

## Inflation and Unemployment I

- Clearly considered important phenomena, in the past much of the UK economy was sacrificed at the altar of inflation
- Can see the new consensus thinks it has sorted it, but could it come back, do we really understand it?
- What is it: rising price level but note it is a dynamic concept not a static concept suggesting comparative static models don't really help-second derivative of prices
- But what is the relevant price index?:
  - Implied deflator for Total Final Expenditure (all G&S)
  - Implied deflator for Total Domestic Expenditure (all C&I)
  - Implied GDP deflator
  - Implied deflator for consumers expenditure(CPI)
  - Retail price index: unlike rest compiled directly from price data, but shopping basket of G&S –changes-, base weighted index –becomes outdated so periodically updates for changes in the pattern of expenditure
  - Late 80s saw discussion of mortgages interest (really a transfer) –now report with and without
  - Important as with any stat that consistent over time.
- Various costs of inflation:
  - Real effects –shoe leather, tax
  - Effects on firms and individuals, through tax interest rates, equity
  - Distributional effects
  - Effects on competitiveness
- But can question whether once inflation reasonable whether the costs of making it lower are justified
- Argument –if have controlled inflation then when come out of recession get low inflation economy
- Has anything changed?
- Depends on theoretical understanding.
- Need to distinguish
  - Impulse or trigger eg exogenous shock
  - Transmission or adjustment mechanism
- Usually distinguish
  - Demand pull –were trigger is increase in D that increase prices by some ad hoc means
  - Cost push –exogenous shock passed on to prices by mark up pricing or bargaining power of unions

- Accommodating monetary and fiscal policy, but indep of state of demand.

## Money and Inflation

- Distinguish Monetarism and political monetarism which was just old fashioned laissez faire economics

$$MV = PT$$

$$MD = k PY$$

$$MD = MS = M$$

$$M = kPY$$

$$\text{Let } \alpha = 1/kY \text{ at FE which means } P = \alpha M$$

$$dP/dt = \alpha dM/dt \text{ so money supply causes inflation}$$

- NB relies on k and Y remaining constant or well behaved –stable demand for money
- Debateable as:
  - Constant k implies no other demand for money, eg speculative
  - Also increase in velocity of circulation with introduction of new forms of credit money in the 1970s
  - So not testable cos Duhem Quine
- But question was –Is money exogenous as assumed or is it endogenous?
- accommodating Kaldor and Desai provide classic critiques of monetarism
- This is still an important question though to some degree the ‘consensus’ might seem to accept endogenous.

## Keynesian –wage inflation

- Importance of wage inflation was anticipated by the early Keynesians such as Robinson and Kalecki
- Unemployment was a discipline on wage inflation
- Unemployment could be eliminated by demand management
- With process set as a mark up on wages Keynesian policies to reduce unemployment would founder on inflation
- Needed wage controls –incomes policies later
- Control the nominal level of wages and target real wage
- NB implicitly FE was a target
- With the genesis of the Phillips curve trade off and the early estimates that suggested unemploy costs of controlling inflation were relatively low these concerns were ignored.

## Neoclassical/Neo-Keynesian-extension of microeconomics

- Equilibrium real wage given by MP of labour and max sustainable growth of real wages is the rate at which productivity increases
- If real wage greater than productivity cos TUs or other exogenous shocks then unemployment will result
- The more flexible the real wage the faster the market will adjust back to equilibrium
  - $wg = f(U)$
  - On the assumption that unemployment is a good proxy for excess supply of labour
- Lipsey and Parkin argued growth of wages was a function of unemployment i.e. the Phillips curve, that had already been discovered as a statistical phenomena
- Implicitly assumes neither workers nor employers anticipate inflation –they behave as if the real and money wage are equal
- Friedman argued that expectations augmented the impact of unemployment
  - $wg = f(U) + gp^e$
  - So agents expectations informed by the past
- Negative relation between money wage inflation and unemployment exists only in the short run when price inflation imperfectly anticipated
- Friedman also introduced the concept of the natural rate of unemployment –where actual and expected are equal
  - Replace  $U$  with  $U - U^N$
  - Can't measure  $U^N$  so tend to use variables that might influence it, such as benefits
- Rational expectations critique suggested that adaptive expectations implied systematic errors
- Means vertical P curve with no trade off in the long run or the short run
  - $Wg = qg + pg$
  - Wage growth is productivity growth plus actual inflation which is dependent on monetary policy –implies relation between  $pg$  and  $wg$
- Considerable empirical dispute of this approach in 1980's
  1. Beckerman and Jenkinson 1986 found no sign of a sig relation between growth of wages and unemployment
  2. Grubb 1986 used a more complex models which included the difference between the rate of growth of real wages and the trend rate of growth of productivity and found some link, but there was a problem of interpretation
  3. Still problems in explaining the real wage behaviour of the 1980s in such models, where wages increased despite mass unemployment

## Structural Models

- Alternative approach to augmented P curve because:
  - -dissatisfied with micro foundations story –given collective bargaining
  - -weakness P curve is cant take account of changes in the real wage itself If growth wages less than growth prices real wage declines and expect a push by workers to restore lost ground
  -
- Gives real wage resistance
  - $Wg = F((w/p)^* - (w/p)_{t-1})$
  - Where  $(w/p)^*$  is the target real wage
  - Can improve by making use of after tax real wage and ,making the target a function of various economic factors
- Jackson, Turner and Wilkinson
- Henry Sawyer and Smith
- See this approach as representing a bargaining approach
  - Wage – wage: differentials spill over union/non union sectors
  - Wage – price : oligopoly with higher than n average productivity, accede to wage demands rather than reduce price, wages leadership, tax system inegalitarian –catch up and trade internationalises it.
- Post Keynesians would have a mark up pricing model that determines real wages but nominal wages determined by collective bargaining –emphasise differential and anticipation
  - -real wage resistance
  - Sargan (1964) provided an early and influential model of this for (ECM)

## Further Developments

### Neo Keynesian

1. Insider outsider: Balkanisation of the labour market means changes in unemployment doesn't necessarily affect wages
2. Hysteresis: long term unemployed have no impact –natural rate will vary with path take to it
3. Similarly skills atrophy quickly, unemployed give signals of inferior labour if take lower paid jobs, insiders prevent hiring of lower cost workers
4. Findings of particular features in UK labour market –more inertia/rigidity

But generally any debate has declined with the 'new consensus' and the independence of the central bank.

Though as have seen starting to be seriously questioned.

#### Structural Models –post Keynesian/Marxist

1. Focus on segmented labour markets –different to insider-outsider more complex and empirical.
2. Rowthorn's conflict theory of inflation and Sarantis (1992) application of similar model:
  - a. Workers negotiate money wage increase to provide tolerable level of real wages or acceptable share of output and firm set prices using target rate of profit on capital (PK)
  - b. If aspirations of the two classes differ then price stability is impossible – shift expect augmented P curve
  - c. But distinguish anticipation and expectation –the former what base actions on
  - d. Important: balance of class forces and role of the state
3. More recent see Arestis and Sawyer's structural model: discuss in class
  - a. Inflationary pressure from level of demand relative to productive capacity, distributional conflict, and cost elements
  - b. Money endogenous
  - c. Inflation barrier –level of economic activity for which inflation would be constant
  - d. Unlike NAIRU no real balance effect such as that which sees level of demand adjust to NAIRU and there is no separation between demand and supply sides of the economy
  - e. Policies that reduce inflation through unemployment will cause the inflation barrier to fall, sustaining higher unemployment
  - f. So need demand policies to stimulate investment and underpin full employment.

Clearly the link between inflation and unemployment plays a particularly important role and now move on to look at unemployment in more detail.