ECO 120: Global Macroeconomics
Week 11 Homework: Short-run Fluctuations

1. Suppose the economy is at the long-run equilibrium when suddenly a global pandemic causes consumers to reduce their demand for many final products and services.

   (a) Describe and illustrate the impact on the price level and real GDP in the short run.

   (b) Assuming government does not intervene to fix the problem, describe and illustrate the impact on the price level and real GDP in the long-run.

   HINT: To answer this question, begin your answer with the graph in your answer to part (a) (just duplicate your graph in the answer to (a)). Then add to to the graph the long-run effects.

(c) Given the state of the economy in the short-run (answer to problem (a)), suggest a government policy to fix the problem without waiting for convergence to long-run equilibrium. Illustrate the impact of this policy on price level and real GDP. Compared to the original long-run equilibrium, what happened to the price level and real GDP as a consequence of your government policy?

HINT: To answer this question, begin your answer with the graph in your answer to part (a) (just duplicate your graph in the answer to (a)). Then add to to the graph the impact of your government policy.

2. Suppose incomes in Europe decrease, causing a decrease in demand for U.S.-produced goods and services that are exported to Europe.

   (a) Describe and illustrate the impact on the price level and real GDP in the short run.

(b) Assuming government does not intervene to fix the problem, describe and illustrate the impact on the price level and real GDP in the long-run.

HINT: To answer this question, begin your answer with the graph in your answer to part (a) (just duplicate your graph in the answer to (a)). Then add to to the graph the long-run effects.

(c) Given the state of the economy in the short-run (answer to problem (a)), suggest a government policy to fix the problem without waiting for convergence to long-run equilibrium. Illustrate the impact of this policy on price level and real GDP. Compared to the original long-run equilibrium, what happened to the price level and real GDP as a consequence of your government policy?

HINT: To answer this question, begin your answer with the graph in your answer to part (a) (just duplicate your graph in the answer to (a)). Then add to to the graph the impact of your government policy.

3. Suppose global supply-chain production disruptions cause an increase in production costs.

   (a) Describe and illustrate the impact on the price level and real GDP in the short run.

   (b) Given the state of the economy in the short-run (answer to problem (a)), suppose the government passes a bill to give businesses grants to financially support businesses during the difficult time. Illustrate the impact of this policy on price level and real GDP. Compared to the original long-run equilibrium, what happened to the price level and real GDP as a consequence of your government policy?

   HINT: To answer this question, begin your answer with the graph in your answer to part (a) (just duplicate your graph in the answer to (a)). Then add to to the graph the impact of your government policy.

(c) Given the state of the economy in the short-run (answer to problem (a)), suppose the government passes a tax rebate bill that gives most consumers $800 to spend or save as they please. Illustrate the impact of this policy on price level and real GDP. Compared to the original long-run equilibrium, what happened to the price level and real GDP as a consequence of your government policy?

HINT: To answer this question, begin your answer with the graph in your answer to part (a) (just duplicate your graph in the answer to (a)). Then add to to the graph the impact of your government policy.