Section 2: Macroeconomics, Monetary Theory, and Econometrics—Answer One Question.

2A. (Econ 202) Answer all of the following parts completely. Be specific.

   a) Draw a *dynamic* aggregate demand-aggregate supply (AD-AS) diagram correctly identifying both axes and all the curves.
   
   b) In one sentence, describe what is the difference between the static and the dynamic version of the AD-AS model (noting that one is static and one is dynamic is NOT a correct answer).
   
   c) What explains the slope of the aggregate demand curve in the AS-AD model?
   
   d) Identify what can cause shifts in the aggregate demand curve. What factors do New Classical economists emphasize? What factor do traditional, orthodox Keynesians emphasize?
   
   e) How would the pre-Keynesian classical economists have drawn the aggregate supply curve(s)? (You may describe it or draw it on a separate graph.) Explain why they would have drawn the curve this way.
   
   f) How would a traditional, orthodox Keynesians have drawn the aggregate supply curve(s)? (Again, you may describe it or draw it on a separate graph.) Explain why.
   
   g) Show on a diagram similar to the one you drew for part (a) how a negative shock to aggregate demand would affect the curves in both the short-run and long run.
   
   h) Use the aggregate demand-aggregate supply model to portray what causes a recession according to real business cycle theory.
   
   i) What theory of expectations does real business cycle theory depend upon?

(over)
2B. (Econ 235) Analyze the demand for money by answering all of the following.

a) Describe in words how changes in the demand for money affect the purchasing power of money, the price level, and real cash balances. Explain why this makes money like any other good or service.

b) Draw a demand-stock graph for money correctly labeling all axes and curves. Why does the money demand curve have that shape? How would you depict real cash-balances on the graph?

c) Describe at least four factors that cause the demand for money to change (i.e., shift). What are the two broad categories of money demand into which these various factors fall?

d) Relate the demand for money to the concept of velocity and to the equation of exchange.

e) Describe how the demand for money behaves during hyperinflations.

f) What do economists mean when they say a change in the money stock is neutral?

g) Do New Keynesian models include money directly in their models? Why or why not?

2C. (Econ 203A) Consider the following linear and log-log models for the demand for cigarettes:

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>price</td>
<td>Price of a pack of cigarettes</td>
</tr>
<tr>
<td>lprice</td>
<td>Log value for the price of a pack of cigarettes</td>
</tr>
<tr>
<td>packs</td>
<td>Thousands of packs of cigarettes sold</td>
</tr>
<tr>
<td>lquant</td>
<td>Log value for packs</td>
</tr>
</tbody>
</table>

OLS Regression

<table>
<thead>
<tr>
<th></th>
<th>packs</th>
<th>lquant</th>
</tr>
</thead>
<tbody>
<tr>
<td>price</td>
<td>-0.62214***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.11513)</td>
<td></td>
</tr>
<tr>
<td>lprice</td>
<td>-1.21306***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.21645)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>210.33420***</td>
<td>10.33892***</td>
</tr>
<tr>
<td></td>
<td>(22.30273)</td>
<td>(1.03529)</td>
</tr>
</tbody>
</table>

Observations 48 48
R2 0.39581 0.40575
Adjusted R2 0.38268 0.39283
Residual Std. Error 18.68556 0.18962
F Statistic 30.13535*** 31.40859***

Note: *p<0.1; **p<0.05; ***p<0.01
a. For the linear functional form (i.e., column 1), interpret the impact of a $2 increase in the price on cigarette consumption—be specific about the units.
b. For the log-log model, interpret the impact of a 2% decrease in the price on cigarette consumption.
c. Suppose the above regressions are heteroscedastic. Define heteroscedastic and name the test we would use to determine this.
d. Under specific conditions, OLS is BLUE. What does the acronym BLUE stand for, and what does it tell us about OLS as an estimator?
e. Based on the conditions discussed in part c, have we met the requirements for OLS to be BLUE?