

## Assignment 12: Aggregate supply and demand

*Due Wednesday 7 December.* Please submit hardcopy at the beginning of class (11:00 a.m.), or if you prefer, under the door of Wimberly Hall 339C by 10:50 a.m.



Please present a model of the Russian economy that relates output to an aggregate price level.

1. Please graph the Russian economy in long-run equilibrium. Mark all curves with subscript “0” as well as output ( $Y_0$ ) and price level ( $P_0$ ). Be sure to also show potential output on your graph.

2. On Tuesday the U.S. Treasury Secretary Janet Yellen reported that the Russian economy will experience inflation of about 20% and a 10 to 15% decline in output.

Suppose that these changes are the result of a short-run shift of *one* curve in your model above. In the space directly below, please write which curve shifts and in which direction.

3. On your graph above, please draw this shift, labeling new curves with subscript “1,” the new output level as  $Y_1$ , and the new price level as  $P_1$ .
4. Is  $Y_1$  above, below, or equal to potential output?

5. Please describe the output gap at  $Y_1$  using a mathematical statement. (For example, “the output gap  $< 100\%$ ” or “the output gap  $< 0$ .”)

6. Consider possible explanations of why that particular curve with subscript “1” might shift in that direction. Give one explanation consistent with current global economic events.

*For example*, if this problem were about the U.S. economy during the pandemic, you might say that aggregate demand increased. A possible explanation of why aggregate demand might increase during the pandemic is that households were given monetary transfers—stimulus payments—which increased aggregate demand.

7. Please explain how this economy will return to long-run equilibrium. What specifically changes? What curve shifts as a result?

8. On your graph above, please draw this shift, labeling new curves with subscript “2,” the new output level as  $Y_2$ , and the new price level as  $P_2$ .

9. Is  $Y_2$  above, below, or equal to potential output?

10. Please describe the output gap at  $Y_2$  using a mathematical statement.