EXAM PAPERS PRACTICE

A Level Economics

Name: ______________________________

Class: ______________________________

Date: ______________________________

Time:

Total Marks Available:

Total Marks Archived:

Level: Pearson Edexcel Level 3 Advanced GCSE with A level in Economics A (9EC0)

Subject: Economics

Topic: A Level Economics

Type: Revision Notes

To be used by all students preparing for A Level Economics Level 3 Advanced GCE in Economics A (9EC0)

Students of other Boards may also find this useful

4.4.1 Role of financial markets a) To facilitate saving

b) To lend to businesses and individuals

c) To facilitate the exchange of goods and services d) To provide forward markets in currencies and commodities

e) To provide a market for equities

4.4.2 Market failure in the financial sector

a) Consideration of

o asymmetric information

o externalities

o moral hazard

o speculation and market bubbles

o market rigging

4.4.3 Role of central banks

a) Key functions of central banks:

o implementation of monetary policy

o banker to the government

o banker to the banks - lender of last resort o role in regulation of the banking industry

Financial Markets

Financial markets are places where **buyers and sellers come together to trade financial assets,** such as stocks, bonds, currencies, and derivatives. These markets serve as **intermediaries** between those who need capital (borrowers) and those who have capital to lend (investors). Financial markets help enable companies, governments, and individuals to raise funds (financial capital) and invest their savings / profits.

EXAM GOLD: THE UK FINANCIAL SECTOR

In 2021, the financial services sector contributed £174 billion to the UK economy, equivalent to 8.3% of GDP. The sector was largest in London, where around half of the sector's output was generated. There were 1.08 million financial services jobs in the UK in 2022, 3% of all jobs. Exports of UK financial services were worth £61 billion in 2021 and imports were worth £17 billion, so there was a **trade surplus** in financial services of £44 billion.

KEY ROLES OF FINANCIAL MARKETS

- **Allocation of Capital**: Financial markets efficiently allocate capital to its most productive uses. Investors allocate funds to projects with the highest expected returns. **Some projects are riskier than others.**
- **Risk Management:** Financial markets offer a platform for risk transfer. Participants can **hedge** against various risks, such as interest rate risk and foreign exchange risk.
- **Price Discovery:** Financial markets determine the prices of financial assets, reflecting available information and market expectations.
- **Economic Growth:** Well-functioning financial markets can spur growth by providing firms with **access to capital** for investment and innovation

THE MAIN ROLE OF FINANCIAL MARKETS

- The main goal of a financial market is to **match buyers and sellers** to efficiently allocate financial capital to its most productive uses.
- Financial markets have become more complex over the years and there are numerous causes of financial market failure.

EXAM PAPERS PRACTICE

BOND MARKET

In 2021, it was estimated that the global market for corporate bonds was worth $10 trillion, with most bonds issued by companies in the USA, Europe, and Asia.

STOCK MARKET

Overseas firms can list on the UK stock market. Examples include Royal Dutch Shell (Netherlands) and BNP Paribas (France).

gov bond ('gilt') → gov issues them as a way to borrow money → pay it back on a set date
→ pay annual interest

- safe place to save/invest your money

→ anyone can buy them as a savings product → individual, firms, pension funds, insurance funds

CURRENCY MARKET

Trading in currency markets reached $6.6 trillion per day in 2021.

MORTGAGE MARKET

There are 11 million outstanding mortgages (home loans) in the UK (as of May 2021)

BUSINESS USE OF FINANCIAL MARKETS

FINANCE A BUSINESS START-UP

2,890 start ups founded in the UK 2019. That's 1,843 per day

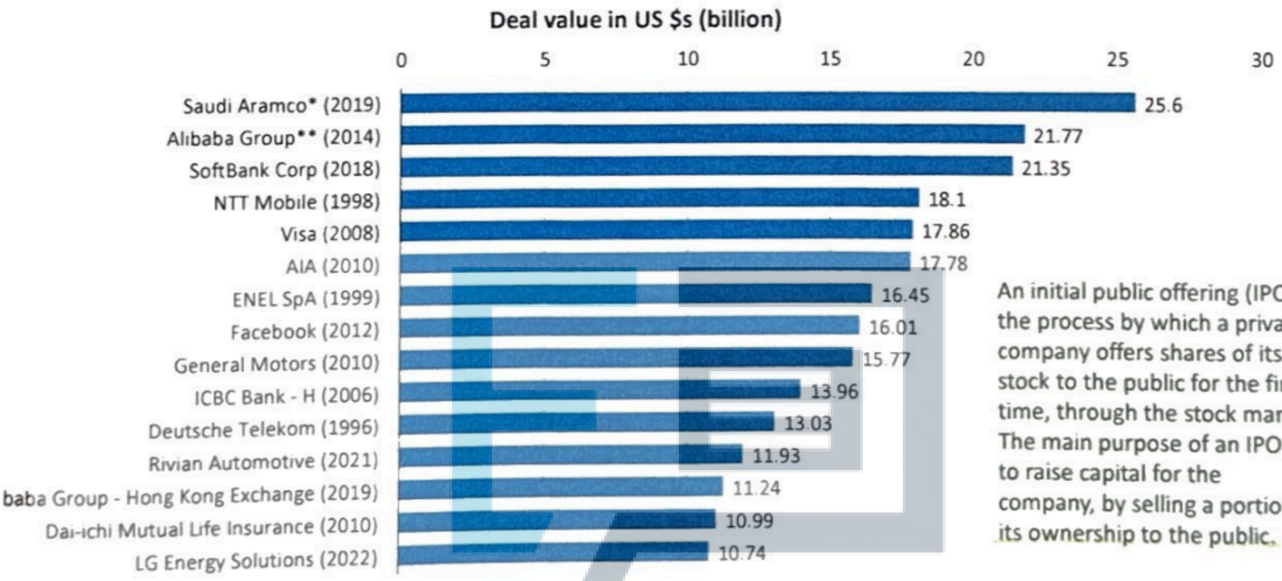
FINANCE A MERGER OR A TAKEOVER

In 2019, the value of global M&A deals amounted to $3.7 trillion

FINANCE CAPITAL INVESTMENT

In 2019, business investment in the UK economy grew by only 1.8%

BIGGEST INITIAL PUBLIC OFFERINGS (APRIL 2023)

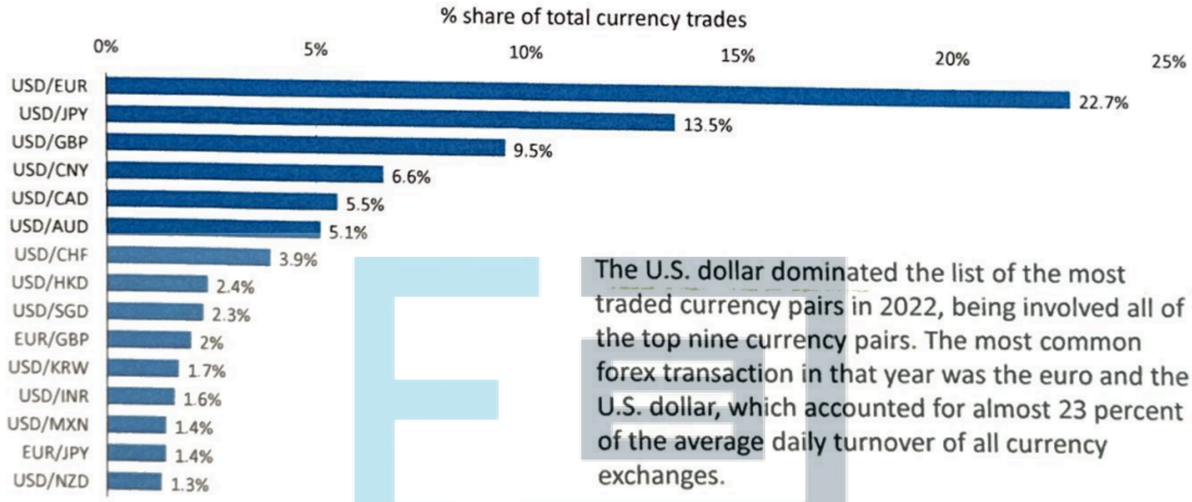


An initial public offering (IPO) is the process by which a private company offers shares of its stock to the public for the first time, through the stock market. The main purpose of an IPO is to raise capital for the company, by selling a portion of its ownership to the public.

FOREIGN EXCHANGE (CURRENCY) MARKETS

- The foreign exchange market is where currencies are bought and sold.
- It facilitates international trade and investment by enabling the exchange of one currency for another.
- The forex market operates 24/5 and is decentralized.
- The most heavily traded currency is the US dollar ($)

LEADING CURRENCY PAIRS TRADED IN 2022



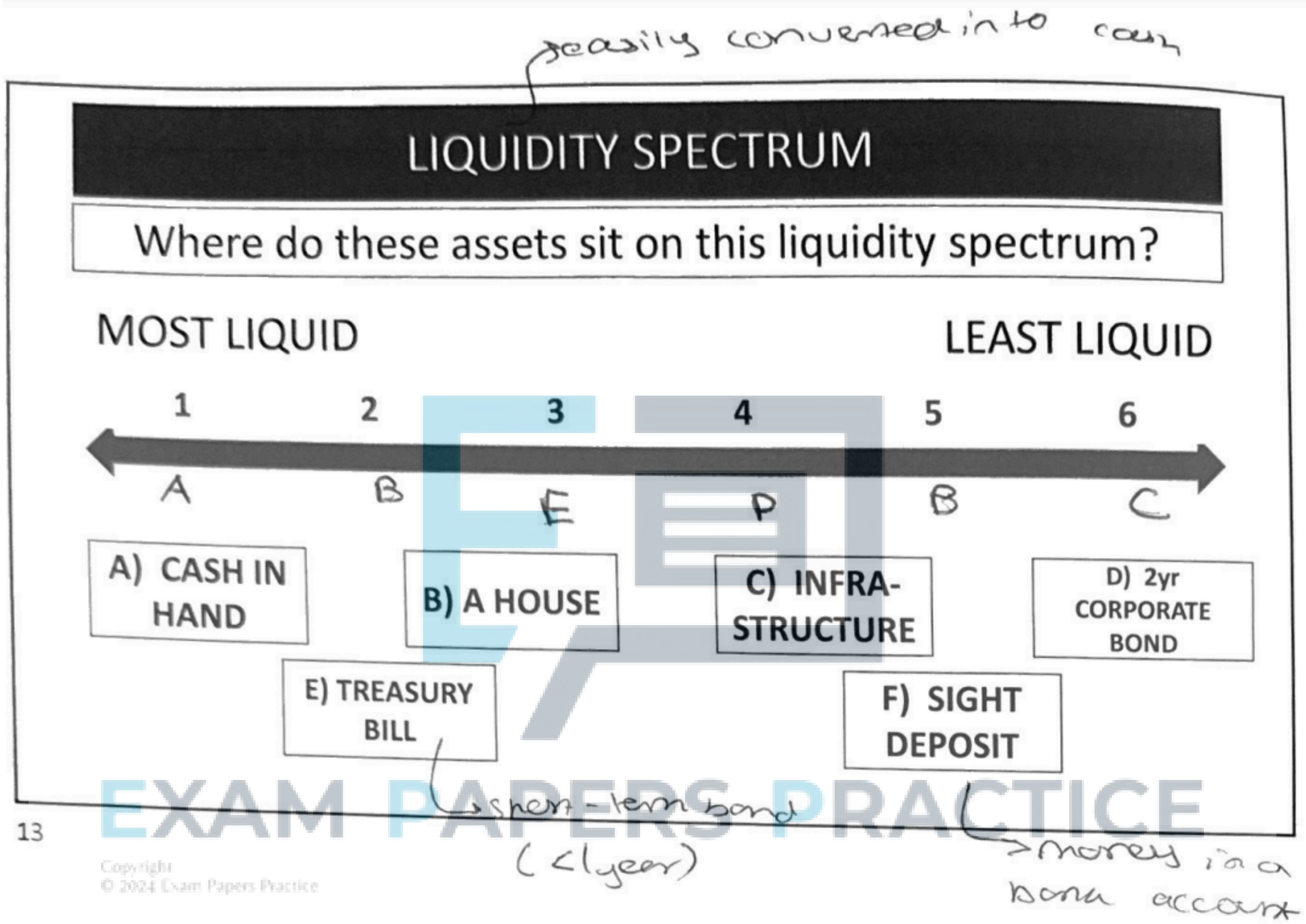
The U.S. dollar dominated the list of the most traded currency pairs in 2022, being involved all of the top nine currency pairs. The most common forex transaction in that year was the euro and the U.S. dollar, which accounted for almost 23 percent of the average daily turnover of all currency exchanges.

CHARACTERISTICS OF MONEY

- **Medium of Exchange:** Money serves as a widely accepted means of facilitating transactions, making trade more efficient.
- **Unit of Account:** Money provides a common measure for valuing goods and services, enabling price comparisons.
- **Store of Value:** Money retains its value over time, allowing individuals to save wealth for future use.
- **Standard of Deferred Payment:** Money can be used to settle debts and obligations in the future.

KEY FUNCTIONS OF MONEY

- **Facilitating Exchange:** Money eases the exchange of goods and services in an economy.
- **Unit of Measurement:** Money provides a common unit for measuring value, simplifying economic transactions.
- **Store of Value:** Money allows individuals to save wealth and transfer it across time.
- **Standard for Debt Settlement:** Money can be used to fulfill financial commitments.


easily converted into cash
LIQUIDITY SPECTRUM
Where do these assets sit on this liquidity spectrum?
MOST LIQUID
LEAST LIQUID
1
2
3
4
5
6
A
B
E
P
B
C
A) CASH IN HAND
B) A HOUSE
C) INFRA-STRUCTURE
D) 2yr CORPORATE BOND
E) TREASURY BILL
F) SIGHT DEPOSIT
short-term bond (<1 year)
money in a bank account
13
Copyright © 2024 Exam Papers Practice

WHAT IS DIGITAL MONEY?

- Digital money, also known as electronic money or digital currency, refers to a form of currency that exists solely in electronic or digital form.
- It does not have a physical counterpart like paper money or coins.
- Digital money is used for various types of transactions, including online purchases, electronic fund transfers, digital payments, and peer-to-peer transfers.
- It has become increasingly prevalent with the growth of e-commerce, digital banking, and the development of new financial technologies.

EXAMPLES OF DIGITAL MONEY

- **Digital Wallets:** Mobile payment apps and digital wallets, like PayPal, Apple Pay, Google Pay, and digital banking apps, allow users to store digital money balances and make secure online payments.
- **Cryptocurrencies:** Cryptocurrencies, such as Bitcoin & Ethereum
- **Central Bank Digital Currencies (CBDCs):** Some central banks are exploring the idea of issuing digital versions of their national currencies.
- **Prepaid Cards:** Prepaid debit or gift cards issued by financial institutions are a form of digital money. Users load funds onto the card, and the card can be used for transactions until the balance is depleted.

WHAT EXPLAINS THE GROWTH OF DIGITAL MONEY?

- **Convenience:** Digital money provides unparalleled convenience for conducting transactions. Eliminating the need for physical cash or in-person visits to banks. Mobile money technologies have accelerated.
- **Globalization:** Digital money facilitates rapid cross-border payments.
- **Security:** Many digital money systems incorporate robust security measures, including encryption and authentication, to protect users' financial information. These security features reduce the risk of fraud, theft, and counterfeiting.
- **COVID-19 Pandemic:** The pandemic prompted more people to embrace contactless payment methods to reduce the risk of virus transmission.

	A	B	C
1	Liquid	Coins and notes	Asset on a balance sheet
2	Medium of exchange	Standard of deferred payment	To use in a supermarket trolley
3	Measure of value	As a return on an investment	Store of value

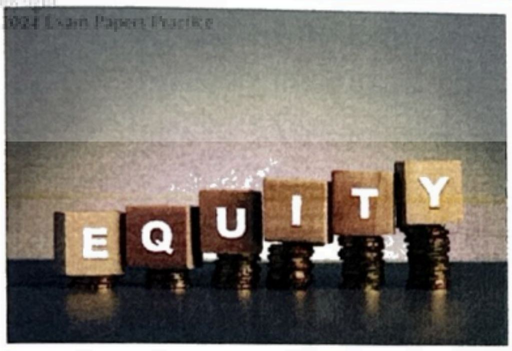
Which of these are the main functions of money?

What is the difference between debt and equity?

borrowing money - pay it back with interest → security / collateral → if you don't pay money back lender can seize that asset to make up for the loss

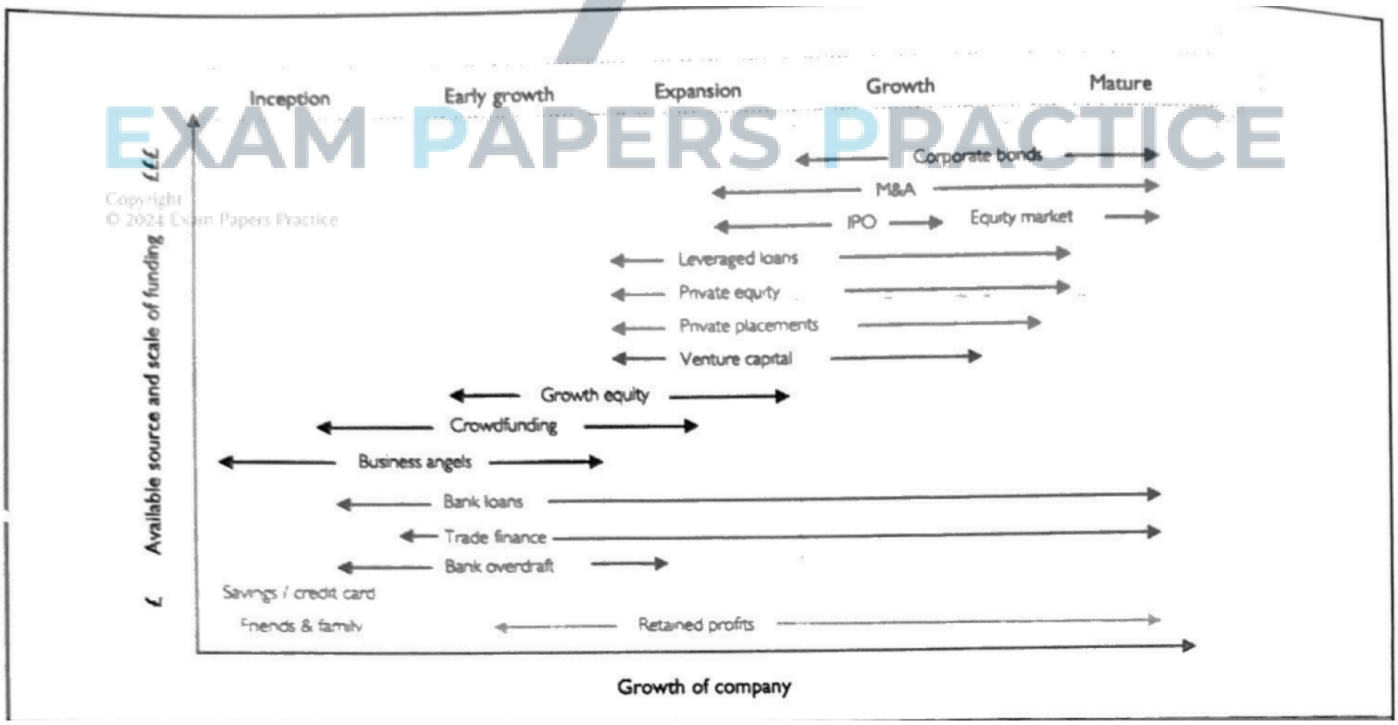
shareholders have equity → when they buy shares in a firm have part - ownership of a firm - voting rights

DIFFERENCE BETWEEN DEBT AND EQUITY

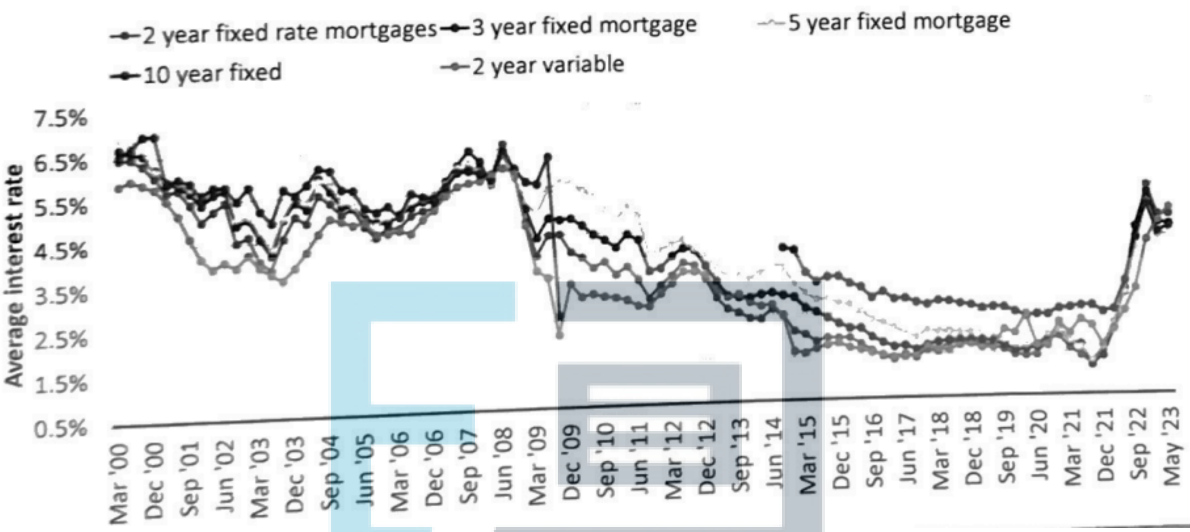
EQUITY FINANCE	DEBT FINANCE
	
Finance from shareholders through the issue of new shares / stock which carry voting rights.	Borrowing money – requires paying interest (on loans) and may also need security.

DIFFERENCE BETWEEN DEBT AND EQUITY

- **Debt:** Debt represents borrowing by individuals or organizations.
  - It involves periodic interest payments and repayment of the principal amount at maturity.
  - Bondholders are creditors with a claim on the issuer's assets but no ownership stake.
- **Equity:** Equity represents ownership in a business or an asset.
  - Equity holders are shareholders or owners who have a residual claim on the assets and earnings of a company.
  - Equity securities include common stock and preferred stock.



MORTGAGE INTEREST RATES IN THE UK



Bonds

In the world of finance, bonds are basically IOUs that allow companies or governments to borrow money from investors. When you buy a bond, you're lending money to the issuer in exchange for regular interest payments and the promise of getting your principal back at a set time in the future.

CORPORATE AND GOVERNMENT BONDS

CORPORATE BONDS

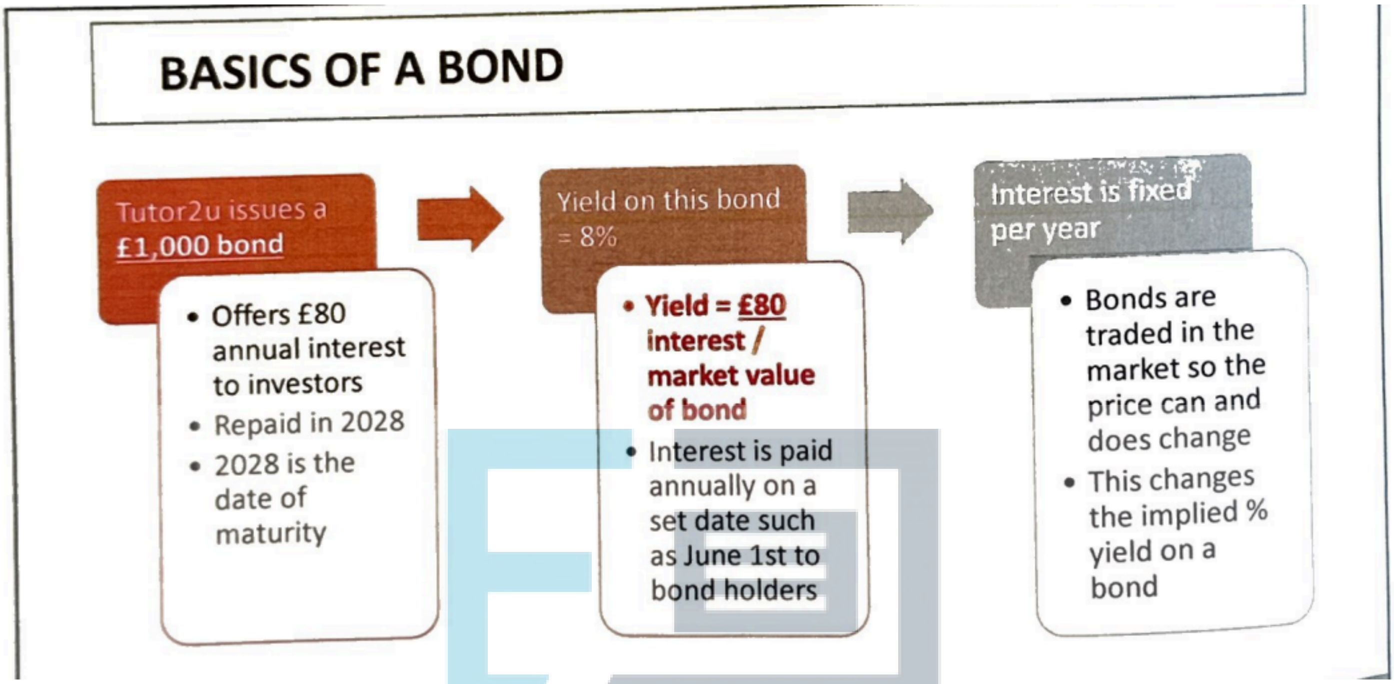
GOVERNMENT BONDS

BASICS OF A BOND

A bond is a loan

Repaid when the bond matures

Also pays annual interest



$$\text{Yield} = \frac{\text{coupon } £80}{\text{market value of bond } £1000} \times 100 = 8\%$$

Interest rates ↑ to 10%, this bond becomes less attractive
↳ demand for it will fall → sold for less than market value (£1000)
new yield ← sold on at £800 ←
would be $\frac{£80}{£800} \times 100 = 10\%$

BOND PRICES AND INTEREST RATES

- Bonds have fixed coupon payments, and their prices are inversely related to market interest rates.
- When market interest rates rise above a bond's coupon rate, the bond's price falls because its fixed interest payments are less attractive compared to newer bonds with higher yields.
- Conversely, when market interest rates decline, bond prices rise because their fixed payments become more appealing compared to new bonds with lower yields.

BOND YIELDS

- Government bonds are issued to fund state borrowing.
- They pay a fixed rate of interest – a coupon – and most have a fixed maturity date when the lender will be repaid.
- Bonds are traded on a stock exchange, which means their prices fluctuate according to demand and supply.
- The yield on a bond is the coupon as a percentage of its current market price.
- For example, if the coupon is £1 000 and the current market price is £20 000, then the yield is 5 per cent.

60 SECOND CALCULATION

"The yield on a bond is the annual coupon as a percentage of its market price. For example, if the coupon is £1,000 and the price is £20,000, then the yield is 5 per cent.

If the bond's market price falls to £14,000, calculate its new yield. Give your answer to one decimal place.

Yield = $\frac{1000}{20,000} \times 100 = 5\%$

falls ↓ $= \frac{1000}{14000} \times 1000 = 7.1\%$

60 SECOND CALCULATION

"The yield on a bond is the annual coupon as a percentage of its market price. For example, if the coupon is £1,000 and the price is £20,000, then the yield is 5 per cent.

If the bond's market price falls to £14,000, calculate its new yield. Give your answer to one decimal place.

Yield = (Coupon / Market Price) x 100

Yield = (£1 000 / £14,000) x 100

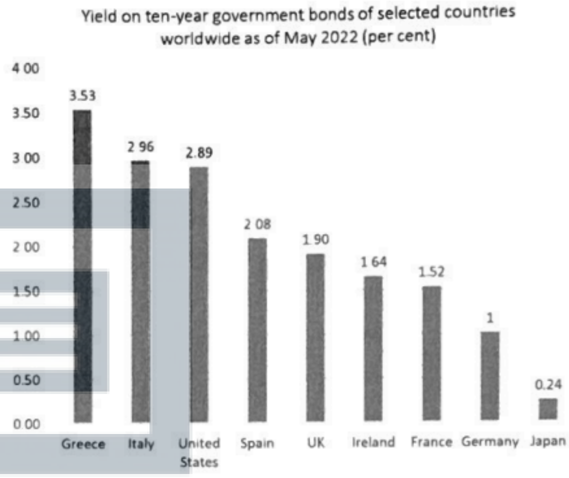
= **7.14%**, or **7.1% to 1dp**

Inverse relationship between yields & Market Price of a bond.

EXAM PAPERS PRACTICE

GIVE ME TWO

Economic reasons why 10-year bond yields differ between countries

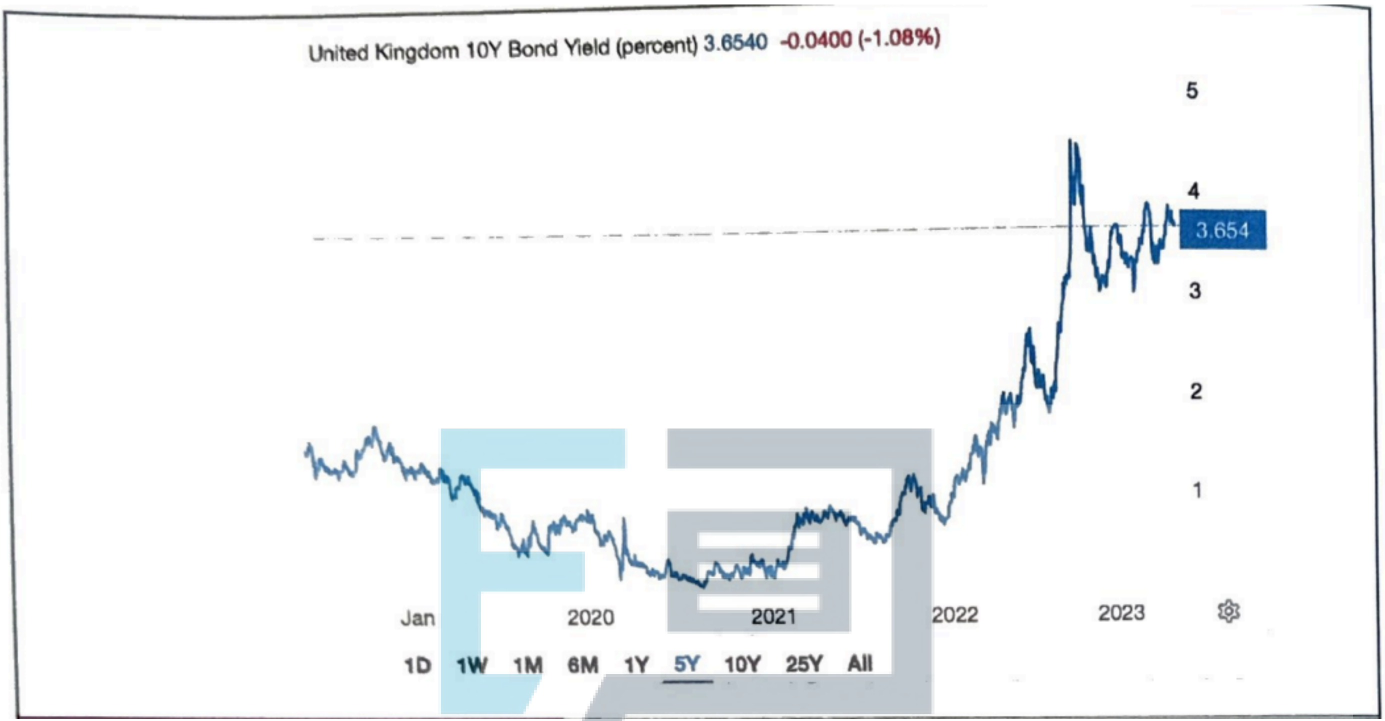


GIVE ME 2...

Reasons why 10-year bond yields differ between countries

1. **Inflation risk:** Countries with higher actual and expected inflation will have higher bond yields to compensate investors for the expected loss of real purchasing power.

2. **Default risk:** Countries with higher national debt or and/or persistently large fiscal deficits will usually have higher bond yields as investors demand compensation for the increased risk of default.



GIVE ME 2…

Likely economic effects of a rise in bond yields on government debt for a country such as the UK

1. **Debt service costs:** The government will have to pay more in interest payments on its outstanding debt. This might reduce the financial resources available for spending on education, NHS and other priority areas.

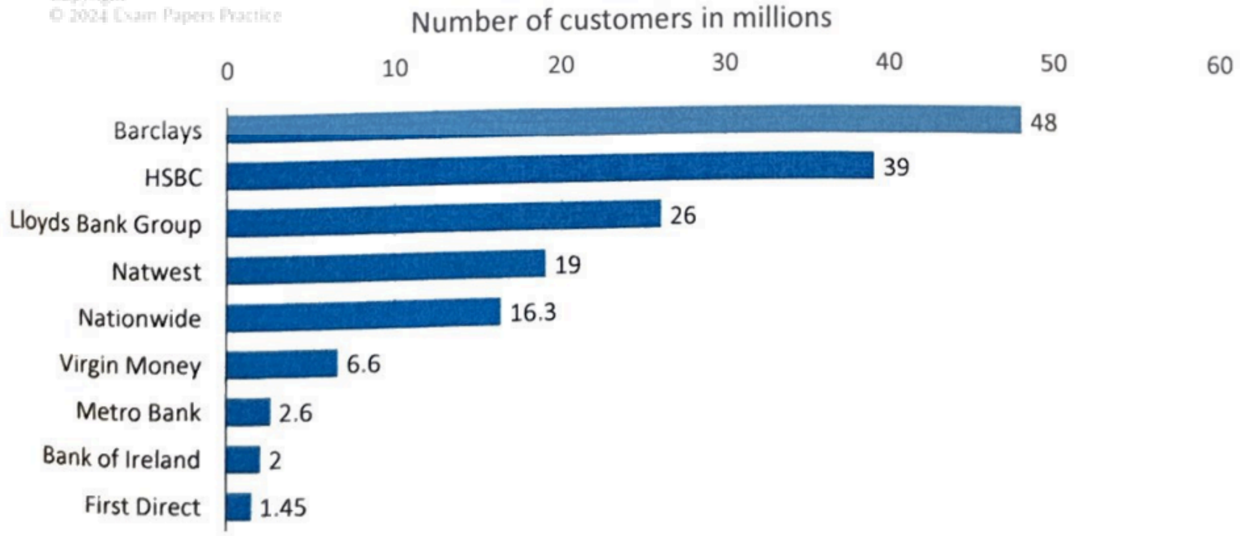
2. **Currency appreciation:** High bond yields might attract inflows of financial capital (hot money) from overseas which could then cause a currency appreciation. This will help control imported inflation but might worsen the price competitiveness of export sectors.

EXAM PAPERS PRACTICE

COMMERCIAL BANKS – BRIEF OVERVIEW

1. Banks are licensed deposit-takers providing a range of savings accounts
2. They are licensed to lend money and thereby **create money** via new bank loans, overdrafts and mortgages
3. A commercial bank's business model relies on charging a higher interest rate on loans (or other assets) than the rate it pays out on deposits (or other liabilities)
4. This spread on assets and liabilities pays the operating expenses of a bank and helps them to make a profit

LEADING BANKS IN THE UK BY CUSTOMERS (2022)



MAIN FUNCTIONS OF COMMERCIAL BANKS

- **Accepting Deposits:** Commercial banks offer safe and easily accessible deposit accounts, including savings accounts, checking accounts, and fixed deposits.
- **Providing Loans:** They extend credit to individuals and businesses for various purposes, such as mortgages, business loans, and personal loans.
- **Payment Services:** Commercial banks facilitate payment and fund transfer services through checks, electronic funds transfers, and online banking.
- **Safekeeping of Valuables:** Some commercial banks offer safe deposit boxes for customers to store valuable items securely.
- **Currency Exchange:** They provide foreign exchange services to facilitate international trade and travel.

HOW COMMERCIAL BANKS MAKE PROFITS

Interest-rate spreads	Charging a higher interest rate on loans than the rate paid to savers
Service fees	Fees charged when arranging business & personal loans
Brokerage percentages	Many banks provide currency and share-dealing services and charge a brokerage fee for doing so

Bad loan = loans that won't be paid back - lent out to a risky customer. This would mean a loss to the lender.

default = repayments not made.

TRADE OFF BETWEEN LIQUIDITY AND PROFITABILITY

- **Liquidity:** Commercial banks aim to maintain sufficient liquidity to meet deposit withdrawal demands and fund lending activities. This ensures that customers can access their funds when needed.
- **Profitability:** Banks seek to generate profits by earning more from their assets (e.g., interest on loans) than they pay on their liabilities (e.g., interest offered on deposits).
- **Security:** Ensuring the safety and security of customer deposits is a primary objective. Banks use **risk management practices** to protect against potential losses.

9

Banks need to maintain liquidity → basically, hold onto enough money to deal with day - to day - activity - withdrawals, etc

But, they also make money

So → This is a balancing act, To increase consumer confidence in banking system - authorities may impose liquidity requirements in order to make sure banks have enough ensure there in order to make sure banks have enough

TRADE OFF BETWEEN LIQUIDITY AND PROFITABILITY

- **Liquidity vs. Profitability:** Striking the right balance between liquidity and profitability can be challenging. While maintaining high liquidity ensures safety, it may reduce potential profits. Banks must decide how much liquidity to hold.
- Sometimes a central bank will impose minimum liquidity requirements on banks such as a cash/deposits ratio
- **Profitability vs. Security:** Pursuing higher profitability often involves taking on more **risk**, which can jeopardize the security of customer deposits. Balancing these objectives is crucial for long-term sustainability. We saw the effects of this in the Global Financial Crisis.

CAUSES OF COMMERCIAL BANK FAILURES

1. **Poor management:** This can include taking on too much risk, making bad loans
2. **Lack of diversification** in the bank's loan portfolio - for example, excessive lending to the volatile property market.
3. **Insufficient reserves to cover bad loans**: Banks must set aside a certain amount of money to cover the possibility of loan defaults
4. **Run on the bank:** A bank can fail if too many depositors withdraw their money at the same time, this is called a run on the bank.
5. **Economic downturns:** Recessions can lead to an increase in loan defaults and a decrease in the value of the bank's assets
6. **Regulatory failure:** Inadequate regulatory oversight can lead to risky practices, fraud and corruption, and ultimately bank failure.

BANK FAILURES – NORTHERN ROCK (2007)

- Northern Rock failed as a bank in 2007 and was nationalised in 2008. Northern Rock's demise - it was split into "bad" and "good" sets of assets and operations, with Virgin Money buying the latter - was a shock to the region's economy, as was the banking crisis that followed, as about 2,500 jobs were lost.

THE FAILURE OF NORTHERN ROCK

- Basically, Northern Rock followed a flawed business model – it relied heavily on borrowing short-term from money markets to finance long-term mortgages. This model left the bank vulnerable to a liquidity crisis, which occurred when the global credit markets tightened in a credit crunch in 2007
- High level of leverage, or the amount of debt it had relative to its assets. This made it more susceptible to a downturn in the housing market.
- Concentration of interest-only mortgages and those with high loan-to-value ratios (LTVs) which sometimes exceeded 100%
- The bank also had a lack of liquidity and was unable to meet a large and sudden withdrawal of funds by depositors, triggered by bad news. These events led to a run on the bank, which caused the UK government to step in and nationalize the bank in 2008. It was eventually bought by Virgin Money.

WHAT IS A CREDIT CRUNCH?

1. A credit crunch, also known as a **credit squeeze**, is a period when the availability of credit from banks decreases, making it harder for individuals and businesses to borrow money.
2. During a credit crunch, lending institutions may become more **risk-averse** and increase their lending standards, making it more difficult for borrowers such as households and businesses to qualify for new loans or to extend their existing debts.
3. Banks may also **call back loans** or **reduce credit lines** for existing borrowers. This can lead to a decrease in consumer spending and capital investment, which can slow down AD and perhaps cause a recession.

Central Banks

A central bank is the monetary authority and major regulatory bank in a country. A central bank is responsible for **monetary policy** and **maintaining financial stability**.

Examples of central banks

- Bank of England (UK)
- European Central Bank (ECB) for all member nations of the Euro Area
- United States Federal Reserve (The Fed)
- Bank of Japan (BOJ)

MAIN ROLES OF CENTRAL BANKS

- Central banks play a critical role in the economy by managing monetary policy and maintaining financial stability. Here are some of their key roles:

1. **Setting interest rates:** Central banks adjust interest rates to control inflation and promote economic growth.
2. **Regulating banks:** They regulate banks to ensure they are financially sound and to protect depositors.
3. **Maintaining financial stability:** They act as a **lender of last resort**, providing liquidity to financial institutions in times of crisis.
4. **Issuing currency:** They are responsible for issuing and managing the country's currency. This might involve operating with a managed floating exchange rate.
5. **Conducting research:** They conduct research and provide advice to policymakers.

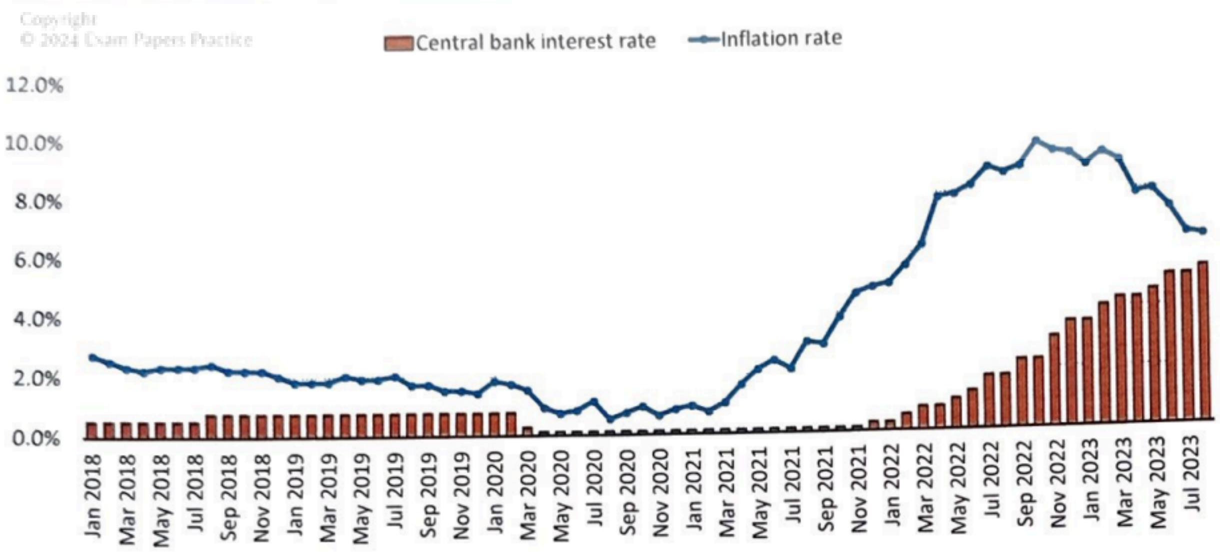
Base Interest Rate (Bank Rate)

The main interest rate set by a nation's central bank. This is the rate of interest charged to commercial banks if they must borrow from the central bank when short of liquidity. Market interest rates often take their cue from changes in the Base Interest Rate.

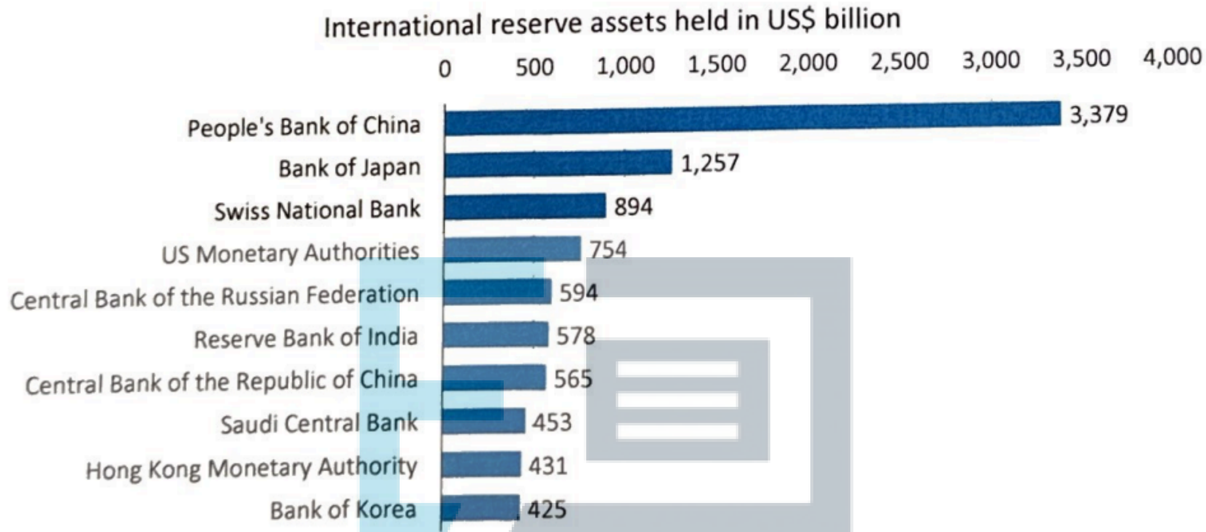
FACTORS CONSIDERED WHEN SETTING BANK RATE

- Rate of growth of real GDP and the estimated size of the output gap
- Forecasts for price inflation
- Rate of growth of wages and other business costs
- Movements in a country's exchange rate
- Rate of growth of asset prices such as house prices
- Movements in consumer and business confidence
- External factors such as global energy prices and inflation in other countries
- Financial market conditions including the rate of growth of credit / money

INFLATION AND BASE INTEREST RATES IN THE UK



LARGEST CENTRAL BANKS WORLDWIDE



THE LENDER OF LAST RESORT FUNCTION

- Lender of last resort is a role central banks play in times of financial distress. When other financial institutions are unable to provide loans, the central bank steps in to lend money to banks and other financial institutions. This prevents liquidity crises and helps to maintain financial stability.
- **Emergency lending:** Central banks provide emergency loans to financial institutions in times of crisis to prevent their collapse and limit systemic risk.
- **Discount window:** They also provide short-term loans to banks at a slightly higher interest rate than the market rate. This is known as the discount window.
- **Collateral requirements:** Central banks require collateral from financial institutions as a condition for lending. This helps to mitigate the risk of default.
- **Reputation:** Central banks are known as the lender of last resort due to their ability to provide loans in times of crisis, which can help to prevent financial panics.

RECENT EXAMPLES OF LENDER OF LAST RESORT

- In 2008, during the global financial crisis, the U.S. Federal Reserve (Fed) acted as the lender of last resort to several financial institutions, including Bear Stearns, Fannie Mae, and Freddie Mac.
- In 2012, the European Central Bank (ECB) provided emergency loans to banks in the eurozone to help stabilize the region's financial system.
- In 2020, during the COVID-19 pandemic, central banks around the world acted as lenders of last resort to support their economies. For example, the Bank of England provided emergency loans to UK businesses and the Reserve Bank of India provided liquidity to Indian banks.

CENTRAL BANK AS BANKER TO THE GOVERNMENT

- Central banks have several important roles as the "banker to the government":

1. **Issuing government bonds:** Central banks can issue and sell government bonds on behalf of the government to finance its budget and borrow money.
2. **Managing government debt:** Central banks can help governments manage their debt by buying and selling government bonds in the market, helping to stabilize prices and maintain liquidity.
3. **Providing advice:** Central banks often provide economic and financial advice to governments, helping them to make informed decisions about fiscal policy and other issues.

- Basically, central banks act as the government's financial advisors, lenders, and money managers all rolled into one!

GIVE ME 2...

Two roles of the Central Bank in the United Kingdom

1. **Operation of monetary policy** – setting base interest rates to meet the inflation target (2%). No direct intervention in the exchange rate – the UK operates a free-floating currency

2. **Lender of last resort** to the financial system during a liquidity crisis / credit crunch.

THE FINANCIAL CONDUCT AUTHORITY (FCA)

- **Regulation and Supervision:** The FCA is responsible for regulating commercial banks, investment firms, insurance companies, asset managers, and consumer credit providers. It sets regulatory rules and standards for these firms, conducts prudential supervision, and ensures that they comply with applicable regulations.
- **Consumer Protection:** The FCA focuses on protecting consumers by ensuring that financial products and services are fair, transparent, and not misleading. It enforces rules on consumer protection, including those related to the sale of financial products, conduct of business, and treating customers fairly.
- **Market Supervision:** The FCA actively monitors financial markets to identify risks and emerging issues

THE PRUDENTIAL REGULATION AUTHORITY (PRA)

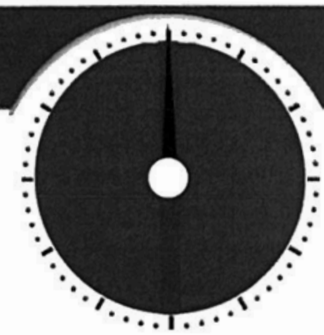
- **Prudential Supervision:** The PRA is responsible for prudential supervision of banks, building societies, credit unions, insurers, and designated investment firms. Prudential supervision involves assessing and ensuring the financial soundness of these institutions to prevent financial instability.
- **Setting and Enforcing Prudential Standards:** The PRA establishes prudential standards and requirements that financial institutions must adhere to. These standards encompass capital adequacy, liquidity, risk management, governance, and other aspects of an institution's financial stability. The PRA enforces these standards to ensure that financial firms maintain appropriate levels of financial resources to withstand economic and financial shocks.

GIVE ME 2...

Ways in which financial regulators can reduce the risk of commercial bank failures in a country such as the UK.

1. **Prudential regulation:** Require banks to maintain adequate capital to absorb potential losses and withstand adverse economic conditions. Use of stress tests.
2. **Direct interventions:** Setting maximum loan to valuation ratios in the mortgage market. Increasing the cash-to-deposits ratio for a commercial bank.

CATEGORISE



You have 60 seconds to categorise these eight **functions** of the **Bank of England** into one of the three categories

M Monetary Policy Function M	Financial stability & regulatory function F	P Policy operation functions
1) Lender of last resort to the banking system P	2) Overseeing the payments systems used by banks/retailers /credit card companies P	3) Supervision of the wider financial system F
4) Managing liquidity in the commercial banking system P	5) Quantitative easing M	6) Setting of interest rates M
7) Prudential policies designed to maintain financial stability P	8) Infrastructure provision function P	

Topic: Role of Central Banks – can you fill in the gaps?

Central banks are crucial institutions in modern economies, responsible for various functions that help maintain economic stability and support the financial system.

Key Functions of Central Banks:

1. Implementation of Monetary Policy

- Central banks have the primary responsibility for formulating and implementing monetary policy, which involves managing the money supply and interest rates to achieve specific economic objectives, such as price stability and economic growth.
- Tools of monetary policy include open market operations (buying and selling government securities), setting interest rates (e.g., the policy rate), and reserve requirements for banks.
- Central banks adjust these tools to influence borrowing costs, inflation rates, and overall economic activity.

2. Banker to the Government

- Central banks act as the government's banker by managing the government's bank accounts, facilitating payments, and helping with debt issuance and management.
- They often oversee the issuance and redemption of government bonds and treasury bills, helping the government fund its operations and manage its debt.
- Central banks also provide advice on fiscal and monetary coordination to ensure overall economic stability.

3. Banker to the Banks – Lender of Last Resort

- Central banks serve as a lender of last resort to financial institutions, especially during times of financial crises or bank runs.
- In this role, central banks provide emergency funding to banks facing liquidity problems to prevent systemic financial instability.
- By offering short-term loans (often referred to as the discount window), central banks help maintain confidence in the banking system.

4. Role in Regulation of the Banking Industry

- Central banks often play a critical role in supervising and regulating the banking sector to ensure its stability and soundness.
- They set and enforce prudential regulations, including capital adequacy requirements and risk management standards, to prevent excessive risk-taking by banks.
- Central banks may also conduct regular bank examinations to assess the financial health and compliance of financial institutions with regulatory standards.

Understanding these key functions of central banks is essential for A-level economics students as they examine the role of these institutions in managing monetary policy, supporting government operations, safeguarding the financial system, and regulating the banking industry. Central banks play a pivotal role in maintaining economic stability and responding to financial challenges, making them a central topic in the study of economics.

stability ✓	risk-taking ✓	bonds ✓
bank runs ✓	regulatory ✓	liquidity ✓
money supply ✓	borrowing ✓	supervising ✓
price stability ✓	interest ✓	fund ✓

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

Some topical financial markets issues for A-level in 2019

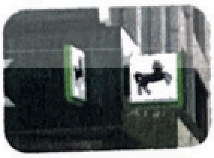
- Increasing contestability in UK commercial banking
- Micro and macro effects of high levels of secured and unsecured household debt
- Evaluating the impact on consumers & businesses of financial regulation in the UK
- The roles of financial markets in developing / emerging countries
- Causes and effects of financial instability

Secured lending → has an asset attached to it that the lender can seize if repayments aren't made, eg. a house with a mortgage - makes lending less risky

"I have likened the financial sector to the brain of the economy: it is central to the management of risk and the allocation of capital. It runs the economy's payment mechanism. It intermediates between savers and investors, providing capital to new and growing businesses. When it does its functions well, economies prosper, when it does its jobs poorly, economies and societies suffer." Professor Joseph Stiglitz

Causes of financial market failure

Externalities from financial instability



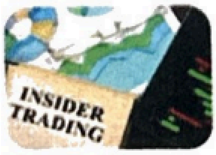
Monopoly power in financial markets

Market rigging / collusion

Market failure occurs when a market fails to allocate scarce resources in an efficient and/or equitable way leading to a loss of economic and social welfare. In this context, financial market failure can refer to the negative externalities that come from financial instability.

Speculative bubbles and irrational behaviour

Moral hazard and attitudes to risk-taking



Asymmetric information and complexity

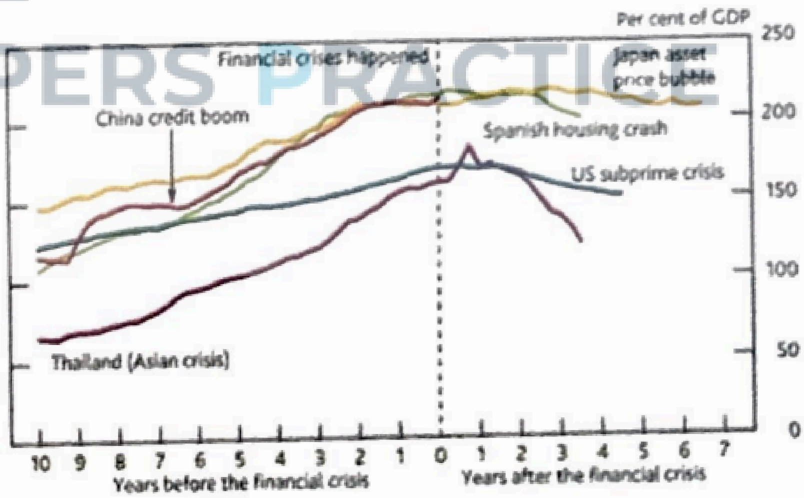
Externalities of financial instability

In finance, **the private sector left to its own devices will never fully price the consequences of its actions**. Although externalities exist in many markets and industries, those in finance seem especially large - contagion within the financial sector to other borrowers and lenders from interconnections and panics and fire sales, and the aggregate demand externality from the responses of heavily indebted households and businesses to shocks to income, interest rates or credit availability.

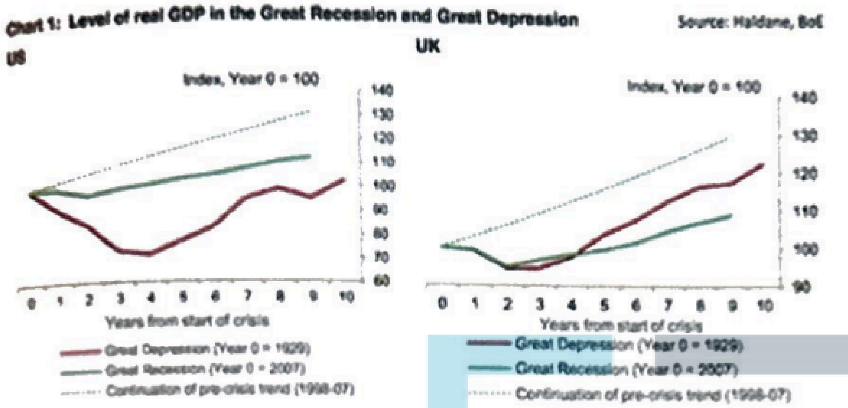
Those externalities **damage innocent third parties** in the form of higher unemployment and lost income when the financial sector cannot perform its normal intermediary functions and credit dries up

Source: www.bankofengland.co.uk/-/media/boe/files/speech/2017/regulation-for-financial-stability-the-essentials.pdf

Countries that underwent sharp credit booms have often experienced a crisis



Financial crises have real and lasting consequences



Ten years after the Great Recession, real GDP in the US and the UK remains well below where it could have been had growth followed the pre-crisis trend.

According to the Bank of England

The Global Financial Crisis cost everyone in the UK £20,000

Wider costs from periods of financial instability

- Taxpayers (Bailout costs)
- Depositors (Risk of lost savings)
- Creditors (Unpaid debts)
- Shareholders (Lost equity)
- Employees (Lost jobs)
- Government (increased fiscal deficit)

Asymmetric information in financial markets

- Buying and selling of shares (e.g. insider information in stock markets)
- Credit risk with a borrower (the bank knows less than a debtor with a limited credit history)
- Risks in insurance markets (buyer knows more than the seller!)
- Asymmetric information can lead to moral hazard and adverse selection

Examples of moral hazard in markets

- State bail-outs of failing commercial and investment banks
- Sub-prime mortgages – other banks were taking on most of the risk
- Generous health insurance can lead to over-prescribing of drugs

Monopoly / oligopoly power in financial markets e.g. dominant commercial banks and insurance companies

LIBOR-fixing scandal

(LIBOR is the London Interbank Offer Rate)

Attempts to rig the foreign exchange (currency) markets

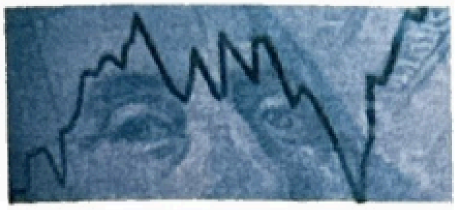
Allegations of price fixing in bond and derivatives markets

Market power and market rigging

Market rigging

World's biggest banks accused of price-fixing Fannie Mae, Freddie Mac bonds

Bank of America, Barclays, Deutsche Bank, others sued



With arrogant disregard for the rules, traders colluded for years to rig Libor, the banks' lending rate. But after the crash, the regulators were on their trail

Market Power: Oligopolistic UK commercial banking industry

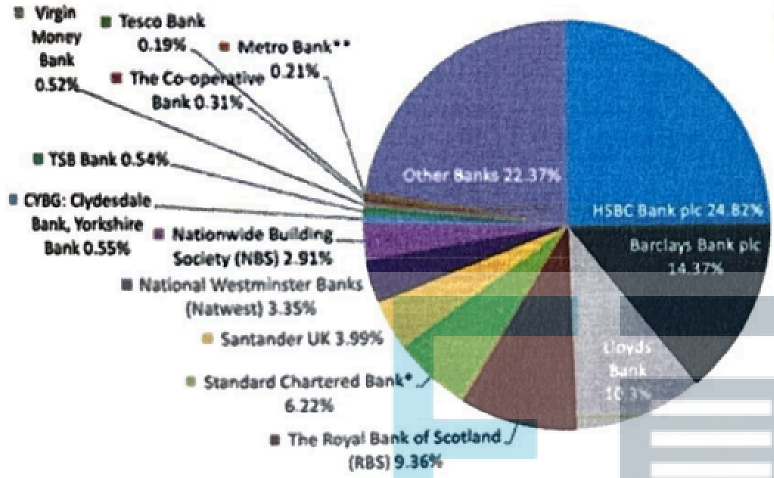
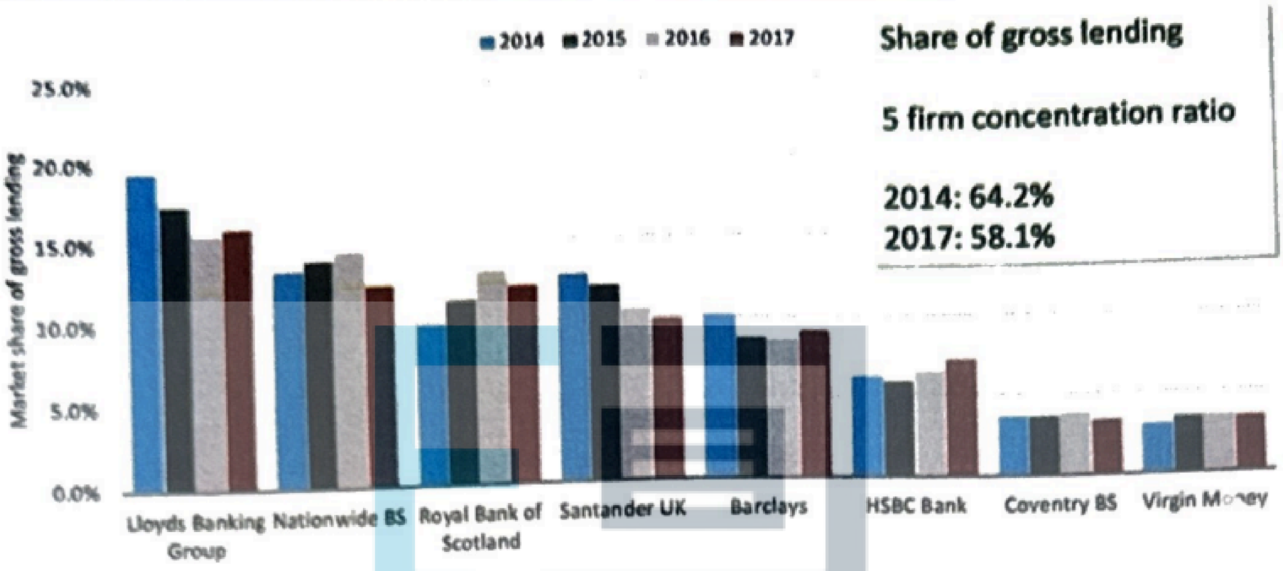


Chart shows the market share of total assets for leading British-owned banks in the UK in 2017

Moral hazard → when an agent knows they are insured against losses (eg. they will be bailed out by the government) then it might lead them to riskier behaviour

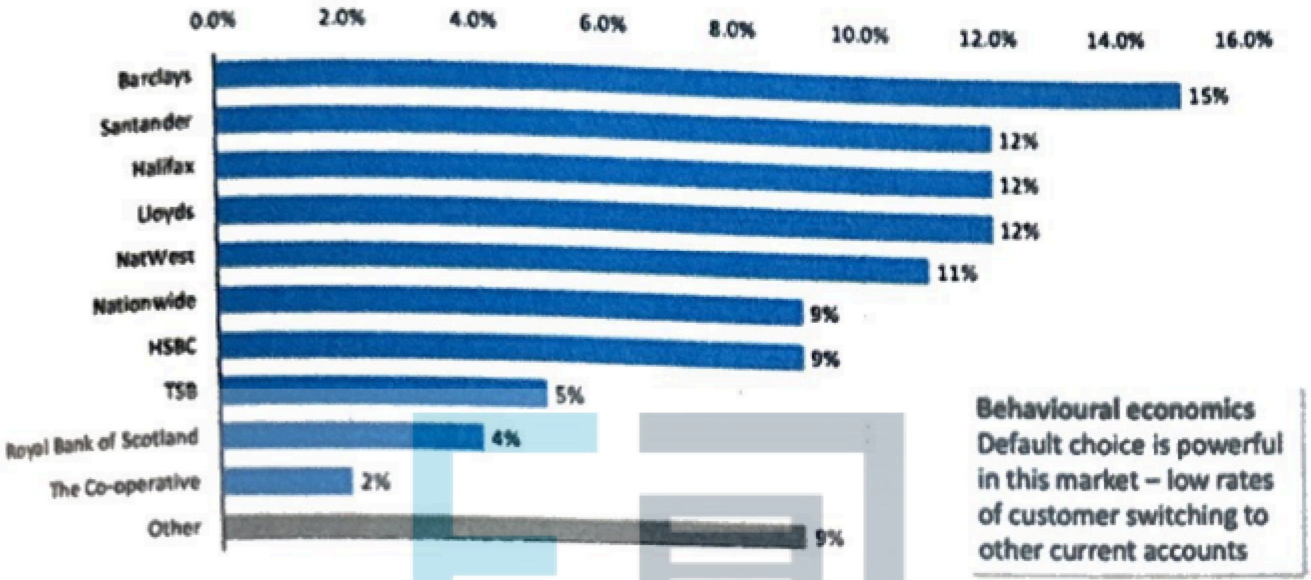
Adverse selection - often see with insurance as an example

Leading UK banks from 2014 to 2017, by market share of gross lending



Barriers to entry in commercial banking

- **Regulatory barriers** – i.e. the need to be given a banking licence by the central bank
- **Natural or intrinsic barriers to entry** – costs of entering the market including marketing costs, building IT and payments infrastructure
- **Strategic advantages of larger banks** – including vertical integration, branch network, low rates of customer switching
- **First mover advantages including strong brand loyalty**



Behavioural economics
Default choice is powerful in this market – low rates of customer switching to other current accounts

Main banks used for current accounts in UK (2018)
Which bank or financial services provider do you have your main current account with? (% of respondents)

- **Established challengers:** First Direct, Metro Bank, TSB, Virgin Money
- **Online banks:** Atom, Monzo, Zopa, Tandem
- **Supermarket banks:** Asda Money, M&S Bank, Sainsbury's Bank
- **Fin Tech companies offering banking services:** Azimo, iZettle, Curve
- **The Next Wave** - digital platform companies such as Google and Apple

Is the UK banking sector now becoming more contestable?

Economics of Commercial Bank Bailouts

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

UK Commercial Bank Bailouts from 2008 onwards

- Royal Bank of Scotland (government acquired 84%) – still retains around 60%
- Lloyds Banking Group (government acquired 43%) – all shares now sold
- Northern Rock (100% nationalised) – sold to Virgin Money (2012)
- Bradford and Bingley (100% nationalised - 2010, Bradford & Bingley was renamed Santander UK
- Total spend on UK bank bail outs estimated at £137 billion, net spend is around £23bn

Justifications for bank bail-outs

- Negative multiplier effects on AD & growth from thousands of banking jobs lost
- Banking collapse might squeeze lending to small and medium-sized businesses who need to borrow money to stay in business or finance capital investment
- Savers and pensioners are at risk if commercial banks fail – this might worsen poverty and lead to increased pressure on government welfare payments
- Severe drop in confidence (animal spirits) and loss of trust in the financial system risks a deflationary depression rather than a cyclical recession
- Money spent on bail-outs can be recouped as the economy recovers – so the net cost is likely to be smaller as the government unwinds the bail-out

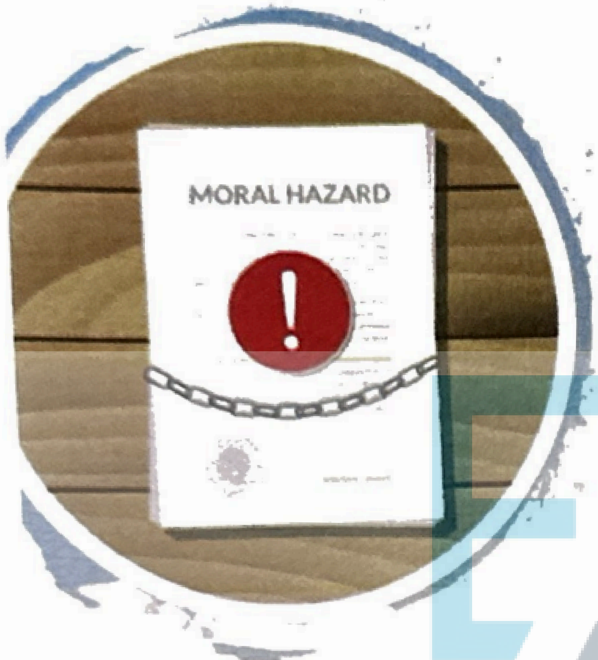
Paradox of thrift, if confidence falls and consumers / firms etc are worried about recession / depression, this might lead them to spend less and try to save more → but this ↓ AD & then causes the recession / depression they were worried about!

Key argument: Systemic risk

Systemic risk is the possibility that an event at the micro level of an individual bank / insurance company could then trigger instability or collapse an entire industry or economy.

Evaluation: Arguments against bail-outs

1. Bail-outs increase government borrowing and the national debt which risks causing higher market interest rates and increased taxes in the future
2. Funds tied up in a bail-out could be used to invest in infrastructure or health & education services (big opportunity cost)
3. Moral hazard argument – bailing out a commercial bank may influence their behaviour causing them to take higher risks in the future
4. Equity issues – why should taxpayers pay the price for a bail-out? Are banks that different from steelworks, airlines, travel companies or loss-making retailers?
5. Austrian school – Economists such as Hayek argued that allowing loss-making banks to fail is part of the normal process of capitalism – new banks will take their place perhaps with less risky business models



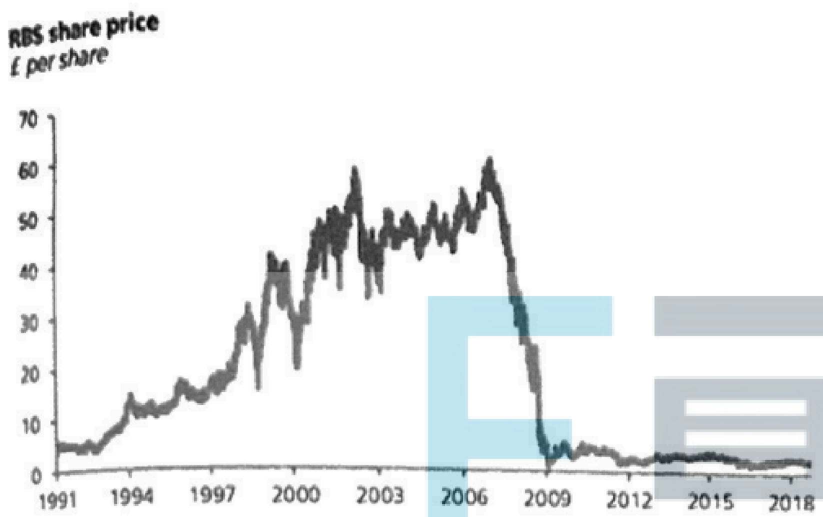
Key argument: Moral hazard

- Moral hazard happens when an agent is given an **implicit guarantee of support** in the event of making a loss – e.g. insurance pay-outs or state bail-outs for failing banks.
- This can **cause the agent to change their behaviour and take higher risks** knowing that they have an insurance in hand.
- **"Profits are privatised whilst losses are socialised"**

A* Context for Evaluation:

- Case for bail out may depend on significance of financial sector to a country e.g. UK City of London, risk of capital flight, exports of financial services, banking profits as a source of tax revenues
- The US and UK chose a bail-out approach (although Lehman Bros could go bankrupt) + measures/tests to improve banking resilience at times of stress
- Bail-outs have now largely been replaced by **bail-ins** - e.g. commercial bank issue bonds which are converted into equity if a bank's losses wipe out their capital buffers / reserves
- Iceland's three leading banks defaulted in 2008 – government nationalised them and then liquidated them – this came at a severe short-term economic cost
- Alternatives to bail-outs include tougher rules on lending (e.g. for housing mortgages) and supply-side reforms to encourage new banks into the industry

Royal Bank of Scotland



- RBS continued to make heavy losses for several years
- Government has sold some of the shares but never at a price above what they paid as part of the original bail out
- Plan is to sell £3 billion worth of shares every year until 2022-23. Last RBS shares will be sold in 2025 – 17 years after the first bailout.
- Estimated cost of the bailout overall is £27 billion – justified?

In 2018, the International Monetary Fund (IMF) lent Argentina $57 billion as part of a bailout package to help prevent the country's government defaulting on its debts. This financial crisis also caused significant capital flight out of Argentina's economy.

(Source adapted from: https://www.ft.com/content/737b48bc-c1c9-11e8-95b1-d36dfef1b89a)

(a) Explain the role of the IMF in providing financial assistance to countries such as Argentina. **(4)**

role of the

The IMF is a non profitable organisation, that promotes ~~eco~~ sustainable growth. By lending Argentina a $57 billion ~~to~~ as a bailout package, it is allowing them to grow further instead of being in debt and thus spending money on paying back the debt instead of into the country itself on increasing welfare and increasing government spending to boost AD.

4

(b) Which **one** of the following is most likely to happen to Argentina's currency value as a result of capital flight, assuming it is operating with a floating exchange rate system?

(1)

☐ **A** Appreciation

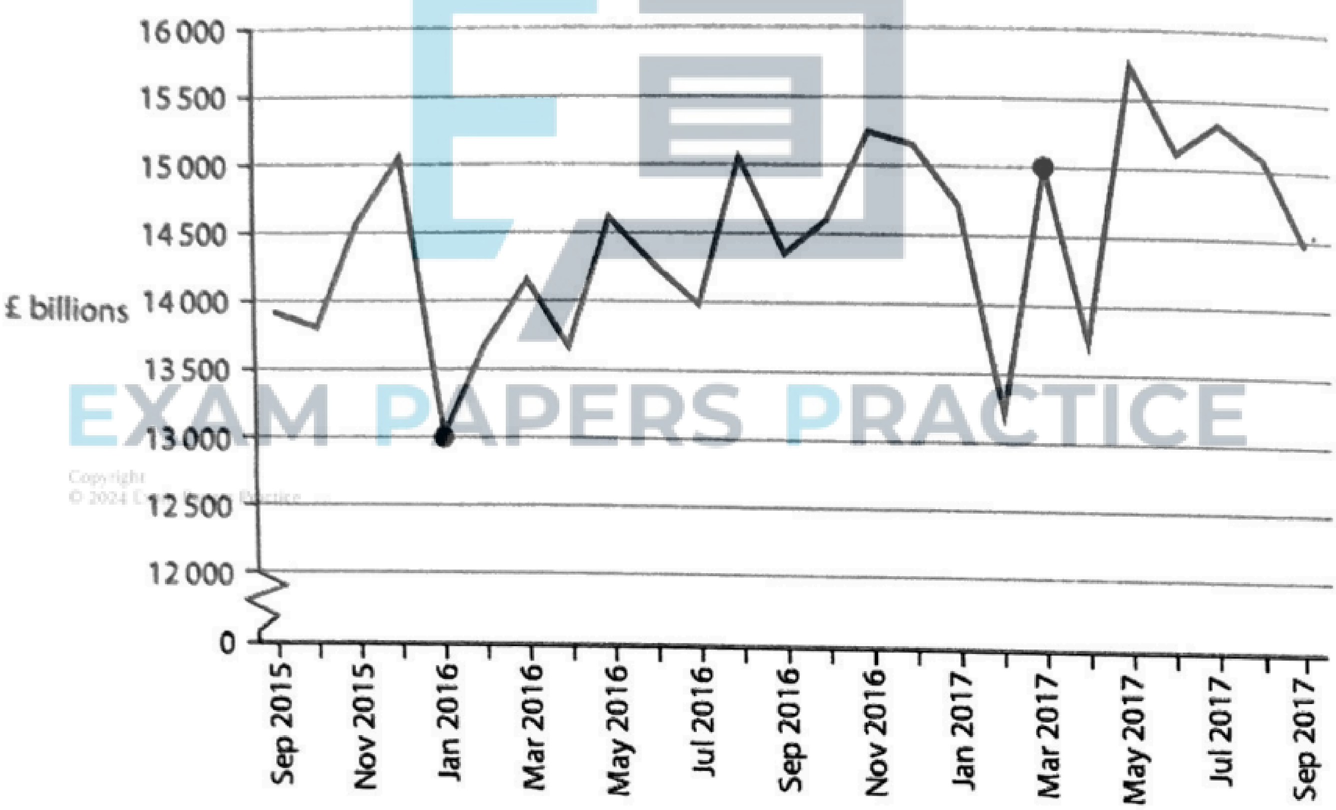
☒ **B** Depreciation

☐ **C** Devaluation

☐ **D** Revaluation

1

Monthly additions to UK credit card lending, £ billions, 2015 – 2017



(Source: https://www.ukfinance.org.uk/statistics/cards/)

(a) Which **one** of the following would be **most** likely to cause an increase in credit card lending?

(1)

☒ **A** A fall in interest rates

☐ **B** A fall in investment

☐ **C** An increase in the deficit on the current account of the balance of payments

☐ **D** An increase in savings

1

(b) Using the chart, calculate an index number for additions to credit card lending in March 2017, using January 2016 as the base. You are advised to show your working.

(2)

March 2017 - 15,000

January 2016 - 13,000

$\frac{15,000}{13,000} \times 100 = 115.4$

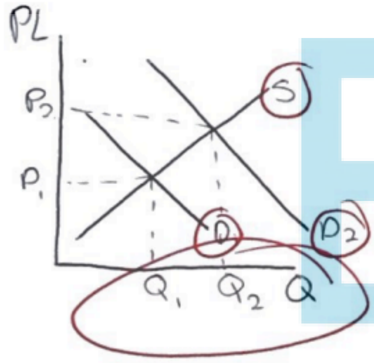
2

(c) Explain **one** possible link between an increase in credit card lending and the rate of inflation.

↑C → ↑AD (2) → ↑ demand-pull inflation

By increasing credit card lending there will be an increase in demand for goods and services and thus increase in price level. Seen on the diagram from D_1 to D_2 pushing price to from P_1 to P_2.

(1)



UK total bank lending to individuals, percentage change on previous year

2014	**2.5%**
2015	**3.2%**
2016	**4.0%**

(Source: Bank of England 2017)

(a) Explain **one** likely reason why consumer demand for bank loans has increased. (2)

Low interest rates → cheaper to borrow

Or ↑ confidence → belief that can payback in the future

~~Rece~~ There has been an increase of people entering the workforce and thus earning money, this has meant that they want to make investments and thus need a loan from the bank ~~the Halifax~~ to do so.

Again, complicated it & so incorrect

0

(b) Which **one** of the following is most likely to result from an increase in bank lending to individuals? (1)

- [ ] **A** An improvement in net trade (X–M)
- [x] **B** An increase in consumption
- [ ] **C** An increase in unemployment
- [ ] **D** Deflation

✓ 1

(c) Calculate the index number for the total value of bank lending in 2016 using 2015 as a base year. (2)

$\frac{4.0}{3.2} \times 100 = 125$ ✗

0

Has ↑ by 4% so 100 → 104

EXAM PAPERS PRACTICE

(a) Explain **one** role of financial markets.

(2)

One role of financial markets is to act as an intermediate between ~~the people~~ borrowers who need capital and those who ~~lend~~ lenders it out to promote economic growth. through ↑C / ↑I

1

(b) Explain **one** reason why the UK central bank used quantitative easing following the Global Financial Crisis of 2008.

(2)

To increase ~~money~~ ~~from~~ investment because people had no money to invest and the quantitive easing provided money to invest increasing money flow. eg. to ↑ bank liquidity so more willing to lend or to prevent deflation / ↑ growth by ↑ the money supply

X

0

(c) Which **one** of the following would be the most likely cause of market failure in the financial sector?

(1)

A Banks charge higher interest rates on higher risk loans

B Banks do not create any external costs or benefits in their operations

C Banks know that the government will bear the risk of customers defaulting on loans

D Banks and their customers have symmetric information

Answer C

✓

1

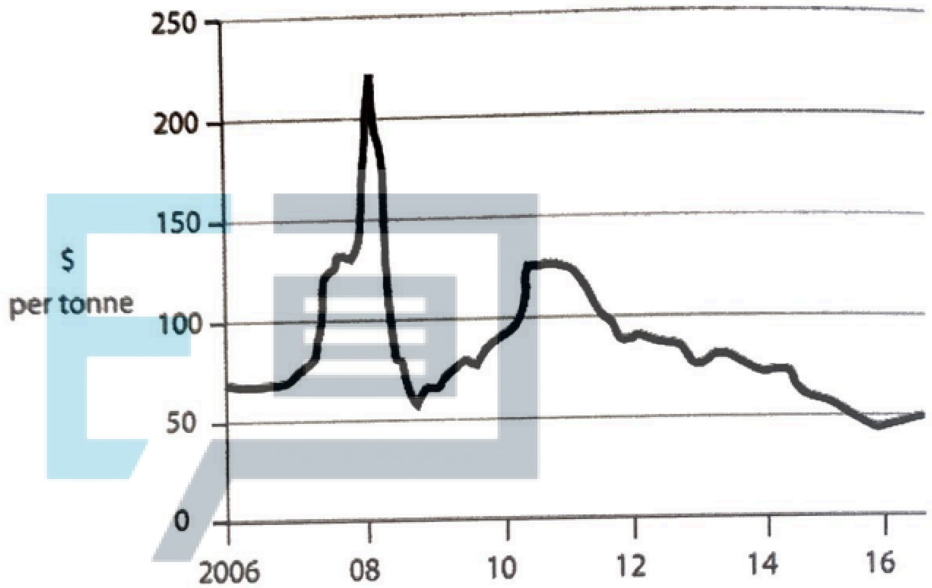
14/25

Read all feedback carefully, Sofia

Class Homework – Paper 3 Data Response June 2018

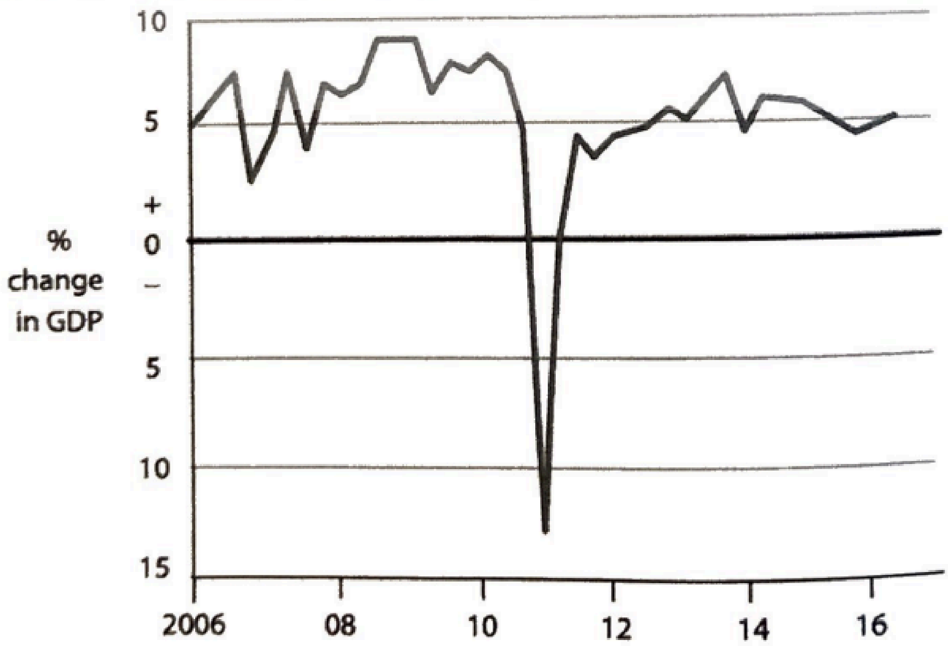
Indonesia

Figure 4: World coal prices, 2006–2016, US dollars per tonne



(Source: http://www.economist.com/news/world-week/21697025-business-week)

Figure 5: Indonesia's real GDP, annual percentage change



(Source: http://www.economist.com/news/world-week/21697025-business-week)

EXAM PAPERS PRACTICE

Extract D

Indonesia's economic outlook

The Indonesian economy is expected to grow by an average of 4.8% a year between 2017 and 2021. Joko Widodo, president of Indonesia since 2014, is increasingly confident in his role and now has enough political support to pass some of his desired supply-side reforms. His government has been aggressively trying to improve the business and investment environment by easing regulations and offering tax incentives, for example to firms investing in special economic zones.

Indonesia receives US$2.3 billion a year in overseas development aid, which is mainly spent on education and healthcare. There is also ongoing aid from international institutions and non-government organisations paying for restructuring after the 2004 Indian Ocean earthquake and tsunami, which led to the loss of over 170 000 lives and much damage to economic livelihood. Aid agencies have supported the Indonesian government in providing healthcare free at the point of access for 88 million of the poorest people, free schooling for 12 years for each child, and tertiary education for students accepted into university. There is a scheme to provide each of Indonesia's 15.5 million poorest households with a cash transfer of 200 000 rupiah (US$14.37) a month. The World Bank has approved US$800 million in infrastructure loans to Indonesia, with another US$950 million as conditional loans. The Asian Development Bank has committed itself to lending US$2 billion. In December Japan's development agency lent Indonesia US$535 million to construct two power stations.

(Sources: adapted from http://country.eiu.com/Indonesia and http://www.economist.com/news/special-report/21693404-after-decades-underinvestment-infrastructure-spending-picking-up-last)

Extract E

Indonesia's economic policies as commodity prices collapse

Indonesia is the world's fourth largest exporter of coal and the raw material accounts for 11% of its exports. Its other main exports are crude oil, palm oil, rubber and tin. Its main commodity exports tripled in value between 2000 and 2010, and as exports boomed, so did the economy. But the value of commodity exports has fallen by more than half from its peak. Coal now sells for just US$50 per tonne, against US$125 in 2011.

In the decade to 2014, Indonesia's real GDP grew by an annual average of 6%, but the collapse in commodity prices has slowed the economy. In 2015 growth was 4.8%, the slowest rate since 2009. But compared with many other commodity exporters, Indonesia is getting off lightly.

The value of the rupiah, Indonesia's currency, against the US dollar has fallen by 30% since 2013, but has since stabilised. Other emerging market currencies have depreciated even more steeply over that period. Despite the weak exchange rate, Indonesia's inflation rate has mostly remained within the central bank's target range of 3-5%. The main impact of the rupiah's fall has been to curb imports, helping limit Indonesia's current account deficit to around 2% of GDP despite weaker export earnings. A cautious fiscal policy during the boom years has allowed for a modest fiscal expansion to offset the effects of weak exports and investment. The national debt is just 26% of GDP.

Mr Widodo knows that Indonesia cannot raise its long-term growth rate if the economy remains reliant on coal. It needs a broader range of manufacturing and service industries. If new enterprise is to flourish, Indonesia must support local entrepreneurship. The labour market is inflexible. To start a business takes an average of 47 days, compared with four in Malaysia and two in Singapore. The President's supply-side policies are improving the business climate. The average number of days needed to approve a new power plant has declined from 900 to 200. The government recently revised its "negative investment list" of sectors in which foreign ownership is banned or restricted, fully opening up the rubber, film and restaurant sectors, among others. In 2015 he launched a series of measures to try to reduce government failure, including easing some regulations, streamlining licensing procedures for firms on industrial estates and providing tax incentives to invest in special economic zones.

The government has used savings from cutting fuel subsidies, worth over 4% of GDP, to fund extra capital spending. But the budget deficit still widened to 2.8% of GDP, very close to the legal limit of 3%. If public expenditure is to increase further, the government will need to raise more revenue. That will not be easy. Most workers and employers pay little or no tax. Only 27 million of Indonesia's 255 million people are registered taxpayers, and in 2014 just 900 000 of them paid what they owed, leaving it with a tax revenue to GDP ratio of around 10%. Big companies say that they are being squeezed harder by the tax authorities because they are an easier target.

Infrastructure spending will help bring foreign investment and good jobs to Indonesia as well as encouraging exports. Indonesia's infrastructure problem can be summed up as too few roads and congested ports. In the short term, infrastructure spending puts people to work and boosts demand for raw materials. In the longer term this spending offers the chance to make up for decades of neglect and underinvestment. Indonesia has plans for 65 dams, 16 of which are already under construction. In 2015 work started on the Keureuto Dam, designed to boost agricultural productivity in Aceh. Recently fields were flooded for the massive Jatigede Dam in West Java, after 20 years of delays. Once complete, the dam will irrigate 90 000 hectares of rice paddy, increasing efficiency by giving farmers two harvests a year instead of one.

(Sources: adapted from http://www.economist.com/news/special-report/21693405-secure-growth-it-needs-indonesia-must-resist-its-protectionist-urges-roll-out and http://www.economist.com/news/special-report/21693404-after-decades-underinvestment-infrastructure-spending-picking-up-last)

2 (a) Using the data in Figure 4 and other information provided, explain the likely change to Indonesia's terms of trade since 2011.

(5)

(b) Examine the likely effects on the profitability of Indonesian rice farmers of the government's increased investment in dams (Extract E, lines 43-48). Use a cost and revenue diagram to support your answer.

(8)

(c) Discuss the benefits of aid to Indonesia.

(12)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic effects on Indonesia of the volatility of prices of commodities such as coal.

(25)