

# Fiscal Policy

Fiscal policy involves changes in taxes and spending by the government

To achieve

1. Full employment
2. Price stability
3. Long-term economic growth

# Federal Budget

The annual statement of the outlays (expenditures) and revenues of the government of Canada.

1. Budget Surplus = Revenues - outlays > 0

2. Budget Deficit = Revenues - outlays < 0

3. Balanced Budget = Revenues - outlays = 0

## Government Revenues

1. Personal income taxes
2. Corporate taxes
3. Indirect taxes  
(Taxes on gasoline)

## Government Expenditures

1. Transfer payments  
(unemployment cheques)
2. Expenditures on goods and services
3. Debt interest payments

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# Deficit and Debt



Budget  
deficits  
add to  
the gov't  
debt



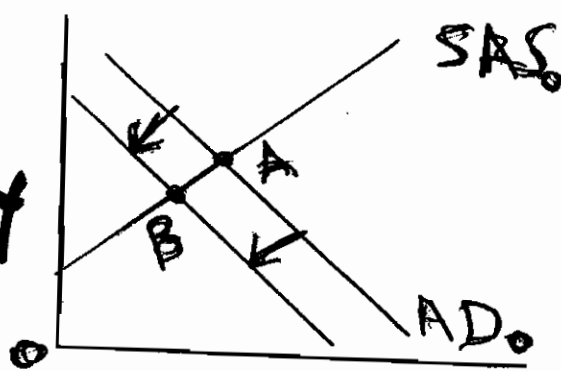
The total  
amount of  
government  
borrowing

# Demand-side Effects of tax changes

Tax increases decrease  
disposable income and decrease  
aggregate demand.

As a result, AD curve  
shifts out and to the  
right.

Contractionary  
Fiscal policy



## 6 Supply-side effects of tax changes

1 Tax increases may also affect the supply-side of the economy.

Higher income taxes weaken the incentive to work and decreases the supply of labour

There is a smaller quantity of labour and a lower potential GDP

A tax cut would  
increase the supply  
of labour, increa-  
se the full-employ-  
ment quantity of  
labour, and increa-  
se potential GDP.

## 2. Taxes and the Incentive to Save

A tax on interest income weakens the incentive to save and lend and decreases the supply of loanable funds.

Saving and investment decrease and slows the growth rate of real GDP.

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Many economists  
recognize the  
power of tax cuts  
as incentives

They correctly argued  
that tax cuts  
would increase em-  
ployment and in-  
crease output

But tax cuts without  
spending cuts would  
increase the budget  
deficit and cause  
serious problems.

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Fiscal policy is used as a tool to stabilize the business cycle.

Fiscal policy actions work by changing aggregate demand.

# 1. Discretionary Fiscal Policy

A change in a spending program or a tax law.

- A cut in income tax rates

It requires approval by the Parliament

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## 2. Automatic Fiscal Policy

Fiscal action triggered by the state of the economy

- An increase in unemployment induces an increase in payments to the unemployed
- A fall in incomes triggers an automatic decrease in tax revenues

# Fiscal policy multipliers

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1. Government Expenditure multiplier

$$= \frac{\text{change in Equilibrium income}}{\text{change in government expenditures}}$$

$$= \frac{\$200 \text{ billion}}{\$50 \text{ billion}} = 4$$

A \$50 billion increase in government expenditures increase equilibrium real GDP by \$200 billion

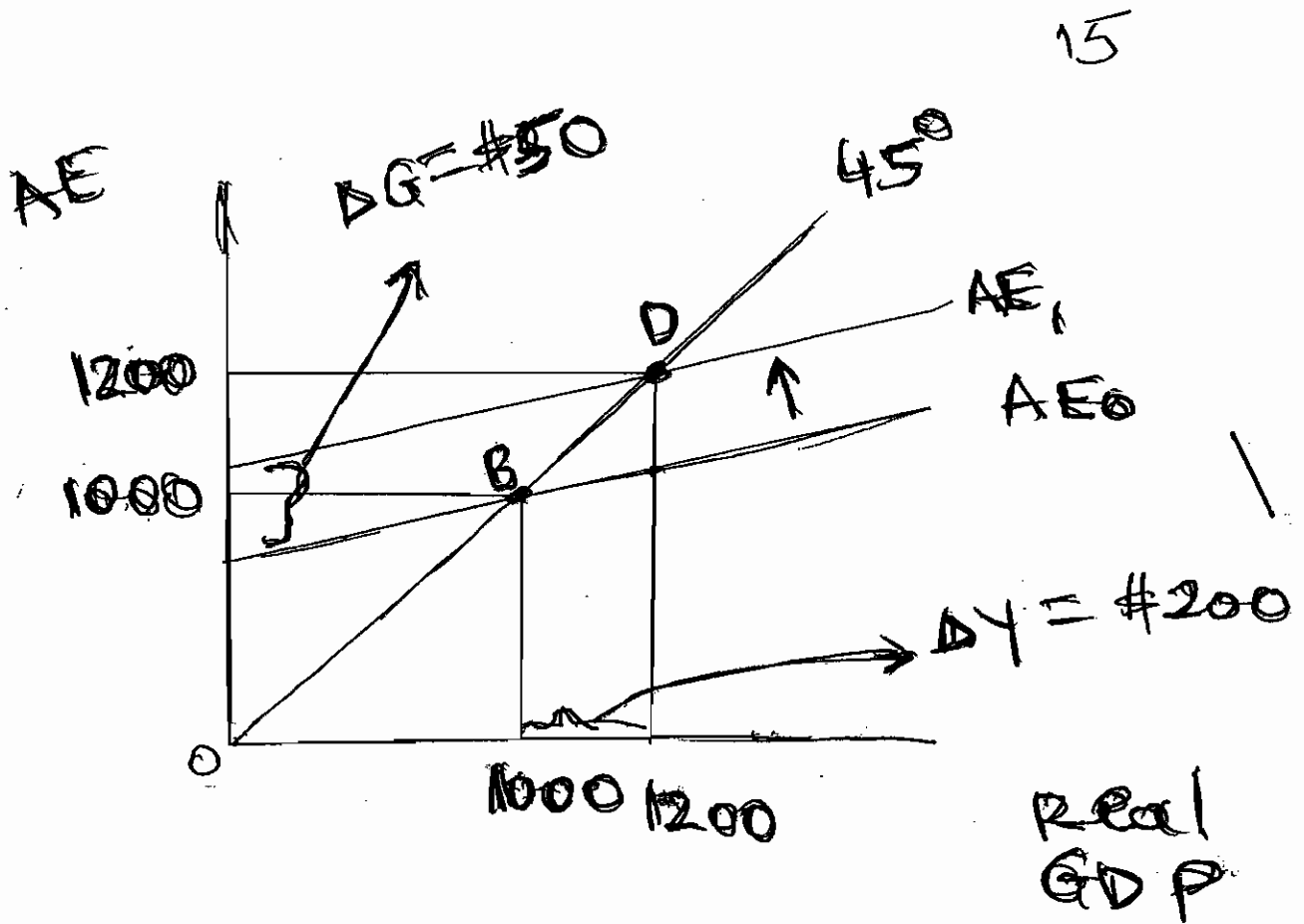
$$\Delta Y = \left( \begin{array}{c} \text{govt} \\ \text{expenditure} \\ \text{multiplier} \end{array} \right) \times \Delta G$$

$\downarrow$   
 change in  
 equilibrium  
 real GDP

$\Delta G =$  change  
 in govt  
 expenditures

$$= (4)(50) = \$200$$

The government can  
 increase its expendi-  
 tures on goods and  
 services to stimulate  
 the economy.



The AE curve shifts upward by the change in gov't expenditure,  $\Delta G = \$50$

$$\frac{\Delta Y}{\Delta G} = \frac{1}{1 - [b(1-t) - m]}$$

This is the government expenditures multiplier

Also,

$$\frac{\Delta Y}{\Delta G} = \frac{1}{1 - \text{slope of AE Curve}}$$

## 2. Autonomous tax multiplier<sup>17</sup>

It captures the magnification effect of a change in autonomous taxes on equilibrium aggregate expenditures and real GDP

A decrease in autonomous taxes increases disposable income, which increases aggregate expenditures

## Autonomous Taxes<sup>18</sup>

Taxes that are levied (imposed) independently of the level of income

(a) Property tax depends on the value of the property

(b) User fees for government services

(c) The GST.

# Induced Taxes<sup>19</sup>

They vary with  
income and real  
GDP

Income taxes  
change because  
a person's income  
changes

### 3. Balanced Budget Multiplier

The magnification effect on real GDP of a simultaneous change in government expenditure and taxes that leaves the budget balance unchanged

When both gov't expenditure and taxes increase by \$1, aggregate demand goes up.

## Transfer payments <sup>21</sup>

### (a) Autonomous transfer payments

They do not vary with income and real GDP.

- Farm subsidies
- welfare payments
- unemployment cheques

### (b) induced ~~transfer~~ payments

depend on the economic state of individuals and businesses

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- Government programs that entitle suitably qualified people and businesses to receive benefits.

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# Limitations of Discretionary Fiscal Policy

Discretionary fiscal policy is limited by time lags

1. Recognition lag  
It takes time to understand that fiscal policy actions are needed
2. Law-making lag  
It takes time for the parliament to vote and change the law.

3. impact lag

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it takes time for  
gov't expenditures  
to have an impact  
on the economy

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## Automatic stabilizers

Mechanisms that stabilize real GDP without explicit action by the government

If real output begins to decrease, tax revenues also fall and induced transfer payments rise  $\Rightarrow$  Budget deficit increases

Automatic fiscal stabilizers work to make output fluctuations less severe.

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## Budget Deficit over the Business cycle

The budget deficit fluctuates with the business cycle because both tax revenues and transfer payments fluctuate with real GDP

## cyclical deficit

A cyclical deficit occurs when there is a deficit due to the fact real GDP is less than potential GDP.

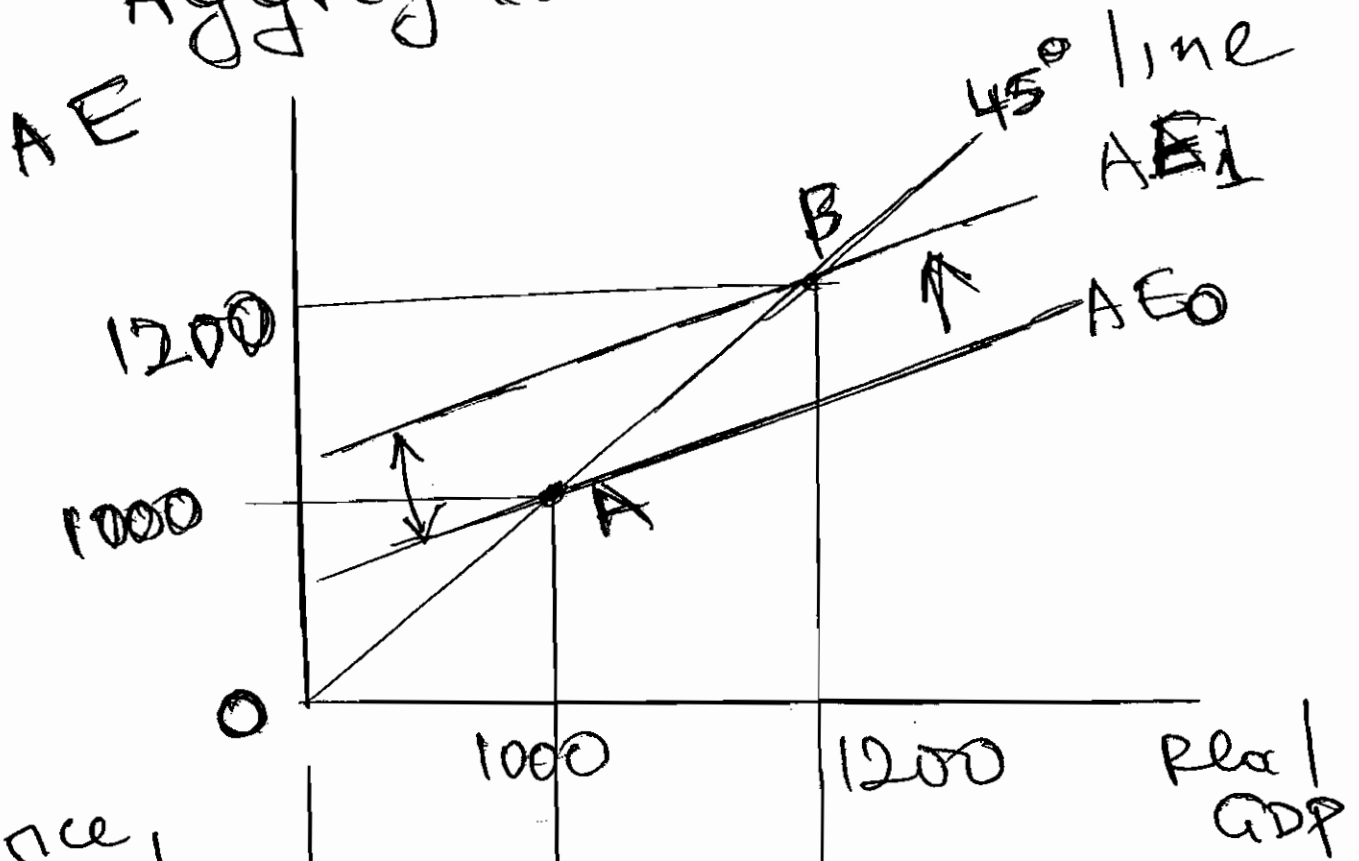
## Structural Deficit

The deficit that remains at potential GDP (at full employment).

- If \$5 billion deficit would remain at full employment, it would be due to the structure of tax and spending programs rather than to the state of the economy.

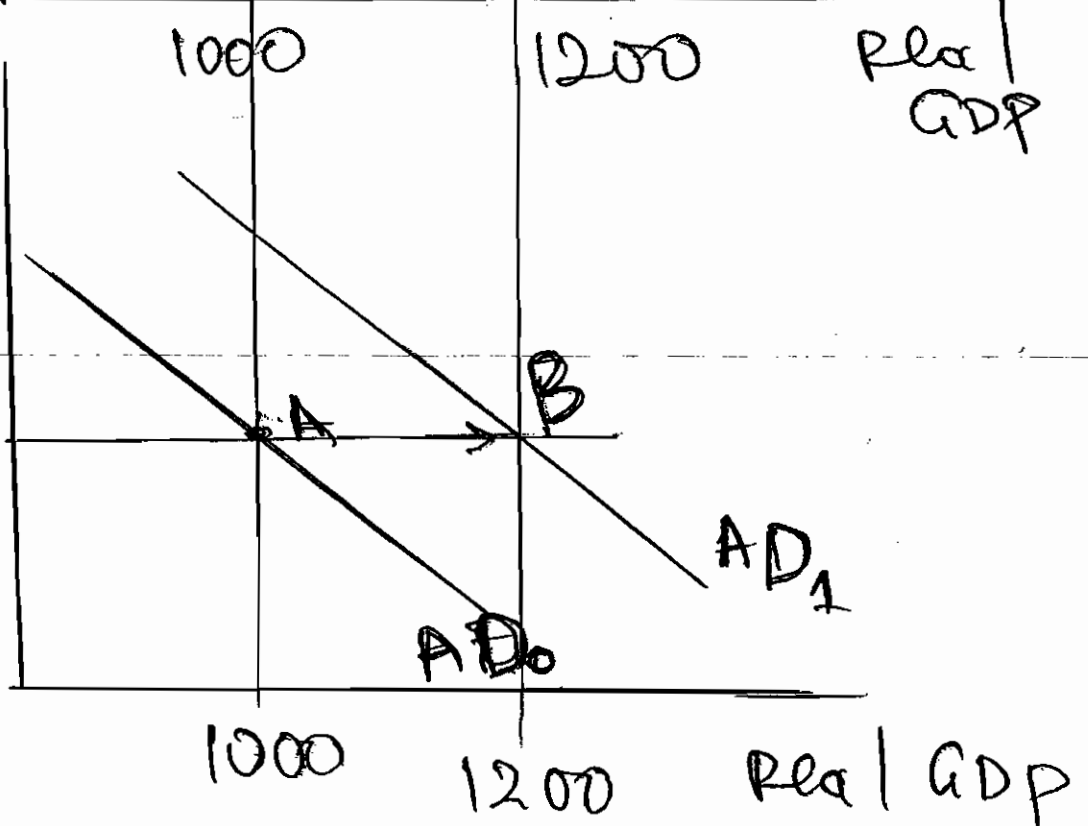
Structural deficits are persistent

# Fiscal policy and Aggregate Demand



Price Level

At same price level



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An increase in gov't expenditures shifts the AE curve to  $AE_1$

Equilibrium real GDP increases to \$1,200 billion.

The AD curve shifts rightward to  $AD_1$  (at the same price level)

This is called an expansionary fiscal policy

## Expansionary Fiscal policy

- A decrease in Taxes
- An increase in Transfers
- An increase in government expenditures

## Contractionary Fiscal policy

- An increase in Taxes
- A decrease in Transfers
- A decrease in government expenditures

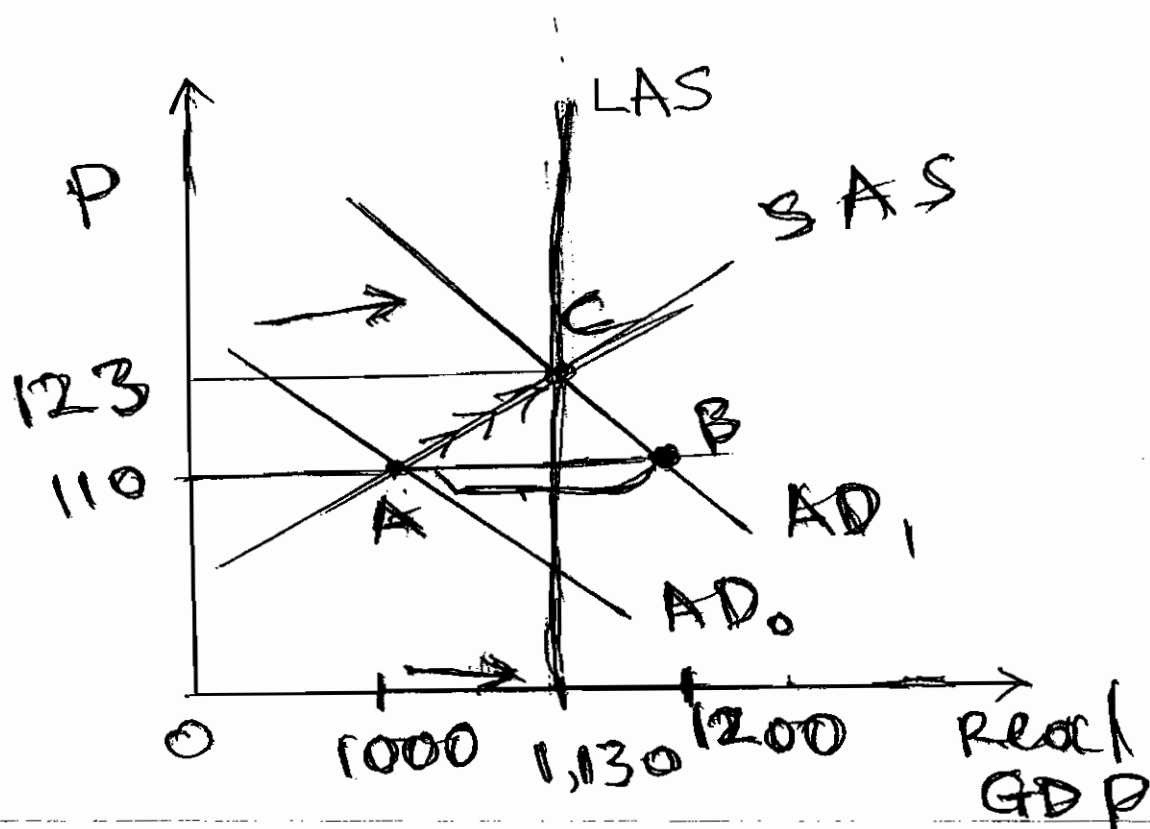
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points

The shift in AD Curve is smaller for a decrease in taxes than for an increase in govt expenditures of the same size.

why?

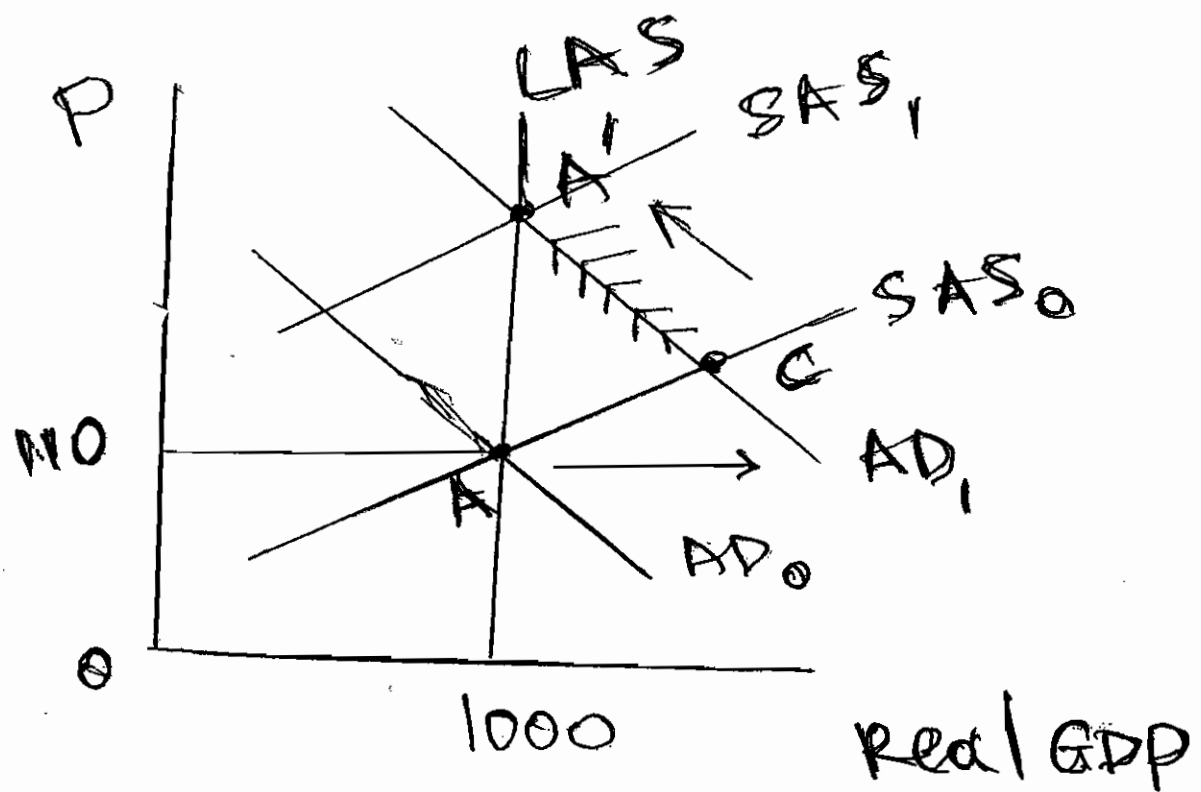
Fiscal policy with unemployment in the short run.



An increase in gov't spending shifts the AD curve to AD<sub>1</sub>.

- The price level rises
- The economy moves to point C.

# Fiscal Policy with Full employment



If we start at point A, the economy is at full employment equilibrium.

An increase in gov't spending  
The AD curve rightward  
to  $AD_1$ .

Real GDP exceeds potential GDP (at point C).

Money wage rises  
Price level rises.

The SAS curve shifts  
leftward to  $SAS_1$

In the long run, the  
economy moves to  $A'$ .  
Real GDP unchanged  
at potential GDP.

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- A temporary increase in real GDP and a permanent rise in the price level

- The long run fiscal policy multiplier is zero.