

ECO 120: Global Macroeconomics

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Week 11 Homework: Short-run Economic 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 **short-run** effects on the price level, real GDP, and employment.

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

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

- (c) Given the state of the economy in the short-run (answer to problem (a)), suggest a change in government spending to reverse the problem without waiting for convergence to long-run equilibrium. Illustrate the short-run impact of this policy on price level, real GDP, and employment.

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

2. Suppose interest rates increase in the Euro area leading to an appreciation of the Euro against the U.S. Dollar. Answer the following from the perspective of the United States.
- (a) Describe and illustrate the **short-run** effects on the price level, real GDP, and employment.

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

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

- (c) Given the state of the economy in the short-run (answer to problem (a)), suggest a change in taxes to reverse the problem without waiting for convergence to long-run equilibrium. Illustrate the short-run impact of this policy on price level, real GDP, and employment.

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

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

(a) Describe and illustrate the **short-run** effects on the price level, real GDP, and employment.

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

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

- (c) 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, real GDP, employment, and wages.

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

- (d) 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, real GDP, and employment.

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.