# Notes 2012 Topic 2B: Unemployment

## List of Definitions

### Unemployment

* + - Refers to all individuals who are able and willing to work but not offered a job.

### Unemployment Rate

* + - The ratio of unemployed people to the labour force/active working population
		- Unemployed people are individuals aged 15 and above who are unemployed but are willing and able to work.
		- Formula:

Unemployment Rate = 100 x $\frac{No.of Unemployed People}{Active Working Population (Labour Force)}$

### Labour Force

* + - Refers to both employed and unemployed individuals (aged 15 and above) that are willing to work (active working population)

### Working Age Population

* + - Refers to all individuals, above 15 years of age, who are able and willing to work and are employed. (active working population and inactive working population)

### Labour Participation Rate (SG – 0.68 in 2016)

* + - Conversion of inactive working population into active working population
		- Proportion of labour force that are employed.
		- Formula:

Labour Participation Rate = 100 x $\frac{Active Working Ppoulation (Labour Force)}{Total Working Pupulation }$

### Economically Inactive Labour Force

* + - Refers to the portion of the labour force who is not working, does not have a job to return to, and are not looking for a job.
		- E.g. Full-time students, housewife, the disabled, etc.

Qn: why must the country have a high labour participation rate?

### Demand Deficient Unemployment (disequilibrium unemployment)

* + - Demand-deficient unemployment occurs as a result of a fall in demand for labour caused by an economic recession under a condition of wage inflexibility where there is ‘stickiness’ in real wage rates as workers are unwilling to accept lower wages, stated by Keynes. (difficult to adjust downward)

Also known **as cyclical unemployment** which is contributed by a fall in export demand and foreign direct investment (FDI) which is affected by global trade and business cycle

* + - In Singapore, recession is due to global economic downturn (↓Xd/↓FDI), which will lead to a fall in aggregate demand and thus, a fall in national income. This will reduce production and lead to a fall in employment as there is a reduction in demand for labour (sg – Cyclical Un+)
		- (explained by the fall in Ad – decrease in NY – decrease in prodn – decrease in demand for labour – rise in unemployment

### Disequilibrium Level of Unemployment

* + - This occurs when there is an excess labour supply where the supply of labour does not equal to the demand for labour as the workers are unwilling to settle for lower wage rate.

Qty of Labor

Wage

Wo

S₀

D₁

D₀

* L₀🡪L₁

Disequilibrium UN+

* L₀🡪L₂

equilibrium level of UN+ (Structural UN+)

L₁

L₀

L₂

W₂

How to explain unemployment contributed by fall in Ad (demand deficient unemployment with AD-As Analysis?

(AD-AS)

decrease in XD – decrease in AD – decrease in national income – decrease in production and decrease in demand for labour – rise in unemployment

As seen from the diagram, the decrease in demand for labour from D0 to D1 will contribute to an excess supply of labour of L1L2. As labour market is sticky downward in wage adjustment, excess labour supply condition will prevail and disequilibrium level of unemployment will occur.

**Qn: Explain how the Singapore government can solve this form of cyclical unemployment due to reduction in export demand and foreign direct investment (FDI) (fall in external demand)?**

**Increase local AD components like government expenditure and local consumption – raise population -local consumption**

 **increase the production of the infrastructural development (a form of government expenditure – direct increase in AD – via k will raise real GDP and provide economic activities – increase in production and raise employment**

### Equilibrium Level of Unemployment

* + - This occurs when the labour market is in equilibrium but some workers of the **working are unwilling or unable to find work** at the current wage level despite the fact that DDL is equal to SSL

### Natural Rate of Unemployment (non-accelerating rate of unemployment)

* + - Due a combination of frictional and structural unemployment, the labour market will experience a condition of unemployment at a particular level of inflation rate. This rate of unemployment can exist even when the labour market demand equals to the labour market supply.

### Frictional Unemployment

* + - It occurs as result of poor information in the labour market which makes it difficult for workers to find employment and thus creates a time lag before workers find suitable jobs.

### Structural Unemployment

* + - Structural unemployment is caused by the changing pattern of demand and/or supply in the economy as a result of sectoral adjustment, technological advancement, imperfect labour market and seasonal adjustment of production period.

### Sectoral Unemployment (adjustment in sectors of the economy)

* + - Sectoral unemployment occurs when there is a change in pattern of demand and change in cost competitiveness within a particular sector of the economy 🡪 Change in competitive advantage

### Technological Unemployment

* + - Technological unemployment occurs as a result of a change in production techniques, usually with the introduction of new technology.

🡪↑ Productivity 🡪↓dd for labour (displacement of workers due to use of capital)

🡪skill incompatibility (new technology) – mismatch of skills

**Qn: Why is technological unemployment inevitable in Singapore?**

**High dependency on capital and technology for economic growth – (high valued production – high growth rate and high wage employment) - likely to experience skills incompatibility and displacement of workers**

**sectoral adjustment to accommodate dynamic efficiency to raise competitiveness – utilize more machineries – move up the production ladder – overcome the economic competition from neighbouring countries**

### Regional Unemployment

* + - This form of unemployment occurs when a certain region experiences full employment but another region has unemployment.
		- This is due to occupational and geographical immobility between regions of a country which occurs as certain regions are no longer able to attract investment to provide employment due to poor investment environment and higher wage rate.

### Seasonal Unemployment – M.I.C.E.

* + - It is caused by relatively regular and anticipated decline in business activity during a certain time period of the year.

### Displacement of Workers

* + - A replacement of a batch of workers due to certain reasons

### **Qn: Which types of unemployment are most common in Singapore? (CSQ)**

Cyclical unemployment / technological unemployment (structural unemployment)

## How to Increase Labour Force Participation Rate

* + - Provide more financial and social support to encourage female workers to join the labour force
		- Shorten the training and development process to allow new workers to enter the labour market at an earlier stage (Shortern NS to extend part-time workers)
		- Extend the retirement age to sustain labour supply
		- Reduce UN+ benefit/For Singapore, the government uses incentive (workfare) to encourage labour participation

**Why low rate of labour participation rate is undesirable?**

low active working population - reduce labour supply – increase wage rate – increase cost of production

* lower output level – slower economic growth
* lesser workers – rising social welfare expenditure/ lower tax revenue

## Impacts of Unemployment

### Rise in opportunity cost of idle resources seen in terms of loss of production and the need for more funding to finance the introduction of unemployment benefit

### Increase in cost of government expenditure

* + - Unemployment benefits have to be given out and there is a decrease in tax revenue since taxable income from employment and business activities will be reduced.
		- This will create budget strain as government expenditure will be greater than tax revenue. (budget deficit – Govt exp > TAX REVENUE)

### National income will be lowered which will lead to a reduction in real per capita income.

* + - Also, lower tax revenue will mean that there are lesser sources of tax revenue to finance public project to provide more public and merit goods, forbidding life to be more comfortable, and improve qualitative aspect of SOL.

### Unemployment will also create social instability as illegal activities and crime rate will rise.

### Unemployment will also lead to unequal distribution of income as the excess labour supply will drive wage rate downwards, lowering the income of the workers and this will lead to social dissatisfaction.

### Unemployment will undermine the economy’s production capacity as resources are under-utilized.

* + - Actual economic growth measured in terms of growth of GDP will decrease.
		- Lesser tax revenue will mean that the economy is unable to have more resources to generate potential growth as the government is unable to finance its infrastructural and institutional development to induce economic development for future growth.

### Unemployment is also an indication of the loss of competitiveness as the economy may cut production and reduce employment as it cannot sustain their comparative advantage in export demand and inflow of investment into the economy.

### **Why government needs to maintain low rate of unemployment?**

### reduce opportunity cost of idle resources

* prevent budget deficit/strain - ↑UN+ benefit/↓tax
* increase production capacity
* maintain a high SOL (more people have income to spend/tight labour market will lead to rise in wage rate)
* prevent unequal distribution of income – to maintain social stability
* raise tax revenue to provide financing for infrastructural and institutional development
* ascertain competitiveness

low unemployment rate will prevent unequal distribution of income as this will mean that there is a large group of people in the economy who are working, and thus, this implies that they have a source of income. This means that the income gap is lesser since the lower income group has a higher level of income. Consequently, there will be lower degree of social dissatisfaction and will prevent the economy from experiencing social instability that will undermine economic development.

Qn: Why Singapore government needs to focus on maintaining low rate Unemployment?

## Explain why unemployment is more important than other aims

* + - Unemployment may reduce the production capacity needed to propel economic growth as there is under-utilization of resources
		- Unemployment may not enable the people to overcome inflation due to lower purchasing power or lack of income
		- Unemployment may create inequality of distribution of income
		- curbing unemployment is more critical than curbing inflation

🡪cost of unemployment to the government is greater than the cost of inflation as the cost of unemployment benefit and the opportunity cost of the idle resources is too high

## Explain why other objectives can be more important than unemployment

* + - External disequilibrium is likely to affect unemployment rather than the other way round
		- Fall in Xd 🡪 fall in production 🡪 fall in I 🡪 increase in unemployment (Singapore is dependent on Xd/FDI for production which will create cyclical unemployment when there is adverse global economic downturn (as the economy tries to increase production, it will induce increase in demand for resources and the rise in cost-push inflation)
		- Exchange rate fluctuation due to the fluctuation in flow of capital 🡪 unstable external prices 🡪 undermine trading activities, investment, external debt 🡪 undermine production 🡪 undermine employment
		- Excessive focus on unemployment may lead to excessive inflation 🡪 fall in real wage of workers 🡪 may not encourage work efficiency 🡪 no real increase in output
		- Focus on high economic growth – will lead to structural unemployment as the economy focuses on high-valued production, which is capital-intensive and technological-based. Consequently, skill incompatibility and displacement of workers will occur as a result of technological advancement and sectoral advancement.

On the other hand, if the government introduces contractionary FP or MP to decrease AE will lead to a reduction in the production capacity which will mean the rise of unemployment.

This implies that a trade-off exists between attaining lower level of unemployment and inflation which means that the government must select an optimum level of unemployment and inflation rate the economy can sustain.

In the long run, such a trade-off will not exist as any attempt to reduce unemployment will only lead to rise in inflation without any adjustment of the natural rate of unemployment. As expansionary policy reduces the unemployment rate and raise price level, it will decrease the real wage. This will induce to reduce their labour supply and thus adjust the unemployment condition to original natural rate of unemployment at a higher inflation rate.

## Using AS-AD analysis to show the possibility of conflicting aim of government in using demand management policy to solve inflation and unemployment condition

Y₂=Y₀

YF=Y₁

P₁

Real GDP

P₂=P₀

AD₁

AD₀=AD₂

AS

GPL

AS-AD –Conflicting aspect of curbing inflation/UN+

↑AD🡪↑production🡪↑NY🡪↑N+ but ↑P

↓AD🡪↓P🡪↓production🡪↓NY🡪↓N+ (↑UN+)

🡪Solution: Corresponding SS-side policy🡪expand resource capacity🡪curb rising cost condition and sustain employment