Problem Set 4: AD-AS and Crises

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Section 1: Money Supply
Based on the reading from Chapter 16 and Lecture 15.

Look at the following H6 report from the Federal Reserve:


For the most recent available month and one year before that, fill out the following table (use seasonally adjusted figures):

<table>
<thead>
<tr>
<th>Category</th>
<th>Most Recent</th>
<th>One Year Before</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand Deposits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traveler’s Checks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checkable Deposits at Commercial Banks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checkable Deposits at Thrift Institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings Deposits at Commercial Banks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings Deposits at Thrift Institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small-Denomination Time Deposits, total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Money Funds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is M1 in the most recent year? ____________________________
One year before? ____________________________
Percentage change? ____________________________

What is M2 in the most recent year? ____________________________
One year before? ____________________________
Percentage change? ____________________________

What category most contributed to the increase in M2? ________________
Section 2: Effect of Shocks on Prices and Output

Based on reading from Chapter 20 and Lectures 16 and 17.

a) Suppose a temporary tax cut increases aggregate demand. Suppose the economy is initially in a long run steady state. In the space below, show how output and prices are affected in the short run and the long run.

\[ \begin{array}{c|c}
\text{Prices} & \text{Output} \\
\hline
\text{Short Run:} & \_ \_ \\
\text{Long Run:} & \_ \_ \\
\end{array} \]

b) A temporary oil price decrease causes an increase in short run aggregate supply. Suppose the economy is initially in a long run steady state. In the space below, show how output and prices are affected in the short run and the long run.

\[ \begin{array}{c|c}
\text{Prices} & \text{Output} \\
\hline
\text{Short Run:} & \_ \_ \\
\text{Long Run:} & \_ \_ \\
\end{array} \]
c) An increase in female labor force participation causes an increase in short run and long run aggregate supply. Suppose the economy is initially in a long run steady state. In the space below, show how output and prices are affected in the short run and the long run.

<table>
<thead>
<tr>
<th>Prices</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Run:</td>
<td>_____</td>
</tr>
<tr>
<td>Long Run:</td>
<td>_____</td>
</tr>
</tbody>
</table>

d) Suppose a change in international strategic priorities reduces military spending and permanently reduces aggregate demand. Suppose the economy is initially in a long run steady state. In the space below, show how output and prices are affected in the short run and the long run.

<table>
<thead>
<tr>
<th>Prices</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Run:</td>
<td>_____</td>
</tr>
<tr>
<td>Long Run:</td>
<td>_____</td>
</tr>
</tbody>
</table>
Section 3: Fed Response to AD Shock

Based on reading from Chapter 21 and Lecture 18.

a) Suppose a stock market crash causes people to feel less wealthy, temporarily reducing aggregate demand. Demonstrate the short and long run effects in the space below, as in section 2.

Prices Output
Short Run: _____ _____
Long Run: _____ _____

b) Now suppose that the Fed increases the money supply to bring output back to its original level. Demonstrate the effect of this in the space below.

Prices Output
Short Run (before Fed intervention): _____ _____
Short Run (after Fed intervention): _____ _____
Long Run: _____ _____
Section 4: Fed Response to SRAS Shock

Based on reading from Chapter 21 and Lecture 18.

a) Suppose a storm damages a port, making it difficult to transport goods, and temporarily reducing short run aggregate supply. Demonstrate the short and long run effects in the space below, as in section 2.

\[
\begin{array}{|c|c|}
\hline
\text{Prices} & \text{Output} \\
\hline
\text{Short Run:} & _____ _____ \\
\text{Long Run:} & _____ _____ \\
\hline
\end{array}
\]

b) Now suppose that, after the storm, the Fed increases the money supply to bring output back to its original level. Demonstrate the effect of this in the space below.

\[
\begin{array}{|c|c|}
\hline
\text{Prices} & \text{Output} \\
\hline
\text{Short Run (before Fed intervention):} & _____ _____ \\
\text{Short Run (after Fed intervention):} & _____ _____ \\
\text{Long Run:} & _____ _____ \\
\hline
\end{array}
\]
Section 5: Milton Friedman on the Great Depression

Please watch the following video:

http://www.youtube.com/watch?v=SWVoPrntBso

a) What is a “bank run”? ______________________________________________________

___________________________________________________________

b) What role does consumer psychology play in bank runs? ______________________

___________________________________________________________

c) What happened to the quantity of money in the aftermath of the Great Depression?

___________________________________________________________

d) Why do runs on banks reduce the quantity of money? __________________________

___________________________________________________________

e) According to John Maynard Keynes, what should the government do if private

spending is insufficient to maintain full employment? __________________________

___________________________________________________________

f) What does Friedman believe to be a fundamental weakness in the leadership system

of the Federal Reserve (during the discussion with Von Hoffman about Keynes and

Strong)? ___________________________________________________________________

___________________________________________________________

___________________________________________________________

g) Why does Friedman believe that the US government has taken such an active role in

the economy in the post-World War II era? _________________________________

___________________________________________________________

___________________________________________________________

___________________________________________________________
Section 6: The Giant Pool of Money
Please listen to this radio program and answer the following questions:


1) What does NINA mean? __________________________________________________________

2) What is the total amount of global fixed income securities (the size of the “giant pool of money”)? __________________________________________________________

3) What is a mortgage backed security? ____________________________________________

4) Why did international fixed income investors (the “giant pool of money”) become interested in buying mortgage backed securities? ____________________________________________

5) Why did mortgage originators (those finding people to take mortgages) not care about the riskiness of the mortgages? ____________________________________________

6) Why did the bond rating agencies (e.g., Moody’s) inaccurately assess the risk of the mortgage backed securities? ____________________________________________

7) Why did the large investment banks stop buying high risk mortgages? ______________

8) What is a major barrier to renegotiating the terms of mortgages? ______________
Section 7: Recent Business Cycles in your Assigned Country

What country were you assigned to study? ______________________________

As preparation for your term paper, below describe three specific policies that you would recommend to your assigned countries to help improve the economy. For motivation, think about the examples of China, Argentina and South Korea, and what policies did and did not work there. Also, think about the particular challenges and the history of your country discussed in other assignments.

Below write a short description (2-3 sentences) on each of the policies you recommend. Remember that it must be a specific policy, not a goal. Refer to the guidelines in the term paper description when choosing your policy suggestions:

http://www3.nd.edu/~wbrooks/Description.pdf

1) __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

2) __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

3) __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
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