# EPPS 6316 : Recitation Session #4

## Oct. 5. 2012

## Questions?

**- You learned :**

- Confidence Interval, Normality test, Standardized coefficient

- Lin-Lin, Log-Lin, Lin-Log, Log-Log model

- Multicollinearity, Adjusted $R^2$

- etc.

## Problem 1

Interpret the $\beta$ :

$$ln(Y_i) = \alpha + \beta_1 x_{1i} + \beta_2 ln(x_{2i}) + \beta_3 \frac{1}{x_{3i}}$$

## Problem 2

Which variable has the largest effect on $Y$

$$Y_i = 37 + (0.4)x_{1i} + (-0.6)x_{2i} + (0.02)x_{3i}$$

| Variable | Std.Dev |
|---|---|
| $Y$ | 13 |
| $x_1$ | 9 |
| $x_2$ | 40 |
| $x_3$ | 80 |

# Problem 3

Calculate standard error of $\beta$

$$Y_i = -4.9 + (0.93)x_{1i} + (0.11)x_{2i}$$
$$\text{Given s= 0.1, } \sum(x_{1i} - \bar{x})^2 = 5, \sum(x_{2i} - \bar{x})^2 = 8.$$

| Corr | $y$ | $x_1$ | $x_2$ |
|------|------|-------|-------|
| $y$ | 1 | | |
| $x_1$ | 0.38 | 1 | |
| $x_2$ | 0.09 | -0.35 | 1 |