



OXFORD JOURNALS
OXFORD UNIVERSITY PRESS

The Effect of Monetary Policy on Wage Inflation

Author(s): Andrew B. Tylecote

Source: *Oxford Economic Papers*, Jul., 1975, New Series, Vol. 27, No. 2 (Jul., 1975), pp. 240-244

Published by: Oxford University Press

Stable URL: <http://www.jstor.com/stable/2662340>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Oxford University Press is collaborating with JSTOR to digitize, preserve and extend access to *Oxford Economic Papers*

JSTOR

THE EFFECT OF MONETARY POLICY ON WAGE INFLATION¹

By ANDREW B. TYLECOTE

WE propose to show how, given certain assumptions, a restrictive monetary policy will tend to increase the rate of wage inflation.

We shall assume :

- (1) that wages are determined through a 'collective bargain' (more accurately a negotiation) between two parties: the management or managements of a firm or firms, and the representatives of the workers in the firm or firms
- (2) that the objective of management is the maximization of the present value of the stream of future profits^{2,3}
- (3) that the objective of the workers' representatives (henceforth 'the union') is to maximize the present value of the stream of lifetime real disposable income of those whom they represent
- (4) that temporary failure to agree leads to a strike or some lesser interference with production by workers until agreement is reached. (We shall refer to 'interference with production by workers' as a 'strike', for the sake of brevity).

Thus the employer faces a familiar problem. As Hicks put it long ago :

When a Trade Union demands an advance in wages, or resists a reduction, it sets before the employer an alternative : either he must pay higher wages than he would have paid on his own initiative (and this generally means a prolonged reduction in profits) or on the other hand he must endure the direct loss which will probably follow from a stoppage of work . . . one alternative will generally bring him less loss than the other. If resistance appears less costly than concession, he will resist ; if concession seems cheaper, he will meet the Union's claim [1].

Hicks took the matter little further, if at all. Recently Hieser [2], Johnston [3], and the present writer [4] have considered the wage-bargaining situation further from this starting point. My own analysis concluded that while the outcome of the negotiation must be influenced by a complex interrelation of the expectations of the two sides, two basic underlying elements were of the greatest importance : the costs of a strike to manage-

¹ I am grateful to C. L. Day and R. J. Ruffell, both of the Department of Economics, University of Stirling, for their invaluable help in the formulation and presentation of this paper.

² It will become clear that to make alternative assumptions about management motivation, so long as there is an important profitability objective, would complicate the exposition of the argument rather than materially change its substance.

³ Thus our conclusions cannot be applied directly to the public sector or (from assumption 1), to industries where workers are unorganized.

ment, compared to the costs of a wage concession ; and the costs of a strike to the workers, relative to the costs of a concession on wages. The higher the former, the higher the wage settlement ; the higher the latter, the lower the wage settlement. It went on to show the great predictive power of such an approach, and the accuracy of predictions based on it. On the assumption that it is correct, we can examine the implications for the effect of monetary policy.

We now make one further assumption : that management incurs strike costs earlier, on the whole, than concession costs. This is clearly to be expected. Under normal circumstances the bulk of the net costs of a strike is incurred during or within weeks of the strike.¹ There may be some loss of market share later, as a result of the strike ; on the other hand, sales may be higher after the strike, as a backlog of delayed deliveries is worked off. The costs of a wage increase, by contrast, are incurred when the extra wages are paid out during all future periods for which the settlement affects the wage level. How long and to what extent will the effect persist ? In principle the ground lost might be won back by employers in future, but I believe labour economists in general—and employers—would agree that in practice the argument in future years will be over the size of future *increases*, and that a large increase now is as likely to set a precedent for future years as to reduce workers' claims. In other words, we can expect the increase in wage level to be permanent, and assume that the employer will expect the same.

Thus the decision to adopt a tough negotiating policy is analogous to an investment decision : at the cost of an initial expense (only a probable expense, in the case of the wage negotiation) the firm expects to increase profits in the future. It follows that it will be rational to apply a time rate of discount to the negotiating, just as to the investment, decision. To put it more directly, the higher the time rate of discount the higher the present value of strike costs relative to the present value of concession costs, therefore (*ex hypothesi*) the higher the wage settlement. And so we arrive at the promised conclusion : if restrictive monetary policy raises management's rate of time discounting, it must, to that extent and *ceteris paribus*, raise the rate of wage inflation.

It will, of course, be objected that this does not take us very far. As always (it will be said) *ceteris* are not *paribus* : there are other and more important ways in which monetary policy affects the rate of inflation. Secondly, it may be thought that if wage negotiations are no more sensitive to the rate of discount employed than manufacturing investment, that is not very much, and makes the present argument more an irritating triviality than a matter for serious consideration for policy makers. Let

¹ Excepting firms like shipbuilders whose sales are widely spaced in time.

us consider the second point first. It seems possible, at least to the present writer, that manufacturing investment may be highly insensitive to market rates of interest over their normal range of variation. And I would not wish to claim that management negotiating policy was *more* sensitive to the market rate of interest: indeed, if it is the shortness of the 'pay-off' period and the high degree of uncertainty involved which makes manufacturing investment insensitive to the interest rate, wage negotiations may well be still less sensitive. But in this context it is extremely important to distinguish between the market rate of interest and the rate of time discount actually applied. Most investment in manufacturing industry, at least in the U.K. and U.S., is financed internally, from retained profits. For both 'rational' and 'irrational' reasons, management cannot be expected to apply the market rate of discount to the use of this money for investment. And a period of 'tight money' will not be expected to last for long; rather than break the continuity of its investment programme management will for this period make the maximum use of overdraft facilities and trade credit, run down its liquid assets, and if necessary economize on stocks. Only if it still simply cannot raise the cash will it postpone or cancel a project. It may well be that the main effect of monetary restriction on investment arises through plain unavailability of funds, particularly to small firms.

Consider, in the same way, the effect of tight money on wage-negotiating decisions. A strike of any magnitude cannot be financed, like an investment programme, out of present cash flow, for it cuts off that cash flow, in fact reverses it. Even if the money market were in good shape, it could scarcely be financed by raising equity or fixed-interest capital—the need is too sudden and the effect on the corporate image too bad. The money must be found from one of two sources: bank credit or liquid assets. But, as argued, it is just these two reserves on which the firm is likely to be already drawing in order to carry through its investment programme; and it is bank credit anyway which is often most affected by a policy of monetary restriction.¹ In such circumstances a strike may lead, at the least, to disruption of investment programmes; at the worst, to bankruptcy. In formal, abstract terms, we may then say that management should apply a very high rate of time discounting in deciding its wage-negotiating policy. In plain English, it can't afford to risk a strike.

Matters might be still worse for the firm if liquidity problems have led it or its distributors to reduce stocks, as I suggested they might. For stocks of finished goods provide a valuable buffer against a strike: the longer they

¹ A. D. Bain [5] has shown that net corporate liquidity (liquid assets minus bank borrowing) showed a marked fall during the 1960s in both the U.K. and the U.S. He concludes from this that investment is likely to be distinctly responsive now to monetary restriction.

last, the longer before it loses sales. Thus low stocks of finished goods mean higher strike costs, and will provide an additional motive for avoiding a strike.

But (to return to the first objection) other things are not equal. Tight money is deflationary (at least, it is meant to be)—that is to say it tends to reduce the level of demand and, it is alleged, thus reduces the rate of increase of wages and prices. It is fair to point out that recent events have made this supposed simple link between demand and inflation a matter for debate; a debate in which I hope soon to join. For the moment, all will, I think, accept that even if deflation is taken to be disinflationary and even if governments are actually ready to implement it, they have the alternative of fiscal means of doing so and should therefore be interested in any unpleasant side-effects of choosing monetary measures.

Tight money has other relevant effects besides deflation. High interest rates raise production costs; through costs, prices. They also raise the cost of living through the cost of mortgage interest payments. On the other hand they tend to drive down the prices of commodities which are affected by speculation, by making them more expensive to hoard. Can we take the net effect of high interest rates, taking these two processes together, to be markedly disinflationary? It seems unlikely.

Finally, it seems proper to consider the union side of the wage negotiation.¹

In principle, illiquidity might affect the union's attitude to the negotiation in the same way as the firm's. In practice, it seems unlikely that either unions or individual strikers depend to an important extent on bank borrowing to finance strikes. Certainly in Britain (where unofficial strikes, i.e. without central union backing, are the rule) strikers are known to subsist principally on savings, tax rebates, and social security payments. In fact, amusingly enough, a strong case can be made out for expecting a period of tight money to *reduce* the effective cost to workers of a strike, and thus to strengthen the union position. For easily available credit will encourage workers to borrow to buy consumer durables (the only purpose for which credit is normally available to them), and this will raise their level of financial commitments until the debt has been paid off. Conversely, if tight money leads to a reduction in consumer credit it will reduce the level of commitments—and make it easier for the striker to finance a strike.

We may conclude, then, that there is at least a *prima facie* case, which deserves further investigation, for expecting restrictive monetary policy to raise the rate of inflation.

University of Sheffield

¹ For the reasons given above, we abstract from any effect of monetary restriction on the level of demand and employment.

REFERENCES

1. HICKS, J. R., *The theory of wages*, Macmillan, London, 1933, pp. 140-1.
2. HIESER, R. O., 'Wage determination with bilateral monopoly in the labour market: a theoretical treatment', *Economic Record*, Mar. 1970.
3. JOHNSTON, J., 'A model of wage determination under bilateral monopoly', *Economic Journal*, 1972.
4. TYLECOTE, A. B., 'Determinants of changes in the wage hierarchy of U.K. manufacturing industry', *British Journal of Industrial Relations*, March 1975.
5. BAIN, A. D., *The control of the money supply*, Penguin, London, 1970, pp. 108-11.