Chapter 5: Regression Analysis

# Regression Analysis for Income and Education

## Corresponding reading: Chapter 5, Page 2

### Purpose: Using Excel to conduct regression analysis based on real data.

1. Search for median income and education level in different US States and territories. Note that each of these can be reported in different ways and using different metrics. Use the metric that makes the most sense to you.
2. Develop a regression model to explore the relationship between the education and income.
3. Use Excel to *calculate* the slope () and intercept () of the regression line using the following equations:
4. Use Excel Scatter diagram and Trendline feature to find the equation of the regression line and compare it with what you calculated in part (c).
5. Use Excel to calculate the SST, SSE, , and .
6. Do you think there is a strong relationship between education and income?
7. Is your conclusion about the relationship between education and income the same as your conclusion in Case 5-1-a? Elaborate how the results in this case complements your findings in Case 5-1-a.
8. What do you recommend to policy makers based on your findings?

***Note:*** *Understanding the case and what you need to do is PART OF THE CASE. If you do not understand a specific part, or are not sure what you should do, you need to review the corresponding reading section in the text before asking for help. You might also need to do some search on the internet. That is all part of the case and your learning process.*