

Problem Set-3

1) Prove that the estimate of  $\beta_1$  in a simple regression will be biased (or inconsistent) when  $E(u_i|X_i) = 0$  does not hold.

**Answer the following exercises from Stock and Watson**

2) 6.1

3) 6.2

4) 6.3

5) 6.5

6) 6.6

7) 6.9

8) E6.1

9) On my website ([faculty.unlv.edu/oeren](http://faculty.unlv.edu/oeren)), you will find a subset of the original data file College Distance from Stock and Watson (same data that you have used for PS-1 & PS-2). Use that data set to answer the empirical exercise E.6.2. (You can not use the original data set, which is available at [www.aw-bc.com/stock\\_watson](http://www.aw-bc.com/stock_watson), since you have Small STATA and the original data contains more than 1,000 observations). A detailed description is given in [CollegeDistance\\_Description](#), also available, on my website.