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The Global Economy
Professor David Backus

Practice Problems C: Aggregate Supply & Demand

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This will not be collected or graded, but it's a good way to make sure you're up to speed. We recommend you do it before the next class.

1. *Inflation high and low.*
   (a) Describe briefly how fiscal deficits might cause hyperinflation. Show qualitatively how the Treasury and Central Bank balance sheets change.
   (b) During the 1990s, the US economy experienced high output growth and low inflation. How is this possible? Why didn't the economy "overheat"?

2. *Shocks.* Fill out the following table, telling us, for each shock, whether it affects the supply or demand curve and whether the short-run impact on output and prices is positive (+) or negative (−):

Shock	Supply or Demand?	Output Effect	Price Effect
Sales tax holiday			
Increase in money supply			
Improved inventory control			
Better information technology			
Fall in world oil prices			
Facebook goes bankrupt			

3. *Clean air and jobs.* As part of its clean air initiative, the Canadian government now requires firms to submit lengthy reports about the impact of its activities on the environment. (This is fiction, by the way: any connection to real governments, dead or alive, is purely coincidental.) Our mission is to look at the impact of such an initiative on aggregate supply and demand.
   (a) What is the likely impact of the initiative on aggregate supply and demand? (Ask yourself: Does this affect the production or purchase of goods and services?) If we start at a position of long-run equilibrium, which curves shift, and in what direction? Show the result in the appropriate diagram.
   (b) What is the short-run impact on inflation and output? The long-run impact?
   (c) Do you think anything is missing from this analysis?

4. *The non-crisis down under.* The 2008 recession was relatively mild in Australia. After three quarters of falling GDP, output began growing rapidly. In late 2009, the Reserve Bank of Australia (RBA) began to raise its target interest rate.

(a) What might have motivated the RBA to raise the interest rate?

(b) What is the likely impact on aggregate supply and demand curves? On inflation and output growth?

5. *Inflation and output.* Using the last two problems as input, consider the relation between inflation and output growth.

   (a) When do inflation and output growth move in the same direction?

   (b) When do they move in opposite directions?

6. *US monetary policy in 2010.* The Federal Reserve's Federal Open Market Committee (FOMC) met April 27-28, 2010, and released this statement:

   > Information received since the FOMC met in March suggests that economic activity has continued to strengthen and that the labor market is beginning to improve. Growth in household spending has picked up recently. ... Business spending on equipment and software has risen significantly. ... Housing starts have edged up but remain at a depressed level. ... With substantial resource slack ... and longer-term inflation expectations stable, inflation is likely to be subdued for some time. ...
   >
   > The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent. ...
   >
   > Voting against the policy action was [Kansas City Fed President] Thomas M. Hoenig, who believed that ... [an] exceptionally low level of the federal funds rate ... was no longer warranted.

   Later the same week, the Bureau of Economic Analysis announced that in the first quarter real GDP growth was estimated to be 3.2% and inflation (in the GDP price index) 0.9%. Both are expressed at annual rates.

   (a) Consider this information in the context of the aggregate supply and demand framework. Based on the FOMC statement, where is the short-run equilibrium of the economy relative to the Fed's inflation target and the long-run equilibrium level of output? Illustrate your answer with the appropriate diagram.

   (b) Given your answer to (a), what should the Fed's response be? How should it change the money supply? The fed funds rate?

   (c) Given your answer(s), do you agree with Hoenig? Why or why not?