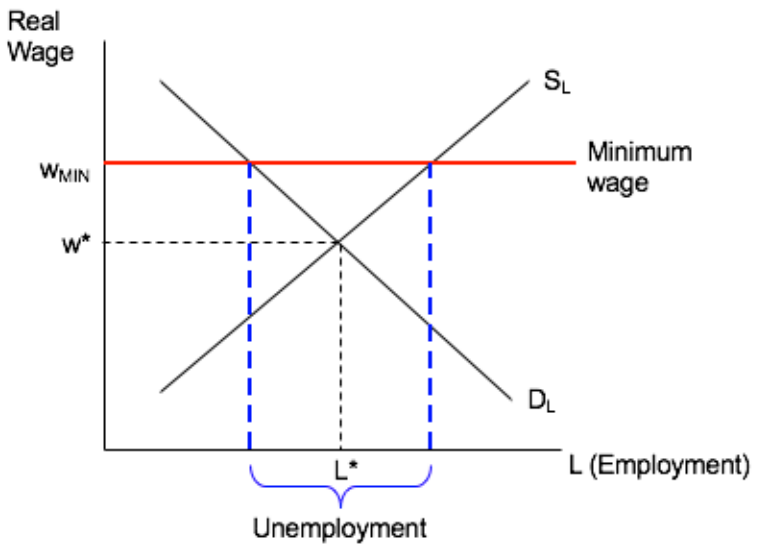
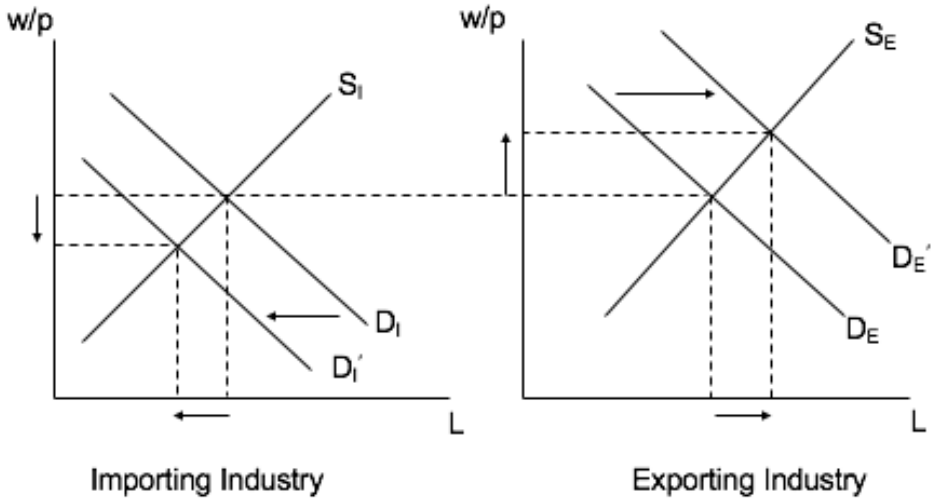
Unemployment – definitions and measurement



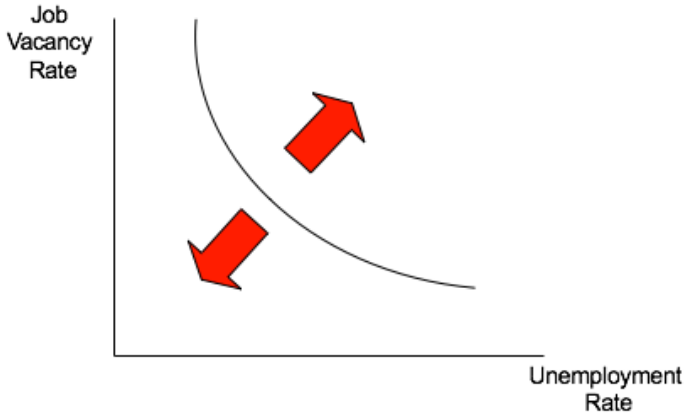
- Globalisation is associated with an increase in the amount of trade. What is the impact on domestic real wages?



- Frictional unemployment – Short term, where individuals are searching for jobs.
- Structural unemployment – Long term, where indivudals are matching skills to vacancies.
- Cyclical unemployment – Results from lower economic growth.
- These three forms of unemployment are included in the Natural Rate of Unemployment. As such, these are the barriers to full employment.

- Employed (E): worked at least 1 hour.
- Unemployed (U): actively looking for work.
- Labour Force (LF) = E + U.
- Working age population = LF + not in LF (individuals over 15).
- Unemployment rate = U/LF.
- Participation rate = LF/working age population.

The Beveridge Curve



- The Beveridge Curve is a graphical representation of the relationship between unemployment and the job vacancy rate. If it moves outward over time, then a given level of vacancies would be associated with higher and higher levels of unemployment, which would imply decreasing efficiency in the labour market.

The Business Cycle

- The business cycle is comprised of peaks, troughs and expansions.
- A recession is two successive quarters of negative GDP growth.
- Output gap – An output gap occurs when there is a difference between actual output (Y) and potential output (Y*).
    - Expansionary gap – output gap > 0
    - Contractionary gap – output gap < 0
        - This has implications for inflation and unemployment. Fiscal and monetary policy is used to manage output gaps.

Okun's Law

- Okun's Law outlines the relationship between unemployment and losses in a country's production. The "gap version" states that for every 1% in the unemployment rate, a country's GDP will be roughly an additional 2% lower than its potential GDP.

- Each extra % point of cyclical U ➔ β% increase in the output gap.

$$\frac{Y - Y^*}{Y^*} = -\beta(u - u^*)$$

- U* = natural rate of unemployment
- U = actual rate of unemployment
- U – U* >0 ➔ cyclical unemployment.
- β_{US}=2; β_{AUST}=1.6;

Short vs Long run

- Short run changes in demand are matched by changes in supply with no change in price.
- SR output gaps are caused by SR expenditure changes.
- Long run prices adjust to eliminate output gaps.
- Bring actual production into line with LR potential production.

Lecture 4 – Short-run Macro: The Basic Keynesian Model

Spending and output in the short run

- When GDP rises and falls, the economy is in periods of contraction and expansion. We can measure these expansion and contractions through:
    - Levels of unemployment – Key indicator of state of the economy because in periods of recession, unemployment is high and vice versa for booms.
    - Durable goods – They are very sensitive to changes in the economy.
    - Non-durable goods – Less sensitive.
    - Inflation – Contractions occur soon after a decline in inflation.

Aggregate expenditure

- AE = C + I + G + NX
    - Consumption, investment, government purchases and net exports
- Planned aggregate expenditure is the total planned spending on final domestic goods and services.
    - Not that we are in the short run where prices and interest rates are constant.
- Output is determined by planned AE.
    - If actual investment (I) is greater than planned investment (I), inventories increase. The inverse holds true. (May be different that what was planned).
    - But for everyone else (C,G), we assume that actual spending = planned spending.

The Keynesian Model (2 section + 4 sector)

- Shows fluctuations in planned aggregate expenditure or how total planned spending can cause actual output to differ from potential output.
    - Too little spending leads to a contractionary output gap, whereas too much spending causes an expansionary output gap.
- Two sector model has households and firms.
    - Withdrawals (S)
    - Injections (I)
        - Y = PAE = C + I
        - I = Y – C = S
            - Thus, savings = (actual) investment
        - If PAE > Y (not in equilibrium):
            - I > S
            - Inventories unexpectedly go down
            - Production goes up to replenish inventories