Delete this before using. Doable in 1 hour, but difficult.

Extremely pleased with this.

The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes.

John Maynard Keynes

Barreto

Macro Topics

Sampling Variability in the Unemployment Rate

Open Unem.xls. Go to the *ToDo* sheet and click the Show Sampling button to reveal the *Sampling* sheet. Scroll right to column AK.

We will review the idea of logic of Monte Carlo simulation and then you will do Task 5. Take notes (in Excel or this handout—it is yours to keep) as we work together on the two questions below.

Q1: How weird is it that a 90% free throw shooter makes only 75 out of 100 free throws?

Implementing a Chance Process in Excel

RAND() and IF(test, value if true, value if false)

In cell AK1, enter this formula: =IF(RAND()<0.9,1,0). Press F9 a few times.

When we have set up the sum of 100 free throws, click the MC Sim button.

Interpreting the results: the average is an approximation to the expected value and the SD is an approximation to the standard error.

So, what is you answer to the free throw question?

Q2: If you’re a 90% free throw shooter, how long is your typical max streak in 100 free throws?

In cell AL2, enter this formula: =IF(AK2=1,AL1+1,0)

Use the remaining class time to complete Task 5 in the *ToDo* sheet. **Save your workbook when finished.**

HW: Watch the last screencast (it’s on search theory) in Unem.xls and complete task 6A by noon Wed. We will review your work and do Task 6B in class on Wed.