

FINANCIAL REPORT

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| PROBABILITY AND STATISTICS |

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A stock (also known as equity) is a security that represents the ownership of a fraction of a corporation. This entitles the owner of the stock to a proportion of the corporation's assets and profits equal to how much stock they own. Units of stock are called "shares." The aim of this project is to determine and compare the returns of six investors from three securities named HDFC, ONGC and Spice Jet.

Investor A working in banking industry invests in banking stock of HDFC. (Housing Development Finance Corporation Limited).



Investor A earns return of 0.00042149 with expected share price of 1505.68. The skewness of the share price is 0.1749 with negative kurtosis of 0.49099.

Investor B believes that oil industry is uptrend and invests in ONGC. (Oil and Natural Gas Corporation Limited)



Investor B earns return of 0.001807994 with expected share price of 114.36. The skewness of the share price is 0.73372 with negative kurtosis of 0.479696316.

Investor C’s brother is a pilot in spice jet and suggests him to invest in the stocks of the company. (Predictions of future price is higher)



Investor C earns return of -0.00153824 with expected share price of 77.63. The skewness of the share price is 0.63099 with kurtosis of 0.28860.

Investing in single portfolio is both good and bad because-

1. you understand what you own when you pick out the stock. You have complete control of what you are invested in, and when you make that investment but at the same time It is harder to achieve diversification.
2. It requires more time from you to monitor your portfolio. You need to ensure that the companies you've invested in aren't having business problems that could wipe out your bet. You also need to monitor industry and economic trends and at the same time it is easier to manage the taxes on your individual stocks. You are in charge of when you sell, so you control the timing of taking your gains or losses.

Investor D, E, F has invested in two of three stocks to enjoy the benefits of diversified portfolio.



Investor D has invested in HDFC & ONGC and earned combined return of 0.000944811 with variance of 0.000360681 and correlation between the two stocks is 0.621575.

Investor E has invested in SPICE JET & ONGC and earned combined return of -0.0001126 34with variance of 0.00059837 and correlation between the two stocks is -0.34797.

Investor F has invested in HDFC & SPICE JET and earned combined return of -0.000665217 with variance 0.000433451 and correlation between the two stocks is -0.088399.

Investing in dual portfolio is good because-

1. The reason that diversification is usually a successful strategy is that separate assets do not always have their prices move together. Hence, a rather naive diversification can be beneficial (however, at worst, it can also be counterproductive). Naive diversification is a type of diversification strategy where an investor simply chooses different securities at random hoping that this will lower the risk of the portfolio due to the varied nature of the selected securities.

**ACKNOWLEDGEMENT**

**First of all, we all thanks to our mentor Miss Surbhi Gupta for providing us this wonderful opportunity to express our concepts and skill of IT together in one project which is nothing less than a competition.**

**Now, coming to the project-**

**On day 1 of announcement of project we three (LITTLE JAIN, PRIYANSH GUPTA, SAHIL MANIYAR) formed a group and organized a google meeting to share the work and responsibilities and after discussion it is decided that-**

**Task- 1,2,3,4 is to be completed by Priyansh Gupta.**

**Task-5 is to be completed by Sahil Maniyar.**

**Task-6 is to be completed by Little Jain.**

**After 2 days of receiving of project we all three have completed our tasks on time and compiled everything together. We all hope you will like our project because we tried our best to leave no stone unturned.**