**Homework**

**Section 4**

**#4.**

**a.** The discovery of iron ore reduces the price of steel, which will decrease production costs

and increase profit per unit at any given aggregate price level. The short-run aggregate supply

curve will shift to the right.

**b.** As the Federal Reserve increases the quantity of money, households and firms have more

money, which they are willing to lend out, and interest rates fall. The lower interest rates will

increase investment spending and consumer spending, leading to a greater quantity of aggregate

output demanded at any given aggregate price level. The aggregate demand curve will shift to

the right.

**c.** If unions are able to negotiate higher nominal wages for a large portion of the workforce, this

will increase production costs and reduce profit per unit at any given aggregate price level. The

short-run aggregate supply curve will shift to the left.

**d.** As the aggregate price level falls and the purchasing power of households’ and firms’ money

holdings increases, the public tries to reduce its money holdings by borrowing less and lending

more. So interest rates fall, leading to a rise in both investment spending and consumer spending.

This is the interest rate effect of a change in the aggregate price level, represented as a movement

down along the aggregate demand curve.

**7.**

**a.** If the government reduces the minimum nominal wage, it is similar to a fall in nominal

wages. Aggregate supply will increase, and the short-run aggregate supply curve will shift to the

right.

**b.** If the government increases TANF, consumer spending will increase because disposable

income increases (disposable income equals income plus government transfers, such as TANF

Solutions to Section 4 Problems 191 payments, less taxes). Aggregate demand will increase, and the aggregate demand curve will shift to the right.

**c.** If the government announces a large increase in taxes on households for next year, consumer

spending will fall this year. Since households base their spending in part on their expectations

about the future, the anticipated increase in taxes will lower their spending this year. There will

be a decrease in aggregate demand, and the aggregate demand curve will shift to the left.

**d.** If the government reduces military spending, this will decrease aggregate demand. The

amount of aggregate output demanded at any given aggregate price level will fall, and the

aggregate demand curve will shift to the left.

**10. a.**

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**b.** The rise in the price of oil usually causes a supply shock. The short-run aggregate supply

(*SRAS*) curve shifts to the left, from *SRAS*1 to *SRAS*2. The economy settles at

a new short-run macroeconomic equilibrium at *E*2, with a higher aggregate price level, *P*2, and

lower real GDP, *Y*2.



**c.** The fall in home prices would cause a demand shock because of the wealth effect. The

aggregate demand (*AD*) curve shifts leftward, from *AD*1 to *AD*2. The new aggregate price level,

*P*2, could either be equal to, above, or below *P*1. The new level of real GDP, *Y*2, is below the

original level, *Y*1.



**d.** The effect on the aggregate price level is indeterminate. As drawn in the diagram for part c, *P*1

and *P*2 coincide because the negative supply and demand shocks have exactly offsetting price

effects. However, prices could either rise or fall when both a negative demand shock and a

negative supply shock occur. The fall in real GDP is unambiguous because the two shocks

reinforce their negative effects on GDP.

**13. a.** The economy is facing a recessionary gap because *Y*1 is less than the potential output of

the economy, *YP.*

**b.** The government could use either fiscal policy (increases in government spending or

reductions in taxes) or monetary policy (increases in the quantity of money in circulation to

reduce the interest rate) to move the aggregate demand curve from *AD*1 to *AD*2 in the

accompanying diagram. This will move the economy back to potential output, and the aggregate

price level will rise from *P*1 to *P*2.



**c.** If the government did not intervene to close the recessionary gap, the economy would

eventually self-correct and move back to potential output on its own. Due to unemployment,

nominal wages will fall in the long run. The short-run aggregate supply curve will shift to the

right, and eventually it will shift from *SRAS*1 to *SRAS*2 in the accompanying diagram. The

economy will be back at potential output but at a lower aggregate price level.



**d.** If the government implements fiscal or monetary policies to move the economy back to long-run macroeconomic equilibrium, the recessionary gap might be eliminated faster than if the

economy were left to adjust on its own. However, because policy makers aren’t perfectly

informed and policy effects can be unpredictable, policies to close the recessionary gap can lead

to greater macroeconomic instability. Furthermore, if the government uses fiscal or monetary

policies, the price level will be higher than it will be if the economy is left to return to long-run

macroeconomic equilibrium by itself. In addition, a policy that increases the budget deficit might

lead to lower long-run growth through crowding out.