

# [Value shares and growth shares in the uk market (ftse 350)](https://assignbuster.com/value-shares-and-growth-shares-in-the-uk-market-ftse-350/)

[](https://assignbuster.com/)[Finance](https://assignbuster.com/essay-subjects/finance/)

Interpretation of Statistical Analysis on Growth and Value Shares The overall objective of the study is to compare and investigate the performance of value and growth shares using financial ratio indicators like PEG and P/E ratio in the London Stock Exchange (FTSE 100 all share index) and check whether value shares outperforms growth shares. Multiple Regression Modelling The regression analysis was carried out to analyse the pattern or relationship between PEG, P/E ratios with stock returns of UK. On the basis of the literature review and theory discussed earlier, the researcher classified various important parameters into dependent and independent variables. The independent variables used in the model are PEG ratios, P/E ratios and the dependent variable set is the stock returns. It was found that the value of R2 was 0. 39 (approx) and adjusted R2 was 0. 19 (approx). The number represented by R2 is a co-efficient of the model that explains the proportion of variation in dependent variable which can be explained by independent variable variations. From the empirical evidence it can be said that higher values of R2 imply that there exists strong correlation between the variables. The adjusted R2 may be used to control any overestimation of sample R2 that might result from larger samples or due to low co-linearity or variable ratios. The “ Std. Error of Estimate” gives the standard deviation of residual values. Generally, the smaller the R2 values the larger will be the standard deviation which is found to be true in our case. The F-value in the “ ANOVA” tables helps to determine whether the model is good fit for data or not. Since, the p value is greater than 0. 05 and the F-value is > 1, this means there was no significant effect on stock returns due to changes in PEG and P/E ratios. The correlation between PEG and P/E is highly negative implying they are strongly and inversely related. Cluster Analysis ANOVA is a statistical procedure for determining whether the means of several different populations are equal or not. One way ANOVA is a method to analyse the difference between two populations on the basis of one variable. From the slope values of regression model it can be said that variable 1 and variable 2 are positively correlated with dependent variable where as variable 3 and variable 4 are negatively correlated with dependent variable. The t-stat has n-2 degrees of freedom and too much lower negative values may be ignored since lower negative t-stat has no significance and can be removed from equation. The p-value of hypothesis is a measure of test for null hypothesis when ? 1 is zero. This means that when H0 is rejected there will be significant relation between independent and dependent variables. The p-value can also be used to test the correlation co-efficient null hypothesis which was found to 0. 96 for variable 1, 0. 04 for variable 3, and 0. 53 for variable 4. Hypothesis Test – 1-tail Test Under certain circumstances, the paired t-test cannot be applied repeatedly. In such circumstance the analysis of variance or ANOVA is useful. The confidence level chosen is 95% or there are 0. 95 chances that our statistical inference is correct. This means that the significance level of the test is 0. 05 or 5%. The null hypotheses are usually accepted when the test is significant statistically at chosen significance level of 5%. When Null hypothesis is rejected it implies that all sample means are not equal. If this is true, it may not be sufficient to give required inference. In such case it might be required to know which sample means differ. To find that out proper confidence interval has to be chosen using small sample procedures based on t-distribution. A parametric correlation test of coefficient and non parametric run test was further used to test the auto correlation for the stock returns over time. When the null hypothesis will be accepted at 5% or 10% level then it can be said that the regression model developed earlier was statistically significant. The marginal significance in the regression model is given by the p-value. When the probability for observing the t-values is large, then the null hypothesis will be true. The value of p ranges from 0 to 1 and it gives the researcher the cut-off level or the lowest significance level below which the null hypothesis may be rejected. If the p-values are very small then the significance of null hypothesis is reduced. Smaller p-values indicate that null hypothesis is not significant and hence should be rejected.