## Ch. 22 Monitoring job and inflation

Principles of Macroeconomics ECON 102

#### Outline

- Employment and unemployment
- Unemployment and full employment
- Price level, inflation and deflation

#### Employment and Unemployment

- Why do we care about unemployment?
  - Waste of human resource
  - Lost of incomes and production
  - Think about a smart KFUPM graduate that is not being a productive member of society
- Definition
  - What is the defined as being unemployed?
  - Not having a job is not the same as being unemployed

## Terminologies

- <u>Population</u> is everyone within a country
- We don't expect children and those who are mentally/physically handicapped, or in jail, or in hospital to work → working-age population
- <u>Labor force</u> + not in labor force makes up the working-age population
  - Some people are not in the labor force by choice
- Employed and unemployed adds up into the labor force
  - 2 conditions for being unemployed: not having any job and still actively looking for one

#### Labor market indicators

- The unemployment rate
  - Percentage of no of unemployed / number of labor force
- The employment-to-population ratio
  - Percentage of number of employed / number of working-age population
- Labor force participation rate
  - Percentage of labor force / number of working-age population

#### Other labor conditions

- Marginally-attached worker → recently looked for a job but could not find any
- Discouraged worker 

  have stopped looking for a job because could not find any
- What about part-time workers?
  - Some countries considered them employed since they have a job
  - Other countries called them partly-unemployed

#### Unemployment and full employment

#### Three kinds of unemployment:

- 1. Frictional unemployment
  - When people move to different stage of life or moving to a different job
  - Example: a fresh graduate from KFUPM
- 2. Structural unemployment
  - When there are mismatch of demanded skills and potential workers qualifications
  - Example: a river engineer in KSA
- 3. Cyclical unemployment
  - Due to business cycle (changes to the economic condition of a country)
  - Example: it is harder to find a job during a recession
- It can be a combination of the three different kinds of unemployment

# Natural unemployment

- Natural unemployment is due to <u>frictional</u> and <u>structural</u> unemployment only
  - Frictional and structural unemployment is independent of economic conditions
  - Cyclical unemployment is not included in natural unemployment
- Natural unemployment is also considered <u>full employment</u>
  - When the unemployment rate is equal to natural unemployment rate
  - The economy is able to fully absorb the potential workers (cyclical unemployment rate = 0%)
  - The <u>output gap</u>, or the gap between the real GDP and potential GDP = 0

# Natural unemployment

- Factors affection natural unemployment rate:
  - 1. The age distribution of the people
    - Younger people may be more willing to change jobs
  - 2. The scale of structural change
    - Technological change may substantially shift the demanded skills in the market
  - 3. The real wage rate
    - The wage rate in the market will affect how many people are willing to work
  - 4. Unemployment benefits
    - Unemployment benefits provide an incentive to not willing to work

#### Price level, inflation and deflation

- Inflation: persistent rise in price level
- Deflation: persistent fall in price level
- Price level matters because it affects the economic activities of a country
  - Remember ECON 101! when the price of a product increases, there will be less quantity demanded
  - when the price of a product decreases, there will be less quantity supplied

## Why in(de)flation is a problem

- Not all inflation nor deflation is a problem
  - Especially when they are expected / anticipated
- Issues related to change in price level:
  - 1. Income redistribution → change in price level affects real wage rate
  - 2. Wealth redistribution  $\rightarrow$  change in price level affects borrowers and lenders
  - Affects GDP and employment → change in price level affects GDP and unemployment rate
  - 4. Diverts resources from inflation → more resources spent on predicting inflation instead of focusing on production

## Consumer Price Index (CPI)

- CPI is a measure of average of the prices paid for a fixed basket of consumer goods and services
  - Only some goods and services, not ALL
- CPI is used an index to find inflation rate

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$$inflation\ rate = \frac{final\ year - base\ year}{base\ year} \times 100\%$$

## CPI is not perfect

- CPI can be biased due to:
  - 1. New goods bias  $\rightarrow$  an introduction of new goods
  - 2. Quality change bias  $\rightarrow$  we expect the quality to increase over time
  - 3. Commodity substitution bias  $\rightarrow$  substitutes goods affect consumer decision
  - Outlet substitution bias → consumers choose stores that sells at lower prices

## Other price indexes

- Chained CPI 

  using current and previous period quantities
- PCE (Personal Consumption Expenditure) deflator → instead of basket of goods, it is using C
- GDP deflator → using all goods and services instead of basket of goods

## Core and sticky-price inflation

- Sometimes we are more interested in the trend instead of the actual fluctuations
- Core inflation rate → we throw out volatile prices
  - Usually uses PCE deflator and excluding food and fuel
- Sticky-price inflation rate → examining how the infrequently adjusted prices are changin