Chapter 11

1. What do b1 and b0 mean in a least squares regression line?

b1 represents the slope and b0 represents the intersection with the y-axis.

2. What components are in the analysis of variance?

Sum of squares total, sum of squares error and sum of squares regression.

3. What does the coefficient of determination say about the regression?

A higher value means a better regression.

4. Which two quantities determine the variance of the slope coefficient?

The distance of the points on the regression line, and the total deviation of the X values of the average.

5. When can we use regression models in the prediction of the dependent variable?

If the future value of the independent variable is given.

6. What is the result of a wider interval?

The wider the interval, the greater the uncertainty surrounding the point prediction.

7. Which three volumes affect the prediction and confidence intervals and in what way?

The larger s_e^2 *, the greater the prediction interval and the confidence interval.*

The larger the sample size n, the narrower the prediction interval and the confidence interval.

The greater the dispersion, the more information, the more precise estimates.

8. What is the difference between diversifiable risk and non diversifiable risk?

Diversifiable risk is that risk associated with specific firms and industries.

Non diversifiable risk is the risk associated with the entire economy.

9. Name three examples of diversifiable risk.

Labor conflicts, new competition, consumer market changes.

10. How could the diversifiable risk be controlled?

By larger portfolio sizes and by including stocks whose returns have negative correlations.

11. What does the beta coefficient say?

How responsive the returns for a particular firm are to the overall market returns

12. What does it mean when the beta coefficient is 1?

Then a company's returns follow the market exactly.

13. How do you know the return on a company reacts violently on the market?

If the beta is more than 1.

14. What are the components of the required return on an investment?

Risk-free rate, beta for investment and market return.

15. What are extreme points?

Points that have X values that deviate substantially from the X values of the other points.

16. What are outlier points?

Points that deviate substantially in the Y direction from the predicted value.