Unemployment is due to real wages being to high

There are four possible relationships between real wages (RW) and unemployment (U): Firstly, U can be caused by high RW (the “ classical” case), secondly high RW can be just a symptom of U rather than its cause, thirdly RW can be simply irrelevant to U and, finally, higher RW may even be a solution or, at least, a prerequisite for the solution of the U problem. This debate is of particular importance not only because it deals with the major issue of how to combat U but also because it sheds light on the micro roots of the theories of U, focusing in particular on their labour market assumptions which are currently one of the major areas of controversy in economics. It should be noted here that throughout the essay the term RW will refer to the so called “ product wage” which measures the cost of labour to the firm, deflated by the prices of the goods this labour produces.

This is able to measure much better the effect of wages on profitability than alternative definitions referring, for example, to the purchasing power of the workers’ net earnings. The most straightforward and unambiguous case of U being actually and uniquely caused by high RW is the (neo)classical theory. This is based on the Marginal Productivity theory of distribution according to which firms employ workers -just as the other factors of production- until the point at which the last unit employed adds as much to Total Revenue as to Total Cost. Assuming profit maximisation and perfect competition workers are offered a (nominal) wage equal to their Marginal Revenue Product (MRP). Further more, (neo)classical theory assumes a diminishing Marginal Physical Product (MPP) because in the short-run the capital stock is constant so each additional unit of labour will have less capital stock to work with (Law of Diminishing Returns to the Variable Factor).

This implicitly assumes that firms are able to vary their labour to capital ratio even in the short run. The MRP, which is the labour Demand Curve (DL), is thus downward sloping as well since it is simply the product of the (downward) MPP and the (constant) price of the good produced (because the firms are assumed to be price takers). This also implies that it is the RW that affects Labour Demand since any changes in the price of the good will lead to a one-for-one change in the DL. The model is concluded by introducing a Labour Supply Curve which is again a -rather inelastic- function of the real wage.

The neoclassical labour market equilibrium is shown in figure 1 below, with P* and L* being the equilibrium price and employment consistent with clearing markets and full employment. U in this model can occur if (real) wages are pushed (or kept) above their equilibrium market clearing level as shown in figure 1. Various market rigidities such as infrequent wage bargaining, and government distortions such as minimum wages are often accused but the major culprits are trade unions. Blame is also often given to the real unemployment benefits which can set a floor to wages. It should be noted here that even within the neoclassical model excessively high RW need not necessarily be the cause of U in the sense that U can be initiated by, for example, an AD or AS shock which leads to U through a sluggish labour market as well as by an increase in trade union demands (the “ ultimate” RW type U).

Within the neoclassical framework however, whether we consider AD initiated U to be caused or not by RW is more a matter of semantics than substance. The important point to note is that in all cases U can be

eliminated by lowering RW to their market clearing level. Moreover, it is argued that this can be done by lowering nominal wages (or moderating nominal wage increases); this is derived because of the assumption of competitive pricing so that a fall in costs does not lead to an equiproportional fall in prices which would leave RW unchanged. In the -more recent- monetarist terminology, an increase in RW due to trade union pressure would probably be said to increase the Natural Rate of U. RW U, however, does not fit very well in the monetarist models (as we shall see and later on they give other explanations of U) because by definition the Natural Rate requires that labour market clear.

It is sometimes argued that RW U is voluntary since trade unions represent the workers so that the workers are collectively responsible for this U but it is not really a very powerful argument. Ironically perhaps, the RW thesis fits better with the – basically “ Keynesian” – NAIRU theories, at least those of its versions which have the Feasible Real Wage fall as employment rises, i. e. those versions which maintain the concept of the diminishing marginal productivity. In such a model an exogenous rise in trade union RW demands will shift the TRW upwards, leading to a higher RW and a higher NAIRU, as shown in figure 2.

Of course in the NAIRU model, just as in the neoclassical one, other possible causes of U are recognised such as AD or AS shocks but again the underlying reason is the RW claims of workers. Indeed, there is a surprising similarity between the neoclassical and the NAIRU explanations of U as well as their proposed solution, namely reduce trade union power. In fact the NAIRU model may even go further since it has explicitly incorporated in its analysis

that AD shocks will fail to have permanent effects on U so that only the “ pure” RW U (and real shocks) can cause U in the long run. Neoclassical theory also believes that AD U will eventually be eliminated but it has not included as explicitly the trade union behavioural rules that will lead to such results.

On the other hand, of course, NAIRU models which allow for Hysterisis do not allow for such a self-corrective nature of the economy but the essential point here is that high RW claims are again the cause of this permanent U (through insiders-outsiders effects). Nevertheless, we must be careful not to underestimate the differences between the two theories: the NAIRU has a disequilibrium view of the labour markets and based on imperfect competition and mark-up pricing unlike the neoclassical model which generally assumes equilibrium, market clearing and perfect competition which are temporarily and sporadically distorted by unions or government intervention. This difference is often seen in their policy recommendations since NAIRU theorists are more sceptical of the effectiveness of labour market deregulation and are, in general, more willing to advocate incomes policies. Moreover, as we shall see different versions of the NAIRU are less close to the neoclassical approach and the RW thesis.

As we have already seen in our analysis of the neoclassical and NAIRU approaches, RW may in some cases accompany but not actually cause U. Indeed, this was Keynes’ initial position exposed in the General Theory (1936). While he set output and employment to depend on Effective Demand, he maintained the classical assumption of a downward sloping DL (based on the Marginal Productivity of Labour theory) and hence that a rise

in U requires a rise in RW. We can clearly see that this is not all that radically different from the classical explanation of the cycle and indeed this led to the Neoclassical Synthesis. Keynes nevertheless, had argued that money wage cuts could not generally lower RW for the economy as a whole and hence reduce U. Though individual firms or industries may succeed in altering their relative prices (and wages), when nominal wage cuts are applied throughout the economy they will simply reduce the price level through mark-up pricing and leave RW unchanged.

There was (and still is) a big debate on whether falling wages and prices would eventually increase real AD and lower RW concerning such issues as the quantitative importance of the Pigou and the Keynes effect, the possibility of a liquidity trap and the elasticities of the IS/LM curves among other things which I do not intend to present here. The moral of the story is that, for Keynes, U had for all practical purposes very little to do with wages, nominal and real; it was simply an outcome of demand deficiency and should be treated as such. Soon after the publication of the General Theory, Dunlop and Tarshis found that evidence for the UK and US showed a pro-cyclical movement of RW, rather than the counter-cyclical one expected by Keynes and the classicals. Keynes himself somewhat reluctantly admitted that pro-cyclical RW are a possibility and argued that anyway this would actually strengthen his theory, though he also expressed doubts on the reliability of these results and tried to reconcile the classical marginal productivity theory with pro-cyclical RW.

Two possible ways that a downward sloping DL curve may not lead to high RW in recessions are that counter-cyclical changes in the non-labour material

imput prices and/or decreases in the capital stock during recessions may cause a downward shift in the MRP in the slumps mitigating the rise in the RW. Neither explanation seems very powerful while the capital stock argument (which is equivalent to capacity Hysterisis in the NAIRU framework) leads to not very classical results (i. e. permanent U). Before we leave the wider classical framework it is worth briefly examining the New Classical and monetarist explanations of U.

These are interesting because they do not include the RW at all, in their explanations of cyclical U although they maintain the belief on the Marginal Product theory. Cycles occur mainly due to mistaken inflationary expectations (through such mechanisms as the Lucas surprise supply curve and the Intertemporal substitution for leisure proposition) which cause agents to mistake aggregate price level changes with relative price changes. Employers and workers make opposite mistakes on their perception of real wages but the RW may in fact remain unchanged (though to the extent that workers make bigger expectational errors than employers, counter-cyclical RW are more likely). Similar results to that are offered by the “ Search theory of U” which would argue that mistaken inflationary expectations make the unemployed reject jobs in recessions because they think that the RW they are offered are lower than the “ normal” ones but the RW need not change at all.

In any case, however, the debate for the importance/behaviour of RW is obviously (?) not between the Neo and the New Classicals but between the former and various “ Keynesian” Quantity constrained models which depart to significant (though different each) degrees from the neoclassical labour

market assumptions. These models share the New Classical view that RW movement during the cycle is largely irrelevant, though obviously for radically different reasons as we will now see. Quantity constrained models were first proposed by Don Patitkin and were greatly extended by Clower. At a simple level they argue that the firms cannot vary their Labour to Capital ratio in the short run so that in a recession labour U is typically accompanied by unused capital equipment. This implies that firms are off their marginal product curves just as labour is off its supply curve as shown in figure 3.

Another way to understand it is that just as households are rationed in the labour market, firms are constrained in the goods market. Given normal cost pricing, a fall in AD will simply lower output since firms cannot sell as much as they used at the given prices and lower output means lower employment. It is clear that in this model the RW may actually remain at its market clearing level in spite of the U. Actually it may fluctuate between W1 and W2, the limits put by the (standard) DL and SL curves.

Once again I will not get into detailed advantages or criticisms of these models but we should note that such models are build on at least as strict assumptions as the neoclassical models, such as mark-up (or is it normal cost? pricing and a constant capital to labour ratio. Indeed elaborate attempts have been made to give a coherent microeconomic rationalisation to these assumptions such as, for example, oligopoly game theoretic models, menu-costs of changing prices, “ thick market externalities”, risk averse firms or imperfect capital markets to explain price stickiness. Nevertheless, many critics would still regard such economic behaviour as irrational or non-optimising but near rationality and viewing firms as creatures of habit may

indeed have more than a grain of truth in them. In any case, the above model has been criticised by some as “ modified neoclassical” because it has maintained the standard downward sloping DL curve and the Marginal Productivity theory (at least at full employment).

Sraffa first and Kalecki later challenged this and argued that Marginal Costs are constant for virtually all levels of output until the full employment level, implying a downward sloping Average Cost curve. Prices are set at a (constant) mark-up over average costs and the firm will produce the maximum possible at this price, as shown in figure 4. So assuming that we have a constant mark-up and that non-wage costs are a constant proportion of total costs, then the RW will be some constant fraction of the (constant) Marginal Product. Thus, we can see again that no requirement for RW to either rise or fall during the cycle.

Actually its behaviour depends on possible variations in the degree of monopoly (level of mark-up) which Kalecki expected to be counter-cyclical, thus making RW pro-cyclical, and on the ratio of the price of raw materials to wages which will probably be pro-cyclical, thus affecting RW on the opposite direction so that we cannot predict RW movements. It has been pointed out (by Keynes among others) that it is possible to have a Kaleckian-type situation at low levels of capacity and a standard neoclassical cost structure at higher levels when diminishing returns may set in. Such a model would allow different wage-output relations over different phases in the cycle. Other models actually assume increasing returns to labour and point out to the generally positive correlation between output and productivity growth.

All Quantity constrained models have, therefore, same conclusion: U is due to deficient AD and that RW are irrelevant to U. Actually higher RW may be a requirement for or a contributor to a recovery. If, for example, RW had fallen to W1 in figure 3, then it would obviously need to rise to W*. Probably more significantly, higher RW could help a recovery by raising AD (assuming that the shareholders have a lower Marginal Propensity to Consume than workers). Such arguments are often combined with more long-term considerations that high RW will put pressure on firms to innovate and invest rather than rely on cheap labour.

Another interesting point to notice is that New Classical economists (and perhaps Neoclassicals as well) would also agree that higher RW could reduce U but they would have in mind a completely different mechanism, namely incentive effects of higher RW to workers' work effort and participation in the labour force. In other words, they refer to the workers' net real earnings rather than the product wage we were considering up to now and would suggest measures to limit the wedge between the cost of labour to the firm and the earnings of the worker through cuts in income tax for example. Here we could go back for a moment to the NAIRU models, modified so as to have a horizontal FRW, due to Kaleckian cost curves or normal cost pricing policies. Such models do not require RW to rise with U since they are fixed at the now constant FRW; in fact the FRW may fall in depressions because of capital stock hysterisis leading to pro-cyclical RW behaviour.

It should be noted though that the nature of the model has not changed much : it is essentially a RW Unemployment model since for all practical purposes we must try to contain the RW claims of trade unions (though

lowering the RW may not be necessary now). In other words here we have the rather paradoxical result of (virtually) RW Unemployment together with even pro-cyclical RW behaviour. Digressing slightly, it is interesting to see in the NAIRU framework, the implications of increasing returns of labour, leading to an upward sloping FRW and a horizontal TRW, i. e. age claims being independent of U, as it is frequently said to be the case.

In such a model an increase in AD would not only reduce U but reduce inflationary pressures as well by increasing RW and, thus, reducing workers' real wage frustration. Concluding, once again no clear conclusion can be reached. Empirical evidence is hotly disputed but seems to indicate no strong relation between RW movements and U, which is hardly surprising given the confusion that exists at the theoretical level : The absence of such correlation could imply as diverse conclusions from NAIRU models through New Classical ones to Kaleckian theories. I would think that, though we can be fairly certain that the naive neoclassical model is not able to capture the intricacies of the labour market, more modern and elaborated versions of it, some form of the NAIRU model, for example is still very useful in understanding U. Similarly a modified and generalised " RW thesis" which would include RW claims rather than just actual RW levels I believe can still be applicable.