

# OCR Economics A-level

## **Macroeconomics**

### Topic 5: The Financial Sector





#### **5.1 Money and Interest Rates**

##### Notes

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## The functions of money

-  **A medium of exchange:** without money, transactions were conducted through bartering. Goods and services were traded with other goods and services, but people did not always get exactly what they wanted or needed. The goods and services exchanged were not always of the same value, which also posed a problem. Exchange could only take place if there was a **double coincidence of wants**, i.e. both parties have to want the good the other party offer. Using money eliminates this problem.
-  **A measure of value (unit of account):** Money provides a means to measure the relative values of different goods and services. For example, a piece of jewellery might be considered more valuable than a table because of the relative price, measured by money. Money also puts a value on labour.
-  **A store of value:** Money has to hold its value to be used for payment. It can be kept for a long time without expiring. However, the quantity of goods and services that can be bought with money fluctuates slightly with the forces of supply and demand.
-  **A method of deferred payment:** Money can allow for debts to be created. People can therefore pay for things without having money in the present, and can pay for it later. This relies on money storing its value.




## The characteristics of money

The characteristics of money are:

- **Durability:** so that money can physically last between transactions, unlike, for instance, wheat.
- **Divisibility:** so that the exact value can be traded. Artwork, for example, cannot be divided to give an exact value.
- **Portability:** Coins and notes are easy to carry around, unlike, for example, a block of iron.
- **Uniformity:** The value should be consistent.
- **Limited supply:** Money should be scarce enough that it has a value and can be earned.
- **Acceptability:** consumers and firms should have enough confidence in money to accept it.

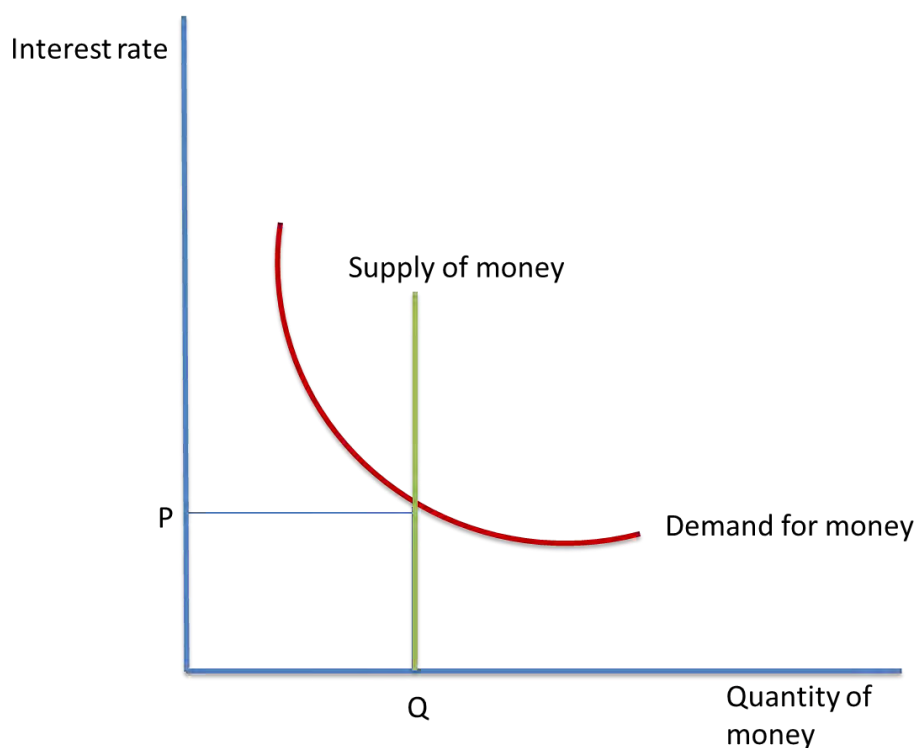


## The Money Supply

-  The money supply is the stock of currency and liquid assets in an economy. It includes cash and money held in savings accounts.
-  Narrow money is physical currency (notes and coins), as well as deposits and liquid assets in the central bank.
-  Broad money includes the entire money supply. Cash could be in restricted accounts, which makes it hard to calculate the money supply. It includes liquid and less liquid assets.

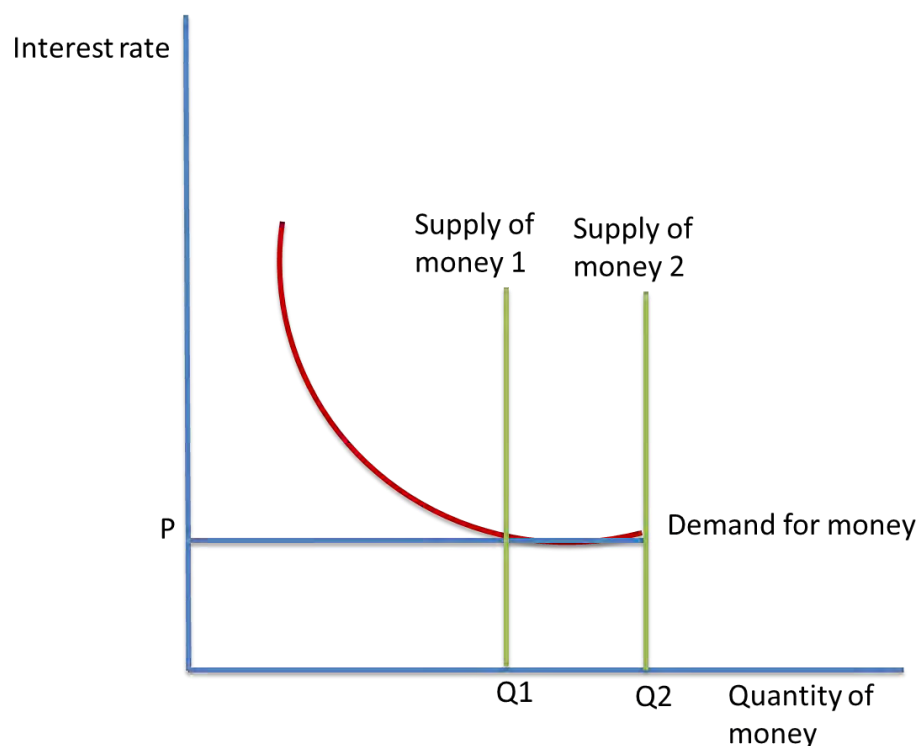
## How the interest rate is determined

### Liquidity trap:





Interest rates are determined as shown in the diagram above. The supply of money meets the demand for money at P, Q. A rate of interest above P means the supply of money exceeds demand. This causes the rate of interest to fall. The interest rate remains at equilibrium unless there the demand for or supply of money changes.






The above diagram shows a liquidity trap. This is when a change in the supply of money does not change the interest rate. This means monetary policy cannot be used to influence consumption and investment.

### **The relationship between the inflation rate and the nominal interest rate**

-  When interest rates are high, the reward for saving is high and the cost of borrowing is higher. This encourages consumers to save more and spend less, and is used during periods of high inflation.
-  When interest rates are low, the reward for saving is low and the cost of borrowing is low. This means consumers and firms can access credit cheaply, which encourages spending and investment in the economy. This is usually used during periods of low inflation. However, during the financial crisis, the UK interest rate fell to a historic low of 0.5%, and has been at this rate since March 2009. Despite high inflation, the interest rate was set at a low rate to stimulate AD and boost economic growth.

### **The relationship between the money supply and the price level using the Fisher equation of exchange**

#### **Quantity theory of money ( $MV = PT$ )**

-  The Quantity Theory of Money states that there is inflation if the money supply increases at a faster rate than national income.



- 📄 Fisher's equation of exchange is  $MV = PQ$ . T can be used instead of Q, although using Q means that PQ is nominal national income and overcomes the difficulties associated with the inclusion of intermediate transactions.
- 📄 M refers to the supply of money, V is the velocity of circulation, P is the price level and Q is the quantity of real goods sold (real GDP). T represents transactions. However, it is difficult to measure T.
- 📄 Therefore, the value of expenditure on goods equals the value of total output ( $MV=PQ$ ).
- 📄 The equation assumes that velocity is constant, and that Q is independent of the supply of money. Only supply-side factors affect Q. It is assumed V is constant because the frequency that workers are paid does not change often.
- 📄 The equation argues that increasing the money supply causes inflation.
- 📄 When the money supply increases, consumers have more money to spend. This causes AD to shift to the right. Firms then increase supply in the short run. A positive output gap occurs, which is inflationary.
- 📄 As a result, more workers are employed, so wages increase. This means costs increase for firms, so they put up prices.
- 📄 This inflationary pressure means the real value of money falls. Since money can buy less, there is a contraction in demand.
- 📄 Workers demand higher wages to make up for the increase in inflation. This leads to a left shift in the SRAS curve.
- 📄 The output in the economy returns to equilibrium, but the price level is higher.

