

## **The Real Wage Gap and its Development Over Time: The Irish Experience 1960-87: A Comment**

BRIAN M. LUCEY\*

*Central Bank of Ireland*

---

I wish to make a number of points regarding the content of the paper on the wage gap presented by Walsh, Walsh and Woelger.

Let me first of all state that I found the explanation given in the paper to be a very simple and a very lucid outline of a concept which may not be familiar to all of the participants at this Conference. The wage gap is basically the difference between the share of wages attributable to labour now,  $W$ , and at some full employment equilibrium,  $W^*$ . Now according to the paper, if I read it correctly, there are three reasons why a wage gap may arise. The first reason is that "too high" wages may be achieved by labour at present. The second reason is that external shocks i.e., terms of trade shocks, may lead to a wage gap developing through relative price effects. The third reason is the potential for a low growth trap to occur as a result of a previously existing real wage gap.

The estimation of the real wage gap ultimately depends on the concept of market clearing. Now while this is of course an unsatisfactory, and indeed an untenable assumption, it is needed if one is at all to attempt an estimation of a real wage gap according to the usual methodology. In the paper a number of the estimation problems and methodological shortcomings are discussed.

\*The views expressed in this Comment are the author's own and are not necessarily those of the Central Bank of Ireland.

I found these to be well and honestly explained. The authors are obviously conscious of the fact that the estimation procedure is imperfect. The shortcomings are however an inevitable consequence.

Changes in the wage gap are made up of changes in real consumption wages plus changes in terms of trade plus changes in productivity. Therefore it is possible to see what caused the real wage gap, and if the gap is then seen to be important in a labour supply or indeed a labour demand function, one can see where the employment shortfall is coming from, and one can see how the shortfall arises. Incidentally, I feel that a useful adjunct to this paper, although possibly this may be more relevant to a paper in which the real wage gap is taken as a determinant of labour demand/supply equations, would be an estimation of the labour shortfall. The estimation of the labour shortfall would be done by means of the following equation,

$$(-d/S_k) W^*$$

where  $S_k$  is the share of capital,  $d$  is the elasticity of substitution, and  $W^*$  is the estimated full employment equilibrium wage. In the Irish context capital stock estimates would of course have to be used, and consistent estimates are not easily obtained. It could, however, have been useful to at least have indicated the magnitude of the implicit wage gap rising from Walsh, Walsh and Woelger's work. It is also perhaps to be speculated that sensitivity analysis, by which I mean analysis of the sensitivity of the estimated wage gap to changes in the elasticity of substitution, could have been done. There also appears to be a potential for a link between the low growth trap element of the wage gap (where a wage gap in period 1 causes, through a reduction in the available production capacity of the economy, lower growth in period 2 than would otherwise have been the case), and the concept of hysteresis in unemployment. This is an area that could repay further investigation. Given all these caveats, what of the interpretation?

The composition of the wage gap for the countries given in the paper is most interesting. It is interesting especially as regards Ireland, to see the apparent loss in productivity over time. It is also apparent that the growth in real consumption in wages has, by and large, been offset or indeed more than offset by secular rises in productivity for most countries. If we look at the growth rate in consumption wages less that of productivity, and if set this equal to 100 at 1959, then we can see the sharp rise in wages in the late 1960s was never offset in Ireland. Previously, Irish productivity had been outstripping wages, but not now. Ireland appears to have undergone three levels of productivity, unfortunately each level, each step, being lower than the preceding one. This causes one to wonder whether or not the apparent

sharp drop in productivity is real, or is it merely a function of the chosen cyclical peaks? Bruno in the 1986 paper addresses this possibility. He concludes, however, that there is little to be gained from following this line of enquiry.

Overall I found this to be a most interesting paper. The explanation given of a concept not immediately familiar to all listeners was consistently clear and concise. The authors are obviously well versed in the relevant literature, and were conscious at all times of the inherent limitations of the estimation techniques required to be chosen. Given these limitations, it is interesting to see the potential reasons why wages in Ireland may have diverged from full employment equilibrium wages. It is especially interesting to use this technique when one is capable of comparing, immediately across countries, reasons for difference in wages. The next step, which I believe the authors are to undertake, is the incorporation of elements of wage gap measurements into a full labour supply/labour demand equation. If this can be done, then an important addition to the wage/price debate in Irish labour economics will have been fulfilled. Even if it were not so, at the very least an extremely "sharp" analytical tool has been shown to be of use in the analysis of Irish labour markets. For this we should be grateful to the authors.