

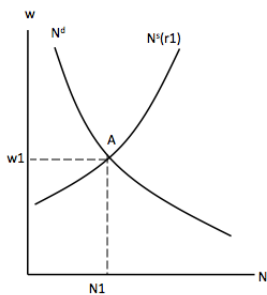
1 Short-run fluctuations, History of macroeconomics

- Two classes of models explaining business cycles: **Market clearing equilibrium models**, **Keynesian models**
- History of Macroeconomics : **Keynesian macroeconomics**, **Monetarism**, Robert Lucas's critique (1976), Rational Expectation Revolution, **New Classical Macroeconomics**, **New Keynesian Economics**, **Real Business Cycle**,

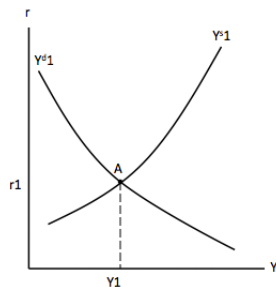
2 Change in Total Factor Productivity (Current and Future)

- An increase in Current TFP (z)
- An increase in future TFP (z')

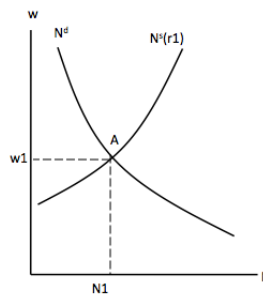
Labour Mkt



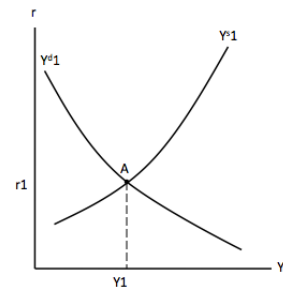
Output Mkt



Labour Mkt

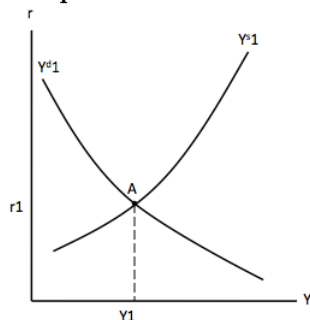


Output Mkt



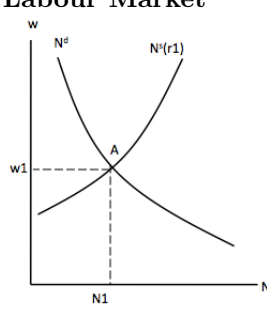
- Combine the two : $z \uparrow$ and $z' \uparrow$

Output Market



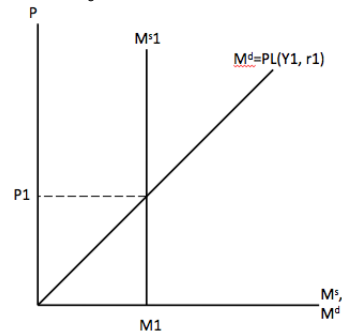
(effect of Δz is stronger)

Labour Market

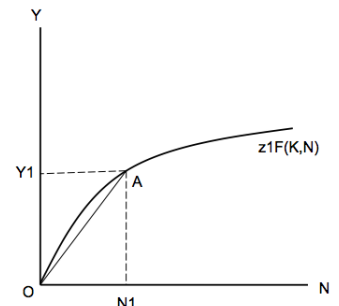


(effect of Δr is small)

Money Market



- Productivity

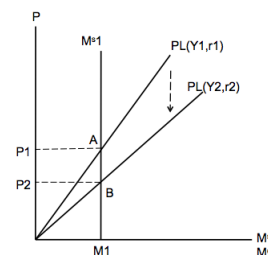


- Overall effects in the RBC model :

- A persistent increase in z (and z') results in: Employment the real wage (strong Y^s). Output, the real interest rate (weaker effect of z' on C^d , I^d and Y^d). The price level (as M^d increases). Consumption (rising current and future income and lower real interest rate). Investment (higher MP'_K and lower r). Average labor productivity

3 Money in real business cycles

- Most RBCs have neutral money.
- A M^d right-shift, **Endogenous money**

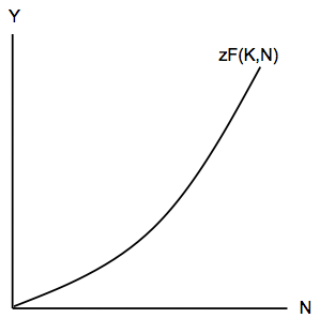


4 Keynesian Coordination Failure Model

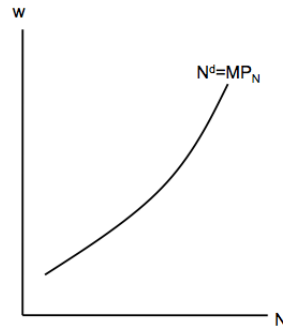
4.1 Strategic complementarities

- One person's willingness to engage in some activity increases with the number of other people engaged in that activity. The economy with strategic complementarities yields multiple equilibria. The aggregate production function is convex.

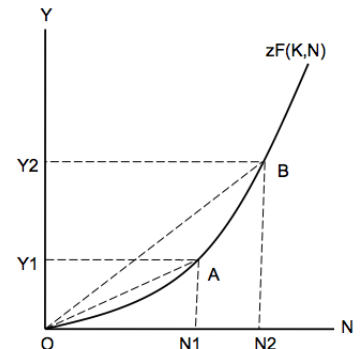
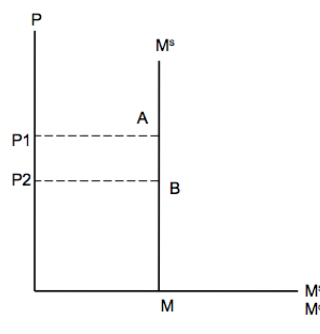
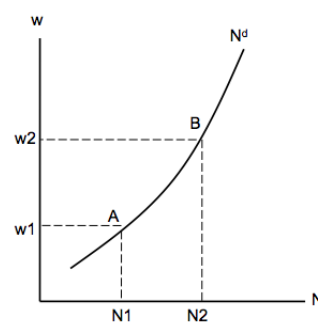
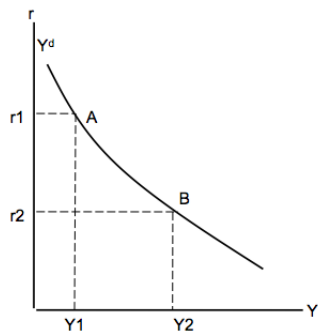
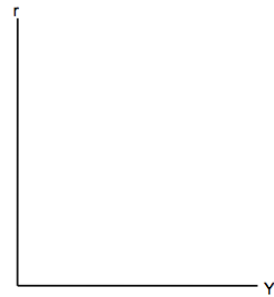
Production Function



Labour Market



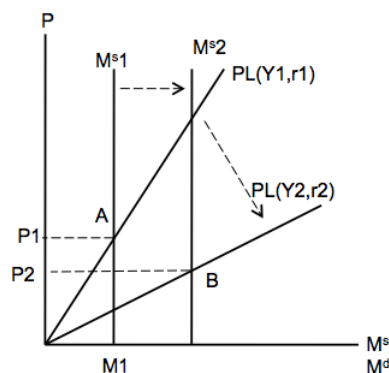
Output Supply Curve



- A = 'bad' equilibrium (high r and P but low y and w).
- B = 'good' equilibrium (low r and P but high y and w).

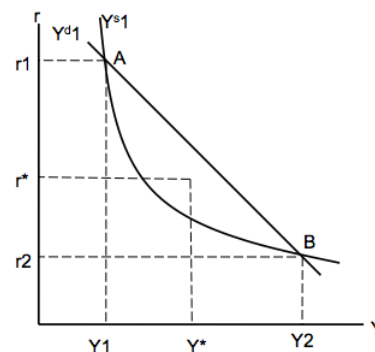
4.2 Sunspot behavior :

- Money Supply as a Sunspot



- Changes in M^S trigger alternate movements between A and B.

- Policy Action :



- Multiple equilibria are eliminated.
- Social welfare is worse than 'good' equilibrium but with less uncertainty and fluctuations.