

Cyclical Unemployment: fall in labour demand in recessions, but wages are fixed in the short run. This leads to excess labour supply and unemployment.

Structural Unemployment:

- Minimum Wage
- Unions
- Efficiency wages

e.g., Germany after reunification: West German real wage rates were imposed on East Germany, leading to structural unemployment

Frictional Unemployment: unemployment associated with job search. Can be beneficial

(e.g., in marriage market, people search for right partner, which is beneficial in long run.)

In Europe, benefits generous and last longer, which leads to higher frictional unemployment

Unemployment insurance

Retraining

Natural Rate/NAIRU: frictional + structural (about 5% in Ireland and U.S., but double that in Continental Europe)

“Full employment” –at the NAIRU

Unemployment rate = structural + frictional + cyclical

Eurosclerosis: refers to fact that labour markets in Continental Europe are inflexible: i.e.,

lots of bureaucracy involved in hiring and firing. Typically, it's very difficult to fire someone. Ultimately, this leads to little job creation. (Compare to U.S. where labour markets are flexible and deregulated.)

Hysteresis: when cyclical unemployment leads to deskilling and exit from labour force. This suggests business cycles can have serious long-run effects.

Okun's Law

$$U = U_n - .5 \left(\frac{Y - Y_n}{Y_n} \right)$$

Downward pressure on wages in a recession

Economic Fluctuations/The Business Cycle

Explanation of Short-Run

Money non-neutral

(Forget about long-run material for now)

Output/Production is Demand-Determined

Price fixed; wages fixed.

In basic Keynesian model, prices are fixed. It's quantities that adjust.

Planned Expenditure

E.g., production is 100, and planned expenditure/aggregate demand is 80. In this case,

firms reduce production over time to meet demand. In new equilibrium, production is 80 and so

Production equals aggregate demand/planned expenditure, and so there is no change in inventories.

Key equilibrium condition is

Planned expenditure/Aggregate demand equals Production

Equilibrium is not necessarily good. Depending on what demand is, we could end up below potential output, Y_n

Labour demand (Derived demand)

As production falls, labour demand falls, and so unemployment rises

Maths of Model

Keynes assumed Aggregate Consumption Function was

$$C = a + mpc(Y - T)$$

So, assuming $NX = 0$ and $T = 0$, aggregate demand (or planned expenditure) is

$$AD = C + I + G = a + mpcY + I + G$$

Our equilibrium condition is

$$AD = Y$$

that is, aggregate demand equals production.
Hence

$$a + mpcY + I + G = Y$$

which implies that

$$Y = \frac{a + I + G}{1 - mpc}$$

Important point: we could have $Y < Y_n$ or $Y > Y_n$, where Y_n denotes potential output.

Crucially

$$\frac{\partial Y}{\partial G} = \frac{1}{1 - mpc}$$

What does this derivative mean: its the change in equilibrium output that occurs when government expenditure increases by 1 unit.

Because $0 < mpc < 1$,

$$\frac{1}{1 - mpc} > 1$$

This is the famous multiplier effect. Increases in expenditure raise output by more. Why? Basically, when I raise expenditure by 100, say, then (because output is demand determined) output increases by 100. But that's not all. That sale becomes your income, and so you will now spend $(mpc)(100)$. So output goes up by $(mpc)(100)$. This process goes on and on..

If I spend 1 euro, then output rises by

$$1 + mpc + (mpc)(mpc) + \dots$$

Adding up this sum gives

$$\frac{1}{1 - mpc}$$

Central Keynesian Idea: Increase G to fill output gap. Because of multiplier effect, expenditure didn't have to rise *that* much. This is called *expansionary fiscal policy*.

However, there is a lot of scepticism about Keynesian economics. For instance:

Permanent Income Hypothesis: suggests mpc is small, and hence the multiplier is small.

Interest rates, prices: Keynes assumed these were fixed, but if they rise, they can counter the multiplier effect and reduce effects of stimulus.