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Role of Central Banks

GCE A-LEVEL & IB ECONOMICS

What Does the Bank of England Do?

Their main responsibility is to maintain financial and macroeconomic stability by controlling interest rates and the money supply in the economy such that the government's macroeconomic objectives can be achieved.

- Interest rates can be increased/decreased to affect AD and hence cause a stable rate of inflation (e.g. 2%) and steady economic growth (which then affects employment rates)

- Another way to maintain financial stability is ensuring steady money supply even when banks or financial institutions fail. In that case, the BoE will lend funds to banks and bail them out to mitigate the financial damage and risks to the macroeconomy.

What Does the Bank of England Do?

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There are other important functions which the BoE does:

- Issue existing/new notes and coins (e.g. new plastic notes)
- Bank of last resort (lending to bankers), banking for the government
- Influence the exchange rate by buying/selling currency
- Collaborate/negotiate with other central banks and international organisations
- To promote stability and reduce risk of financial firms, so as to make the financial system less susceptible to future crises

How the Bank Operates

There are three main parts of the Bank of England which we will discuss in more detail in later slides:

https://www.youtube.com/watch?v=b75qgqHqV98&index=8&list=PLslyOrpjJ0z2H8B-ZjGgFjNCZHcHqASmr&t=0s

MPC: Monetary Policy Committee

FPC: Financial Policy Committee

PRA: Prudential Regulation Authority

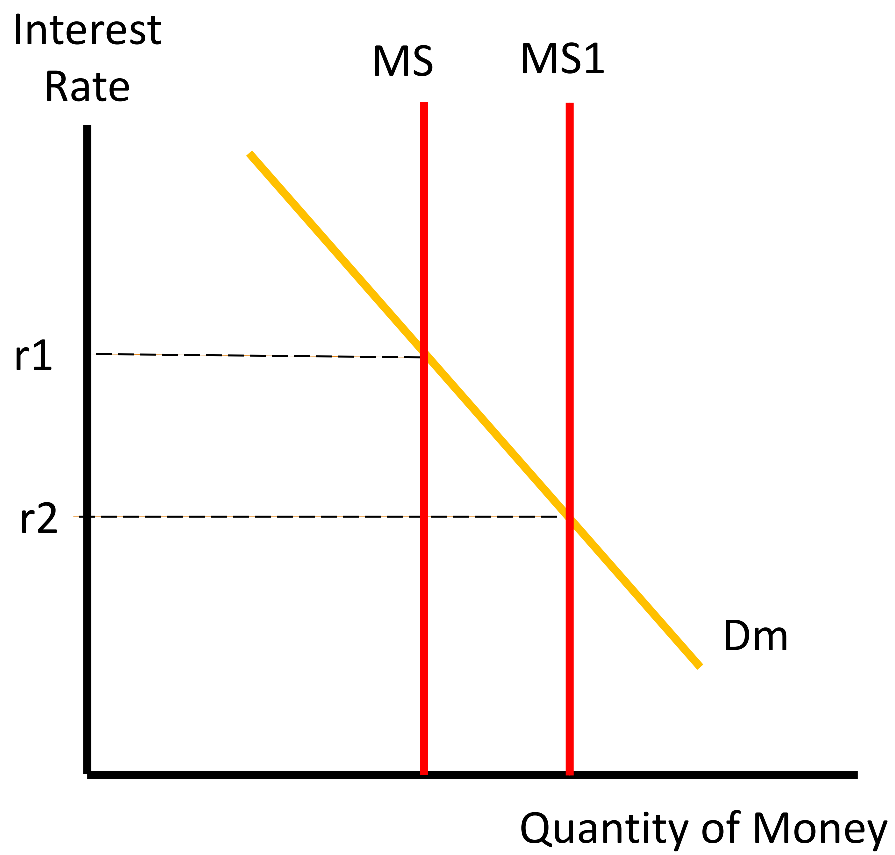
Implementation of Monetary Policy

There are two ways of implementing monetary policy:

- Money Supply (e.g. Quantitative Easing)
- Interest Rates

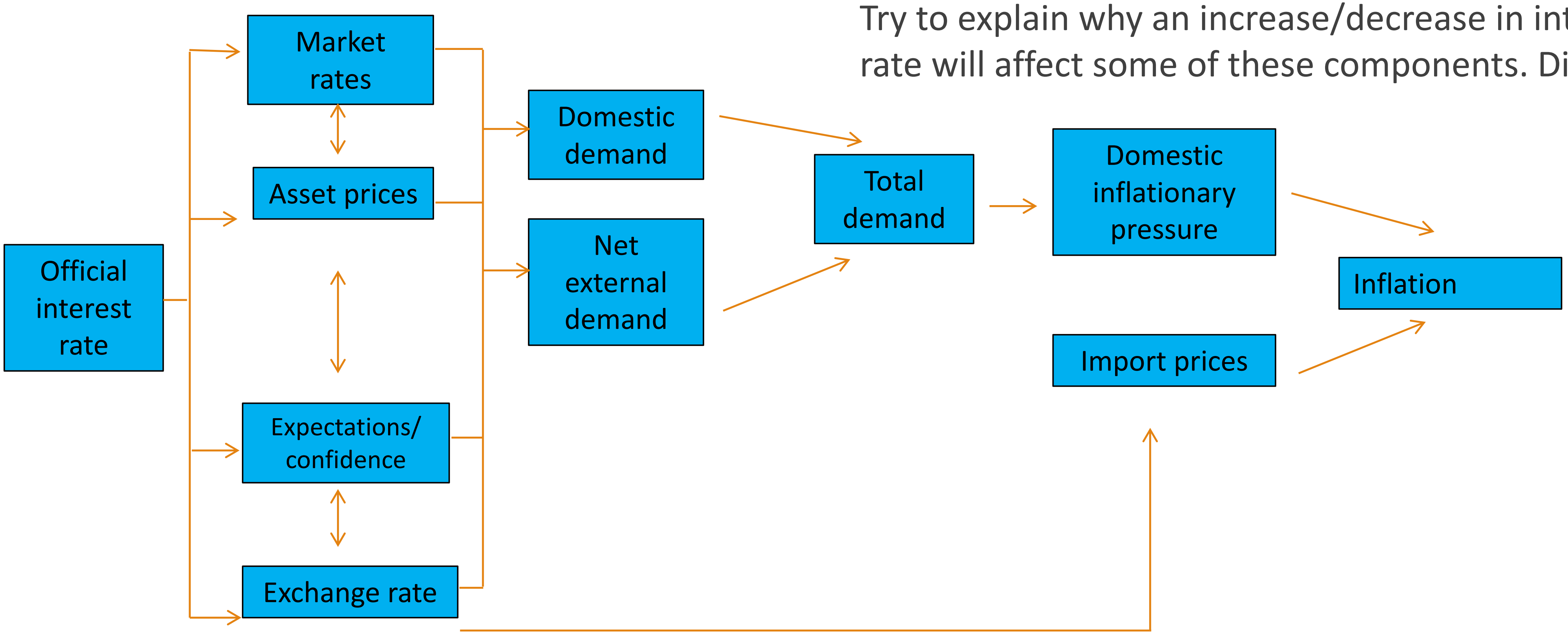
https://www.youtube.com/watch?v=WeT3HeaSBvM

If the BoE would like to adopt an expansionary monetary policy to increase AD, they can either reduce the interest rate directly, or increase the Money Supply from MS to MS1. As shown in the diagram, when money supply increases, it will become easier to borrow funds in the economy and credit will be more easily available. As a result, the interest rate charged on loans will fall, causing a similar effect as to decreasing the base interest rate directly.



The Monetary Policy Transmission Mechanism

Try to explain why an increase/decrease in interest rate will affect some of these components. Discuss.



Quantitative Easing

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Quantitative easing aims to increase the money supply in the economy, which decreases interest rates. This involves the central bank printing electronic money so that the government can purchase financial assets from banks/pension funds to stimulate the economy and improve liquidity. We will go into more detail with regards to QE in later slides.

https://youtu.be/H1lzGIsAyeU?t=329

But why quantitative easing?

Central Bank as a Banker

The central bank acts as the Government's Banker by:

- Being an advisor to the government
- Manage the government's bank deposit accounts that are used for payments and transactions (e.g. bank transfers, foreign currency/commodity purchases)

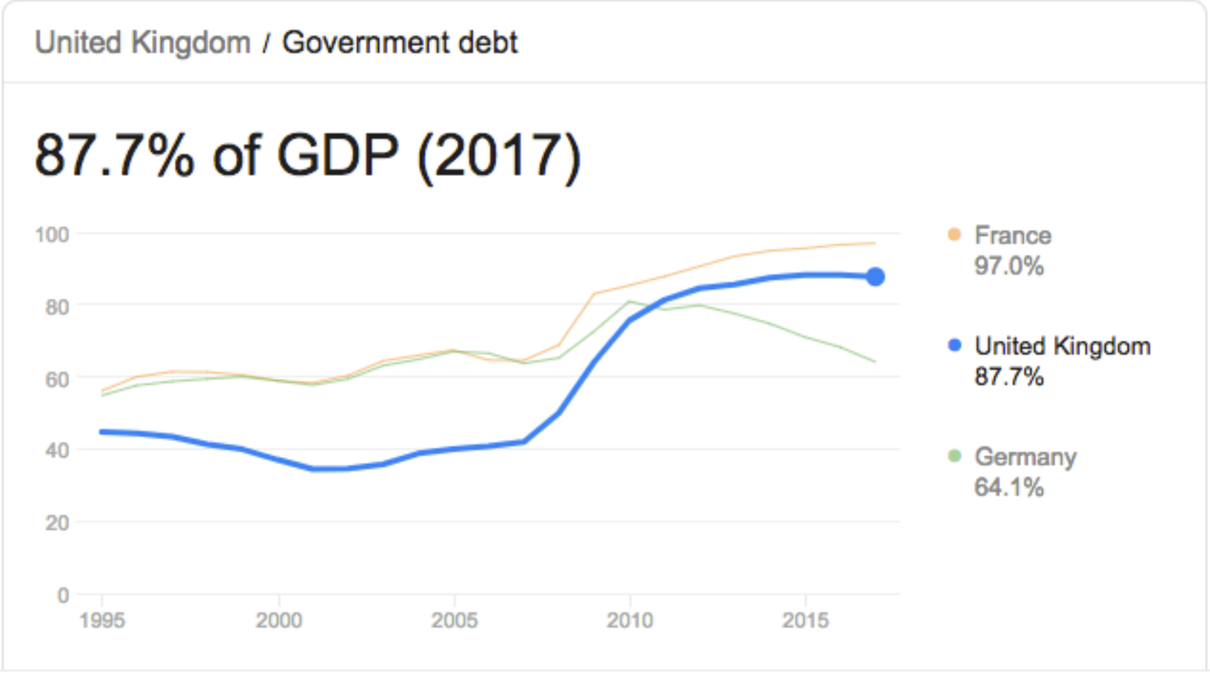
As a lender of last resort, the Bank of England:

- Charges commercial banks for borrowing their funds if they are short on liquidity (money available for immediate transactions to be made in a short-time period e.g. for customer withdrawals)
- Helps prevent the collapse of financial institutions (especially major banks) to ensure stability in the economy (hence the term too big too fail)

Money Supply & Government Bonds

One way the government borrows is by issuing government bonds.

Government bonds are loans the private sector/investor gave the government. If you own one, the company/government will have to pay back the amount they owed you with interest.



Money Supply & Government Bonds

The value/price of these bonds is worth slightly more than the sum that is borrowed to the government, as the bond owner will be paid that full amount by the government in the future in addition to interest.

A lot of commercial banks and pension funds lend money to the government and owns these bonds. This is because they can earn some interest with very low amounts of risk (it is unlikely that government will default). Government bonds also act as a benchmark for the cost of borrowing in the economy due to its low risk nature.

Quantitative Easing

What are some potential problems/limitations with this mechanism to stimulate growth?

Bank of England creates new money electronically

→ The money is then used to buy government bonds and other assets from commercial banks, and other institutions

↓ Bank of England now owns these bonds, and commercial banks is repaid in cash the amounts they borrowed the government

← Banks now use the surplus cash from selling those government bonds to lend to individuals and businesses, and to improve their financial condition

↓ Individuals and businesses can access funds easier from banks and pay a cheaper rate for borrowing (lower interest rates)

→ As a result, money supply increases as businesses/individuals lend more to consume and invest

Price of Bonds and Interest Rates (Yields)

The interest rate (yield) of a bond is simply the % return you gain from lending your money.

The interest rate paid to you from a government bond is simply the total amount paid back to you, divided by how much you paid in.

$$Interest\ Rate\ of\ Bond\ (Bond\ Yield) = \frac{Interest\ Payment}{Price\ of\ Bond}$$

From this equation we can see the interest rate you receive from a bond is inversely related to the price.

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Hence, when the Bank of England buy up and demand more government bonds, price of government bonds will increase, which decreases the interest rate (yield). Because of the lower returns, commercial banks and financial institutions will invest in company bonds/shares instead of government bonds. This will increase money available for firms to increase consumption/investment.

Regulation of the Banking Industry

“The BoE used to be responsible for the regulation and supervision of the banking and insurance industries. This responsibility was transferred to the Financial Services Authority in June 1998, but after the financial crises in 2008 new banking legislation transferred the responsibility for regulation and supervision of the banking and insurance industries back to the Bank.” Wikipedia

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Regulation of the Banking Industry

BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY

The PRA supervise over 1,500 financial institutions including banks and insurance companies. This is achieved by implementing regulation, stress tests, capital/liquidity ratios on firms.

Financial Policy Committee

The FPC looks into reducing risks for the financial system as a whole and sets capital/liquidity ratios and other requirements at a macro level. It does not regulate specific firms directly.

FCA FINANCIAL CONDUCT AUTHORITY

FCA works with firms to ensure fair outcomes for consumers. One of their responsibilities is regulating and ensuring fair practice in consumer credit. This comes into play when you take out a loan or use a credit card for example. Also if you want to check if a firm is legitimate or report a possible scam for example, the FCA is the go-to contact.

Preventing Banks From Failing

Current Assets	Current Liabilities
Customer deposits lent out to earn interest	
Payments from Loans	Customer Withdrawals
Customer Deposits stored as cash	

Banks earn interest and make a profit by using our deposits to lend to other individuals/companies.

As a result, they are incentivized to lend most of our deposits to maximize profits.

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Preventing Banks From Failing

Current Assets	Current Liabilities
Customer deposits lent out to earn interest	
Loans not repaid	Customer Withdrawals
Customer Deposits stored as cash	

One way banks fail is when they do not have enough cash to sustain withdrawals in the short-run (lack of liquidity).

This can happen when loans are not being repaid by borrowers in a recession, and too much of the bank's cash reserves are lent to businesses/households.

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Preventing Banks From Failing

Current Assets	Current Liabilities
Customer deposits lent out to earn interest	
Loans not repaid	
Customer Deposits stored as cash	Customer Withdrawals

To avoid this, Liquidity Ratios imposed by the FPC requires the bank to have more cash/liquid reserves as a % of total assets they own. This reduces risk of them failing due to a lack of cash to fund withdrawals.

The Basel Agreement requires banks to keep enough liquid assets (e.g. cash reserves) to go through a 30 day market crisis.

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Preventing Banks From Failing

Another reason banks can fail is if they owe depositors more than they own in assets and cash in the long term. This can happen if there is a huge fall in the value of assets that they own (e.g. houses acquired from failed mortgages was worth very little)

- Capital Ratio requirements prevents this by ensuring that banks hold enough non-risky assets (e.g. cash/government bonds) as a % to their total assets. This can reduce the risk of losing huge amounts of asset value in adverse market conditions, and becoming insolvent.