This chapter discusses the principles of bivariate analysis as a tool for helping researchers get to know their data and identify patterns of association between two variables. Bivariate analysis offers a way of establishing whether or not there is a relationship between two variables, a dependent variable and an independent variable. With bivariate analysis, theoretical expectations can be compared against evidence from the real world to see if the theory is supported by what is observed. The chapter examines the pattern of association between dependent and independent variables, with particular emphasis on hypothesis testing and significance tests. It discusses ordinary least squares (OLS) regression and cross-tabulation, two of the most widely used statistical analysis techniques in political research. Finally, it explains how to state the null hypothesis, calculate the chi square, and establishing the correlation between the dependent and independent variables.