

Edexcel IGCSE Economics

CODE: (4PH13)

Unit 3

Government and the economy



3.1 Economic growth

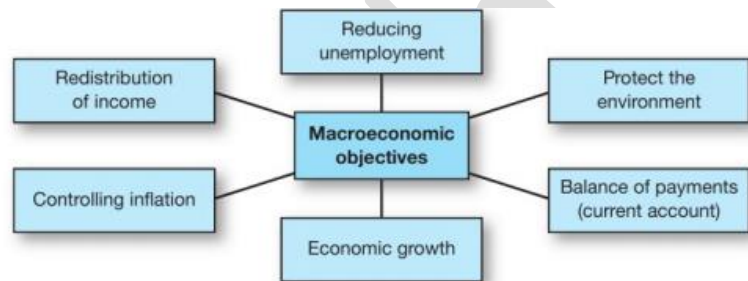
What is macroeconomics?

Economics can be divided into **macroeconomics**, which examines the entire economy, including income, employment, and price levels, and **microeconomics**, which examines individual parts of the economy, such as resource allocation, and specific markets like rail travel, oil, healthcare, and wheat.

What are macroeconomic objectives?

One of the key aims is to promote **economic growth**.

The economy is promoting growth through government policies, aiming to increase incomes, output, and employment. However, governments must ensure price stability, maintain import-export ratios, protect the environment, and redistribute income to maintain living standards.



▲ Figure 25.1 Macroeconomic objectives

SUBJECT VOCABULARY

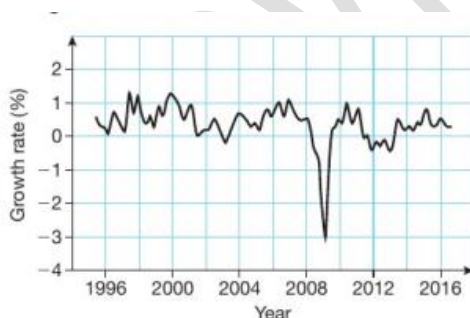
macroeconomics study of large economic systems such as those of a whole country or area of the world
microeconomics study of small economic systems that are part of national or international systems

What is economic growth?

National income, a measure of economic growth, represents the total value of all incomes in an economy, including wages, profits, royalties, dividends, interest, and foreign income, combined.

Measuring economic growth

The most common measure of national income is **gross domestic product (GDP)**. GDP is a widely used measure of national income, encompassing a country's total output for the year, including both domestic and overseas goods and services. It measures final production, excluding manufacturing parts and components. GDP is used to compare economic growth rates globally. However, the EU's GDP growth between 1996 and 2016 was mostly zero to 1%, with a sharp decline in 2008 due to the global recession.



▲ Figure 25.2 Economic growth in the EU, 1996–2016

SUBJECT VOCABULARY

national income value of income, output or expenditure over a period of time

SUBJECT VOCABULARY

gross domestic product (GDP) market value of all final goods and services produced in a period (usually yearly), an internationally recognised measure of national income

Limitation of GDP as a measure of growth

Inflation

The GDP, a measure of economic growth, can be misleading due to price increases. If an economy grows by 2.6 per cent and prices rise by 2.6 per cent, it doesn't grow. To overcome this, real GDP can be adjusted for inflation.

Population changes

Population growth must be considered when analysing growth patterns

Statistical errors

GDP is a crucial measure of economic growth, but its true value is often unknown due to the massive task of collecting data from various sources.

The value of home production goods

Some goods and services are not traded and therefore economic activity is not recorded.

The hidden economy

Sometimes paid work goes unrecorded. Certain paid services, such as driving for cash, may go unrecorded, contributing to the hidden, 'black' or informal economy.

GDP and living standards

GDP is used to measure living standards. However, just because GDP rises, it does not automatically mean that living standards have also risen. Other factors must be considered such as:

- The amount of leisure time people has.
- The way extra income is shared between the population
- Whether growth has resulted in pollution
- The quality of goods and services.

External costs

GDP does not consider external costs such as environmental costs.

The economic scale

GDP, a measure of economic growth, is subject to variation and potential fall, influenced by the economic, trade, or business cycle, which includes four phases: boom, downturn, recession, and recovery.

The impact of the economic cycle on the growth, employment and inflation

Boom

During a boom, GDP rapidly grows due to economic performance, with firms expanding, demand rising, jobs created, wages rising, and profits rising, although prices may also rise.

Downturn

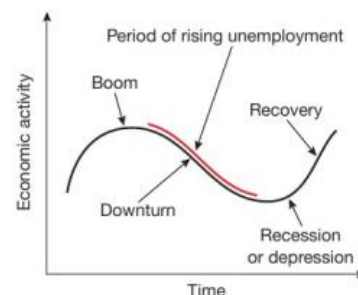
A boom followed by a **downturn**, slowing economy growth, falling demand, rising unemployment, slowing wage increases, and potential firm exits, with slower price rise.

Recession or depression

At the bottom of the economic cycle, GDP may be flat. If GDP starts to fall, the bottom of the cycle may be referred to as a depression or slump. The prices of some things may even fall. A less severe version of a depression is a **recession**.

Recovery

GDP rise signifies economic recovery, boosting confidence among businesses and consumers, leading to increased demand, decreased unemployment, and a resurgence of prices.



▲ Figure 25.4 Economic, trade or business cycle

SUBJECT VOCABULARY

boom peak of the economic cycle where GDP is growing at its fastest

SUBJECT VOCABULARY

depression or slump bottom of the economic cycle where GDP starts to fall with significant increases in unemployment

downturn period in the economic cycle where GDP grows, but more slowly

recession period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters

The impact of economic growth

Employment

Economic growth boosts employment by increasing businesses' output, requiring more workers, and reducing unemployment. Government spending also contributes to job creation in education, healthcare, and infrastructure development.

Standards of living

GDP increases lead to increased disposable income, enabling people to buy more goods and services, such as better food, housing, and leisure goods. Efficiency improvements allow for shorter work weeks, earlier retirements, and longer life expectancy due to healthier diets and medical technology advancements.

Poverty

Rapid economic growth in some developing countries has helped to reduce poverty. The expansion of existing businesses and the development of new businesses create jobs, some of which will be taken by the poor.

Productive potential

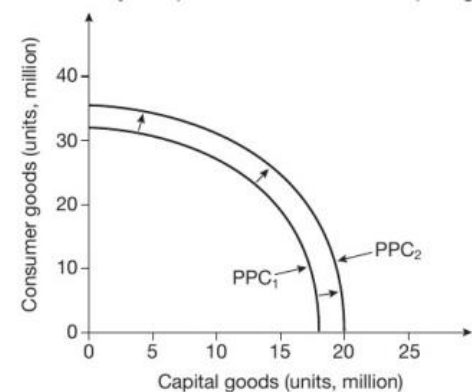
Economic growth boosts a country's productive potential, enabling increased production of goods and services, as illustrated by production possibility curves (PPCs), thereby increasing both capital and consumer goods.

Inflation

If economic growth is too fast, the economy may **overheat**. Economic growth too fast can cause inflation, causing overheating. In the late 1990s and 2000s, house price booms led to affordability issues. In the last decade, inflation has not been a major issue due to low economic growth.

The environment

Environmental groups argue that growth benefits are lower than costs, as it contributes to greenhouse gases and pollution in countries like China and India. Economic growth also uses up non-renewable resources, leaving future generations with fewer resources. This is referred to as **unsustainable growth**.



▲ Figure 25.5 Economic growth and the PPC

SUBJECT VOCABULARY

aggregate demand total demand in the economy including consumption, investment, government expenditure and exports minus imports

deflation period where the level of aggregate demand is falling

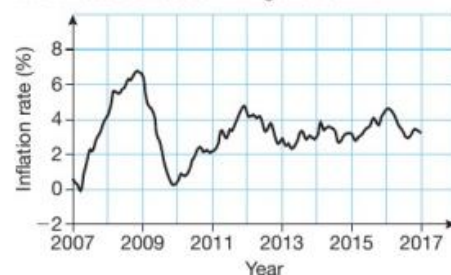
inflation rate at which prices rise, a general and continuing rise in prices

3.2 Inflation

What is inflation?

Inflation refers to a continuous rise in prices of goods and services over time, often resulting in a slowdown in the economy. In Peru, for example, inflation was 3.2% in 2016, indicating an average increase of 3.2 per cent in goods and services. **Deflation**, on the other hand, refers to a fall in average prices or a slowdown in **aggregate demand**, which includes consumption, investment, government expenditure, and exports.

Governments usually measure and monitor the rate of inflation. In the EU and many other countries, inflation is measured using the **consumer price index (CPI)**.



▲ Figure 26.1 Inflation in Peru, 2007–16

Types of inflation

Demand – pull inflation

Some economists argue that inflation can be caused by too much demand in the economy. This is called **demand-pull inflation**.

Aggregate demand is the total demand in the economy. So, demand-pull inflation could be caused by:

- Rising consumer spending encouraged by tax cuts or low interest rates
- Sharp increases in government spending
- Rising demand for resources by firms
- Booming demand for exports.

consumer price index (CPI) measure of the general price level (excluding housing costs)

retail price index (RPI) measure of the general price level, which includes house prices and council tax

SUBJECT VOCABULARY

demand-pull inflation inflation caused by too much demand in the economy relative to supply

Cost – push inflation

Another theory is that inflation can be caused by rising costs. This is called **cost-push inflation**. When businesses are faced with rising costs, they put up their prices to protect their profit margins. As a result, inflation is caused.

The relationship between inflation and the interest rate

Inflation, according to **monetarists**, is linked to growth in the money supply, which includes notes, coins, and bank deposits. This inflation occurs when households, firms, and the government borrow more money from banks, increasing bank balances and driving up prices. **Low interest rates** are more likely to trigger this type of inflation.

SUBJECT VOCABULARY

interest rates price paid to lenders for borrowed money; it is the price of money

monetarists economists who believe there is a strong link between growth in the money supply and inflation

The impact of inflation

PRICES

One of the main problems of inflation is that prices are rising. As a result, inflation reduces the purchasing power of money. This means that people cannot buy as much with their income. Therefore, households will experience a fall in their living standards.

WAGES

When prices are rising, workers need to increase their wages to compensate for the loss in purchasing power. If workers can negotiate higher wages with their employers, they will get more money.

SUBJECT VOCABULARY

purchasing power of money amount of goods and services that can be bought with a fixed sum of money

EXPORTS

If inflation is higher at home than in other countries, firms may find it difficult to sell in overseas markets. This is because the prices of exports rise. As a result, demand for exports is likely to fall which means that the balance of payments.

UNEMPLOYMENT

High levels of inflation usually mean that aggregate demand is rising. As a result, firms will be keen to increase output since the prices of goods is increasing. This means that firms will need to recruit more workers, which reduces unemployment.

MENU COSTS

If inflation is rapid, firms will have to increase their prices frequently. This will cost money because customers must be told. New brochures will have to be printed, websites updated, and sales staff informed. These are called **menu costs**.

SHOE LEATHER COSTS

When prices are changing frequently consumers and firms will have to spend more time looking for the lowest prices or the best value for money. This involves 'shopping around', which is a cost because it takes time and wears out the leather on your shoes.

UNCERTAINTY

If inflation is high and varying, firms do not know what prices will be in 3- or 6-months' time, and predicting years ahead becomes impossible. However, decisions must be made now which will affect the business in the long term.

BUSINESS AND CONSUMER CONFIDENCE

The uncertainty caused by inflation may influence the confidence of consumers and businesses. For example, inflation might make consumers anxious. They may become more cautious-less willing to borrow money,

INVESTMENT

Inflation often results in a decline in business investment. This is because investment requires spending quite large amounts of money now in the hope of returns over a future period of time-perhaps up to 5, 10 or more years.

3.3 Unemployment

What is unemployment?

Unemployment refers to those unable to find work, a waste of resources and a waste of resources. It negatively impacts a country's GDP and living standards, as those without jobs actively seek work at current wage rates.

How is unemployment measured?

In 2016, Portugal's population was over 10 million, with over 5 million able to work. However, 549,000 were unemployed, with the Labour Force Survey (LFS) measuring unemployment in the EU. The International Labour Organisation (ILO) defines unemployment, and Portugal's unemployment rate was 10.5% in the third quarter of 2016. This highlights the ongoing issue of unemployment in Portugal.

Types of unemployment

CYCLICAL OR DEMAND DEFICIENT UNEMPLOYMENT

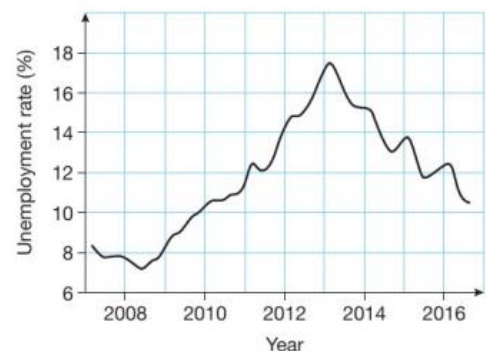
Cyclical unemployment, a deficiency in demand, is a significant issue in the economic cycle, where firms often lay off staff due to falling demand, causing a slowdown in business activity and a rise in unemployment.

STRUCTURAL UNEMPLOYMENT

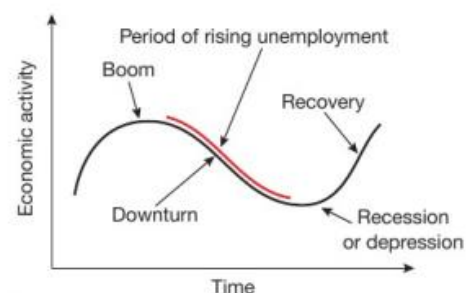
Over a period, the structure of an economy changes. Changes in the structure of the economy can result in structural unemployment. There are three main types.

SUBJECT VOCABULARY

unemployment when those actively seeking work are unable to find a job



▲ Figure 27.1 Unemployment in Portugal, 2006-16



▲ Figure 27.3 Economic cycle and unemployment

■ **Sectorial unemployment** occurs when people are laid off because the industry, they work in is in decline.

■ **Technological unemployment** occurs when jobs that were previously done by people are now done by machines.

■ **Regional unemployment**- Unemployment in a particular country is not likely to be the same in all regions.

SEASONAL UNEMPLOYMENT

Some types of workers are only required for certain times of the year.

VOLUNTARY UNEMPLOYMENT

Most people are unemployed against their wishes. They are victims and want to work if they are given the opportunity.

FRICTIONAL UNEMPLOYMENT

Frictional unemployment is short-term unemployment. It occurs when people are unemployed as they move from one job to another. Frictional unemployment will always exist in an economy, but it is not considered to be a problem.

Impact of unemployment

OUTPUT

If people are unemployed, the productive potential of a country is not being fully exploited. As a result, levels of output are lower than they could be.

USE OF SCARCE RESOURCES

People who are out of work do not make any contribution to production. This is a waste of resources and results in lower levels of national income.

POVERTY

In some developing countries, many people have never worked in their lives. There have never been any employment opportunities for them. As a result, they must live in poverty. They may try to support themselves at a minimum level by growing some food on a plot of land,

GOVERNMENT SPENDING ON BENEFITS

In most developed countries, when people are unemployed, they are entitled to receive some financial benefit from the state. If unemployment levels rise, the government must allocate more money to unemployment benefit. This extra expenditure will incur an opportunity cost.

TAX REVENUE

When unemployment rises, tax revenues will fall because most taxes are linked to income and spending. This means the government has less to spend and may have to cut public sector services

CONSUMER CONFIDENCE

During periods of high unemployment, consumer confidence is likely to fall. Most people who find themselves without a job must suffer hardship. Their incomes fall because state benefits are generally lower than wages.

BUSINESS CONFIDENCE

When firms lay off workers, they must pay them redundancy money. Also, the remaining workers may be demotivated because they may fear that they will be the next to be made redundant.

SOCIETY

Sometimes unemployment can have an impact on local communities.

cyclical or demand deficient unemployment unemployment caused by falling demand as a result of a downturn in the economic cycle

laying off to stop employing someone because there is no work for them to do

frictional unemployment when workers are unemployed for a short period of time as they move from one job to another

seasonal unemployment unemployment caused when seasonal workers, such as those in the holiday industry, are laid off because the season has ended

voluntary unemployment unemployment resulting from people choosing not to work

structural unemployment unemployment caused by changes in the structure of the economy such as the decline in an industry

3.4 Balance of payments on the current account

The current account on the balance of payments

Goods and services which are sold overseas are called **exports**. Those goods and services which are bought from other countries are called **imports**. A country will keep a record of all transactions relating to international trade. This record is called the **balance of payments**. It is divided into two parts.

The **current account** shows the value of all imports and exports over a period. It includes both visible trade and invisible trade.

The **capital and financial accounts** record flows of money into and out of a country resulting from transactions relating to savings, investments and speculation,

Current account deficits and surpluses

It is very unlikely that in any given period, the value of a country's exports will be the same as the value of its imports. The difference between the two values is called the **current balance**. The current account balance can be in deficit or surplus.

A **current account deficit** occurs when the value of imports is greater than the value of exports. This means that the money flowing out of the economy resulting from international trade is greater than the money flowing in.

A **current account surplus** is recorded if the value of exports is greater than the value of imports. This means that the money flowing into the country resulting from international trade is greater than the money flowing out.

Visible and invisible trade

Visible trade is to do with the buying and selling of physical goods. The difference between the total value of visible exports and imports is called the **balance of trade or visible balance**. Figure 28.3 shows the visible trade for a country in 2016. The balance of trade is -US\$69 181 million (US\$96 732 - US\$165 913). It has imported more goods than it has exported.

SUBJECT VOCABULARY

balance of payments record of all transactions relating to international trade

capital and financial account that part of the balance of payments where flows of savings, investment and currencies are recorded

current account part of the balance of payments where all exports and imports are recorded

exports goods and services sold overseas

imports goods and services bought from overseas

current account deficit when value of imports exceeds the value of exports

current balance difference between total exports and total imports (visible and invisible)

balance of trade or visible balance difference between visible exports and visible imports

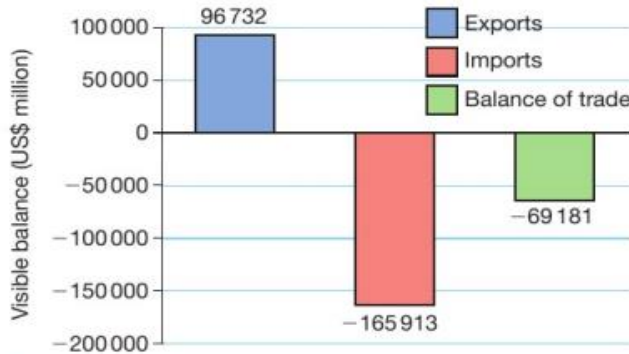
invisible trade trade in services

primary income money received from the loan of production factors abroad

secondary income government transfers to and from overseas agencies such as the EU

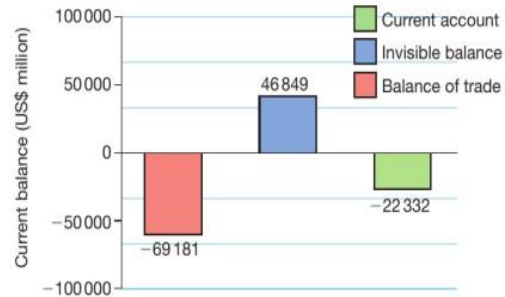
visible trade trade in physical goods

Invisible trade involves the exchange of services. Invisible trade also includes flows of money resulting from the ownership of assets overseas. This is called **primary income**. Finally, invisible trade also includes **secondary income**, which results mainly from government transactions.



▲ Figure 28.3 Visible balance for a country, 2016

Figure 28.4 shows the balance on the current account for a country in 2016. The current balance is the balance of trade and the invisible balance added together. It is -US\$22,332 million. This is a current account deficit.



▲ Figure 28.4 Current balance for a country, 2016

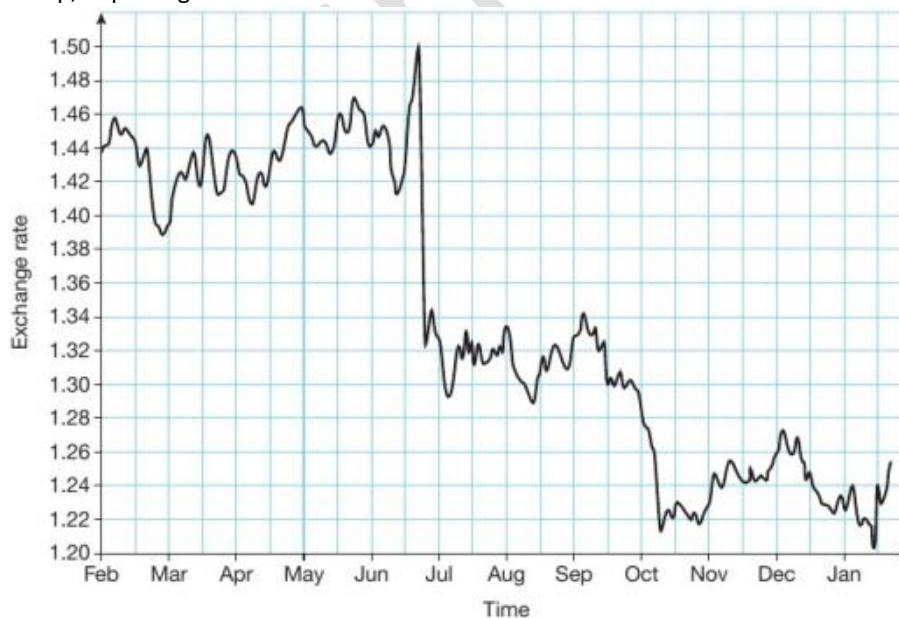
exchange rate price of one currency in terms of another

The relationship between the current account and exchange rates

The **exchange rate** plays a crucial role in influencing international trade patterns. A stronger exchange rate leads to higher prices for exports and lower prices for imports, resulting in fewer exports and more imports. This can negatively impact the current account, particularly if a country already has a deficit. Additionally, a country's current account balance can influence the exchange rate, driving up demand for its currency.

Examples of real-world exchange rates

The exchange rate, a key indicator of a country's currency exchange rate, can fluctuate due to market forces. For instance, the UK's pound's value fell significantly after Brexit, from £1 = US\$1.50 to around £1 = US\$1.24, a 17 per cent drop, impacting international trade.



▲ Figure 28.6 Pound : dollar exchange rate, 2016/17

Reasons for deficits and surpluses

QUALITY OF DOMESTIC GOODS

If a country develops a reputation for high-quality goods, it is likely to enjoy rising sales from overseas buyers. This will drive up the demand for exports and help to improve a current account balance.

QUALITY OF FOREIGN GOODS

If goods and services from overseas are superior to those produced domestically, there will be an increase in demand for these imports. Clearly this will have a negative impact on the current balance. The size of a current account deficit.

PRICE OF DOMESTIC GOODS

Demand for goods and services is heavily influenced by the price. If domestic goods are expensive, owing to rapid inflation.

PRICE OF FOREIGN GOODS

If foreign goods are cheaper than those produced at home, there will be a rapid in demand for imports. This will have a negative effect on the current account, reducing the size of a surplus,

EXCHANGE RATES BETWEEN COUNTRIES

Since the exchange rate affects the prices of domestic goods and foreign goods, any changes in the exchange rate can have an impact on the current account.

The impact of a current account deficit

If a nation has a persistent current account deficit, it may experience several effects.

LEAKAGES FROM THE ECONOMY

A persistent current account deficit suggests that a country is becoming increasingly dependent on imports. This means that consumers are buying goods produced outside the domestic economy.

INFLATION

A country running a high current account deficit might be exposed to inflationary pressures. If the prices of imports go up, this will be reflected in the general price level since many imported goods will be counted when the CPI is calculated.

LOW DEMAND FOR EXPORTS

A country with a high current account deficit might be struggling to sell goods and services abroad. If demand for exports is low, it might mean that the quality of goods and services is poor, or the price is too high.

FUNDING THE DEFICIT

If a country has a continuing current account deficit, it will need foreign currency to pay for the rising quantity of imports that are being purchased. If the foreign currency reserves of a country run low, it may be necessary to borrow.

3.5 Protection of the environment

Business activities that damage to the environment

MINING

Open-cast mining, where minerals are extracted from large holes, is a damaging activity due to the limited availability of valuable materials. This process involves crushing rocks, releasing harmful materials like radioactive elements and asbestos-like minerals, and producing tailings that can leak into water systems. Open-cast mines also cause damage to wildlife habitats and large amounts of water, potentially threatening fresh drinking water supplies.

POWER GENERATION

The generation of electricity can be very damaging to the environment. This is particularly the case when it is produced by burning fossil fuels, such as coal and oil. A wide range of harmful environmental impacts can result from fossil fuel power plants.

CHEMICAL PROCESSING

Chemicals are used to make most synthetic materials and play an important role in everyday life. However, chemicals can also create a negative impact on human health and the environment when their production and use are not managed responsibly. The range of chemical processes and applications in business is huge.

AGRICULTURE

Farming can have a variety of negative environmental effects. One of the main problems results from the use of pesticides and fertilisers. Although fertilisers can increase crop yields, after heavy rainfall some always ends up in rivers, lakes and the sea where it can kill aquatic life.

CONSTRUCTION

The construction industry produces the most waste material in the UK, with 109 million tonnes produced annually. About 24% of this waste is total, three times more than all households combined. Construction activities contribute to air pollution, dust, water pollution, and soil erosion. The industry also produces harmful chemicals and waste, which can be burned or disposed of in landfills. Most businesses use fossil fuels, causing environmental damage, and produce waste that cannot be reused or recycled.



▲ Algal bloom caused by water pollution

Ways business damage the environment

VISUAL POLLUTION

Visual pollution refers to unattractive physical aspects of business activity, such as smoke from power stations, office blocks, advertising hoardings, wind farms, electricity pylons, slag heaps, and overflowing skips. Litter is also considered visual pollution, especially in countries with no organized collection system.

NOISE POLLUTION

If excessive noise results from a business activity, this could be regarded as noise pollution. If noise causes disturbance to everyday life, then it can be a problem for people and reduce their quality of life.

AIR POLLUTION

Air pollution, caused by factories, machines, and vehicles, causes around 6.5 million deaths annually, with 90% occurring in low- to middle-income countries. The World Health Organization estimates 90% of these deaths occur in Southeast Asia and the Western Pacific. The main causes of air pollution vary globally, with China primarily causing particle emissions from coal burning and India primarily resulting from indoor burning.

A summary of the way businesses might cause pollution is given below.

- Burning of fossil fuels: Sulphur dioxide, which comes from burning fossil fuels, such as coal and petroleum, is one the major causes of air pollution. Emissions from vehicles.
- Emissions from factories and other business activities: Manufacturing and processing businesses discharge carbon monoxide, hydrocarbons, organic compounds and chemicals into the air, which contribute to pollution.
- Agricultural activities: Ammonia is one of the most dangerous gases in the atmosphere. It is often a by-product from a range of agriculture activities.

WATER POPULATION

Around two-thirds of the planet is covered in water. However, only about 2.5 per cent of this water is drinkable. Unfortunately, in many countries the supply of safe drinking water is diminishing due to water pollution. Some of the main causes of water pollution by businesses include the following.

■ **Industrial waste:** Many industries, such as power generation, brewing and chemical processing, use very large quantities of water in their manufacturing processes.

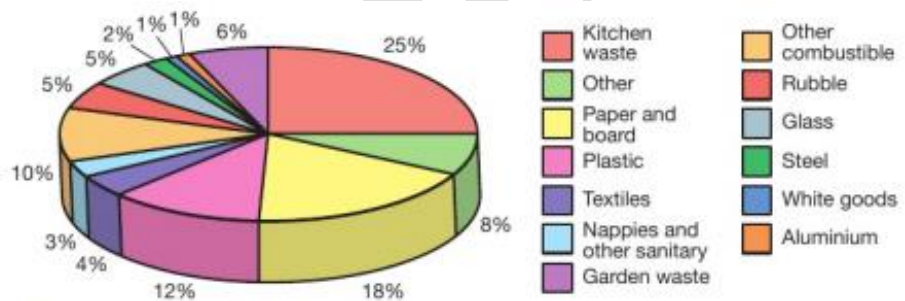
■ **Marine and ocean dumping:** Marine and ocean dumping, caused by shipping, oil extraction, and land waste, leads to water pollution. Household refuse, including paper, aluminum, rubber, glass, plastic, and food, can take years to decompose, like foam and Styrofoam.

■ **Sewerage:** Sewage discharge into the sea can be treated in developed countries, but untreated waste can also contain chemicals, paper, plastic, and other materials. Sewage can also transport viruses, causing illnesses like hepatitis, typhoid, and cholera from contaminated water.

Government intervention to protect the environment

Taxation

Governments impose taxes on businesses that cause environmental damage to meet social costs. In 2016, Canada introduced a carbon tax to raise fossil fuel prices, reducing emissions and creating jobs. Another common tax is the landfill tax, which aims to reduce landfill to almost zero by 2020. The EU estimates that 80% of household solid waste is recyclable or compostable.



▲ Figure 29.3 The components of EU refuse (solid waste)

Subsidies

The government can offer grants, tax allowances and other subsidies to firms as an incentive to reduce activities that damage the environment.

Regulations

China's 2016 plan to improve water quality in rivers, lakes, coasts, and aquifers includes banning industrial plants, paper mills, and refineries that pollute water supplies. The government has already blocked coal gasification plants and focuses on small-scale paper, leather, printing, oil refineries, electronic plating, and pharmaceutical factories.

Population permits

Governments issue pollution permits, allowing businesses to discharge a certain amount of polluting material per year. These permits are 'tradable', allowing businesses to sell them if they reduce their pollution levels. This incentive encourages the introduction of new pollution-reducing technology and raises profits.

Park provision

National parks are large, illegal areas of natural beauty in many countries, preserving wildlife, historic sites, and special interest areas. They welcome visitors but may have restrictions, such as prohibited fire lighting and camping.

3.6 Redistribution of income

Income inequality

Income inequality is a severe issue in the USA, with the top 0.1 percent earning an average annual income of \$6,087,113 in 2014, while the bottom 90% earned only \$33,068, indicating significant disparities.

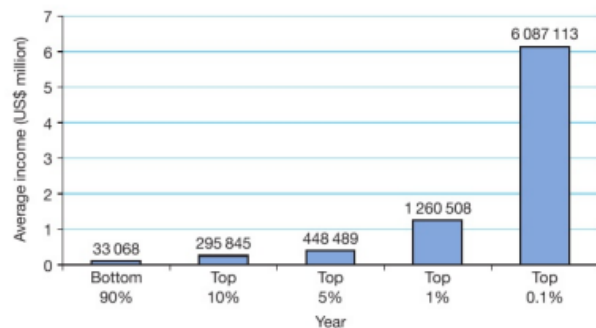
These huge differences in incomes may arise for several reasons.

- Workers with natural talent, a good education, valuable work experience or who can offer labour in a market where there is a shortage of qualified labour, will tend to earn more.

- People who do not work, such as pensioners, receive lower incomes than those in employment.

- The extent to which a government redistributes income through taxes and welfare payments is influential.

- People who own assets such as property, shares and capital will enjoy additional income such as rents, dividends and interest, respectively.



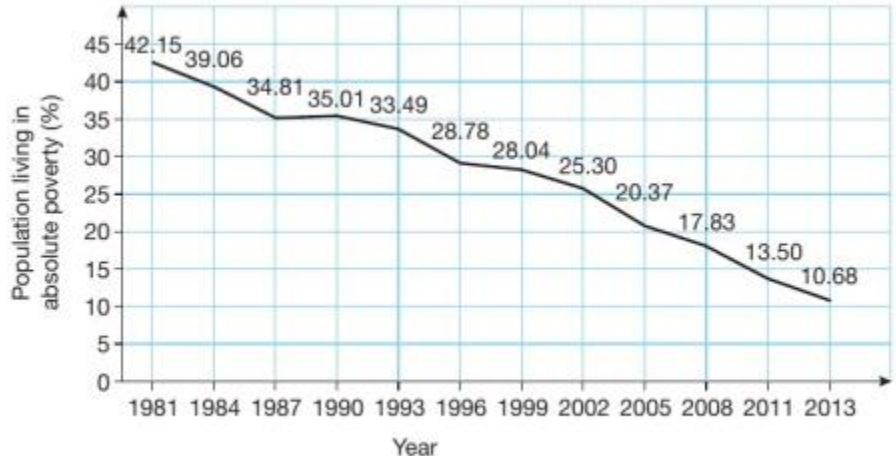
▲ Figure 30.1 Income inequality in the USA (US\$)

Lorenz curve graphical representation of the degree of income or wealth inequality in a country

Income inequality differences in income that exist between the different groups of earners in society, that is, the gap between the rich and the poor

Absolute poverty

Absolute poverty refers to a situation where basic needs are not adequately met, such as food, shelter, water, sanitation, education, and healthcare. In 2015, the World Bank defined it as those living on less than \$1.90 per day. In developed nations, absolute poverty levels are low, but in 2015, 702 million people (9.6% of the world's population) were living in poverty, with many in Africa and Asia. Governments provide welfare payments to those in need.



▲ Figure 30.3 Percentage of the world's population living in absolute poverty

Relative poverty

Relative poverty refers to individuals at the bottom of a nation's income scale, falling short of the average living standard. It is measured by the number of households with total income below the median income for that country. In the EU, the level is 60%. Relative poverty varies between countries due to the median income level, with richer countries having higher median income levels. Over time, income levels usually rise, allowing individuals to move out of poverty or further away from the poverty line.

relative poverty poverty that is defined relative to existing living standards for the average individual

absolute poverty where people do not have enough resources to meet all of their basic human needs

Reasons to reduce poverty and inequality

MEET BASIC NEEDS

Around 10% of the world's population lives in absolute poverty, with 700 million people struggling to survive. Many are undernourished, with 47-8% in Zambia and 47.7% in the Central African Republic. In some cases, people in absolute poverty starve to death, particularly young children. Undernutrition worsens the effects of diseases like measles and malaria, and 161 million children under five cannot fully develop physically. Eliminating absolute poverty would meet basic needs and prevent life loss from starvation.

RAISE LIVING STANDARDS

Reducing poverty can improve global living standards by meeting basic needs and increasing average living standards. Reducing relative poverty can also improve living standards, as rising median incomes lead to higher incomes for those living on less than 60% of the median income. However, ill health and early death remain issues, as people in relative poverty have poorer housing, less nutritious diets, and limited access to healthcare. Reducing poverty can boost global economic growth, increase employment, income, and tax revenue, which can be used to improve public services.

ETHICAL REASONS

Many believe that reducing poverty and income inequality is a moral duty for both individuals and governments. However, the sacrifice needed by the better off to alleviate poverty is small. The world's income inequalities are significant, with the richest countries having higher GDPs than the poorest. Many ethically minded individuals donate to charities like Oxfam and Save the Children to help reduce poverty, but there is still a need to address these inequalities globally.

Government intervention to reduce poverty and income inequality

PROGRESSIVE TAXATION

A **progressive tax** system focuses on distributing tax more disproportionately to the rich, with the proportion of income paid in tax rising as the taxpayer's income increases. This approach is common in countries where personal income taxes are more progressive, as low-income individuals often do not have to pay any tax. Conversely, a **regressive tax** system places more burden on the poor, with taxes on spending like VAT being more regressive. A progressive tax system may close the income gap, but it may widen if average incomes rise rapidly.

REDISTRIBUTION THROUGH BENEFIT PAYMENTS

Tax revenues are used in developed countries to redistribute income in favor of the poor, often through direct payments to low-income individuals and those unable to work. These payments help reduce absolute and relative poverty. However, in countries with low GDPs, governments often lack sufficient funds to redistribute income in this way. In recent years, some developing countries have successfully reduced poverty and closed the gap between the rich and the poor, thanks to government commitment, booming oil sales, lower unemployment, rising wages, and public service investment.

INVESTMENT IN EDUCATION AND HEALTH CARE

Education is a key factor in reducing poverty, as it equips future generations with skills like reading, writing, numeracy, communication, and critical thinking. UNICEF emphasizes that education provides a safe environment for children, while health care programs can reduce child mortality rates, increase life expectancy, and alleviate suffering. Healthy children attend school more frequently, and longer life expectancy leads to increased retirement savings and increased investment. Additionally, healthy individuals are more productive in the workplace, contributing to economic growth.

3.7 Fiscal policy

Policy instruments

Policy instruments, such as interest rates, taxation rates, and government expenditure, are economic variables used by governments to achieve macroeconomic objectives. Changes in these instruments can impact aggregate demand, inflation, unemployment, and GDP, affecting other economic variables.

Fiscal policy

Fiscal policy is a crucial policy instrument that adjusts government expenditure and taxation levels to influence aggregate demand in the economy. It influences firm and individual behavior, such as heavy taxes on harmful products. Governments plan expenditure, raise money, and borrow, published in their **budgets**.

Government revenue

The main source of revenue for a government is taxation. Governments all over the world impose taxation for the following reasons.

- To pay for public sector services.
- To discourage certain activities.
- Taxes can be used to help to control aggregate demand in the economy. This is discussed in more detail later.
- The distribution of wealth in the economy can be made fairer. Taxing the wealthy more heavily than the poor achieves this. This is discussed in Chapter 30 (pages 240-249).

DIRECT TAXES

Most government taxes fall into two categories. Direct taxes are taxes imposed on firms and individuals. They are usually linked to income and wealth. Some of the key direct taxes used around the world are outlined below.

- Income tax is a direct tax on the amount earned by an individual. It is a common and important tax worldwide. Both employed and self-employed people must pay this tax.
- Social insurance taxes are like income tax. They are imposed on people's income.
- Corporation taxes are levied on the profits made by limited companies.
- Capital gains tax is levied on any financial gains made when selling assets at a profit.

INHERITANCE TAXES

Is paid on money that is inherited from people who die.

INDIRECT TAXES

Any tax on spending is an indirect tax. Some of the main indirect taxes used around the world are described briefly below.

- Sales taxes are taxes on spending.
- Duties are often heavy taxes on a select range of goods.
- Council tax is collected by local authorities to help pay for local services such as refuse collection. It is levied according to the value of residential property and is paid by the occupants.
- Business rates are also collected by local authorities and contribute to the provision of local community services.
- Stamp duties are paid when buying certain assets, such as houses and shares.

SUBJECT VOCABULARY

policy instruments tools governments use to implement their policies, such as interest rates, rates of taxation, levels of government spending

SUBJECT VOCABULARY

budget government's spending and revenue plans for the next year
fiscal policy decisions about government spending, taxation and levels of borrowing that affect aggregate demand in the economy

SUBJECT VOCABULARY

direct taxes taxes levied on the income earned by firms and individuals

ENVIRONMENTAL TAXES

These are designed to protect the environment.

Government expenditure

The Canadian government's 2015 budget outlines total planned expenditure. Some countries divide government spending into mandatory and discretionary spending. Mandatory spending is automatically determined by current systems, while discretionary spending is extra or new, like a new motorway. Table 31.1 outlines the main areas of focus for most countries.

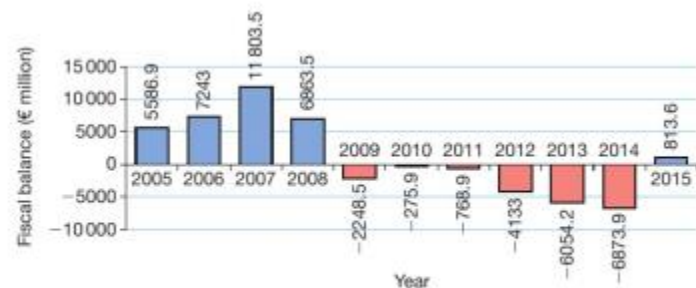
SUBJECT VOCABULARY

fiscal deficit amount by which government spending exceeds government revenue

fiscal surplus amount by which government revenue exceeds government spending

Fiscal deficits and fiscal surplus

Fiscal deficits occur when governments spend more than they receive in tax revenue, requiring borrowing to fund the deficit. Fiscal surpluses, on the other hand, occur when governments spend less than they receive in tax revenues, potentially used to repay debts. Sweden experienced **fiscal surpluses** from 2008 to 2015, illustrating the cycle of fiscal deficits and surpluses.



▲ Figure 31.4 Fiscal balances for Sweden, 2005–15 (€ million)

Impact of fiscal deficits and fiscal surplus

FISCAL DEFICITS

Governments often avoid running fiscal deficits, as they require borrowing to fund overspending. This leads to a larger national debt, requiring more revenue to pay off debt. Interest payments have a high opportunity cost, potentially causing higher taxes or infrastructure development. Persistent fiscal deficits also burden future generations with the debt of "today," causing unfairness.

FISCAL SURPLUSES

A fiscal surplus can be beneficial for a government, as it can be used to fund public services, lower taxes, or pay off national debt, strengthening finances. It's crucial to analyze fiscal deficits in relation to GDP to understand their impact.

The impact of fiscal policy on microeconomic objectives

Fiscal policy is also used to influence aggregate demand in the economy. In some years, a government may increase the size of a budget deficit (or reduce a surplus), by spending more or taxing less, to **stimulate** the economy. This is called **expansionary fiscal policy**. In contrast, it may be necessary to reduce aggregate demand. In this case, the government will plan to reduce the size of a deficit (or increase a surplus) by spending less or taking more in tax. This is called **contractionary fiscal policy**. Some examples of the impact of fiscal policy on macroeconomic objectives are outlined below.

INFLATION

Contractionary fiscal policy can be used to reduce inflation. If it is thought that inflation is being caused by aggregate demand growing too quickly, measures can be taken to reduce demand.

ECONOMIC GROWTH

Expansionary fiscal policy can be used to help stimulate economic growth. Increases in government expenditure will increase aggregate demand.

UNEMPLOYMENT

Expansionary fiscal policy can help to reduce unemployment. Again, increases in government expenditure and tax cuts can help to stimulate demand. To meet this extra demand, firms will have to produce more.

CURRENT ACCOUNT DEFICIT

Fiscal policy might be used to help influence the balance on the current account.

FISCAL POLICY AND THE ENVIRONMENT

More recently, governments have used fiscal policy to tackle environmental problems.

SUBJECT VOCABULARY

expansionary fiscal policy fiscal measures designed to stimulate demand in the economy

contractionary fiscal policy fiscal measures designed to reduce demand in the economy

SUBJECT VOCABULARY

monetary policy use of interest rates and the money supply to control aggregate demand in the economy

money supply amount of money circulating in the economy

3.8 Monetary policy

Monitory policy

The **money supply**, a crucial component of aggregate demand, is influenced by government adjustments in taxation and expenditure. **Monetary policy**, a method of demand management, involves adjusting interest rates or the total amount of money circulating in the economy, including notes, coins, and money held in bank accounts.

Interest rates

Interest is the price paid to lenders for borrowed money. It is the price of money. In most countries, there are many different rates of interest. There are several reasons for this.

- Different banks charge different rates as they compete for business.
- Rates are higher if money is borrowed without security.
- The amount paid to borrowers is higher than the amount given to savers. This allows moneylenders such as banks to make a profit.
- Some of the highest rates of interest are charged to credit card users.

SUBJECT VOCABULARY

base rate rate of interest set by government or regional central banks for lending to other banks, which in turn influences all other rates in the economy

mortgage legal arrangement where you borrow money from a financial institution in order to buy land or a house, and you pay back the money over a period of years; if you do not make your regular payments, the lender normally has the right to take the property and sell it in order to get back their money

rate of interest price of borrowing money

The role of central banks in setting interest rates

In many countries, interest rates are set by a central bank. Central banks play an important role in the economy by:

- Implementing the government's monetary policy and regulating the banking system
- Acting as a lender of last resort to commercial banks
- Controlling inflation and stabilising a nation's currency
- Eetting interest rates.

Impact of interest rate changes on macroeconomic objectives

INFLATION

Monetarists believe that inflation is caused by the money supply growing too quickly. They say that the way to reduce inflation is to slow down the speed at which the money supply is growing. This is likely to involve raising the rate of interest.

UNEMPLOYMENT

A government might use lower interest rates to reduce unemployment. If interest rates were cut, there would be an increase in demand for loans. As a result, spending by firms and households would increase.

ECONOMIC GROWTH

Monetary policy might be used to help smooth out the small variations in the economic cycle.

THE CURRENT BALANCE

A government could use monetary policy to adjust the balance on the current account. The overall effect on the current balance of higher interest rates depends on the following.

- The income elasticity of imports: If demand for imports were income elastic, higher interest rates would reduce demand for them. This would improve the current balance.
- The strength of the link between interest rates and exchange rates: If the link is strong, higher interest rates will raise exchange rates. Exports will become expensive, and imports will become cheaper.
- The price elasticity of demand for imports and exports: If they are both price elastic and the exchange rate does rise when interest rates rise, imports will be cheaper, and exports will be dearer. This would worsen the current balance.

The mechanism by which interest rate changes affect consumers and firms

CONSUMERS

Interest rates affect consumer behavior. Lower rates lead to increased demand for loans and lower mortgage payments, allowing consumers to spend more. Conversely, higher rates encourage spending, as consumers reduce borrowing due to increased costs. This results in lower demand for goods and increased mortgage payments, causing households to cut spending or reduce saving.

FIRMS

Interest rates affect firms using borrowed money to fund their business activities. Lower rates boost profits, increase business confidence, and stimulate investment. Conversely, higher rates raise costs, lower profits, reduce business confidence, and make entrepreneurs more cautious. The relationship between interest rates and exchange rates is also significant. When interest rates fall, the exchange rate also falls, leading to cheaper export prices and increased demand for goods and services. This results in improved aggregate demand and current account balance.

The use of asset purchasing by central banks

Quantitative easing is a method used by many countries to control the money supply by buying financial assets from commercial banks. This results in a flow of money, which can be used for new loans, increasing aggregate demand. However, this approach can be inflationary as the money used by the government is created electronically, resembling printing money.

SUBJECT VOCABULARY

quantitative easing buying of financial assets, such as government bonds from commercial banks, which results in a flow of money from the central bank to commercial banks

3.9 Supply side policies and government controls

What are supply side policies?

Supply side policies are used to help increase aggregate supply in the economy. They can be targeted at the whole economy or at those parts where an obstacle exists that prevents economic growth. In many countries, supply side policies have aimed to:

- Improve flexibility in labour markets by removing restrictions
- Restore the incentive to work by lowering taxes on work and enterprise
- Promote competition through privatisation, deregulation and helping small firms
- Increase investment by improving the flow of capital in capital markets.

SUBJECT VOCABULARY

aggregate supply total amount of goods and services produced in a country at a given price level in a given time period

supply side policies government measures designed to increase aggregate supply in the economy

PRODUCTIVITY

Supply side policies generally improve the productivity of production factors. This means that resources are used more effectively, and the productive potential of the economy can be increased. Several supply side policies have attempted to increase labour productivity using the following approaches.

■ **Improving flexibility:** In the past, many believed that labour markets were too inflexible, the government introduced a range of anti-trade union legislation to weaken unions and help labour markets work more freely.

■ **Training and education:** If people receive more education and training, the quality of the workforce will improve. This will help improve labour productivity and increase aggregate supply. This is discussed in more detail below. Some supply side policies are designed to promote more competition

TOTAL OUTPUT

Supply side policies aim to increase the productive potential of the economy. With increased volumes of output, national income will rise and living standards will be improved. Also, if the government can increase supply, there is less chance of demand-pull inflation and more jobs would be created. Therefore, unemployment will be lower.

Impact of supply side policies on macroeconomic objectives

PRIVATISATION

Governments have privatised state assets to break up monopolies and promote competition. Private sector businesses must make a profit to survive, and competitive pressure should improve quality and reduce prices. Some services have been contracted out, but privatisation can lead to consumer exploitation, price increases, and poor-quality services, especially in industries like water supply and energy distribution.

DEREGULATION

Regulation, often called 'red tape', involves government controls in markets. Deregulation in business generally means tackling problems such as:

- Excessive of paperwork
- Obtaining unnecessary licenses
- Having lots of people or committees to approve a decision
- Various 'trivial' rules that slow down business development.

Many governments have addressed these problems by relaxing regulations that restrict competition. However, inadequate or insufficient regulation may bring problems.

EDUCATION AND TRAINING

Improving human capital through education and training can lead to increased productivity and employability. Governments and firms can invest in schools, universities, and colleges, and provide incentives for training. However, investment in education is expensive and returns are not immediate, leading to inadequate funds in many countries. Over 226 million children globally do not attend secondary school, highlighting the need for improved education and training.

POLICIES TO BOOST REGIONS WITH HIGH UNEMPLOYMENT

One of the advantages of supply side policies is that they can be targeted or used selectively. In some countries, it is likely that certain regions will have far higher unemployment than others

INFRASTRUCTURE SPENDING

The Indian government is investing heavily in infrastructure development, including road construction and high-speed broadband networks. This will improve transport and communications systems, making it easier for private sector

firms to distribute goods. Investment in education and healthcare will also improve human capital, benefiting both private and public sectors. However, more is needed due to the underdeveloped network.

LOWER BUSINESS TAXES TO STIMULATE INVESTMENT

Economic growth can be accelerated by encouraging businesses to invest more. Supply side measures, such as reducing profits and maintaining a stable economy, can help. Governments can maintain a stable economy and increase investment funds. Examples include reducing corporation tax rates, allowing firms to offset investment costs with capital allowances, and using tax incentives to encourage saving and investing in companies. Overall, these measures can help accelerate economic growth.

GOVERNMENT CONTROLS

Governments can manage the economy through fiscal, monetary, and supply side policies, including environmental legislation, fines for exploitation, and business conduct standards. These controls reduce exploitation but may impose costs on firms, potentially hindering growth and development.

3.10 Relationships between objectives and policies

Impact of policies measures on macroeconomic objectives

Governments use policy instruments to achieve macroeconomic objectives, such as promoting economic growth, reducing inflation and unemployment, preventing deficits, and protecting the environment. Fiscal, monetary, and supply side measures impact economic variables. However, achieving macroeconomic objectives can be challenging due to both positive and negative effects, requiring governments to accept trade-offs between objectives.

Unemployment and inflation

POLICIES TO REDUCE INFLATION

Inflation, particularly if it gets out of control, can be very harmful for an economy. In many countries, central banks will automatically raise interest rates if they have been given an inflationary target to meet. When interest rates are high, there will be a decrease in aggregate demand. This will help to reduce inflation but there may be some serious negative effects, such as the following.

- Higher interest rates will discourage consumers and businesses from borrowing. As a result, there will be a fall in consumption and investment. This will reduce aggregate demand and lower economic growth.
- Higher interest rates will result in higher mortgage payments for many households. This will reduce their spending power and lead to a fall in aggregate demand.
- Firms will react by reducing capacity and laying off staff. Firms will incur higher interest charges. This will raise their costs and reduce their profits. They may invest less, which will reduce aggregate demand.
- Higher interest rates will also discourage firms from borrowing to invest in new technology and expansion. This will hamper their long-term development. They may also lose their competitive edge in foreign markets.
- If higher interest rates result in higher exchange rates it may be harder for firms to sell abroad. Exporters are likely to react by laying off staff.

Even if a government favours the use of fiscal policy to reduce inflation, there will still be some negative effects.

- Higher taxes and lower government spending could result in unemployment.
- People may suffer because of poorer government services after the cuts in expenditure.

POSSIBLE TRADE-OFF

Anti-inflationary fiscal and monetary policies can negatively impact the economy, as governments often face a trade-off between reducing inflation and increasing unemployment. Economists suggest governments must accept higher

unemployment levels to reduce inflation, and rapid reductions may increase unemployment. Supply side measures, designed to increase output supply, may avoid rising unemployment but are often slow to impact the economy.

Economic growth and inflation

Policies and promotion growth

Governments worldwide are keen to see economic growth when elected, as it improves living standards and satisfaction. To promote growth, governments can use expansionary fiscal policies, such as lowering taxes or increasing government expenditure, which encourages businesses to produce more and stimulates aggregate demand. Additionally, using expansionary monetary policies, such as lower interest rates, can encourage borrowing and spending, leading to increased investment and economic growth. Quantitative easing can also stimulate growth by increasing the money supply and aggregate demand.

Possible trade off

Policies aimed at boosting economic growth can be too expansionary, leading to overheating and inflation. This can occur when firms struggle to meet aggregate demand, leading to price increases instead of production. Governments should be cautious, as excessive stimulation can cause inflation. Inflation is more likely in economies with limited capacity or immobile production factors. Supply side policies can help reduce inflationary pressures.

Economic growth and environmental protection

Growth and the environment

Economic growth, particularly in developing nations like China and India, can lead to environmental damage. Increased business output and increased vehicle consumption result in increased emissions and road congestion. This can lead to health risks, as over 80% of China's underground water is unsafe to drink due to pollution. Additionally, more land is taken for business development, reducing wildlife habitats and causing habitat loss.

Possible trade off

In developing countries, economic growth leads to reduced poverty, longer life expectancy, and improved living standards. While some argue environmental damage is worth it, governments are recognizing the cost and implementing measures to protect the environment.

Inflation and the current account on the balance of payments

Measure to reduce inflation

Inflation can negatively impact a country's current account balance. High inflation can lead to increased prices for exports, reducing demand for domestic goods and causing consumers to switch to cheaper imports. Monetary policy to reduce inflation can worsen the balance of payments situation by strengthening the exchange rate, increasing domestic currency demand and making exports more expensive and imports cheaper, further affecting the current account balance.

Possible trade off

To reduce inflation, a government may need to raise interest rates, which may worsen the current account. However, using fiscal policy alone can avoid worsening the current account. Cuts in spending or taxes can lead to a fall in demand without affecting the exchange rate, maintaining stable prices for exports and imports. Supply side policies, which are business-friendly, can boost exports and benefit the current account.

Revision questions

(1) In a mixed economic system, such as Portugal's, the government intervenes in the economy. Reasons for government intervention include to correct market failure and to achieve its aims for the economy, such as control of inflation. In 2017, one-fifth of Portugal's population was living in poverty and the government increased its spending. Discuss whether increasing government spending will enable a government to achieve its aims for the economy.

(2) In February 2016, share prices on stock exchanges fell throughout the world. There were several reasons for this, including concerns about the slowdown in world growth, the possibility of deflation and unemployment, and fears that some commercial banks could go out of business. Discuss whether government policy measures to reduce unemployment will cause inflation.

(3) Economists are uncertain about the future United States (US) macroeconomic performance. For instance, in recent years, US unemployment has fallen while the deficit on the current account of the balance of payments has fluctuated. Whether its current account deficit will rise or fall in the future may be affected by proposed tax cuts. Some economists suggest that the US government should not be concerned about the country's current account deficit. Explain two reasons why the objectives of low unemployment and balancing the current account may conflict.

(4) Since 1990, the population of Lithuania has fallen by one fifth because of net emigration. People usually leave in search of better living standards. In 2015, there were signs of improved macroeconomic performance as real GDP per head rose and unemployment fell. People expected that the decline in unemployment would affect the country's inflation rate and might also turn the government's budget deficit into a budget surplus. Define budget deficit.

(5) The Chinese government reformed the Chinese tax system in 2016. It extended VAT (sales tax) from the sale of goods to the sale of services enabling it to cut the corporation tax rate. Taxes on goods and services are usually regressive. The Chinese government wanted to raise living standards and hoped that a cut in the tax rate firms pay would attract multinational companies (MNCs) to the country. State two reasons for levying taxes.

(6) After the UK's decision to leave the European Union (EU) in June 2016, the value of the British currency, the pound (£), depreciated. However, in August 2016, despite the fall in the value of the £, the Bank of England reduced interest rates from 0.5% to 0.25%. This was to encourage further spending and borrowing to avoid a lower economic growth rate. Discuss whether a fall in interest rates will benefit an economy.

(7) There was a significant increase in the money supply in Angola in 2019. The National Bank of Angola was concerned that this would keep inflation above 17% and harm Angola's producers. The Angolan government had concentrated on reducing unemployment, which had fallen from 10% in 2010 to 7% in 2019. Discuss whether an increase in the money supply will always increase inflation.

(8) More agricultural markets come close to perfect competition than markets for manufactured goods and for services. The goals of business organisations can vary between markets, and within markets. In 2017, the Nigerian government used supply-side policy measures to influence the goals and performance of firms in a range of markets and to lower firms' average costs of production. Discuss whether the use of supply-side policy measures by a government will reduce firms' average costs of production.

(9) Mali is a developing country. Its Human Development Index (HDI) rose from 0.297 in 2000 to 0.442 in 2016. Most of Mali's workers are employed in agriculture and cotton is the country's main agricultural crop. The country's main export, however, is gold. The country is the third largest exporter of gold in Africa.

Discuss whether an increase in the size of a country's gold mining industry will benefit an economy

(10) Moldova is Europe's poorest economy with many of its people living in poverty. It is mainly an agricultural economy with many small farms. Its shops are also small. The government has used a range of policies, including supply-side policy, to improve the economy's performance. It has mostly been successful. For instance, unemployment has fallen

Discuss whether firms will benefit from a fall in unemployment.

(11) Between 2007 and 2017, the average wage in China tripled, while it fell in Brazil. The rise in average wage in China was particularly high in the tertiary sector. Farm workers experienced a smaller rise. In June 2017, unemployment in China was only 4% while it was 13.5% in Brazil. Despite the lower unemployment, China's inflation rate was lower than that of Brazil.

Discuss whether a country with high wage rates will have a high unemployment rate.

(12) In February 2017, China's central bank raised the rate of interest. It wanted to reduce borrowing and the growth of the money supply, but it was worried that the rise in the interest rate might reduce the country's economic growth rate. The change in interest rate is likely to have increased the workload of skilled commercial bank workers.

Discuss whether a rise in the rate of interest will reduce economic growth.

(13) In the 1990s Cambodia became a mixed economy. One of the results of this was specialisation in the clothing industry. In 2005, import quotas for clothing in the key markets of the USA and the EU were removed. Clothing now accounts for 80% of Cambodia's exports. The increased role of the private sector has resulted in a rise in malnutrition in Cambodia.

Discuss whether an increase in the role of the private sector will benefit an economy.

(14) Mexico has a history of trade deficits. The government is moving the economy closer to free trade, to try to improve its macroeconomic performance. It was predicted in 2017 that Mexico's economy would experience a small rise in its unemployment rate. In 2017 the economy's inflation rate was 6.6%, the highest rate since 2001. Several policy measures may be used to reduce inflation, including increasing the rate of income tax.

Discuss whether an increase in the rate of income tax will reduce inflation.

(15) It was announced in November 2016 that 500- and 1000-rupee banknotes could no longer be used in shops in India. These were replaced by the central bank, an institution that makes extensive use of division of labour. In India, cash is still an important form of money used in economic transactions. The replacement of banknotes put pressure on banking staff and other workers in the tertiary sector and affected the general price level.

Discuss whether deflation will benefit an economy.

(16) In February 2017, Europe experienced a shortage of fresh vegetables due to bad weather. For a period, the markets for several vegetables, including broccoli and lettuces, were not in equilibrium. The price of food tends to fluctuate more than the price of manufactured goods and services. These fluctuations influence the rate of inflation.

Discuss whether a higher inflation rate will benefit producers.