Additional Slides

ให้อ่านควบคู่ไปกับสไลด์หลัก

Correlation and Causation

- Correlation: the relationship between two or more things
- Causation: the relationship between cause and effect
- Correlation does not imply Causation
- BUT Causation implies Correlation
- If there is a **causal** relationship between two variables, they must be **correlated**.

Unemployment

ส่วนเพิ่มเติมจะเป็นสีแดง

Categories of Unemployment *(1 of 3)*

FOUR categories of unemployment:

- Frictional unemployment
- Structural unemployment
- Cyclical unemployment
- Seasonal unemployment

Categories of Unemployment *(2 of 3)*

- **frictional unemployment** is a normal turnover in the labor market, and is used to denote short-run matching problems.
- e.g. people quit jobs to find new ones because they want better salary or are not happy with their workplaces
- **structural unemployment** is a loss of jobs due changes in the structure of the economy, and thus is a long-run problem.
- e.g. newspaper workers are replaced by E-Book workers

Categories of Unemployment *(2 of 3)*

- **cyclical unemployment** is a loss of jobs due to business cycles
- e.g. when economy is good, jobs are plenty, and vice versa
- **seasonal unemployment** is a loss of jobs due to changing seasons
- e.g. rice farmers are laid off during summer
- ถ้าใครไม่ตอบ **seasonal unemployment** ในข้อสอบก็ไม่ผิดนะครับ แต่อยากให้ทุกคนรู้ว่ามีประเภทของ **unemployment** อันนี้อยู่

Inflation

ส่วนเพิ่มเติม หัวข้อจะมีสีแดง

The Costs of Inflation *(1 of 3)*

- During inflations, most prices—including input prices like wages—tend to rise together, and input prices determine both the incomes of workers and the incomes of owners of capital and land.
- In short, inflation raises both wage and prices of goods.
- So inflation by itself does not necessarily reduce one's purchasing power.

The Costs of Inflation *(1 of 3)*

- Purchasing power (PP) refers to how many goods we can buy with some money.
- Normally, inflation does not reduce PP because inflation raises both wage and prices of goods.
- But if our wages are FIXED due to “employment contracts”, then inflation will reduce our PP.
- This is because given the FIXED amount of income, we can buy LESS goods due to their HIGHER prices.

Fisher Equation (Page 30 of Slide 1)

- **real interest rate** The difference between the interest rate on a loan and the inflation rate.
- From this statement, we can write $r = i - \pi$
- OR $i = r + \pi$; this is called Fisher Equation.
- r denotes real interest rate, which is often assumed to be constant.
- i denotes nominal interest rate, which is the rate that banks use.
- π denotes inflation rate.

Fisher Equation

- Fisher Equation is a simple rule that banks use to set their (nominal) interest rates on loans and deposits.
- When inflation rate is high, banks will set higher nominal interest rate.
- Otherwise, REAL interest rate may become negative (i.e. $\pi > i$), and no one will deposit money in the bank.
- Negative real interest rate means that the value of money in the bank is deteriorating over time.

Fisher Equation - Example

- Suppose we have 100$ deposit, and apple price is 5$/unit.
- Consider 3 cases.

Case 1 >>> i = 0% and π = 0%

- We can buy 100/5 = 20 apples after a year.
- r = 0%, so we do not lose or gain from deposit.

Fisher Equation - Example

Case 2 >>> i = 0% and π = 10% (price goes up by 10%)

- We can buy 100/5.5 = 18 apples after a year.
- r = -10%, we lose from depositing money. The value of money in the bank is deteriorating.
- We should not deposit money when r is negative.

Case 3 >>> i = 10% and π = 10%

- We can buy 110/5.5 = 20 apples after a year.
- r = 0%, so we do not lose or gain from deposit

Fisher Equation - Example

- The example shows that when real interest rate is negative, we should not deposit money in the bank because the purchasing power is falling over time.
- For banks to attract deposits from people, banks should set high nominal interest when there is high inflation.
- When r = 0, we may not lose from depositing money, but there is no gain as well. In fact, there is an opportunity cost of putting money in the bank, i.e. not being able to spend money when urgently needed.