Report on portfolio analysis

After analyzing all the six portfolios we can observe that Diversified portfolio is better than a single stock portfolio.

What is diversification?

Diversification is an investing strategy used to manage risk. Rather than concentrate money in a single company, industry, sector or asset class, investors diversify their investments across a range of different companies, industries and asset classes. When you divide your funds across companies large and small, at home and abroad, in both stocks and bonds, you avoid the risk of having all of your eggs in one basket.

What is the need of diversification ?

You need diversification to minimize investment risk. If we had perfect knowledge of the future, everyone could simply pick one investment that would perform perfectly for as long as needed. Since the future is highly uncertain and markets are always changing, we diversify our investments among different companies and assets that are not exposed to the same risks. Diversification is not designed to maximize returns. At any given time, investors who concentrate capital in a limited number of investments may outperform a diversified investor. Over time, a diversified portfolio generally outperforms the majority of more focused one. This fact underscores the challenges of trying to pick just a few winning investments.

Following is the data from portfolios of six different investors:

|  |  |
| --- | --- |
| **Stock Price Adj Close) Analysis** | |
| Expected Share Price | 1505.688304 |
| Expected Return | 0.000442149 |
| Variance in Share Price | 5319.072564 |
| Variance in Return | 0.000231849 |
| Skewness of Share Price | 0.174911617 |
| Kurtosis of Share Price | -0.490991392 |

Investor A (stocks of HDFC)

|  |  |
| --- | --- |
| **Stock Price(Adj Close) Analysis** | |
| Average of Share Price | 114.368582 |
| Average of Return | 0.001807994 |
| Variance in Share Price | 418.4188663 |
| Variance in Return | 0.000533931 |
| Skewness of Share Price | 0.733721582 |
| Kurtosis of Share Price | -0.479696316 |

Investor B (stocks of ONGC)

|  |  |
| --- | --- |
| **Stock Price(Adj Close) Analysis** | |
| Average of Stock Price | 77.6323171 |
| Average of Return | -0.00153824 |
| Variance in Stock Price | 78.0369382 |
| Variance in Return | 0.00072609 |
| Skewness of Stock Price | 0.63099166 |
| Kurtosis of Stock Price | 0.2886082 |

Investor C (stocks of SPICEJET)

|  |  |
| --- | --- |
| **Portfolio** | |
| Expected Return | 0.000944811 |
| Variance of Return | 0.00021467 |

Investor D (stocks of HDFC and ONGC)

|  |  |
| --- | --- |
| **PORTFOLIO** | |
| Expected Return | -0.00011 |
| Variance of Return | 0.000355 |

Investor E (stocks of ONGC and SPICEJET)

|  |  |
| --- | --- |
| **PORTFOLIO** | |
| Expected Return | -0.00067 |
| Variance of Return | 0.000255 |

Investor F (stocks of HDFC and SPICEJET)

We can observe that the diversified portfolios (D, E, F) have performed better when compared to the portfolios who only have a single stock (A, B, C).

Portfolio of investor D is supposed to gain maximum among the all the diversified portfolios as the expected return of portfolio D is maximum.

CONCLUSION: Diversified portfolios are better than single stock portfolios but if the person has tendency to take risk than single stock portfolios are better as if the stock performed well than the profit made will be a no match.

Planning of project

All the members of the teams showed their interest and dedication to complete the project.  
We divided the work equally as Harshal Jagtap did task 1 and 4, Jeet Jejurikar did Task 2 and some parts of task 5, task 3 and left part of task 5 was done by Devanshu Jindal. Task 6 was done by all three of us. We conducted various google meets consult each other and clarifyy our doubts.

We researched on diversification from forbes.com.