THE TOPICS INCLUDED IN THIS HANDOUT ARE:

- Demand side policies
    - Fiscal policy
    - Monetary policy
- Supply-side policies
    - Free market
    - Interventionist

TWO TYPES OF DEMAND-SIDE POLICIES

There are two types of demand-side policies that governments can use to achieve their macroeconomic objectives; these are:

1. Fiscal policy
2. Monetary policy

Fiscal policy: The use of government revenue collection (mainly taxes) and expenditure (spending) to influence the level of economic activity.

Monetary policy: The process by which the monetary authority of a country, like the central bank, controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability.

1. FISCAL POLICY

THE GOVERNMENT BUDGET

A government budget is an annual financial statement presenting the government's proposed revenues and spending for a financial year that is often passed by the legislature, approved by the chief executive or president and presented by the Finance Minister to the nation.

The government earns revenue primarily from taxes (direct and indirect), as well as from the sale of goods and services and the sale of state-owned (government-owned) enterprises.

GOVERNMENT REVENUE

The main sources of government revenue are as follows:

- **Direct and indirect taxes.** Direct (e.g., income and company taxes) and indirect (e.g., sales, VAT, GST and excise taxes) taxes are typically the largest source of government revenue.
- **Sales of goods and services** from state-owned enterprises (e.g., postal services and vehicle licensing) and the fees charged by other government

departments (e.g., issuing building consents and passports). The revenue earned from the sale of goods and services varies by country. For example, in Saudi Arabia, the state-owned petroleum company generates over US$200 billion annually. However, much of the revenue generated by government departments and state-owned enterprises goes towards the operating expenses of running such enterprises.

- **The sale of state-owned (government-owned) enterprises**, the sale of which generates a one-off payment to the government. Such sales are termed privatisation and are a transfer of ownership from the government to the new private sector owners.

GOVERNMENT EXPENDITURE

Government spending can be classified into current expenditures ***and*** transfer payments (**Examples** of **transfer payments** include welfare, financial aid, social security, and government making subsidies for certain businesses.
There are three types of government expenditure:

- **Current expenditures**. Current expenditure is expenditure on goods and services consumed within the current year, which needs to be made recurrently to sustain the production of services such as health and educational services. Examples would include the wages and salaries of police officers, nurses and teachers. Also included in current expenditures are any interest payments on outstanding government loans and the provision of subsidies to industry.
- **Capital expenditures**. This is money spent by the government on acquiring or maintaining fixed assets, such as land, buildings, and equipment. Money will be spent on producing physical capital such as roading, ports and airports, as well as the building of hospitals and schools.
- **Transfer payments**. A transfer payment is a payment made or income received in which no goods or services are being paid for, such as a benefit payment or subsidy. These are frequently used to redistribute income from high income earners to those who need income support such as the unemployed, sick, disabled and elderly.

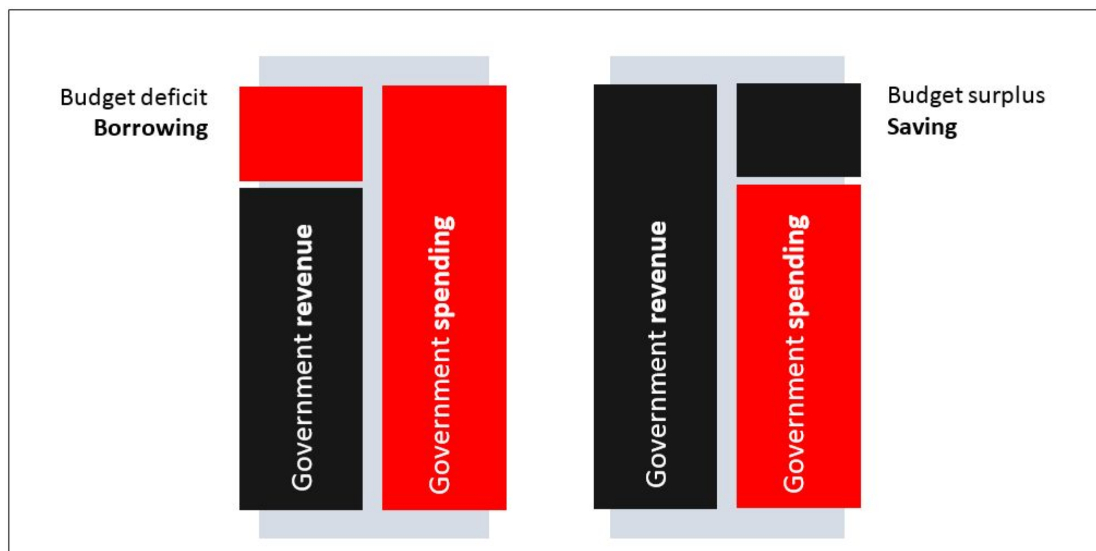
BUDGET SURPLUSES AND DEFICITS

Deficits, **surpluses** and **balanced budgets**

A government budget is a financial statement presenting the government's proposed revenues and spending for a financial year. The government budget balance is the overall difference between government revenues and spending. A positive balance is called a government **budget surplus**, and a negative balance is a government **budget deficit**. Where government revenues equal government expenditures the government has a balanced budget.

- **Budget deficit**: Government revenue < government expenditure
- **Budget surplus**: Government revenue > government expenditure
- **Balanced budget**: Government revenue = government expenditure

Over time, the accumulation of government budget deficits leads to government debt. If governments do not have a source of savings such as accumulated surpluses to draw down upon, then governments will need to finance deficits by borrowing money by issuing bonds or other such securities.



The larger the government deficit and/or the more frequently government deficits occur, the larger the government debt and the greater the interest payments will be.

Tax revenues tend to be highest in expansionary stages of the business cycle when economic growth is strong, as more people are employed, consumer confidence and expenditure, and company profits are high. Conversely, government expenditure on transfer payments such as unemployment benefits and income support is lowest in the expansionary stage of the business cycle.

The opposite pattern holds true in contractionary periods where recession means high unemployment, low consumer confidence and spending, and low company profitability. Expenditure on transfer payments increases as more people rely on unemployment benefits and income support.

As such, many countries have a fiscal policy to balance the budget over the long term. Surpluses are run in expansionary stages of the business cycle and deficits run in contractionary stages.

If deficits are accumulated across periods of strong and weak economic growth then the government debt will continue to grow and the interest costs associated with it continue to grow. Paying interest on government debt has associated opportunity costs. For example, money spent on interest payments is money that cannot be spent on health or education.

Any proceeds from the sale of government-owned state assets can be used to pay down government debt, and reduce the burden of interest payments. However,

government assets are finite and government debt cannot be continually financed through the sale of such assets.

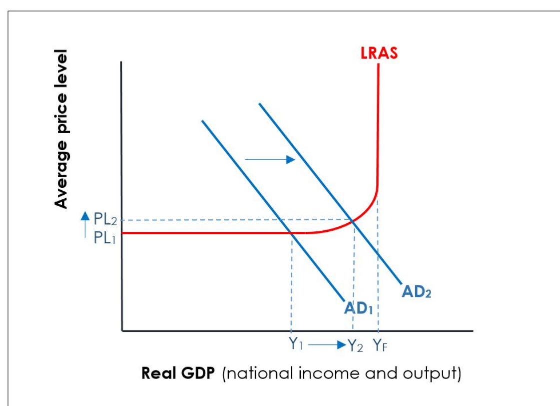
EXPANSIONARY FISCAL POLICY

Expansionary fiscal policy occurs when government taxation and expenditure comes is adjusted in the form of tax cuts, increased transfer payments and increased government spending, etc. Expansionary fiscal policy is when government spending is greater than its revenues from taxes.

If a government runs an expansionary fiscal policy by increasing transfer payments to households, reducing personal and business income taxes, etc. then real disposable incomes for consumers and firms will increase. With increased incomes comes increased demand for goods and services and aggregate demand will increase. And, as aggregate demand increases, firms will employ more resources to meet the increased demand for their goods and services – unemployment in the economy falls as the economy moves to achieving the full employment level of output – YF.

Expansionary fiscal policy increases (expands) aggregate demand, and thus, the level of overall economic activity in an economy.

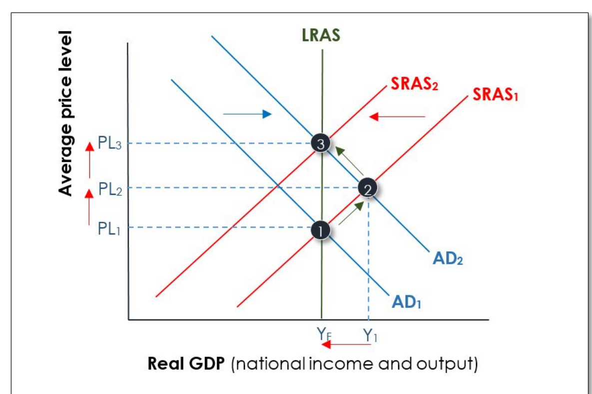
Expansionary fiscal policy can take one or any combination of the following forms:



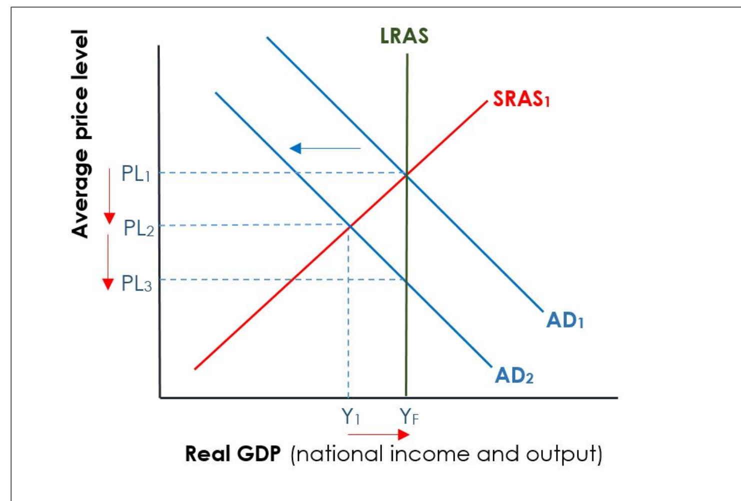
- Increased government spending (i.e., increased transfer payments)
- Decreases in the rates of personal income taxes. For example, decreasing the rate of personal income tax from 35% to 25% will increase the disposable income of households and increase consumer expenditure.
- Decreases in the rate of business taxes or tax exemptions which, ceteris paribus (all things being equal), will lead to an increase in profitability and an increase in business investment.

KEYNESIANS AND MONETARISTS VIEWS ON EXPANSIONARY FISCAL POLICY

In the new classical/monetarist model of aggregate supply and demand, any **increase in aggregate demand will lead to inflation** – a sustained increase in the average prices (i.e., the price level) of goods and services in an economy. This is shown right as the price level increases from P1 to P3.

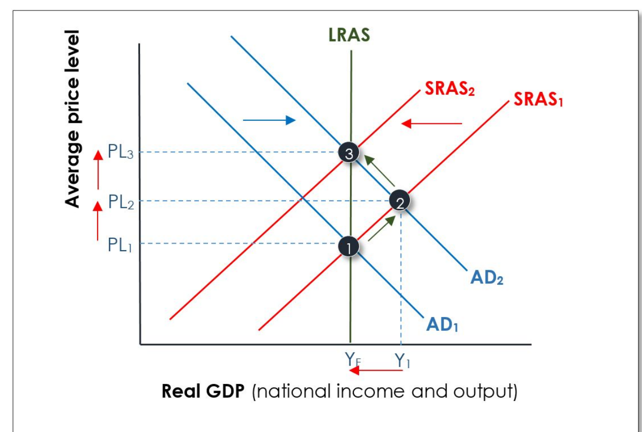


In this model, if the economy is in a deflationary gap, aggregate demand will automatically adjust back to the long-term level of output associated with the full employment of resources. P1 to P2 and eventually to P3. Therefore in a deflationary gap there will be no long term increase in Yf. Monetarists state there is no need for government intervention as resource (factor of production) prices automatically adjust.

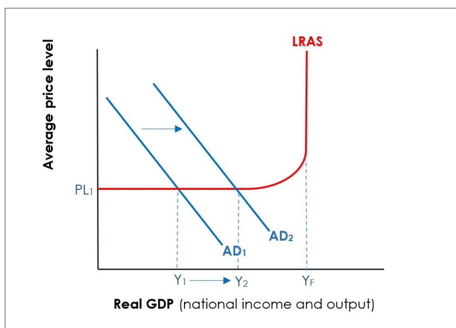


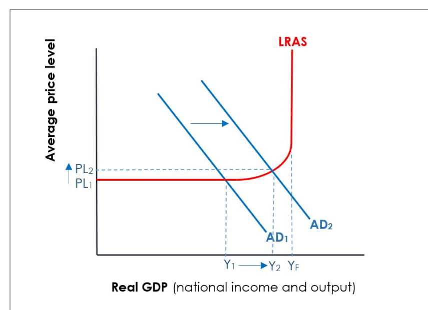
This why monetarists favour supply side policies rather than demand side policies.

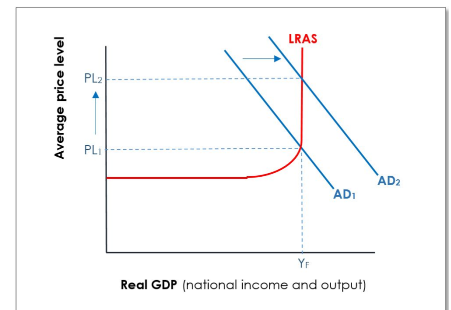
Likewise they state that demand side policies will not help an economy to increase its potential output. The effect of cutting taxes may lead to a short-term increase demand and supply, but eventually the outcome is no long term increase in Yf and higher prices (inflation).



Keynesian on the other have a different view on the effectiveness of helping an economy to grow (reach Yf). This is clear from the diagrams below:







In the Keynesian model, increases in aggregate demand do not necessarily lead to sustained increases in the price level (i.e., inflation). It all depends on the current level of aggregate demand in an economy and the initial equilibrium level of output.

The diagrams showing that an increase in the price level is dependent on the how close the initial equilibrium level of output (AD1 = LRAS) is to the level of output where there is full employment of the factors of production (YF).

At low levels of aggregate demand, and increase in aggregate demand has a low to negligible effect on the price level, as can be seen in the first two figures. It is only when aggregate demand is high and the economy is producing at (or close to, or past) an equilibrium level of output where there is full employment of the factors of production, that further increases in aggregate demand will fast raise the price level without a corresponding increase in output (real GDP). YF will not move past the LRAS level of output as increasing resource prices lead to higher average prices in an economy and **real expenditure on goods and services cannot increase any further**.

REMEMBER THIS: Keynesians state that output is largely determined by aggregate demand. Thus, boosting aggregate becomes the solution to unemployment in an economy. Increase in aggregate demand lead to increases in the supply of goods and services and increased employment of the factors of production, increasing output (real GDP) and thus, real incomes

CONTRACTIONARY FISCAL POLICY

Contractionary fiscal policy occurs when government taxation and expenditure is adjusted in the form of increased tax rates, decreased transfer payments and government spending, etc. Contractionary fiscal policy is when government spending is less than its revenues from taxes.

Reduced government spending and/or increased taxes decreases aggregate demand.

Governments can run a budget surplus when inflationary pressures are beginning to build and real output is operating past the full employment level of output; i.e., an inflationary output gap. A **budget surplus** is when government revenues are greater than government expenditure. A budget surplus acts as a withdrawal from the circular flow of income and expenditure because the government is in effect saving the surplus, i.e., deferring expenditure today for some future point in time (perhaps when the economy slips into recession and a boost to aggregate demand is required to stabilise national output and income).

Contractionary fiscal policy can take one or any combination of the following forms:

- **Decreased government spending** (i.e., decreased transfer payments or infrastructure spending.
- **Increases in the rates of personal income taxes** or personal tax exemptions. For example, increasing the rate of personal income tax from 25% to 35% will decrease the disposable income of households and decrease consumer expenditure.

- **Increases in the rate of business taxes** or decreased tax exemptions which, ceteris paribus, will lead to a decrease in profitability and a decrease in business investment.

Contractionary fiscal policy can be used by governments to curb inflation and **to maintain price stability. BUT**: Contractionary fiscal policy constraints economic growth and increases unemployment.

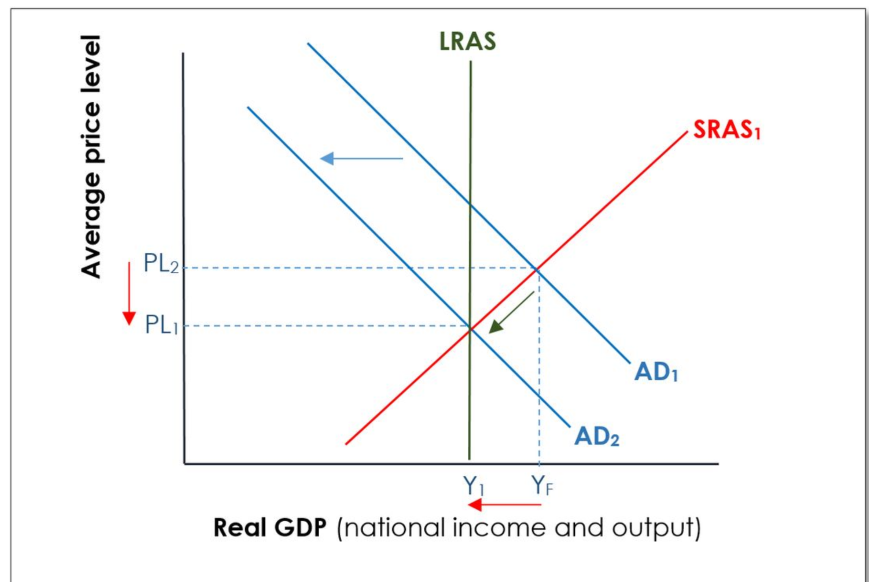
An increase in personal income tax will cause disposable incomes to decrease, and as consumers have less disposable income, household expenditure on goods and services will decrease and reduce the level of aggregate demand in an economy.

Reduced government expenditure or increased taxation decrease aggregate demand and shift the AD curve left, decreasing the price level as shown below.

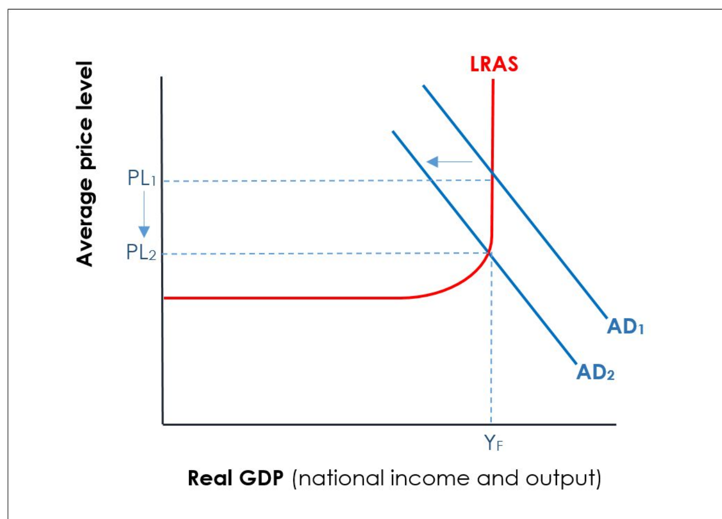
Eliminating an inflationary gap using contractionary fiscal policy depends on which model is being used / followed.

In the new classical/monetarist model of aggregate supply and demand, any decrease in aggregate demand will lead to deflation as the inflationary gap is closed and the economy returns to the full employment level of output.

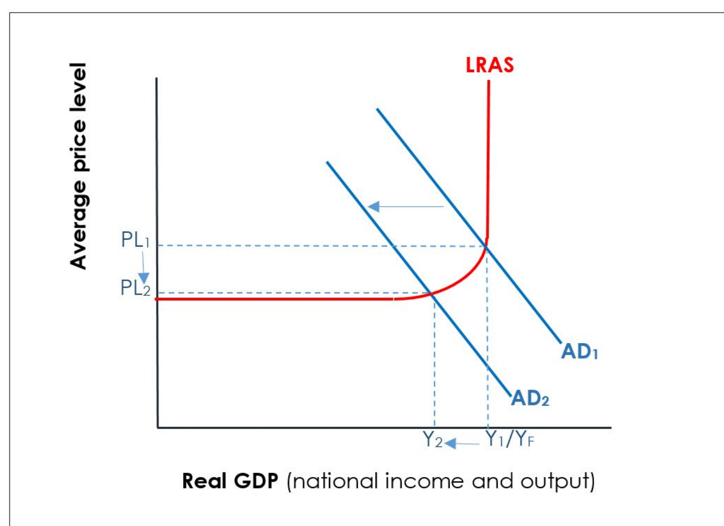
But, remember that in the monetarist model this government intervention to manage the level of aggregate demand is ***unnecessary***. Because, they argue that aggregate demand will automatically adjust back to the long-term level of output associated with the full employment of resources anyway. There is no need for government intervention as resource (factor of production) prices automatically adjust.



In the Keynesian model in the steep section of the LRAS curve: When the level of economic activity is elevated such as in the expansionary or peak stages of the business cycle, then contractionary fiscal policy may be appropriate. A decrease in aggregate demand caused by contractionary fiscal policy when the economy is operating at the full employment level of output (YF) will maintain price stability without a decrease in real output (real GDP).



In the Keynesian model in the flat section of the LRAS curve: When the level of economic activity is near or below the full employment level of output (YF), then contractionary fiscal policy will not be appropriate. A decrease in aggregate demand caused by contractionary fiscal policy at this stage will reduce economic growth and increase unemployment and cause a deflationary output gap.



EVALUATING EXPANSIONARY FISCAL POLICY

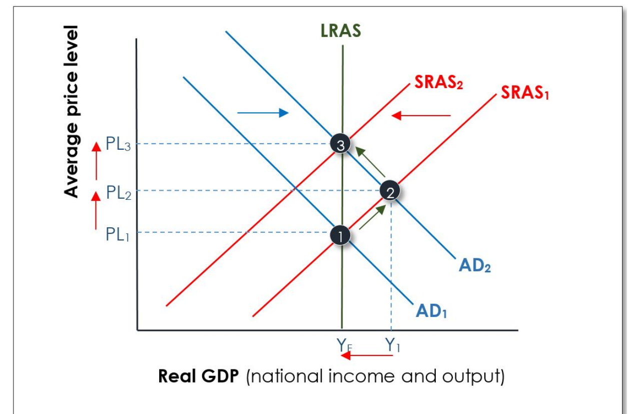
Increased government spending and/or decreased taxation revenues worsens the government's fiscal position. Budget deficits add to the national debt. *Think of the opportunity cost of decreasing taxation!*

But, as aggregate demand increases, tax revenues increase and government expenditure on transfer payments such as unemployment benefits will decrease. Higher tax revenues and lower government spending will increase a budget surplus, decrease a budget deficit or close an existing budget deficit, depending on how the

government's books were balanced prior to an expansionary fiscal policy being implemented.

Also, decreasing taxes to increase AD may cause added incentives to work because households will have higher disposable incomes. If this occurs there will be a rise in productivity and AS could increase.

Looking at this diagram you know what monetarists would say:



Demand causes prices to rise
Resources are being used unsustainably
Unemployment may only reduce temporarily as eventually increased prices mean increased production costs and we end up at point 3 on the diagram. So long-term there is no benefit.

OTHER ISSUES

- **Time Lags**. If the government plans to increase spending this can take a long time to filter into the economy and it may be too late. Spending plans are only set once a year. There is also a delay in implementing any changes to spending patterns.
- **Other components of AD**. If the government uses fiscal policy its effectiveness will also depend upon the other components of AD, for example if consumer confidence is very low, decreasing taxes may not lead to a significant increase in consumer spending.
- **Increased government borrowing** to finance the deficit caused by increased spending can cause issues in the long term.

2. MONETARY POLICY

Decreased interest rates increase aggregate demand as they make loans more attractive to potential borrowers, and increased aggregate demand shifts the economy closer to the full employment level of output and decreases unemployment.

Monetary policy: The process by which the monetary authority of a country, like the central bank, controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability.

Central bank: A national bank that provides financial and banking services for its country's government and commercial banking system, as well as implementing the government's monetary policy and issuing currency.

What does the central bank do?

1. The central bank holds cash deposited with it by the government (e.g., collected taxes). The central bank also makes government payments (e.g., direct crediting or writing cheques for school teachers on the Ministry of Education's payroll). Further, the central bank will sell government bonds to finance government spending if need be and pay the interest repayments on its debt. The central bank will also provide advice on banking and financial matters to the government.
2. The central bank is also the bank for commercial banks. A place where they can deposit their money. Central banks are also a lender of last resort to commercial banks. If banks get into liquidity shortages then the Central Bank is able to lend the commercial bank sufficient funds to avoid the bank running short. This is a very important function as it helps maintain confidence in the banking system. If a bank ran out of money, people would lose confidence and want to withdraw their money from the bank.
3. They are also the regulator of commercial banks. For example, banks must hold certain cash reserves to protect savers against risky loans. It is up to the central bank to ensure that commercial banks are following the rules.
4. Central banks also supposed to ensure exchange rate stability. They may **intervene in the foreign exchange markets** to buy or sell currency to increase or decrease the exchange rate as it deems necessary.

DETERMINING THE RATE OF INTEREST

Interest rate: The price paid for borrowing money. It is expressed as a percentage rate over a period of time and reflects the rate of exchange of present consumption for future consumption.

The central bank can increase or decrease the money supply.
Central banks use several different methods to increase (or decrease) the amount of money in the banking system. These actions are referred to as monetary policy.

There are two main methods a central bank can use in order to inject (or withdraw) money from the economy:

1. A central bank can influence the money supply by modifying reserve requirements, which is the amount of funds banks must hold against deposits in bank accounts. By lowering the reserve requirements, banks are able loan more money, which increases the overall supply of money in the economy. Conversely, by raising the banks' reserve requirements, the central bank is able to decrease the size of the money supply.
2. The central bank can also alter the money supply by changing short-term interest rates. Lower rates increase the money supply (because more is being loaned out) and boost economic activity; however, decreases in interest rates lead to an increase in aggregate demand and thus fuel inflation, so the central bank must be careful not to lower interest rates too much for too long.

EXPANSIONARY MONETARY POLICY

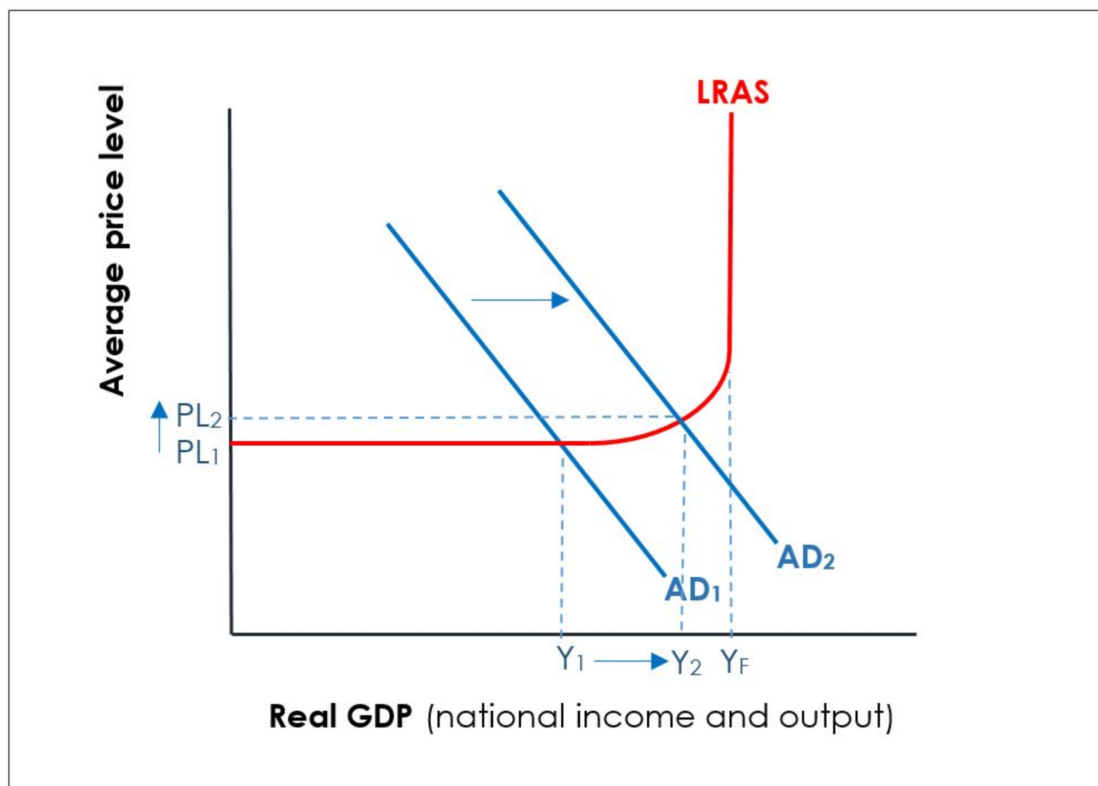
Expansionary monetary policy: The central bank decreases **the interest rate in an economy** causing borrowing for consumption and investment to become relatively less expensive and the exchange rate to depreciate as foreigners are less likely to invest in a currency with low interest rates - this is good for exports.
Lower interest rates have various economic effects:

1. **Decreases the cost of borrowing**. With lower interest rates, interest payments on credit cards and loans are less expensive. Therefore this incentivises people to save less and borrow more. People who already have loans will have more discretionary income because they spend less on interest payments. Therefore other areas of consumption will increase.
2. **Decrease in mortgage interest payments**. Related to the first point is the fact that interest payments on variable mortgages will decrease. This will have a significant impact on consumer spending. This is because a 0.5% decrease in interest rates can decrease the cost of a £100,000 mortgage by £60 per month. This is a significant impact on personal discretionary income.
3. **Decreased incentive to save rather than spend**. Lower interest rates make it less attractive to save in a deposit account because of the interest gained.
4. Lower interest rates **decrease the value of currency**. The exchange rate will depreciate because investors are less likely to save in British banks if UK rates are lower than other countries. A weaker Pound makes UK exports more competitive – increasing exports and reducing imports. This has the effect of increasing aggregate demand in the economy and boosting employment in both export industries and the domestic firms competeing against imported products.
5. Falling interest rates affect both consumers and firms. Therefore the economy is likely to experience increases in consumption and investment.
6. **Increased confidence.** Interest rates have an effect on consumer and business confidence. A decrease in interest rates encourages investment; it makes firms and consumers more willing to take out risky investments and purchases.

Therefore, lower interest rates will tend to increase consumer spending and investment. This will lead to an increase in aggregate demand.
Higher AD causes:

- Higher economic growth
- Lower unemployment. If output increases firms will produce more goods and therefore will demand additional workers.

This is the opposite of contractionary monetary policy, which has the opposite effect – increasing unemployment (usually in an effort to maintain price stability in the face of rising average prices).



Lower interest rates decrease the costs of borrowing and increases consumer and investment expenditure being financed by loans. Ceteris paribus, lower interest rates decreases incentives to save. Savings are forgone consumption by households, so as consumption increase, so too does aggregate demand, and unemployment decreases.

CONTRACTIONARY MONETARY POLICY

Contractionary monetary policy: The central bank increases the base interest rate in an economy causing borrowing for consumption and investment to become relatively more expensive and the exchange rate to appreciate (results in increased unemployment).

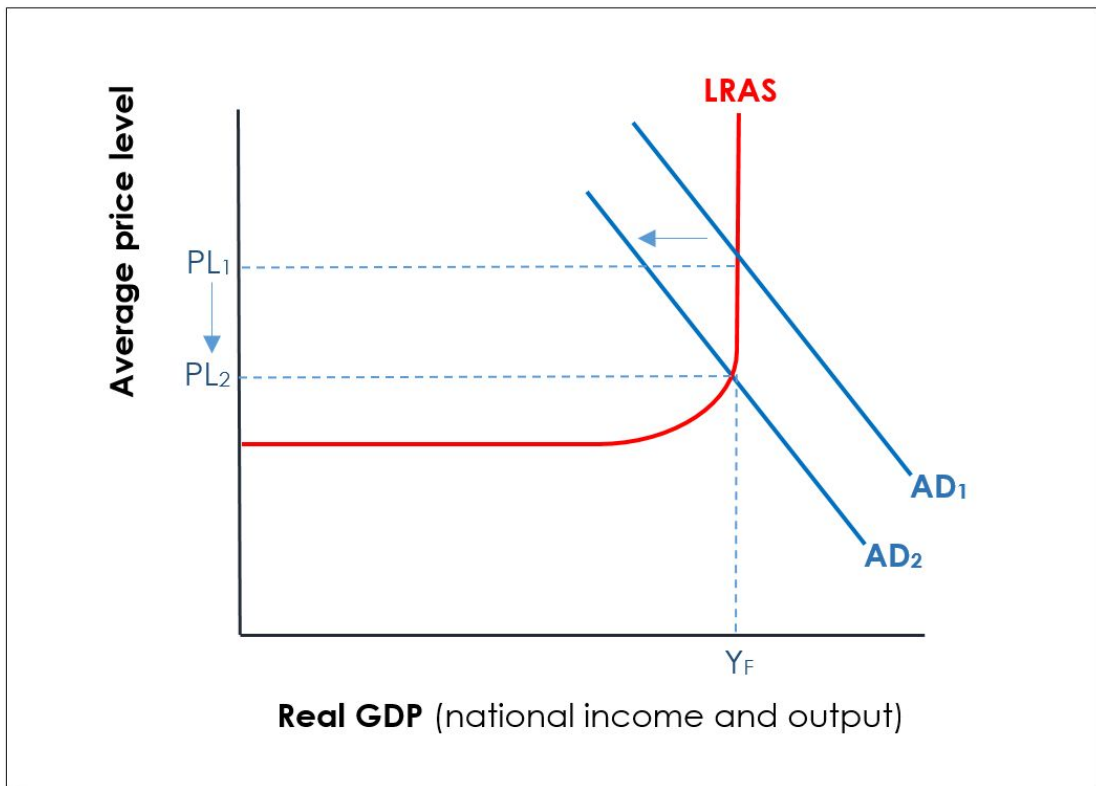
Higher interest rates have various economic effects:

- **Increases the cost of borrowing**. With higher interest rates, interest payments on credit cards and loans are more expensive. Therefore this discourages people from borrowing and saving. People who already have loans will have less disposable income because they spend more on interest payments. Therefore other areas of consumption will fall.
- **Increase in mortgage interest payments.** Related to the first point is the fact that interest payments on variable mortgages will increase. This will have a significant impact on consumer spending. This is because a 0. 5% increase in interest rates can increase the cost of a £100,000 mortgage by £60 per month. This is a significant impact on personal discretionary income.
- **Increased incentive to save rather than spend.** Higher interest rates make it more attractive to save in a deposit account because of the interest gained.
- **Higher interest rates increase the value of currency.** The exchange rate will appreciate because investors are more likely to save in British banks if UK rates are higher than other countries. A stronger Pound makes UK exports less competitive – reducing exports and increasing imports. This has the effect of reducing aggregate demand in the economy.
- **Rising interest rates affect both consumers and firms.** Therefore the economy is likely to experience falls in consumption and investment.
- **Government debt interest payments increase.** The UK currently pays over £30 billion a year on its national debt. Higher interest rates increase the cost of government interest payments. This could lead to higher taxes in the future.
- **Reduced confidence**. Interest rates have an effect on consumer and business confidence. A rise in interest rates discourages investment; it makes firms and consumers less willing to take out risky investments and purchases.

Therefore, higher interest rates will tend to reduce consumer spending and investment. This will lead to a fall in aggregate demand.

Lower AD causes:

- Lower economic growth (even negative growth – recession)
- Higher unemployment. If output falls firms will produce fewer goods and therefore will demand fewer workers.



EVALUATING MONETARY POLICY

ADVANTAGES

Advantages of monetary policy in setting interest rates:

- **Central banks are independent.** They are not subject to political pressures; e.g., they are not tempted to keep interest rates low before an election to boost employment levels. This used to be a problem for many developed economies.
- **Monetary policy is pre-emptive**. Central banks try to prevent inflation before it occurs. They predict future inflation trends. If inflation looks to be increasing above the government's target then they can increase interest rates to reduce consumer spending and keep inflation on track.
- **Monetary policy has reduced inflation expectations**. People have confidence that inflation will remain low. Therefore wage demands are lower and it becomes easier to keep inflation low.
- Interest rates have a powerful effect in influencing consumer spending and thus aggregate demand. This is because many people have mortgages or other types of "big" loans.

LIMITATIONS

Limitations of the monetary policy's effectiveness:

- Inflation is low but this is partly due to global pressures keeping inflation low; e.g., globalisation, low prices of raw materials and better technology making

production processes cheap-(ish). If these factors were to increase it would be much more difficult for monetary policy to keep inflation low.

- **Interest rates have a time lag**. It is estimated it takes 18 months for interest rates to have an effect. Therefore it becomes difficult to control inflation solely through interest rates.
- **Some sections of the economy do not respond to higher interest rates**. For example the recent rises in interest rates have not stopped house prices rising. Many older people have a small mortgage therefore changes in interest rates have little effect. However interest rates have a disproportionate effect on people who have just joined the housing market ladder.
- **It depends upon other components of AD.** For example, if consumer confidence is high then raising interest rates may have little effect on reducing consumer spending.

SUPPLY-SIDE POLICIES

I know we already did this, but since this handout it about government policy it seems apt to re-include it here

Supply side policies are government policies which seek to increase the productivity and efficiency of the economy.

Supply side policies aim to increase long term competitiveness and productivity. For example, it was hoped that privatisation and deregulation would make firms more productive and competitive. Therefore, in the long run supply side policies can help increase the level of employment in an economy as firms expand and grow. However, supply side policies work very much in the long term; they cannot be used to reduce sudden increases in the unemployment rate. This is why Keynesian theory become prominent after the Great Depression (although the the US government implemented a mix of demand side and supply side policies). Also, there is no guarantee government supply side policies will be successful in reducing unemployment.

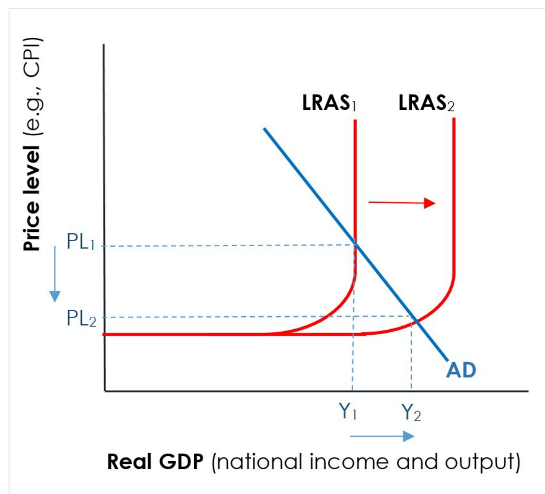
Supply-side policies can involve interventionist supply side policies (e.g. government spending on education) or free market supply side policies (e.g. reduce government legislation).

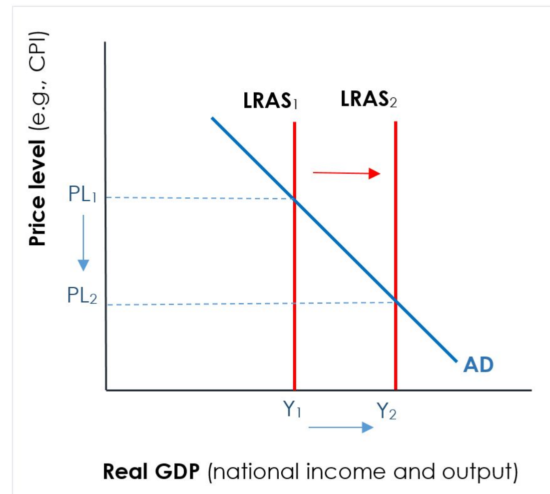
The main macro-economic objectives of the government include:

- Higher economic growth
- Low and stable rates of inflation
- Low Unemployment
- Equilibrium on the balance of payments

Quite often these objectives conflict with each other. For example, expansionary fiscal policy may contribute to higher economic growth and lower unemployment; however, it will be at the cost of inflation and a deterioration on the current account.

To achieve **all objectives simultaneously it is essential to improve the supply side of the economy**. If the government can increase productivity and shift AS to the right, it can enable employment to grow and unemployment to fall without the inflationary pressures associated with increasing aggregate demand.





To attain rates of low unemployment and inflation and increase economic growth, supply side policies can help reduce costs and increase productivity. For example, privatisation and deregulation can help reduce costs, lower costs increase the profitability of firms which, in turn, increase the supply of goods and services and employ more workers to do so.

EVALUATING SUPPLY-SIDE POLICIES

ADVANTAGES

The advantages:

- Supply-side policies can help reduce inflationary pressure (see the diagrams) in the long term because of efficiency and productivity gains in the product and labour markets.
- They can also help create jobs and sustainable growth through their positive effect on labour productivity and competitiveness.
- Finally, supply-side policy is less likely to create conflicts between the main macroeconomic objectives of stable prices, sustainable growth, full employment and a balance of payments. This partly explains the popularity of supply-side policies over the last 25 years.

DISADVANTAGES

The disadvantages:

- However, supply-side policy can take a long time to work its way through the economy. For example, improving the quality of human capital, through education and training, is unlikely to yield quick results. The benefits of deregulation can only be seen after new firms have entered the market, and this may also take a long time.
- In addition, supply-side policy is very costly to implement. For example, the provision of education and training is highly labour intensive and extremely costly, certainly in comparison with changes in interest rates.
- Furthermore, some specific types of supply-side policy may be strongly resisted as they may reduce the power of various interest groups. For example, in labour markets the interests of trade unions may be threatened by labour market reforms.
- Demand-deficient unemployment. Supply side policies will not reduce unemployment caused by a fall in aggregate demand (demand-deficient unemployment). They can only reduce long term structural unemployment (i.e., the natural rate of unemployment). However, in maintaining a low level of unemployment, the most significant factor in the short-run is the use of monetary policy and controlling AD through interest rates. **Supply side policies will take a long time to have any effect on reducing unemployment - Remember that!**
- Finally, there is the issue of equity. Many supply-side measures have a negative effect on the distribution of income, at least in the short-term. For example, lower taxes rates, reduced union power, and privatisation have all contributed to a widening of the gap between rich and poor.

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