

PLSC 497, Fall 2005

Notes for Nov 21 2005

So far: Jones and Baumgartner chapter 1-7

Correct error about how to calculate sd, skew, and kurtosis. (You don't really need to know this, but I said something incorrect in class the other day and I don't like to do that.) The correct formulas for St. Dev., Skew, and Kurtosis are below. They are somewhat more complicated than I mentioned in class. However, if you look closely, you'll see that they have at their cores the same type of calculation, and one is based on the *squared* deviations from the mean; one is based on the *cubed* deviations; and the next is based on the *fourth power* of the deviations from the mean, which is what I said in class. But the real formula are below and they are a little more complicated:

STDEV uses the following formula:

$$\sqrt{\frac{\sum (x - \bar{x})^2}{(n-1)}}$$

- where \bar{x} is the sample mean $AVERAGE(\text{number1}, \text{number2}, \dots)$ and n is the sample size.

SKEWNESS is defined as:

$$\frac{n}{(n-1)(n-2)} \sum \left(\frac{x_i - \bar{x}}{s} \right)^3$$

KURTOSIS is defined as:

$$\left\{ \frac{n(n+1)}{(n-1)(n-2)(n-3)} \sum \left(\frac{x_i - \bar{x}}{s} \right)^4 \right\} - \frac{3(n-1)^2}{(n-2)(n-3)}$$

- where s is the sample standard deviation.

Review the model of decision-making based on attention-shifting and status quo replication.

Go through chapter 4, on the budget

Go through the friction model and simulations