

# WORKING PAPERS IN ECONOMICS

**Keynes on the Australian  
Wages System**

by

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**Abstract**

**Keynes's *General Theory* briefly discusses the Australian wages system, as an example of a system in which an attempt was made to fix real wages by law. Keynes argues that such a system, strictly enforced, generates an unstable unemployment equilibrium or highly volatile money wages and prices. This paper clarifies Keynes's views on the Australian system, with a view to their wider relevance for the significance of real and money wage flexibility and inflexibility in Keynes's economics. The most striking finding is that money wage stickiness is a conclusion, not an assumption, of Keynes's theory of employment.**

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### KEYNES ON THE AUSTRALIAN WAGES SYSTEM\*

If, as in Australia, an attempt were made to fix real wages by legislation, then there would be a certain level of employment corresponding to that level of real wages; and the actual level of employment would, in a closed system, oscillate violently between that level and no employment at all, according as the rate of investment was or was not below the rate compatible with that level; whilst prices would be in unstable equilibrium when investment was at the critical level, racing to zero whenever investment was below it, and to infinity whenever it was above it. The element of stability would have to be found, if at all, in the factors controlling the quantity of money being so determined that there always existed some level of money-wages at which the quantity of money would be such as to establish a relation between the rate of interest and the marginal efficiency of capital which would maintain investment at the critical level. In this event employment would be constant (at the level appropriate to the legal real wage) with money-wages and prices fluctuating rapidly in the degree just necessary to maintain this rate of investment at the appropriate figure. In the actual case of Australia, the escape was found, partly of course in the inevitable inefficacy of the legislation to achieve its object, and partly in Australia not being a closed system, so that the level of money-wages was itself a determinant of the level of foreign investment and hence of total investment, whilst the terms of trade were an important influence on real wages (Keynes, 1936, pp.269-70).

So says Keynes of the Australian wages system in Chapter Nineteen of *The General Theory*, the chapter which examines the role of money wage flexibility in a competitive capitalist economy's capacity (or otherwise) for self-adjustment towards full employment. What causes the apparently unstable equilibrium in this instance of exogenously (legislatively) fixed real wages? The purpose of what follows is to clarify the meaning and significance of this interesting (and sole) reference to the Australian economy in *The General Theory*.<sup>1</sup>

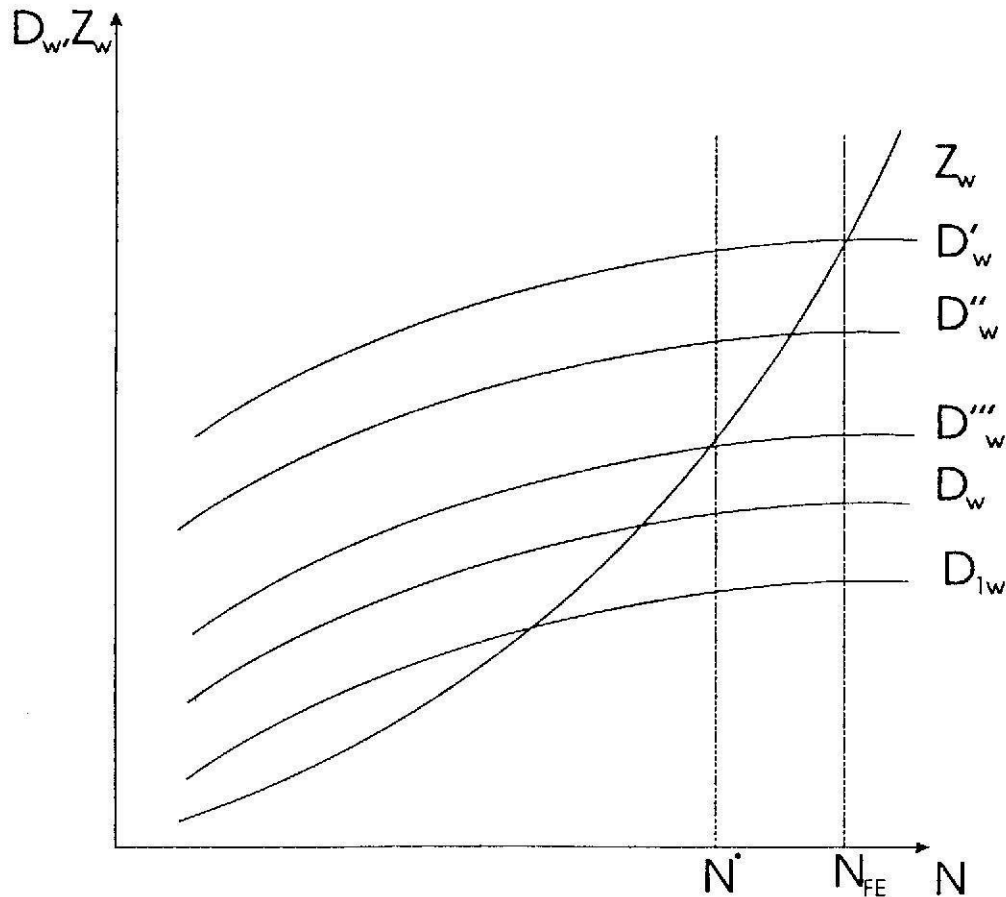
#### I

Having presented the core of his alternative theory of employment in Books I to IV of *The General Theory*, in Chapter Nineteen Keynes

turns to a critique of what he (rightly) considered to be a central tenet of orthodoxy: "the Classical Theory has been accustomed to rest the supposedly self-adjusting character of the economic system on an assumed fluidity of money-wages; and, when there is rigidity, to lay on this rigidity the blame of maladjustment" (GT, 257). The essence of Keynes's theoretical exercise here is to consider, given initial involuntary labour unemployment, the influence of falling money wages on the level of employment associated with the point of effective demand given by the intersection of the aggregate demand and aggregate supply functions. For Keynes this essentially reduces to an evaluation of the influence of money wage reduction upon his three fundamental determinants of effective demand: "the volume of employment is uniquely correlated with the volume of effective demand measured in wage-units, and ... the effective demand, being the sum of the expected consumption and the expected investment, cannot change, if the propensity to consume, the schedule of marginal efficiency of capital and the rate of interest are all unchanged" (GT, 260-61).

The aggregate supply function ( $Z$ ) represents the aggregate expected money revenues which would induce entrepreneurs in the aggregate to produce outputs which employ  $N$  workers, given the money wage. The aggregate demand function ( $D$ ) represents the aggregate money revenues which entrepreneurs in the aggregate, *actually* expect from the outputs which employ  $N$  workers, given the money wage. Equilibrium occurs at the level of employment at which  $Z$  equals  $D$ ; and it is supposed that equilibrium exists, and is usually unique and stable.<sup>2</sup> The aggregate demand function depends upon the propensity to consume and the inducement to invest, the latter in turn depending upon "the relation between the schedule of the marginal efficiency of capital and the complex of rates of interest on loans of various maturities and risks". In summary, "the volume of employment in equilibrium depends on ... the aggregate supply function, ... the propensity to consume, ... and ... the volume of investment" (GT, 23-30). A characterization of aggregate demand and aggregate supply along the lines proposed by Keynes is illustrated by  $Z_w$  and  $D_w$  in Figure 1, where the aggregate money revenues have been divided by the average money wage (i.e., have been measured in wage-units) in the method Keynes employs throughout much of *The General Theory*. With regard to the influence of money wage

Figure 1: Aggregate Demand and Aggregate Supply



reduction on equilibrium employment, Keynes's argument in a nutshell is that in a closed system the effects on the propensity to consume and the marginal efficiency of capital are ambiguous or adverse; so that it is "on the effect of a falling wage- and price-level on the demand for money that those who believe in the self-adjusting [towards full employment] quality of the economic system must rest the weight of their argument" (GT, 261-66; cf. Moggridge, 1979, pp.270-72). Assuming an exogenous money stock, falling wages and prices may act upon nominal money demand (or equivalently, the real money stock) so as to reduce interest and expand investment demand and employment.<sup>3</sup> Hence follows a certain degree of theoretical equivalence between money wage reductions with a given exogenous money stock, and money supply increases with a given money wage - which for Keynes means that the former, "as a method of securing full employment, are ... subject to the same limitations" as the latter: there is "no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment; - any more than for the belief than [sic] an open-market monetary policy is capable, unaided, of achieving this result" (GT, 266-67). However, if anything can be hoped for from these equivalent mechanisms, additional considerations lead Keynes to prefer the latter (GT, 267-69).

Keynes sums up his argument:

It follows, therefore, that if labour were to respond to conditions of gradually diminishing employment by offering its services at a gradually diminishing money-wage, this would not, as a rule, have the effect of reducing real wages and might even have the effect of increasing them, through its adverse influence on the volume of output. The chief result of this policy would be to cause a great instability of prices, so violent perhaps as to make business calculations futile in an economic society functioning after the manner of that in which we live (GT, 269).

It is at this point that the Australian case is introduced.

## II

Consider first the general case Keynes presents, as outlined above. His argument on money wage reduction given initial involuntary unemployment is that the intersection of the  $D_w$  function and the  $Z_w$  function will have no systematic tendency to shift in the direction of full

employment (represented by  $N_{FE}$  in Figure 1); or to use the terms Keynes does throughout the bulk of *The General Theory*, aggregate demand (supply) measured in wage-units will exhibit no systematic tendency to shift upwards (downwards). If this is so, and the price level responds flexibly to money wage changes, then a system in which money wages are flexible in response to labour demand and supply imbalances obviously would exhibit "a great [or "violent"] instability of prices" - because falling money wages would generate no tendency towards a narrowing of the gap between labour demand and supply. (The rate of change of prices largely will be governed by the rate of change of money wages, plus any change in marginal labour returns due to output variations.) Strictly speaking, if there were no level of money wages at which labour demand and supply converge, a system in which money wages are flexible in response to labour demand and supply imbalance would exhibit money wages and money prices going to zero (or symmetrically, to infinity, if labour demand exceeds labour supply at all levels of the money wage). While money wages were free-falling, the real wage would rise, or not systematically fall, if output contracted or did not systematically rise - because Keynes accepts (in 1936) a well behaved inverse relation between aggregate output (employment) and marginal labour product, and therefore also between output and real wages under his assumption of profit maximizing, competitive conditions. But there remains one avenue to full employment via money wage reduction which Keynes has great difficulty evading: given that he regards investment demand to be a well behaved inverse function of interest, and to the extent that he also regards interest to be an inverse function of the real money supply, the flexibility of the price level in response to money wage flexibility may allow the real money supply to expand automatically in response to involuntary unemployment until investment demand has so increased as to fill the gap between  $Z_w$  and  $D_{1w}$  (consumption demand) at  $N_{FE}$  (a shift from  $D_w$  to  $D'_w$  in Figure 1). The existence of an (implicit) conventional IS schedule in Keynes's system means that in general there exists a full employment rate of interest and the system therefore may exhibit self-adjusting forces which push it towards that position.

With regard to the particular case of the Australian wages system, as understood by Keynes, a fixed real wage constrains the ratio of money-prices to money-wages (at least in the wage-good industries); and given

the supposition of diminishing marginal labour product, means that the aggregate supply function reduces to a single point (e.g., point a in Figure 1). It would then seem only by fluke that this point of supply would coincide with the aggregate demand function. If aggregate demand (e.g., given by  $D_w$  in Figure 1) were less than aggregate supply at the level of employment ( $N^*$ ) associated with the supply point, then in the absence of systematic forces acting to shift the supply point and  $D_w$  towards each other, output and employment would go to zero. Similarly, money prices would go to zero with money wages following close behind. This is so because, with money wages being set equal to the money value of the fixed real wage by the authorities, and competitive (marginal cost) commodity pricing by firms, money prices and money wages will spiral downwards (until they can fall no further), because of the interaction of these two principles. The system cannot lodge at the intersection  $D_w$  and  $Z_w$ . If aggregate demand were greater than aggregate supply at  $N^*$  (e.g.,  $D_w''$  in Figure 1), employment and output could not expand to correct the imbalance because of the fixed real wage, and prices and money wages would go to infinity. Hence if the fluke happened to occur ( $D_w''$  in Figure 1), the equilibrium would be unstable. But here again Keynes has recourse to the possibility of variation in the real money supply, in this case generating stability of equilibrium via its influence upon interest and thereby investment demand; though in this instance it will be an unemployment equilibrium, in general (because of the fixed real wage), rather than a full employment equilibrium: variations in money prices and money wages might ensure, via the real-money-supply-interest-investment-demand nexus, that investment demand is stabilized at the level given by  $D_w''$  minus  $D_{1w}$ . Evidently, the greater the volatility of investment demand around this equilibrium level, the greater the required variations of prices and money wages. Finally, Keynes thinks that the destabilizing role of the Australian wages system was vitiated by the openness of the economy (as well as the fixing of real wages being in some degree ineffective); in the former case, because the wage-setting authorities would be obliged to respond to terms of trade shocks and as well, the responsiveness of net foreign expenditure to Australian money wage changes.<sup>4</sup>

One point of clarification may be added here. If one conceives the production system as producing a single homogeneous output,  $Q_1$  (as is

implicit in the preceding paragraph), the result is straightforward. The fixed real wage ( $\bar{c}_1$ ) fixes the ratio between the commodity price ( $p_1$ ) and the money wage ( $w$ ):

$$w = p_1 \bar{c}_1 \quad (1)$$

$$(p_1 / w) = (1 / \bar{c}_1) \quad (2)$$

Assuming for simplicity that labour cost is the only marginal cost, marginal cost pricing entails

$$p_1 = w / (\partial Q_1 / \partial N) \quad (3)$$

$$(p_1 / w) = (1 / \bar{c}_1) = 1 / (\partial Q_1 / \partial N) \quad (4)$$

which means that  $c_1$  determines a single level of output supply associated with a unique point on  $Z_w$ . But if output and real wages are heterogeneous, then the fixed real wage ( $\bar{c}_1, \bar{c}_2, \dots, \bar{c}_n$ ) defines a set of possible price-wage ratios:

$$w = p_1 \bar{c}_1 + p_2 \bar{c}_2 + \dots + p_n \bar{c}_n \quad (5)$$

$$1 = (p_1 / w) \bar{c}_1 + (p_2 / w) \bar{c}_2 + \dots + (p_n / w) \bar{c}_n \quad (6)$$

As a result, the  $Z_w$  "point" would be consistent with a range of different compositions of aggregate output; and therefore, in general, different levels of  $N$  for each vector of price-wage ratios which satisfy equation (6). Keynes was at least partly aware of such complexities, but left them in the background (e.g., *GT*, 280-89). (For a rigorous account of effective demand with heterogeneous output and fixed real wages in a closed system see Kurz, 1985.) For our purposes here it is advisable to leave these matters aside. It may finally be noted that if diminishing returns are abandoned in favour of constant average (and therefore constant marginal) labour product, then (homogeneous) output ( $Q$ ) is free to vary with the real wage fixed. With marginal (labour) cost pricing:

$$(p_1 / w) = (1 / \bar{c}_1) = 1 / (\bar{Q} / N) \quad (7)$$

though this solution is only consistent with fixing the real wage at the value of the marginal labour product. Alternatively, pricing via a mark-up ( $m$ ) on wage cost would generate:

$$p_1 = [w / (\bar{Q} / N)] (1 + m) \quad (8)$$

$$(p_1 / w) = (1 / \bar{c}_1) = (1 + m) / (\bar{Q} / N) \quad (9)$$

The real wage can be set independently of output, so long as the mark-up will adjust in response - which would not be the case, for example, if there were an independently given required profitability of employment (and in the long run, capital) embedded in the mark-up - and ignoring open economy constraints.

### III

How accurate was Keynes's characterization of the Australian wages system? It is certainly the case that from the early decades of the twentieth century institutions were put in place with the design of setting by law minimum wage rates at least for unskilled labour ("basic" wage rates), with a view to establishing minimum real wages on the basis of "needs", by reference to a price index for a composite wage good - a unique system which was a source of some controversy among Australian economists, particularly in relation to policies for addressing depression. It should be noted, however, that even to the (incomplete) extent that this system set wage rates, it was not a unified national system but a federal system, with state wages tribunals as well as a Commonwealth Arbitration Court - and the former did not always move in step with the latter. In relation to Keynes's open economy qualifications, it is true that this system of (partial) needs based wage setting did, in depression, yield to external economic forces - in particular, shocks to the balance of foreign payments via the terms of trade as well as international financial flows - by reducing basic money wages without reference to needs, particularly in 1931. It is also true, as Keynes suggests, that the success of the system in enforcing minimum wage rates was far from complete: there was extensive noncompliance with award rates during the worst depression years. It is also worth noting in relation to Keynes's views on real and money wages that while one available index of average Australian money wages (for semi-skilled male industrial workers; 1929 = 100) shows sharp falls to 90 (1931) and a low point of 81 (1933), an index of the average (not basic) rate of real wages in manufacturing shows near constancy during the decade 1927-28 (=100) to 1936-37 (99), not rising above 100 nor falling lower than 98 (Schedvin, 1970, pp.348-50).<sup>5</sup> In any case, it seems evident that the motive for his comments was not so much to throw light upon the actual Australian system; but rather, to provide a foil for casting light upon the significance of nominal and real wage flexibility in his own theoretical system.

However, subsequent to the publication of *The General Theory* there was one significant strand of commentary - initiated by Dunlop (1938), with a number of related contributions (Kalecki, 1938; Tarshis, 1939; Keynes, 1939, esp. pp.40-43, 46-51; cf. Moggridge, 1979, pp.282-88;

Potier, 1991, p.46) - which led Keynes to tentatively back away somewhat from his earlier firm conviction concerning an inverse relation between real wages and employment. Apart from empirical evidence, the key arguments brought against the inverse relation were that marginal and average costs do not increase with output; and/or, that full cost rather than marginal cost pricing applies, with mark-ups inversely related to output over the cycle. With marginal cost pricing, if marginal labour productivity were invariant with respect to output (or rising with output) real wages would not be obliged to vary inversely with employment (and could rise as output expands) - ignoring for simplicity non-labour elements of marginal cost. The notion of an inverse relation between real wages and employment likewise would become irrelevant with forms of mark-up pricing which rendered the price-wage ratio invariant (or inversely related) to output; e.g., constant or increasing average labour productivity and constant or decreasing mark-up on wage cost. Indeed, with average labour productivity increasing with output, marginal cost pricing would generate losses so that a mark-up (whether or not invariant to output) would inevitably constitute the pricing rule. Under these kinds of conditions - in either the marginal cost or mark-up case - the  $Z_w$  function then would allow constant or rising real wages as employment expands. As intimated in the last paragraph of section II above, in the simplest case of constant costs (constant average labour productivity and marginal cost pricing or constant mark-up) real wages would be independent of employment and the  $Z_w$  function would be linear (cf. GT, 295-97). As a result, Keynes's problem with real wage inflexibility (Australian or otherwise) would evaporate, at least in principle: a fixed real wage would be consistent with existence and stability of employment equilibrium, and consistent with the achievement of full employment (if not automatically via the dubious mechanism, then by policy).<sup>6</sup> But this should not be read as meaning that the real wage could be arbitrarily fixed; e.g., without reference to interest or profitability of capital, as well as external balance.

However, the more important lesson from Keynes's treatment of money wages, real wages and employment - for the Australian case and capitalist economies in general - is that the downward inflexibility of money wages in conditions of labour supply in excess of labour demand is a *conclusion*, not an assumption, of Keynes's theory of employment; whereas the flexibility of real wages in general is necessary for the

stability of (un)employment equilibrium and for the achievement of full employment (whether automatically or by policy), so long as Keynes endorses diminishing marginal labour product. In the absence of real wage flexibility the stability of unemployment equilibrium in a closed system would depend upon the dubious mechanism of money wage and price flexibility acting upon the aggregate demand function via the influence of real money supply upon interest and thereby investment demand; and the capacity of the same dubious mechanism to push effective demand to the full employment level, in any case, would in general be rendered irrelevant by the associated supply side constraint. In the light of the debates of 1938-39, Keynes's 1936 conviction that real wages must vary inversely with aggregate output and employment is denied; though as he partly realized, the absence of an inverse relation between employment and real wages actually strengthens the core of his theoretical position:

That I was an easy victim of the traditional conclusion [concerning the inverse relation between real wages and employment] because it fitted my theory is the opposite of the truth. For my own theory this conclusion was inconvenient, since it had a tendency to offset the influence of the main forces which I was discussing and made it necessary for me to introduce qualifications, which I need not have troubled with if I could have adopted the contrary generalisation ... (Keynes, 1939, pp.40-41,45).

With regard to Keynes's conclusion, rather than assumption, concerning money wage inflexibility in response to excess labour supply, it is surprising that this aspect of Keynes's economics has been so rarely recognized (but see Garegnani, 1978-79, pp.31, 49-51; 1988, pp.198, 203, 205-06, 209-11, 220). It could hardly be more clearly stated in *The General Theory*:

- [1] ... we shall assume that the money-wage and other factor costs are constant per unit of labour employed. But this simplification, with which we shall dispense later, is introduced solely to facilitate the exposition (27).
- [2] ... not all changes in D are compatible with our temporary assumption that money-wages are constant. Thus it will be essential to a full statement of our theory to dispense with this assumption (29).

- [3] ... moderate changes in employment are not associated with very great changes in money-wages. ... [W]orkers will not seek a much greater money-wage when employment improves or allow a very great reduction rather than suffer any unemployment at all.

But ... whether or not this conclusion is plausible *a priori*, experience shows that *some such psychological law must actually hold*. For if competition between unemployed workers always led to a very great reduction of the money-wage, there would be a violent instability in the price-level. Moreover, there might be no position of stable equilibrium except in conditions consistent with full employment; since the wage-unit might have to fall without limit until it reached a point where the effect of the abundance of money in terms of the wage-unit on the rate of interest was sufficient to restore a level of full employment. At no other point could there be a resting-place (251,253; emphasis added).

- [4] ... I am now of the opinion that the maintenance of a stable general level of money-wages is, on a balance of considerations, the most advisable policy for a closed system; whilst the same conclusion will hold good for an open system, provided that equilibrium with the rest of the world can be secured by means of fluctuating exchanges (270).
- [5] If ... money-wages were to fall without limit whenever there was a tendency for less than full employment, ... there would be no resting-place below full employment until either the rate of interest was incapable of falling further or wages were zero. In fact we must have *some* factor, the value of which in terms of money is, if not fixed, at least sticky, to give us any stability of values in a monetary system (303-04).
- [6] Experience ... indicates ... that there is a steady tendency for the wage-unit to rise over long periods of time and that it can be reduced only amidst the decay and dissolution of economic society (340n.).

There are three distinct strands represented in these views on money wage inflexibility. First Keynes notes that money wages *in fact* are sticky downward (first paragraph of quotation 3, and quotation 6) - an observation which he would have well known was far from novel or unorthodox (e.g., GT, 276, 278). Second, Keynes also adopts a *normative* view that average money wages should be inflexible downward as a

matter of policy, partly on social justice grounds (quotation 4; GT, 267-71). Third - and this is the genuinely unorthodox element in his thinking on wages - Keynes draws a *theoretical conclusion* that, in any case, money wages must be downward inflexible, or at least sticky, in response to involuntary labour unemployment (quotations 3 and 5). Keynes could not simply have *assumed* downward money wage inflexibility (see quotations 1 and 2), precisely because he had to examine the influence of money wage reduction on effective demand in order to draw his novel conclusion. The analytical basis of this critical conclusion is clear: if one's theoretical system shows that employment and labour supply do not systematically converge in response to money wage reduction, then one *could not but conclude* that money wages *must be* unresponsive to involuntary unemployment - otherwise one would predict money wages and prices to be continually susceptible to gravitation to zero in conditions of involuntary unemployment. And Keynes regarded involuntary aggregate unemployment, though not *logically* necessary to capitalism, as a normal and persistent feature of a competitive capitalist system - not as merely a short run or cyclical phenomenon (GT, 249-50, 254, 307-09, 322-24). Put differently, Keynes's conclusion amounts to saying that The Law of Supply and Demand - i.e., the old proposition, traceable back to classical economics and earlier, that prices respond negatively to excess supplies - *cannot* be applicable to aggregate labour, because variations in the money wage will not lead to convergence of labour demand and supply.

However, Keynes left an opening for a restoration of more orthodox conclusions concerning competition, wage flexibility and full employment: his dubious (to him) mechanism via real money supply and interest. The presence in Keynes's system of a relation which has investment demand an inverse function of interest means that there is an orthodox IS function implicit in *The General Theory*, and therefore in general, a full employment rate of interest (GT, 178-82, 202-04, 234-36, 242-44, 375). This opens the way for a restoration of automatic gravitation to full employment via the impact of wage and price flexibility on interest (as indicated in quotation 3 above). The avenues for escaping this result would appear to be limited: positing inflexibilities of a monetary kind which impede the fall of interest to the full employment rate, or insufficiency of (especially investment) demand even at zero interest, or that the adjustment path via money wage flexibility would be so volatile

that the intervention of monetary policy would be preferable. (The last case points to the quite orthodox view that monetary policy should act to keep the rate of interest in the banking system in line with the "natural" rate associated with full employment.) Keynes's novel conclusions on money wages (and a range of other important matters) thereby were compromised by elements of his own system (Garegnani, 1978-79, esp. pp.51-63; 1988, esp. pp.198-200, 206-14). It is because Keynes's *General Theory* is a compromise between orthodox and novel theoretical constructions that it generated two distinct variants of Keynesianism: one, "neo-classical synthesis" and "new Keynesian", which sought to draw Keynes's economics back into a firmly orthodox framework; the other, "Cambridge" and "post-Keynesian", which sought to radicalize Keynes's system by moving it further away from orthodoxy. These divergent streams are a reflection of the gap between Keynes's radical theoretical *intention* and his much more orthodox *execution* of the theory. In this regard, Keynes's intention seems sounder than his execution.

## NOTES

- \* The author is indebted to Peter Groenewegen, Matthew Smith and Graham White for comments, without thereby implicating them in the final product.
- 1. Hereafter cited in the text as GT, with page references.
- 2. It is, of course, also necessary, for this equilibrium to be meaningful, to suppose that expected and actual values coincide at the point of effective demand - which is most straightforwardly guaranteed by assuming that the expectations underpinning the aggregate demand function are correct.
- 3. Note that such movements in the price level occur with a fixed quantity of (at least outside) money, which in general entails compensating variations in the velocity of the total (outside) money stock. Note also that by concentrating on the behaviour of aggregate demand in response to money wage changes, Keynes implies that aggregate supply *measured in wage-units* is invariant to the level of money wages.
- 4. Cf. GT, 262-63, 335, 339n, 348-49, 381-83. Theoretical results for a closed system are more general than those for an open system; though an analysis of effective demand in a (closed) global system with interacting currency areas would be more general than both.
- 5. This paragraph relies upon Schedvin (1970, pp.108-13, 181-93, 210-12, 215-24, 239-45, 251, 316-20, 345-50) and Groenewegen and McFarlane (1990, pp.126-28, 133, 139-40, 162-68, 179). It may also be noted here that in 1932 Keynes wrote an article for the *Melbourne Herald* on Australian economic adjustment in 1931-32, and there are also some other passing references to it by Keynes (Moggridge, 1981, pp.381-82, 398, 452; Moggridge, 1982, pp.94-102, 142).

6. Fields (1946) also rejects the instability and rigidity Keynes imputes to the Australian system on the basis that (1) marginal costs rising with output levels is not a typical phenomenon (mentioning Kalecki); and/or (2) the system does not render real wages so inflexible since only a (needs based) component of aggregate money wages is linked to price movements (estimated at approximately fifty percent of total wages and salaries). It may be noted incidentally that in reprinting this paper, Wood (1983, vol. I, p.21; vol. III, p.147) wrongly attributes it to 1948 rather than 1946; and in his commentary (vol. III, p.3) incorrectly refers to "Kahn" rather than (L. Albert) Hahn.

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