

Unemployment results in

1. Lost incomes and production
2. Lost human capital.

accumulating ways: education, training, etc.

depreciating ways: not being used.

physical capital → being used.

it cost more as longer time unused.

Population

Not working - age.

working - age / 1. not in labour forced. sick/disabled.

population / 2. Labour forced - unemployed. employment < not part-time.

unemployment → don't want to work

1) (discouraged workers) in a voluntary

unemployment rate ↓



$$\text{Unemployment rate} = \frac{\text{Unemployed people}}{\text{Labour force}} \times 100\%$$

$$\text{Involuntary part-time rate} = \frac{\text{Involuntary part-time people}}{\text{labour force}} \times 100\%$$

$$\text{Labour Force participation rate} = \frac{\text{Labour force}}{\text{work-age population}} \times 100\%$$

$$\text{Employment rate} = \frac{\text{Employment people}}{\text{work-age population}}$$

Discouraged searcher: A person who currently is neither working nor looking for a job due to the past

repeated failure but indicate that he or she wants to have a job.

A person with a job to start in more than four weeks is not counted as unemployed.

unemployment.

1. Frictional unemployment.

↑
always
exist

unemployment that arises from normal labour market turnover

↓ e.g. not the right time / looking for a better job.

2. Structural unemployment.

created by changes in technology and foreign competition

3. Cyclical unemployment.

higher than normal unemployment at a business cycle trough and lower than normal unemployment at a business cycle peak.

Full employment - no cyclical unemployment.

GDP at full employment \Rightarrow Potential GDP.

Actual GDP $\begin{matrix} > \\ < \end{matrix}$ Potential GDP $\begin{matrix} \text{inflation gap} \\ \text{recession gap} \end{matrix}$

Full employment: the situation in which the unemployment rate equals the natural unemployment rate.

\rightarrow No cyclical unemployment, only frictional and structural

Real GDP - Potential GDP = output gap.

Price level \uparrow \Rightarrow inflation
 \downarrow \Rightarrow recession

Problem:

low, steady, and anticipated inflation/deflation (X).

unpredictable inflation/deflation (V)

1. Redistributes income and wealth
2. Lowers real GDP and employment.
3. Diverts resources from production.

Inflation $\xrightarrow{\text{cost more}}$ Hyper Inflation

Consumer Price Index (CPI) measures the average of the prices paid by urban consumers for a fixed basket of consumer goods and services.

CPI reference base period: defined to equal 100

the average CPI of 12 month in 2012 is 100.

2017 \Rightarrow 130.4.

$$CPI = (\text{Current cost of basket} \div \text{base-period cost of basket}) \times 100$$

cost of basket: for every goods and service: $P \times Q$.

The CPI might overstate the true inflation

1. New good bias.

New goods are not counted in the base-year. If they're more expensive than the goods they replaced, CPI \uparrow .

2. Quality change bias.

Quality improvement occurs every year, so the rise of the price for the better quality is not inflation

3. Commodity substitution Bias.

4. Outlet Substitution Bias.

The price of a good falls as time passes but the CPI does not take it into account.

The GDP deflator = $(\text{Nomial GDP} \div \text{Real GDP}) \times 100$.

$\text{Nomial GDP} - \text{Real GDP} = \text{Inflation}$.

Chain Price Index for Consumption = $(\text{Nomial consumption expenditure}$

$\text{CPI} = \frac{\text{C} - \text{Real}}{\text{C}} \times 100$

Real wage rate = $(\text{Nomial wage rate} / \text{ADP deflator}) \times 100$.