

Name: \_\_\_\_\_

# CREST

## HSC Economics

Topic 3: Economic Issues

Lesson 2: Unemployment

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## HSC Economics Topic 3: Economic Issues

### Lesson 2: Unemployment

#### *Dot-points covered this lesson:*

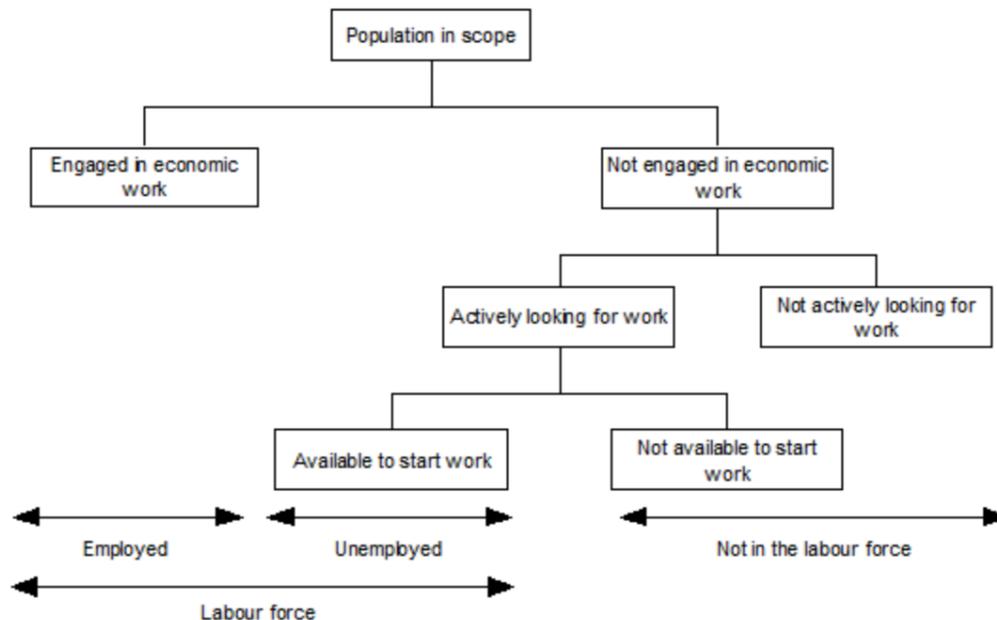
- All of the Unemployment topic

#### Measurements of labour force, participation rate, unemployment rate

#### Labour force

The labour force is defined as that section of the population 15 years of age and above who are either working or actively seeking work. Also known as workforce. It consists of:

- People aged 15 and over currently employed for least one hour per week of paid work.
- Unemployed persons aged 15 and over, who are currently available for work and are actively seeking work



## Participation rate

The participation rate refers to the percentage of the population aged 15 and over who are part of the labour force.

$$\text{Labour force participation rate (\%)} = \frac{\text{Labour force}}{\text{Working age population (15+)}} \times \frac{100}{1}$$

The working age population refers to those individuals in the economy who are aged 15 and over.

- Australia's participation rate is 66.2% (2020)
- Participation rate varies with the level of economic activity; rises during booms when more jobs are available
- Falls during recessions when unemployment rises, and job vacancies fall

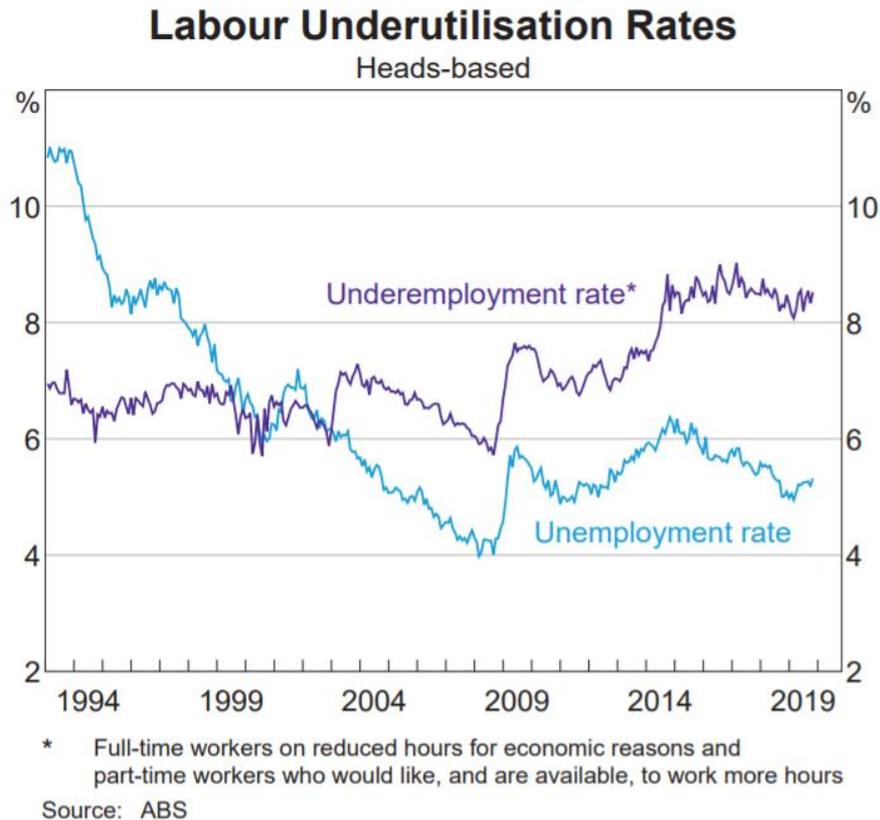
## Unemployment rate

$$\text{Unemployment rate (\%)} = \frac{\text{Number of persons unemployed}}{\text{Total labour force}} \times \frac{100}{1}$$

Unemployment is a situation where individuals want to work and actively look for work but are unable to find a job.

- Economic impact of unemployment: labour resources in an economy are not utilised – economy operative below its productive capacity
- Issues with this measurement of unemployment:
  - Does not include underemployed people (individuals who are employed but wish to work longer hours)
  - Does not include those who are hidden unemployed (discouraged workers who have given up actively looking for work so are no longer counted as part of the workforce)

## Unemployment trends



- 1993-2008: Steady long-term decline due to economic growth
- 2008: 3.9% - lowest level in 34 years. Especially lowest in WA/QLD (resource-rich states benefitting from high commodity prices).
- 2009: GFC - 5.8% peaked due to low economic growth of 1.4%. Employers also cut hours of work, cut wages, and switched workers from full time to part time
  - RBA assistant governor Christopher Kent: 'Resilience of Australian economy can be attributed to the flexibility of three key prices: interest rates, the exchange rate and wages'
- 2011-2013: Uneven pattern of growth (two-speed economy) due to mining investment boom and high value of \$A negatively impacting the international competitiveness of manufacturing firms such as Toyota, Holden, Ford and Bluescope Steel (Dutch Disease). Cyclical unemployment decreased but

structural unemployment increased due to the hollowing-out of manufacturing sectors.

- 2013-2017: Unemployment increased due to end of mining investment boom and subsequent decrease in economic growth. Structural unemployment continued to rise as car manufacturing sector shut down.
- 2017-18: Decline in unemployment rate due to strong economic growth in the global economy (2017 was global economy's best year since GFC) resulting in a rising ToT. Strong trade performance and consumption allowed unemployment to drop to 5% in September 2018 (lowest since 2012).
- April 2019: Australia's unemployment rate remains at low at 5% in April 2019.
  - The unemployment rate is very low despite Australia's main macroeconomic indicators suggest a weakening economy in the last 12 months. Australia has experienced lower consumption growth in the last year, as well as lower economic growth (2.3% annual), low inflation (1.3% annual), and low wages growth (around 0% real wages growth).
  - Why is the unemployment rate still apparently so low? The unemployment rate is no longer the best measurement of labour underutilisation in Australia. This is due to rising underemployment in the Australian economy – this has been a problem in the last 3 years.
  - Underemployment = 8% (2019)
  - Labour underutilisation rate (which includes both unemployment and underemployment) = 13% (2019)
  - Despite low unemployment, there is some spare capacity in labour market.
- 2019-20: Unemployment broadly steady at 5.25%. Participation rates at record high. U/E expected to decline gradually to 5% but still short of the central estimate of 4.5%. Wages growth is still slow and shows little signs of picking back up.

## Okun's law

- To reduce unemployment, the annual rate of economic growth must exceed the sum of growth in productivity plus increase in the size of the labour force
- Long term: higher labour productivity would lead to stronger economic growth and more job creation (firms choose to employ labour over capital)
- Short term: higher labour productivity would result in higher unemployment as firms are able to produce the same quantity of  $g/s$  with less employees

## Sample HSC Question

*1. Explain the effect of an increase in economic growth on the participation rate and the level of unemployment. (4)*

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## Types of unemployment

### **Cyclical**

- Cyclical unemployment is caused by insufficient Aggregate Demand in the economy resulting in a lower derived demand for labour and workers being laid off.
- Occurs due to downturn in the level of economic activity. Falls during strong economic growth

### **Structural**

- Results from a mismatch of skills between the labour skills of employees and the job vacancies offered by employers
- Introduction of new technology - makes some job obsolete, whilst new jobs may be created in expanding industries such as mining and services
- Microeconomic reforms - tariff cuts, and reforms to Public Trading Enterprises (in 1990s and 2000s) have led to significant structural change (decline of manufacturing sectors; rise of services and mining)
- Example: 50000 jobs lost in Personal Motor Vehicle (PMV) industry due to shut down of Holden, Toyota, Ford in 2013-17.
- Australia's persistent long-term unemployment is mainly due to structural unemployment

### **Frictional**

- Frictional unemployment occurs when individuals move from one job to another.
- Reduced by improving efficiency of job matching services through job and skills databases
- Examples: Young people leaving school to find jobs, people in search of better paid jobs

## Seasonal

- Is part of frictional unemployment but may be categorised separately
- Occurs at predictable and regular times due to seasonal nature of work
  - e.g. influx of students who finish Year 12 exams in December
- Official unemployment figures are seasonally adjusted to take these fluctuations into account

## Underemployment

- People who are employed but would like to work longer hours
- Not classified as unemployed but is a part of the unemployment problem
- 8% in 2019.

## Hidden

- Individuals not counted as unemployed, but part of the unemployment problem
- Individuals discouraged from seeking employment and are no longer actively looking for a job
  - Known as 'discouraged job seekers'
- These people are **not** counted in official statistics (since they do not fit the definition by the ABS), but are still considered unemployed

## Long term

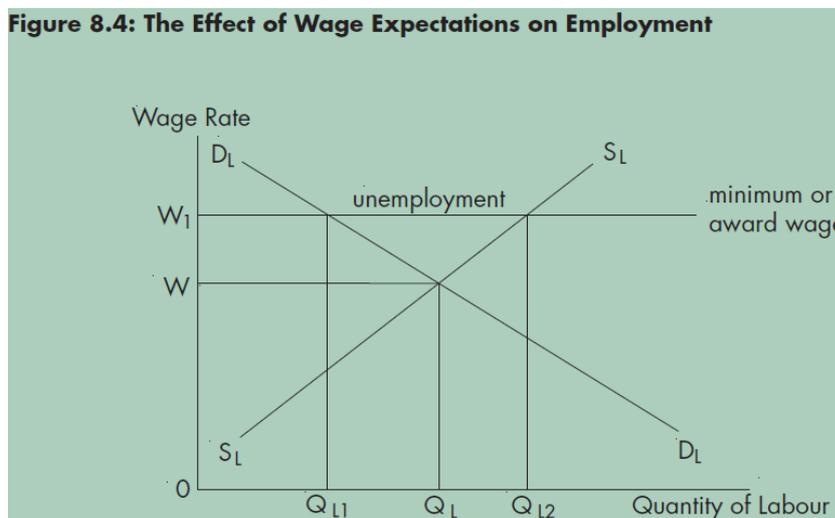
- Individuals out of work for longer than 12 months
- Usually due to structural unemployment
- The longer a person is out of work, the harder it is to find a job because:
  - long-term unemployed have skills that are not as up-to-date/attractive to employers
  - usually suffer from structural unemployment and do not possess skills demanded in labour market

## Causes of unemployment

- **Level of economic growth** (main cause): demand for labour is derived, so a downturn in AD may cause a downturn in demand for labour and increase in unemployment levels.
- Deficiency in aggregate demand ( $AD = C + I + G + X - M$ )
  - e.g. cyclical unemployment has decreased in 2017-18 to 5% as a result of a higher ToT due to higher global growth
- **Stance of macroeconomic policies (fiscal and monetary)**: Expansionary fiscal/monetary policies increase AD and reduce cyclical unemployment
  - Example: Cash rate at a historic low of 1.5% since 2016, contributed to decrease in unemployment to 5%.
- **Rising participation rates**: Increase in labour force participation rate causes increase in unemployment in the short term, as the labour force increases. Usually occurs in times of economic recovery
- **Structural change**: Job losses in less efficient industries undergoing major reforms such as large tariff cuts (loss of jobs in manufacturing industries). TCF, steel, PMV forced to reduce workforces due to tariff and quota cuts. Reform of Public Trading Enterprises through privatisation and deregulation led to increase in workforce downsizing and the retrenchment of some labour in affected industries
- **Technological change**: Substitution of capital for labour and a change in work skills required causes workers to become redundant. This is usually structural unemployment
- **Productivity**: High productivity slows employment growth in the short term (less employees required per unit of output) but in the long term, it contributes to higher economic growth and lower rates of unemployment.
- **Increase in labour costs (wages)**: can be due to: shortage of skilled labour (employers competing for a limited pool of labour may cause wage inflation), excessive wage demands (cuts profit levels causing businesses to substitute

capital for labour or reduce output), minimum wages made by the Fair Work Australia, rise in labour on-costs

- **Inflexibility in the labour market:** Australia's high minimum wages makes it less attractive for employers to hire less skilled workers, contributing to higher unemployment. The deregulation of the labour market may lead to lower wages and lower level of unemployment
  - Superannuation, taxations, workers' compensation, unfair dismissals, legislation and award conditions reduce the hiring intentions (through higher 'on costs' of labour) of employers, causing unemployment
- **Wage expectations (minimum wages)** [this is essentially the same as 'increase in labour costs'] Higher wage expectations, e.g. planned increase in minimum wage will push up the price of labour relative to capital. Rises in real wages costs will reduce the demand for labour and provide employers to substitute capital for labour, causing rise in wage induced unemployment



## Non-accelerating inflation rate of unemployment (NAIRU)

### Natural rate of unemployment:

- Full employment (also known as the natural rate of unemployment) occurs when cyclical unemployment is zero. At full employment, the only types of unemployment are structural and frictional. Estimated to be 5-6% of the Australian workforce.

### Non-accelerating inflation rate of unemployment (NAIRU)

- At the NAIRU, there is zero cyclical unemployment, and only structural and frictional. When the economy is operating at or above the NAIRU, inflationary pressures will not increase.

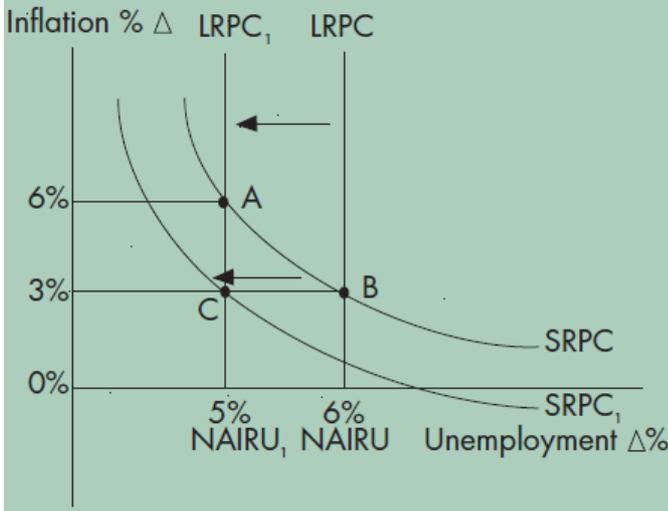
### Reason for relationship between unemployment and inflation

- If unemployment is less than NAIRU, this means employers have already employed the cyclically unemployed workers and now need to compete for existing workers
- This causes a rise in wages, causing cost push inflation

### Implications of NAIRU for economic policy

- Macroeconomic policies can be used to reduce cyclical unemployment, thus bringing the economy down to the NAIRU – but they cannot reduce structural or frictional unemployment. Attempts to use expansionary macro policies to reduce unemployment when the economy is already at the NAIRU will result in higher inflation.
- NAIRU can be reduced through policies that improve skills of unemployed people or addressing other hurdles to participation in work (e.g. making workplaces suitable for those with disability)

**Figure 8.6: The LRPC and the NAIRU**



**Short run Phillips curve:**

Shows the short run trade-off between rates of inflation and unemployment

e.g. 6% inflation and 5% in the short run

Or 3% inflation and 6% unemployment

**Long run Phillips Curve:**

Shows there is no trade-off between

inflation and unemployment in the long run,

with NAIRU equal to the natural rate of

unemployment (LRPC)

- NAIRU is the lowest unemployment rate which can be sustained without an increase in inflation
- Reducing NAIRU involves supply side policies such as labour market reforms
  - In the long run, LRPC shifts to LRPC<sub>1</sub> and the NAIRU lowers from 6% to 5% at point C

## Main groups affected by unemployment

- 1. Youth:** Employers seek workers with greater skills and experience, which young unskilled workers lack. Strategy: increasing school retention rate (more secondary students stay on to complete Year 12) and long term rise in participation in tertiary education.
- 2. Indigenous Australians:** High unemployment rate. Unemployment rate was 3 times higher for this group compared to non-Indigenous people.
- 3. Age related unemployment:** Unemployment is higher among young Australians. 15-19-year olds who are in the labour force face unemployment of 3 times the national average. Older workers have greater difficulty finding employment a job once they have lost their job. Average length of time out of job for a job seeker over 55 is 59 weeks, compared to 20 weeks for 15-19-year olds.
- 4. Specific regions:** Unemployment is lower in capital cities than in non-metropolitan areas.
- 5. Recent immigrants:** Slightly higher, possibly caused by the language barrier faced by people from non-English speaking backgrounds. Unemployment rate for those born outside was 5.2% compared to 4.9% for Australian-born residents. Also, lower level of workforce participation in immigrants - 58% compared to 68% for those born in Australia.

## Effects of unemployment – economic and social costs

### Economic costs

- **Opportunity cost:** Underutilisation of labour resources in an economy, thus operating below production possibility frontier. This opportunity cost is a loss in potential production from these labour resources. Real GDP not maximised; lower material living standards.
- **Lower living standards:** Unemployed people do not contribute to the production process, which the employed have to shoulder greater costs. Higher unemployment means production of consumer and capital goods is lower and hence cause a reduced rate of economic growth and standard of living.
- **Decline in labour market skills for the long term unemployed:** Cyclical or short-term unemployment may turn into long term structural unemployment, in a process known as hysteresis (unemployed people lose their skills, job contacts and motivation to work). This means there is a loss of skills among existing workers without work for extended periods of time
- **Costs to the government:** Less tax revenue is generated due to falling incomes and the government is forced to pay more transfer payments (unemployment benefits), fund more training and labour market programs. This will cause a deterioration in the government's budget balance. Increasing taxation burden placed on employed persons in the workforce to finance social security spending from the taxation payments they make to the government. This could lead to a rise in the budget deficit or a fall in a budget surplus
- **Less equal distribution of income** as the unemployed will be reliant on income support from government welfare payments, and concentrated disproportionately in the lowest quintile of the distribution of household income

- **Lower wage growth:** high unemployment means there is an excess of labour supply in the economy, which should lead to a fall in the equilibrium level of wages. However, regulations restricting the downward flexibility of wages (e.g. high minimum award wages), higher unemployment is more likely to lead to slower wage growth, rather than wage reductions
- **Loss of human capital** - unemployed will not be contributing their skills and experience to the workforce and will need to undergo re-training to become 'job ready' in their search for new employment opportunities. Hence, there is a depreciation of human capital of the unemployed, and increased duration of unemployment will increase this rate of depreciation

## Social costs

- **Increased inequality:** unemployment tends to occur among low income earners (e.g. young and unskilled). This means these groups will be relatively worse off compared to high income earners, contributing to poverty and overall inequality in income distribution
- **Loss of self-esteem and dignity** which will reduce the motivation to search for jobs or to undergo re-training and education to increase their skills. The lack of motivation can lead to higher rates of long-term unemployment and dependence on government welfare payments for income support
- **Other social costs** such as:
  - Severe financial hardship and poverty
  - Increased levels of debt
  - Homelessness and housing problems
  - Family tensions and breakdown
  - Boredom
  - Loss of work skills
  - Increased social isolation
  - Rising crime rates

## Sample HSC Questions

1. Explain the effect of higher economic growth in relation to unemployment. (3)

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2. The table below refers to employment data for a hypothetical economy

Year	Working age population (millions)	Employed (millions)	Unemployed (millions)
1	60	57	3
2	60	56	4
3	63	56	7

How is the unemployment rate calculated? (1)

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3. Describe the trend in the unemployment rate between year 1 and 3. (3)

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**Answers:**

**1. Explain the effect of higher economic growth in relation to unemployment. (3)**

*The overall effect of higher economic growth is lower cyclical unemployment. As businesses increase production of goods and services, firms will increase their demand for labour, as the demand for labour is a derived demand, lifting employment and reducing the level of cyclical unemployment in the medium to long run. However, in the short term, an increase in economic growth will usually increase the labour force participation rate, as formerly discouraged job seekers return to the job market to seek work because they believe there are improved opportunities for employment. The unemployment rate may therefore increase in the short term, if the increased number of job seekers is greater than the increase in job vacancies. In addition, firms that are experiencing increased business activity usually delay hiring new staff until they are certain that the increased business activity will be sustained, resulting in a time lag for the derived demand effects to take place.*

**2. How is the unemployment rate calculated? (1)**

$$\text{Unemployment rate (\%)} = \frac{\text{Number of persons unemployed} \times 100}{\text{Total labour force}}$$

**3. Describe the trend in the unemployment rate between year 1 and 3. (3)**

*The trend in the unemployment rate is increasing at an increasing rate from 5% in year 1, 6.6% in year 2 to 11.1% in year 3.*

**4. Explain TWO social and TWO economic costs of unemployment. (4)**

**Answers could include:**

### *Economic Costs*

- *Loss of economic production*
- *Slower economic activity due to reduced income and consumption*
- *Erosion of long-term productivity*
- *Social welfare payments*
- *Income inequality*

### *Social Costs*

- *Crime*
- *Lack of self-esteem*