# **Question 1**

### How are the monthly returns of possible portfolios distributed?

The monthly returns of Oracle, Yahoo and Ebay over the past year shows that the companies have registered negative returns except in very few months as seen in Figure 1.



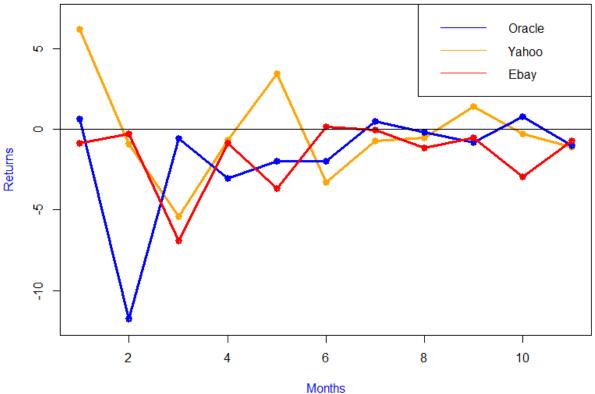


Figure 1

The mean of the combined portfolios is -1.620177 and the median is -0.8405465. This shows that the median is greater than the mean hence the portfolio is skewed to the left as shown in Figure 2.

## Combined portfolio returns

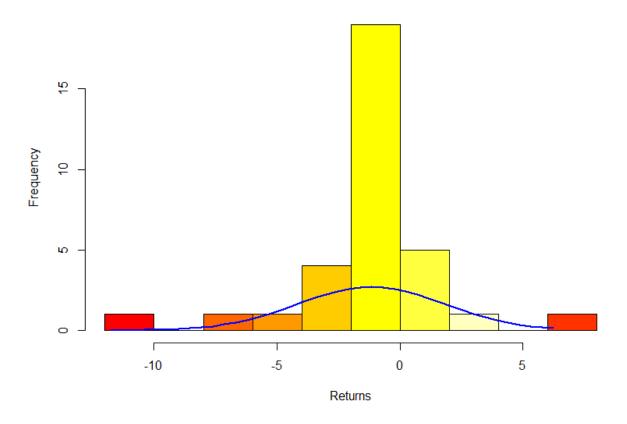


Figure 2

Question 2

# Do you see a wide variance in the possible portfolio returns and its cumulative outcome?

There is a wide variance in the combined portfolio of 26.58926, while Oracle, Yahoo and Ebay have each a variance of 12.47348, 9.607127 and 4.508648. In addition, the portfolio has a low cumulative outcome.

### **Question 3**

Given that you chose similar stocks from the same industry, what accounts for the variance of returns among different portfolios (if any)?

In the case of Oracle, the returns of the company have been significantly volatile in the beginning but are slowly stabilizing towards the end as seen in Figure 1. Currently, the returns are dropping but Oracle believes that the returns will increase in the future as Oracle is currently focusing on venturing into the cloud business ("Why Oracle", 2017). Yahoo performance on the other hand has been significantly similar to Oracle the difference being that Yahoo monthly returns are currently increasing. This is after Yahoo joined a venture with Alibaba an online giant retail store that deals main in consumer goods (Walters, 2017). The monthly returns of Yahoo are expected to steadily rise in the coming future.

#### References

- Walters, N. (2017). Yahoo!'s outperformance is due almost exclusively to Alibaba. TheStreet.

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  Retrieved 14 May 2017, from <a href="http://www.nasdaq.com/article/why-is-oracle-orcl-down-38-since-the-last-earnings-report-cm775625">http://www.nasdaq.com/article/why-is-oracle-orcl-down-38-since-the-last-earnings-report-cm775625</a>