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Do Hostile Mergers Destroy Jobs?

by

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Abstract

This paper provides a systematic empirical analysis of the employment effects of hostile takeovers in the United Kingdom for the period 1983-1996. It finds no evidence for distinguishing between friendly and hostile acquisitions in terms of their impact on labour demand. Indeed, each type of transaction appears to have an immediate negative impact on labour demand, equivalent to about 7.5 percent of the pre-merger level. However, the paper does find that the *absolute* number of employees falls substantially, along with output, in the hostile merger case alone. This appears to be the consequence of a high level of post-merger divestment that distinguishes hostile transactions.

Outline

- 1. Introduction
- 2. Hostile Mergers and Their Employment Consequences
- 3. Sample, Data and Modelling Strategy
- 4. Results
- 5. Conclusions

Non-Technical Summary

The objective of the study was to construct a large panel database of UK firms in order to determine the impact of completed acquisitions on the demand for labour of the firms concerned. We identify as many acquisitions as possible within the set of quoted UK companies, over the period 1967-1996, using the London Business School Share Price Database, the Cambridge DTI database of firm accounts, the Office of National Statistics datasheets and 'Acquisitions Monthly'.

The paper finds that acquisition activity in the UK is associated with substantial and statistically significant falls in the employment of merged firms. However it finds no evidence for distinguishing between friendly and hostile acquisitions in terms of their impact on labour demand. Indeed, each type of transaction appears to have an immediate negative impact on labour demand, equivalent to about 7.5 percent of the pre-merger level. However, the paper does find that the absolute number of employees falls substantially, along with output, in the hostile merger case alone. This appears to be the consequence of a high level of post-merger divestment that distinguishes hostile transactions.

In contrast to the earlier US literature which suggests that control changes produce insignificant employment effects, or at least produces effects which are limited to a small number of white collar employees, our results are indicative of mergers being used as a major tool of industrial restructuring.

1 Introduction

"In the light of the lacklustre performance of other disciplinary devices, hostile takeovers are probably the most effective way for shareholders to get rid of non-value-maximizing managers without bribing them." Andre Shleifer and Robert Vishny (1988) p. 11.

"...[T]he greater the threat of the contested takeover, then the higher the premium companies feel that they must earn to keep their shareholders happy. This is the fundamental weakness of the British system." Will Hutton (1995) p. 157.

The purpose of this paper is to provide a systematic empirical investigation of the widely held - but strangely under-researched - proposition that hostile takeovers result in job losses. The hostile takeover remains the most controversial instrument in the Anglo-American system of corporate governance, as the above quotations illustrate. Its supporters see it as the ultimate disciplinary sanction on managerial incompetence or malfeasance. Critics suggest that it is imprecise, open to abuse and the source of substantial specific and systemic costs. Following an influential contribution by Shleifer and Summers (1988), it has also been considered as a device to enforce an *ex post* renegotiation of the firm's explicit and implicit labour contracts. This, according to the authors, involves a "breach of trust" with employees and an expropriation of value - via job losses and/or revisions in the wage/effort bargain - from labour and its redistribution to shareholders. Such an outcome has efficiency implications if it undermines the *ex ante* commitment of employees to the firm and to their investment in firm-specific human capital (Blair, 1995).

This debate over hostile takeovers gives rise to a policy dilemma: If the market for corporate control works as its proponents believe then any restrictions on hostile bids will encourage inefficiency. However, if the specific and systemic costs of hostile transactions exceed the benefits, then limitations, including those designed to safeguard the interests of "stakeholders" [Kay and Silberston (1995)], including employees, may be appropriate. Such issues can be resolved only by evaluation of the empirical evidence. The need to assemble such evidence provides the principal motivation for this paper.

The existing evidence on the employment consequences of hostile mergers - see below - is fragmentary, inconclusive and largely confined to studies from the USA. This paper uses a dynamic demand for labour model to explore the immediate impact of mergers on

employment and also the adjustment process through time. Since our design incorporates explicit controls for output changes in the post-merger period, it addresses the changing demand for labour more precisely than would be possible through a consideration of employment numbers alone. The model is estimated on an unbalanced panel of 433 firms, with 240 identified stock market acquisitions over the period 1983-96.

The paper is organised as follows: Section II explores the hypothesised relationships between hostile acquisitions and job losses. Section III outlines the sample, presents some descriptive statistics and then discusses the econometric methodology it be employed. The results are discussed in section IV and a brief conclusion follows.

2 Hostile Mergers and Their Employment Consequences

The 'market for corporate control' hypothesis contends that the interests of shareholder-principals are best protected by unrestricted competition for the stewardship of corporate assets using a take-over market [Manne (1965)]. Such a view rests on three propositions. First, it assumes the existence of a liquid and efficient stock market that allows low cost trades in equity claims at prices that reflect relevant available information. Second, for the *threat* of a take-over bid to be fully effective, it must be possible that a potential acquirer can take control despite the opposition of the incumbent management - i.e. hostile bids must be feasible. And third, actual and potential competition for equity voting rights should be sufficient to ensure that any benefits resulting from a change in control will accrue wholly or partly to incumbent shareholdersⁱⁱ.

Critics have questioned whether the hostile acquisition is cost-effective as a disciplinary device. First, such critics point to the evidence on the characteristics of acquired and acquiring firms - see Hughes (1993) for a comprehensive survey - to question the precision of the take-over process in reallocating resources to demonstrably superior management teams. Second, it is pointed out that equating a hostile approach with a disciplinary one is not necessarily justifiable: hostile acquisitions may be used to further managerial aspirations for growth, particularly by cash-rich managements [Mueller (1969), Jensen (1986)]. Finally, there are non-trivial costs associated with pursuing and opposing hostile bids, these include the explicit costs incurred in specific contests as well as the systemic costs, associated with the absorption of managerial efforts etc. iii

Given the multiplicity of possible motivations for acquisition [see Caves (1989)], including managerial aspirations for growth as noted above, it may be reasonable to ask why hostile takeovers are so widely considered likely to result in injurious consequences for labour? After all, disciplinary transactions in the sense of Manne (1965) or acquisitions intended to restructure redundant capacity could be achieved -and probably are - through agreed takeovers. Two principal reasons for expecting *hostile* takeovers to be distinctive have been advanced: First, a hostile (or contested) merger is one that, by definition, is initially opposed by the board of the target firm. To the extent to which this indicates that the two parties could not agree upon a mutually acceptable price, it suggests that low bidders (among which are presumably many cost-minimising disciplinary acquirers) will be disproportionately represented. Second, since hostile acquisitions are typically followed by the displacement of existing senior managers [Franks and Mayer (1996), Hirshleifer and Thakor (1994)] they represent an opportunity to take decisions that these managers may have been reluctant to approve. Managerial preferences for size, or for a quiet life without excessive change, or management's identification with the interests of employees may inhibit the sale, reorganisation or closure of under-performing business units. A new management team, with a different motivation, may have fewer inhibitions. Jensen (1993) attributes a major role to the hostile takeover in this regard in stimulating US corporations' exit from many traditional manufacturing activities in the 1980s.

The change in managerial motivation is likely to be supplemented by an increase in management credibility in the event of any confrontation with labour. Not merely is success in the takeover contest itself some indication of a willingness to engage in confrontation, but *hostile* takeover specialists, including Leveraged Buyout associations, may bring with them a reputation for re-structuring, perhaps reinforced by debt commitments.

Shleifer and Summers (1988) reject this efficiency-enhancing interpretation of *hostile* transactions. They view the control change as an opportunity to renege on implicit aspects of the employment contract and an occasion for the new management to renegotiate employment, effort and pay levels on terms less favourable to the interests of labour. They suggest that such a change is not merely an *ex post* redistribution of value in favour of shareholders. It is also - to the extent that it is seen as a "breach of trust" by employees with long-term job expectations - a discouragement to other workers in making *ex ante*

commitments to the firm. Thus it may discourage employees from acquiring job-specific human capital or from accepting pay profiles with deferred compensation elements. If these arrangements have output benefits, as has been widely argued, their discouragement will have systemic costs and not merely re-distributive consequences.

These arguments have reinforced the voices of those seeking to restrict *hostile* acquisition activity out of concern for job losses. In the USA a number of states have enacted antitakeover legislation for this purpose, while in the UK there have been widespread calls, from the trade unions and from proponents of "stakeholder capitalism" [e.g. Kay and Silberston (1995), Hutton (1995)], for changes in shareholder voting procedures to retard *hostile* approaches. However, even if systemic costs are associated with *hostile* takeovers, it does not follow that these should be outlawed. Shleifer and Summers (1988) themselves merely suggest that the distributional consequences of such transactions be addressed by making the acquired firm's shareholders, who typically reap the anticipated benefits via a bid premium, responsible for compensating adversely affected employees. Jensen (1993) goes further and argues that the costs are simply an inevitable corollary of using implicit contracts. He suggests that the latter's use here is precisely because it is prohibitively costly to specify contracts that allow for all demand and supply uncertainties.

These policy issues require an informed debate, but the extent of hard evidence on the employment effects of hostile acquisitions is extremely limited. Most existing empirical evidence on the employment implications of mergers [e.g. Brown and Medoff (1988), McGuckin et al. (1995)] does not typically distinguish their consequences by merger type. This is unfortunate if, as Morck et al (1988) point out, the differences between the characteristics of friendly and hostile targets are sufficiently pronounced that: "... research results on friendly bids may have little to say about hostile bids, and vice versa." Such evidence as is available is strictly limited but suggestive of differing effects at different levels in the organisation: board members are clearly subject to abnormally high levels of displacement following successful hostile bids in the USA [Hirshleifer and Thakor (1994)] and the UK. Franks and Mayer (1996), for example, report that 88 percent of UK inside directors resigned following a hostile acquisition compared to 50 percent in "friendly" mergers. [Of course, the absolute number of displaced directors will be quite small and some of these will be replaced.] White-collar employees appear to be most vulnerable in

hostile take-overs, particularly where headquarters can be consolidated. Bhagat et al (1990) provide case study evidence on 30 hostile acquisitions in the US, out of which 14 experienced substantial white-collar job losses, averaging 660 each. However, Bhagat et al's use of press reports as the primary source of labour data makes it difficult to be specific about what was happening elsewhere in their sample. Lichtenberg and Siegel (1990) examining US leveraged buyouts, which may be considered as alternative disciplinary transactions, also report supervisory job losses; Blue-collar employees appear to experience fewer job losses in US deals. However, whilst Bhagat et al (1990) report higher proportionate white collar job losses in hostile take-overs than in "white knight" outcomes, the reverse is true for blue-collar jobs.

3 Sample, Data and Modelling Strategy

3.1 Sample and Data

The starting point for this research was to use the London Share Price Database to identify all domestic acquisitions among the set of quoted UK companies between 1983 and 1996. This allowed the identification of 721 mergers and acquisitions made by 536 firms. Takeovers involving foreign or state-owned enterprises were omitted because of potential data and comparability problems. Since the intention of the research was to study employment effects in the context of a dynamic labour demand model, the entire potential sample of acquired and acquiring firms was screened for data availability on employment, wages and sales for at least three consecutive years surrounding the merger event. Companies making two or more substantial acquisitions in any year were excluded, to avoid conflating the effects of different events.

Takeovers were next classified into *hostile* or *friendly*, on the basis of the target firm's response to the initial bid from the subsequently successful bidder, using data from *Acquisitions Monthly* and the *Financial Times*. Additional information was obtained from Datastream and from the Office of National Statistics. Unavailability of data here and relating to employment, wages etc. reduced our sample to 240 potentially useful cases, made by some 195 acquirers. The frequency distribution of these mergers is given in Table 1.

A control group of firms was also selected from the population of UK quoted companies over the period, using the following criteria. First, that the firm had made no major acquisition during the sample period. Secondly, that data on wages, employment etc. were

available for at least three consecutive years. Thirdly, that in no year did the growth rate of total assets exceed 100%, an event which was considered likely to indicate an unrecorded acquisition. And fourthly, that the 2-digit sectoral composition of the control matched that of the sample itself. This resulted in a control group of 238 firms. These non-acquiring control firms were, as expected, significantly smaller than the acquirers^{iv}. For example, the latter had an average number of employees (pre acquisition) of 11,041 compared to 973 for the control. Similarly, their average levels of real output (in 1990 £k) were 632,449 and 103,235, respectively. The balance of the entire panel is given in Table 2.

A preliminary comparison of the hostile and friendly cases is shown in Tables 3 and 4. For the purposes of displaying descriptive statistics, we have here concentrated on a restricted sample of companies for which six consecutive years of data were available and which made only a single acquisition over the period. Table 3 indicates within the set of friendly acquisitions, the acquiring firm was significantly larger and paid a significantly higher mean wage rate than the acquired firm. Hostile acquirers were also significantly larger than their targets, although the wage rate difference was insignificant. Mean labour productivity, measured here as real sales per employee, was higher for the acquired firms in the friendly case and for the acquiring firm in the hostile case, but neither difference was statistically significant.

In Table 4 the post-merger trajectories for the same variables are compared to their premerger (t-1) values. It can be seen that there is a considerable difference between the friendly and hostile cases. In the former, there is an insignificant fall immediately after the merger, perhaps consistent with the elimination of duplicated facilities, followed by a significant increase that is sustained until at least year t+4. In the hostile merger case the immediate fall in employment is significant and equal to a substantial 15 percent of the premerger level. There is some recovery in year t+2, but this is not sustained over the following years. By contrast, productivity fluctuates substantially in a both the hostile and friendly cases, but shows no significant change.

A partial explanation for the employment differences between the two cases is evident in Table 4, where real output levels are compared. It is clear that while friendly acquirers' mean output increased gradually over a six year period, the hostile acquirers experienced a severe 17.9 percent fall in output between the years immediately preceding and following the

acquisition. There is some recovery in each of the following three years, but even four years after the event average real output only stands at 86.7 percent of its pre-merger level. This pattern is consistent with the substantial post-merger divestiture of activities in the case of hostile transactions, an interpretation that is considered below. However, for a more detailed analysis it is necessary to examine employment changes in the context of a demand for labour model.

3.2 The Modelling Strategy

If the merger of two firms results in a different optimal employment size to that previously obtaining for them as separate entities, then a profit-maximizing management will need to effect an adjustment in the labour force. However, movement to the newly desired level of employment is unlikely to be instantaneous, and the process of adjustment will depend on the balance of costs between changing employment levels and being away from the optimum. Different specifications of a dynamic labour demand function may be derived depending on the assumptions that are made concerning the form of adjustment costs, the production function, the predetermination of production and the capital stock. We follow Nickell (1984) in assuming that individual firms face quadratic costs functions, Cobb-Douglas technology and are output constrained. This results in general adjustment equation of the form:

(1)
$$l_{ii} = a l_{ii-1} + b_0 w_{ii} + b_1 w_{ii-1} + d_0 Q_{ii} + d_1 Q_{ii-1} + f_i + e_{ii}$$

Where l, w and Q denote the log of employment, log of real wages relative to the user cost of capital and the log of real output respectively and the f_i denote firm-level fixed effects. In the present context it is also necessary to allow for the possibility that mergers have additional effects on labour demand, for example by changing the efficiency with which labour is used. This is done by the introduction of dummy variables to capture the contemporaneous and subsequent effects of hostile (H and PH, respectively) and friendly (H and H) are respectively) acquisitions. Adding time dummies to control for possible cyclical effects gives the estimating equation:

(2)
$$l_{it} = a l_{it-1} + b_{0} w_{it} + b_{1} w_{it-1} + d_{0} s_{it} + d_{1} s_{it-1} + g_{0} H_{it} + g_{1} F_{it} + d_{1} PF_{it} + f_{i} + time dummies + e_{it}$$

Where i and t index firms and time periods respectively; l, w and s denote logarithms of employment, real wages and real sales respectively^{vi}. In recognition of the problems of measuring inter-firm variations in the user cost of capital, we follow much of the demand for labour literature – see Hamermesh (1993) – in implicitly normalising this to unity and thus using the real wage terms to capture the relative factor price effects. Finally, e is an equation disturbance term.

Following the seminal work of Anderson and Hsiao (1982), consistent estimates of the parameters of dynamic panel models with fixed effects may be secured by applying appropriate instrumental variables techniques to the first differenced equations^{vii}. Since the disturbances of the first differenced models are correlated within firms by construction, see Nickell (1981), a generalised instrumental variables, or a generalised method of moments, estimation is required.

4 Results

The first-differenced version of equation (2) was estimated using a generalised instrumental variable approach, with an instrument set which included lagged values of employment, wages, output and fixed assets. The results are given in Table 6. Here it can be seen that the labour demand equation performs as expected. The wage and output terms have the anticipated signs and are each statistically significant. The positive and significant coefficient on the lagged dependent variable additionally indicates that the employment level exhibits inertia and wages and output have persistent effects. In all cases the parameter estimates fall within the expected ranges. The equation performs well statistically, with an absence of second order serial correlation while the J-test indicates that instrumental validity cannot be rejected.

Turning to the impact of mergers and acquisitions on labour demand, Table 5 indicates that friendly and hostile transactions are each accompanied by a statistically significant fall of approximately seven and a half percent in the acquirer's derived demand for labour. A test for equality of the two coefficients could not be rejected (p=0.96). Thus *having controlled* for output changes each form of acquisition appears to stimulate a similar immediate fall in employment. The subsequent effects are investigated using the post-merger dummies *PF* and *PH*. These attract negative signs and coefficients of substantial magnitude (equivalent to 4.9 percent and 6.1 percent, respectively), but they do not achieve significance at the 10 percent

level. Thus there is no statistical evidence to distinguish between the effects of hostile and friendly transactions, although the relatively small number of hostile cases (39 out of 240) and the high standard error on the *PH* dummy together suggest some caution is necessary.

In section II of this paper we reviewed a number of arguments, that each tended to suggest that hostile takeovers would be particularly associated with job losses. This paper's results suggest such a view is substantially incorrect. It is the case that on average the level of employment in the new entity created by the merger falls steeply in the immediate aftermath of a hostile acquisition. Furthermore, this decline is sustained and is even reinforced over a four-year post-merger interval. By contrast, the average *level* of employment in the friendly merger case actually increases, at least after a probable initial decline. However, the decline in employment in the hostile merger case appears to be a consequence of the immediate fall in output that follows a hostile transaction in our sample. This output fall is not present in the case of friendly mergers. Once a demand for labour formulation is adopted, in which output changes are explicitly controlled for, the distinctive employment effects of the hostile transaction disappear. Both friendly and hostile transactions appear to be followed by a reduction in the derived demand for labour of about 7.5%. Thus we find no clear support for the Shleifer and Summers (1988) argument that the completion of a hostile transaction provides a unique occasion for the new management to renege on implicit labour contracts resulting in a "breach of trust" of employees' expectations. Control changes do appear to be followed by substantial falls in labour demand, but no more so for hostile mergers than for friendly ones.

How then should we reconcile our result that hostile and friendly acquisitions have an approximately equal negative impact on labour demand with the finding reported here - and indeed elsewhere [e.g. Bhagat et al (1991)] - that the level of employment falls particularly sharply after hostile acquisitions? It is conjectured that the answer lies in the substantial volume of voluntary divestment that is associated with hostile acquisitions. Haynes et al. (2000), in a forthcoming paper, suggest that the UK economy was exhibiting very high levels of voluntary divestment over the period of our investigation. They suggest that this frequently represented a reversal of an earlier trend towards corporate diversification. Such an outcome was perhaps a response to a decline in the comparative advantage of the multidivisional form of organisation for the multi-product firm, and/or a recognition of the

stock market's apparent preference for firms with a narrower focus of activities [Hoskisson and Turk (1990)]. Haynes et al. (2000) report that merely the *threat* of a hostile approach was sufficient to generate a significant increase in the level of divestment activity among their sample.

A full investigation of the relationship between acquisition activity and divestment would require detailed information on the business units divested, which lies beyond the scope of this paper. However, it was possible to use published accounting data to make an exploratory investigation. Table 6 reports the results of a random effects model panel regression of reported fixed asset sales (i.e. disposals of property, plant and equipment) on contemporaneous and lagged hostile and friendly merger dummies, with controls for industry growth and the *pre-merger* level of divestment. It can be seen that the *post-hostile* coefficient is highly significant (t=69.4) and approximately three times the size of the positive but insignificant *post-friendly* effect. This result is strongly supportive of the paper's conjecture that hostility is particularly associated with divestment.

Three further qualifications should be added to our results: First, assuming that the observed output fall is generated by divestment, as we have conjectured, it is not necessarily the case that hostile takeovers *cause* divestment. As Franks and Mayer (1996) have pointed out, disagreements over proposed divestment plans might be an important reason why incumbent boards reject takeover approaches in the first place. Second, our employment results relate strictly to observed activity in the firm that emerges as an outcome of the merger. If divestment activity does indeed follow hostile takeovers to a substantial extent, as suggested, then a full analysis of employment consequences would require an investigation of the second (plus any subsequent) round control change effects as divested business units are themselves acquired. It is possible that employees of these units experience Shleifer-Summers effects to a disproportionate extent. Third, as seen in Table 1, the proportion of hostile cases, is quite small (under one sixth). It is conceivable, given the respective magnitude of the Post Friendly and Post Hostile coefficients, in Table 6, and the high standard error of the latter that a change in sample period would produce a significant difference between the two.

5 Conclusions

It has been widely contended that hostile takeovers have adverse employment consequences. Firstly, hostility has been interpreted as signalling a disciplinary acquisition whose objective is the substitution of a new set of managers to raise the return on corporate assets. Such transactions are considered likely to be associated with increased labour productivity and job losses. Secondly, following Shleifer and Summers (1988), it has been conjectured that a hostile acquisition offers a unique opportunity for employers to renege on the explicit and implicit terms of employment of workers in the acquired company. This would allow a transfer of value from labour to capital, at least some of which will take the form of job losses.

This paper has used a dynamic demand for labour model estimated across a panel of UK firms over the period 1983-1996 to explore the impact of hostile mergers on employment. Our empirical results suggest that hostile and friendly acquisitions are each similarly associated with an apparent initial decrease in labour demand, averaging about 7.5 percent. There is some weak evidence that each type of acquisition produces a further negative shock in subsequent periods, although the coefficients here fall below generally acceptable levels of significance. There is, however, no evidence that hostile acquirers' labour demand falls more strongly than that of the friendly acquirers. That is, using a demand for labour framework that explicitly controls for contemporaneous and lagged output and wage effects, we are unable to distinguish any separate hostile takeover effect. In the UK, at least, the hostile takeover is not uniquely associated with the 'dirty job' of laying off redundant workers, as Shleifer and Vishny (1991) and others have contended. It follows that calls to reform the corporate governance system to outlaw or severely curtail hostile acquisitions, with a view to protecting the interests of labour, may be seriously misplaced.

There is, however, one important respect in which this paper has shown that hostile and friendly takeovers differ and which may have given rise to some of popular distrust of the former. It has been seen that hostile transactions are associated with immediate substantial falls in output and employment, which are not present after friendly transactions. It has been conjectured here that these falls are a consequence of a high level of post-merger divestment of divisions and subsidiaries. Such divestments constitute a second order of control transactions. In the absence of further information it is not possible to say whether these

transfers of business units have employment consequences that differ from the acquisition of quoted companies themselves. If they do experience a second wave of post-transaction employment changes, then the Shleifer-Summers argument is vindicated, albeit in an indirect form.

Table 1 Frequency of Sample Mergers by year

Year	Agreed	Hostile
1983	5	3
1984	10	3
1985	17	1
1986	23	8
1987	24	6
1988	24	0
1989	21	3
1990	14	1
1991	12	5
1992	13	3
1993	11	2
1994	13	1
1995	13	2
1996	1	1
Total	201	39

Table 2
Balance of the Panel

Number of time series	Acquirers	Controls
3	7	68
4	13	30
5	11	16
6	8	20
7	16	17
8	11	14
9	10	10
10	5	8
11	3	8
12	18	7
13	67	25
14	25	14
16	1	1
Total	195	238

Table 3
Paired t-tests for Acquiring and Acquired
Firms a Year Prior to Merger

Merger type	Acquiring	Acquired	p-value
And variable			
Friendly			
Employment	4154	1529	.00
Wage rate	12.38	10.99	.02
Labour Productivity	60.97	66.87	.23
Hostile			
Employment	9819	3943	.01
Wage rate	12.57	11.10	.20
Labour Productivity	74.01	61.47	.30

Notes:

- 1. All values are simple means
- 2. Productivity is defined as real sales per employee

Table 4
A Comparison of Pre- and Post-event Employment, Wage, Productivity and Real
Output Performance in Friendly and Hostile Mergers

Output I till	or manice m	1 I I I CII GIJ	unu most	ic micigor	D .
Merger type And variable	t-1	t+1	t+2	t+3	t+4
Friendly					
Employment	5684	5342	6081*	6175*	6024
Wage rate	11.83	13.39	12.26	12.19*	12.60*
Labour Productivity	58.66	65.59	59.85	60.40	62.06
Real Output	334,423	350,381	363,948	372,970	373,849
Hostile					
Employment	13762	11706*	12240*	12004*	11229*
Wage rate	12.31	12.11	12.34	13.60	14.20*
Labour Productivity	69.74	67.32	65.14	69.08	74.12
Real Output	959,762	788,048	797,314	829,236	832,293

Notes:

^{1.} The first column refers to the combined (acquired and acquiring) values of the respective variables one year prior to the mergers.

^{2. (*)} Denotes significant differences (at 10% level) from the pre-merger values.

 ${\bf Table~5} \\ {\bf Estimates~of~First-Differenced~Labour~Demand~Model:~Dependent~variable~} l_{ii} \\$

Coefficient
(standard error)
.610 (.144)
680 (.269)
.387 (.121)
.829 (.096)
419 (.139)
074 (.024)
076 (.038)
049 (.033)
061 (.039)
2679
.607
Yes
No
(p-value = .72)
.551

Table 6
Exploratory Analysis of the Determinants of Divestment:
Random Effects GLS Estimates

Random Effects GES Estimates		
Coefficient (standard error)		
911** (.074)		
27.11 (74.20)		
-13.83 (49.81)		
54.67 (44.48)		
44.62 (97.62)		
149.04** (2.15)		
960		
.29		
.96		

Notes

- The dependent variable is real sales of fixed assets (i.e. proceeds from sale of property, plant and equipment, Datastream item 423). The
 data are restricted to four years after merger.
- ** Indicates significance at the 1% level.
- 3. Industry Growth is the growth rate of the acquired industry (3 digit level). Replacing this variable with industry's dummies produced a similar result.
- 4. Friendly and Hostile are dummy variables for the first year of post-merger activity.
- 5. Post-Friendly and Post-Hostile are dummy variables for the second and subsequent years of post-merger activity.

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ⁱ In an illiquid or an inefficient market, incumbent shareholders' interests will not necessarily benefit from a take-over approach.

ii Hart (1995) demonstrates that the (widely adopted) one-share-one-vote decision rule affords maximum protection to the interests of incumbent shareholders in the event of a control contest. Grossman and Hart (1980) showed that in the absence of compulsion, free riding by the target's shareholders would require that *all* potential gains be redistributed to incumbent shareholders. Here the incentive to mount a control contest depends upon prior toehold stakes or upon institutional devices to coerce minorities - see Yarrow (1985).

iii Blair (1995) and others point out that these could be substantial if a fear of hostile acquisition encourages myopic neglect of long-term investments.

iv There have been a number of comparisons of acquiring and other firms in the UK literature (see Hughes (1993) pp48-52). These have shown that acquiring companies are on average substantially larger but not necessarily more profitable than either the acquired or non-acquiring controls.

^v Longer lags may be necessary for the exogenous variables depending on the precise assumptions made regarding their evolution.

^v Sales replace real output/value added, as accounts data do not directly report the former. See Nickell et al (1992) for a discussion of the use of this variable.

Pesaran and Smith (1995). Their basic argument is that since it is difficult to obtain valid instruments for heterogeneous dynamic panels, it is better to average parameters from individual time series regressions. This is not feasible in our context on two counts. Firstly, the individual time series lengths are generally inadequate (95% of them have less than 15 observations); and secondly comparison of acquiring and non-acquiring firms necessitate some sort of pooling. Besides, we take comfort from a recent comparative study by Baltagi and Griffin (1997) which concluded that efficiency gain from pooling is likely to more than offset the biases due to individual heterogeneity even with a moderately large T.