

Internal and External Influences Upon Pay Settlements

David G. Blanchflower and Andrew J. Oswald***

INTRODUCTION

The past few years have produced much research on the economics of wage determination. Economists have tackled the area in two different ways. First, they have developed mathematical models derived from conventional neoclassical axioms. Second, they have attempted to apply such models, by using econometric methods, to time-series and cross-section data.¹ This methodological approach is so common in economics that it is often taken for granted. Yet, in the analysis of labour markets, it has always had its critics (for a recent account, see Kerr (1983)).

In this paper we take a different route to the study of wage settlements, and analyse the answers provided by a survey in which employers were asked what factors influenced their rates of pay. The sample is constructed to be nationally representative, and the figures given below summarise the replies of 1,267 personnel managers in the private sector of the British economy. An advantage of the data set is that it is possible to separate out establishments into the following categories:

- (i) manual workers in the union sector
- (ii) non-manual workers in the union sector
- (iii) manual workers in the non-union sector
- (iv) non-manual workers in the non-union sector

Systematic information of this kind is rare.

Questionnaire information on wages has occasionally been used before by economists. Most recently, for example, the work of Gregory, Lobban and Thomson (1985, 1986) is similar in spirit to our inquiry. It uses the Confederation of British Industry's Databank, which records the perceived pressures on pay settlements for 1300-1400 settlement groups,² covering just under half-a-million employees. One feature of the Databank survey is that respondents are required to answer within a set framework (that is, they choose amongst various given replies). Although this has its advantages, it also forces those who complete the answer sheets to conform to the model in the minds of those who constructed the survey.

Can questionnaire studies help to discriminate amongst competing

*Lecturer, University of Surrey.

**Senior Research Fellow, Centre for Labour Economics, LSE.

theories of wage determination? We believe that, in certain cases, they can make a contribution. Although the main purpose of the paper is to report the data, it is possible to apply them, by way of an example, to current theoretical disputes over the nature of the labour market.

A number of economists have recently proposed so-called 'insider-outsider theories of wages' (see, for example, Gregory (1985), Lindbeck and Snower (1986), Solow (1985), Blanchard and Summers (1986) and Carruth and Oswald (1987a), among others). The key characteristic of these models is the stress they place upon firms' internal activities and financial performance.³ Wages, in this framework, are determined at least in large part by how well the employers are doing. If sales boom, 'insiders' demand higher pay from their firms. 'Outsiders', such as the unemployed, have little or no role to play.

It is important to make clear that all union bargaining models of wage determination can generate similar predictions (Oswald (1985) is a recent survey). Whenever there exists a combination of super-normal profit and some degree of worker power, the firm's financial position is likely to influence wage negotiations.

The classical theory of the labour market is quite different. Under competitive conditions, the wage an employer pays is neither under his control nor under that of his workers. The going rate of pay is fixed by conditions in the whole economy, and most especially by the total demand for and supply of labour. Each firm must pay that going rate. It has no need to raise wages when its productivity increases or its sales boom; if it did so it would be inundated with applicants from other sectors. In this kind of world 'insiders' have no power.

An observer of British industrial relations might be inclined to think that the competitive model is manifestly inappropriate and that an insider-outsider *cum* bargaining approach is worth taking seriously. However, four points ought to be borne in mind. First, the competitive theory of the labour market is still widely accepted by (especially American) economists, and continues to be taught to undergraduates. Second, orthodox econometric models of wage determination (see, for example, the 1986 Unemployment Issue of *Economica*) do not include as an explanatory variable any profit or financial performance measure.⁴ Third, in searching for an explanation of recent real wage increases, British economists have not turned to study product market performance but rather to factors which could have reduced the effective supply of labour.⁵ Fourth, it is conceivable that the competitive model is suitable for the analysis of Britain's non-union sector.

A natural way to assess these two approaches — the competitive model against the insider/outsider or bargaining framework — is to examine the importance of external and internal pressures upon pay. One first step is to ask managers what shapes their decisions.

The Survey

The 1984 Workplace Industrial Relations Survey, which was sponsored by the Department of Employment, the Policy Studies Institute, the Economic and Social Research Council and the Advisory, Conciliation and Arbitration Service, provides a unique source of data on the factors which personnel managers claimed affected the most recent pay settlement. The Survey is a nationally representative sample of approximately 2,000 British establishments (defined as 'places of employment at a single address or site') in both the public and private sectors. The sample was drawn from the 1981 Census of Employment.⁶ To be included in the sample an establishment had to have at least twenty-five employees (full or part-time) both in 1981 and in 1984, so that new and small establishments were omitted. The response to the survey questionnaire was 77 per cent. Agriculture and coalmining were the only important industries to be excluded from the survey. Our study uses the data obtained from personnel managers — more precisely, the 'senior person at the establishment dealing with industrial relations, employee relations or personnel matters' — in 1,267 private sector establishments. The design of the sample involved the selection of workplaces with different sampling fractions, with larger establishments having higher probabilities of selection than smaller workplaces. Weights are applied to restore the number of cases in each establishment size band to their proper proportions according to the Census. In Table 1 we give the approximate sampling errors attached to a single estimate, assuming a 95 per cent confidence level. Hence, where the survey shows that, for example, 30 per cent of all establishments had a particular feature, there is a 95 per cent probability that the true proportion is in the range of 27.5 per cent to 32.5 per cent.

TABLE 1
Sampling Errors

	<i>Percentage found in the survey</i>			
	10% or 90%	20% or 80%	30% or 70%	50%
Approximate sampling error	1.6	2.3	2.5	2.8

All those managers interviewed for the survey were asked the question:

What factors influenced the level of pay decided upon in the most recent settlement?

This was asked twice — once for a pay settlement for manual workers and again for a pay settlement for non-manual workers. One of the advantages of the questionnaire was that, in the case of the question above, respondents were allowed to answer entirely in their own words. Managers were not prompted, nor were they required to tick specific boxes on the interview form. They were permitted to cite as many influences as they wished (though

typically they only gave one or two). The questionnaire design was influenced by the earlier work of Daniel (1976).

Despite the economist's conventional antipathy towards such empirical evidence, it is difficult to believe that professional personnel managers — who spend much of their time negotiating over pay — have nothing to tell the economic investigator. Our view is that the answers to the question provide information of a kind which is complementary to that available from normal econometric methods.

Table 2 contains our results. The many different answers given by managers were grouped into thirteen classes. This classification was done *ex post* by the survey team. Table 2 reports the percentages of managers citing each of those different factors in wage settlements. For example, the top left hand figure of 11 in that Table indicates that, for those establishments employing unionised manual workers, 11 per cent cited the reason 'All establishment could afford'.

The most common answers were:

- (i) Profitability/productivity⁷
- (ii) Increasing cost of living
- (iii) Going rate in industry

TABLE 2
Factors Influencing the Level of Pay in the Most Recent Settlement

Cited Influences	Per cent Responses			
	Union Sector* (Manuals)	Non-union Sector* (Manuals)	Union Sector** (Non-manuals)	Non-union Sector** (Non-manuals)
All establishment could afford	11	5	9	7
Increasing cost of living	34	29	37	32
Going rate in industry	15	23	13	19
Merit/individual performance	4	20	5	33
Published norms	3	2	3	4
Internal pay structure	2	3	6	15
External pay structure	15	15	9	11
Government regulation	6	3	10	2
Strikes	1	0	0	0
Profitability/productivity	34	35	37	38
Economic climate	9	2	13	3
Other	13	7	15	6
Not answered	8	3	11	1
Number of establishments	488	613	356	904

Base: *establishments with manual workers

**establishments with non-manual workers

- Notes: 1. Because managers could cite more than one influence, the columns sum to more than 100 per cent.
2. Union status of establishment is determined by whether or not unions were recognised at the workplace for purposes of bargaining.
3. The 'other' category includes answers such as 'union pressure, change in payment systems, retention/recruitment, change in working practices', *inter alia*. This information was kindly supplied by Neil Millward.

Source: 1984 Workplace Industrial Relations Survey.

- (iv) External pay structure
- (v) All establishment could afford

It is unfortunate (if not surprising⁸) that the single most cited reply, number (i), should be an amalgam of two slightly different concepts, but that is how the computer coding was done, and confidentiality requirements restrict further analysis.

These findings accord reasonably closely with those in Gregory, Lobban and Thomson (1985, 1986) and in Daniel (1976). We take that to be corroborative evidence of the Survey's accuracy.

The results have implications for the way economists think of the labour market. Most strikingly, it is difficult to see how these figures could be interpreted as favouring the competitive theory of the market for labour. Although external factors (ii), (iii) and (iv) are fairly strongly cited, the importance of (i) and (v) runs counter to the textbook model of labour markets (it can be presumed that all theories are consistent with (ii)). An establishment's rate of pay appears to depend in part upon the performance of that establishment and this is true of both union and non-union establishments. These results are difficult to reconcile with the wage-taking firm of classical theory.

Another finding of interest is the difference between the union and non-union sectors over the role of 'Merit/individual performance'. This is only important — insofar as these answers can be taken at face value — in the non-unionised sector of the British economy. Although American evidence (Freeman and Medoff (1984), for example) has previously suggested such a conclusion, this is the first systematic British evidence of which we are aware. In other respects, perhaps surprisingly, the answers given for the unionised and non-unionised sectors are similar,⁹ so that competitive theory may be inadequate even for Britain's non-union labour markets. However, 'Economic climate' and 'All establishment could afford' were cited more in establishments with unionised employees than was the case in non-union workplaces.

CONCLUSIONS

This paper contains no mathematical model of wage determination, nor any econometric analysis of the labour market (our own econometric work is reported in Blanchflower and Oswald (1987a, b) and Blanchflower, Oswald and Garrett (1987)). Instead it reports what 1,267 British managers said in 1984 had influenced their firms' most recent pay settlements.

Although the data may be used in various ways, we have concentrated on only two. First, the statistics appear to provide evidence which is consistent with insider-outsider and bargaining theories¹⁰ of the labour market, and inconsistent with the classical competitive model.¹¹ Wage rates appear to be shaped by employers' financial prosperity. However, they are also affected by external pressure. Second, with the interesting exception of merit

payments for individual performance, union and non-union pressures upon wage settlements are apparently similar.

These results should be seen as complementary to, rather than a substitute for, those obtained by other methodological means. Some economists may even be sceptical of the value of survey evidence of the kind presented here. However, we find it difficult to believe that managers do not understand the industries and establishments in which they earn their living.

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NOTES

1. Some of this research is surveyed in, for example, the symposium papers of Blanchflower (1986) and Oswald (1986).
2. All the figures come from the manufacturing sector.
3. These new theories are closely related to a much older, and recently neglected, debate over whether 'ability to pay' influences wage structure. Bowen (1960) evaluates early evidence.
4. One exception is Carruth and Oswald (1987b).
5. Layard and Nickell (1987) argue that wage pressure has been stimulated by the large rise in long-term unemployment.
6. The most comprehensive account of the Survey is Millward and Stevens (1986). In chapter 9 (pp. 245-249) they considered managers' accounts of influences upon the most recent pay settlement for manual and non-manual employees, across all sectors of the British economy. However, they did not specifically consider the data for the private sector examined here. They reported that (union) establishments where the workplace was the most important level of bargaining were particularly likely to report that profitability/productivity had influenced the most recent pay settlement. This was true for both manual and non-manual workers. It is well known that workplace bargaining is particularly important in the manufacturing sector (see later).
7. We are grateful to Neil Millward for informing us that this category also includes answers such as 'performance of the establishment/company/enterprise'.
8. For any given wage, profit per employee is determined by average productivity, so it is to be expected that managers would conflate the two.
9. Many of these establishments have both union and non-union workers, and it is possible that this blurs the distinction in the answers reported in Table 2.
10. There is a close link between trade union models and insider-outsider theories. It is worth noting that, towards the end of chapter seven of the 1932 *The Theory of Wages*, Hicks (1966) states:

Once an employer is making large profits, and expects these profits to continue in the near future, he is an easy mark for union demands. He will

nearly always be prepared to make some concession in order to avoid a strike. (p. 155)

11. However, we cannot resist quoting Slichter (1950), an unjustifiably neglected work: 'This study shows that the models used in accepted wage theory are too simple and need to be supplemented. This is not exactly news' (p. 91). Slichter's paper showed that there was a remarkable positive rank correlation in 1939 between industries with high profit ratios (to sales) and those with large unskilled earnings figures. It is unlikely he would be surprised by any of our findings.

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