Edexcel

AS Level

Econ

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Unit 02

Section 01 – Measures of economic performance

Chapter 21 – Introduction to the measures of economic performance

MICROECONOMICS AND MACROECONOMICS

Microeconomics is the study of individual markets within an economy. In contrast, macroeconomics is concerned with the study of the economy as a whole. The price level of the whole economy is studied. Total levels of employment and unemployment are examined.

NATIONAL ECONOMIC PERFORMANCE

Macroeconomics provides insight into an economy's performance, allowing comparisons between different economies and determining the effectiveness of production, resource usage, and benefits. An economy is a system that resolves resource scarcity in a world of infinite wants. High levels of production, full utilization of resources, and low unemployment contribute to better economic performance. High price rises disrupt the economy's performance, and a national economy must avoid overspending and build up debts. The value of what it buys from other economies must roughly equal what it sells over time.

ECONOMIC GROWTH

One of the key measures of national economic performance is the rate of change of output. This is known as **economic growth**.

There is a standard definition of output based on a United Nations measure that is used by countries around the world to calculate their output. Using a standard definition allows output to be compared between countries and over time. This measure of output is called gross **domestic product or GDP**. GDP growth, adjusted for inflation, indicates a 3% increase in the economy's output over a 12-month period. Real GDP, or GDP at constant prices, indicates an increase in output. The economic growth rate measures the rate of change in output over a year, expressed as a percentage. For instance, Ireland's rate was 26.29% in 2015, while Brazil's rate was -3.85%.

The term **recession** means an economy has experienced negative economic growth over at least two consecutive quarters.

UNEMPLOYMENT

Unemployment is a significant issue in society, causing wasted resources and poverty. High unemployment indicates poor national economic performance, while low unemployment indicates good performance. Economic growth and unemployment are linked, with fast-growing economies having low unemployment due to increased production. Low growth is associated with rising unemployment, while rapid economic growth leads to net job creation, indicating an economy's performance by its rate of job creation.

INFLATION

Inflation refers to the increase in average prices in an economy, with positive rates indicating price rise and negative rates indicating price fall. Low, positive inflation is generally better than high inflation, as it has negative effects such as falling savings value and disrupting market knowledge. Inflation is considered acceptable at a few percent, but when it reaches 5%, it's considered too high. **Deflation**, or falling prices, is a problem in some industrialized countries, like Japan, making it harder for them to grow their GDP.

BALANCE OF PAYMENTS

A nation's spending on foreign goods and services is called the value of its imports. It earns money to pay for those imports by selling goods and services, known as **exports**, to foreigners. If the value of its **imports** is greater than the value of its exports then this must be financed, either through borrowing or reducing savings held abroad.

The **balance of trade** is a major part of the balance of trade records the value of goods and current account of the balance of payments. The services sold abroad (exports) and the value of goods and services bought from abroad (imports). Where exports of goods and services are greater than imports, there is said to be a **balance of trade surplus**. Where imports exceed exports, there is a **balance of trade deficit**.

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balance of trade part of the current account. The balance of trade records the value of goods and services sold abroad (exports) and the value of goods and services bought from abroad (imports). A positive value shows a surplus, a negative value shows a deficit.
balance of trade deficit when the value of imports is greater than exports.
balance of trade surplus when the value of exports is greater than the value of imports.
current account part of the balance of payments account. A major component of the current account is the balance of trade.
economic growth a measure of how much output has increased by over a 12-month period. It is expressed as a percentage.
exports goods and services sold abroad.
gross domestic product (GDP) a standard measure of the output of an economy, used by countries around the world.
imports goods and services bought from abroad.
inflation a continuing and general rise in prices across an economy.
recession two quarters of negative economic growth in a row.
unemployment occurs when individuals are without a job but are actively seeking work.

Chapter 22 – Economic growth and GDP/GNI

MEASURES OF NATIONAL INCOME

The accounting standard used by most countries is based on the United Nations' System of National Accounts 2008. Most countries today either have introduced this accounting standard or are in the process of revising their national income statistics to meet these accounting standards.

The key measure of national income used is gross **domestic product (GDP**). This is the total market value of all goods and services produced over a period of time.

Gross value added (GVA) at basic prices This is GDP minus indirect taxes plus subsidies on goods. Indirect taxes minus subsidies is called the basic price adjustment.

Gross national product (GNP) and gross national income (GNI) at market prices These are very similar measures of the domestic output of the country (as measured by GDP) plus earnings from overseas. More precisely, **gross national income (GNI)** is the value of the goods and services produced by a country over a period of time (GDP) plus net overseas interest payments and dividends (factor incomes**). Gross national product (GNP**) is the market value of goods and services produced over a period of time through the labour or property supplied by the citizens of a country, both domestically (GDP) and overseas.

Net national income at market prices Each year, the existing capital stock or physical wealth of the country depreciates in, or loses, value because of use. This is like depreciation on a car as it gets older. I

REAL OR VOLUME VERSUS NOMINAL OR VALUE

When measuring national income, the real value of national income can also be described as measuring the **volume of national income**. It is the basket of goods and services that can be bought with a given amount of money. When comparing national income in a previous year with that of today in real terms, what is being measured is the relative size of that basket of goods and services. In contrast, the **value of national income** measures the cost of the basket of goods and services at a given level of prices. The value is equal to the volume times the current price level.

ECONOMIC GROWTH

Real GDP, adjusted for inflation, represents changes in the volume of national income. The economic growth rate is the annual percentage change in real GDP. For example, Indonesia's economic growth rate was 4.9% in 2015, indicating an increase in output. In contrast, Russia's rate was -2.8% in 2015. A recession is an economic growth that has occurred over two consecutive quarters. Comparing growth rates between countries and over time is common, as seen in Indonesia's fall from 6.4% to 4.9% between 2010 and 2015.

TOTAL AND PER CAPITA

The national income of the USA is approximately the same as that of China today and seven times that of the UK (at PPPs). However, this measure compares total national income of those economies. To compare the living standards it is better to compare national income **per person or per head or per capita**. This means dividing national income by the size of the population.

TRANSFER PAYMENTS

Not all types of income are included in the final calculation of national income. Some incomes are received without there being any corresponding output in the economy. For instance:

- most developed economies have a system of welfare payments
- children receive pocket money and allowances from their parents
- an individual selling a secondhand car receives money, but no new car is created.
- These incomes, called transfer payments, are excluded from final calculations of national income.

For instance, government spending in national income is public expenditure minus spending on benefits and grants.

WHY IS NATIONAL INCOME MEASURED?

National income is a measure of the output, expenditure and income of an economy. National income statistics provide not only figures for these totals but also a breakdown of the totals. They are used in a number of different ways.

- Academic economists use them to test hypotheses and build models of the economy. This increases our understanding of how an economy works.
- Government may attempt to direct the economy, making changes in its spending or its taxes at budget time. Groups, such as trade unions, will make their own recommendations about what policies they think the government should pursue.
- They are used to make comparisons over time and between countries.
- They are used to make judgements about economic welfare. Growth in real national income per capita, for instance, is usually understood to mean a rising standard of living.

THE ACCURACY OF NATIONAL INCOME STATISTICS

National income statistics are inaccurate for a number of reasons.

Statistical inaccuracies National income statistics are calculated from millions of different returns to the government. Inevitably mistakes are made: returns are inaccurate or simply not completed. The statistics are constantly being revised in the light of fresh evidence.

The hidden economy Taxes such as goods and services taxes, and government regulations such as health and safety laws, impose a burden on workers and businesses. Some are tempted to evade taxes, and they are then said to work in the **hidden, black or informal economy**. In the building industry, for instance, it is common for workers to be self-employed and to under-declare or not declare their income at all to the tax authorities. Transactions in the black economy are in the form of cash.

Home-produced services - In the poorest developing countries, GDP per person is less than US$130 per year, making it impossible to survive. However, farming production is not traded, and national income statistics often underestimate the value of national output. Additionally, housewives and househusbands' services are not recorded, causing further under-recording.

The public sector Valuing public sector output is challenging due to its non-traded nature. To avoid this, non-traded output is valued at its cost of production, like a state school's cost of running. This method can lead to unexpected results.

THE LIMITATIONS OF USING GDP/GNI TO COMPARE LIVING STANDARDS OVER TIME

Comparing national income over time is crucial for economists to determine economic growth and living standards improvement. GDP/GNI may have limitations unless adjustments are made and additional information is available.

Consideration must be made for the following.

Prices - Over time, prices increase, so an increase in national income doesn't necessarily mean an increase in goods and services. To determine output, consider real changes in income, not nominal ones, and measure the nominal rate of economic growth.

The accuracy and presentation of statistics National income statistics are inaccurate, making it difficult to accurately predict income changes over time. Inflation rate fluctuations and changes in the method of calculating national income also contribute to these inaccuracies.

Changes in population National income statistics are often used to compare living standards over time. If they are to be used in this way, it is essential to compare real national income per capita (i.e. per person). For instance, if the population doubles while real national income increases by four times, people are likely to be nearer twice as well off than four times.

Quality of goods and services - Advances in technology can improve goods quality but may also lead to price decline. For example, cars in 1945 were devoted to defense expenditure, impacting the standard of living of the population.

Defence and related expenditures - During WWII, the UK's GDP was higher than in the 1930s, but much of it was devoted to defence expenditure, impacting the standard of living of the population.

Consumption and investment It is possible to increase standards of living today by reducing investment and increasing consumption. However, reducing investment is likely to reduce standards of living from what they might otherwise have been in the future.

Externalities National income statistics take no account of externalities such as pollution produced by the economy.

There has been some work on developing a measure called **green GDP**, which takes away the environmental costs of production from GDP. Environmental costs include loss of biodiversity. pollution and the use of non-renewable resources.

Income distribution When comparing national income over time, it is important to remember that an increased national income for the economy as a whole may not mean that individuals have seen their income increase. Income distribution is likely to change over time, which may or may not lead to a more desirable state of affairs.

THE LIMITATIONS OF USING GDP/GNI TO COMPARE LIVING STANDARDS BETWEEN COUNTRIES

Economists often compare national income between countries. Comparing national income between economies is fraught with difficulties too for many of the same reasons that it is difficult to compare national income over time.

• Countries may use different accounting conventions to calculate national income.

• The quality of national income data gathered varies greatly. For example, a poor country like Tanzania spends far less on gathering data than a rich country like the UK.

• The size of the unrecorded part of the economy differs between countries. Italy and Greece, for example, have much larger hidden economies than Sweden or the UK.

• National income figures must be adjusted for the size of the population. So GDP per capita rather than GDP itself is the variable that must be used to make comparisons.

• The quality of goods and services differs.

• Countries spend different proportions of their GDP on defence and related expenditures but these expenditures do not necessarily contribute to the standard of living of citizens.

• National income statistics take no account of externalities created by different economies.

• Income distributions differ between economies.

• Geography distorts comparisons.

• Market exchange rates do not reflect purchasing power. So simple comparisons using market exchange rates may give a distorted picture of living standards between countries. A way round this is to use purchasing power parities.

PURCHASING POWER PARITIES

The day-to-day market exchange rate can bear little relation to relative prices in different countries. So prices in some countries like Sweden or Germany can be much higher at official exchange rates than in the USA, China or India. Therefore, if national income statistics are to be used to compare living standards between countries, it is important to use an exchange rate that compares the cost of living in each country. These exchange rates are known as **purchasing power parities.**

INDICATORS OF NATIONAL HAPPINESS AND WELL-BEING

National income is often used as a substitute measure for economic welfare or the standard of living. This measure tends to focus on standard of living as a measurement of material welfare. Even with this focus, GDP per capita may only be a useful guide combined with other indicators such as average household real disposable income or quality of housing. Income is also often used as a measure of 'happiness': the higher the income, the happier the individual. However, there are many other factors apart from income and GDP that contribute to the standard of living of an individual.

REAL INCOMES AND SUBJECTIVE HAPPINESS

Economists have been studying happiness for nearly 200 years, with Jeremy Bentham stating that humans should act to cause the greatest happiness of the greatest number. However, measuring happiness for oneself and others remains a challenge. Recent brain science experiments have shown that happiness is associated with measurable electrical activity in the brain, which can be assessed using MRI scans. The 1970s found that happiness and income are positively related at low-income levels, but higher income levels do not increase happiness. This is known as the Easterlin Paradox, where an increase in consumption of material goods improves well-being when basic needs are not met. This suggests that average happiness in developed countries will not increase if GDP doubles. However, survey evidence suggests a positive correlation between relative income and happiness within a population. Those with above average incomes tend to have higher levels of happiness than those with below average incomes. Two suggested explanations for the correlation between relative income and happiness are: 1) the income of the top 10% in Bolivia, and 2) the income of the top 80% of the population.

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economic growth a measure of how much output has increased by, over a 12-month period. It is expressed as a percentage.
green GDP a measure of GDP that takes account of the environmental costs of production such as pollution and the use of non-renewable resources.
gross domestic product (GDP) a measure of the output or value added of an economy that does not include output or income from investments abroad or an allowance for the depreciation of the nation's capital stock.
gross national income (GNI) the value of the goods and services produced by a country over a period of time (GDP) plus net overseas interest payments and dividends (factor incomes).
gross national product (GNP) the market value of goods and services produced over a period of time through the labour or property supplied by citizens of a country both domestically (GDP) and overseas.
hidden, black or informal economy economic activity where trade and exchange take place but which goes unreported to the tax authorities and those collecting national income statistics.
national happiness and well-being the terms well-being, standard of living and quality of life are often used with the same meaning. However, the term 'living standards' tends to have a slightly narrower focus on material welfare. The term well-being covers every dimension of a person's life.
net national income a measure of national income that includes both net income from investments abroad and an allowance for deprecation of the nation's capital stock.
per person or per head or per capita per individual in a population.
public expenditure another name for government expenditure. Public spending is the amount of money spent by the government.
purchasing power parities an exchange rate of one currency for another which compares how much a typical basket of goods in one country costs compared to that of another country.
recession two consecutive quarters of negative economic growth.
standard of living how well off is an individual, household or economy, measured by a complex mix of variables such as income, health, and the environment.
subjective happiness this term is used when an individual rate their happiness by giving it a score, based on their self-evaluation of happiness. This can be problematic, since there is no measurement unit for happiness. This means objective indicators of happiness and well-being are also often used in studies to provide a clearer picture. Objective measures are things that affect our happiness or well-being, such as income, health, education, safety, etc.
transfer payments income for which there is no corresponding output, such as unemployment benefits or pension payments.
value/volume of national income the value of national income is its money value at the prices of the day; the volume is national income adjusted for inflation and is expressed either as an index number or in money terms at the prices in a selected base year.

Chapter 23 – measuring inflation and unemployment

INFLATION, DEFLATION AND DISINFLATION

Inflation is defined as a continuous general rise in prices across an economy. The opposite of inflation is **deflation**. This is defined as a continuous general fall in prices across an economy. **Disinflation** is defined as a fall in the rate of inflation.

A general rise in prices may be quite moderate. Creeping (slow) inflation would describe a situation where prices rose a few per cent on average each year. **Hyperinflation**, in contrast, describes a situation where inflation levels are very high. There is no exact figure at which inflation becomes hyperinflation.

The term **reflation** is used to describe the rise in GDP, which occurs following a recession. **Stagflation** is the term used to describe a period when inflation is rising or is very high at a time when the economy is in recession. The economy is stagnating (not growing) but there is also inflation.

MEASURING INFLATION USING THE CPI

The **Consumer Price Index (CPI)** is a measure of the price level and inflation. It is produced to international standards, which means comparisons can be made between countries. The price level is measured in the form of an index. So, if the price index were 100 today and 110 in one year's time, then the rate of inflation would be 10 per cent.

The Consumer Price Index (CPI) measures the additional money a typical household needs to buy the same goods the previous year. It involves collecting data on household spending patterns, such as a UK household spending £8 a week on lamb mince. Surveyors record the price of lamb per kilogram, calculating percentage increases over time and converting this into an index number form.

Commodity	Proportion of total spending	Weight	Increase in price	Contribution to increase in CPI
Food	75%	750	8%	6%
Cars	25%	250	4%	1%
Total	100	1000		7%

▲ Table 1 Weights and inflation

LIMITATIONS OF THE CPI

There are some limitations of the CPI as a measure of inflation. The CPI only provides information for how much more money a typical household needs to buy the same basket of goods as the same time the previous year. The weights will be adjusted annually to reflect any changes in the typical consumer's spending pattern over time. However, for many households, their basket of goods will differ substantially.

THE PRODUCER (WHOLESALE) PRICE INDEX (PPI)

The **producer price index** is used to measure the change in the price of a typical basket of goods bought and sold by the manufacturers of an economy. Like the CPI it is a weighted index to reflect the relative importance of different types of products to manufacturers. The PPI includes price indices of materials and fuels purchased by manufacturers (input prices) and price indices of finished goods or intermediate goods as they leave the factory gate (factory gate prices). Factory gate prices are also called output prices.

USE OF THE PRODUCER PRICE INDEX

The producer (wholesale) price index is used as an indicator of future trends in the rate of inflation (CPI). If retailers have to pay more for the products they buy from manufacturers, then retailers will try to pass on these higher costs to consumers. They will want to raise the price they charge to consumers. So, a rise in the producer price index is likely to cause a rise in inflation, as measured by the consumer price index. However, the relationship will not be perfect. There is also likely to be a time lag effect, so the impact on the CPI inflation rate may take a few months.

MEASURING UNEMPLOYMENT

Governments need to measure unemployment. It is an important measure of economic performance for an economy. The International Labour Organisation (ILO) has set an international standard for measuring unemployment. This measure of unemployment is used by the OECD, the statistical office of the EU and many other countries. This means unemployment can be compared between countries, since the same method of calculation unemployment is used.

SOME DEFINITIONS

The population of working age is all people within a certain age range, typically the statutory age for leaving school and the state retirement age. This could be 16-65.

The unemployed, according to the ILO measure, are those without a job, who want a job, have actively looked for work in the last four weeks and are available to start work in the next two weeks.

The employed are those who have work. The majority of workers are employees, which means they are employed by another individual or a firm. A minority are self-employed, working for themselves and not part of a company structure. Most are in full-time work, meaning they work the hours and the days that are the norm for a job. A minority are **part-time workers** who work for a proportion of the hours of full-time workers. As far as the ILO definition of employment is concerned, anyone who carries out at least one hour's paid work in a week is employed. Also counted as in employment, according to this measure, are people on government-supported training schemes and people who work unpaid in their family business.

The labour force is made up of those in employment and those unemployed according to the definitions above. The labour force is also known as the economically **active population.**

Those who are out of work, but do not meet the criteria of ILO unemployment are economically **inactive**. This includes people such as students, parents who stay at home to look after children, people who have taken early retirement, and those who are unable to work due to sickness or disability.

The **underemployed** are those who work, but want to work more hours.

To summarise:

- the population of working age (16-65) = economically active population + economically inactive population
- the labour force (economically active population) = those in employment + ILO unemployed.

THE LABOUR FORCE SURVEY AND THE ILO UNEMPLOYMENT RATE

The ILO **unemployment rate** is calculated using Labour Force Survey (LFS) statistics. The LFS is a sample survey of households. The survey asks questions about individual's personal circumstances and their activity in the labour market.

The ILO unemployment rate is the proportion of the economically active population who are ILO unemployed.

$$\text{ILO unemployment rate (\%)} = \frac{\text{ILO unemployed}}{\text{economically active population}} \times 100$$

Figure 3 shows unemployment rates for the USA and eurozone between 2008 and 2010, with a peak of around 9% in 2009. However, the eurozone experienced a peak in 2013, while the US experienced a downward trend from 2010 to 2015.

There are four important statistics that are often quoted by economists and governments.

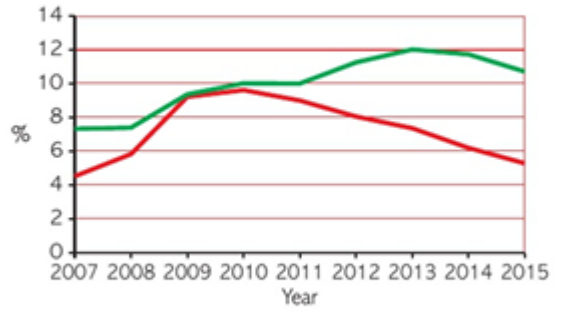
1. The employment rate is the number of those in work divided by the population of working age, expressed as a percentage.

2. The ILO unemployment rate is the number of ILO unemployed divided by the labour force (active population), expressed as a percentage.

3. The activity rate or participation rate is the number of those in work or unemployed (active population) divided by the population of working age, expressed as a percentage. It is the proportion of the working population in the labour force.

FIGURE 3

USA and eurozone unemployment rates, 2007–15



Source: adapted from www.oecd.org

4. The inactivity rate is the number of those in the inactive population divided by the population of working age, expressed as a percentage. It is the proportion of the working population that is not in the labour force.

THE UNDERUTILISATION OF LABOUR

The ILO measure of unemployment is an internationally recognised standard. However, a wider definition may be useful for measuring the degree of labour market slack in an economy. In the global financial crisis, many job seekers became so discouraged that they stopped 'actively seeking work', they no longer believed it was possible to get a job. Another group were forced into 'underemployment' (working fewer hours than they would like) by taking on part-time jobs, when they wanted a full-time job as an employee.

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active population those in work or actively seeking work; also known as the labour force.
activity rate or participation rate the number of those in work or unemployed divided by the population of working age, expressed as a percentage.
anticipated inflation increases in prices that economic actors are able to predict with accuracy.
consumer price index (CPI) a measure of the price level used to measure inflation. It is produced to international standards.
deflation a fall in the price level.
disinflation a fall in the rate of inflation.
employed the number of people in paid work.
employees workers employed by another individual or firm.
employment those in paid work.
employment rate the number of those in work divided by the population of working age, expressed as a percentage.
full-time workers workers who work the hours and days that are the norm for a particular job.
hidden unemployed partly those in the population who would take a job if offered, but are not in work and are not currently seeking work; and partly those who are underemployed.
hyperinflation large increases in the price level.
inactive the number of those not in work and not unemployed.
inactivity rate the number of those not in work and not unemployed divided by the population of working age, expressed as a percentage.
indexation adjusting the value of economic variables such as wages or the rate of interest in line with inflation.
inflation a general and continued rise in prices.
labour force those in work or actively seeking work; also known as the active population.
part-time workers workers who only work a fraction of the hours and days that are the norm for a particular job.
population of working age total number of people aged between the state school leaving age and the state retirement age.
price level average price of goods/services in the economy.
producer price index used to measure the change in the price of a typical basket of goods bought and sold by the manufacturers of an economy.
reflation the process of increasing the amount of money being used in a country in order to increase trade.
self-employed workers who work on their own account and are not employees.
stagflation an economic situation in which there is inflation but many people do not have jobs and businesses are not doing well.
underemployed those who would work more hours if available or are in jobs that are below their skill level.
unemployed those not in work but seeking work.
unemployment occurs when individuals are without a job but who are actively seeking work.
unemployment rate the number of those not in work, but seeking work, divided by the labour force, expressed as a percentage.

Chapter 24 – Balance of payments

THE INTERCONNECTEDNESS OF ECONOMIES

Over time, the world economy has been growing more interconnected. There are four key ways in which this process of globalisation has been taking place.

• The proportion of output of an individual nation economy that is traded internationally is growing.

• There is ever-increasing ownership of physical and financial assets, such as companies or shares or loans, in one country by economic actors in another country.

• Individuals are moving in increasing numbers from one country to another.

• Technology is being shared between countries on a faster basis

THE BALANCE OF PAYMENTS ACCOUNT

Governments keep records of the numerous ways in which economies are interconnected. One important record is the **balance of payments account**. This is a record of all financial deals over a period of time between economic agents of one country and all other countries. Balance of payments accounts can be split into two components:

- the **current account** where payments for the purchase and sale of goods and services are recorded
- the **capital and financial accounts** where flows of money associated with saving, investment, speculation and currency stabilisation are recorded.

Flows of money into the country are given a positive (+) sign on the accounts. These inflows are recorded as a credit item. Flows of money out of the country are given a negative (-) sign. These outflows are recorded as a debit item.

THE CURRENT ACCOUNT

The current account on the balance of payments is itself split into several components.

Trade in goods Trade in goods is sometimes called trade in visibles. This is trade in raw materials such as copper and oil, semi-manufactured goods such as car components and finished manufactured goods such as cars, tablets or mobile phones. Goods come into the country while money flows out. Hence visible imports of, say, wheat are given a minus sign on the balance of payments. The difference between the value of visible exports and visible imports is known as the **balance of trade** in goods.

Trade in services International trade involves various services, including financial, transport, and tourism. Trade in invisibles, or invisible goods, involves foreigners buying services, such as hotel stays or insurance. These invisible exports, called export credits in services, flow money into the UK, while invisible imports, like holidays or jet hires, are bought from other countries. The difference between these two is known as the balance of trade in services, indicating the flow of money between countries.

Primary and secondary income Primary income is generated from foreign factors of production, such as interest, profits, and dividends on assets owned abroad. South Korean company Samsung invested $16.7 billion in Vietnam, generating income in dividends and profit. Secondary income occurs when income is transferred between countries without corresponding output, such as personal or government transfers.

THE DISTINCTION BETWEEN BALANCE OF TRADE DEFICITS AND SURPLUSES

The balance of trade, also known as net exports or net trade balance, is the difference between exports and imports. It is recorded separately in goods and services, and when exports exceed imports, there is a **trade surplus,** while when imports exceed exports, there is a trade deficit.

THE DISTINCTION BETWEEN BALANCE OF PAYMENTS DEFICIT AND SURPLUS ON THE CURRENT ACCOUNT

The current account is made up of the trade in goods, trade in services account (together forming the balance of trade in goods and services), the primary income account and the secondary income account. The overall balance on these accounts is called the **current account balance**. If overall credits are greater than overall debits, then there is a **current account surplus** (also called a balance of payments surplus on the current account). If overall debits are greater than credits, then there is a **current account deficit.**

GOVERNMENT DEFICITS AND BALANCE OF PAYMENTS DEFICITS

The current account deficit is not solely financed by the government, but rather by billions of individual transactions. The relationship between the deficit, private sector borrowing, and government borrowing is complex and depends on individual circumstances. Governments can attempt to correct deficits or surpluses through various methods, with advantages and disadvantages. However, they can also allow free market forces to correct any deficit or surplus.

Trade in goods		
Export of goods (goods, credit)	1,374,296.1	
Import of goods (goods, debit)	387,369.0	
Balance of trade on goods		–13,072.9
Trade in goods		
Exports of services (services, credit)	24,499.6	
Imports of services (services, debit)	33,440.9	
Balance of trade on services		–8941.3
Balance of trade on goods and services		–22,014.1
Primary income		
Credits	8075.8	
Debits	34,987.0	
Primary income balance		–26,911.2
Secondary income		
Credits	27,235.8	
Debits	730.4	
Secondary income balance		26,505.4
Current balance		–22,420.0

Note: balances do not add up due to rounding.

▲ **Table 1 Mexican current account balance, 2016 (US$ millions)**

Source: IMF data portal

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balance of payments account a record of all financial deals over a period of time between economic agents of one country and all other countries. It consists of the balance of trade in goods and services, the primary income account, the secondary income account, the capital account and the financial account.

balance of trade the value of exports minus the value of imports. Data may distinguish between the balance of trade in goods, the balance of trade in services or the balance of trade in goods and services. Without any distinction, the balance of trade would refer to the balance of trade in goods and services.

balance of trade deficit or surplus a deficit exists when the value of imports is greater than the value of exports. A surplus exists when the value of exports is greater than the value of imports.

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

current account part of the balance of payments. The current account has four components: the trade in goods, trade in services, primary income and secondary income accounts.

current account balance records the overall difference between the credits and debits on each separate part of the current account – the balance of trade in goods, the balance of trade in services (these two then form the balance of trade in goods and services), the primary income balance and the secondary income balance.

current account deficit or surplus a deficit exists when overall debits exceed credits on the current account. A surplus exists when overall credits exceed debits on the current account.

primary income income that results from the loan of factors of production abroad.

secondary income income transfers between countries that occur without any corresponding output.

Chapter 25 – Employment and unemployment (causes and effect)

INTRODUCTION

The measurement of employment and unemployment was covered in Chapter 23. Chapter 23 also discussed the distinction between unemployment and underemployment and how it is important to interpret data with care. This chapter focuses on the causes of unemployment, the effects of unemployment, the impact of net migration and the significance to the economy of changes in employment and unemployment rates.

CAUSES OF UNEMPLOYMENT

Frictional unemployment Most workers who lose their jobs move quickly into new ones. This short-term unemployment is called **frictional unemployment.**

Frictional unemployment in a free-market economy is not a serious issue, but the time spent unemployed varies. Higher unemployment benefits and better job information reduce the time workers spend searching for jobs.

Seasonal unemployment Some workers, such as construction workers or workers in the tourist industry, tend to work on a seasonal basis. **Seasonal unemployment** tends to rise in winter when some of these workers will be laid off, while unemployment falls in summer when they are taken on again. There is little that can be done to prevent this pattern occurring in a market economy where the demand for labour varies through the year.

Structural unemployment Far more serious is the problem of structural unemployment. This occurs when the demand for labour is less than its supply in an individual labour market in the economy. One example of structural unemployment is regional unemployment.

In many economies, unemployment differences between regions occurs because factors of production are geographically immobile.

Technological unemployment is another example of structural unemployment. Groups of workers across industries may be put out of work by new technology. Again, without retraining and geographical mobility, these workers may remain unemployed. For any economy to maintain its employment levels in a competitive global market, it must invest in the skills of its workforce over time. In competitive environments it is likely that mismatches will arise between the types of skills demanded by firms and the skills offered by job seekers. This creates structural unemployment.

Cyclical or demand-deficient unemployment Cyclical or demand-deficient unemployment is unemployment that occurs when there is insufficient aggregate demand in the economy for all workers to get a job. Cyclical unemployment will be higher when an economy is in a recession. In a recession, it is not just workers who are unemployed. Capital too is underutilised. So factories and offices can remain empty. Machinery and equipment can remain unused.

Real wage unemployment Real wage unemployment or classical unemployment exists when real wage rates are stuck at a level above that needed to reduce unemployment further. Real wage rates are inflexible downwards. One cause of real wage unemployment is minimum wages. Unemployed workers might be prepared to work for less than the minimum wage.

USING DIAGRAMS TO ILLUSTRATE UNEMPLOYMENT

Unemployment can be illustrated using a variety of diagrams. Figure 1 shows a production possibility diagram. The economy is operating at its productive potential when it is somewhere on the production possibility frontier, such as at point A. There are unemployed resources when the economy is operating within the frontier, such as at point B.

Aggregate demand and supply analysis can be used to distinguish between demand-side and supply-side causes of unemployment. In Figure 2, the economy is in short-run equilibrium at an output level of Y1. However, what if the long-run aggregate supply curve (LRAS) curve is to the right of this point?

The same point can be illustrated using the concept of the output gap. The trend growth of the economy is shown by the upward sloping straight line in Figure 4. At point A, there is a negative output gap and the economy is in recession. So there is cyclical unemployment. An increase in demand will move the economy to B and eliminate demand-deficient unemployment.

FIGURE 1

The production possibility frontier

At any point on the production possibility frontier there is no unemployment due to a lack of demand. At point B, there is cyclical unemployment.

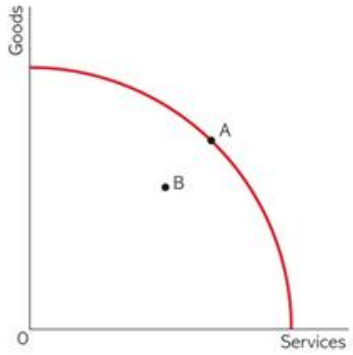


FIGURE 2

Cyclical unemployment

The economy is in equilibrium in the short run at an output level of OY_1. This is below the level of OY_2, shown by the long-run aggregate supply curve, where there would be no demand-deficient unemployment.

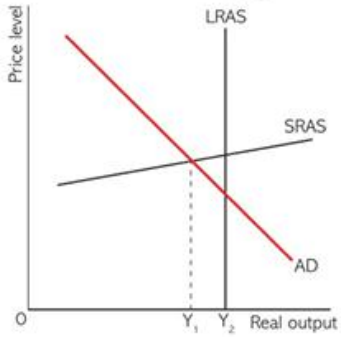


FIGURE 3

Cyclical unemployment

Cyclical unemployment in the economy at the short-run equilibrium of $0Y_1$ can be eliminated by raising aggregate demand, shown by the shift in the aggregate demand curve from AD_1 to AD_2.

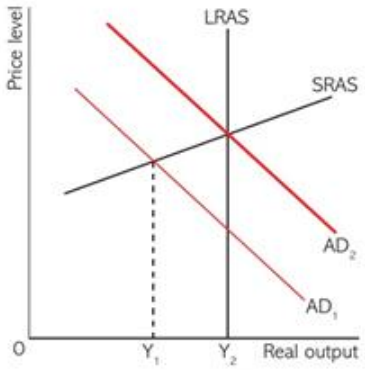
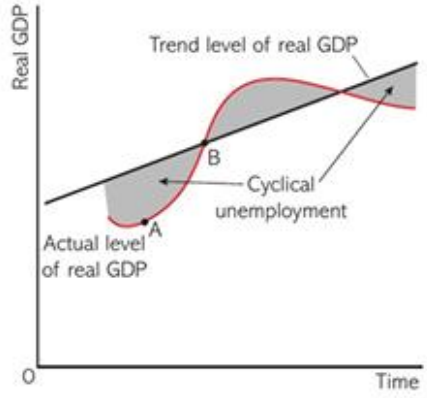


FIGURE 4

Unemployment and the output gap

Cyclical unemployment occurs if the actual level of income is below its long-run trend level, for example at A.



In Figure 4, the long-run trend line of growth is drawn assuming the gradual shift to the right in the long-run aggregate supply curve shown in Figure 3. If the long-run trend rate of growth is 2.5 per cent, then in Figure 3, the LRAS curve is shifting to the right by 2.5 per cent per year on average. So the trend rate of growth assumes there will be supply-side improvements to the economy over time. This may or may not include supply-side improvements that reduce frictional, seasonal or structural unemployment. However, past evidence would suggest that existing structural unemployment tends to fall over time. Of course, there may be new supply-side shocks that lead to new structural unemployment. If the long-run trend rate of growth could be raised, say from 2.5 per cent to 3 per cent, there is a greater probability that structural unemployment will fall. A rise in the long- run trend rate of growth would be shown by a shift upwards in the trend growth line in Figure 4.

EMPLOYMENT, UNEMPLOYMENT AND ACTIVITY RATES

Governments attempt to achieve full employment in their economies. Unemployment represents a significant cost and so reducing unemployment rates is seen as economically desirable.

Some governments are also committed to increasing employment rates and reducing inactivity rates. Two main groups tend to be targeted.

- Women tend to have lower activity rates. This is mainly caused by a lack of educational opportunities for women in some countries, cultural views on role of women in society, lack of job opportunities for women and women being far more likely to give up jobs to look after children. However, many governments are adopting policies to increase female participation rates. Bringing more women into the labour force increases recorded GDP and so increases growth rates, a goal for most governments.
- Older workers, particularly over the age of 60, have lower activity rates. In developed economies, there is often a state retirement age. This means individuals receive a state pension (form of welfare payment) from the government to support them in old age. Governments in Europe have been raising the retirement age in order to reduce the amount of government spending on pensions.

MIGRATION

Migration, particularly net inward migration, can significantly impact employment and unemployment. Russia has experienced this since the fall of communism, with immigrants primarily from lower-skilled parts of the former Soviet Union. This can drive down wages in lower-skilled jobs and increase the supply of labor. However, net immigration can also bring benefits, such as creating further jobs and promoting innovation. Skilled workers can also contribute to growth. The overall impact of migration depends on factors like migrants' skills and the economy's state. Remittance payments can be a significant source of income for developing countries.

THE COSTS OF UNEMPLOYMENT

Long-term unemployment is generally considered to be a great social evil. This is perhaps not surprising in view of the following costs of unemployment.

Costs to the unemployed and their dependants - Unemployment is a significant financial loss for the unemployed, resulting in a loss of income, welfare payments, and leisure time. Unemployed individuals and their families also suffer from a negative view of unemployment, feeling embarrassed by receiving welfare payments and not being able to support themselves or their families. Unemployment can lead to extreme poverty unless family support is available. Unemployed individuals also suffer from social problems such as stress, divorce, suicide, physical and mental illness, and higher death rates. Short-term unemployed individuals face relatively low costs, with some receiving redundancy payments and limited social and psychological costs. However, long-term unemployed individuals are likely to be major losers due to reduced human capital, reduced skills, and potential job loss. Employers use unemployment as a quick way to sort through applicants, fearing the unemployed may have personality problems or be undisciplined.

Costs to society: the impact on local communities Costs of unemployment to local communities are more difficult to establish. Some have suggested that unemployment, particularly among the young, leads to increased crime, violence on the streets and vandalism. Areas of high unemployment tend to become run down. Shops go out of business. Households have no spare money to look after their properties and their gardens. Increased vandalism further destroys the environment. The social costs of unemployment include the private costs to the unemployed themselves and the external costs that impact the local communities in which they live.

Costs to the government - Unemployment costs taxpayers heavily, as governments in high-income economies pay increased welfare payments and lose revenue due to workers' potential tax evasion. Taxpayers also have to cover increased government spending and make up taxes they would have paid if they were employed. Governments often offer assistance to the unemployed, such as job information, training schemes, and subsidies for employers.

The impact of unemployment on resource utilisation Taxpayers paying money to the unemployed is not a loss for the economy as a whole. It is a transfer payment that redistributes existing resources within the economy. However, unemployment does create a cost to the economy as a whole. Unemployment means labour is underutilised in the economy. This means not all factors of production are being employed.

Costs to consumers The unemployed as consumers lose out because they have to spend less. Consumers in areas of high unemployment also lose out because local shopping centres tend to be run down and don't offer the range of shops available to those in areas of low unemployment.

Costs to firms- Firms suffer because unemployment represents a loss of demand in the economy. If there were full employment, the economy would be more healthy and there would be more spending. Long-term unemployment also reduces the pool of skilled workers that a firm could hire.

SUBJECT VOCABULARY

cyclical or demand-deficient unemployment when there is insufficient demand in the economy for all workers who wish to work at current wage rates to obtain a job.
frictional unemployment when workers are unemployed for short lengths of time between jobs.
long-term unemployed in the UK, those unemployed for more than one year.
real wage or classical unemployment when workers are unemployed because real wages are too high and inflexible downwards, leading to insufficient demand for workers from employers.
seasonal unemployment when workers are unemployed at certain times of the year, such as building workers or farm workers in winter.
short-term unemployed in the UK, those unemployed for less than a year.
structural unemployment when the pattern of demand and production changes, leaving workers unemployed in labour markets where demand has shrunk. Examples of structural unemployment are regional unemployment, sectoral unemployment or technological unemployment.
technological unemployment when developments in technology cause roles to become redundant.

Chapter 26 – Inflation (causes and effects)

INFLATION, DEFLATION AND DISINFLATION

Inflation is defined as a sustained general rise in prices across an economy. The opposite of inflation is **deflation**. This is defined as a sustained general fall in prices across an economy. **Disinflation** is defined as a fall in the rate of inflation.

Hyperinflation, on the other hand, describes a situation where inflation levels are very high. There is no exact figure at which inflation becomes hyperinflation.

THE CAUSES OF INFLATION

Inflation can be caused by two main factors: too much demand in the economy or rising costs.

Demand-pull inflation- In the market for oil, a significant rise in demand for oil with no increase in supply will lead to a rise in the price of oil. The same occurs at a macroeconomic level. If aggregate or total demand rises and there is no increase in aggregate supply, then demand-pull inflation is likely to occur. **Demand- pull inflation** is caused by excess demand in the economy. When there is too much demand, the **price** level (or average level of prices in the economy) will rise. Excessive increases in aggregate demand in any economy can occur for a variety of reasons.

• Consumer spending may rise excessively. Interest rates could be low and consumers are spending large amounts on their credit cards, or consumer confidence could be rising because house prices are rising.

• Firms may substantially increase their spending on investment. Perhaps they are responding to large increases in demand from consumers and need extra capacity to satisfy that demand.

• The government might be increasing its spending substantially, or it could be cutting taxes.

• World demand for that country's exports may be rising because of a boom in the world economy.

Figure 1 shows how an increase in aggregate demand in the short run leads to inflation. Aggregate demand increases from AD_1, to AD_2. The price level increases from P_1, to P_2, showing the inflationary impact of this increase in aggregate demand.

Cost-push inflation- Inflation may also occur because of changes in the supply side of the economy. **Cost- push inflation** occurs because of rising costs. There are four major sources of increased costs.

• Wages and salaries are generally a high proportion of national income. An increase in wages will have a significant impact on costs of production.

• Imports can cause a rise in price. A boom in the world economy, for example, may push up commodity prices such as oil, copper and wheat. It will also push up the price of finished goods. This will lead to higher import prices for an economy.

• Profits can be increased by firms when they raise prices to improve profit margins. The more price inelastic the demand for their goods, the less will such behaviour result in a fall in demand for their products.

• Government can raise indirect tax rates or reduce subsidies, thus increasing prices.

The effect of a fall in aggregate demand or an increase in aggregate supply (a downward shift in the SRAS caused by costs falling) will show the price level falling in an economy. If the value of a currency rises on foreign exchange markets, this will make domestic goods more expensive for foreigners, so exports should fall. Again, the AD curve will shift to the left and the price level will fall from P_1, to P_2.

However, in the real world, it is unlikely that the price level will actually fall. The diagram in this case will illustrate that demand-pull inflationary pressures have eased. So prices will still be rising, but at a slower rate.

FIGURE 1

A rise in aggregate demand leads to demand-pull inflation

A rise in aggregate demand from AD_1 to AD_2 leads to an increase in prices of P_1P_2.

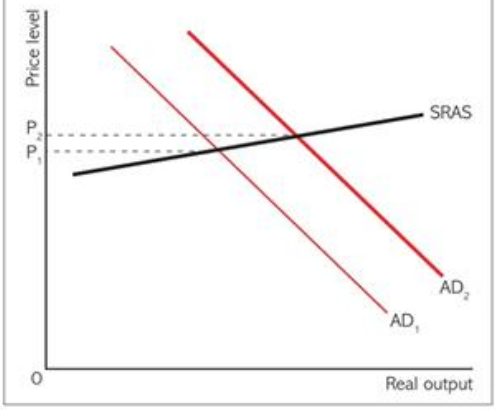
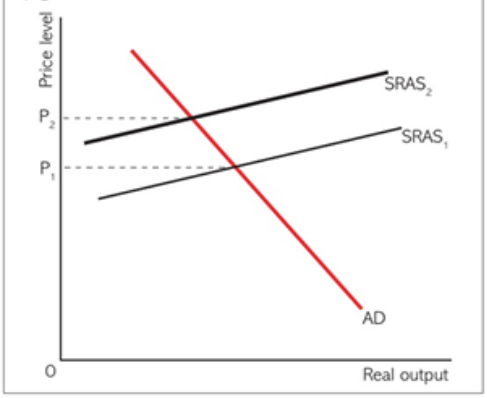


FIGURE 2

A fall in short-run aggregate supply leads to cost-push inflation

A shift upwards in short-run aggregate supply curve from $SRAS_1$ to $SRAS_2$ leads to an increase in prices of P_1P_2.



For most economies, it is very rare to experience deflation. Deflation is when the price level is actually falling. Deflation is caused by falling aggregate demand (caused by a fall in any of the components of aggregate demand or a fall in the money supply) or falling costs (an increase in aggregate supply). A single factor, such as weaker exports, would have to have an effect that was greater than the other components of aggregate demand which would be rising, to cause deflation. This is why deflation is more likely if there is a significant negative output gap (there is significant unused productive

potential in the economy so the economy is operating below full employment). In the same way, a fall in oil prices would have to be very significant to offset the other cost rises that normally occur in the economy, for example, positive wage growth, for deflation to occur. In this case the diagram, showing a fall in the price level, would show deflation.

FIGURE 3

An increase in short-run aggregate supply, from $SRAS_1$ to $SRAS_2$, leads to a fall in the price level from P_1 to P_2.

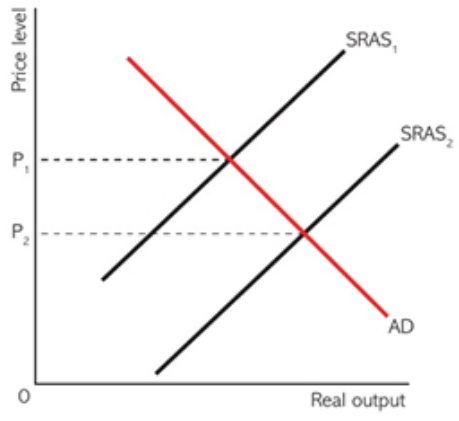
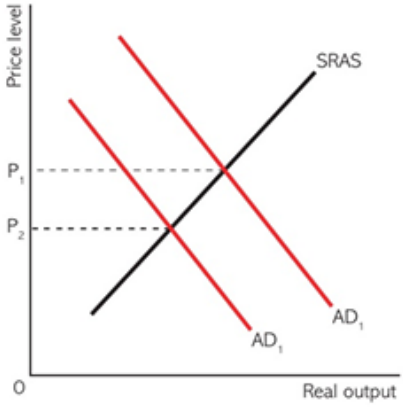


FIGURE 4

A fall in aggregate demand, from AD_1 to AD_2, leads to a fall in the price level from P_1 to P_2.



THE COSTS OF HIGH INFLATION

A sustained rise in the price level is generally considered to be a problem. The higher the rate of inflation the greater the economic cost. There is a number of reasons why this is the case.

Growth and unemployment High inflation is typically unpredictable. Both consumers and firms find it hard to predict what will be the rate of inflation next month or next year. This **unanticipated inflation** makes it difficult, if not impossible, for consumers and firms to plan for the future.

Competitiveness High inflation can lead to a balance of payment effect. If inflation rises faster in one economy compared to others, and the value of the currency does not change on foreign currency markets, then exports will become less competitive and imports more competitive. This will cause a deficit on the balance of trade in goods and services on the current account to widen, or a surplus to narrow or move into a deficit. The result will be a loss of jobs in the domestic economy and lower growth.

Redistributional costs Inflation can redistribute income and wealth between households, firms, and the state in various ways. Fixed income individuals, such as pensioners in the UK, may suffer if prices double over a five-year period. Workers who cannot negotiate pay increases in line with inflation may also suffer. Negative real interest rates can transfer resources from lenders to borrowers, while taxes and government spending may not change in line with inflation. Failure to adjust taxes can result in a decrease in real government revenue and increased burden on taxpayers.

Psychological and political costs Price increases are deeply unpopular. People feel that they are worse off, even if their incomes rise by more than the rate of inflation. High rates of inflation, particularly if they are unexpected, disturb the distribution of income and wealth as we shall discuss below, and therefore affect the existing social order greatly. Change and political upheaval in the past have often accompanied periods of high inflation.

Shoe-leather costs If prices are stable, consumers and firms come to have some knowledge of what a fair price for a product and which suppliers is are likely to charge less than others. At times of rising prices, consumers and firms will be less clear about what is a reasonable price. This will lead to more 'shopping around' (wearing out your shoes), which in itself is a cost.

Menu costs If there is inflation, restaurants have to change their menus to show increased prices. Similarly, shops have to change their price labels and firms have to calculate and issue new price lists. Even more costly are changes to fixed capital, such as automatic drinks machines and parking meters, to take account of price increases.

Some of these costs can be reduced if inflation can be predicted. **Anticipated inflation** allows economic actors to plan for the future and adjust their decision to take inflation into account. One way of doing this is through **indexation**. This is where economic variables like wages or taxes are increased in line with inflation. For instance, a union might negotiate a wage agreement with an employer for stepped increases over one year of 2 per cent plus the change in the consumer price index. The annual changes in welfare payments in an economy might be linked to the consumer price index.

THE COSTS OF DEFLATION

Over the past 50 years, countries have faced high inflation rates, but deflation of falling prices can also pose problems. For example, Japan experienced nine years of falling prices between 1995 and 2014, causing a decline in consumer confidence and aggregate demand. This leads to a negative multiplier effect, with lower interest rates and higher borrowing costs. Deflation also affects asset values, encouraging households to save rather than spend, leading to low economic growth. For borrowers, deflation increases the real value of their debt, discourages borrowing and spending, and reduces aggregate demand.

THE BENEFITS OF LOW INFLATION

Central banks set a target for inflation of around 2%, which is considered desirable due to its low rate of inflation and positive increase in prices. This rate avoids high inflation and deflation issues, allowing policymakers to adjust the economy if inflation increases or decreases. Additionally, 2% is desirable due to its effect on assets prices, as the real value of borrowing falls gradually over time, making it easier for those borrowing to finance consumption or investment.

SUBJECT VOCABULARY

anticipated inflation increases in prices that economic actors are able to predict with accuracy.
cost-push inflation inflation caused by increases in the costs of production in the economy.
deflation a fall in the price level.
demand-pull inflation inflation that is caused by excess demand in the economy.
disinflation a fall in the rate of inflation.
hyperinflation large increases in the price level.
indexation adjusting the value of economic variables such as wages or the rate of interest in line with inflation.
inflation a general rise in prices.
price level the average price of goods and services in the economy.
unanticipated inflation increases in prices that economic actors like consumers and firms fail to predict accurately and so their decisions are based on poor information.

Revision questions