Financial Statistics

Statistics
The science of collecting, analyzing, presenting, and interpreting data.

Population
The entire group that is the subject of a statistical study.

Sample
A subset of the population selected for observation and analysis.

Representative Sample
A sample that accurately reflects the characteristics of the population from which it is drawn.

Random Sampling
A method of selecting a sample from a population where each member has an equal chance of being chosen.

Bias
A systematic error in data collection or analysis that leads to incorrect conclusions.

Inference
The process of drawing conclusions about a population based on data collected from a sample.

Correlation
A statistical measure that describes the extent to which two variables change together, but does not imply causation.

Causation
A relationship between two variables where one variable causes a change in another.

Scatter Plot
A type of graph used in statistics to visually display and compare two variables for a set of data.

Trend Line
A line on a scatter plot, drawn to indicate the general course or tendency of the data points.

Sampling Error
The error is caused by observing a sample instead of the whole population, leading to potential inaccuracies.

Confounding Variable
An outside influence that changes the effect of a dependent and independent variable.

Generalization
Extending the results from a sample to a larger population, making assumptions about a whole group based on a sample.