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INDUSTRIAL RELATIONS IN GREENFIELD SITES

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ABSTRACT

There is a popular stereotype that at greenfield sites managers practice, and sustain over time new forms of human resource management and that in doing so they obtain highly positive performance outcomes. A persisting theme in this stereotype is that greenfield sites are characterised by a highly collaborative form of employee relations and that they are largely strike and conflict free. The aim of this paper is to test the stereotype by reviewing what is known about the subject. Existing research on greenfield sites is placed within a broad conceptual framework, key issues are highlighted and gaps in our knowledge identified. The discussion emphasises the issues of national ownership and industrial relations/human resource practices in foreign-owned firms; how well greenfield sites cope with the ageing process; and the industrial relations and human resource outcomes obtained in greenfield sites. The review finds that most research ignores the last two issues. At present it is impossible to conclude with confidence that IR/HR practices adopted in these firms are any more effective than traditional systems. There is also little or no evidence about how greenfield site practices adapt over time. The review provides the point of departure for research being undertaken at the LSE's Centre for Economic Performance; the research agenda is briefly discussed.

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1. INTRODUCTION

Greenfield sites are of interest to students of industrial relations and management policy because they provide an opportunity to examine the kind of industrial relations management would ideally like. In setting up a new plant, managers have what is essentially a *tabula rasa*, an opportunity to start afresh, freed from the constraints of tradition and custom and practice. What sort of industrial relations will they pursue? Will they recognise trade unions and engage in traditional collective bargaining? If not, what does industrial relations, or what may perhaps be more appropriately termed employee relations look like in the absence of a trade union? And can policies and practices associated with greenfield sites be sustained over time? In other words, what happens when greenfield sites turn brown?

There is a popular stereotype that at greenfield sites managers practice, and sustain over time the practice of new forms of human resource management, either in the absence of unions or with a single carefully selected and controlled union; that they do so on the basis of a model based either on American high technology companies or Japanese manufacturers; and that in doing so they obtain highly positive performance outcomes, judged both on human resource and industrial relations criteria and on a wider range of performance criteria. One outcome that is not expected is any form of industrial dispute between company and workforce.

The aim of this chapter is to test this popular stereotype by reviewing, within a broad conceptual framework, what is already known about the subject. The review

additionally highlights the key issues, identifies gaps in our knowledge and provides the point of departure for research being undertaken at the LSE's Centre for Economic Performance.

2. WHAT IS A GREENFIELD SITE?

The term "greenfield site" has been loosely used in the past and has clear connotations of a new plant established in a rural or semi rural environment. Beaumont and Townley (1985) have argued that it will be a manufacturing plant and it will typically have innovative employment policies. However this seems to prejudge the issue and is therefore too limiting. For our present purposes it will be more useful to focus on the following features:

- it will be a new site, located some distance away from existing sites belonging to the same organization.
- it will be part of a larger organization rather than a completely new venture.

This second criterion imposes a major but deliberate limitation. Many, indeed most new organizations are single establishments. However most are also small and, if they survive, stay small. Storey (1983) has studied new firms in the North-East of England and found that over 30 per cent of new manufacturing firms fail to survive for four years, the median number of employees is 10 and there is at best a 0.75 per cent chance of a wholly new business employing 100 employees after a decade. From data on trade union recognition we know that industrial relations, defined in terms of collective arrangements with trade unions has a better chance of thriving in larger establishments. By the time they exceed the official, albeit perhaps unrealistically large figure for a small firm of 200 employees, almost none of the new single site

establishments will also be able to call themselves greenfield sites any longer. They are therefore excluded from our operational definition for the purposes of our research.

Most research has focused on new manufacturing plants. Yet much growth has occurred in the service sector. Our definition must therefore embrace new supermarkets, new insurance offices and new banks which may be located in new buildings but which will often be sited in town centres rather than green fields. Finally, we would exclude the nature of the human resource management/industrial relations (HRM/IR) policies from our definition since they would appear to be a dependent variable.

3. THE ANALYTIC FRAMEWORK

The analysis of industrial and employment relations in greenfield sites must include consideration of inputs or influences on policy choices, some way of classifying the resultant policies and practices and a concern for the range of outcomes. Each is briefly considered.

Influences on Policy

Previous research points to a long list of possible influences on human resource management and industrial relations policy.

(i) Industrial Sector We know that there are variations on a range of industrial relations indices between and within sectors. For example, trade unions are more likely to be found in manufacturing than in the private service sector (We will not be discussing the public sector). Furthermore, within manufacturing, unions are more prevalent in motor manufacturing than in electronics.

(ii) Size Unions are more likely to be found in larger organizations (Millward and Stevens, 1986). At some new plants management may deliberately plan to keep the number of employees below about 500 in the belief that smaller plants are associated with greater job satisfaction, and lower labour turnover, absence and conflict.

(iii) Location One of the attractions of the original concept of the greenfield site was the argument that rural areas had less militant trade union traditions. There are variations between regions in levels of trade union membership. These are heavily influenced by, but operate independently of sector and size. Companies may wish to locate in less unionised and less militant areas. One survey which explored this (ACAS Wales, 1986) concluded that the key influences on choice of location, for a sample of new foreign-owned plants in Wales, were proximity to markets, availability of premises and availability of labour. These over-rode industrial relations considerations, despite some initial concern about industrial relations reputation.

(iv) National/Government Policy Companies may be encouraged to establish new plants because of a range of government policies. These include regional incentives, industrial relations policy, educational and training policy, the tax regime and labour costs. Recently the government in the UK has made much of the need to avoid the damaging impact of the Social Chapter on inward investment. It has also emphasised over the past decade its eagerness to free managers of legal and trade union constraints. Indeed the EETPU, in its evidence to a House of Commons Employment Select Committee enquiry in 1986 accused the government of covertly encouraging foreign investors to ignore union calls for representation rights (IRRU, 21/10/1986).

This variable is important in any debate about whether greenfield sites established in the 1980s are different from those set up in earlier years. It is worth

remembering that even the most militant plants were once greenfield sites. So will those plants opened in the 1980s in a political context more hostile to trade unions than in the past drift as they age towards a typical pattern of medium size plant industrial relations or will they retain the often distinctive employment policies and practices established at the outset?

(v) Labour Market Considerations and Type of Workforce Unionization and therefore collective industrial relations is more likely among male full-time workers in craft-type jobs than among clerical female part-time workers (Stevens and Wareing, 1990). In greenfield sites it may be possible to shape the structure of the workforce through job design and at the point of selection. This in turn will be governed by the nature of the labour market. It has, for example, been argued (Garrahan and Stewart, 1992) that firms like Nissan have been able to take advantage of high levels of local unemployment to select and retain a workforce that operates effectively with their distinctive set of policies.

(vi) Country of Origin Non-union policies in the UK and indeed in Ireland (Toner, 1987) have been particularly associated with American multinationals. Considerable attention has also been paid to industrial relations policies in Japanese plants. Focus on country of origin assumes that some distinctive features of "home" patterns are likely to be exported, at least in part, to the UK greenfield site. In the present context, the key factor is likely to be the kind of industrial relations the firm is accustomed to both in its home territory and in any previous experience of new plants, particularly in the UK. Thus the normal American experience will be of no union. The Japanese will be accustomed to a form of "in house" union. The north Europeans will be most familiar with a heavily institutionalised set of arrangements

with a single union.

(vii) Corporate Culture Many of the best known US non union firms reflect the strong culture developed by their founder, or sometimes by a particularly strong subsequent leader. This culture stamps its mark on all parts of the organization. A major and as yet unresolved research issue has been the relative influence of corporate against national culture on local practice (Hofstede, 1980). Clearly however, there are likely to be variations in the extent to which organizations have a strong culture and the extent to which they wish to transplant that culture to plants in other countries.

(viii) Plant Leadership Industrial relations policies may be influenced by the particular leader of the plant and the management team at the time when the plant is established. The first HRM director may also play a key part in establishing policy and practice. One issue is whether the key managers are exported from the host organization or recruited locally.

(ix) The Production System and the Product Market These two factors will be closely inter-related and may have an important bearing on the type of industrial relations that is sought. For example a firm providing components on a "just-in-time" basis will place a high premium on smooth, uninterrupted and high quality production. In such circumstances it must avoid industrial unrest or problems of quality and availability of labour.

All these factors, together no doubt with others, combine to influence the HRM/IR strategy. Much, probably too much has been written on this subject. One consequence of this is that many more people are now aware of the importance of developing a strategy; at a greenfield site, unlike some established plants, there is

genuine scope for strategic choice and the opportunity to think through the preferred set of HRM/IR policies in advance. Of course the factors listed above do not indicate total freedom of choice. There may be national legislative requirements. Managers may also feel constrained by other factors; for example new car plants are highly visible and become natural targets for the trade unions. Managers may therefore feel that they want to recognise a union on their terms rather than when, through unforeseen circumstances the union may be in a stronger position to dictate. Previous experience may also lead to the view that collective arrangements, if carefully organized, provide more orderly arrangements than any alternatives. The strategic choice is therefore not straightforward. Even those who opt to avoid a union may then have to consider what alternative arrangements to provide and what steps must be taken through positive HRM policies to obviate any felt need for unions among the workforce. Finally we must bear in mind that the existence of strategic choice does not imply that managers are invariably either aware of the choices or weigh them in any deliberate manner.

The Form of Industrial Relations

There have been various attempts to classify contemporary industrial relations strategies, (see, for example, Purcell and Sisson, 1983; Purcell,1987; Keenoy,1990) and the relevant debate will not be repeated here. These attempts normally identify policy choices along one or two dimensions. Purcell and Sisson (1983), for example, classify personnel and industrial relations strategies along two dimensions of individualism and collectivism, giving them four main policy types. Guest (1989) has identified a range of policy choices about the management approach to trade unions at greenfield sites which can be summarized on a continuum from unitarist anti-

unionism to support for a traditional, possibly multi-union presence. Another dimension which Guest and others identify reflects the approach to human resource management, ranging from sophisticated and strategically integrated at one extreme to a set of often ad hoc and certainly less clearly thought out policies at the other.

Dimensions of this sort are inevitably arbitrary and over-simplistic, but do help to identify and classify some of the main choices and to locate and compare organizations. For our present purposes, since we are particularly interested in industrial relations and human resource management in greenfield sites, probably the most useful approach is to take the two related dimensions of policies on unionization and HRM policies. Along one dimension we therefore have policy preferences ranging from "anti union" through "controlled unionism", which in practice means that unions are tolerated and even welcomed but on management's terms, to "independent unionism", which implies that unions exist on their own terms and within an essentially pluralist framework. Along this continuum we might expect to find a managerial preference for policies which focus primarily on individuals, on groups and on collective arrangements.

Along the second dimension we again have three categories. The first is "no coherent HRM strategy and ad hoc personnel policies". However it seems sensible to follow the increasingly popular pattern of separating two approaches to HRM. One, which is sometimes termed "hard" HRM is primarily concerned with efficient use of human resources and cost minimization. The other is more concerned with full use of human resources and is sometimes termed "soft" HRM. The preferred approach can often be traced back to whether the organization's main concern was initially for managerial and professional staff, in which case they are more likely to

emphasise the "soft" version; or for shop floor production work, in which case they are more likely to emphasise "hard" HRM. The distinction between these approaches is likely to be reflected most clearly in the form of control system in use and in the ideology about the role of work in facilitating personal growth.

If we use these two dimensions and link them to national stereotypes we might find the following:

	Ad hoc Weak HRM	"Hard" HRM Efficiency Focus	"Soft" HRM Utilization Focus
Anti Union (Individualistic)	UK?	UK/USA?	USA
Controlled Unionization (Group)	UK?	Japan	Japan
Independent Unionization (Collective)	UK/North Europe?	North Europe?	North Europe

Within this sort of classification system it becomes possible to locate the expected policies of the typical firm from specific countries if they conform to the popular stereotype. For example American firms would be expected to fit in the top right hand triangle in the figure. Japanese firms would be somewhere in a block in the middle. The location of European firms is less clear but we might predict that North European countries, with their tradition of social democracy, present a clear alternative which would actively welcome trade unionism, albeit in the form of a single union. They would therefore fit somewhere near the bottom end of the figure. What is less clear is how to locate the typical British firm. The reason for this is the

absence of a distinctive national approach. This absence produces the range of possibilities indicated in the figure and raises the important empirical question of whether there is a preferred UK-firm pattern of HRM/IR in greenfield sites. These assumptions of national patterns are over-simplistic stereotypes but their value lies in providing hypotheses for empirical work and a context within which to explore the existing research evidence.

The next sections look first at the evidence on the number and extent of Greenfield sites in the UK and then uses the existing evidence to address the stereotypes outlined above.

4. WHERE ARE THE GREENFIELDS?

There is no central source of information about greenfield sites in the UK. We know that new firms and new plants have played a major part in employment growth in the past decade. But most of the growth has occurred in very small firms, often in the service sector. We do know more about investment by foreign firms through information collected by the Invest in Britain Bureau (IBB) of the Department of Trade and sometimes from data collected by foreign embassies. According to 1991 figures (Financial Times, 20/9/1991) foreign-owned manufacturing companies accounted for 13 percent of manufacturing employment, 19 percent of net manufacturing output and 21 percent of capital expenditure. The figure of 13 per cent represents a fall from 15 per cent of manufacturing employment in 1989, according to IDS (1992) figures. The total number of employees working for foreign-owned firms fell from 974,000 in 1979 to 724,000 in 1989. This occurred because the growth caused by the influx of new plants was more than off-set by a decline in

employment in established American multinationals.

The IBB reported that in 1990, there were in the UK 120 new American investment projects, 63 German, 37 Japanese and 27 French. The IBB figures help to put the scale of Japanese investment in perspective. It is nevertheless highly significant in terms of the total Japanese pattern of investment in Europe. In recent years, the UK has accounted for 41 percent of the financial value of the direct EEC investment of both Japan and the USA. This is both because the scale of Japanese investments in the UK are numerically greater than in other EEC countries and of higher average value. Looking specifically at Japanese manufacturing companies, which have attracted much of the research attention, there were about 17 new investments in the UK in the 1970s but this rose to 145 in the 1980s. By 1990, there were 78 Japanese plants employing more than 200 employees.

Some of the most thorough work on new manufacturing plants has been reported by Beaumont (1987). Based on Scottish Development Agency data, he reports that in 1981 there were 288 foreign-owned firms in Scotland, 170 of which were American-owned. A majority had started prior to 1950. Each plant employed on average 326 workers compared with 103 for UK-owned plants. More recent data from Welsh Development International reveals that in 1960 there were about 30 foreign-owned companies based in Wales. By 1992 there were about 350 such companies employing more than 67,000 people (Welsh Development International, personal communication).

We must be careful not to over-estimate the importance of these foreign-owned firms. Stone and Peck (1991) claim to have approached all inward investing manufacturing companies that had established plants in the north-east of England

during the 1980s and which employed more than 20 people. A third were UK-owned firms. Nevertheless, 19 percent of the plants but 40 percent of the employment was accounted for by Far East firms which in practice means predominantly Japanese. The 105 plants had created 15,000 jobs or 5% of total manufacturing jobs in the region. Since the north-east has been one of the favoured regions for investment, this implies that the impact of new plants on employment has not been as great as sometimes believed.

Finally, Beaumont (1987) cites data from two new towns in Scotland, Irvine and Glenrothes. He found that approximately half the manufacturing plants in each town had been started between 1979 and 1985. Most were single independent establishments and most were British-owned. During the same period, Glenrothes had obtained only one new foreign-owned plant and Irvine nine.

Two further points may help to set the assumptions about greenfield sites in perspective. Firstly, manufacturing sites account for only about 20 percent of Japanese investment in the UK. About half has gone into the financial sector. Secondly the pattern of investment in manufacturing may be changing. Recently there has been a shift towards joint ventures or takeovers. (Financial Times, 20/9/1991). Thirdly as the pattern of investment changes resulting in the possible need for a more skilled workforce, Japan may lose interest in opening new plants. Many Japanese firms have reported concern about UK skill shortages and general skill levels. Perhaps as a result, recent JETRO figures indicate that at present 137 Japanese companies are considering investment in Germany compared with only 107 in the UK. (Financial Times, 4/6/1992). At the same time, firms in the north-east complain that Japanese firms are poaching the skilled workers. In all this it becomes

ever more important that company HRM/IR systems operate successfully if the UK is to remain an attractive location for inward investment.

In analyzing the industrial relations and human resource policies in greenfield sites, the existing literature focuses almost entirely on manufacturing. It falls into three main and partly overlapping categories: Firstly a general interest in industrial relations in greenfield sites, reflected in particular in the question of trade union recognition and the existence of innovative HRM policies; second a focus on specific sectors and most notably electronics and the motor industry; and third, an analysis of the impact of foreign-owned firms and in particular Japanese and American firms but to a lesser extent German ones too. Our review will follow this pattern.

Research on Industrial Relations and Human Resource Management in Greenfield Sites

Research on greenfield sites has its origin in the USA. There, it was initially associated with the move from the rust belt to the sun belt but also with the quality of working life movement. Foulkes (1980) has outlined how existing non-union firms carefully selected the location and size of new plants in the USA to ensure that they would be non-union and would obtain a suitable workforce. Lawler (1978, 1986), who has done the most extensive work on the American experience, has drawn up a list of characteristics found in several of the apparently successful greenfield plants. These overlap to a considerable extent with the set of policies and practices Foulkes (1980) reported in his study of personnel policies in large non union companies.

These characteristics include a flat structure based on high trust; job enrichment or autonomous work groups as the basis of job design; team and group activity; an open consultative system with extensive two way communication and

likely use of regular attitude surveys; very careful selection based on best practice psychological tests and realistic job previews; an internal labour market and career structures; extensive training and development; skill-based and normally generous reward systems; security and stability of employment; egalitarianism and single status conditions; and a pleasant physical working environment. These policies and practices have come to be associated with greenfield sites in America, with successful electronics and other high technology firms and subsequently with the "full utilisation" approach to human resource management. They are based on individual commitment to the organization and leave little scope for trade unionism. Where grievances occur there will be elaborate systems for individual expression of concern, but no collective arrangements. Industrial disputes are likely to be non-existent. This approach presents one paradigm for the study of greenfield sites. It is, stereotypically what greenfield sites are thought to emulate.

These stereotypes have been partly confirmed in some of the case study reports of greenfield sites in the UK. In the early 1980s the Work Research Unit (1982) of the Department of Employment described the innovative practices at sites such as Carreras Rothman in Spennymore and the Berkshire Brewery in Reading. More recent accounts of sites such as Toshiba (Trevor, 1988) and Nissan (Wickens, 1987) confirm the pattern of greenfield practices. While illustrating what can be achieved, these case studies provide no indication of whether these practices are typical of greenfield sites.

In an attempt to find out whether new plants in general conform to this pattern, Beaumont and Townley conducted surveys of practices in two samples of greenfield sites, one in Scotland, the other in the north-west of England. They

obtained a count of the number of new practices of the sort outlined above and correlated the total score against a number of independent variables. In Scotland, there was a greater number of these practices in firms which were US-owned, non union and had larger personnel departments. However there was no significant correlation with age of plant, suggesting that these practices were no more likely in newly established plants (Beaumont, 1985). This may reflect the date of the data collection, in 1984. Otherwise, the stereotypes are supported. Further support comes from the study of the Scottish electronics industry by Sproull and MacInnes (1989). Multivariate analysis revealed three significant influences on the presence of a recognised union, namely size, age of plant and single status. A single status system is one of the core elements of a human resource policy suggesting that where a human resource policy existed trade unions were more likely to be absent.

In the north-west England survey, the results were very different. The practices associated with HRM were more prevalent in larger, unionized plants with a specialist personnel department and which were part of a larger multi-plant organization. The small number of American firms did not have a significant influence on the overall results although their practices were closer to the pattern found among the American plants in Scotland. We must treat these results carefully since we do not know which variables were ticked in each sample, the list of variables included a variety of joint committees which might be more common in unionised than non-unionised plants and the statistical analysis is limited. However the results imply that UK-owned greenfield sites, particularly small single establishment firms, do not conform to the American stereotype. The American-owned greenfield sites may do, but they were no more likely to do so than the older

American firms.

One of the key issues for greenfield sites is how well they cope with the ageing process. Lawler (1990) has revisited a number of the earlier greenfield sites in the USA and although he presents no systematic data, he reports that "virtually every plant has thrived and continues to be managed in a very participative way" (1990, p.10). However, like other writers, he notes that these plants face a number of what might be termed second generation problems. These include the problem of managing change, associated with a risk of complacency; an under-estimate of the investment required to sustain effective teams; the problem of skill-based pay "topping out" after about four years; and the problems of developing both staff and managers in stand-alone manufacturing sites offering little scope to move on to other activities in the wider organization. Taking his assessment a step further, Lawler (1991) argues that these greenfield sites have been largely successful in providing workers with the information and autonomy to maintain involvement in their jobs and to do them effectively but the new challenge lies in creating self-managed organizations where workers contribute well beyond the narrow confines of their own jobs.

At a more mundane level new plants face the challenge of moving to a more stable bureaucracy. The risk is that something will be lost as the excitement and novelty and sense of opportunity in a greenfield site disappears. It is perhaps then that they become more vulnerable to industrial relations problems. These problems can be exacerbated by external economic factors and also by the maturing of the workforce. Promotion expectations may be hard to meet. Those selected as young impressionable workers grow older and wiser but cannot be replaced; in short, a new

set of issues arises. The analysis of industrial relations arguably becomes more important once a plant has aged a little and the real challenges begin.

We have very little systematic evidence on the impact of ageing on HRM/IR in the UK. However there does appear to be some substance to the fears for greenfield sites. A report (IRRR, 1984) on Cadbury's plant at Chirk fifteen years after its establishment as a greenfield operation in 1969 found that a single union agreement had given way to separate recognition for some white collar staff. There had been some minor industrial relations difficulties. But on the positive side, industrial relations generally were rated as being very good and some further innovations in policy and practice had been introduced. A study by Newell (1991) of workforce attitudes in four UK and European-owned greenfield sites a few years after their opening revealed that the workforce attitudes were no more positive than those of typical UK workers. The main problem appears to have been that workers were encouraged to have unrealistically high expectations at the outset which the company was unable to realise. Essentially, this appears to be a problem with the processes of recruitment, selection and socialization.

Sproull and MacInnes (1989) in their study of the UK electronics industry reported considerable stability of union recognition over the three years between 1984 and 1987. Among the 47 plants in their sample recognising a trade union, 24 had accepted recognition at the time when the plant opened, 10 recognised them during the first five years of operation, six between six and ten years and seven only after 11 years. Most of this recognition subsequent to opening had occurred in the 1970s and there was very little evidence of it occurring in the harsher climate of the 1980s. The evidence therefore appears to be mixed but points to some variety of outcome

as new plants age.

5. RESEARCH ON SPECIFIC INDUSTRIES

The electronics industry is reputed to have been most enthusiastic in adopting human resource management. This is a function of its relative youth and its association with a number of American organizations such as IBM, Hewlett Packard and Digital which have been in the forefront of human resource management and non union systems both in the USA and the UK.

Much of the research has been conducted in Scotland. In 1991 the Scottish electronics industry employed 47,000 workers (Guardian, 8/10/1991). Over half the plants were foreign-owned, 80 percent by American firms. About 50 of the firms in the industry originated locally. In 1988, 39 of these each employed less than 100 workers. Sproull and MacInnes (1989) have reviewed the impact of the shift "from ships to chips" on trade unionism. Their postal survey obtained responses from 144 plants employing 87 percent of the industry's workforce. They found that although 64% of the plants they studied were non union, most of these were small, so that 62 percent of workers in the industry were employed in establishments that had some form of union recognition. They also found that American plants were just as likely to be unionised as UK owned plants, mainly because size was a key factor and American plants tended to employ much larger numbers on average. Significantly in the present context, however, they, like Beaumont and Harris (1990), found that those established in the 1980s were much less likely to be unionised. Therefore although this research is useful in challenging popular assumptions about the electronics industry in Scotland in general, it does seem possible that the 1980s greenfield sites are different. Given the other results, these findings also raise again

the question of whether the difference is a function of the young age of the plants or a significant new pattern associated with the changed climate and/or the changes in management strategy in the 1980s.

A second industry which is of interest is the car industry. Taking account of the influences cited earlier and its strong industrial relations traditions, it would be plausible to assume that any new plants would be unionised. There have been a few new plants opened in the 1980s, largely by foreign-owned firms and in particular the Japanese. The employment patterns in some cases, such as the Nissan plant in Sunderland, is well known. However there are also a number of new plants in the engine and components industries which have also been traditionally highly unionised. One of the new plants opened by Lucas in the 1980s is non union and based entirely on individual contracts. Recent plants opened by some Japanese firms have voted to be non union. So the picture is not clear cut.

The third sector is finance and insurance. Large numbers of foreign and UK firms established a significant presence in the City and elsewhere in the UK during the "big bang". Not all have subsequently thrived. It is generally assumed that almost all of these are non union. Yet some employ quite large numbers, raising the question of what sort of employment practices they have adopted. Again, there is a stereotype - large amounts of performance related pay and the threat of arbitrary dismissal. Some evidence to reinforce the existence of a distinctive pattern of human resource management in financial institutions was provided by White and Trevor (1983) who looked at three Japanese city firms and found that they did not conform to the Japanese stereotype, preferring to operate a dual labour market and a system in which scope for advancement and participation in key decision making was denied

to UK employees. More recently, a case study based on two Japanese firms finds that they have adapted their policies, limiting the number of Japanese staff and providing more access to positions of power for UK employees (Evans, 1991). We need more research before we can write with any confidence about patterns of HRM in new finance sector sites. They deserve as much attention as manufacturing plants since they are probably more representative of the future pattern of employment.

6. INDUSTRIAL RELATIONS AND HUMAN RESOURCE MANAGEMENT IN FOREIGN-OWNED ESTABLISHMENTS

The hypothesis outlined earlier, based on popular stereotype, is that American firms are typically non union, that new Japanese plants are single union but with special arrangements and that North European firms will typically adopt traditional collective bargaining but with a single union. These industrial relations considerations will be associated with distinctive patterns of human resource management practice.

Research in the USA by Fiorito, Lowman and Nelson (1987) has suggested that the presence of a range of company HRM policies is associated with union failure to organize at specific plants. Beaumont and Harris (1990) attempted to explore this in the UK by examining the characteristics of failed union attempts to organize. Using data from WIRS2 for the period 1979 to 1984, they found that among plants which were still non union in 1984, organizing attempts were slightly more likely in plants which showed any evidence of HRM practices as measured by the presence of joint consultation, share ownership schemes and increases in employee involvement. Arguably these are poor indicators of HRM, more especially joint consultation which was much the most important predictor of the three but which is not typically

associated with American firms. They also found that organizing attempts were much more likely in UK as opposed to foreign-owned plants. However since this study only covers unsuccessful attempts at organizing it must be treated with caution.

The evidence of Sproull and MacInnes (1989), cited earlier, appears at first sight to dent the assumptions about US firms. Their study found that in the Scottish electronics industry, the plants recognizing a trade union ranged from 44 percent among establishments which were part of a larger British-owned firm, 40 percent in American firms, and 30 percent in European firms to 0 percent in Japanese firms. The same study also shows that new plants, including new American plants are less likely to be unionised and that none of the Scottish semi-conductor plants, all of which are foreign-owned, are unionised. There may not have been a long established tradition of non-unionism in American plants in Scotland, but one appears to have developed in the 1980s.

Much research has been conducted on Japanese firms (see for example, Oliver and Wilkinson, 1988; White and Trevor, 1983). Since the first zip-making plant was established in 1972, Japanese firms have set up or taken over about 150 manufacturing plants, employing about 40,000 people. They have also set up well over 50 banks and brokerages in the City. (Financial Times, 20/9/1991) Yet there is disagreement about how best to label their industrial relations and human resource management. The earlier studies described them as "piecemeal pragmatism" (White and Trevor, 1983). Others, such as Oliver and Wilkinson and Wickens (1987) have outlined a distinctively Japanese set of practices. In industrial relations terms, these include the single union with a special agreement, often including no strikes and

possible pendulum arbitration. There will be careful selection and training and considerable flexibility of roles. There will also be use of teamwork and a system of open and extensive communication. The existence of all these characteristics has been empirically confirmed by Morris (1988) in a study of plants set up in the mid 1980s, and by Oliver and Wilkinson (1988).

Oliver and Wilkinson (1989) attempted to survey all Japanese firms in the UK. They found that the expected Japanese practices were widely used. For example, 95 percent had flexible work arrangements, 93 percent had group working, 83 percent used an extensive system of communications, 75 percent had single status and 73 percent used quality circles. Although they obtained a limited response, meaning that the results must be treated with some caution, a slightly later survey broadly supported their findings (IRRR,1990).

More recently the assumption that these practices are typical of Japanese firms has been challenged. Stone and Peck (1991) have queried whether the Japanese do in fact use many of the innovative practices which are claimed, suggesting that often the responses may reflect misunderstanding of questions or a desire to please. They also argue that "nationality of ownership is a relatively poor predictor of (HR) patterns". Nevertheless, "Japanese firms are perhaps more common in the more sophisticated group". Garrahan and Stewart (1992) have argued that Japanese firms in the north-east, and more especially Nissan, have only succeeded because of the external labour market situation - location in high unemployment areas - and careful selection which this situation permits. It seems equally probable that these counter-claims are in turn over-simplifications. In this context it is interesting to note that Oliver and Wilkinson (1989) found that comparable British firms were almost as

likely to be using the "Japanese" practices as the Japanese. What this strongly implies is that the use of a particular technique is less important than the way it is used and how successfully it is integrated into a coherent HRM strategy. In many of the Japanese plants this has been achieved, using total quality management as the key integrating mechanism.

Beaumont, Cressey and Jakobsen (1990) have examined the practices in a sample of half the German firms operating in the UK, 25 per cent of which had been started in the 1980s. They do not appear to conform readily to the North European stereotype. Seventy-six per cent were non union - almost exactly the proportion of "parent" companies that were unionised - and only a quarter had anything resembling a works council. The probability of a trade union presence predictably increased with size, the median size for the whole sample being only 85. It appears that German firms maintain very loose controls over the personnel and industrial relations policies of their UK subsidiaries.

Purcell et al (1987) used WIRS2 to compare UK and foreign owned firms on a number of personnel practices. They found that the foreign owned ones were far more likely to use innovative techniques, to take communication and consultation more seriously and generally to behave in a manner more likely to conform to good personnel practice. This reinforces the findings of the Beaumont and Townley study with respect to Scotland.

What all this research indicates is that although there may be a tendency towards the national or industrial stereotype, the picture is far from clear. "Newness" may possibly be more important than "foreignness" in explaining IR/HRM policies in greenfield sites. This is of course no surprise. It is unreasonable to

assume homogeneity among firms from a particular country. What it also reveals is the scope for choice, again emphasising the importance of management strategy and in particular strategy at the time when a new plant is established. Greenfield sites of the 1980s do on balance appear to be distinctive in their industrial relations. What we do not know is whether they are distinctive because they are new or because they reflect an enduring break with the past. Will they sustain their new practices or will they go the same way as so many green fields of the past and turn muddy and brown and develop familiar industrial relations?

7. INDUSTRIAL RELATIONS AND HUMAN RESOURCE MANAGEMENT OUTCOMES AT GREENFIELD SITES

In this section we will concentrate on IR/HRM outcomes. They can be considered at a number of levels. The first concerns the system and its stability. Do those plants which start out with a particular system sustain it over time? The most obvious aspect of this is the question of whether non union plants stay non union and whether single union plants stay single union. A second issue is how far the arrangements, such as they may be, for negotiation, consultation, communication and grievance handling are altered over time.

The second level of issue concerns the product of this system in what might be termed conventional industrial relations terms. In other words, are there disputes, what evidence is there of grievances and how far are employees participating in the consultative and communication processes? Are employees comfortable with the system and satisfied with their jobs and with their employment?

At the third level, a range of outcomes typically assumed to flow from effective HRM should be considered. These will include levels of labour turnover

and absence, the number of ideas emerging from quality circles and related techniques, amount of unplanned overtime working and stability of employment. Taking this one step further, we might want to consider business performance criteria. Has the plant expanded according to its expected schedule, is the quality of the product acceptable in the marketplace and how does the productivity and competitiveness of the plant compare with other plants, perhaps in other countries?

At present it is much easier to ask these questions than to answer them. We can only take a superficial look on the basis of the available sketchy evidence.

(i) Stability of the Industrial Relations Arrangements

There is little indication that IR procedures change significantly in more than a handful of cases. If we confine our analysis to greenfield sites opened in the 1980s, the picture from the Sproull and MacInnes (1989) study in Scotland, which found one case of recognition and one case of de-recognition, is probably fairly typical. However a few cases have been reported, including the Cadbury plant at Chirk cited earlier, which reveal the kind of pressures that can lead to change. Three of these cases can illustrate the points.

The first case is a Japanese plant in Wales where the management took a decision as the plant grew that it would prefer a union to simplify and organize its communication and consultation processes and consequently took the initiative in seeking a collective agreement. The second concerns Isola Werke, a German electronics firm employing 170 staff in Scotland. It opened in 1985 but by 1991 the AEU had organized 60 percent of the workforce. Management insisted that the works council retain sole representative and negotiating rights but allowed 60 percent of the employee seats on the council to go to AEU members. It also conceded that

failure to agree at the council could lead to calling in the full time official. The union in turn had to agree to support the company objectives by displaying adaptability and cooperation.

The third case concerns United Dairies. It opened its new Westgate plant in West London, employing about 100 workers, as a non union plant in 1987. As the first non union plant in the company, this was meant to serve as a model with single staff status for everyone, flexible team working, a flat hierarchy and no union. The non union status was confirmed after an 18 month review. However friction arose over working conditions and working arrangements. In particular there was concern among the workforce that they were required to undertake overtime work without pay because they were on staff status. An initial reaction was high labour turnover and a subsequent one was that the TGWU was able to organize over half the workforce. By early in 1991, management was forced to concede "limited recognition", which consisted of the right to be consulted about changes in working conditions and the right to make representations on annual pay. Although the evidence on the German plant is too limited, the United Dairies example illustrates the potential for unionization if management fails to ensure good industrial relations. Taken together these cases illustrate the variety of pressures at greenfield sites that can lead to union recognition.

(ii) Disputes, Industrial Conflict and Worker Satisfaction

Evidence of industrial disputes in greenfield sites is hard to find. Metcalf and Milner (1991) studied 72 cases of "new style deals". Two thirds were in plants established in the 1980s, half were Japanese or American owned and 43 percent were in the electronics sector, so they fit in well with the popular image of the new 1980s

IR/HRM. Although the variations in the procedures make the results hard to compare, 27 of the 212 wage rounds where a disputes procedure was available went to impasse. This figure of 12.7 percent is not particularly low compared with private sector firms as a whole. However industrial action took place in just five cases in the form of two strikes and three overtime bans, which is well below the national average. Since the sample is likely to contain many if not most of the sizeable 1980s green field sites where trade unions are recognised, it confirms the absence of significant industrial conflict.

A somewhat older study by ACAS Wales (1986) examined 26 foreign-owned firms operating in Wales. Fourteen had started during the 1980s and all the remainder in the 1970s. In the ten years prior to the study seven of the 26 companies had experienced industrial action in the form of strikes or overtime bans.

Research, usually on a plant by plant basis, often reveals high levels of satisfaction among staff, more particularly at foreign-owned establishments. Toner (1987) in Eire, compared foreign-owned greenfield sites and comparable locally-owned older plants and found higher satisfaction among those at the new and non union plants. Surveys at the Cadbury plant revealed fairly high levels of satisfaction. The work of Newell (1991) cited earlier, provides an interesting contrast, suggesting that high satisfaction will only be achieved with an integrated human resource policy giving careful attention, among other things, to the management of expectations.

In summary, greenfields sites of the 1980s do appear to be largely free of industrial disputes. In so far as many are non-union, the whole concept of an industrial dispute begins to look outdated. Good industrial relations needs to be redefined either in terms of quality of working life criteria of the sort found in the

Social Chapter or in terms of human resource outcomes.

(iii) Human Resource Management Outcomes

There is very little systematic evidence on criteria such as labour turnover and absence. The ACAS Wales study cited absenteeism levels of about 4 per cent and claimed that this was close to the average for Wales. Reports on Toshiba and Nissan reveal absence levels, including sickness absence of about 2.5 per cent. Anecdotal evidence points to care taken to sustain employment stability at foreign-owned greenfield sites. However in the face of recession, some changes are beginning to appear. For example Unisys have shut their Scottish plant, opened in 1980, resulting in the loss of nearly 700 jobs and Seagate have closed their Scottish disk drive repair plant with a loss of 220 jobs. Another American closure was the Wang plant in Scotland but it was taken over by Compaq with a net increase in the numbers employed. Stone and Peck (1991) refer to two north-east foreign-owned plants which were sold to UK-owned companies but they do not cite the country of origin.

Japanese firms have been reluctant to close plants or make compulsory redundancies. However Hitachi required major cutbacks in their Welsh plant and asked for volunteers aged above 35. The current recession has affected a number of plants. NSK and Komatsu in the north-east of England used extended Christmas and New Year breaks at the end of 1991 as a way of cutting back production and Fujitsu have slowed the expansion plans for their new plant.

On the basis of these limited cases, it appears that the Americans are more ready to abandon sites, even when, as in the case of Unisys there is a research and development capacity as well as production. The Japanese seek ways to maintain employment levels without compulsory redundancies.

Plant performance data for greenfield sites are very hard to identify. Profit levels are inappropriate criteria to assess plant level performance because of the flexibility of accounting procedures. Productivity indices would be more useful. If we are only comparing across greenfield sites then the age factor can be discounted. But once again we lack any systematic data. There is however a certain amount of anecdotal evidence about the performance of Japanese plants compared with similar plants in Japan. These accounts range from some which suggest productivity levels are the same to others which indicate that they are up to some 20 percent lower. At a more general level, recent CBI data suggest that foreign-owned firms have contributed disproportionately to the rise in UK manufacturing productivity. This reflects the figures cited earlier about differences in employment and output.

8. CONCLUSIONS: THE RESEARCH AGENDA

This review has revealed how little we know about policies and practices at greenfield sites and about their impact on HRM/IR outcomes and organizational performance. Most of the reported research focuses on policy and practice and ignores industrial relations and performance outcomes. At present it is impossible to conclude with confidence that the HRM/IR policies adopted by these firms are any more effective than more traditional systems. Almost all the evidence is drawn from cross-sectional surveys of manufacturing industry, with a strong bias towards Scottish and Japanese plants. There is some suggestion that survey data seriously oversimplifies the picture (see for example Stone and Peck, 1991). There is also little

or no evidence about how HRM/IR policy and practice adapts over time. This points to the need for a different research agenda linking inputs, in terms of policy and practice with outputs in terms of indicators of cooperation and conflict and levels of performance and doing so in the service sector as well as in manufacturing. And it points to the need for a form of reconstruction of cases to identify how the system has changed if at all and why. Only then will we be in a stronger position to reach conclusions about the sustainability and impact of the industrial relations and human resource management at establishments opened in the 1980s. And only then will we be able to judge whether industrial relations at these plants have moved beyond industrial disputes.

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