JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

ANALYSIS ON PORTFOLIO CONSTRUCTION DURING THE PANDEMIC (COVID-19)

Rakshith S
MBA 3rd Trimester
PES University
Bengaluru – Karnataka INDIA

ABSTRACT

This paper talks about various stocks which are been selected based on different industries and their performance during the covid-19 pandemic. A sample portfolio is been created in order to look into the risk, weight and return of the portfolio and individually during the Covid-19 pandemic. For this paper data from BSE.com and Yahoo finance is taken into consideration and performed sharpie ratio to find out the performance of the stock as well as to measure

INTRODUCTION

The “COVID-19 pandemic's global spread” in early 2020 triggered unforeseen difficulties in a variety of industries, transforming the economic environment and the stock market in ways that were before unthinkable. In addition to a public health emergency, the pandemic's waves caused a significant economic upheaval over the world. Financial markets saw quick and dramatic oscillations within these dynamic and turbulent circumstances, prompting investors to rethink their approaches to building and maintaining investment portfolios.

A key component of contemporary finance is portfolio creation, which is careful choice of assets to strike the ideal equilibrium between both return and risk. Investors have traditionally created portfolios that are in line with their risk sensitivity and financial goals using historical data and accepted assumptions. Nevertheless, the pandemic brought about a wide range of novel factors, including unprecedented government involvement, supply chain disruptions, tendencies towards remote labour, and altered consumer behaviour. Due to these factors, it may now be difficult to adequately design traditional portfolios to account for the risks and subtleties of this brand-new world.

In the framework of portfolio development, this research project aims to look into the numerous opportunities and difficulties given by the pandemic-induced market instability. This research attempts to offer a thorough examination of the changing landscape for investment portfolio management throughout the pandemic by examining the success of various investor strategies and closely examining how different asset classes reacted to the crisis.

In addition to challenging the accepted norm of portfolio diversification, the unique conditions of the epidemic have also sparked innovation and adaptability within the financial sector. Financial professionals have had to forge new paths due to the fast involvement of technology in making investment choices and the review of risk models. This study aims to shed some light on the efficacy of these changes and their consequences for future portfolio creation techniques by an empirical analysis of historical data, metrics for performance, and qualitative market participant observations.

We will go into detail about the precise goals, procedures, and projected outcomes of this study in the parts that follow. This research aims to provide investors, financial professionals, and policymakers with invaluable information for understanding the complicated scenery of managing investments in an environment that had been fundamentally altered by the events of the current pandemic by thoroughly analysing the pandemic's effect on portfolio construction.

LITERATURE REVIEW

The so-called pandemic that is covid 19 was started in the early 2020 and had a significant impact on all the industry and trades which affected the share markets significantly. The so-called pandemic did not affect only manufacturing sector but it also affected all type of service including non-service industry. When it comes to the finical markets or the stock markets there was an unexcepted changes which the market went through. The paper concentrated on the “Warsaw Stock Exchange”. The main purpose of the paper was to measure the diverse sectors of the market, and how the market responded to the pandemic, and it also aimed to study the stability of the market during the pandemic. (Michal Buszko, 2021)

The paper talks about a comparative analysis of the equity based mutual funds in the pandemic covid 19 in the US markets during the early of 2020. Contrary to a common belief, we demonstrate that the majority of active reserves underperformed unreceptive benchmarks throughout the disaster. Both funds with high star ratings and funds with high sustainability ratings exhibit strong performance. Fund outows somewhat outperform crisis patterns. Stakeholders prefer investments with strict elimination criteria and excellent sustainability ratings, mainly in the ecological sector. The research specifies that investors are still concerned in sustainability in spite of the current severe financial crisis, demonstrating that they see it as a need rather than a costly item. (Lubos Pastor, 2020)

The paper talks about the ESG (environmental, social and governance) preferences in the investors during investing in different bonds and equity-based stocks in the pandemic covid-19. The study claims that the investors prefer in investing bonds or stocks which has higher ESG that other financial instruments. Investors prefers ESG because It implies that money is moving from the stock and high yield corporate bond markets to the investment-grade corporate bond market. During times of crisis, investors prefer the fixed income market over the stock market and seek sanctuary in companies with comparatively higher ESG ratings and creditworthiness. (Singh, 2021)

This paper talks about the risk and return of an investor while creating any portfolio of an investor during the pandemic covid 19. This paper talks in the point of view of an individual investor. For this study the data was collected from individual investors I Mumbai and Delhi. The results demonstrate that stakeholders have begun changing their portfolios as a result of the present financial crisis related to “COVID-19”. Investors are fluctuating towards a thoughtful strategy since the earnings on riskier assets are not what was expected. Though, not all stakeholders experience the same shift from “risky to risk-free investments”. (Himansu, 2021)

The paper examines on the investors during the pandemic because at the time of pandemic the investors were reconsidering their portfolio consideration. This paper gives an understanding the market volatility throughout different types of bonds that were traded in the market during the pandemic in Indonesia. In the study we can clearly see that there was an increase in the asset movement but there was low profitability in the returns during the pandemic. (Paresh Kumar Narayan, 2022)

The paper speaks about how the investors are advised to change their equity stock into bonds as time passes by. The study used two methods that are ASD and AMV to inspect the supremacy between both equity and bond. The study stated that widely used recommendation to recommend a larger stock to bond ratio for lengthy investment horizons is well supported by ASD and AMV principles. In light of this, we explain the practitioners' advice using the anticipated utility paradigm. (Turan G. Bali, 2009)

The study focused on Madhya Pradesh and sought to investigate how the COVID-19 outbreak affected people's financial decisions in tiny communities there. The researchers used two major techniques to do this: a study of the literature on COVID-19 and government initiatives, as well as a survey of people who work in the service industry or own companies in the area. The study revealed a substantial relationship between people's economic levels and the different controls put in place to stop spreading of COVID-19, such as shutdowns and travel restrictions. These actions have a direct impact on people's capacity to save money as well as their investing choices. According to the data, during the pandemic there was a significant 43% decrease in investment made via SIPs. (Arpita Gurbaxani, 2021)

Using data for the period of 01.07.2019 through 30.06.2020, we evaluate the impact of covid-19 diseases and fatalities on bond rates and stock returns as well as potential contagion effects between markets. Contrary to several works in the field that group nations and do panel regressions, we find that by utilizing various empirical approaches, the Depending on how the epidemic was handled, the consequences of COVID on the stock market varied per nation. First, the effects of COVID-19 infections on bond yields and market returns were often transient. Secondly, in nations that Covid-19 mortality were linked to countries that, throughout the research period, had a covid-19 health issue (e.g., the UK and Italy). with a rise in bond yield. For nations (like Sweden) using less stringent methods of disease management, Investor concerns were raised by the COVID-19 outbreak. (Njamba Kapalu, 2022)

This study gives an idea about how people/investors were thinking about money in the point of view of their financials. This research talks about the different situation of people handling their money during the covid-19 pandemic and also gives an overview of how people were investing in the stock market. (Manish Talwar, 2021)

OBJECTIVE

The main objective of this research is to analysis how This paper focuses about only the BSE Market "Bombay Stock Exchange". Using this research paper, the reader may know how stocks from various industries act like one portfolio performed along with the individual risk, individual return along with the total risk of the stocks as one and total returns of the stock as one portfolio.

I have derived to this objective to provide Insights about how different stocks from various industries or domain performed during the pandemic especially the stocks that have been listed in BSE, India.

RESEARCH METHODOLOGY

Scope:

This study is aimed at analysing the investor's portfolio construction during the covid 19 pandemic that is from 1-march-2020 to 1-march-2022. This study talks about how the stock market performed during the pandemic and also talks about the portfolio performance during the pandemic. For conducting this research, I have collected the data from 1st march of 2020 to 1st march 2022.and the stocks that is been chosen is based on various industries that have performed well during the covid 19 pandemic for example industries like telecommunication, pharmaceutical, and many more.

Data collection and source:

For conducting this research, I have used secondary data of various stocks from various industries that were available on yahoo finance and BSE website. I have taken data from the date 1 of march 2020 to 1 of march 2022 because in this period the market vitality was more compared to other times which is useful for conducting my analysis on the stock portfolio performance.

METHODOLOGY

The Sharpe Ratio is a popular financial indicator that assists investors in determining the risk-adjusted earnings of an portfolios. It was named after "Nobel laureate William F. Sharpe", who invented it in 1966. The Sharpe Ratio helps investors to analyse different investment possibilities by taking into account both their earnings and risk levels.

The formula for the Sharpe ratio is as follows:

$$\text{Sharpe ratio} = \frac{R_p - R_f}{\sigma_P}$$

Where:

- Rp is the "average return of portfolio".
- Rf is the "risk-free rate of return"
- σp is the "standard deviation of the portfolio's returns"

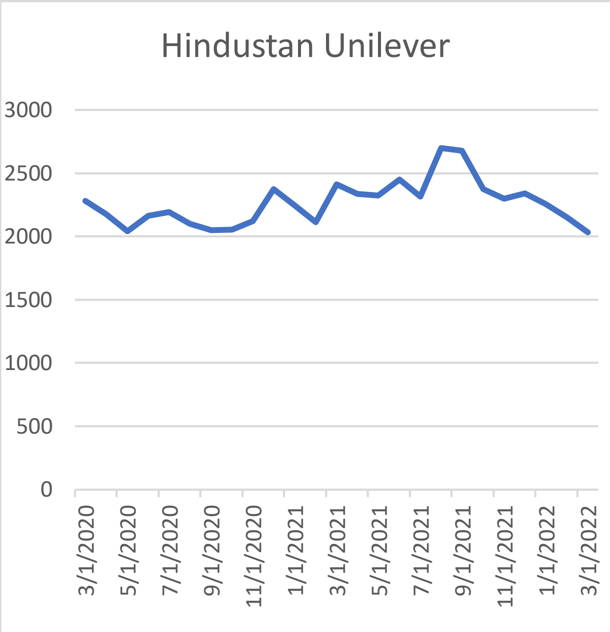
The "Sharpe Ratio" calculates the total of extra return earned per component of risk taken.

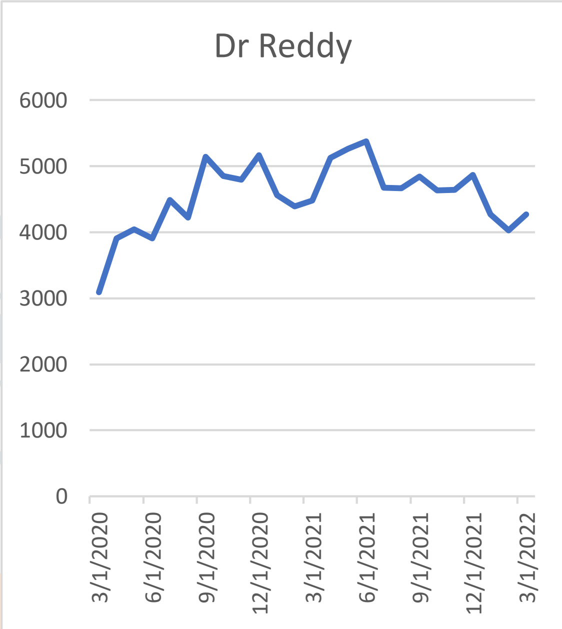
DATA ANALYSIS

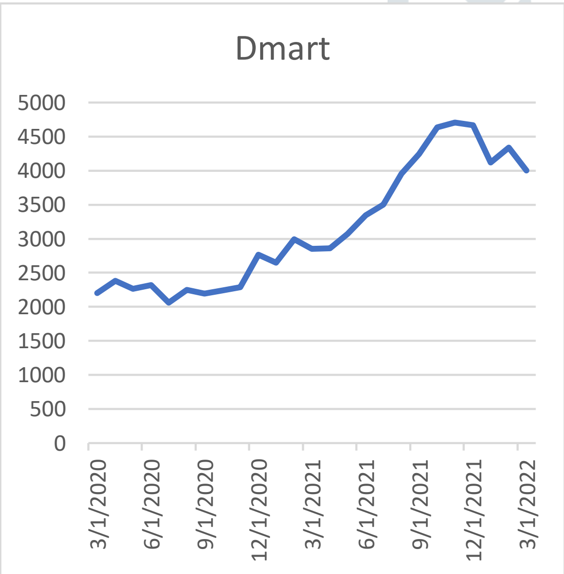
BSE STOCK DATA.xlsx

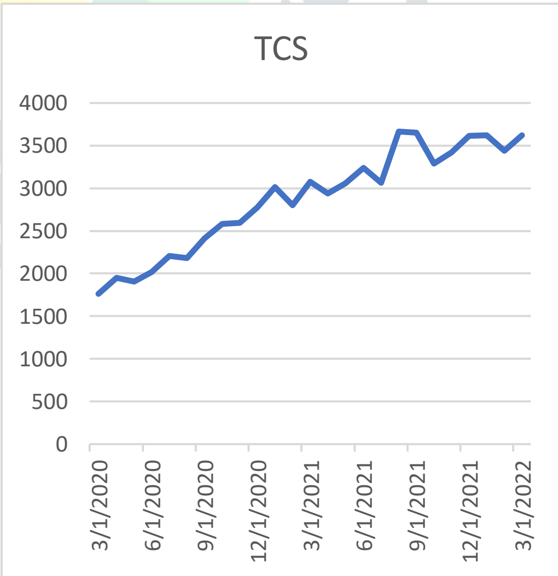
The above excel File consists of the data which is used in this research

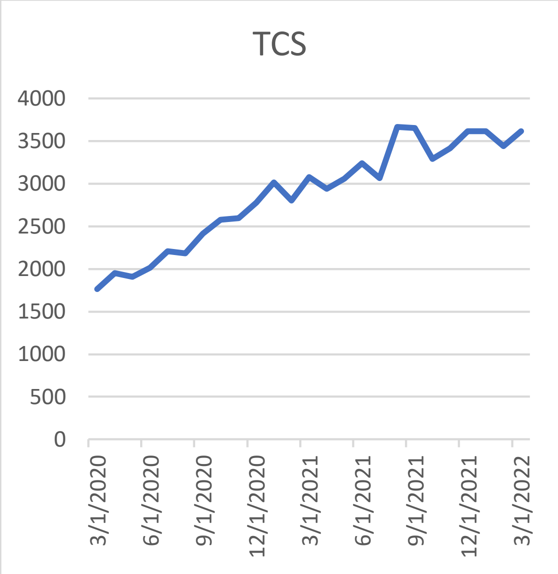
Below we can see the adjusted prices for different stocks in different industries which is in the excel file and which are used in the further study in this research

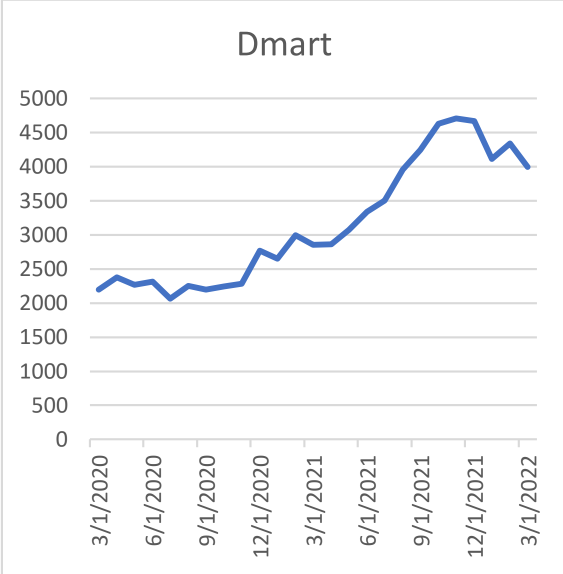


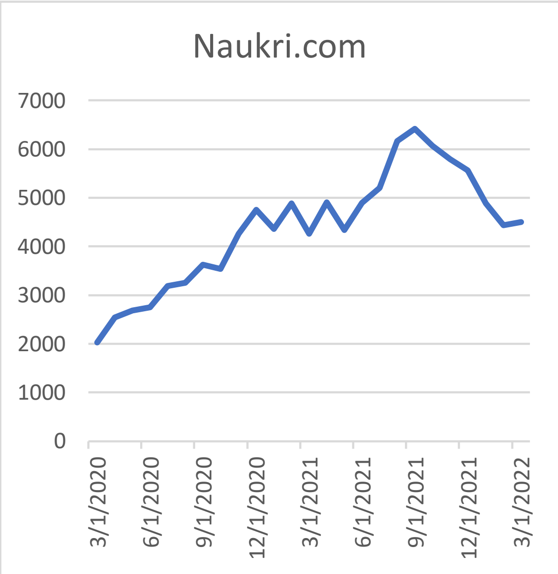


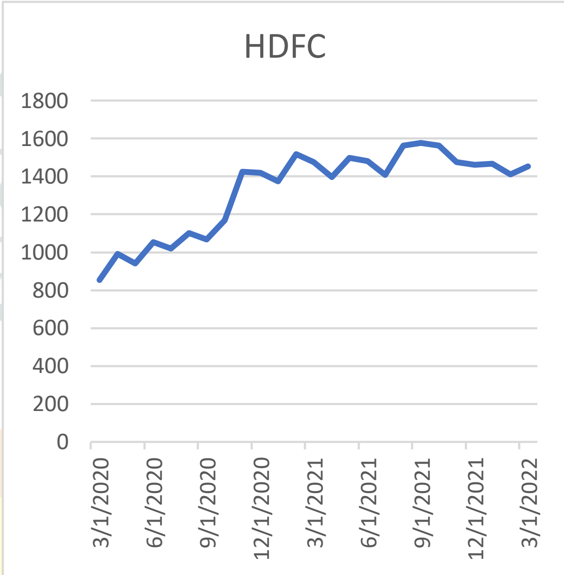


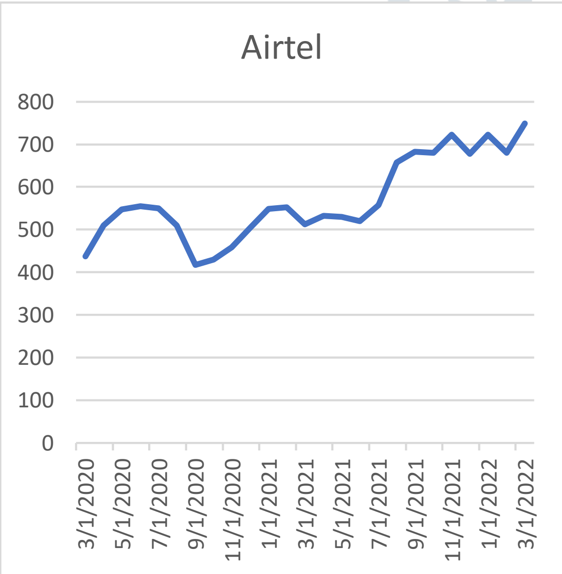


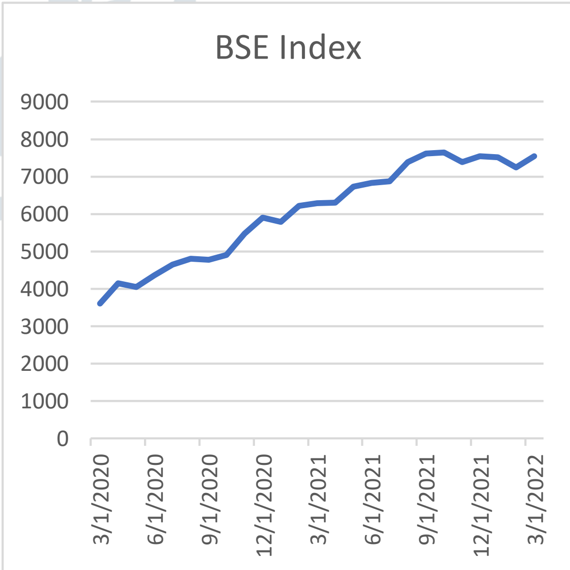

TCS
4000
3500
3000
2500
2000
1500
1000
500
0
3/1/2020
6/1/2020
9/1/2020
12/1/2020
3/1/2021
6/1/2021
9/1/2021
12/1/2021
3/1/2022


Dmart
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
3/1/2020
6/1/2020
9/1/2020
12/1/2020
3/1/2021
6/1/2021
9/1/2021
12/1/2021
3/1/2022


Naukri.com
7000
6000
5000
4000
3000
2000
1000
0
3/1/2020
6/1/2020
9/1/2020
12/1/2020
3/1/2021
6/1/2021
9/1/2021
12/1/2021
3/1/2022


HDFC
1800
1600
1400
1200
1000
800
600
400
200
0
3/1/2020
6/1/2020
9/1/2020
12/1/2020
3/1/2021
6/1/2021
9/1/2021
12/1/2021
3/1/2022

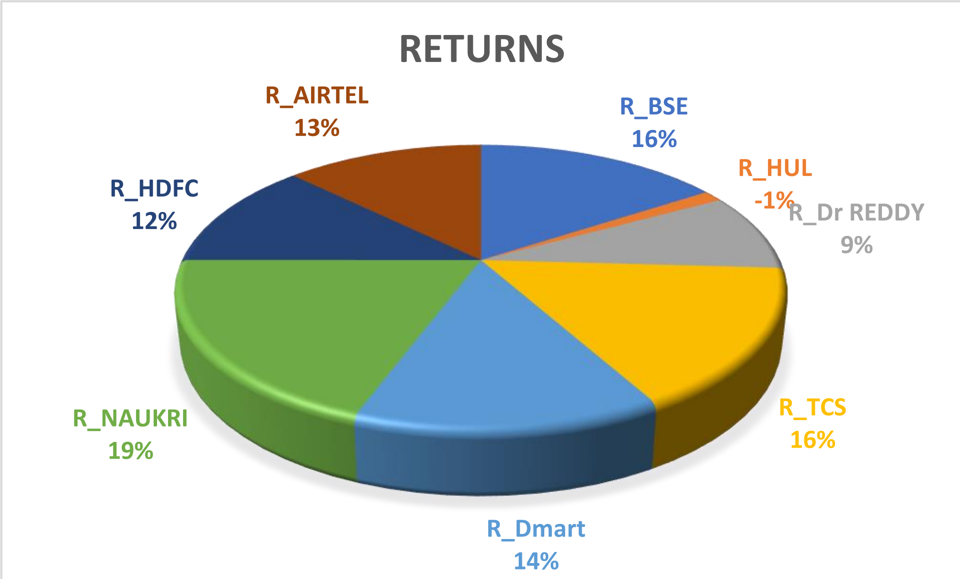

Airtel
800
700
600
500
400
300
200
100
0
3/1/2020
5/1/2020
7/1/2020
9/1/2020
11/1/2020
1/1/2021
3/1/2021
5/1/2021
7/1/2021
9/1/2021
11/1/2021
1/1/2022
3/1/2022


BSE Index
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
3/1/2020
6/1/2020
9/1/2020
12/1/2020
3/1/2021
6/1/2021
9/1/2021
12/1/2021
3/1/2022

data interp.xlsx

The above is the solved data using sharpie method in Ms excel

The below pie chart shows how each stock from different industries have given returns during the covid-19 pandemic



After analysing the above pie chart, we can come to a point that by seeing returns table above we can see various company stock return. Companies like Dmart, TCS and Naukri.com has the highest return compared to other stocks like HDFC, HUL etc.

Now coming to the percentage of returns of the stocks that have performed well during the covid-19 pandemic is as follows:

Airtel: 13%

Hindustan Unilever: -1% (lowest)

Dr Reddy: 9%

TCS: 16%

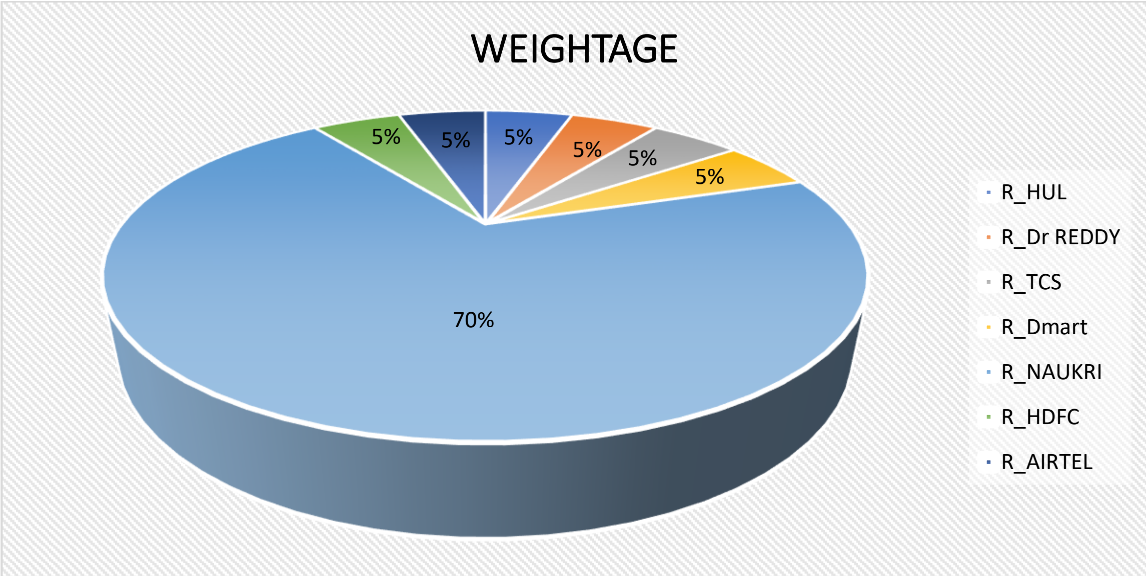
D-mart: 14%

Naukri.com: 19% (highest)

HDFC: 12%

WEIGHTAGE

Weightage defines how much money should be invested in various stocks during covid 19 acting as a single portfolio. Weightage defines the percentage that one should invest on the various stock. For example, seeing any weightage of stocks an investor can divide his investment into small investment and invest. Weightage gives an investor a rough figure of how much money should be invested in each stock in a portfolio.



The above is the weightage of the stocks that I have selected from various industries that have performed good during the covid 19 pandemic. As seen in the above pie chart we can see that the HUL has the highest weightage which indicates an investor to make high investment in HUL than compared to others.

FINDINGS

This paper talks about how investors analysis the portfolio during covid-19 pandemic. To examine this, I have taken stocks from various industries that performed good during the pandemic. After getting the data from BSC.com and Yahoo finance I performed sharpie ratio to look into the individual risk and return along with the portfolio risk and return when I have created by using stock from various industries. We can look into the weight of each stock along with the return and come to a conclusion stating that if I were an investor, I would invest in Naukri.com because the stocks of Naukri.com has highest weightage compared to the rest other stocks and when coming to the returns Naukri.com has the highest return percentage compare to other stocks

CONCLUSION

To conclude this paper, we can tell that during the covid 19 pandemic the market had more volatility compare to other times. based on my portfolio we can state that during covid 19 if investors were to follow my sample portfolio then they would except a higher rate of return in Naukri.com and least return in HUL but based on the weight we can see that Naukri.com stocks had 70% returns while the other stocks had only 5% which come to an conclusion that Naukri.com is the best stock to invest and when talking about all the stock as one portfolio we can conclude that the portfolio which I have created by using stocks from various industries which performed well during the pandemic is quite stable can generate a stable income for the investors.

References

Arpita Gurbaxani, D. R. (2021). A Study on the Impact of COVID- 19 on Investor Behaviour of Individuals in a Small Town in the State of Madhya Pradesh, India .

Himansu, R. N. (2021). Impact od COVID-19 on portfolio allocation decisions of individual investors .

Lubos Pastor, M. B. (2020). MUTUAL FUND PERFORMANCE AND FLOWS DURING THE COVID-19 CRISIS.

Manish Talwar, S. T. (2021). Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic?

Michal Buszko, W. O. (2021). COVID-19 pandemic and stability of stock market - A sectoral approach.

Njamba Kapalu, O. K. (2022). Financial markets' responses to COVID-19: A comparative analysis.

Paresh Kumar Narayan, S. A. (2022). Did green debt instruments aid diversification during the COVID-19 pandemic?

Singh, A. (2021). COVID-19 and ESG preferences: Corporate bonds versus equities.

Turan G. Bali, K. O. (2009). Bonds versus stocks: Investors' age and risk taking.