A Critique of Orthodox Labour Wage Theory

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Equilibrium in the labour market is assumed to be optimal and self-adjusting in classical labour theory. Recognising this assumption as simplistic, Alan Stuart presents a critique of orthodox labour wage theory and discusses some alternatives.

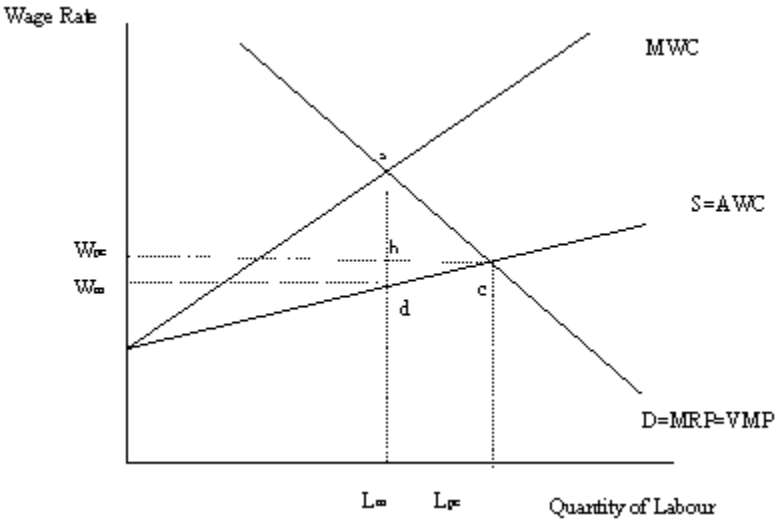
Too often in economic analysis, labour market equilibrium is portrayed by a simple model of perfectly rational individual firms and individual workers coming together in a competitive market, where each economic agent is assumed to be motivated to maximise his own utility and arrive at a market clearing wage rate and employment level. Equally, it is too frequently assumed that any shocks to labour supply or demand necessitate adjustments in the wage rate until the labour market once again reaches competitive Walrasian equilibrium. Such a simple approach to the labour market, based upon marginal productivity theory, ignores a huge variety of specific traits associated with labour as a tradable economic commodity. Only recently have the assumptions underlying orthodox wage theory been relaxed and attention been devoted to other sub-optimal methods, of reaching equilibrium in specific labour markets, that have greater empirical validity (Thurow 1995). This paper illustrates how the body of criticisms levied against orthodox tâtonnement theory provided by labour economists could complicate labour market analysis, and investigates whether these criticisms are valid.[1]

Institutionalism in Labour Markets

The main area where orthodox theory has come under attack has been through the institutionalist view of labour markets. Its basic tenet is that collective bargaining on behalf of trade unions renders the assumption of individual 'atomised' wage bargaining unrealistic (Carlin and Soskice, 1990). A simple description offered by some advocates of collective bargaining is that employers' associations and trade unions shift supply and demand curves to their consciously determined wage rate to clear the market (Brue and McConnell, 1995). Others consider it highly improbable that the wage rate resulting from collective bargaining will be the same as that which would emerge in a competitive setting, and consequently the level of unemployment would be different in the two scenarios (Masters; Moser and Reynolds, 1991).

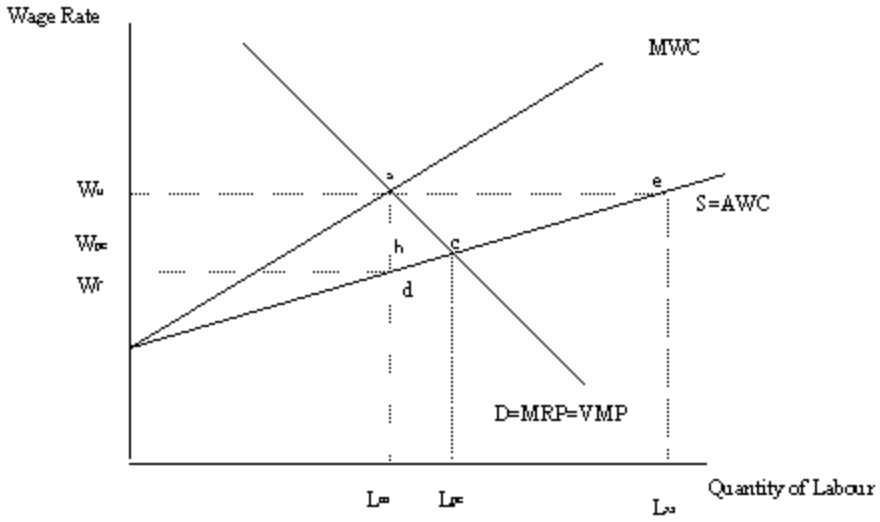
A major issue in relation to the institutionalist viewpoint derives from theory regarding the nature and purpose of trade unions, with the point being that there is no single raison d'être of unions and that they may sometimes trade-off wage rate maximisation for reasons connected with the social and political welfare of members. Prominent industrial relations author Michael Salamon (1992) expresses trade unions' goals as follows, and claims that they are usually in conflict with each other: collective power, economic regulation, job regulation, social change, member services, and self-fulfilment of members. Robert Frank, in particular, has emphasised the importance of 'status' in the choice of jobs by certain unions which in certain circumstances overrides wage preferences (Elliott, 1991). Even when we safely assume that individual workers, and their collective organisations, wish to, ceteris paribus, optimise their wage rate, there are a number of ways of analysing why the labour market will not necessarily reach an allocatively efficient equilibrium. A thorough analysis of two of such situations, monopsony and bilateral monopoly, can illustrate this point (Varian, 1990 and 1992).

Monopsony and Bilateral Monopoly Models



Monopsony in a labour market is a realistic assumption, since firms which have a sole right or ability to sell a particular commodity (i.e. goods market monopolies) will conversely be the sole buyers of the specific skilled workers relevant to that industry (i.e. labour market monopsonists). The equilibrium in a labour market monopsony is shown in Figure 1 above. The model requires two assumptions. The first assumption is that the firm's marginal revenue product (MRP) curve is coincident with the firm's short-run demand for labour curve (D). The second assumption is that the monopsonist is selling its product in a perfectly competitive market, so that the firm's marginal revenue is equal to the price received for each unit. A corollary of the second assumption is that the firm's marginal revenue product curve (marginal revenue ´ marginal product of labour) also coincides with its value marginal product curve (price ´ marginal product of labour). The marginal wage cost curve lies above the average wage cost curve because the firm must pay a higher wage to attract more workers, and (in the absence of an internally segmented labour market) pay this higher wage to all workers employed. The monopsonist's marginal condition equates MRP and MWC at point *a* and employs L_M units of labour, but needs to pay only w_M to each worker. The monopsony equilibrium wage and employment are lower than their perfectly competitive equivalents (w_{PC} and L_{PC}). Total efficiency loss is shown by the area *abcd*. Triangle *abc* represents the loss of consumer surplus and triangle *bcd* the loss of producer surplus (adapted from Brue and McConnell, 1995). Seen in this context, it has been suggested that a minimum wage would stimulate competition in labour markets rather than reduce it (Hosford, 1997).

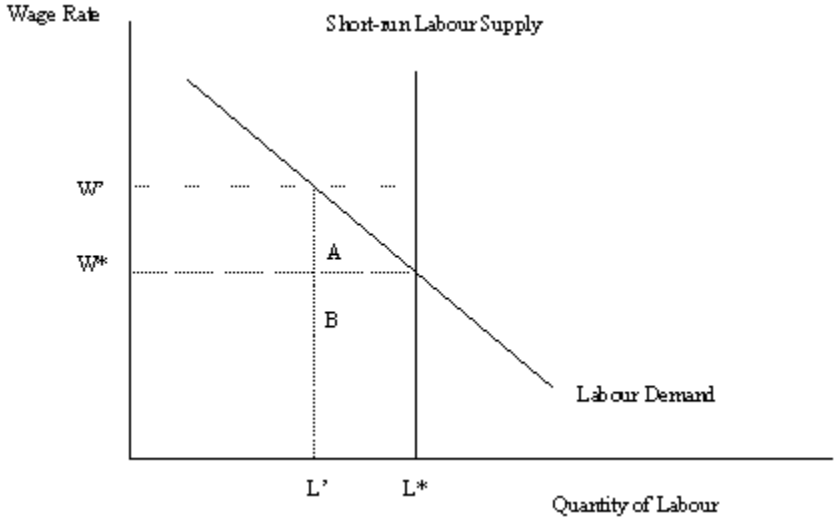
Figure 2: Bilateral Monopoly



Another quite feasible inefficient outcome is that of bilateral monopoly, illustrated in Figure 2. In such situations, the firm is the sole buyer of the relevant specialised skilled labour needed, and a craft union or enterprise union is the sole seller of that labour. If it could, the union would set a wage level where marginal wage cost equals marginal revenue product, although this would lead to an excess employment level of *ae* and an equally large social loss to that described for monopsony above. Here, depending upon the relative bargaining power of the union and the firm, the locus of all possible wage market equilibria lies between w_u and w_f (the two wage rates preferred by the union and the firm respectively) and employment between L_m and L_{pc}. Thus, in general, a bilateral monopoly will be more efficient and closer to competitive equilibrium than a monopsony market situation due to the Galbraithian countervailing power of the union (Schuster, 1983). Bilateral monopoly can approach real industrial collective bargaining structures in many industrial relations instances (Stuart, 1997).

Lagged Short-Run Labour Supply

Figure 3: Lagged Short-run Labour Supply

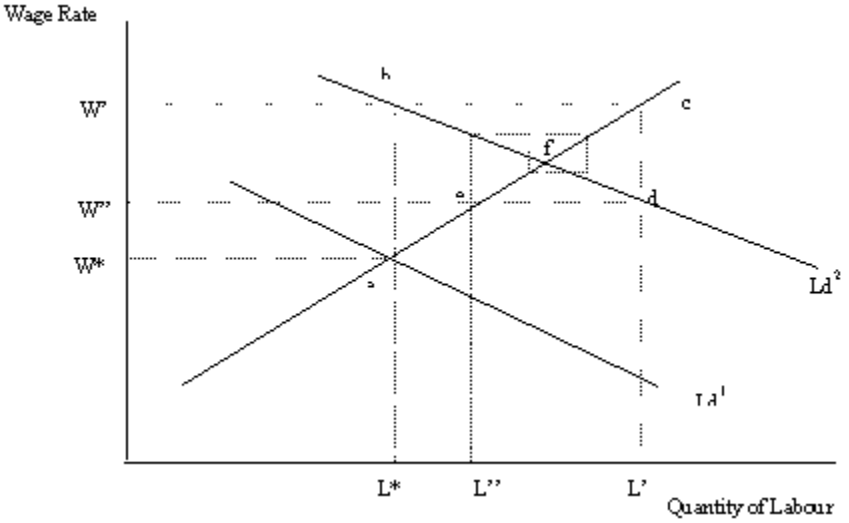


Orthodox wage theory also assumes away the difficulty in dynamic supply adjustment to long-run labour market equilibrium and the efficiency loss associated with labour supply inelasticity. As Figure 3 illustrates above, a vertical labour supply curve can

result in inefficiency if the wage rate is above equilibrium and the curve does not adjust to clear the market. Since firms only demand L' of labour at wage w', causing unemployment due to excess supply of L'L*, there would be a gain of area B to workers if employment was at its equilibrium level of L*. Firms' marginal willingness to pay for an extra unit of labour (represented by the demand curve) is greater than the wage they would have to pay to workers for the extra labour (w*), so firms' net gain is equal to area A. Therefore, the total dead weight loss of inelastic supply, failing to adjust, is equal to areas A and B, or mathematically the integral of the section of the demand curve between L' and L*. Since the supply curve between the origin and L* is coincident with the horizontal axis, area A can be seen as consumer surplus loss and area B as producer surplus loss.

The Cobweb Theory

Figure 4: Convergent Cobweb Supply Effect



A more advanced method of assessing lagged labour supply adjustment, adapted by labour economists, is the cobweb theory. The theory describes how an initial unexpected outward shift in the labour demand curve leads to prices fluctuating in a "cobweb" pattern, until the long-run equilibrium is achieved. In figure 4, this situation is illustrated (adapted from Brue and McConnell, 1995). The initial shift in demand leads to a shortage of labour, so that in effect there is a vertical short-run labour supply curve at L*. The combination of the labour shortage and short-run inelastic supply raises the short-run equilibrium to point *b* on the demand curve, at a higher wage of w'. However, this high wage rate leads to an increase in the number of workers willing to work and L' workers will eventually fill the market. The supply response equates to a shift rightwards in the vertical short-run supply curve to L'. Yet, now that the quantity of workers employed is again temporarily fixed, a surplus of *bc* workers occurs at w'. To eliminate the surplus the wage rate drops to w'', which leads to workers slowly exiting the market until only L'' workers are employed. The resulting labour shortage once again leads to a wage cycle until long-run equilibrium is finally attained at point *f*. This model disregards rational expectations and utilises an adaptive expectations approach to describing labour supply adjustment (Carlin and Soskice, 1990).

Criticisms of Cobweb Theory

Although the evidence for the applicability of the model has dissipated in most efficient labour markets, it can still be used to describe supply adjustments in markets which require heavy investment in human capital and training time (Freeman, 1976). It is also interesting to note that the convergent model described here contrasts with

the divergent or oscillating models that would chaotically result from certain combinations of supply and demand elasticities (Jackman, Layard and Nickell, 1991). The idea that a conventional perfectly competitive approach to labour market equilibrium may only apply to certain labour markets leads to the next criticisms outlined in this paper.

Internal Labour Markets and Dual Labour Markets

A growing group of internal labour market theorists have criticised the neo-classical perspective of continuous open job competition. They have proposed that job ladders involving a sequential progression of jobs, based upon seniority and investment in human capital, exist in many large firms involving different activities (Brue and McConnell, 1995). Consequently, jobs at the bottom rung of the job ladder (called a port of entry) are fought for competitively in an external labour market, since the firm must compete with other firms which are hiring the same kind of unskilled, unspecialised labour. On the other hand, an internal labour market which determines the recruits for higher positions on the job ladders is governed by administrative rules and seniority specific to the particular firm in question, and not the tâtonnement of external labour markets. Mulvey (1978) tried to illustrate this outcome as being Pareto sub-optimal by having a wage preference path not coincident with the output expansion path in a particular industry.

The two basic reasons for internal labour markets are that the skills required for some more senior and specialised jobs are specific to each firm and can only be learned by people within that firm; and to get a return on human capital investment, firms must employ workers for a significant period of time (Brue and McConnell, 1995). Although the resulting internal labour markets are said to allocate inefficiently, when viewed over time there are advantages which some authors refer to as dynamic efficiency. Such temporal efficiency results from the positive externalities associated with the reduced human capital investment for firms using internal labour markets and the job security and promotions which workers receive in internal labour markets, which are beneficial to both firms and workers (Salamon, 1992).

Some labour economists even extend the internal labour markets idea into a theory of segmented dual labour markets, consisting of primary and secondary labour markets. Primary labour markets are characterised by employment stability, the presence of job ladders, strong and effective trade unions and efficient management, while secondary markets have the opposite characteristics (Brue and McConnell, 1995). Although some criticise dual labour market theory for being undeveloped and excessively Marxist or Galbraithian, there has been increasing evidence of empirical validity for the idea, due to certain industry structures and selective efficiency wage practices. Seasonal or cyclical variation in some industries will naturally lead to the development of secondary markets, while closed shop practices have proved an indomitable barrier to mobility in others. The central tenet of the argument is that, while predominantly classical wage characteristics can be seen in secondary markets, this is not the case in primary markets. (Masters, Moser and Reynolds, 1991).

Efficiency Wage Theories

In internal labour market and dual labour market theory the source of the market imperfection and involuntary unemployment lies in human capital costs and the ability of 'insider' employees to influence wage levels. In efficiency wage models, the source is the asymmetric information between employees and firms regarding their profitability (Lindbeck and Snower, 1986). Efficiency wage models explain how it is in the firm's best interests to pay a wage above the market clearing equilibrium rate in order to optimise the marginal revenue product of labour.

A number of different microeconomic underpinnings have been found to explain the

phenomenon (Akerlof and Yellen, 1986). The threat of shirking on the job may prompt firms to pay an additional wage to eliminate the 'moral hazard' of employee dishonesty and improve the general morale of workers in the firm (Shapiro and Stiglitz, 1984). A corollary of this argument is Stoft's 'cheat-threat' theory which states that if the economy is nearing full employment, the threat of being fired for being caught cheating is less serious to employees, so they must be paid extra to dispel thoughts of dishonest behaviour (Stoft, 1982). Salop (1979) takes a different approach by emphasising the lower labour turnover costs associated with the decreasing quit rates, which in turn result from the above market-clearing wage rates.

A more sophisticated argument developed by some, like Weiss (1980), is that of adverse selection. Assuming that workers' abilities and dependability are positively correlated to their reservation wages, firms pay an efficiency wage in the hope of attracting the best workers. If workers underbid the efficiency wage, they stand the possibility of being regarded as 'lemons' by firms and will become involuntarily unemployed. Nevertheless, the lack of willingness to fire unproductive workers by some American firms prompted Akerlof to even suggest a sociological model based upon raising the standards of group work norms by above equilibrium wages that defies neo-classical wage theory.

An explanation for efficiency wages in less developed countries, described by Leibenstein (1986), especially relevant in the agricultural sector, says that workers need to be paid enough to be well-fed and clothed even if this means paying them a wage above their marginal product of labour, which in many sectors is even zero. All these efficiency wage models account for Pareto sub-optimal equilibria even in the absence of institutionalist or insider/outsider structures.

Conclusion

Taken together, the criticisms of orthodox wage theory illustrate how, in capitalist economies, labour market inefficiencies will arise in the absence of intervention. The simplicity of classical wage theory must be expanded upon to include the specific characteristics associated with labour as an economic commodity. While there has been disagreement over the degree to which labour market imperfections help in understanding the relationships between money, income, and unemployment, there are few adherents to the belief that neo-classical wage theory in its entirety can explain labour markets' operation. For example, many industrial relations authors claim that the worst inefficiencies and inequities of collective bargaining have been mitigated with the rise of firm-specific 'co-determination' structures in many countries (Bean, 1994). More theoretical and empirical research into the criticisms outlined in this paper is needed before any effective policy measures to boost employment can be derived.

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