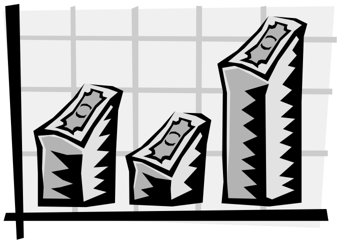
LIGHTHOUSE CPA SOCIAL SCIENCES DEPARTMENT

AP ECONOMICS

EXAM PREP WORKSHOP # 5 > COMBINED MONETARY AND FISCAL POLICY



NAME : *DATE :*

Review Of Tools Of Monetary And Fiscal Policy :

1. Both monetary and fiscal policy can be used to influence the inflation rate and real output . Indicate what effect (increase or decrease) each specific policy has on inflation and real output in the short run (9 to 18 months) :

Monetary Policy		***Inflation***	***Real Output***
1.	*Buy government securities*	*I*	*I*
	Sell government securities	*D*	*D*
2.	*Decrease the discount rate*	*I*	*I*
	Increase the discount rate	*D*	*D*
3.	*Decrease the reserve requirement*	*I*	*I*
	Increase the reserve requirement	*D*	*D*
Fiscal Policy			
1.	*Increase government spending*	*I*	*I*
	Decrease government spending	*D*	*D*
2.	*Increase taxes*	*D*	*D*
	Decrease taxes	*I*	*I*

Lags In Policy Making :

As the economic situation changes , policy makers must decide when to take action and which policy action to take . Then they must implement the policy . The economy then responds to the policy . The amount of time it takes policy makers to recognize and take action is called the " inside lag " . The amount of time it takes the economy to respond to the policy changes is called the " outside lag " .

The " inside lag " is estimated to be short for monetary policy , but long for fiscal policy . The " inside lag " is long for fiscal policy because the legislative branch must come to agreement About the appropriate action . The " outside lag " however , is long and variable for monetary *policy , but very short for fiscal policy .*

1. *Explain why the inside lag can be short for monetary policy , but the outside lag is long and variable .*

The Federal Reserve can change the money supply on a daily basis through open market operations . Thus , once the Open Market Committee decides on a particular policy , the policy can be implemented immediately . However , monetary policy works through changes in interest rates and the response of interest sensitive components of aggregate demand to the interest rate changes . The response of investment and consumption takes time .

2. *Explain why the outside lag is short for fiscal policy .*

The outside lag is short for fiscal policy for several reasons :

1. *Fiscal policy has been debated in Congress and discussed extensively in the media . Thus , as soon as it is enacted , people and businesses can respond .*

2. *If the fiscal policy is a tax change , the effects will be felt with a year's time .*

3. *If the fiscal policy is an expenditure change , the effect will be felt almost immediately as the affected agency changes its spending pattern .*

3. *Explain why lags are important to the discussion of stabilization policy .*

The existence of policy lags implies that policy actions could be out of sequence with the economy . For example , expansionary policy might have its impact after the economy has started to recover from a recession . As a result , the expansionary policy may create inflation because it over stimulates the economy . This problem has led some economists to recommend policy rules . Examples of policy rules are that money supply should grow at 5 percent a year and nominal GDP should grow at 6 percent a year . Ther's a second reason why understanding lags is important for stabilization policy . Policy makers should not think that policy can fine tune the economy at any point in time .

The Crowding Out Effect Using Aggregate Demand And Aggregate Supply Analysis :

1. *Assume fiscal policy is expansionary and monetary policy keeps the stock of money constant at MS . Shift one curve in each graph below to illustrate the effect of the fiscal policy :*

   A. *Which curve did you shift in the short run aggregate demand and aggregate supply graph ? What happens as a result of this new curve ?*

Shift the aggregate demand curve to AD 1 , as a result of the expansionary fiscal policy . The price level and real GDP both increase .

B. In the money market graph , which curve did you shift to demonstrate the effect of the fiscal policy ? What happens as a result of this shift ?

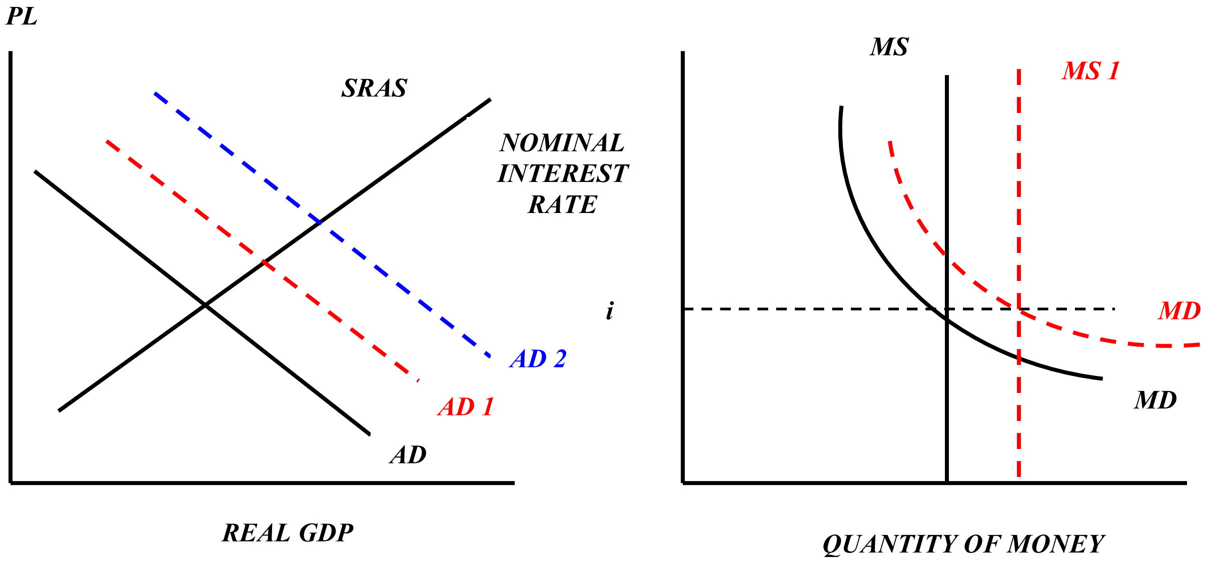
Shifted the money demand curve to the right ; money demand increased because real GDP increase . Interest rates rise .

C. Given the change in interest rates , what happens in the short run aggregate supply and aggregate demand graph ?

Aggregate demand shifts back to AD 2 because the increase in interest rates reduces some private domestic investment and interest sensitive consumer spending . This is crowding out .

D. How could monetary policy action prevent the changes in interest rates and output you identified in (B) and (C) ? Shift a curve in the money market graph , and explain how this shift would reduce crowding out .

Shift the money supply curve to MS 1 . If the money supply is increased to MS 1 , interest rates would move back to (i) . If interest rates are at (i) , there would be no crowding out (or reduction) of investment spending , and the aggregate demand would be AD 1 .



The Crowding Out Effect Using The Loanable Funds Market :

The loanable funds market provides another approach to looking at the effects of increases in the budget deficit . The demand for funds in the loanable funds market comes from the private sector (business investment and consumer borrowing) , the government sector (budget deficits) and the foreign sector . The supply of funds in the loanable funds market comes from private savings

(businesses and households) , the government sector (budget surpluses) , the Federal Reserve (money supply) and the foreign sector .

1. ***Shift one of the curves in the graph below to indicate what occurs in the loanable funds market if government spending increases without any increases in tax revenue or the money supply .***

The demand increases , shifting the demand curve to D 1 . D 1 represents the private plus public demand for loanable funds .

A. ***What happens to the interest rate as a result of this expansionary fiscal policy ? Explain .***

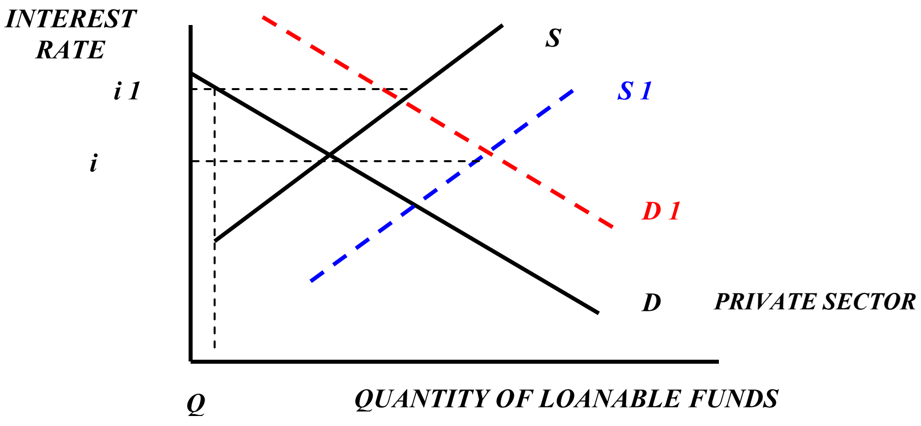
There is an increase in the demand for loanable funds to pay for the increased government spending . The interest rate rises to (i 1) .

B. ***Indicate on the graph the new quantity of private demand for loanable funds .***

At the higher interest rate (i 1) , the level of private demand for loanable funds is Q .

C. ***An accommodating monetary policy could prevent the effect you described in (A) and (B) . Shift a curve in the diagram to show how the accommodating monetary policy would counteract the effects of crowding out . Explain what would happen to interest rates and the level of private demand for loanable funds as a result of this new curve .***

If the monetary authorities expanded the money supply to keep interest rates constant at the original level , a larger quantity of loanable funds would be available , and there would be no crowding out . The new supply curve is S 1 , interest rates return to (i) and the private sector receives the original level of loanable funds .



What Would Happen ? :

1. ***Indicate whether you agree , disagree , or are uncertain about the truth of the following statement and explain your reasoning . " Exhaustion of excess bank reserves inevitably puts a ceiling on every business boom because without money the boom cannot continue . "***

Uncertain . The answer depends on the assumptions that are made . The boom could continue to grow if the velocity of circulation increases . Increased demand for a fixed money stock would tend to increase interest rates , and increased velocity is associated with higher interest rates . However , the higher interest rates could cause investment to decrease and slow economic growth .

2. ***The Federal Reserve Open Market Committee wishes to accommodate or reinforce a contractionary fiscal policy .***

   A. ***Would the Federal Reserve buy bonds , sell bonds , or neither ?***

Sell bonds

   B. ***What effect would this policy have on bond prices and interest rates ?***

Bond prices would decrease , and the interest rate would increase .

   C. ***What effect would this policy have an bank reserves and the money supply ?***

Bank reserves would decrease , and the money supply would decrease .

   D. ***What effect would this policy have on the quantity of loanable funds demanded by the private sector ?***

The bond sale would decrease the supply of loanable funds ; the increase in the interest rate would decrease the quantity demanded of loanable funds (movement along the demand curve) .

   E. ***What effect would the change in interest rates you identified in (B) have on aggregate demand ?***

Aggregate demand would decrease because the higher interest rates would curtail the interest sensitive components of consumption and investment .

3. ***The Federal Reserve Open Market Committee wishes to accommodate or reinforce an expansionary fiscal policy .***

   A. ***Would the Federal Reserve buy bonds , sell bonds , or neither ?***

Buy bonds

B. *What effect would this policy have on bond prices and interest rates ?*

The price of bonds would increase , and the interest rate would decrease .

C. *What effect would this policy have an bank reserves and the money supply ?*

Bank reserves would increase and the money supply would increase .

D. *What effect would this policy have on the quantity of loanable funds demanded by the private sector ?*

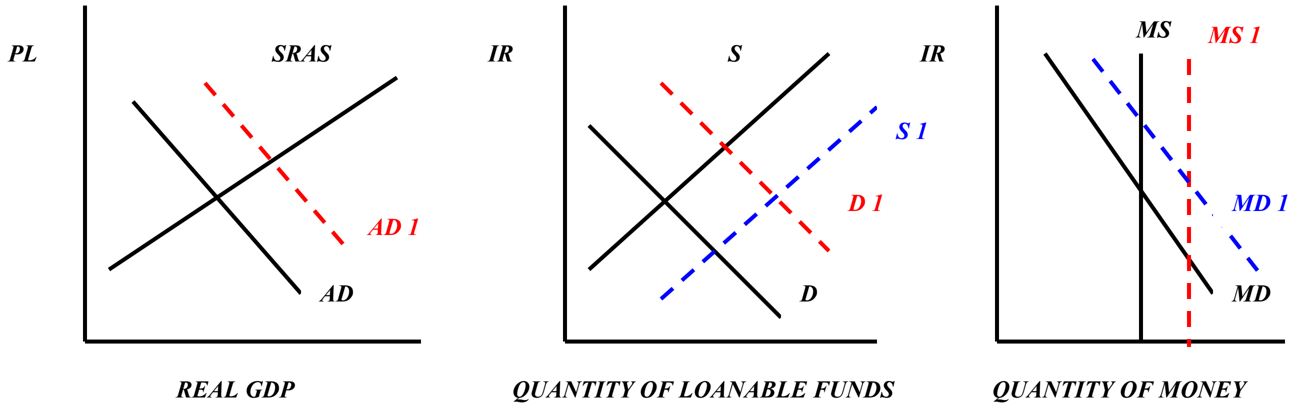
The quantity demanded of loanable funds would increase .

E. *What effect would the change in interest rates you identified in (B) have on aggregate demand ?*

Aggregate demand would increase because of the lower interest rates and the resulting increase in interest sensitive components of consumption and investment .

Graphing Monetary And Fiscal Policy Interactions :

Illustrate the short run effects for each monetary and fiscal policy combination using aggregate Demand and supply curves , the money market , and loanable funds market . Once again assume that there are no changes in the foreign sector . Indicate whether there is an increase , decrease , or whether you are uncertain .



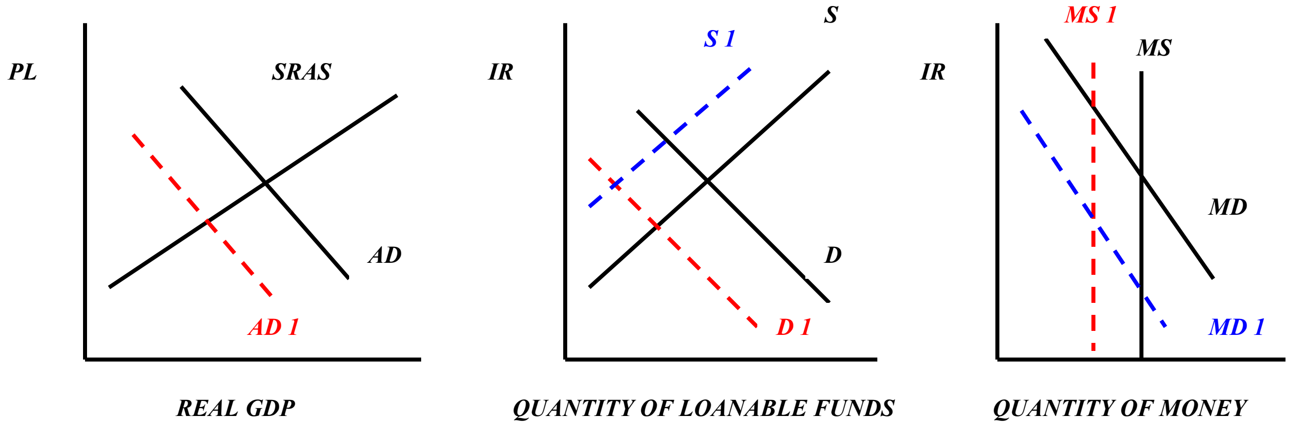
1. *The unemployment rate is 10 percent , and the CPI is increasing at a 2 percent rate . The federal government cuts personal income taxes and increases its spending . The Federal Reserve buys bonds on the open market .*

	What Is Affected	*Increase*	*Decrease*	*Uncertain*
A.	*Real GDP*	*X – Expansionary policies*		
B.	*The price level*	*X – Increase in aggregate demand will increase the price level*		

C. Unemployment *X – Increase in aggregate demand will increase employment and output*

D. Interest rates *X - Fiscal policy would result in an increase in interest rates ; monetary policy would result in lower interest rates . The net effect depends on the relative strength of the two policies . Thre graph here shows a slight increase in interest rates ; the effect on interest rates is moderate .*

E. Investment *X – Because the effect on interest rates is uncertain , we can't say what happens to investment because of changes in the interest rate .*



2. *The unemployment rate is 6 percent , and the CPI is increasing at a 9 percent rate . The federal government raises personal income taxes and cuts spending . The Federal Reserve sells bonds on the open market .*

What Is Affected *Increase* *Decrease* *Uncertain*

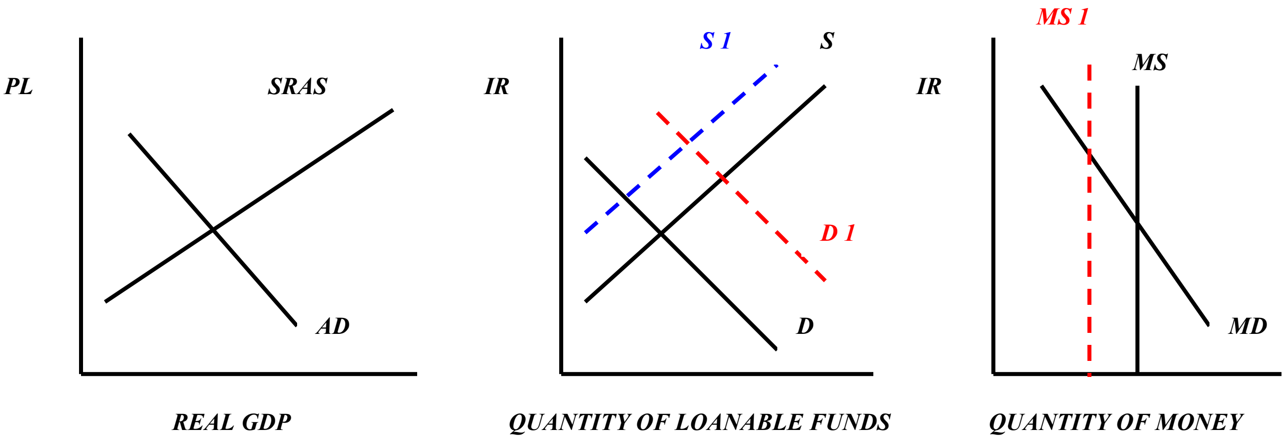
A. Real GDP *X – Contractionary policies*

B. The price level *X – Dncrease in aggregate demand will lower the price level*

C. Unemployment *X – Lower out put decrease employment on the SRAS curve*

D. Interest rates *X – The Federal Reserve decrease the money supply , which should result in an increase in interest rates . The increase in taxes and decrease in government spending result in a decrease in interest rates since the demand for loanable funds by the government should decrease . The demand for money decreases because of the decrease in real GDP . Interest rates will be higher if the decrease in* *demand is less than the decrease I supply in the money market . The interest rate effect is indeterminate .*

E. Investment *X – If interest rates are higher , there would be a decrease in the level of investment . If interest rates are lower , there would be an increase .*



3. The unemployment rate is 6 percent , and the CPI is increasing at a 5 percent rate . The federal government cuts personal income taxes and maintains current spending . The Federal Reserve sell bonds on the open market .

__What Is Affected__ __Increase__ __Decrease__ __Uncertain__

A. Real GDP *X – The combined effect on aggregate demand is impossible to predict . The fiscal policy is expansionary , and the monetary policy is contractionary .*

B. The price level *X – The impact on the price level is impossible to predict given the contradicting monetary and fiscal policies .*

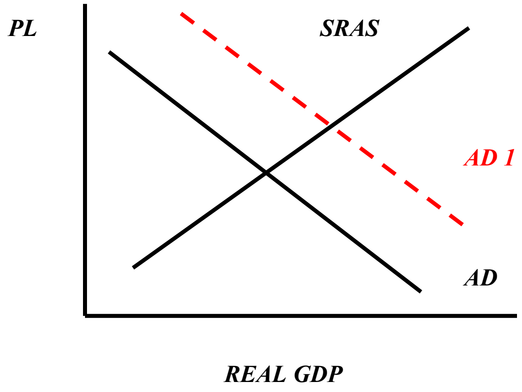
C. Unemployment *X – The impact on output and , hence , employment is impossible to predict given the contradicting policies .*

D. Interest rates *X – Interest rates will rise because of the increased demand for and reduced supply of loanable funds .*

E. Investment *X – The increase in interest rates will tend to decrease investment .*

The Short Run Phillips Curve :

1. Suppose government policy makers want to increase GDP because the economy is not operating at its potential . They can increase aggregate demand by increasing government *spending , lowering taxes , or a combination of both . Using an AD and SRAS model , draw a new ad curve that will represent the change caused by government policy designed to increase real GDP .*



A. *What happens to the price level in the short run ?*

B. *What happens to real GDP in the short run ?*

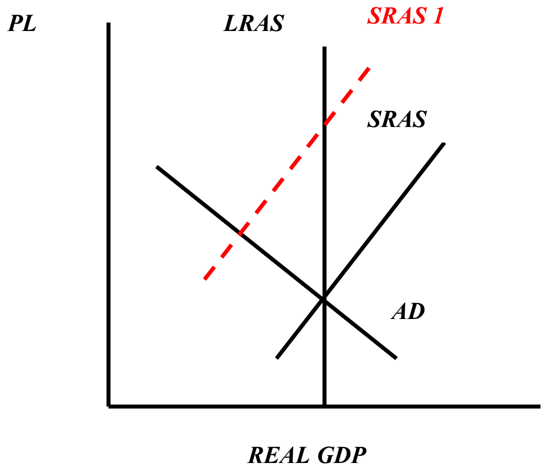
C. *What happens to the rate of unemployment in the short run ?*

D. *The Federal Reserve can use monetary policy to try to stimulate the economy . It can encourage bank lending by ____________________ bonds on the open market , ____________________ the discount rate , and / or ____________________ reserve requirements .*

A. *Increases* B. *Increases* C. *Decreases*

D. *Purchasing , decreasing , decreasing*

2. *Aggregate supply shocks resulting from the oil embargo imposed by Middle Eastern countries (OPEC) and worldwide crop failures helped to bring about higher inflation and higher unemployment rates . The economy , with rising prices and decreased output , was in a state of stagflation . Using an AD and SRAS model , draw a new SRAS curve that will represent the change caused by the OPEC oil embargo .*



A. *In the short run , based on the new SRAS :*

1. *What happens to the price level ?*

2. *What happens to real GDP ?*

3. *What happens to the rate of unemployment ?*

B. *As the economy moves to the long run :*

1. *What happens to the wage rate ?*

2. *What happens to the price level ?*

3. *What happens to real GDP ?*

4. *What happens to the rate of unemployment ?*

A 1. Increases A 2. Decreases A 3. Increases

B 1. The wage rate will decline in response to the increased unemployment rate .

B 2. The price level wil eventually return to the original level . As the wage rate declines , the SRAS shifs back toward the original SRAS .

B 3. The output level will eventually return to its original level .

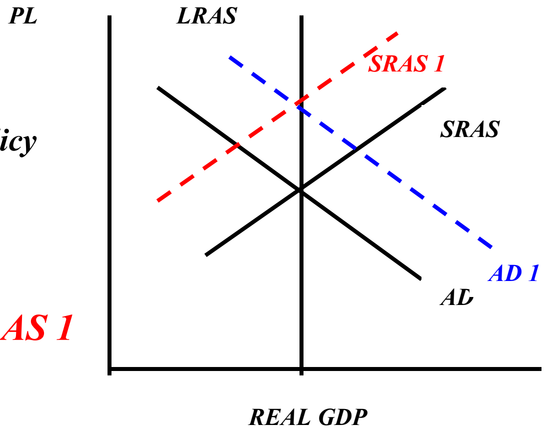
B 4. The rate of unemployment will decline initially , then return to the original level of unemployment .

3. Use the AD and SRAS model below to show the appropriate policy response to the oil price increases in the following instances . Be sure to show on the graph the effects of the oil price increase .

A. If unemployment were the main concern of policy makers

B. If inflation were the main concern of policy makers

C. If inflation and unemployment were of equal concern



The increase in oil prices shifts the SRAS to SRAS 1

A. If unemployment is the concern of policy makers , they will increase AD from AD to AD 1 using expansionary monetary and fiscal policy

B. If inflation is the concern , policy makers will probably maintain current policies and allow the self correcting forces in the economy to move the economy back to the original price level and output .

C. If inflation and unemployment are equally important , the authorities will carry out some expansionary policies but not to shift the aggregate demand as far as AD 1 .

4. As inflation in the 1970's continued to increase , economists argued that , for a reduction in money growth to be fully effective in lowering inflation , the Federal Reserve would need to convince people it was serious about reducing money growth – in other words , the Federal Reserve would stick with a lower money growth policy until inflation decreased . Why would it be important for the Federal Reserve to establish this credibility ?

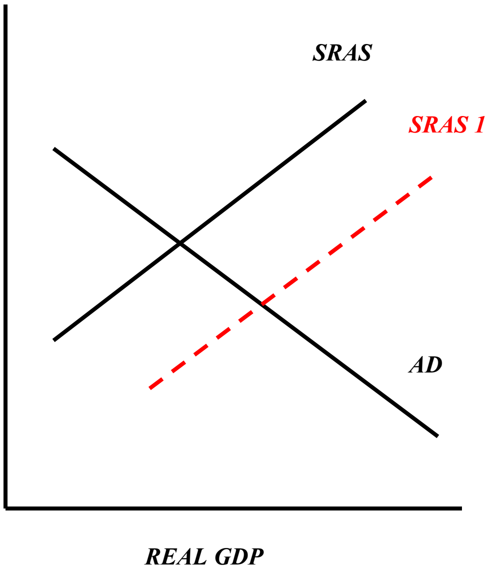
If the public doesn't believe the Federal Reserve intends to maintain a low growth *rate in the money supply , the public will simply demand higher wages , assuming the Federal Reserve will not be willing to live with a higher unemployment rate . The public expects continued inflation . The Federal Reserve would wan to establish its credibility to reduce inflationary expectations and thus reduce wage demands .*

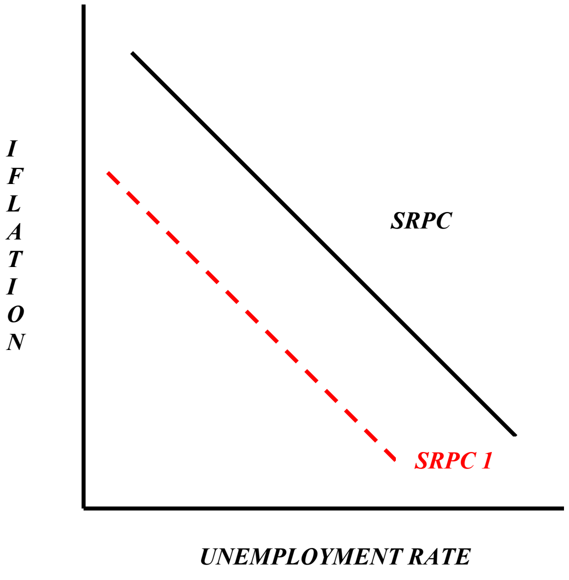
5. *In 1980 , the unemployment rate was no lower than it had been in 1960 , but inflation was much higher . Between 1980 and 1982 , the economy experienced a recession and unemployment rose . Explain the general effect of a recession on unemployment and inflation . Then explain why the recession of 1980 to 82 was accompanied by high inflation .*

In general , if there are no policy changes , a recession will reduce inflation by decreasing the inflationary pressure of wage increases . During this period , the Federal Reserve did not accommodate the oil price shocks and the economy sustained a high unemployment rate in conjunction with high inflation . This period lasted until the public believed that the Federal Reserve would not increase money growth to reduce unemployment . The public changed its inflationary expectations .

6. *Eventually the OPEC cartel was weakened , and energy prices decreased . Several United States industries , including communications and transportation , were deregulated . This caused greater competition . Explain and illustrate the effects of a weakened oil cartel and deregulation using both the aggregate demand and aggregate supply model and the Phillips curve .*

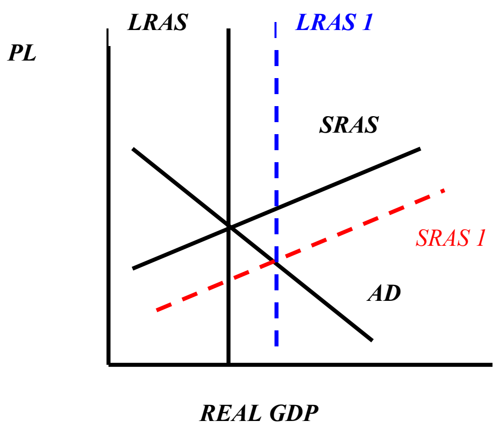
A weakened oil cartel decreased energy prices and therefore production costs . Deregulation allows for greater competition , resulting in lower production costs and production prices . The short run aggregate supply curve shifts to the right , and the short run Phillips curve shifts to the left .

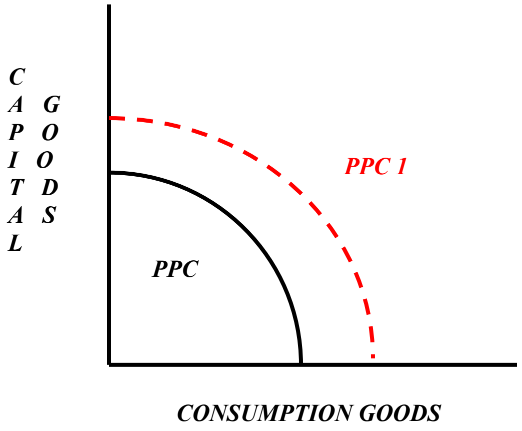




Economic Growth :

1. Explain how fewer government regulations will affect economic growth . Cite an example to support your explanation . Show the effect of fewer government regulations on the graphs below :





A reduction in government regulation will reduce the cost of production for firms . This will result in an increase in production at every level , causing increases in short run and long run aggregate supply . The PPC curve will shift outward . Examples would be a decrease in regulation of environmental pollution or a reduction in the required testing for new drugs .

2. Briefly explain how the following will affect economic growth and why .

A. Higher taxes on business

Economic growth would decrease because firms have fewer resources to invest in producing more products or in providing educational opportunities for employees .

B. Improvements in technology

Economic growth should increase . Firms should be able to produce more with fewer resources .

C. Less savings by people who want to enjoy the good life

Consumption expenditures increase , reducing the level of capital goods ; thus , future production is reduced .

D. Higher productivity of labor because of improved management styles

Economic growth would increase because labor can produce more with the same inputs .

E. Lower interest rates

Lower interest rates sustained over time will encourage investment , which will increase the capital stock , and encourage people to invest in education .