving average convergence/divergence (MACD) as well as average true range (ATR) to control losses and optimize profit. Data such as Open, High, Low, Close, Adj-close, and volume are used, and a five-year historical data [2018 to 2022] are taken from Yahoo finance. The remaining parameters were adjusted by author. In an effort to have something to compare the results gotten by using indicators mentioned above, another trading strategy was used which is called Buy & Hold also known as position trading.

2.2.1 Moving average

A moving average is one of the most widely known indicator that many technical traders use. Its goal is to spot or indicate the start of a new trend or the end or reversal of an old trend. When computing a moving average, the closing price is most commonly used,

however, other technicians prefer to utilize different pricing, such as the midpoint value and so on. (Murphy, 1990, p. 198)

- **Simple Moving Average (SMA)**

The way we calculate a simple moving average is by simply finding the average of past closing prices for the given time frame. Let say we want to calculate a moving average of the past 10 days (10-day SMA), we add up the closing price of the last 10 days and we divide the sum by 10. As the price data moves, we must add the new closing price to the total of the past 10 day's closing price and subtract the closing price of the 11th days back from the new total and then we divide that by 10. (Murphy, 1990, p. 195/196)

$$SMA = \frac{CP1 + CP2 + \cdots + CPn}{n} \qquad (1)$$

Where: **CP-** is the closing price, and

     n- is the time frame (number of days)

- ➤ Changes in the price trend are identified by the price crossing the MA, not by a reversal in the direction of the MA. (Pring, 2014, p. 211)
- ➤ The limitation with simple moving average is that when calculating, it gives equal weight to each day's price. Some traders in practice give the heavier weight to the most recent closing price. (Murphy, 1990, p. 199)

- **Exponential moving average (EMA)**

The exponential moving average considers the older data points, meaning that the old data points maintain a multiplier regardless their position in the selected data period. (TradingView(n.d), 2022) Calculations are as follows:

For Single EMA

Note: for the first EMA we use SMA of previous day instead of EMA of previous day

$$EMA = \{CP - EMA\ (previous\ day)\} * Multiplier + EMA(previous\ day) \qquad (2)$$

Where: CP is close price

$$Multiplier = \frac{2}{n+1}$$

  n is the time frame (period taken)

- **Using two moving averages crossover**

Some technical traders prefer to use two moving averages to follow the market. It is believed that this method lags the market a little more than a single moving average does but

it creates fewer false signals. This type of technique is called double crossover. The double crossovers interpreted as when the short period moving average crosses above the longer period moving average a buy signal is created. On the contrary, when the short moving average crosses below the longer period moving average, it produces a sell signal. (Murphy, 1990, p. 203)

2.2.2 Moving average convergence/divergence (MACD)

The moving average convergence and divergence is one of the most useful and popular indicators that was developed by Gerald Apple. The information we get from MACD helps to identify momentum, duration, and trend direction. The MACD indicator uses two Moving Averages of different lengths as lagging indicators to establish the trend's direction and duration. It computes the difference between the values of these Moving Averages to generate the MACD Line and an Exponential Moving Average (EMA) of these Moving Averages, resulting in the Signal Line. The difference between these two lines is displayed in the form of a histogram that oscillates above and below the Zero Line, which provides significant insights into the momentum of security. (TradingView(n.d.-b), 2022) the MACD is calculated using the following formula:

$$MACD\ Line: (12\ day\ EMA - 26\ day\ EMA \qquad\qquad (3)$$

$$Signal\ Line: 9\ day\ EMA\ of\ MACD\ Line \qquad\qquad (4)$$

$$MACD\ Histogram: MACD\ Line - Signal\ Line\ (9\ EMA\ of\ MACD\ line) \qquad (5)$$

When the two lines (MACD line and Signal line) crossover a buy or sell signal occur. A buying pressure occurs when the faster MACD line crosses above the slower signal line and when the slower signal line crosses below the faster MACD line a sell signal is created. In addition, these MACD line and signal line fluctuate above and below the zero-line creating either an overbought or oversold conditions giving us a trend reversal signal. When these two lines are far above the zero line and starts to weaken but price continues to trend, then an overbought condition occurs creating a bearish divergence and when they are far below the zero line and starts to move beyond the price while the price is still on the bottom an oversold condition occurs which creates a bullish divergence. An overbought condition means a lot of traders are buying in the trade and this gives a sell signal to short the positions.

An oversold condition (which is when a lot of traders are selling their positions) gives a buy signal. (Murphy, 1990, p. 253/254).

2.2.3 Average true range (ATR)

The average true range (ATR) was developed by J. Welles Wilder and presented on his book called *New concepts in technical trading system* that was published in 1978 along with other several indicators which are used to this day, and they all hold of great importance in the world of technical analysis. The average true range is primarily used as the measurement of volatility in terms of Pips or movement of price. Pips is the measurement of price range which is calculate by the difference between the lowest traded price and the highest traded price. In order to find the true range, we have to do three calculations and we compare them against each other. The largest number from those calculations is the true range. (TradingView(n.d.-a), 2022) The calculations developed by Wilder are as follows:

$$CH - CL$$
$$|CH - PC|$$
$$|CL - PC|$$

$$True\ range = max[\ (CH - L), |(CH - PC)|, |(CL - PC)|\ ] \tag{6}$$

Where:

  H is highest price

  L is lowest price

  CH is the current period high

  CL is the current period low

  PC previous period close

Note:
- most popular period is the 14-day period
- absolute value is used because the ATR measure only volatility not price direction.
- ATR is also used to set up stop loss control, this application is used in this thesis

2.2.4 Backtesting

A backtest is applying a trading strategy to historical data to assess its profitability. It allows to test trading strategies without risking any actual capital, thus, help traders to

avoid taking a huge loss on their trades. If a well conducted backtest show good results, traders may go ahead and apply the strategy on a real trade. (Chen J. , 2021)

2.2.5 Evaluating stock performance

Being able to use the tools (strategies) to analyse the historical data of a stock or any other security is not enough if traders don't have the know-how to evaluate the results. It takes more than looking at the price change to evaluate the stock performance. There are a lot of different metrics that one could employ to objectively evaluate the stock performance report. In this thesis, some of the metrics are used including important metrics such as *Total Net Profit, Profit Factor, percentage Profitable Trades, Largest (Max) Drawdown and Average trade net profit.* (Folger, 2022)

Formulas taken from Investopedia are as follows:

- Represents the bottom line of the trading system over a period of time

$$Total\ Net\ Profit = Gross\ profit - Gross\ Loss$$
(7)

- Shows the amount of profit per unit of risk

$$Profit\ Factor = \frac{Gross\ Proft}{Gross\ Loss} \qquad (8)$$

- Shows the probability of winnings from the total trades in percent

$$\%Profitable\ Trades = \frac{No\ of\ Winning\ Trades}{Total\ No\ of\ Trades} \qquad (9)$$

- Measures the greatest distance or loss from previous equity peak

$$Largest\ drawdown\ (MAX\ Drawdown) = \frac{Trough\ Value - Peak\ Value}{PeakValue} \qquad (10)$$

- Is the average expectancy of the system

$$Average\ trade\ net\ profit = \frac{Total\ Net\ Profit}{Total\ trades} \qquad (11)$$

3 Literature review

This chapter contains some features about stock and the stock market analysis, different kinds of trades, as well as some interesting points about money management.

3.1 Stock

A stock also known as "share or equity" is a type of security or financial token that indicates an ownership of a company. For instance, if company X has 100 shares and if you buy 1 share, you own 1 of 100 shares of company X. Basically when one owns a stock that means he/she owns a portion of the underlining company and when the value of that company increases so does the stock price and vice versa. (Hayes A. , 2022) There are two types of stocks which are called Common stocks and Preferred stocks which refers to the voting rights of the shareholder. Common stock shareholders have voting rights which enables them to have a say on things like board member elections and other financial decisions for the company, but preferred stock shareholders do not have these rights. On the other hand, when a company pays dividends, preferred stock shareholders get preference than the common stock shareholder. Dividend is a split of the profit of the company with the shareholder. (Heyes, 2023)

Why companies sell stocks? The answer for this question is simply to get money. Companies allow individuals to buy shares of their company to raise capital so that they could use the money to finance their business goals. The modern stock market often basis the value of the company on the potential earnings in the future. This allows even small companies to earn millions if not billions if the potential investors believe the company can succeed down the line.

3.1.1 The Stock Market

For companies to sell shares they will need to enter the stock market which turns the privately owned business to a publicly traded business. The stock market is a variety of markets and exchanges where individuals or organizations buy, sell, and issue shares of these publicly held companies. When companies want to enter the stock market, they need to list shares by selling them through IPO (Initial public offering) in an exchange which turn them like mentioned earlier into a publicly traded business. The key advantage of IPO is that it

allows companies to have access to public investment that would raises their equity to finance and expand their business at the same time increase company's exposure and public image which in turn help the company's sales and profit. (Fernando, 2022)

Stock market analysis is a method one could use to help decide when to buy or sell a certain stock or security. There are different approaches when dealing with stock market analysis, some use Fundamental analysis to help them with their decisions and others use the technical approach. In this thesis, technical analysis is used to analyse one of the biggest streaming services Netflix.

3.2 Fundamental analysis, Technical analysis, and Dow theory

3.2.1 Fundamental analysis

Fundamental analysis is process in which investors make a thorough examination of company's financial statements to help them decide whether the company's stock is a good investment or not. Financial statements include income statement, balance sheet and cash flow statement. This information shows the investors the build-up of the company behind the stock and evaluate the intrinsic values. In short, the main goal of fundamental analysis is to determine whether the security of the underlining company is overvalued or undervalued by other investors. (Segal, 2022)

3.2.2 Technical analysis

Technical analysis is a method in which traders use to forecast price movements by analysing the historical data and present data of price action. The keyword when we come to technical analysis is Market Action (John Murphy's word for Price Data). This approach highly depends on market action which refers to a different combination of open, high, low, close, volume, or open interest at a given period of time. The analyst has a variety of options when collecting the price data such as minutes, hours, daily, weekly, monthly, and yearly. (Murphy, 1990, p. 1/2)

Investors use this trading strategy to identify when to entre or exit a stock position. When performing technical analysis there are different techniques or tools that can be used to analyse a chart. In this thesis, some of these tools will be applied to analyse and forecast the profitability of Netflix stock.

3.2.3 The Dow theory

Modern technical analysis has gone a long way in recent years, but some investors prefer to use old techniques in their analysis. Dow Theory is one of the earliest and oldest forms of technical analysis. The theory came from the collective works of Charles Dow over centuries ago who first published his observations in the Wall Street Journal. The theory attempts to time entries and exists in the stock market by analysing price trends, volume, and other characteristics. (Murphy, 1990, p. 23/24)

Dow theory consists six ideas:

- The averages discount everything: stock prices incorporate all available information and react quickly to news. As a result, stock prices reflect to new information immediately. (Murphy, 1990, p. 24/25)

- Market trends move in three ways: the most influential move is the Primary trend which may last several months, a year or even more. The next type of move is a secondary trend that runs counter to the primary trend. It represents changes within the primary trend, lasts from about three weeks to three months and it usually retraces between a third and two-thirds of the value gained during the primary trend. The third type of move is the minor or short swing, which might last for a few hours to a month which are noted as insignificant. It represents fluctuations within the secondary trend. (Murphy, 1990, p. 25/26)

- Major trends have three phases: the first phase is known as the Accumulation Phase. This phase is where smart investors (insiders) make an informed move when there is so called Bad-News out in the public, buying stocks at the tail end of a downtrend. The second phase is called Public Participation Phase. In this phase the news improves, and a new trendbor upward trend begins to accelerate. Technical trend followers and other technical driven investors begin to participate. The third and last phase is the Distribution Phase. In this phase the news begins to address a positive and bullish story and a lot of people start buying in. The insiders that have been accumulating when the price was at the very low start to sell to the public. (Murphy, 1990, p. 26)

- The average must confirm each other: this idea involves the relationship between two indices, the Dow Jones Industrial Average (DJIA) and the Transport indices (DJT). He believed that both indices tend to move in the same direction. The signal that

occurs in one index must match with the signal in the other. But when these indices move apart it could be a sign of a reversal in the trend. (Murphy, 1990, p. 27)

- Volume must confirm the trend: this idea says that volume should follow the direction of the major trend. Charles Dow believed that relatively high volume was necessary to confirm Major trend (primary trend). Meaning that if the primary trend is bullish, the volume should increase or go against it if the primary trend is bearish. (Murphy, 1990, p. 27)

- A trend is assumed to be in effect until it gives definitive signals that is has reversed: Dow believed that a primary trend will continue in its motion unless otherwise other external force causes it to change direction. (Murphy, 1990, p. 28)

3.4 Types of Charts

3.4.1 Bar charts

These types of charts are one of the most commonly used charts in the technical analysis. we can construct a bar chart for any intervals such as intraday (E.g., hourly), daily, weekly, monthly, yearly. The bar chart shows 4 different details: considering the daily bar chart, on the top of the vertical line it shows the high of the day's price and the bottom the low of the day's price. The horizontal right tic on the bar chart shows the close price and the opposite left tic shows the open price. (Schwager, 1999, p. 17/18)

Figure 1. Bar Chart
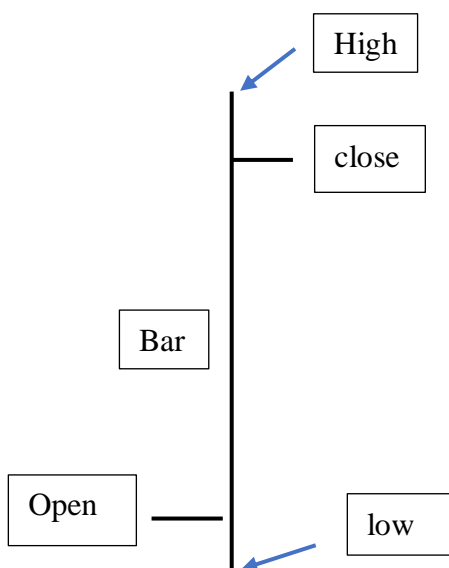
Source: Own Processing, 2022

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Figure 2. NFLX, Inc bar chart

Source: TradingView.com, 2022

3.4.2 Point and Figure Charts

This type of chart requires an intraday data and will always be an intraday charting method. Unlike bar chart or candlesticks in point and figure there is no time factor. When constructing the point and figure chart volume will not be part of it, it is disregarded. Point and figure charts are named according to the size of the box and the reversal amount. The "X's" are an upward movement and as the price increases "X's" are added to the column for each increment. On the other hand, the "O's" are downward movement, as the price begins to decline a new "O's" column will start in a descending manner. (Schwager, 1999, p. 20/21).

Figure 3. NFLX, Inc Point & Figure Chart

Source: *(Navin, 2019)*

3.4.3 Japanese Candlestick Charts

Candlestick charts display multiple price information just like in bar charts such as open price, close price, high and low price. This type of charts is used as a trading tool to visualize and analyse the price movements over time. Although the symbols used in candlestick charts resemble a box plot, they function differently. (Schwager, 1999, p. 22)

The main rectangle is known as the real body which is used to display the range between the open and close price of the given time period. The lines extending from the top and bottom of the real body are called upper shadow and lower shadow. Each shadow represents the highest price (upper shadow) and lowest price (lower shadow) during the given time period. Typically, when the market is bullish the real body would be white or green colour, while on a bear market the real body would have a black or red colour. (Murphy, 1990, p. 298)

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Figure 4. Candlestick Chart
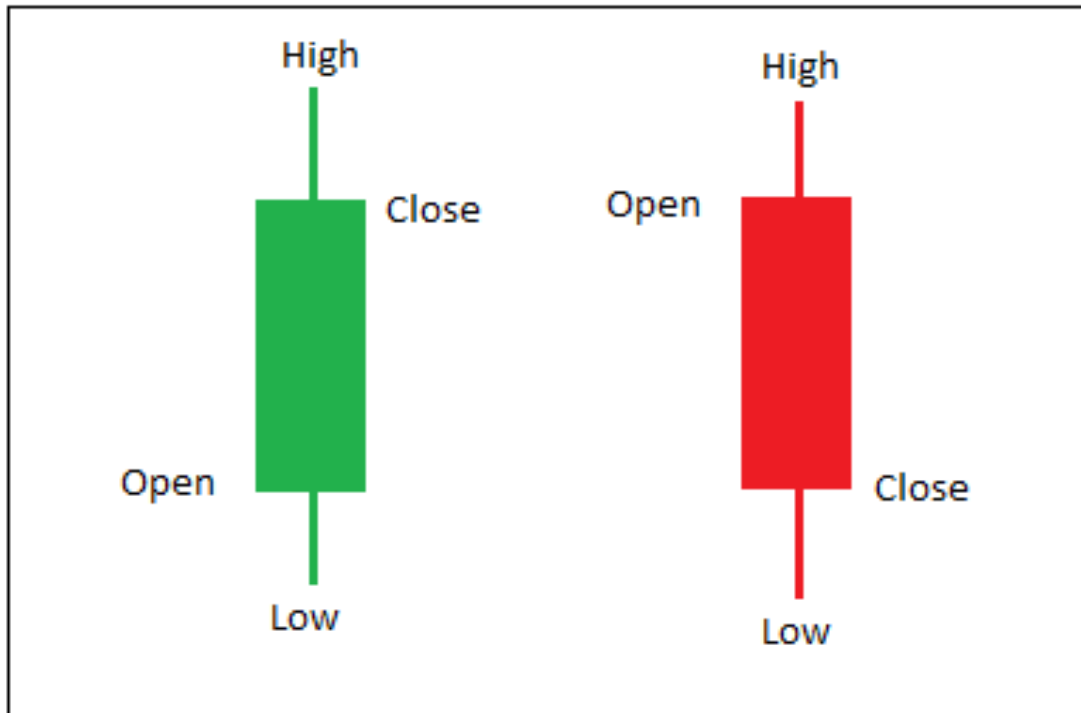
Candlestick charts are great for detecting and predicting market trends over time. And they are useful for interpreting the day-to-day sentiment of the market. Through each colouring and shape, a trader could get a lot of important information on what is going on in the market. For instance, as shown on the figure above longer or bigger body refers to a long day (great difference between open and close) it shows an intense selling and buying pressure. On the figure below (fig. 4) is shown a candlestick chart with short body with long upper and lower shadows known as Spinning Tops. It refers to short days (small difference between open and close) which indicates a very little price movement, and it represents consolidation. (Murphy, 1990, p. 299/300)

Figure 5. Small body Candlestick Chart
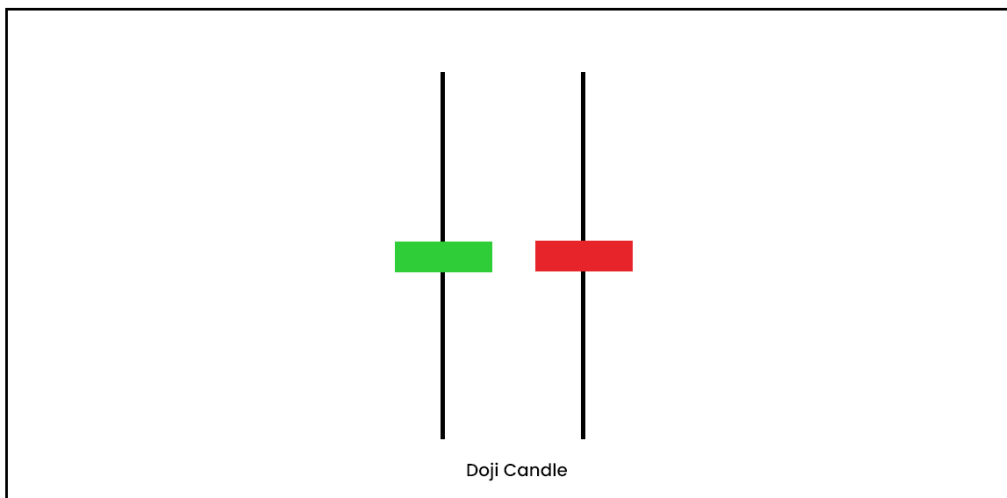
Doji Candle

Source: Sevenstarfx.com, 2019

When the open price and close price are equal, they are called Doji lines. There are three different types of Doji candlesticks shown below (fig 6): Long upper and lower shadow is called long legged Doji which indicates a considerable indecision on market participants. Only long upper shadow is called Gravestone Doji, it reflects a bearish movement (the longer it is, the more bearish the interpretation). And lastly the only lower shadow is called Dragon Fly Doji and it indicates a bullish movement. (Murphy, 1990, p. 300/301)

Figure 6. Three types of Doji Candlesticks

Source: *(Chen, 2022)*

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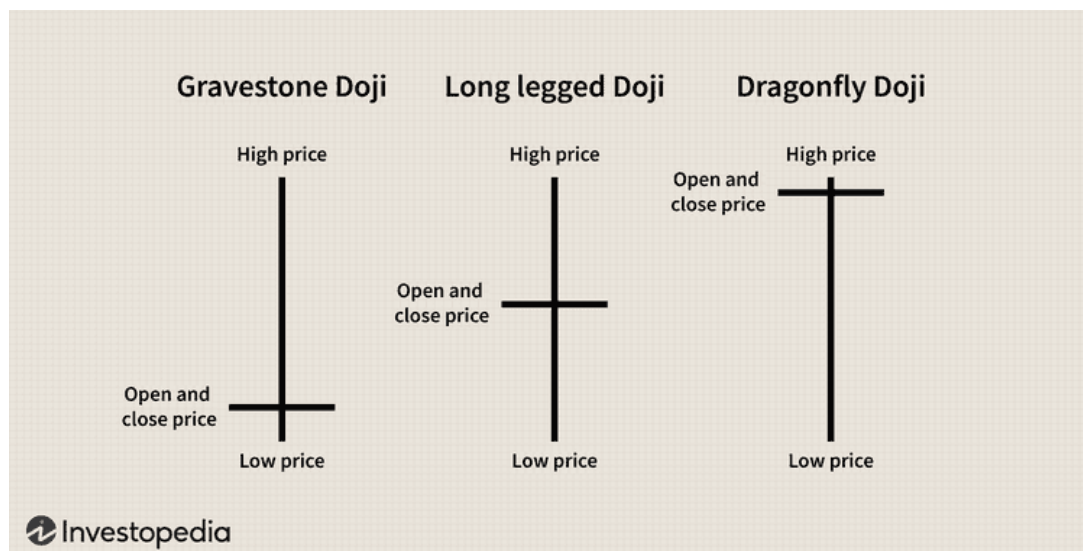
Figure 7. NFLX, Inc candlestick chart

Source: TradingView.com, 2022

3.4.4 Line chart

Some traders prefer to use the line chart than Japanese candlestick or bar chart. These traders prefer the line chart to see price movement because they consider the closing price to be the most important price of all. The line chart basically consists of the closing price for each period. Of all the three charting methods, the line chart is the simplest and easiest to understand for beginners. No special knowledge is required, and they give the big picture. On the other hand, the line chart lacks a lot of information. It doesn't show details of the prices such as open, high, and low price. Therefore, line chart can be misleading, and traders should be very careful if they do decide to use this type of charting method. (Peters, 2022)

Figure 8. NFLX, Inc Line chart

Source: tradingview.com, 2022

3.5 Price Action

3.5.1 Trendlines

Market trend referring to the direction of the market. The idea of trend has an absolute importance in technical analysis. No technical analyst could do any form of technical analysis or use any types of technical tools to predict (forecast) future price movement without having a market trend. Market trend goes in one of three ways. It goes up when prices are booming which is called an uptrend (also the market know as a Bullish market), it goes down when prices start to decline which is called a downtrend (Bearish market), and lastly prices move in a static manner where there wouldn't be any price change, or the changes are not so much that neither an uptrend or a downtrend are exhibited, and the trend goes in sideways. This type of trend shows a trendless market and usually a nightmare for trend-following investors. Most of the technical tools and systems work inefficiently if not become completely useless for some. (Murphy, 1990, p. 49/52).

Figure 9. NFLX, Inc Trendlines

Source: TradingView.com, own processing, 2022

3.5.2 Support and Resistance

During market trends two extreme points could be seen, these are called Peaks and Troughs which are widely known as Support and Resistance levels. The troughs are referring to a support level at which the buying interest is very strong that it by passes the selling pressure. At this level the price bounces back from declining and continues to rise. A breakout from the support level suggests a reversal in price movement. On the other hand, the peaks are called resistance levels. This point or level is the exact opposite of troughs (support levels). The selling interest is strong enough to overpower the buying pressure leading up to a continuation of decreasing price. Again, here a breakout from the resistance level would be a warning sign for price reversal. During these breakouts and price enters a new trend the label of these levels will change. The support level would change into a resistance once the price breaks the support and starts a downtrend, the same is true in visa versa. (Murphy, 1990, p. 55)

Figure 10. NFLX, Inc Support and Resistance levels

Source: TradingView.com, Own processing, 2022

3.6 Main types of trading

There are four types of trading that the majority of traders will follow (Scalping, Day trading, Swing and Position trading.

3.6.1 Scalping

It usually refers to a very short-term trades, meaning that anything from a few seconds to number of minutes. Due to the very fast nature of their trades, analysis is usually done on a very small periods such as 1, 2 and 5 minutes. These types of trades tend to have smaller profit in contrast to long term trades due to their duration as price doesn't move very far within a short period of time. Because the trades tend to be smaller, the goal from scalping traders' point of view is to take lots of trades with small risks and small reward. This means with in a typical day, a scalper will look to open a large number of trades each day. (Konchar, 2020)

3.6.2 Day trading

These types of trades are typically opened and closed within a day. They last anywhere from 15 minutes to several hours. They tend to have a larger target than when scalping trader will look in to take advantage of the main moves a market makes within that day. (Konchar, 2020)

3.6.3 Swing trading

This type of trade covers a period any longer than those of scalping and day trading up to position trading. Swing trade can last from days to number of months or even longer in some cases. Analysis for these trades tend to be the daily, weekly, and monthly time frame. Due to extended time frame of these trades the targets tend to be significantly larger than those targeted by the previous two types of trading. Since swing traders hold their trades for a longer time compared to scalping and day trading, they don't need to be following the market actively and manage their trades every minute and hour of every day. This makes swing trading a more ideal way of trading for those who don't have the time. In addition, a longer time frame will make a swing traders look into fundamentals. Strong directional moves usually happen due to a significant and unexpected market news. (Konchar, 2020)

3.6.4 Position trading

Position trading refers to a long-term trading, it is less concerned with short-term fluctuations in the price and more concerned with primary price trend in the long run. It involves holding a position for weeks, months, as long as years with the expectation of high profit in the future. Investing and position trading are similar in a sense of going long. which means profiting as the price is increasing by buying the security or stock at a low price and selling it high. Position trading differs from investing because it involves both going long and going short. Going short means that the trader will profit as price is declining by selling the stock or security at a high price and buying back at low. (Konchar, 2020)

3.7 Money Management

One of the most crucial skills for every individual to have that has a significant impact on one's financial safety or stability is money management. No matter who we are, where we come from, where we work or how much money we make if we do not manage our money or income thoroughly, we could end up in financial struggle. Specially now days, with the inflation rate skyrocketing which I personally believe that it is going to take a really long time before it gets better, at best maybe after this catastrophic Ukraine war ends. Even after that it is not a certain that the inflation rate would go down for some countries.

According to Murphy, money management play a great role in the trading world. Such things as the size of the account, the portfolio mix, and the amount of money committed to each trade impacts the final results. (Murphy, 1990, p. 395)

3.7.1 Money management guidelines

Murphy laid out four general money management guidelines that could be helpful in allocation funds and size of trading commitments. These guidelines are as follows:

- Total invested funds should be limited to 50% of the total capital.
- Total commitment in any one market should be limited to 10-15% of total equity.
- The total amount risked in any one market should be 5% of total equity.
- Total margin in any market group should be limited to 20-25% of total equity. (Murphy, 1990, p. 395/396)

4 Practical Part

This part of the thesis includes the applications and results of the methods mentioned above as well as evaluations of the results.

4.1 Trading strategy using SMA

This section illustrates the trading system using the simple moving average (SMA).

4.1.1. 10 SMA and close price crossover

The following input parameters are used for all trading strategies:

- Two types of trading performed: Swing trading and Buy & hold (Position trading). The buy & hold strategy is used for the sake of comparing the other trading strategies.
- Weekly price data was taken from yahoo finance
- Capital: $10000
- As mentioned in the methodology part ATR is used to optimize and control loss. The most common 14 period is used with an ATR multiplier of 1.5 to identify stop loss level.
- Long position taken - buy high and sell low
- Commission fees are not considered
- Buy signal occurs when the 10 SMA (blue line) crosses below the closing price, sell signal when 10 SMA cross above close price (Murphy, 1990, p. 201)

Figure 11. Strategy with 10 SMA

Source: TradingView.com, Own processing, 2023

Table 1. 10 SMA and Close price crossover & Buy & Hold strategy

	Buy & Hold	10 SMA
Gains	63 771 USD	44 869 USD
Loss	-62 405 USD	-35 385 USD
Net profit	1 366 USD	9 484 USD
Number of winning trades	-	76
Number of losing trades	-	68
% winning trades	-	53%
% losing trades	-	47%
Largest profitable trade	2 244 USD	2 404 USD
Largest losing trade	-4 005 USD	-1 906 USD
Profit factor	1,02	1,27
Largest drawdown	-74.58%	-33.72%
Ave. trade Net profit	-	66 USD

Source: Own processing, 2023

As shown on table 1, the short 10 SMA and close price crossover generated a profit of $9 484 which is a promising result making a 94.84% return from the initial investment. Looking at the trades, buying above the SMA it had a total of 144 trades with 53% of those trades ended with a profit while the rest of 47% were loses. Even though the method using this strategy over a span of 5 years was profitable, the greatest distance loss from previous historical peak was -33% (which is the Largest or Maximum drawdown) indicating that this strategy was a little risky. On the other hand, the buy & hold strategy was profitable with only 13.66% return from the original capital sustaining a maximum drawdown of -74.58% from the historical highest peak of the account indicating that this strategy is very risky. When comparing these two strategies, the 10 SMA and close price crossover was more profitable and less risky than the buy & hold trading strategy. This shows how important it is the use of technical indicators for getting better results in our portfolio.

Figure 12 Equity curve for Buy & Hold (2018-2022)
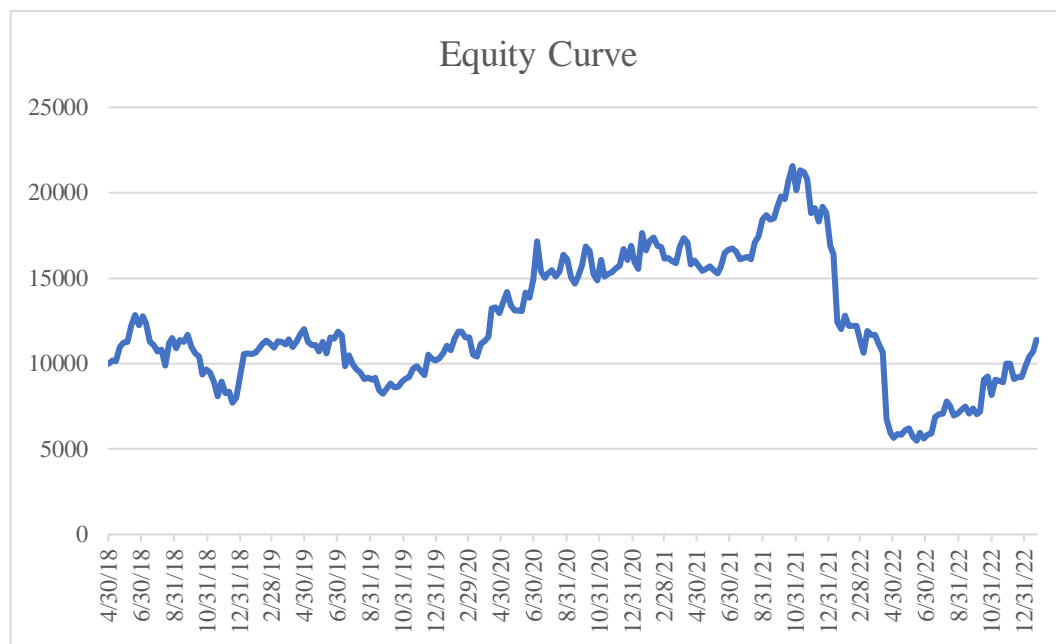
Source: Own processing, 2023

Figure 13. Equity curve for 10 SMA (2018-2022)
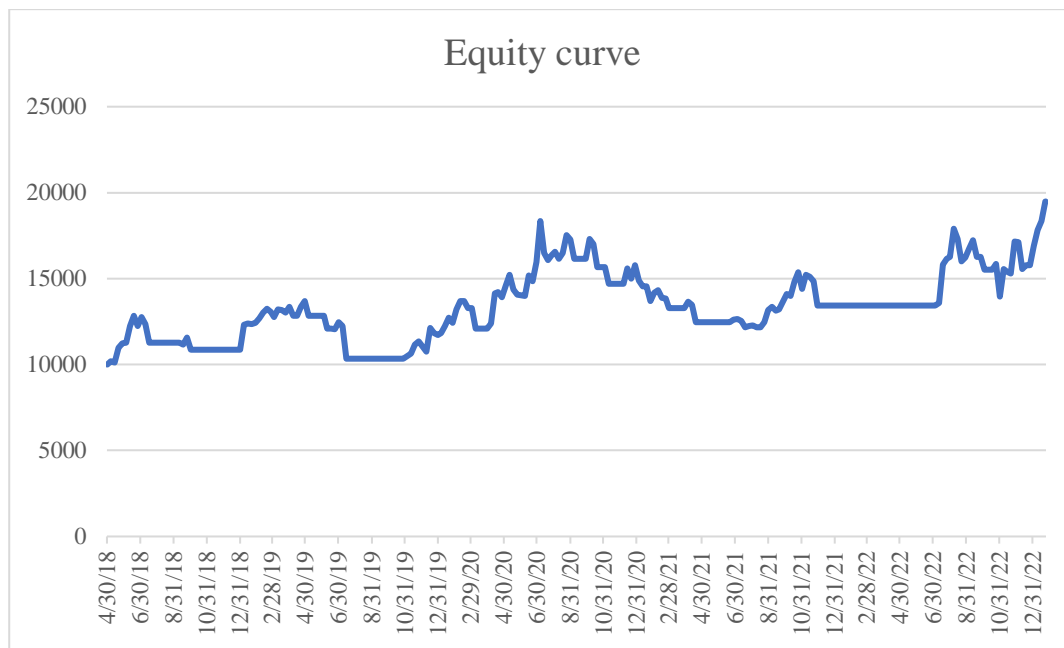
Equity curve

Source: Own processing, 2023

Equity curve shown in figure 12 and 13 gives a clear visual difference between the buy & hold strategy and 10 SMA-close price crossover respectively. It shows how the moving average worked well through the year 2021 and 2022 emphasizing how important it is to use indicators.

4.1.2 ATR SL with 10 SMA and close price crossover

Input parameters:

- ATR stop loss employed to control losses and optimize profit.
- Other parameters remain the same

Table 2. 10 SMA and Close price crossover with ATR - SL

	10 SMA - ATR SL
Gains	46 176 USD
Loss	-35 921 USD
Net profit	10 255 USD
Number of winning trades	76
Number of losing trades	68

% winning trades	53%
% losing trades	47%
Largest profitable trade	2 493 USD
Largest losing trade	-2 089 USD
Profit factor	1,29
Largest drawdown	-34,32%
Ave. trade Net profit	71 USD

Source: Own Processing, 2023

Table 2 illustrates, the optimization of 10 SMA and close price crossover using ATR - SL turn out to be a little more profitable strategy to that of without using the stop loss. It made a net profit of $10 255 which makes about 102.55% return from the original investment. The profit factor is also another indicator that this strategy was slightly more profitable which increased to a value of 1,29 compared to profit factor of 10 SMA and close price crossover shown on table 1.

According to Murphy, the use of short period moving average is very sensitive and creates many false signals. (Murphy, 1990, p. 202) When we compare the two strategies above (10 SMA and close price crossover with and without ATR - SL), the number of winning and losing trades are the same, but the strategy in which ATR – SL was employed gave a better result than without using the stop loss. This is proof to Murphy's claim mentioned above, the stope loss was able to control some of those false signals created by the 10 SMA and close price crossover, thus, making more profit

Figure 14 Equity curve 10 SMA - ATR SL (2018-2022)
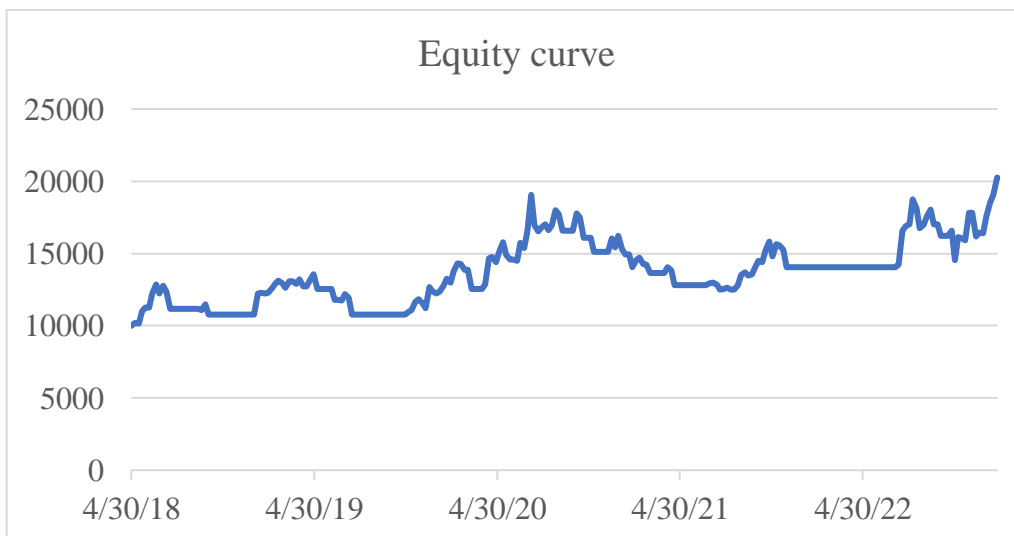
Source: Own processing, 2023

4.1.3   10 SMA and 20 SMA crossover

Input parameters:

- When the short 10 SMA-blue line (which is a fast-moving average) crosses above the 20 SMA-green line (slow moving average) a buy signal is created, and when 20 SMA cross above 10 SMA a sell signal is generated. (Murphy, 1990, p. 203)

- Other parameters remain the same

Figure 15. Strategy with 10 SMA & 20 SMA crossover

Source: TradingView.com, Own processing, 2023

Table 3. 10 SMA and 20 SMA crossover

	10 SMA & 20 SMA
Gains	53257 USD
Loss	-37708 USD
Net profit	15549 USD
Number of winning trades	74

Number of losing trades	72
% winning trades	51%
% losing trades	49%
Largest profitable trade	4183 USD
Largest losing trade	-2453 USD
Profit factor	1,41
Largest drawdown	-23,85%
Ave. trade Net profit	106 USD

Source: Own Processing, 2023

The results from trading strategy using 10 SMA and 20 SMA crossover shown on table 3 were significantly better generating $15 549 total net profit. That makes about 155.49% return on the original account. The strategy opened a total of 146 trades in which 51% of those trades secured a win with largest profit in a single trade of $4 183.

When we compare this strategy to 10 SMA and close price crossover, the 10 SMA and 20 SMA crossover was notably less risky with a Maximum drawdown of -23.85% as well as more profitable attaining a profit factor of 1.41, thus, making the 10 SMA and 20 SMA crossover a better strategy for trading NFLX, Inc.

Figure 16 Equity curve for 10 SMA and 20 SMA (2018-2022)
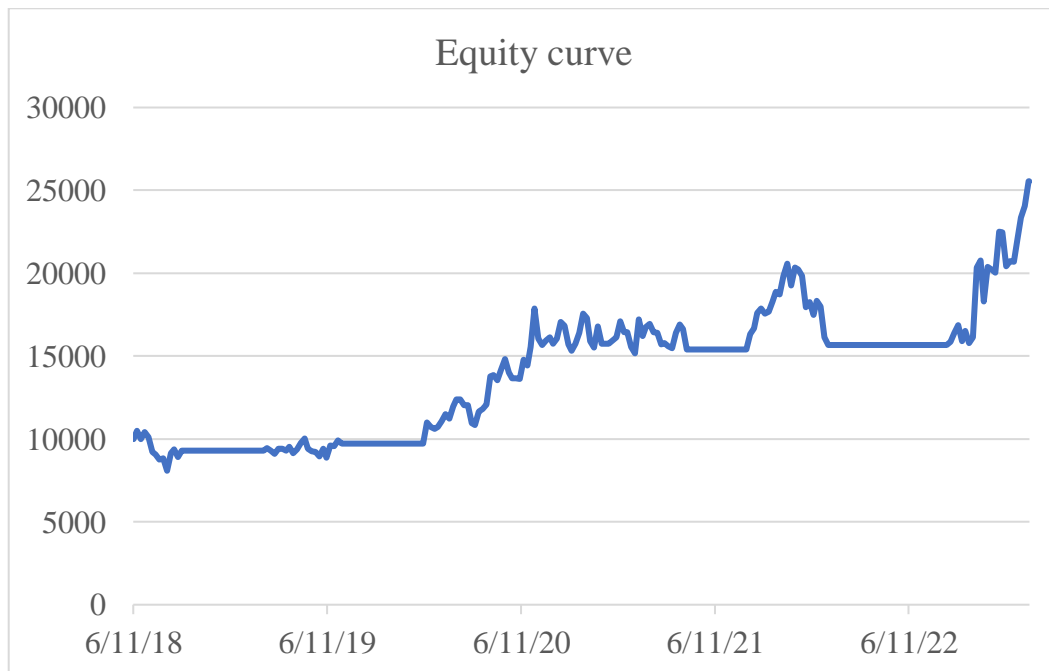
Source: Own processing, 2023

4.1.4 ATR SL with 10 SMA and 20 SMA crossover

- ATR Stop Loss employed

- Other inputs remain the same

Table 4. 10 SMA and 20 SMA crossover with ATR - SL

	10 & 20 SMA - ATR SL
Gains	47127
Loss	-34858
Net profit	12269
Number of winning trades	74
Number of losing trades	72
% winning trades	51%
% losing trades	49%
Largest profitable trade	3672
Largest losing trade	-2267
Profit factor	1,35
Largest drawdown	-23,69%
Ave. trade Net profit	84 USD

Source: Own Processing, 2023

The attempted to optimize the trading strategy 10 SMA and 20 SMA crossover by employing ATR stop loss had made a disappointing results compared to the pair SMA strategy without setting up the stop loss. The strategy had made a total net profit of $12 269 which accounts to a return of 122.69% in a run of 5 years investment. Even though the total number of open trades were the same and largest (maximum) drawdown was somewhat better the 10 SMA and 20 SMA crossover with ATR SL was slightly less profitable trading NFLX, Inc making about 1.35 profit factor. This is again due to the lagging behavior of the moving average that creates many false signals which in turn activates the ATR SL too early or too soon.

Figure 17 Equity curve 10 SMA & 20 SMA – ATR SL (2018-2022)
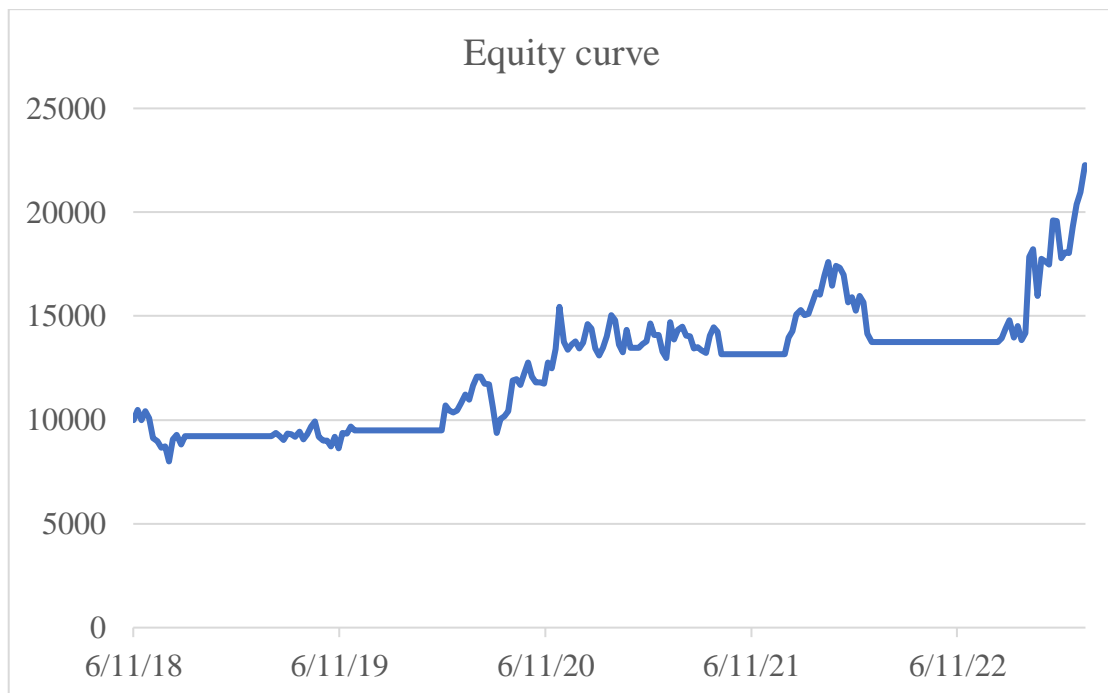
Source: Own Processing, 2023

4.2 Trading strategy using EMA

This section illustrates the trading system using exponential moving average (EMA).

4.2.1. 10 EMA and close price crossover

Input parameters:

- Buy signal when the close price cross above the 10 EMA
- Sell signal when the 10 EMA cross above the close price
- Other inputs are unchanged

Table 5. 10 EMA and Close price crossover

	10 EMA
Gains	46 085 USD
Loss	-35 096 USD
Net profit	10 990 USD

Number of winning trades	76
Number of losing trades	68
% winning trades	53%
% losing trades	47%
Largest profitable trade	3 437 USD
Largest losing trade	-2 015 USD
Profit factor	1,31
Largest drawdown	-32,01%
Ave. trade Net profit	76 USD

Source: Own Processing, 2023

As shown on table 5, trading strategy using 10 EMA and close price crossover had produced a total net profit of $10 990, about 109.9% return on the account. The system generated a total of 144 trades throughout the 5 years, and 53% of those trades generated profits making an average trade net profit of $76.

Figure 18. Equity curve 10 EMA (2018-2022)
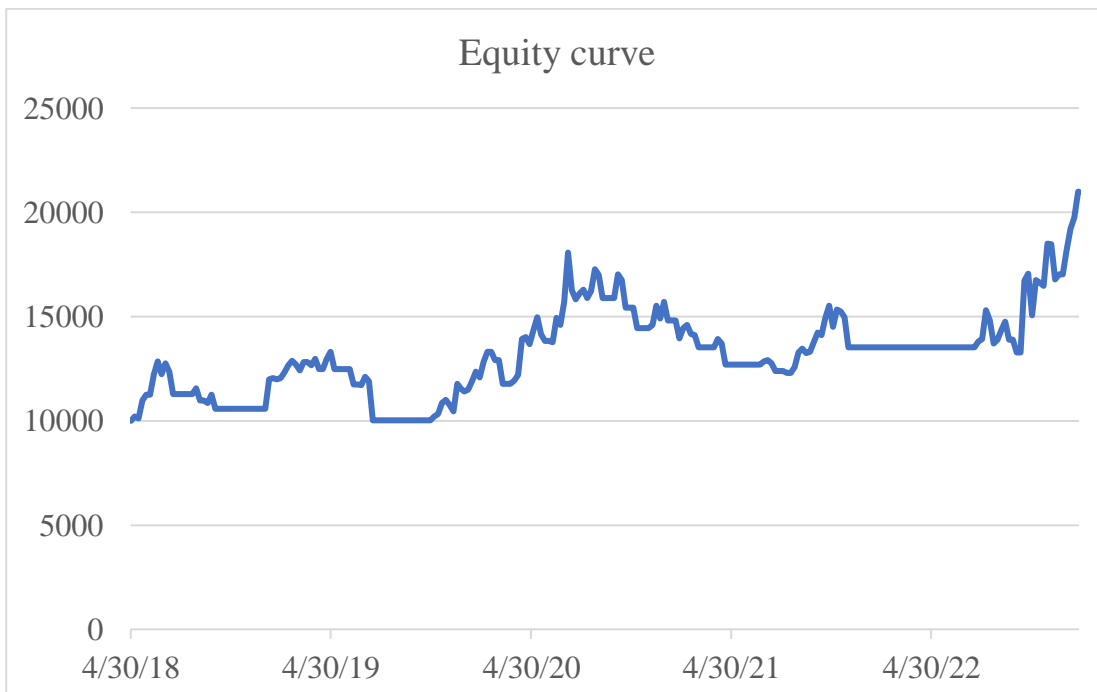
Source: Own Processing, 2023

4.2.2 ATR SL - 10 EMA and close price crossover

- ATR stop loss employed
- Other parameters are unchanged

Table 6. 10 EMA and Close price crossover with ATR - SL

	10 EMA - ATR SL
Gains	47 437 USD
Loss	-35 617 USD
Net profit	11 821 USD
Number of winning trades	76
Number of losing trades	68
% winning trades	53%
% losing trades	47%
Largest profitable trade	3 598 USD
Largest losing trade	-2 221 USD
Profit factor	1,33
Largest drawdown	-32,63%
Ave. trade Net profit	82 USD

Source: Own Processing, 2023

As we can see on table 6, by employing ATR – SL the system managed to be a little more profitable making $11 821 total net profit (118.21% return on the account). As shown on table 5 and 6 the total number of trades that were open in the span of 5 years were the same (144 trades) as well as the number of winning and losing trades, but because of the ATR stop loss the system was able to control its loses and optimize, thus, able to be more profitable than the trading strategy 10 EMA and close price crossover without ATR.

Figure 19 Equity curve 10 EMA - ATR SL (2018-2022)
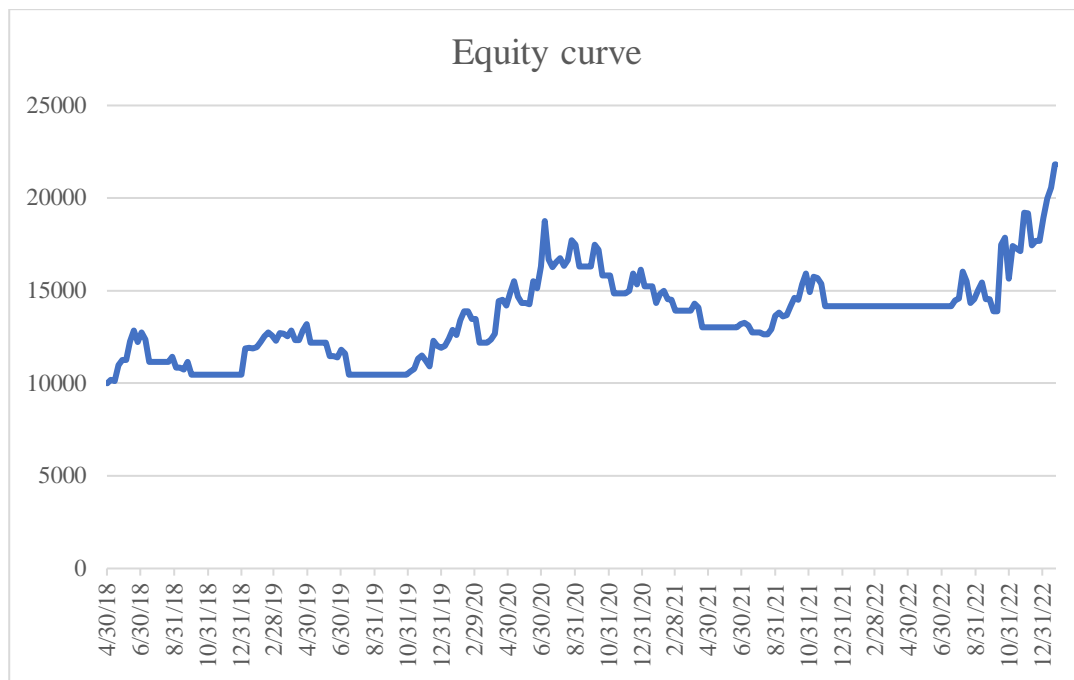
Source: Own Processing, 2023

4.2.3. 10 EMA and 20 EMA crossover

Input parameters:

- Buy signal when the short moving average (10 EMA) cross above the long moving average (20 EMA)
- Sell signal when 20 EMA cross above 10 EMA (Murphy, 1990, p. 203)

Table 7. 10 EMA and 20 EMA crossover

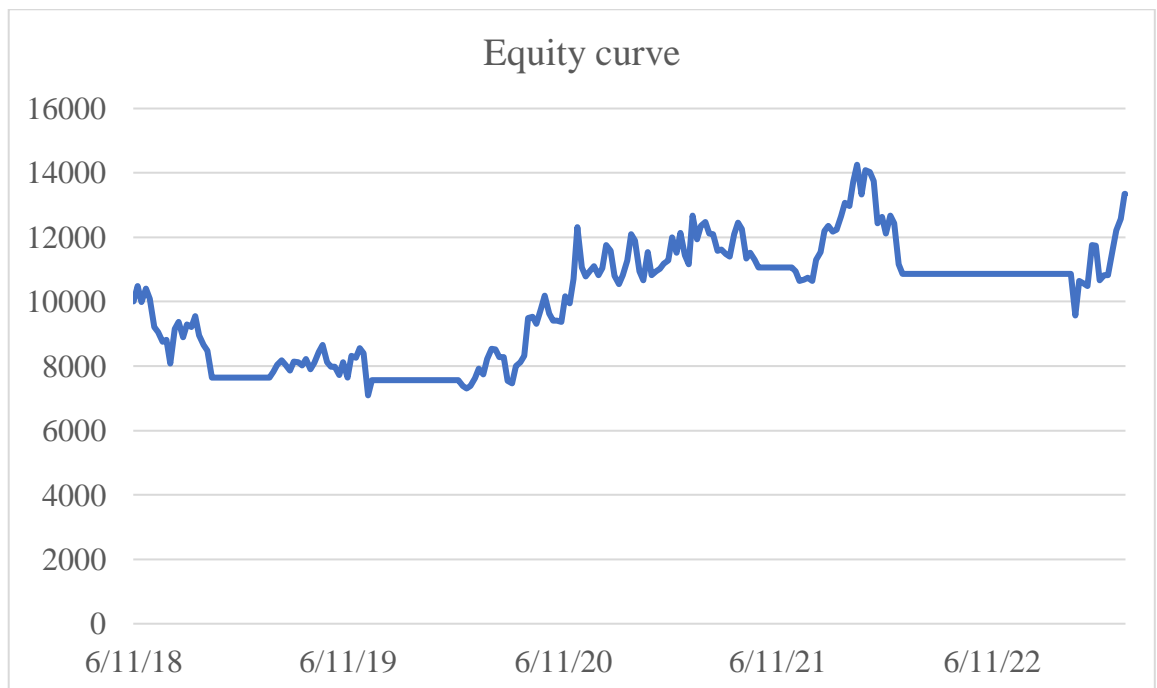|	10 EMA & 20 EMA
Gains	33 420 USD
Loss	-30 065 USD
Net profit	3 355 USD
Number of winning trades	76
Number of losing trades	81
% winning trades	48%
% losing trades	52%

Largest profitable trade	1 612 USD
Largest losing trade	-1 311 USD
Profit factor	1,11
Largest drawdown	-32,84%
Ave. trade Net profit	21 USD

Source: Own Processing, 2023

Pair of EMA crossover strategy made a disappointing outcome compared to the strategies used before. As shown on table 7, the 10 EMA and 20 EMA crossover made a total net profit of $3 355 making only 33.55% return of the original $10K trading account. The strategy opened a total of 157 trades where more than half of those trades ended with a loss. Evidently, trading NFLX, Inc using the 10 EMA and 20 EMA crossover strategy was less profitable compared to the results of 10 SMA, pair of SMA and 10 EMA excluding the Buy and Hold strategy.

Figure 20 Equity curve 10 EMA & 20 EMA (2018-2022)

Source: Own Processing, 2023

4.2.4 ATR SL – 10 EMA and 20 EMA crossover

Input parameter:

- ATR stop loss employed

- Other parameters are unchanged

Table 8. 10 EMA and 20 EMA crossover with ATR - SL

	10 EMA & 20 EMA - ATR SL
Gains	31 428 USD
Loss	-28 975 USD
Net profit	2 453 USD
Number of winning trades	76
Number of losing trades	81
% winning trades	48%
% losing trades	52%
Largest profitable trade	1 488 USD
Largest losing trade	-1 268 USD
Profit factor	1,08
Largest drawdown	-34,25%
Ave. trade Net profit	16 USD

Source: Own Processing, 2023

As shown on table 8, trading strategy using 10 EMA and 20 EMA along with ATR stop loss recorded a total net profit of $2 453, that is a return of 24.53%. The result shows that the system sustained a significant losses from the 157 total number of trades that were open in the span of 5 years losing more than half of those trades generating average trade net profit of only $16. By far this strategy turned out to be the worst strategy for trading NFLX, Inc compared to 10 SMA, pair of SMA, 10 EMA excluding the buy and hold strategy shown on table 1. The largest profitable trade that the system could generate from a single trade was $1 488 while the loss was -$1 268 which is only $300 difference. Despite the profit factor being greater than one showing us the system had a little profit, the profit factor was greater than one by only a fraction which is another indicator that the strategy using 10 EMA and 20 EMA along with ATR SL did not work well for trading NFLX, Inc.

Figure 21 Equity curve 10 EMA & 20 EMA - ATR SL (2018-2022)
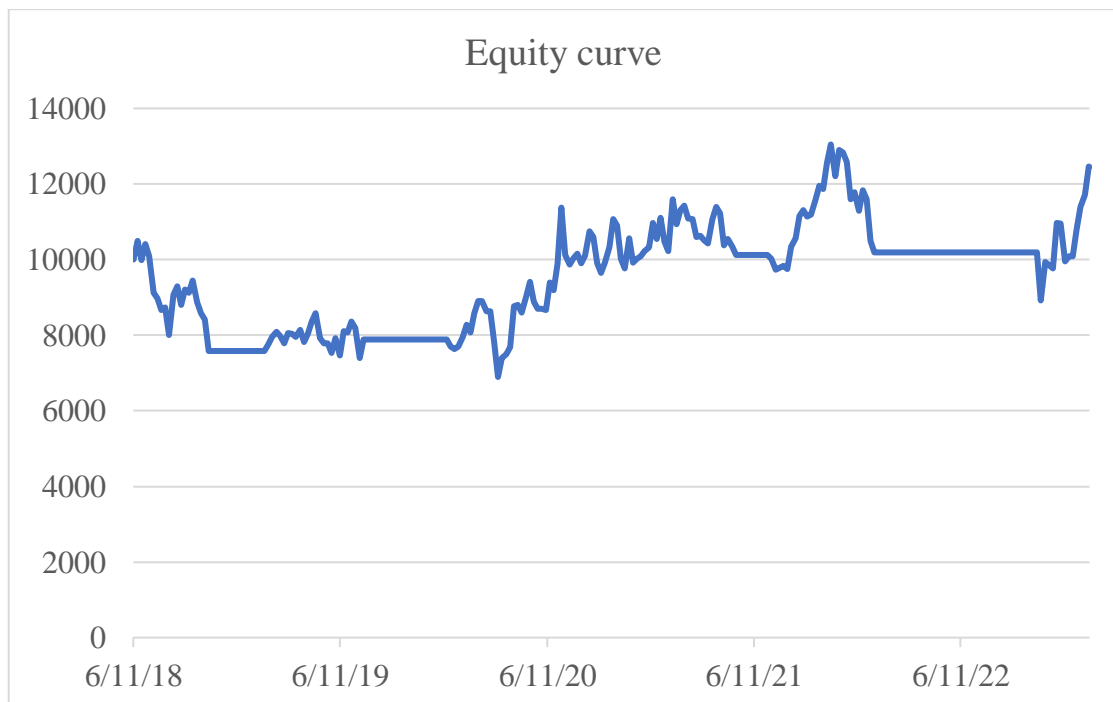
Source: Own Processing, 2023

4.3 Trading strategy using MACD

This section illustrates the trading system using MACD.

4.3.1 MACD and signal line crossover

Input parameters:

- Buy signal occurs when the MACD line (blue line) cross above signal line (red line)
- Sell signal occurs when signal line cross above the MACD line (Murphy, 1990, p. 253)
- Other parameters are unchanged

Figure 22 MACD line and signal line crossover

Source: TradingView.com, Own processing, 2023

Table 9. MACD line and Signal line crossover

	MCD and Signal line crossover
Gains	46 747 USD
Loss	-26 941 USD
Net profit	19 806 USD
Number of winning trades	66
Number of losing trades	55
% winning trades	55%
% losing trades	45%
Largest profitable trade	4 880 USD

Largest losing trade	-2 862 USD
Profit factor	1,74
Largest drawdown	-23,79%
Ave. trade Net profit	164 USD

Source: Own Processing, 2023

The MACD line and signal line crossover strategy revealed to be a promising strategy. As shown on table 9, the strategy made a total net profit of $19 806 making approximately 198.06% return on the original $10 000 investment. A total of 121 trades were open by the system through the five years and 55% or 66 of those trades generated profit. The largest profitable trade recorded was $4 880 along with average trade net profit of $164.

The MACD line and signal line crossover turned out to be a profitable strategy for trading NFLX, Inc with a profit factor of 1.74. Another indicator that the system is more reliable than the couple of strategy mentioned above is the largest distance from the highest peak value or the Maximum (Largest) Drawdown making out to be -23.79$ which is in somewhat acceptable for some traders.

Figure 23 Equity curve for MACD (2018-2022)
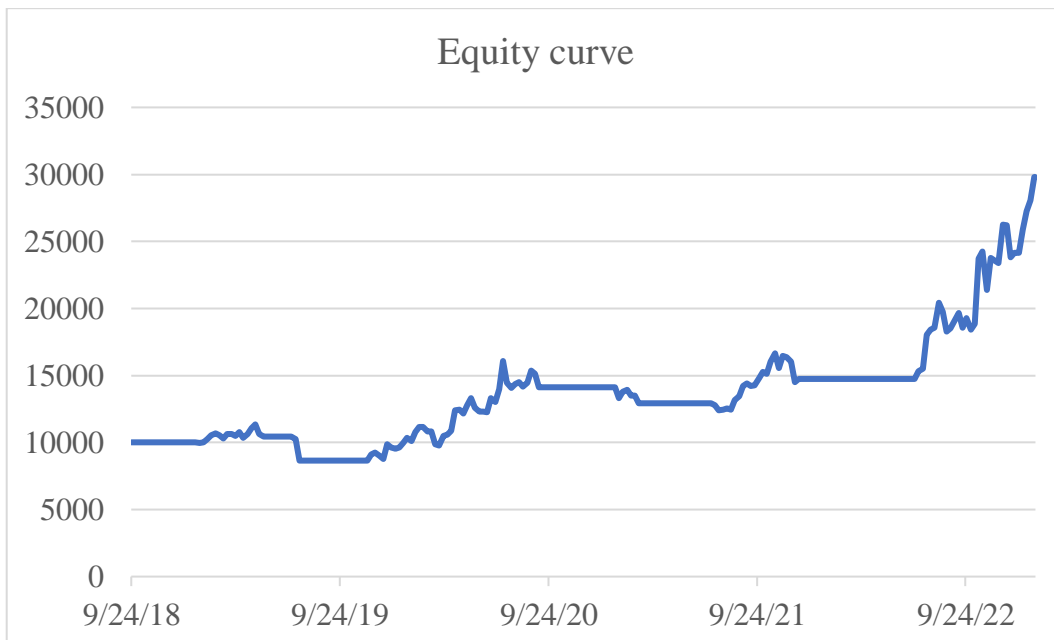
Source: Own Processing, 2023

4.3.2. ATR SL - MACD line and Signal line crossover

Input parameters:

- ATR stop loss employed
- Other parameters are unchanged

Table 10. MACD line and Signal line crossover with ATR - SL

|	MACD line and Signal line - ATR SL
Gains	68 128 USD
Loss	-32 292 USD
Net profit	35 836 USD
Number of winning trades	70
Number of losing trades	52
% winning trades	57%
% losing trades	43%
Largest profitable trade	7 258 USD
Largest losing trade	-3 921 USD
Profit factor	2,11
Largest drawdown	-18,41%
Ave. trade Net profit	294 USD

Source: Own Processing, 2023

Out of all the trading strategies that were used to backtest the five year historical data of NFLX, Inc the MACD line and signal line crossover along with ATR - SL set up to control losses is by far the best strategy that was used making an incredible payoff.

As shown on table 10, the system opened a total of 122 trades and 57% of those trades ended with a win making up to $7 258 from a single trade which the largest profitable trade that was ever recorded when backtesting NFLX, Inc stock for this thesis. A promising result that generated a total net profit of $35 836. This is the highest net profit made compared to all of the other trading strategies including the MACD line and signal line crossover without using the ATR stop loss. By employing ATR stop loss the system was able to boost the profits and generate a return of 358.36% on the account.

The profit factor went up to 2.11 making an average trade net profit of $294. In addition, the maximum (largest) drawdown was -18.41% which is the shortest distance from

the highest peak that was recorded compared to all the other strategies when trading NFLX, Inc stock.

Figure 24 Equity curve MACD - ATR SL (2018-2022)
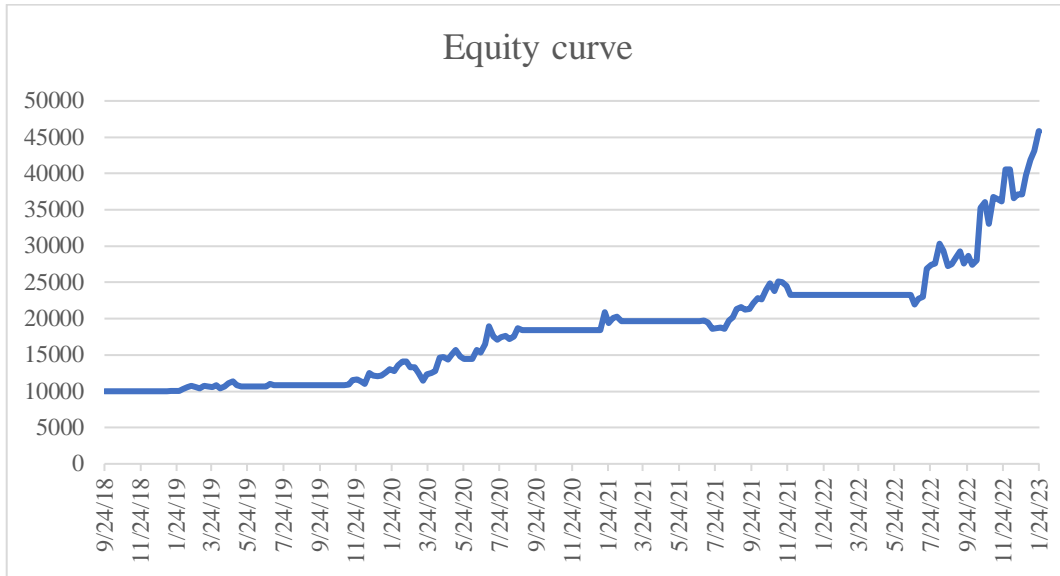
Source: Own Processing, 2023

5 Results and Discussion

This chapter illustrates the comparison of trading strategies used above along with some recommendations.

Table 11. Strategies - all in one

Strategy		Total net profit	Total number of trades	Largest Drawdown
Buy & Hold		$1 366	-	-74,58%
SMA	close price crossover	$9 484	144	-33,72%
	ATR SL employed	$10 255	144	-34,32%
	Pair of SMA	$15 549	146	-23,85%
	ATR SL employed	$12 269	146	-23,69%
EMA	close price crossover	$10 990	144	-32,01%
	ATR SL employed	$11 821	144	-32,63%
	Pair of EMA	$3 355	157	-32,84%
	ATR SL employed	$2 453	157	-34,25%
MACD	Signal line crossover	$19 806	121	-23,79%
	ATR SL employed	$35 836	122	-18,41%

Source: Own Processing, 2023

Table 11 shows all the strategies that were used to backtest to see if the system were profitable trading NFLX, Inc. A total of eleven trading strategies were tested and all of the strategies that were used made profit, there was no strategy that ended with a loss or in negative numbers and keep in point that commission fees are not considered in all of them. For some that might seem good news but for a lot of traders out there they might ask for more details and rightfully so, because there are other factors that need to be checked as well as how much of a profit a strategy had generated in the given timeline (five years in this case) which is the return on the account.

The worst strategy that resulted with the lowest of return on account as well as the highest maximum drawdown was the Buy & Hold strategy. This strategy doesn't use any technical indicators nor stop loss system, it is simply buying a position and holding it to the present day and see how much of a profit it generated. Moreover, the Pair of EMA had showed to be the second worst strategy, and the attempt for controlling losses was a failure.

On the other hand, the best strategy that generated the most profit was the MACD (moving average convergence/divergence). Not only the system had made a promising return on account but also it had the lowest maximum drawdown. In addition, the second-best strategy was pair of SMA crossover. Despite having many false signals, it showed to have made the third largest profit recorded even more than when the system had an ATR stop loss set up. Case in point, the ATR stop loss had a positive effect on most of the strategies, but it had negative effect on strategies such as: pair of SMA, Pair of EMA. This shows a pattern of when two moving averages are used the ATR stop loss does not work well with the pairs. As for the rest of the strategies, the results were somewhat acceptable ranging profits from $9K to less than $12K. the ATR stop loss worked perfectly for these systems but not as much as it for MACD strategy.

Overall, trading based on NFLX, Inc using these popular strategies had a high and low profits. That being said, traders should apply other technical indicators to confirm their results before trading actual funds. Additionally, it is recommended to consider using other technical indicators because a strategy that worked for one stock doesn't mean it will work for another. Thus, traders should test different trading strategies that is suitable for their chosen stock to achieve their targeted profit goal.

Conclusion

The main objective of this thesis is to check the profitability and feasibility of trading strategies and long-term profitability by using the technical approach and analysing the historical data of Netflix stock over the course of 5 years (2018-2022). To achieve this goal different trading strategies were employed as well as a method of controlling loss was applied. A "Buy & Hold" which is a strategy without using technical indicator is also used in this thesis for the sake of comparison to check how well the strategies work and if there is a significant difference on the total return over the course of five years.

Data that are important for the practical part of this thesis were: open, high, low, and close and Adj price. The methods that are used include Simple Moving Average (SMA), Exponential Moving Average (EMA), Moving Average Convergence/Divergence (MACD) and to control loss Average True Range (ATR). In addition, metrics that would help to evaluate the stack performance of each trading strategies were included which are: total net profit, profit factor, percentage profitable trades, largest (max) drawdown, and average trade net profit.

I started off as an introduction to the stock market and how much it recovered since the great recession in 2008 and continued with a summary of the two stock giants that hold a combined 54% of the word stock market. As a background, some fundamentals and definition of stock and stock market were summarized as well as types of analysis which are fundamental and technical analysis. Both of these two approaches are used by traders, but in this thesis only the technical approach was used. I also mentioned about one of the oldest and earliest forms of technical analysis which some traders prefer to use to this day which is called Dow theory, and it's six ideas the theory consists of. Following with most popular types of charts traders use that includes Bar chart, Japanese candle sticks and Line chart and also some feature of price action were mentioned. Another important part of trading is deciding what kind of trade to take. Some of the major types of trading were laid out that include scalping, day trading, swing, and position trading, and for this thesis swing and position trading were selected to check profitability of NFLX, Inc.

And lastly for the literature part of this thesis I stated about money management, one of the most important part when talking about money which I personally believe is crucial to anyone in this world. Whether an individual is in trading or generating money in any other way, without money management the money made could be lost in short amount of time.

The practical part is divided into three sections which includes three trading strategies (SMA, EMA and MACD). To optimize the results or in other worlds to be able to control loss ATR was employed for each strategy. Additional strategy called Buy & Hold was added for the sake of comparison with the selected indicators as well as to see how well the ATR SL was effective.

In the beginning, the trading strategy with SMA and Buy & Hold were performed. There were two ways to trade with Simple moving average which includes SMA and close price crossover and the other is a pair of simple moving averages crossover. The buy & hold trading system was simply buying the stock and holding the position for a long period of time (no trading in between). The moving average and close price crossover were profitable as well as when the ATR stop loss was employed. On the other hand, the buy & hold strategy was profitable but when compared its return on the investment to the moving average trading system it did not generate a significant profit. The Next trading strategy used was pair of SMA, and this strategy turn to give a better result/profit. Although the pair of SMA system were much more profitable, the attempt to control loss to get better result was not successful due to false signals and activation of ATR stop loss to late or too early.

Trading strategy with exponential moving average was quite an interesting strategy. The EMA and close price crossover strategy results were somewhat similar to that of SMA and close price strategy except the EMA and close price having to generate a little more profit. Likewise, when ATR stope loss was employed along with EMA and close price crossover the strategy made the trades better, controlled losses same as the outcome for SMA and close price crossover with ATR stop loss. Despite the EMA and close price having a successful and profitable trades, the pair of EMA crossover did not result in a more significant profit. In fact, the pair EMA crossover return on investment were quite exceptionally low and even worse when the ATR stop loss were employed the profit went further down. Looking at the profits pair of EMA strategy made out to be not very well suitable strategy to trade NFLX, Inc along with the effort to sustain the system's loss with a stop loss.

Overall, trading strategy using moving averages were all profitable but emphasizing maximum profit the Pair of EMA crossover alone nor with ATR stop loss is not recommended for trading strategy along with the buy & hold which is the worst of all the strategies used in this practical part of the thesis.

Finally, results from trading strategy using Moving average convergence/divergence (MACD) were quite remarkable. The MACD line and signal line crossover showed to be more effective and profitable as well as less risky than the moving average strategies. And in the end, by employing the ATR stop loss the MACD line and signal line crossover improved generating a significantly high profit. Considering the profits made by this system it proved to be more suitable for trading NFLX, Inc, and recommended to apply this trading strategy than the moving averages.

The results in the practical part showed how the indicators work and how they responded to a stop loss mechanism set up in an attempt to make the strategies more effective and optimize profit. And it showed which strategy work together with the stop loss and which did not. This could help readers to decide whether to trade with Netflix stock or not using these strategies. I emphasize again on the fact that the trading strategies applied in this thesis are backtested solely on Netflix stock, thus, recommended to readers to consider and employ other indicators as well to reach their profit goal. It is also recommended to use other indicators to confirm their results before putting funds on a real trade.

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