608_Final_Project

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```
## Warning: package 'ggplot2' was built under R version 3.1.3

## Warning: package 'lattice' was built under R version 3.1.3
```

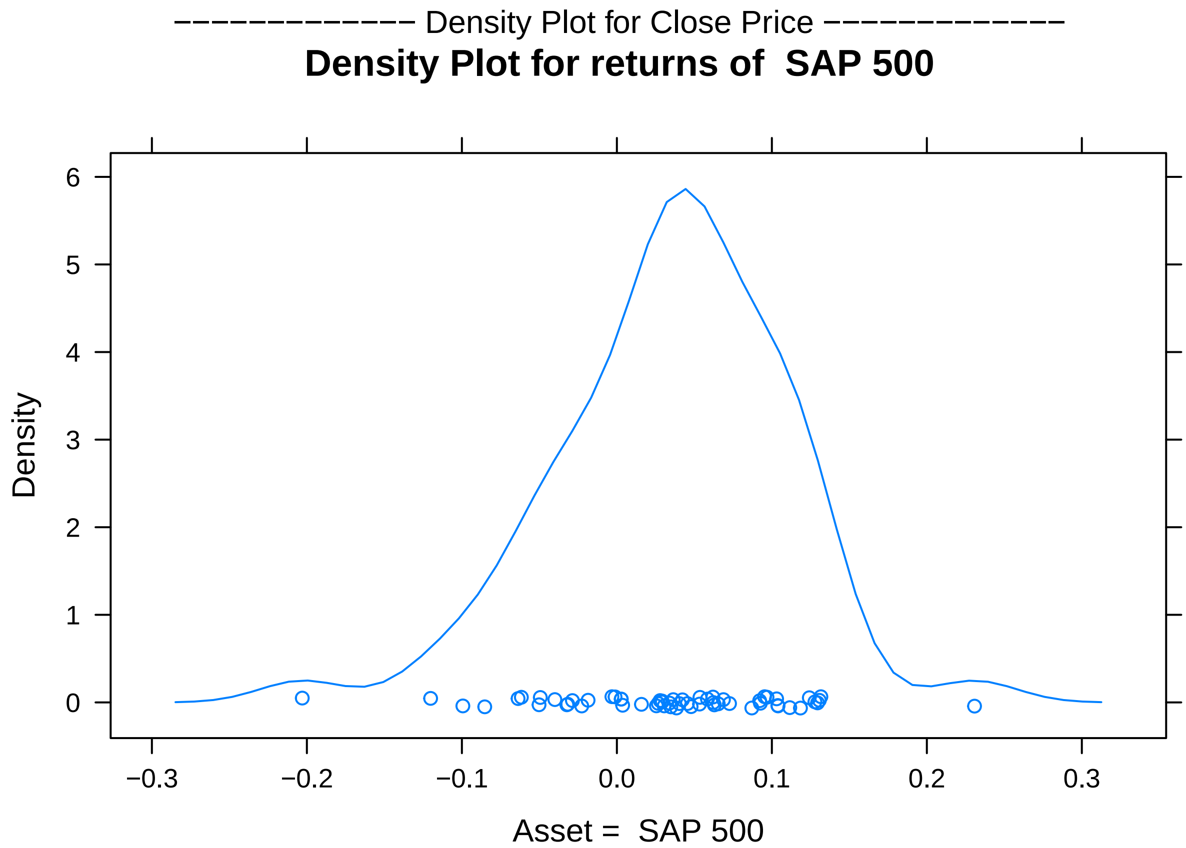
Assumptions:

We use the closing price of the SAP 500 index for our calculations.

```
##           Date    Open    High     Low   Close     Volume Adj.Close Year
## 838 2011-12-30 1262.82 1264.12 1257.46 1257.60 2271850000   1257.60 2011
## 839 2011-12-29 1249.75 1263.54 1249.75 1263.02 2278130000   1263.02 2011
## 840 2011-12-28 1265.38 1265.85 1248.64 1249.64 2349980000   1249.64 2011
## 841 2011-12-27 1265.02 1269.37 1262.30 1265.43 2130590000   1265.43 2011
## 842 2011-12-23 1254.00 1265.42 1254.00 1265.33 2233830000   1265.33 2011
## 843 2011-12-22 1243.72 1255.22 1243.72 1254.00 3492250000   1254.00 2011
##     Month Day
## 838    12  30
## 839    12  29
## 840    12  28
## 841    12  27
## 842    12  23
## 843    12  22
```

Assumptions:

For calculations on the prices for an index such as the SAP 500 Index, it is assumed that the prices are normally distributed. The plot below shows the distribution of the Close price for the SAP 500 index from 1953 to 2012. You can see that the plot roughly represent a normal distribution.


------------- Density Plot for Close Price -------------
Density Plot for returns of SAP 500
Density
0
1
2
3
4
5
6
−0.3
−0.2
−0.1
0.0
0.1
0.2
0.3
Asset = SAP 500

```
## NULL
```