

# EC 201: Principles of Macroeconomics

## Worksheet-6

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**Q1.** An increase in the aggregate price level causes consumer and investment spending to ....., because consumer purchasing power ..... and money demand .....

Answer: Fall, decreases, increases.

**Q2.** Determine whether the following shift AD or SRAS to the left or to the right.

1. Changes in the healthcare market cause employers to pay significantly more for health insurance they provide employees. SRAS declines
2. The production of a new type of blade for their combine harvesters, a tractor used to harvest crops, has allowed wheat farmers, like Herbert, to increase productivity by 40%. SRAS increases
3. The United States government decides to increase the federal tax rate by 4% for all earners. AD declines
4. The Federal Reserve, the agency charged with regulating banking and monetary policy in the United States, decides to increase the amount of money available in the economy. AD increases

**Q3.** In a graph, show how an increase in the nominal wages affect economy's output in the long run.

Hint: In the long run, prices don't affect output (real GDP)

**Q4.** Would a discovery of new technology that increases productivity shift LRAS? Show it in a graph along with how the equilibrium changes.

Hint: Recall that LRAS is the economy's potential to produce goods and services. With the discovery of a new technology, would that potential increase or decrease? How would you shift the LRAS curve if the potential increased or decreased?

**Q5.** Using the AD-AS model, show the following macroeconomic situations. Why does each of these situations arise?

Hint: please refer to the lecture slide/video about this chapter to find these graphs.

1. Stagflation

2. Recessionary gap

3. Inflationary gap

**Q6. Why do we say that in the long run inflationary and recessionary gaps are self-correcting?**

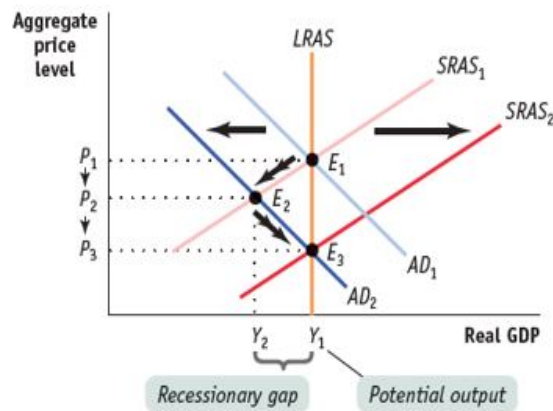
answer: nominal wages rise to close an inflationary gap or fall to close a recessionary gap.

**Q7. Using AD, SRAS, and LRAS curves, consider the process by which the following economic events will move the economy from one long-run macroeconomic equilibrium to another. What are the short-run and long-run effects on the aggregate price level and aggregate output of the following?**

1. There is a decrease in households' wealth due to a decline in the stock market.

**Answer:**

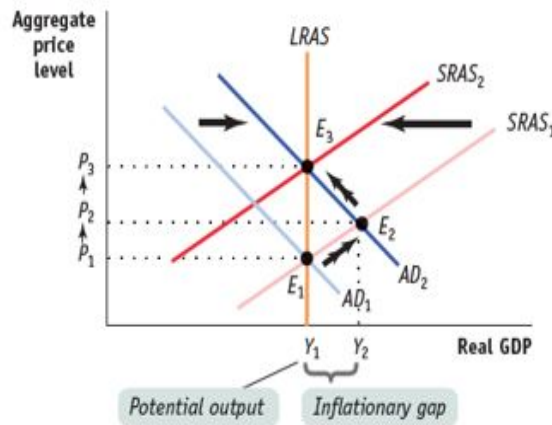
Remember that we start from a long run equilibrium. A long run equilibrium is an intersection of AD and SRAS that lies at a point in LRAS. A decrease in households' wealth will reduce consumer spending. Beginning at long-run macroeconomic equilibrium,  $E_1$  in the accompanying diagram, the aggregate demand curve will shift from  $AD_1$  to  $AD_2$ . In the short run, nominal wages are sticky, and the economy will be in short-run macroeconomic equilibrium at point  $E_2$ . The aggregate price level will be lower than at  $E_1$ , and aggregate output will be lower than potential output. The economy faces a recessionary gap. As wage contracts are renegotiated, nominal wages will fall and the short-run aggregate supply curve will shift gradually to the right over time until it reaches  $SRAS_2$  and intersects  $AD_2$  at point  $E_3$ . At  $E_3$ , the economy is back at its potential output but at a much lower aggregate price level.



2. There is an increase in government spending.

**Answer:**

Again, start with an initial long run macroeconomic equilibrium. Beginning at long-run macroeconomic equilibrium,  $E_1$  in the accompanying diagram, the aggregate demand curve will shift from  $AD_1$  to  $AD_2$ . In the short run, nominal wages are sticky, and the economy will be in short-run macroeconomic equilibrium at point  $E_2$ . The aggregate price level is higher than at  $E_1$ , and aggregate output will be higher than potential output. The economy faces an inflationary gap. As wage contracts are renegotiated, nominal wages will rise and the short-run aggregate supply curve will shift gradually to the left over time until it reaches  $SRAS_2$  and intersects  $AD_2$  at point  $E_3$ . At  $E_3$ , the economy is back at its potential output but at a much higher aggregate price level.



**Q7. What kind of policies should government follow in the following situations?**

- Economy is facing a recessionary gap.

**Answer:**

Expansionary fiscal and monetary Policy.

Expansionary fiscal policies include lowering taxes, increasing transfers, increasing government spending. Expansionary monetary policy entails increasing money supply. Usually this is done by lowering the Federal funds rate (aka interbank market interest rate).

- Economy is facing an inflationary gap.

**Answer:**

Contractionary fiscal and monetary policies. The policy tools would be just the opposite of expansionary policy tools.

**Q8. Assume that economy is at the long run equilibrium. Imagine you are a renowned economist. One day someone asks you which economic shock you would prefer the most and the least. What would you say and why? Can you explain your answers using graphs?**

**Answer:**

Most preferred: a positive supply shock– increases output without increasing prices.

Least preferred: a negative supply shock–no policy tool to counteract such shock. If output is increased, inflation goes further up, if fighting inflation the output goes further down.