



WestminsterResearch

<http://www.wmin.ac.uk/westminsterresearch>

Skill shortages, recruitment and retention in the housebuilding sector.

**Linda Clarke
Georg Herrmann**

Westminster Business School

This is an electronic, author-formatted version of an article published in *Personnel Review*, 36 (4). pp. 509-527, 2007. The definitive version in *Personnel Review* is available online at:

<http://dx.doi.org/10.1108/00483480710752777>

The WestminsterResearch online digital archive at the University of Westminster aims to make the research output of the University available to a wider audience. Copyright and Moral Rights remain with the authors and/or copyright owners. Users are permitted to download and/or print one copy for non-commercial private study or research. Further distribution and any use of material from within this archive for profit-making enterprises or for commercial gain is strictly forbidden.

Whilst further distribution of specific materials from within this archive is forbidden, you may freely distribute the URL of WestminsterResearch. (<http://www.wmin.ac.uk/westminsterresearch>).

In case of abuse or copyright appearing without permission e-mail wattsn@wmin.ac.uk.

Dr. Linda Clarke is Professor of European Industrial Relations at the Westminster Business School, University of Westminster, London, with particular and extensive research expertise on construction labour and training in Europe. clarkel@wmin.ac.uk, Tel: 0044 (0) 207 911 5000 extn. 3158, Fax: 0044 (0)207 911 5780.

Dr. Georg Herrmann was formerly a senior research fellow at the Westminster Business School, University of Westminster, London and is now project manager for the housing association East Thames Group Ltd. Georg.Herrmann@east-thames.co.uk.

Skill shortages, recruitment and retention in the housebuilding sector

Linda Clarke and Georg Herrmann

Structured abstract

Purpose

The paper shows how internal and external labour markets operate in the construction sector, associated with different strategies taken by firms in recruiting and retaining particular groups of employees. It draws on research of the housebuilding sector which aims to discover how far firms develop human resource policies, recruitment and retention strategies, and training and development activities in response to skill shortages.

Methodology

The paper is based on: a questionnaire survey of skills shortages, recruitment and retention in housebuilding firms, drawn from databases of social and private housebuilders and a detailed investigation of firms.

Findings

The results show worsening skill shortages and hard-to-fill vacancies, particularly for site managers and tradespersons. These shortages are especially bad for housebuilding firms, above all those with higher levels of direct employment in the social housing sector. Despite this, firms rely for operative recruitment on traditional and informal methods and procedures, on experience – not qualifications - as the main criterion, and on ‘poaching’ – all symptomatic of a craft labour market. For managers, there is some evidence of retention measures, in particular through training and promotion, implying the development of internal labour markets. And for professionals there are indications of occupational labour markets with their dependence on institutionalised systems of training and qualifications.

Value and implications

The paper shows that firms take little responsibility themselves for resolving skill shortages and establishing training needs, though national training policy is reactive and driven by employer demand. Obligatory skills certification and an institutionalised industrial training system would facilitate a move from this deadlocked situation, from craft to occupational labour markets.

Key words: skill shortages, recruitment, retention, housebuilding

Introduction

This paper is about recruitment and retention in the construction industry. Drawing on a large-scale survey of firms active in housebuilding and a detailed survey of construction firms it shows how, despite acute skill shortages experienced by the majority of firms, traditional and often informal methods and procedures predominate. The considerably greater recruitment difficulties experienced by firms involved in social housing and with at the same time higher levels of direct employment of operatives points, however, to clear disparities in the nature of the labour market. Our paper seeks to illustrate these and highlight their implication for the recruitment and retention of staff and operatives.

Many firms in our survey conform to what Marsden has termed a ‘production approach’ whereby skills tend to be firm-specific and training depends to a large extent on the individual employer and on on-the-job learning (Marsden, 1999). In terms of labour market structure and theory, such firms would be expected to rely on internal labour markets, characterised by mobility between jobs within the same firm, which is at the same time highly structured internally in its grades and hierarchies. With such markets, therefore, employers regularly fill vacancies from their current employees rather than from external recruitment and processes of skill formation depend on predictable job structures (Kalleberg et al., 1996). Such ‘firm internal markets’ are apparent from our survey, in particular for office staff, but they are not prevalent for operatives.

A distinction has been made in labour market theory between such ‘firm’ internal markets and ‘craft’ internal markets, characterised by mobility between firms within the same occupation (Kerr, 1954). This paper shows how such craft labour markets tend to predominate for operatives in the housebuilding sector in Britain and how they impact on recruitment and selection, especially through subcontracting, which plays a significant role in their operation. In doing so, the paper builds on and – through focusing on recruitment and retention – extends our previous research, which has identified the British construction industry as typified by a ‘craft’ production

system compared with the more industrialised systems found in continental countries such as Germany and the Netherlands (Clarke and Wall, 2000). This craft system, especially strong in housebuilding, lays emphasis above all on selling the products of labour associated with a particular trade. With it, traditional apprenticeship and/or learning on-the-job survive as the main means of training, wages tend to be output-based, labour is employed casually from one project to another rather than by firm, firms are small and self-employment high.

Not all British construction firms conform to this picture of craft production, above all in their policies for recruitment and retention. There are more regulated and formal approaches to the labour market, as evident from our surveys - particularly for those firms identified as 'good practice' - and from Lockyer and Schlarios (2007) in this special issue. Marsden distinguishes between 'production' and 'training' approaches, each implying different means of entry into the labour market (1999, 33-9). A training approach is one where investment in training is provided by collective industry-related associations of employers and employees together with the state. This broadly conforms with the 'industrial' systems described in our previous research on the construction sector as 'qualification-based' in the sense that entry is dependent to a large extent on training and qualifications and employment more regulated. Whereas a 'production' approach underpins internal labour markets, a 'training' approach underpins 'occupational labour markets', defined as institutionally regulated, related to a person's skill and certified qualifications, and usually collectively and industrially organised. As Marsden explains, a "well-stocked occupational market means that employers can expand their workforces readily to meet increased demand, and there are no long lead times that would be required if they had to train their labour from scratch" (1999, 216). Some evidence exists from our firms and organisations that they operate as if such a labour market existed, particularly with regard to professionals, as found also for Scottish surveyors (Lockyer and Schlarios 2007).

With occupational labour markets firms may just as easily recruit externally. The problem apparent from our surveys is, however, that when skills are depleted and institutional regulation and training are weak, what have been termed 'secondary labour markets' become increasingly prominent (Piore and Sabel, 1984). These depend on external recruitment markets and differ from both internal and occupational markets in the lack of empowerment of employees and of stability

of employment, the exercise of managerial prerogative, lack of training and low qualification levels. Here we shall seek to show how all four forms of labour market – firm and craft internal labour markets and occupational and secondary external labour markets – are recognisable in the housebuilding sector for different groups, even within single firms. Each is associated with different strategies for recruitment and retention.

The Surveys

This paper draws on three sources: a large-scale questionnaire survey of skill shortages, recruitment and retention in housebuilding firms; a detailed investigation of ‘good practice’ firms within the survey group with respect to recruitment and retention; and a survey of construction firms and organisations conducted as part of a project entitled ‘Overcoming Marginalisation’ and concerning gender and ethnic minority inclusion and exclusion.¹ The former survey was the first to focus exclusively on housebuilding, including the private and social housing sectors. It establishes a framework for future surveys and allows us to compare changes in the housing sector with the rest of the construction industry. Two databases were used for this survey:

- the House Builders’ Federation (HBF) membership list of in total 408 members;
- a specially constructed database of 161 firms consisting of companies operating in the areas of social housing and regeneration and drawn from entries in the magazine ‘Social Housing’.

The total sample of 103 firms responding represented a response rate of only 18% in all, though the rate for the Social Housing sample was 28%. These firms have a combined turnover of £6.8 bn and employ 20,162, of whom 35% or 7,034 are skilled operatives and 835 craft trainees. Firms responding from our own Social Housing database have a turnover of £1.1 bn and employ 6,878, 52% or 3,587 of who are skilled operatives and 283 craft trainees, representing a much higher proportion of direct employment (56%) compared with the whole sample (39%). These firms also operate predominantly in the public (including housing association) sector and their activities are in social housing, regeneration and repair and maintenance. In contrast, those drawn from the

¹ The survey of housebuilding firms was conducted for the Housing Forum, whose support is gratefully acknowledged. The ‘good practice’ survey was part of the same study and was conducted by Barbara Susman, formerly of University of Westminster. The project on gender and ethnic inclusion was entitled ‘Overcoming marginalisation: structural obstacles and openings to integration in strongly segregated sectors’ and supported by the European Commission.

HBF database operate predominantly in the private sector, though a few (8) operate in both sectors. We therefore distinguish the firms from our own database as ‘Social Housing’ firms in the paper because they are all active in social housing even though they may also operate in the private sector and though firms in the HBF sample may also be building social housing.

The breakdown of firms into geographical regions is skewed, with the South-East and South-West over-represented. 86% of all firms construct new housing in the private sector and half in the public sector (two-thirds for the ‘Social Housing’ firms). Repair and maintenance is carried out by a third of all firms, and in the public sector by two-thirds of the ‘Social Housing’ sample. The Social Housing sample therefore comprises firms operating in both sectors but with a significantly higher proportion of activity in the public sector (Table 1). Over half of all firms (two-thirds of the Social Housing sample) have a turnover of between £5 m and £50 m, whilst a quarter have a turnover of under £5 m. Small firms with fewer than 10 employees are, at 14%, therefore under-represented compared with their proportion within construction generally, where 28% employed fewer than 7 in 2002 (DTI, 2003). A half of all firms employ between 10 and 100 employees, and another quarter are larger medium-sized firms employing between 100 and 300. However, 66% of firms representing the social housing sector employ between 50 and 300, compared with only 48% for the whole sample, revealing again that firms from the Social Housing list employ considerably more personnel directly. The distribution of firms varies, from main contractors with predominantly office staff to firms in which a high proportion of the workforce is manual. Skilled tradespeople make up more than half the total workforce in 34% of firms and 47% for those firms active in social housing, indicating both that the survey reached a number of subcontracting firms and that some main contractors, in particular those involved in social housing, have a substantial proportion of directly-employed skilled operatives.

TABLE 1 HERE

Any skill problems that the sector experiences inevitably have an impact on the human resource (HR) policies of firms, on the recruitment and retention strategies they pursue and in particular on their training and development activities. They also have implications for the readiness of firms to ensure implementation of the Construction Skills Certification Scheme, which seeks to register

the skills and qualifications of construction operatives. It is to be anticipated that firms concerned about staff leaving develop methods to improve their retention rate. Firms were therefore surveyed for their recruitment and retention policies and practices, training plans, training spending and formal qualifications achieved, new skill requirements, staff development and mobility, the take-up of Key Performance Indicators (KPIs), and the use of Respect for People toolkits identified as part of the 'Rethinking Construction' initiative following the Egan Report (DTI, 1999).

As well as surveying firms through a postal questionnaire, we also investigated in more detail through face-to-face interviews ten firms identified with good practices from our large scale sample. There are significant research difficulties associated with 'good practice', though this is widely used in applied research, policy design and implementation. Our definition was that it should not just be seen as 'good intention', but be consciously and successfully designed and introduced with awareness of the difficulties and obstacles. This does not mean of course that what is good practice in construction is not normal practice in another sector or in construction in other countries. Good practice is usually only generalised if its benefits become sufficiently apparent or there is sufficient government and industry support. Our choice of 'good practice' firms was also drawn up to represent a cross-section in terms of size and type, activity, type of client and location. In addition to these 'good practice' firms we have drawn from the recruitment and retention sections of a detailed survey of twelve construction firms, conducted as part of the 'Overcoming Marginalisation' project on structural obstacles to gender and ethnic minority inclusion (Beck et al. 2004).

Skill shortages

Strategies for recruitment and retention might be expected to vary according to the degree to which skill strategies exist or skills are in plentiful supply, given the skill-sensitive nature of different labour markets. In our large-scale survey, firms were asked whether they had experienced difficulties recruiting skilled operatives in the previous three months, following the same questions asked in a CITB survey in which 79% of all construction firms reported experiencing recruitment difficulties and 24% claimed they were unable to tender for a contract

because of skill shortages (CITB 2002). Our survey reinforces these findings: 79% of all firms and 84% of those from the Social Housing sample have been experiencing recruitment difficulties. For all of the main occupations in the housebuilding sector too, recruitment problems far exceed those for general construction (Table 2) indicating a worsening in the situation over time and particular difficulties in the housebuilding sector.

TABLE 2 HERE

Our survey shows that 49% of respondents and 53% from the Social Housing sample have experienced difficulties in recruiting site managers, representing twice the proportion reported by the CITB for housing a year earlier and almost five times its figure for general construction. In an earlier employment survey of the House Builders' Federation, over 35% of firms had experienced considerable shortages of site managers (HBF 2001). The results for our Social Housing firms indicate that there are significantly greater recruitment difficulties and skill shortages in social housing and regeneration. With regard to certain occupations, though many firms have recruitment difficulties, the proportion does not diverge significantly from the CITB results: for managers and senior officials, 32% compared with 29% in the CITB survey; professionals, 25% compared with 32%; and associated professionals and technical staff, 27% compared with 18%. The CITB survey reveals higher levels of recruitment difficulties for the main trades: bricklayers 57% compared with 39%; and carpenters and joiners 50% compared with 33%. Our Social Housing sample shows, however, higher recruitment difficulties for almost all occupations compared with the total sample, in particular for the main trades: bricklayers (45%), carpenters and joiners (42%) and plasterers (39%). Such evidence of critical skill shortages is not surprising given the large proportion of those in skilled construction occupations without qualifications and the fact there has been little improvement in the acquisition of vocational qualifications (ONS 2004).

The Employers' Skills Survey of 2002 found that 26% of employers in construction had a vacancy and that 73% of these were hard-to-fill (CITB, 2002). Since this time, the situation has further deteriorated (ONS 2004). Our survey showed that 60% of the whole sample of 103 firms in the housebuilding sector has at least one hard-to-fill vacancy compared with a rate of 63%

reported by the CITB in 2002 for all construction. The CITB also reported that: “20% of the overall number of firms in the sample (470) was left with a long-term vacancy which they were unable to fill”, although no breakdown is provided for the housing sector. In our survey only 19% of the 62 firms with hard-to-fill vacancies succeeded in filling all of them, leaving 81% with at least one hard-to-fill vacancy they could not fill. For the whole sample therefore 49% had at least one hard-to-fill vacancy that they could not fill, more than twice the CITB proportion.

The indication is that the housing sector experiences many more critical recruitment problems and skill shortages than construction in general, though it should also be remembered that our sample is skewed to the South of England. Only 25% of firms reporting hard-to-fill vacancies succeeded in filling all their vacancies in the six occupations with the highest recruitment difficulties (Table 3). A large proportion was unable to fill at least half of its vacancies for bricklayers (41%), managers and senior officials (40%), carpenters and joiners (40%), supervisors (31%) and professionals (25%). All these are occupations requiring some element of training and experience.

TABLE 3 HERE

Recruitment rationale

As regards the reasons for recruitment difficulties, nearly two-thirds of firms pointed to the low number of applicants with the required skills (63%). Almost half considered that there is too much competition between employers for applicants (41%); whilst others complained of lack of experience (37%) or attitude, motivation and personality (34%). Only 11% regarded the bad image of the sector as a problem for recruitment. Generally, lack of training provision (2%) and poor terms and conditions (4.9%) were not regarded as important reasons for recruitment difficulties.

The lack of significance attributed to terms and conditions in explaining recruitment difficulties is surprising given that 53% considered pay and benefits to be at the same time the main reason for leaving. It is also surprising given that organisations providing good and stable terms and

conditions, in particular the two local authority building departments or Direct Labour Organisations (DLOs) interviewed in depth, appeared to experience little difficulty with recruitment. One in Yorkshire had, for instance, recently filled 33 vacancies, for which they had received 60 applicants, many in their fifties or new recruits (Housing Forum 2004). 49% of respondents in our large-scale survey also reported that they successfully recruit staff through offering higher wages, in particular for surveying, bricklaying, site management and carpentry and joinery. The CITB survey of autumn 2002 showed a lower proportion of firms (37%) pursuing this strategy and the considerable increase suggests that the labour supply problems in the sector have become more acute and that there is now an upward pressure on wages.

In the face of such serious skill shortages, we would expect firms to implement active policies to improve the situation. Half of all firms have a recruitment (52%) and a retention (48%) policy in place, and 22% a recruitment and 23% a retention plan. The firms involved in social housing demonstrate a rather better record in their HR policies and plans: 56% have a recruitment and 51% a retention policy, and 29% both a recruitment and a retention plan. In a survey of housebuilders in 2001, 67% of firms had a training plan (HBF, 2001). Our survey demonstrates a significant increase in the number of firms with a training plan, 79% of all firms and 89% of the social housing firms, with implications for the development of internal firm labour markets. The DLOs were especially good, having well-formulated training plans and good apprenticeship training programmes. Both departments were increasing their intake of apprentices, the Yorkshire DLO to 37 or 10% of the workforce and the Midlands DLO to 60 or over 12%.

Shortages have however had an impact on reducing the reluctance to recruit those from ethnic minorities, who account officially for only 2.3% of the construction workforce, though constituting 6.9% of the workforce as a whole (Byrne et al, 2005). A Royal Holloway survey reported positive responses from ethnic minorities concerning the attitude of employers towards them, personally and professionally. For instance:

... an employer who finds someone good will grab him and give him a job irrespective of the work situation at that moment and could not care less whether he is ethnic minority or not. It is an employee's market, it is difficult to recruit and good staff are poached regularly. (Royal Holloway 2002)

Different reasons were given by those of our firms surveyed in depth for the otherwise low recruitment rates of ethnic minorities and women, who account for only 9.2% of the construction workforce and 0.3% of tradespersons (Beck et al. 2003). Most claimed that women and ethnic minorities just did not apply and had no interest, perhaps due to the image of the industry given by the media. One small firm, whilst insistent that it did not discriminate, claimed that the “highest barrier for women is working with men” as the men are “intimidated”. Others attributed low participation to “custom and practice”, to lack of encouragement from families and to “general communality of prejudice, especially against women”, “women and ethnic minorities get victimised”. This prejudice was aptly demonstrated in the views of one firm that if it recruited women “it would attract ‘talk’”, or “women slow production”.

Conversely, reasons *for* recruitment may be more complex, with some knowledge of the industry, whether through family or friends, playing a critical role. The Royal Holloway survey, for instance, found that having a family member in the industry was an important factor for 59% of white people surveyed and for 48% of those from ethnic minorities. However, compared with ethnic minorities, white people had influences from a greater range of sources, such as careers advice or teacher encouragement (Royal Holloway 2002).

The explanations given by firms for recruitment difficulties, including in recruiting women and those from ethnic minorities, are therefore varied. In many cases recruitment rationale appears to be guided by a reliance on tradition and discrimination, rather than any conscious policy, which would imply firms themselves taking some responsibility for resolving skill shortages.

Methods and criteria of recruitment and selection

Firms interviewed in depth were asked about their methods of recruitment. Many, large and small, relied largely on informal channels, particular word of mouth or people ringing in or “ringing around” using lists that have been built up. The Royal Holloway survey (2002) of ethnic minorities in construction confirmed this, as summed up by one interviewee:

You'll probably find 90% of the blokes on this site go to the pub on Friday. And all their mates do the same thing. Most of them are in construction, one way or another. ... that's where I get a lot of my work.

Though favouring 'insiders' rather than 'outsiders' and thereby perpetuating inequalities, informal recruitment channels continue to be important to recruitment generally, especially in certain jobs and industries, with small firms, in the private sector, and in periods of unemployment (Alpin and Shackleton 1998). Several firms interviewed in depth still recruited people turning up on site, a method found also in the Scottish construction sector and one that is symptomatic of a craft labour market (see Lockyer and Schlarios 2007). Other firms however appeared to increasingly shun this method, which can also discriminate against women and ethnic minorities (Royal Holloway, 2002). As common, too, was advertising in the local press. One DLO in the Midlands was especially targeted in this, including advertising in the local Asian press with Asian images in the advertisements, and in women's centres with mainly female images in different trades. This DLO also worked closely with schools, encouraging girls and ethnic minorities to come in for work experience, and ran a one-week 'taster' course every year. One result was that in 2002 it received 574 applicants for just 24 apprentice vacancies!

There is a growing realisation by many firms interviewed in depth that using the same channels of recruitment for white men, women and ethnic minorities simply does not work. Nor, given the reports of skill shortages in all areas, do the traditional channels anyway appear to be especially effective. Agencies in particular, used by a few of the firms, were reported to invariably send white males. One firm leafleted the local area where a project was due to start and talked to the local Further Education college, especially to recruit apprentices; another visited the school in the vicinity of a new project; and another put advertisements on its vans, in shops and in the company newsletter, where sisters and aunts were addressed as well as male relations. This firm even offered £100 loyalty bonuses to any employee introducing a new recruit who stayed at least six months. Only rarely was the JobCentre approached 'as a last resort' as the return was regarded as 'poor'. Tradeswomen and ethnic minorities also report problems in applying for jobs through the job centre. In the words of one: 'whoever's behind the desk, especially if it's a man, he'll say "Are you sure this is what you want to do ... this is heavy work?"' and would then

proceed to ‘warn’ any prospective employer of the gender of the applicant (Royal Holloway 2002, 26).

In general the more firms rely on ‘word of mouth’ for recruitment, the more exclusively white male their workforces. Going together with this at operative level are informal recruitment procedures, especially simply ‘trying recruits out’ rather than conducting formal interviews, as was also found for Scottish construction (Lockyer and Schlarios 2007). Only a few firms interviewed in detail conducted formal interviews with operatives, one even using psychometric testing. The Midlands DLO was exemplary in setting up a trade interviewing panel including one person from an ethnic minority, one female and one white male and in its reassessment of recruitment and selection methods. Procedures were even more systematic with apprentices, this DLO requiring applicants to sit a literacy and numeracy test and another firm an ability test. In terms of selection itself formal and proactive methods appeared to be more favourable to a wider integration of women and ethnic minorities.

Informal procedures are symptomatic of craft (internal) labour markets in operation. So too is the main criterion for recruitment applied, given by most firms interviewed in depth as “experience”. In almost all cases, experience was put before qualifications. Qualifications were, however, more highly rated for the professions and for occupations such as plumbing and electrical work, indicating occupational rather than craft labour markets at work. One firm put “motivation” before experience as a criterion for recruitment and one “pride in work” and “grasp of the trade”. Only one paid some regard to references. The most significant selection guide was applied by a London carpentry subcontractor, who checked out applicants’ tool kits, thereby clearly denoting the continued craft and artisan nature of this activity. These kits were expected to be valued at as much as £3,500, including some power tools, and to be well looked after; if not the application was turned down. A criterion for recruitment for one DLO was the ability to work in teams and for another to have served an apprenticeship. Skills sought by firms varied, but increasingly in addition to technical ability consideration is given to social skills, such as the ability to work in teams as well as task flexibility. For trainees, the ability to attend to and follow instructions is also highly valued.

In opting predominantly for informal and word of mouth rather than formal methods of recruitment and for experience rather than qualifications as the main criteria for taking operatives on, firms perpetuate the current situation and at the same time favour the recruitment of 'likes'. Informal procedures such as recruiting those turning up on site and trying recruits out also tend to favour white males, as does the use of agencies. They also demonstrate by and large the continued operation of a craft labour market, though some, such as the DLOs, in their greater formality and in the value they accord training and qualifications, also refer to the training approach embedded in an occupational labour market – however rudimentary.

Poaching and internal labour markets

In our large-scale survey, firms were asked how many staff in the last twelve months they had trained or promoted internally, recruited from other construction firms or recruited from non-construction firms. This is an important indicator of whether they see themselves operating in craft or occupational labour markets. The key problem for employers with respect to the former is 'poaching', that is when firms do not contribute towards training in the sector and satisfy their labour requirements through offering higher pay and benefits - thereby 'poaching' staff from other firms. That this is rife is evident from the above average rise in pay for construction trades (ONS 2004). 'Poaching' is an especially British problem, being foreign to countries such as the Netherlands, Germany and Denmark where occupational labour markets prevail, training provision is three to four times higher and wage rates are anyway regulated through collective agreements (Clarke and Wall, 1998).

Knowing the extent to which firms train and promote their own employees or rely on being able to recruit from other firms by offering higher pay enables us to examine the extent of mobility within sectors and the inflow of labour into construction. A high proportion of firms reported recruiting from other construction firms, 51%, above all the Social Housing firms, at 68%. The CITB employers' skill needs survey also concluded that: "Recruitment from other firms is most common" (CITB, 2002). Our survey showed, however, significant differences between occupations (Table 4). Managers are most likely to be internally promoted, as reported by 60% of firms, indicating the operation of an internal labour market for office staff. This figure is

considerably higher than the CITB's (45%), though results for the Social Housing firms (42%) are far closer. The proportion of firms internally recruiting professionals and associated professionals is much lower, 46% (CITB 43%), especially for the Social Housing firms, at 29%, indicating the operation of occupational labour markets in terms of professional skills.

TABLE 4 HERE

The results are different for skilled operatives: far fewer firms promote these from within, 29% (compared with the CITB figure of 46%), though considerably more of the Social Housing firms train and promote themselves (39%). Poaching of skilled operatives is also a serious problem, with 58% of firms recruiting these from other firms compared with the CITB figure of 49%. Poaching is especially a problem in relation to site management staff, with 58% of firms (69% public sector) recruiting from other firms and only 38% (30% social housing sector) training and promoting internally.

13% of firms reported recruiting skilled operatives from non-construction sectors, almost three times the extent of cross-sectoral mobility than that reported by CITB (5%) and matching the findings of investigations in other countries. Research into the west German construction industry, for instance, shows that mobility generally follows the business cycles, with fewer employees leaving the sector in times of recession. Between 1980 and 1995 there was an inflow of labour into construction in Germany of between 9% and 14%, similar to that in the engineering sector (5% to 12%) (Erlinghausen and Zuehlke-Robinet 2001).

Promotion

Another means of developing an internal labour market is for firms to grow their own workforce through promotion. From firms interviewed in depth there was evidence of firms attempting to promote internally, whether vertically from, for instance, tradesperson to assistant foreperson to site manager to contracts/project manager, or sideways, as in the DLOs, for instance to the design department. One firm even offered its call centre staff, who had become well-versed in technical matters, the opportunity to become surveyors. Promotion of this kind does not necessarily depend

on firm size and structure, though was found to be less likely with small firms. One small firm did hold annual appraisals and encouraged the labourers to move up; another, in contrast, though it also promoted labourers to the trades, was categorical that there are “no opportunities and if they ask for more money they are down the road”; whilst another considered the structure, with only three directors, one surveyor and the rest operatives, did not allow for promotion. One carpentry subcontractor, whilst promoting trainees and labourers to the trades, otherwise claimed it did not really promote and that even directors were at the same time working carpenters. Few firms carried out formal appraisals of the skills they were short of.

The career route possible for tradespeople in construction is anyway restricted. In the past a carpenter might progress to tradesforeperson and then even to site manager through evening or weekend courses to obtain a Higher National Certificate (HNC) or Diploma (HND). Having qualified in this way, it was then possible to take a Chartered Institute of Building professional examination to facilitate promotion to project manager and then further to contracts manager. With the advent of National Vocational Qualifications (NVQs), however, with their paucity of underpinning knowledge, it has become increasingly difficult to progress in this way in spite of an evident need and even demand (Steedman 1992). In the Netherlands, for instance, a survey of 6,000 construction workers concerning career development found that 18% or 1,680 wanted to make a career move and take up a new function in construction (Huisman and Westhuis, 2002).

Some of the promotions reported by firms were of women and ethnic minorities and a number of firms had women and ethnic minorities at all levels. One female project manager, for instance, had been promoted from foreperson and was likely to become a contracts manager, running big jobs. In one DLO female apprentices had gone on to be tradeswomen and then leading hands, supervisors and managers, but women and ethnic minorities were not more frequently promoted than white men, rather the reverse. The Royal Holloway survey found that job progression is rare for those from ethnic minorities, that they are often marked down in appraisals compared with white colleagues and that labourers in particular are more likely to go at the end of the job (Royal Holloway 2002, 35). The survey also found that socialising with colleagues is important to career progression and those from ethnic minorities often did not participate in outside work activities.

Our survey therefore demonstrates a combination of labour markets at work, both internal and external. However, firms mainly recruit from other firms when replacing employees, filling vacancies or expanding capacity, irrespective of occupation apart from managers. Training and internal promotion are little used as recruitment strategies, indicating the weakness of internal firm markets in the sector. Problems for the sector are thus exacerbated through the 'poaching' of skilled and experienced personnel, in particular skilled operatives and supervisors.

One reason why skill shortages are not simply resolved by increasing recruitment into training as in an occupational labour market is that training policy at national level is driven by industry demand. ConstructionSkills (formerly CITB), for instance, is a reactive organisation relying on employers' willingness to take on trainees. Though it may focus on employers who are committed to this and set targets, including for the recruitment of women and those from ethnic minorities, no compulsion is placed on firms. ConstructionSkills does try to influence the situation, for instance through its positive image campaign, including of female and ethnic minorities tradespersons, for which local area offices do the marketing. The employers' organisation, the Construction Confederation, too, facilitates group meetings with member companies and guidance on recruitment, retention, equal opportunities and training and development, but does not take any direct responsibility for trainee recruitment. Actual recruitment is however entirely down to individual firms, as in an internal labour market.

Subcontracting

The situation is complicated through the use of subcontracting, with subcontractors themselves either employing directly or using self-employed operatives. The questionnaire included a section on subcontractors, addressed to main contractors and enquiring what proportion of their work was subcontracted. The results show great variations: only 16% of all firms carry out over 50% of their workload themselves. The largest proportion of firms (53%), predominantly the medium and larger firms (over £5m turnover), subcontract more than 75%, though of the Social Housing firms only 39% are in this category, indicating again their higher levels of direct employment. This signifies the disparity between firms active in the private and social housing sectors:

housebuilders in the private sector operate with a higher proportion of subcontract labour and thus rely much more on the external labour market.

Difficulties with subcontractors can give rise to major problems through lowering of quality standards and restricting the capacity of the housebuilding sector. 71% of all our firms reported that they experience difficulties with subcontractors regarding quality standards and availability (Table 5). Bricklayers top the list (53% of respondents), yet the numbers for the other trades are not far behind: for the finishing trades (47%), carpentry and joinery (41%) and services (35%). Firms in the social housing sector also experience more quality problems with carpenters and joiners and services than firms in the private sector. Skill shortages with respect to subcontracting are also acute. Firms reported that there are too few bricklaying subcontracting firms (51%), carpentry and joinery (46%), and services and finishing (37%). Fewer quality problems and skill shortages are reported for groundworks and new construction methods. The indication is that the situation has deteriorated since 2002 when a Federation of Master Builders' survey found that 41% of building firms reported difficulty in hiring subcontractors (FMB, 2003).

TABLE 5 HERE

One would expect that in response to skill shortages contractors would move from the use of labour-only subcontracting and self-employment and begin employing and training staff directly in order to regain control of the construction process, thereby moving from craft to firm internal labour markets (in the absence of a regulated occupational labour market such as exists for professionals). Contractors were asked whether they have changed from subcontracting to directly employing more skilled operatives in the last twelve months: only 10% confirmed that they had pursued this strategy.

Retention policies

Continuing training by firms is a good indicator of how far they are operating with an internal labour market. In our large-scale survey firms were asked how they identified their training development needs. Almost all used a combination of various methods, with around half

establishing these as a result of appraisals (55%), employee requests (51%) and in response to business issues (48%). The majority of firms ascertained training needs in informal meetings with management (64%) and only a third carried out a formal training needs analysis (35%). A higher proportion of the Social Housing firms used formal training needs analysis (42%) and more responded to employee requests (58%), reflecting their higher levels of direct employment.

Of our good practice firms, a number used well-developed procedures for identifying training needs and career development, in particular Personal Development Reviews linking training needs to business objectives. One firm linked training needs to individual objectives derived from a set of key business performance indicators, such as customer satisfaction, quality of product, competition and safety. In this case the firm had a good retention record, with a 5% labour turnover, low absenteeism and a low accident rate. New training needs were also identified, including in equal opportunities, customer care and communication (e.g. for work in occupied premises).

Firms therefore take training issues seriously. However, the fact that such a high proportion relies on informal methods to establish their training needs indicates a reactive and employee-lead training policy. These informal ways of the construction sector do not conform to our definition of good practice, prescribing an awareness of the difficulties in the sector and conscious implementation.

Over two-thirds of firms (69%) included all staff in their training plan and 13% even included subcontractors. Over the last three years 64% had carried out training leading to qualifications, with 41% reporting training activities leading to lower-level National Vocational Qualifications (NVQ 1 and 2), 46% to intermediate (NVQ 3), and 31% to higher. 33% of firms were supporting staff pursuing the examinations and membership of professional institutions. These training activities were backed up by considerable training investment. A quarter spent less than £100 per member of staff per annum on training, but almost half spent between £100 and £250 and a quarter over £250 – with a mean of £197 per firm. This is a relatively high overall spending on training, in particular for a sector not known for its good training record.

There has been a change in retention policies in the sector, with many firms adopting human resource policies in response to skill problems. Two-thirds were found to have a performance management system in place; for half of these this was linked to identifying training needs and for a third to pay. In one good practice case a performance management system has been introduced whereby an employee's capabilities (e.g. skills, knowledge) are identified jointly with the employee and linked to the KPIs benchmarking performance and driven by customer satisfaction, thereby linking performance measurement to employee development. Almost all firms monitor employee satisfaction, two-thirds informally and about half through appraisals. A large proportion undertakes exit interviews (67%), most informally (70%), with the majority taking less than 30 minutes (55%) or less than 10 minutes (26%). Both the HR methods of exit interviews and monitoring employee satisfaction are therefore widely used, but their informal character suggests that they are hardly effective as a means of gaining staff feedback and informing firms' HR policies.

Firms were asked which retention initiatives they use. Training and development (71%) and increased pay (65%) were most often quoted as a means of improving staff retention. All other initiatives are much less adopted; a third of firms use other methods, such as opportunities for promotion (39%) and improved benefits (34%); and a quarter more flexible hours (25%) and job evaluation (25%). Equal opportunities training (20%), opportunities for sideways job move (16%) and family-friendly benefits beyond the legal minimum (10%) are harder to find. Those firms active in the social housing sector were more likely to deploy a range of retention initiatives, above all training and development and increased pay. From our deeper investigation too it was evident that the formal application of HR practices does have a positive impact on recruitment and retention. Internal promotion and generous and relevant benefits were considered to be a factor in retention and in higher levels of employee satisfaction. Combined with formal monitoring of employee satisfaction through measures such as labour turnover, companies were able to plan and prepare HR strategies.

Firms make little use of the tools devised by Rethinking Construction. The take-up of Respect for People toolkits, at 21% of all firms, is low, especially amongst those predominantly operating in the private sector, only one of which used the Respect for People KPIs and four the toolkits. In

contrast, 40% of firms active in the social housing sector used the Respect for People KPIs and 38% the toolkits. The toolkits most used were Health and Safety (by 76% of firms), Working Environment (67%) and the Training Plan (57%); less used were those covering Workforce satisfaction (33%), Work in occupied premises (23%) and Equality and Diversity in the Workplace (23%).

Our findings for retention policies therefore again confirm that firms make relatively little attempt to build up internal firm labour markets except for staff but where they do, this has a positive impact on retention. Training and development may be taken seriously but too often establishing training needs, appraisals and exit interviews are carried out on an informal basis. More formal methods, including the use of tool kits and other established HR staff retention measures, are deployed by only a minority of firms.

Conclusions

Our survey confirms that the housebuilding sector experiences a more acute skills supply problem than construction in general, particularly affecting firms involved in social housing and regeneration, which rely on higher levels of direct employment and lower levels of subcontracting. Employers reported the greatest recruitment difficulties and the highest number of hard-to-fill vacancies for intermediate skill occupations, such as site managers and for skilled operatives, such as carpenters and joiners, bricklayers and plasterers. Difficulties and vacancies are less acute but still reported for managers and senior officials, professionals and associated professionals and technical staff.

The surveys demonstrate that for all occupations apart from managers firms mainly recruit from other firms when replacing staff, filling vacancies or expanding capacity, indicating that they depend on the external labour market. The training and internal promotion required to build up an internal firm labour market are little used as recruitment strategies. Problems are thus exacerbated by the 'poaching' of skilled and experienced staff so typical of craft labour markets, in particular skilled operatives and supervisors. Firms' recruitment too depends on informal methods and networks of contacts, with few interviewing formally. This can be extremely exclusive, in

particular of women and ethnic minorities. It means too that the division between craft and secondary labour markets can become blurred, resulting in firms depending on inappropriate and insufficient skills.

In response to skill problems, however, firms take training issues seriously - especially for staff - though in most cases without sufficient effect for an internal labour market to come into play. The training and development of staff is the top retention initiative, closely followed by increased pay, but the high proportion of firms relying on informal methods to establish their training needs indicates that employers are mainly reactive instead of formulating training policies. In response to skill problems a number of firms have adopted human resource (HR) policies, such as performance management systems, linked to identifying training needs and to pay. Almost all employers monitor employees' satisfaction and a large proportion undertake exit interviews, though most do this informally. HR methods are widely used, but their informal character suggests that they are hardly effective as a means of gaining staff feedback and in informing firms' HR policies. This informality in application of HR methods does not accord with our definition of good practice, which prescribes that an awareness of the difficulties in the sector and conscious implementation are required and necessitates a more proactive role.

For the first time data could be collected and analysed for firms involved in social housing and regeneration, allowing particular problems in this subsector to be identified, above all even greater skill shortages and recruitment difficulties. The results point to significant differences between firms operating in the private and social housing sectors, and indicate both the influence on firms' employment policy of a public sector client and a potential role for contract compliance. Compared with those in the private sector, firms in the social housing sector have a higher level of direct employment, lower levels of subcontracting and a wider range of HR policies in place. They also train more and make much more use of Respect for People KPIs and toolkits and partnering arrangements. At the same time they suffer far more from skill shortages.

In terms of labour markets, therefore, what we observe is particular strategies for different groups. For staff in the firm there are clear attempts to build up internal labour markets through training, promotion and the increasing use of formal HR practices. For professionals,

occupational labour markets come into play, as evident from their high mobility and the reliance on recruiting (or poaching) them from other firms. For operatives, however, craft labour markets, based on mobility between jobs and poaching predominate, though critical skill shortages, the extensive use of subcontracting and self-employment, and general lack of training opportunity mean that these merge into secondary labour markets to compound problems of quality. Where comprehensive apprentice training programmes and good, stable employment conditions are offered, as in the DLOs, vacancy applications are oversubscribed and recruitment difficulties appear to be less. The implication is that without an industry-wide training scheme to shift the nature of recruitment and without obligatory skills certification to back this up, there is little means to overcome skill shortages and to establish occupational labour markets. National training policy rests on individual employer demand but firms themselves take little responsibility to resolve skill shortages though, as we have indicated, efforts are made to improve retention.

References

Alpin C and Shackleton J.R. (1998) "Labour market trends and information needs: their impact on personnel policies" in "European Journal of Vocational Training", No 12, August, CEDEFOP.

Beck, V., Clarke, L. and Michielsen, E. (2003) "Overcoming Marginalisation: British National Report", Report presented to the European Commission, Education and Labour Market Research Group, Westminster Business School, University of Westminster.

Byrne, J., Clarke, L. and van der Meer, M. (2005) "Gender and ethnic minority exclusion from European construction: an international comparison", Construction Management and Economics forthcoming.

CITB (2002) "Employers' Skill Needs Survey", Bircham Newton.

Clarke, L. and Wall, C. (2000) "Craft versus industry: the division of labour in European housing construction", Construction Management and Economics Vol 18, pp. 689-98.

Clarke, L. and Wall, C. (1998) "UK construction skills in the context of European developments", *Construction Management and Economics* Vol 16, pp. 553-567.

DTI (Department of Trade and Industry) (2003) „Construction Statistics Annual“, London.

DTI (Department of Trade and Industry) (1999) „Rethinking Construction“ (The Egan Report), London.

Erlinghausen, M. and Zuehlke-Robinet, K. (2001) "Branchenwechsel im Bauhauptgewerbe. Eine Analyse der AIB-Beschäftigtenstichprobe für die Jahre 1980 bis 1995", *Mitteilungen aus der Arbeits- und Berufsforschung* 2/2001, pp. 165-181.

FMB (Federation of Master Builders) (2003) "State of Trade Survey 2002", London.

Hillage, J., Regan, J., Dickson, J. and McLoughlin, K. (2002) "Employers Skill Survey", DfES, research report RR372.

House Builders' Federation (2001) "Employment survey", London.

Housing Forum (2004) "Housing skills: approaches to the current challenges", London: Constructing Excellence.

Huisman, T. and Westerhuis, A. (2002) "Staying at work in the building industry, research into career development in the building industry", research report, CINOP, Centre for the Innovation of Education and Training, the Netherlands.

Kalleberg, A., Knoke, D., Marsden, P. and Speeth, J. (1996) "Organisations in America: Analysing their structures and Human Resources Practices", Sage, California.

Kerr, C. (1954) "The balkanisation of labour markets" in Bakke, (Ed.), *Labour Mobility and Economic Opportunity*, MIT Press, Cambridge Mass.

Lockyer and Schlarios (2007)

Marsden, D. (1999) "Theory of Employment Systems: microfoundations of societal diversity", Oxford University Press, Oxford.

Office of National Statistics (ONS) (2004) "Skill shortages in skilled construction and metal occupations", National Statistics feature by Yolanda Ruiz, Labour Market Division.

Piore, M. and Sabel, C. (1984) "The Second Industrial Divide", Basic Books, New York.

Royal Holloway (2002) "Retention and Career Progression of Black and Asian People in the Construction Industry" (EMI Research Report No. 15 prepared for the CITB), University of London.

Steedman, H. (1992) "Mathematics in vocational youth training for the building trades in Britain, France and Germany", NIESR discussion paper No. 9, London.

Table 1 Sector of activity of firms

Business activities of firms		% Total firms¹ (% Social Housing firms)
Private sector	New housing	86 (73)
	R+M	31 (33)
	Responsive repairs	11 (13)
	Other	13 (24)
Public sector	New housing	49 (69)
	R+M	34 (67)
	Responsive repairs	11 (20)
	Other	16 (33)

1. Firms have activities in more than one sector, so that % figures exceed 100.

Table 2 Difficult-to-recruit occupations reported by firms (in brackets Social Housing sample)

Occupations	% of firms	CITB 2002	
		% for housing	% for all construction
Managers and senior officials	32 (37)	29	14
Professionals	25 (34)	32	15
Assoc. professional and technical	27 (21)	18	10
Admin. and Secretarial	10 (11)	18	6
Supervisors	49 (53)	25	11
Carpenters and joiners	33 (42)	50	34
Bricklayers	39 (45)	57	27
Painters	6 (8)	21	11
Plasterers	25 (39)	14	15
Plant operatives	10 (8)	18	7
General operatives/labourers	13 (11)	18	12
Plumbers	18 (24)	25	10
Trainees and apprentices	14 (16)	-	-

Table 3 Firms reporting hard-to-fill and filled vacancies for selected occupations

Occupations	% of firms filling 100% of hard-to-fill vacancies	% of firms filling less than 50%	% of hard-to-fill vacancies filled
Managers and senior officials	40	40	54
Professionals	44	25	60
Assoc. professional and technical	64	0	74
Supervisors	34	31	49
Carpenters and joiners	33	40	48
Bricklayers	29	41	49

Table 4 Methods of recruitment for different occupations (in brackets predominantly public sector)

	% of firms relying on					
	Training and internal promotion		Recruitment from other construction firms		Recruitment from outside construction	
Type of occupation	%	% CITB	%	% CITB	%	% CITB
Managers	60 (42)	45	35 (55)	50	6	5 (3)
Professional and assoc. professional	46 (29)	43	51 (68)	50	3 (3)	7
Supervisors	39 (30)	-	58 (69)	-	3 (1)	-
Skilled operatives	29 (39)	46	58 (51)	49	13 (10)	5

Table 5 Type of difficulties with subcontractors reported by firms

Type of difficulty with subcontractor	Stage of work	% Total firms
Not skilled enough for	Groundworks	24
	Brickwork	53
	Carpentry and joinery	41
	Services	35
	Finishing trades	47
	New construction methods	19
Too few in the area	Groundworks	26
	Brickwork	51
	Carpentry and joinery	46
	Services	37
	Finishing trades	37
	New construction methods	19