4.5 Financial Sector

At the end of this topic a student should be able to:

- examine the main factors affecting the demand for and supply of cash and credit funds in the money market
- explain how commercial banks create credit and outline the consequences for an economy
- analyse the factors that influence the level of interest rates, evaluating the impact of changes in interest rates on economic activity
- examine the role and effectiveness of current financial institutions and regulators in the operation of financial markets

The financial sector is sometimes called "the engine room" of the economy. A basic goal of financial institutions is to make money available for those who want to spend beyond their income, taking it from those who are saving.

Introduction to Money

Functions of Money

- **Medium of exchange**
  - Money allows people to buy goods and services/ allows exchange between buyers and sellers. Allows the buying and selling of goods/services to be broken into two distinct activities.
- **Measure of Value**
  - Money enables a price to be put on goods & services.
- **Store of Wealth**
  - Allows people to save for the future/can be used to make purchases in the future.
- **Standard for Deferred Payment**
  - Money is capable of measuring value for a future date. It is the function of being able to value a debt, thereby allowing goods and services to be acquired now and paid for in the future.

Forms of Money

In time gone by, money was worth its weight in gold. Gold and silver coins were worth their **intrinsic value, i.e. their real value**. Modern money can be described **as token money.**
A €1 coin is worth 100 cent. This is its **face value**. Its intrinsic value if you attempted to melt it down and sell the metal, it would be worth a fraction of this.

Token money refers to money that has a face value that is greater than its intrinsic value.

The "**term legal tender"** means the currency that is the official currency and must be accepted as payment by suppliers of goods/services and by creditors. Cheques are not legal tender but can be converted into legal tender.

Financial Markets

1. **Money Markets**

- Market for short term loan finance for businesses and households
- Money is borrowed and lent normally for up to 12 months
- Includes inter-bank lending i.e. the commercial banks providing liquidity for each other
- Includes short term government borrowing e.g. 3-12 month Treasury Bills – to help fund the government's budget (fiscal) deficit

2. **Capital Markets**

- Market for medium-longer term loan finance
- Capital markets are the markets where securities such as shares and bonds are issued or re-sold to raise medium to long-term financing
- Includes raising of finance by the government through the issue/sale of government bonds for example 10 year and 20 year bonds

3. **Currency Markets**

- A market where currencies (foreign exchange) are traded. There is no single currency market – it is made up of the thousands of trading floors
- Gains or losses are made from the movement of exchange rates – speculative activity in the currency market is often high
- The spot exchange rate is the price of a currency to be delivered now, rather than in the future.
- The forward exchange rate is a fixed price given for buying a currency today to be delivered in the future

Helpful video here

Cash and Credit

Factors affecting demand for cash

- **Interest Rates**
  - When interest rates are low people are less likely to save their money in financial institutions therefore increasing demand for cash
- **Financial Technology**
  - Increased use of contactless payments reduces demand for cash.

Factors affecting demand for credit

- **Interest Rates**
  - High interest rates discourage borrowing as they increase the cost of credit
- **Future Expectations about the economy**
  - If business people are optimistic about the future of the economy, they are more likely to expand their businesses which leads to an increase in demand for credit
  - Similarly, a consumer who is optimistic about the future of the economy is more likely to borrow money to purchase a property/car.
- **Cost of Capital**
  - The greater the cost of capital items the more businesses will have to borrow.

- **Level of Employment**
  - Higher rates of employment lead to greater demand for loans as people have a greater ability to repay if they are employed.

Factors affecting supply of cash

- **European Central Bank**
  - The ECB closely monitors the stock and circulation of euro banknotes and coins. It is the ECB's task to ensure a smooth and efficient supply of euro banknotes and to maintain their integrity.
  - "Irish" euros are minted by the Irish Central Bank but only when instructed by the ECB

Factors affecting supply of credit

- **Monetary Policy**
  - "Open market operations"
    - this is effectively the same as Quantitative Easing. The Central Bank buys government bonds, effectively creating money
    - **Quantitative Easing**
      - An unconventional monetary policy in which a central bank purchases financial instruments such as bonds from the market in order to lower interest rates and increase the money supply. Quantitative easing increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity in economies.
  - The Reserve Requirement" (primary Liquidity Ratio)
    - This imposed on financial institutions by central banks – it is the % of deposits made by customers at the bank that the bank must keep hold of rather than lending it out
- **Availability of Credit worthy customers**
  - In times of recession many businesses experience cash flow difficulties. The risk of these companies failing can be quite high. Banks will be cautious in terms of lending as they will be worried about the risk of the loans not being repaid. Likewise, consumers' loans are riskier in a recession. Consumers might lose their jobs and be unable to repay their loans.
- **Cash deposits in the banks**
  - A bank can only give loans provided that it can attract cash deposits. If it attracts more deposits then it can create more credit. Irish banks have experienced a difficulty in attracting deposits since the beginning of the recession as people favour the higher rates of return with state savings. Depositors have been wary of depositing money fearing that the banks might collapse.
- **Customers' demands for cash**
  - The bank must keep sufficient cash so as to be able to meet the demands of its customers for cash. If during a recession people pay more of their bills in cash then their demand for cash will increase and this will reduce the ability of the banks to create credit.
- **International Economic Climate**
  - If financial intuitions are pessimistic about the future of an economy they will stop lending to each other with can lead to a credit crunch, as in the great recession of 2009 - 2014

- **Government Regulation**
  - Government regulators can impose stricter rules on financial institutions which limits their ability to lend to individuals/businesses.
  - For example, in Ireland a financial institution cannot lend more than 3.5 times someone gross annual income when seeking a mortgage or more than 90% of the purchase price of the house (80% for non-first time buyers).

Financial Institutions

- **Commercial Banks**
  - These are the four biggest banks (AIB, Bank of Ireland, KBC and Ulster bank). The main functions of these banks are deposit taking, and lending to personal customers and businesses. They also provide a range of other services, including foreign exchange, night safe facilities, credit cards and mortgages.
- **Investment Banks**
  - Investment banks are institutions that serve as intermediaries for a variety of purposes. Most of the services in which they engage tend to be large and complex financial transactions. Investment banking clients are normally governments and other financial institutions as well as institutional clients such as hedge funds, pension funds, and large companies.
  - Example include Barclays and Credit Suisse, Goldman Sachs
- **Merchant Banks**
  - A financial institution primarily engaged in offering financial services and advice to corporations and to wealthy individuals.
  - In practice, the fine lines that separate the functions of merchant banks and investment banks tend to blur. Traditional merchant banks often expand into the field of securities underwriting, while many investment banks participate in trade financing activities.
  - Goldman Sachs, Morgan Stanley maintain an active merchant banking presence while also providing investment bank services
  - Helpful Video here
- **Subprime lenders**
  - Subprime lending is the practice of granting loans to borrowers with a poor or no credit rating. Normal banking practice is to grant loans only to those borrowers who show ability to repay a loan. In recent times many financial institutions have sprung up who are willing to grant loans to people with a poor credit rating.
- **Post office savings bank**
  - Entirely government owned, its deposits are lent to the government. It is purely a savings medium, where deposits are state guaranteed.
- **Credit Unions**
  - These are locally based organisations which take deposits and give loans. They are non-profit making co-operatives set up locally.

Central Banks

European Central Bank

(Notes taken from 4.4 “Monetary Policy and Price Levels”)

The ECB is responsible for monetary policy in the Eurozone (Economic and Monetary Union). The Eurozone is made up of the countries that use the Euro as their currency.

Monetary Policy is policy related to **money supply**, **interest rates** and **availability of credit.**

Functions of the ECB

- **Implements EUs monetary policy.**
    - Through its member Central Banks the ECB monitors and advises on: rates of interest, money supply, credit availability & protects the value of the euro. Main measures: Refinancing operations, Standing Facilities, Minimum Reserve Requirements.
- **Maintain Price Stability**.
    - The key aim of the ECB is to maintain price stability and this it does by closely monitoring inflation in member countries and adjusting the base ECB interest rate so as to adjust spending.
- **Holds and manages the official reserves of the euro area countries.**
    - These are the EUs official holdings of gold, foreign currencies and other reserves held as security against the issue of the euro. The ECB manages these reserves on behalf of the countries.
- **Financial stability and supervision**
    - The member authorities must provide prudential supervision of credit institutions and ensure stability in the financial system.
- **Euro bank notes and coins**
    - The ECB has the exclusive right to authorise the issuance of banknotes within the euro area.

Tools of the ECB

- **Open Market Operations**
    - The Governing Council of the ECB sets the key interest rates for the euro area:
        - The interest rate on the **main refinancing operations** (MRO), which provide the bulk of liquidity to the banking system.
        - The rate on the **deposit facility**, which banks may use to make overnight deposits with the Eurosystem.
        - The rate on the **marginal lending facility**, which offers overnight credit to banks from the Eurosystem.
    - **Main refinancing operations (MRO)**
        - This is a regular open market operation executed by the ECB for the purpose of providing the banking system with the amount of liquidity that the ECB deems to be appropriate. Main refinancing operations are conducted through weekly standard tenders (in which banks can bid for liquidity). The ECB set a **minimum bid rate** (minimum interest rate) and banks will bid for the money above this rate

        - This **minimum bid rate** in turn influences the rate at which money is borrowed in **money markets** by all banks and therefore the price consumers pay for borrowed money
- **Standing Facilities**
    - **Deposit facility**
        - The deposit facility rate is set every six weeks as part of its monetary policy. The rate defines the interest banks receive for depositing money with the central bank overnight. Since June 2014, this rate has been negative.
    - **Marginal Lending Facility**
        - The marginal lending facility offers commercial banks the opportunity to procure, against eligible collateral (security) and at a specified interest rate for one business day, liquidity (overnight loans) from the ECB. This permanent facility is intended to meet temporary, very short-term liquidity needs.
- **Altering the reserve requirement:**
    - This could mean that the banks would have to hold more cash for their customer's requirements thus reducing their credit creating capacity.

Irish Central Bank

The Irish Central Bank contributes to Eurosystem monetary policy which aims to ensure price stability. The Governor of the Irish Central Bank is a member of the Governing Council of the ECB, which meets every six weeks to review monetary policy. The Irish Central Bank is responsible for implementing policy decisions of the ECB in Ireland.

Functions of the ICB

- **Monetary Policy**
    - The Central Bank of Ireland is responsible for maintaining price stability in Ireland through the implementation of ECB decisions on monetary policy. As a member of the ECB Governing Council, the Governor has direct input into monetary policy decisions and other major policy areas.
- **Financial Stability**
    - The key role of the central bank is to ensure the stability of the financial system in Ireland. Financial stability analysis involves researching the stability of the financial system as well as its relationship with the real economy.
- **Economic Analysis**
    - The Irish central bank carries out research to decide on policies to support the economy. This helps to monitor the financial system for potential risks and make forecasts about the economy
- **Prints Legal Tender & monitors the payments system**
    - The central bank has the sole authority to print and mint euro currency in Ireland. It distributes euro through financial institutions in Ireland. They also ensure the payments system (the digital manner in which money is transferred from one account to another) is fit for purpose.
- **Resolution**
    - When a financial institution is failing the central bank will ensure it is wound up in such a way as to not harm other financial institutions or customers.

- **Financial Regulator**
  - The financial regulator is under the aegis of the Central Bank. It regulates the financial sector in Ireland including credit unions, building societies, IFSC operations, etc.

Banking Regulation

Benefits of regulating Financial Institutions:

For Citizens

- **Provide protection to depositors / consumers**
  - To ensure sound and solvent financial institutions giving depositors confidence that their deposits and investments are safe. /customers have confidence in the financial system. Avoid consumers being over-charged e.g. trackers mortgage scandal.
- **May help consumers make better financial decisions**
  - Some consumers can make poor financial choices e.g. take on too much debt or choose products that do not match their needs. Therefore, they need protection through regulation.
- **Confidence in banking sector / economic growth**
  - By regulating the banking sector consumers will have confidence in the banking sector. It may encourage greater savings. A stable banking sector will facilitate economic growth.
- **Secure employment**
  - By ensuring that the banking sector is secure it may mean stability in this sector and thus ensure that jobs are secure.
- **Benefits for taxpayers/less need for government intervention**
  - If banks are stable and promote savings and investment, then they become more profitable, providing more funds for government services. It also means that there is reduced risk of tax payer funds being needed (for possible bailouts).

For the Banking Sector

- **To avoid reckless lending**
  - Proper regulation should ensure that banks, which engaged in excessive risk-taking and reckless property-related lending, which resulted in Irish borrowers borrowed too much in the past, should not re-occur.
- **To maintain stability in the financial system / provide investor confidence**
  - To foster a stable / healthy financial system. Regulation will ensure the financial sector will operate efficiently and public confidence will be restor
- **Less prone to shocks / need for government intervention and decision making**
  - It will help to ensure that what happened in 2008 should not re-occur and therefore there will be less shocks to the financial system reducing the need for government intervention.
- **To reduce macro-economic instability**
  - When banks were left to their own devices they loaned excessively in good times and little in bad times. Regulation ensures that this boom/bust cycle is controlled. Strong financial institutions are necessary for an economy.

How Banks Create Credit

The Primary Liquidity Ration/Reserve Ratio
The amount of a deposit that the Central Bank requires commercial banks to keep in cash form.

Example:

Alternative A

1. Commercial banks accept cash deposits from their customers e.g. say €100, for safekeeping. **4 marks**
2. These banks know from experience that their customers will only demand back a small amount of these deposits in cash - say 10% because of their use of cheques as an acceptable method of payment. **4 marks**
3. So they now have surplus cash with which to give loans - €90. **4 marks**
4. The amount of loans they give is related to, but in excess of their cash deposits and is based on their reserve ratio

4 marks

Formula for Calculating Increase in Credit:

$$\text{Cash Deposit} \times \frac{1}{\text{Bank's Reserve Ratio (PLR)}} \text{ less Original Cash Deposit}$$

EXAMPLE
A person deposits €100 into a bank and the bank has a reseve requirement (PLR) of 10%. Calculate the amount of credit it can creat?

Answer:

$$€100 \times \frac{1}{10\%} = (€1000 - €100) = €900 \text{ Credit Created}$$

Alternative B

Balance Sheet of a Bank - 4 marks

Assets	€	Liabilities	€
Cash lodged by X	100	X's deposit	100
Total Assets	100	Total Liabilities	100

Balance Sheet of a Bank – 6 marks

Assets		Liabilities	
Cash lodged by X	100	Deposits	100
Loan	900	New Deposits	900
Total Assets	1,000	Total Liabilities	1,000

1. Mr. X lodges €100 into the bank
2. It knows that only 10% is demanded in cash.
3. It has enough cash to support total deposits of €1,000.
4. The bank can create another €900 in deposits. It does this by giving out loans of €900.
5. So €100 cash is sufficient for this purpose. This is shown in the new balance sheet.

Helpful video here

How credit tightening affects the following:

- **Irish motor Industry**
  - **Decreased demand for cars.**
    - It is more difficult for customers to avail of credit in order to purchase cars. This has led to a fall in the demand for both new and second-hand cars.
  - **Increased redundancies**
    - With less demand for cars the numbers of people employed in the sale of cars has declined.
  - **Business Closures/Consolidations**
    - Many small independent car dealerships cannot survive and close. Inability to get credit may result in cash flow problems for the firms, inability to pay suppliers and possible closure.
- **Inflation:**
  - **Inflation will decrease**
    - The supply of money/credit will fall causing a decrease in the spending power of individuals. This fall will lead to a reduction in demand-pull inflation.
  - **Deflation**
    - The price of goods and services will fall due to falling demand and costs of production.

- **Ireland's Balance of Payments:**
  - **Imports decrease**
    - If there is a reduction in the demand for goods and services then we can assume that there will be an automatic fall in the demand for imports.

      OR

  - **Imports Increase**
    - Consumers with a lower spending power may switch consumption to cheaper imported substitute goods

      OR

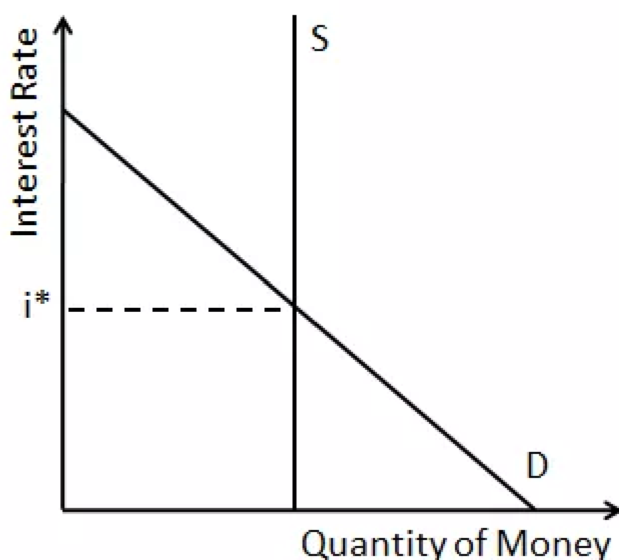
  - **Exports Decrease**
    - Business will not be able to avail of credit in order to expand their business. This fall in investment may lead to a decrease in exports

Interest Rates

The interest rate is the rate at which saving is rewarded or the rate at which funds are rented. Banks collect interest from borrowers and give a portion of it to savers - they keep a margin to try and ensure a profit is made

- **Real versus nominal Interest Rates**
  - The nominal interest rate is UNADJUSTED for inflation.
  - The real interest rate is ADJUSTED for inflation
  - Example:
    - Suppose we buy put €100 in a deposit account pays 7%. At the end of the year we get €107. This 7% is the nominal interest rate, as we have not accounted for inflation.
    - Now suppose the inflation rate is 3% for that year. If we withdraw the €107 from the deposit account at the end of the year and buy a basket of goods for we will be paying €103 for a basket of goods that would have cost us €100 a year ago. We now have €4 left over. So after factoring in inflation the real interest rate is 4%.
  - **Helpful video here**

- **Determining the Interest Rate**



- **Money Supply**
  - the money supply is set by the central bank and they can alter it through open market operations.
  - As the money supply is set by the central bank, the supply does not depend on other economic variables, in particular the interest rate. the supply of money is perfect inelastic
- **Money Demand**
  - According to Keynes people hold/demand money for the following reasons:
    - **Transactionary motive**
      - People desire to hold money for day-to-day expenses e.g.buying goods & services
    - **Precautionary motive**

            - People desire to hold money for emergencies/rainy day e.g. illness, house repairs.
        - **Speculative motive**
            - People desire to hold money for any possible profitable future investment opportunities.

- **Determining the Interest Rate**
    - The interest rate is determined by the demand for and supply of money. The forces of supply and demand in the market for money push the interest rate towards the equilibrium interest rate, at which people are content holding the quantity of money the central bank has created.

Helpful video here and here

- **Effects of a fall in interest rates on each of the motives**
    - **Transactionary**
        - The demand for money for transactionary reasons is **not affected** by the fall in the rate of interest. Why? People need to have cash for day-to-day spending and this, allied to their level of income, not rates of interest determines the motive.
    - **Precautionary**
        - The demand for money for precautionary reasons is affected slightly (negatively) by the rate of interest. Why? As interest rates fall slightly more money will be held for precautionary purposes, due to the opportunity cost of lower rates of interest.
    - **Speculative**
        - The demand for money for speculative reasons is greatly affected (negatively) by the rate of interest. Why? As interest rates fall more money will be held for speculative purposes as people will hold more wealth in cash form to profit from future higher rates of interest.

- **Benefits of Falling Interest Rates**
    - **Borrowing encouraged**
        - Borrowing is now cheaper resulting in cheaper loan repayments which will increase spending power resulting in a higher standard of living.
    - **Savings discouraged**
        - With a lower rate of return people may find it less attractive to save and so they will increase their spending.
    - **Reduced mortgage repayments**
        - The cost of monthly repayments (on tracker mortgages) decreases resulting in increased disposable income and a higher standard of living.
    - **Costs of Production / increased competitiveness**
        - Cost of production will decrease resulting in lower domestic prices. This will increase the competitiveness of Irish exports and may lead to an increase in sales.
    - **Incentive to Invest**
        - The MEC will rise resulting in increased profits and this may encourage investors. It becomes less expensive for businesses to borrow and so they may invest.
    - **Economic Growth encouraged**

    - With possibly increased investment / increased consumer spending future economic growth in Ireland may be encouraged.
- **Taxation revenues**
    - With a possible reduction in savings the government may receive less revenue through DIRT. However, with a possible increased spending the revenue from VAT and excise duties may rise. If unemployment decreases there will be an increase in income tax revenue.
- **Employment**
    - Increased consumer spending; rising demand for Irish exports; an increase in investment and an increase in economic growth may result in an increase in the numbers employed.

*the opposite of the above is true for rising interest rates.