

Ch 13: Keynesianism

The Macroeconomics of wage and price rigidity

Classical - and New Classical:

- Classical : economy adjusts to shocks, New Classical must explain business cycles and role of G
- Economy adjusts well to shocks, most are supply side shocks.
- Only unanticipated M policy has real effects.
- G policy has problems with lags, and has long run effects only if labour sees itself as worse off!
- Labour problems include mismatches (required shifts across sectors).
- Firm's hoard labour - cost minimizing reaction to costly hiring and firing.
- Errors occur with information processing, but prices adjust to information available.
- Discretionary stabilization policy has little or no basis in theory
- (What about automatic stabilizers?)

Keynesian

- deep recessions or long recessions are fundamental disequilibriums.
- Assume w and P are fixed, $Y < Y_{fe}$; then discretionary policy can be useful.
- New Keynesians must explain why W , or P does not change if agents are rational, what causes cycles, what can G do?
- Recall real wage: $w = W/P$
- % change $w =$ % change $W -$ % change P

13.1 Real Wage Rigidity

- job mismatch not sufficient to explain unemployment
- low demand for goods is associated with low labour demand and real wage does not fall sufficiently
- this is real wage rigidity

- Rigid Wages
 - Institutional factors (min wage laws, union power)
 - High wages are good; (higher than necessary)
 - Turnover costs (hiring and firing, training)
 - Reputation and ability to attract applicants
 - Efficiency wage; pay for extra effort

The Efficiency Wage Model

- Effort depends on real wage - s shape:
 - Gift exchange: paid well and not fired during slowdown in return for high level effort (implicit contract)
 - Shirking game: shirking occurs at low wages because the cost of losing the job is low. As the wage increases, shirking becomes more costly. Monitoring is expensive, higher wage gets more effort and reduces monitoring costs. This gives a convex portion to the effort curve.
 - Diminishing returns and limited resources - time. (Effort is a measure of output)
- Efficiency Wage Determination
 - Maximize effort/wage (max slope from origin)
 - Employment is worth the efficiency wage

- If effort curve is fixed employment is fixed.
- Employment and Unemployment
 - Consider labour market, N_s and N_d .
 - Efficiency wage $>$ market clearing wage.
 - Excess N_s at efficiency wage.
 - N_d is MPN at a given effort level.
 - N_d is equilibrium N , it is demand determined.
 - Unemployment always exists! Mismatching need not occur.
 - Modification: efficiency wage varies procyclically.
- Full Employment Output
 - Less than market clearing
 - Demand determined, shifts in N_s irrelevant
 - Productivity shocks are the same as classical model. (N_d shifts left, Y_{fe} falls)

*** The efficiency wage model is important because it provides one explanation for the underemployment equilibrium. All agents are optimizing, but the market real wage appears to be too high with no tendency to fall. Even if this captures only a portion of reality, it does introduce a market clearing model of slow price adjustment.***

13.2 Price Stickiness

- Money is not neutral if prices are sticky.
- Perfect competition vs Imperfect competition
- Imperfect competition (3 elements)
 - Price setting: $P=MC(1+\text{markup})$ where Markup depends on perceived competition; perceived demand elasticity

- Change output as required at the set price (within some range)
- Change price if profit maximizing. Price changes cost something - menu costs (restaurant menus, e-commerce sites, international prices, catalogues)
- When MB (increase in profit) > MC (change price) then change P.
- ...microeconomics- IO - game theory.
- Produce to demand given the set price.
 - If $Q > Q_{\text{expected}}$GREAT
 - It is profit maximizing to produce more since $P > MC$
 - If wages are efficiency wages, excess labour supply exists at the going wage and output can be increased.
 - *** planned output < full employment output **
 - firms are always profit maximizing.
- Demand for output determines Labour demand.
 - Flip axes of the output = $f(\text{labour})$ curve
 - Effective demand for labour (as per Keynes)

13. Appendix : Wage rigidity

- Contracts are in nominal wages. If P rises, real wage falls and firms are willing to hire more (profit maximization). SRAS is upward sloping. In terms of expectations, if $P > P_{\text{expected}}$ SRAS is upward sloping (as the Lucas supply curve)
- New Keynesian = New Classical except in interpretation of SRAS.

13.3 Monetary and Fiscal Policy

- replace labour market with the effective demand for labour.
- IS-LM analysis remains intact.
- What is the long run? What is SRAS (flat)
- Price rigidities can yield sloped SRAS if some prices adjust more quickly than others (a competitive sector)
- Wage rigidities can produce upward sloping SRAS if not all contracts are in nominal wages (or defined periods).
- Nominal W and P rigidities and real wage rigidities mean that the short run adjustment may be largely unpredictable at the aggregate level. Different shocks may imply a different set of adjustments in which sectoral rigidities play different roles.
- Disequilibrium in these New Keynesian models occurs even though agents optimize and have rational expectations. However price and wage changes are not be costless and are therefore not instantaneous.

13.4 Keynesian Theory of Business Cycles and Stabilization

- What causes cycles and what can be done?
- RBC theorists are Classical - New Classical ; Supply shocks are predominant.
- Keynesian - New Keynesian : Aggregate Demand shocks dominate. Recession occurs because Effective demand is too low
- Business Cycle Facts - OK
 - Investment pro-cyclical and leading

- Inflation pro-cyclical and lagging
- Business cycle fact - Not OK
 - Pro-cyclical labour productivity; demand shocks move N_d along a production function MPN falls as N increases - labour productivity would be counter-cyclical!
 - Labour Hoarding helps here. Empirical evidence ??

Stabilization Policy: Demand Management Policies

- consider recession
 - (a) do nothing: IS left, Y falls, r falls: LR P falls, Y increases to Y_{fe} , r falls. Net effect lower P and r and unemployment for some period.
 - (b) Use FP: in LR Y, r return to original equilibrium. C, NX and I are less, G is greater. The increase in G must be repaid sometime. The period of recession is less and P does not have to fall.
 - (c) Use MP: in LR increase M_s , P does not have to fall.
- Problems
 - (a) MP-FP co-ordination
 - (b) Where is Y_{fe} ? What is the natural rate of unemployment?
 - (c) When will policy have an effect?
 - (d) How much of a policy intervention (multiplier)?
- General Responses
 - (a) respond to severe recessions
 - (b) do not fine tune

Keynesian Supply Shocks

- basically the same as classical analysis with a meaningful SR with one addition: suppose the shock also induces a price increase in the sectors most affected and so price level increases.
- Oil price shock
 - Impact effects: FE line shifts left and LM shifts left further than IS-FE equilibrium.
 - MP or FP to get to IS-FE worsens inflation!
 - In the face of recession and inflation....do nothing!!
 - This is a false problem: RBC theorists would not do anything either!!