

Postcode selection? Employers' use of area- and address-based information shortcuts in recruitment decisions

by Dr Alex Nunn, Dr Tim Bickerstaffe,
Terence Hogarth, Derek Bosworth,
Anne E. Green and David Owen

Department for Work and Pensions

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A report of research carried out by the Policy Research Institute at Leeds Metropolitan University and the Institute for Employment Research at Warwick University on behalf of the Department for Work and Pensions

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The Authors

Alex Nunn is Head of the School of Applied Global Ethics at Leeds Metropolitan University. His academic research focuses on the role of crises in capitalist development and he has undertaken many applied consultancy and research projects for the Department for Work and Pensions (DWP) and other government departments.

Tim Bickerstaffe is Senior Research Fellow at the Policy Research Institute, Leeds Metropolitan University. Tim's work focuses on issues of low pay and inequality in labour and credit markets. He also works on issues of social research methods.

Terence Hogarth is Principal Research Fellow at the Institute Employment Research (IER) at Warwick University. He is a noted international expert on labour market policy and skills. His research over the past 20 years has concentrated upon employer behaviour in the labour market, and he currently leads a research programme on this subject at IER.

Derek Bosworth is Emeritus Professor at the University of Manchester and Professorial Fellow at the University of Warwick. He holds a number of associate titles, including Senior Research Associate, St Peter's College, Oxford and Associate Fellow of the National Institute for Labour Studies, Adelaide. Until recently he was Honorary Professor at Wuhan University of Technology, People's Republic of China. He has worked extensively on a wide range of labour market issues and is a member of the Sector Skills Development Agency Expert Panel.

Anne Green is Principal Research Fellow at IER, University of Warwick. A geographer by background, she has over 20 years' experience of researching employment, non-employment and regional and local labour market issues. Her research has been funded by the Joseph Rowntree Foundation, the ESRC, the Leverhulme Trust and government departments and agencies, including the DWP, the Department for Education and Skills, Learning and Skills Councils and the Department for Employment and Learning of Northern Ireland, as well as Regional Development Agencies, local government and the Organisation for Economic Co-operation and Development. With colleagues at Warwick she has contributed to evaluations and consultancy on welfare-to-work programmes and she is working on the evaluation of City Strategy.

Summary

Introduction

Between the mid-1990s and the onset of the current economic crisis in 2007/08, the UK labour market had been characterised by generally high levels of employment. Despite this it was widely noted that some notable problems remained even during this period. In particular, there was a paradox that strong labour demand appeared to coexist with high levels of 'worklessness', especially concentrated in deprived areas and neighbourhoods.

The causes of worklessness have been widely researched. One possible cause of spatially concentrated unemployment and worklessness highlighted by the literature is related to the practice of address-based discrimination on the part of employers; what might be termed 'postcode selection'. While this is often asserted it is very much less frequently substantiated. As such the Department for Work and Pensions (DWP) appointed the Policy Research Institute at Leeds Metropolitan University and the Institute for Employment Research (IER) at Warwick University to investigate the gap in the evidence base with a view to addressing two interlinked hypotheses:

- that postcode discrimination exists and is part of the explanation for unemployment and worklessness in deprived areas; and
- that this might be tackled through the use of employer information networks to combat inaccurate stereotypical perceptions.

This report presents the findings from this research.

Methods

The project involved three components:

- **Literature review** – a comprehensive review of the theoretical and empirical literature on postcode discrimination and employer recruitment decisions was undertaken and is summarised briefly in Chapter 3.

- **Qualitative fieldwork** – semi-structured interviews were undertaken in six local authority areas. This involved around 20 interviews with employers, five interviews with employment agencies and a further five interviews with representatives of Jobcentre Plus. The emphasis here was on identifying knowledge of potentially stigmatised areas as well as evidence of use of shortcuts in decision making, including address/postcode-based considerations.
- **Quantitative analysis** – detailed econometric analysis of the Labour Force Survey and National Benefits Database data was undertaken to identify personal and neighbourhood indices of deprivation and the relationships between these and employment, unemployment and inactivity.

Literature review

A literature review was conducted to inform the qualitative fieldwork and quantitative analysis; this report contains a summary of that review.

Economic theory provides a number of explanations for why markets do not always operate perfectly. One potential set of explanations revolves around the availability and quality of information in the market. Asymmetric and/or poor quality information may sometimes lead market actors to make 'adverse selections'. This may hinder the attempts of job seekers from deprived areas to find work if employers use their knowledge of the reputation of residents in such areas as possessing undesirable characteristics to screen out their applications. Here, information is 'asymmetric' and 'imperfect' as the individual knows about their own 'qualities' (e.g. skills and behaviour), but the employer does not and often has difficulty in judging the relative qualities of different candidates for vacancies. Thus, the market may fail in relation to bringing (employable, but) unemployed individuals from deprived areas together with employers wanting to take on new recruits.

One potential category of explanations for worklessness in conditions of high demand for employment is associated with 'area effects' or the notion that a location (neighbourhood or estate) may confer additional disadvantage on its residents on top of those they face as a result of their own characteristics (skills, attributes, etc). There has been a lively debate over whether 'area effects' exist. However, one frequently cited 'area effect' is postcode or address-based discrimination in employer recruitment strategies. Despite this, there has been little or no research that actually proves the existence of such behaviour.

The second element of the research hypothesis concerned the scope to use employer networks to combat the use of information shortcuts by providing better information to employers acting in the labour market. The literature review suggested that information networks have been used in a wide variety of ways to try to change employer behaviour, especially with regard to age, ethnicity and gender equality in recruitment processes. Here the defining success factors appeared to be the resources devoted to continual employer engagement and

support and ongoing mentoring and support to individuals themselves once they had entered work.

Summary of qualitative findings

The qualitative fieldwork evidence suggested that in certain conditions employers do use information shortcuts to screen applicants. In labour market conditions where employers receive large numbers of applicants they may use these methods to make the task of short listing and selection more manageable. Screening of this sort is less likely to occur where recruitment and selection is in some way professionalised, for example by the involvement of HR professionals in some or all of the process. Respondents also suggested that 'legitimate' screening is more likely to occur where occupational licences or other regulatory requirements are in place which means that employers may simply reject candidates who do not already have the required licenses or qualifications. An additional consideration for postcode/address-based selection/screening to occur revolved around the individual managing recruitment having sufficient local knowledge to be able to recognise particular residential areas and understand their relative reputations. In these specific conditions, the fieldwork found that there was some evidence of a marginal degree of willingness among employers to screen on the basis of address, or at least a recognition of the reputational problems of certain areas, even if they then suggested that they would not use this knowledge in making recruitment decisions.

Summary of quantitative findings

The quantitative analysis suggests that there is evidence to support the overall 'area effects' thesis that individuals living in deprived areas may face disadvantages in the labour market additional to their own personal characteristics which result from the nature of the neighbourhood in which they live. Such factors might include 'postcode selection' or address-based discrimination in employers' recruitment decisions. However, this is complex and the complexity may offer some support to the research hypothesis. The quantitative findings suggest that those with relatively less disadvantageous personal characteristics do face additional disadvantage resulting from the comparative deprivation of the area in which they live. However, counterintuitively, those with relatively more deprived characteristics but who want to work may actually gain some marginal employment/earnings advantage from being in a relatively more deprived area. Though it is only one potential explanation of these slightly contrasting findings it may be that the former group (facing less personal disadvantage) tend to compete in wider geographical labour markets and therefore suffer from their residential characteristics relative to competitors in the labour market living in other (less deprived) areas. The second (more personally deprived) group may surprisingly do marginally better in the more deprived area precisely because they are competing in local labour markets where most of their competitors share similar residential characteristics. Again, these are only potential interpretations of interesting data and other potential interpretations may also fit the same data.

Discussion and interpretation

The evidence presented in this report is useful and provides perhaps the most insight to date into the dynamics of 'postcode selection' or address-based discrimination in employer recruitment decisions as a contributor to worklessness in deprived areas. The qualitative evidence suggests that these factors do play a role but that this is on a relatively modest basis and is secondary to a range of additional contributory factors. However, there may be reasons to think that this interpretation of the qualitative evidence slightly understates the contribution of area or address-based considerations. This is because employers and especially recruitment agencies may have been relatively unwilling to admit to various prejudices and therefore may have overstated their adherence to the merit-based approach. Certainly, the proportion of employers that knew of different deprived areas and were aware of their reputation but asserted that this would not impact on their recruitment decisions was considerably broader than those that indicated that they may either directly or indirectly disadvantage job applicants from deprived areas.

The quantitative analysis is not yet able to offer any more conclusive evidence of the existence or relative contribution of 'postcode selection'/address-based discrimination to the range of other personal and neighbourhood effects that contribute to area-based concentrations of worklessness and negative labour market outcomes. However, the empirical observations offered in the quantitative analysis are consistent with the hypothesis that address-based discrimination is one potential area-effect which acts on top of other personal characteristics in shaping labour market outcomes. However, like the qualitative analysis, the quantitative evidence suggests that if this does exist it is at the margins and in very specific conditions: where individuals have the personal characteristics to compete in labour markets against individuals with similar personal characteristics but who live in less deprived neighbourhoods.

'Area effects' are notoriously difficult to isolate from the wider range of disadvantages that individuals and groups face in the labour market. However, taken together, the qualitative and quantitative evidence suggests that the research hypothesis regarding address-based discrimination among employers in their recruitment decisions can be supported as one potential 'area effect'. This is not a conclusive finding but it does move the debate on postcode selection forward as one possible 'area effect' from a simple assertion to one that has some empirical support, until such time as future research can either confirm it or contradict the findings and interpretation offered here.

The second part of the hypothesis being tested in the research related to the prospect of using employer networks to 'seed' information in support of changing employer behaviour in relation to the employment of people from deprived areas. There is an established evidence base on employers' use of employer networks to share information and tackle common business problems. These networks tend to work where employers build up trust and overcome barriers related to competition and view participation in them as delivering tangible benefits.

However, the evidence collected in the qualitative fieldwork suggests that there is only limited scope to change employer behaviour in this regard. Employers were mistrustful of government-provided information and reported limited evidence of changing behaviour as a product of this sort of information. They also suggested only a limited awareness of prominent recent government-sponsored information campaigns. Together, this suggests that where employer peer networks take up the information campaign, employers may take this information seriously. This applies equally to employment and recruitment agencies, HR departments and external consultants who appeared to be trusted by employers but tend only to provide information and advice related to statutory requirements or business strategy.

1 Introduction

Until the recent economic crisis the UK labour market had performed strongly. Despite this it was widely noted that some notable problems remained even during the period of high employment. In particular, there was a paradox that strong labour demand appeared to coexist with high levels of worklessness, especially concentrated in deprived areas and neighbourhoods.

The causes of worklessness have been widely researched over recent years. One possible cause of spatially concentrated unemployment and worklessness suggested by this literature is related to the practice of address- or postcode-based discrimination on the part of employers. While this is often asserted, there is little direct proof that these practices exist. As such the Department for Work and Pensions (DWP) appointed the Policy Research Institute at Leeds Metropolitan University and the Institute for Employment Research (IER) at Warwick University to investigate the gap in the evidence base with a view to addressing two interlinked hypotheses:

- that postcode discrimination exists and is part of the explanation for unemployment and worklessness in deprived areas; and
- that this might be tackled through the use of employer information networks to combat inaccurate stereotypical perceptions.

The research project thus has the following principal aims and objectives:

- to understand the role and impact of information problems in the UK labour market and at the local level;
- to understand the extent to which employers use information shortcuts in recruitment processes, especially in relation to postcode;
- to understand the reasons why employers use information shortcuts;
- to understand what broad impact this might have on labour market performance and in particular relevant government objectives around worklessness, social inclusion and the employment rate;

- to understand the potential for changing employer behaviour through the provision of information, where this would have clear and desirable social and economic outcomes;
- to understand how such interventions might be designed to achieve maximum effectiveness and efficiency.

The research was undertaken in three main phases:

- **A literature review** considering the theoretical basis for quality uncertainty and employers' use of information shortcuts; the evidence of the use of information shortcuts in the UK; contextual literature on employers' behaviour in the recruitment process and evidence of changing employer behaviour through the use of information networks.
- **Qualitative fieldwork with employers** to identify evidence of employers' use of address-based and other information shortcuts in the recruitment process and the reasons for this.
- **Quantitative research** using data derived from the Labour Force Survey (LFS) and the National Benefits Database (NBD) to explore whether it is possible to model and test for the existence of a 'postcode' effect in explaining unemployment, worklessness and deprivation at the local level.

This report summarises findings from all three phases and includes discussion and interpretation of the findings.

2 Methodology

2.1 Literature review

The fieldwork was preceded by a substantial literature review. This report includes a brief summary of that review. The literature review was undertaken following a comprehensive search using the following sources: IDOX Information Service database, Cambridge Scientific Abstracts (including 'Applied Social Science Indexes and Abstracts' and 'Sociological Abstracts'), International Bibliography of Social Science and Social Science Citation Index. Search strings were developed to reflect the main issues identified for the scope of the literature review, these being: theoretical issues; information problems and the UK labour market; employer behaviour; and changing employer behaviour. These searches helped to identify approximately 2,100 references from which around 140 were designated, for reasons of relevance to the hypotheses, to be obtained in full text. These were then augmented using 'snowballing' techniques, following appropriate references, including using popular search facilities such as Google Scholar.

2.2 Qualitative fieldwork

2.2.1 Area selection

Fieldwork locations were selected using a process designed to ensure that the conditions in which the fieldwork took place had as little bias against the research hypothesis as possible. To achieve this, areas were selected where high levels of vacancies (i.e. unmet labour demand) existed alongside comparatively high levels of unemployment, and the process was biased toward urban and coastal rather than rural areas. The objective of this was to try to rule out other explanations for unemployment and disadvantage, such as low levels of demand for labour or spatial separation from demand (the full details of this are available in Appendix A). Fieldwork locations were selected at the level of local authority. Within each location, small areas, neighbourhoods and/or estates were selected to act as prompts in the fieldwork research with employers, agencies and Jobcentre Plus staff. These were selected through national and local media searches to identify places with potentially negative/stigmatised local reputations.

2.2.2 Employer selection

Employers were selected with the aim of ruling out employers only or predominantly employing highly-skilled occupations that might be difficult to access from a position of unemployment. Employers were sampled from Experian on the basis of their sector and occupational mixes to achieve this objective. Quotas were set for each area to be representative of the sector and size mix of employers in all deprived areas. Sampled employers were then put through a screening process to ensure that: Experian records were correct; they were willing to take part; they had relevant experiences to draw upon (i.e. had recruited/tried to recruit recently); and that they were located close to the potentially stigmatised areas.

2.2.3 Employment agency selection

Long lists of employment and recruitment agencies in each area were compiled using registers maintained by Jobcentre Plus and through membership searches of the Recruitment and Employment Confederation. These were then checked to screen out those agencies recruiting staff only in high skill/professional occupations (defined as having vacancies at or above NVQ level 4 requirements).

2.2.4 Fieldwork methods

The vast majority of employers were interviewed on a face-to-face basis. Interviews were undertaken using a semi-structured topic guide (see Appendix B). This provided sufficient structure to address the research questions but allowed freedom for interviewers to pursue interesting lines of enquiry where these emerged. All interviews were digitally recorded (where permission was given) and fully transcribed.

2.2.5 Data analysis

Transcriptions were analysed using a structured coding framework with the help of qualitative analysis software. Open coding was also possible throughout to allow for both inductive and deductive analysis. Coding developed in this way was reconciled with the initial structure at the end of the coding process.

2.3 Quantitative analysis

2.3.1 Data sources

The quantitative part of the project was planned around two data sources: a specially provided, confidential version of the Labour Force Survey (LFS); and the National Benefits Database (NBD), which comprises a set of related, individual administrative records.

2.3.2 National Benefits Database

The NBD is a highly complex set of inter-related databases, which is organised for administrative purposes. The formatting of the data requires extensive manipulation for most forms of statistical, including econometric, work. The present study produced new programmes that transformed the administrative data into an approximation of a cohort dataset, which enabled each individual in the dataset to be traced over a period of 60 months. The NBD comprises, potentially at least, one of the most important resources for understanding key, unanswered questions in the academic literature that have fundamental implications for policy design (as will be set out in the later chapters).

2.3.3 LFS-based data

The LFS dataset for 2007 was provided by the Economic and Social Research Council (ESRC) Data Archive. All the main individual and family characteristic variables were available on the LFS, but spatial information was matched on from a variety of sources (e.g. NOMIS) to augment the statistical information at the neighbourhood level or as close to the neighbourhood level as possible. Given the variation in data available across the four quarters of the LFS, in the final analysis, based on maximising the relevance of the information available, the fourth quarter LFS data were used in the econometric analysis.

2.3.4 Data analysis

More extensive analysis of the LFS data was possible than for the NBD because of issues surrounding data confidentiality and data access. The work on the LFS included the development of new indices of multiple personal disadvantage, which were designed to parallel the available indices of multiple (neighbourhood) deprivation. Econometric work on the LFS included multiple probit estimation of the economic status of individuals (e.g. the probability that any given individual would be employed, unemployed or inactive), with a view to disentangling, as far as possible, the effects of individual characteristics from those of neighbourhood effects. The rationale for including the National Benefits Database was to explore the 'sorting' effects, by which disadvantaged individuals gravitate to more deprived neighbourhood areas over time – a phenomenon that the cross-sectional LFS data are not equipped to investigate rigorously.

3 Prominent themes in the relevant academic literature

3.1 Introduction

A literature review was conducted to inform the qualitative fieldwork and quantitative analysis; the discussion below summarises that review.

3.2 Theoretical issues

Economic theory provides a number of concepts which might help to contextualise and explain postcode and address-based discrimination, where it exists. Economic theory usually starts from the point of view of the perfect market, in which supply and demand are able to come together in equilibrium through the price mechanism. In the labour market, this assumes that both the supply and demand for labour are related to wages, and that wages can adjust flexibly. It also assumes that there are large numbers of actors on both the supply and the demand side and that there is competition in the market. In addition, information must be available and other markets (e.g. the capital and product markets) must also be functioning adequately.

In practice however, markets, including the labour market, do not operate in this way and often contain multiple imperfections (see, for example: Schömann and Siarov, 2005; Keep, 2006; Bosworth, 2008) some of which result from the simplicity and lack of validity of the assumptions underpinning the neoclassical model. They may also include a range of information problems.

Information is not always transparent and actors in a market often have differential access to it. For example, the seller of a second-hand car may know more about its quality than the buyer. In such a case an unscrupulous seller can pass off their low quality product as if it is of high quality and gain a much higher price than

the product is worth, simply because the buyer has insufficient information on which to judge its true quality and value. This can result in 'adverse selection' where higher quality goods are driven out of the market by substandard products (Akerlof, 1970). As buyers become aware, through individual experiences, of the low quality of products in the market, they can become reluctant to trade, leading to market collapse. Here a second information problem is evident; that of imperfect information (Izquierdo and Izquierdo, 2007). Buyers are much more likely to form a view on the general quality of products in the market on their own previous buying experience where there is no mechanism to share information between buyers on their experiences. So for instance, where a single buyer has a bad experience of buying a particular brand or model of second-hand car, they are much more likely to be adverse to buying again if they have no recourse to an information network that might otherwise tell them that they were simply unlucky the first time round and the average quality of that type of car is really quite high. Equally, if they had access to an information network in the first place which could help them to discern the average quality of cars on the market, the market would be much less vulnerable to bad products driving out good ones.

While these theories are often demonstrated in relation to the market for second-hand cars they can also be applied to labour markets (Albert and Cabrillo, 2000). For instance, employers have more information about their own employees than individuals in the external labour market. If it is assumed that in general employers will hold on to their best workers then it can also be assumed that those on the market may be of inferior quality. Also, because recruitment is costly (Chartered Institute for Personnel and Development (CIPD), 2007) and because it is difficult to find out about the likely productivity of a prospective employee, employers may take recourse to proxy-indicators and be risk averse. This is applicable to job seekers from deprived areas where employers may use their knowledge of the reputation of residents in such areas as possessing undesirable characteristics and, since it is difficult to know whether an individual is representative of these or not, may not recruit them on these grounds alone. Here, information is 'asymmetric' as the individual knows about their own 'qualities' (e.g. skills and behaviour), but the employer does not. Thus, in much the same way as the model of adverse selection outlined above, the market may fail in relation to bringing (employable, but) unemployed individuals from deprived areas together with employers wanting to take on new recruits.

3.3 Information problems and postcode discrimination in the UK labour market

Postcode selection is an example of one of three categories of explanation for the emergence and continuation of spatial concentrations of worklessness. The first category of explanations – the residential sorting thesis – suggests that individual and household characteristics such as age, family structure, work history, skills and qualifications explain the worklessness of individuals and families (Berthoud,

2003:11-20; Sanderson, 2007:37-45)). The argument then runs that individuals and families facing these disadvantages have been brought together through the sorting effect of the housing market, especially in the context of rapid labour market restructuring and housing policies which have accentuated the process (Cheshire et al., 2003: 83-102; Hills, 2007: 86-111; Nunn et al., 2007: 72).

The second category of explanation – the spatial mismatch thesis – suggests that some areas have fared particularly badly from industrial decline and have not benefited from the economic growth in new service sectors which has occurred in other places (Houston, 2005). Here travel and transport to work issues are prominent, as is the relative inability of people to move to areas of employment opportunity or to access information about often lower-skilled employment opportunities that tend to be advertised on a very localised basis.

The third category of explanations – the ‘area effects’ thesis – suggests that a range of factors have worked together to create and reinforce the effects of the first two categories and have generated local cultures of worklessness and discrimination (Ellen and Turner, 1997; Atkinson and Kintrea, 2001; Buck, 2001). Postcode discrimination is one example of the ‘area effects’ thesis (Atkinson and Kintrea, 2001: 2290-1; Houston, 2005:229), though it is notable as one that acts on the demand rather than supply side. Most other ‘area effects’ are assumed to work on the supply side.

Where it exists, postcode or address-based discrimination requires a number of preconditions to be in place: Firstly, it assumes that there are widely held negative perceptions about a particular residential area, neighbourhood or estate. There is considerable evidence that certain areas and estates are stigmatised and that this results from a combination of factors which are both internal and external to the areas themselves. The evidence suggests that these factors act in a mutually reinforcing way which link perceptual issues with material, social, economic and cultural issues which can create negative spirals of decline (Taylor, 1998; Hastings, 2004; Hastings and Dean, 2007). Secondly, it assumes that concentrations of unemployment really do coexist with high levels of labour market demand. Here the evidence is less conclusive. While there may be places where this is the case, available vacancies may often be unsuitable for the skills mix of the majority of job seekers from deprived areas (Green et al., 1998; Green and Owen, 2003; Hogarth and Wilson, 2003). This does not necessarily refute the postcode discrimination hypothesis, but it does suggest that it may only be applicable in specific and limited circumstances and that, even there, it only provides part of the explanation for spatial concentrations of worklessness.

Despite this, postcode discrimination is a regular feature in the literature on worklessness and deprived areas. However, in the majority of cases where this is cited as an explanation for spatial concentrations of worklessness and deprivation, concrete evidence of the causal impact is not provided (Christie and Rolfe, 1992; Power, 1996; Taylor, 1998; Smith, 1999; Jones, 2005; DCLG, 2006; Duffill and Hurrell, 2006). In some cases it is simply asserted and in others it is provided as

one of a basket of possible explanations, with no causal evidence (Kearns and Parkinson, 2001; Palmer et al., 2004; Allen, 2005). Evidence has been sourced from job seekers themselves where postcode discrimination is cited as one part of their own rationalisation of their apparent disadvantage and unemployed status (Atkinson and Kintrea, 2001; Rosenbaum et al., 2002). While such evidence cannot be discounted it is not necessarily conclusive proof that this is the reason why their job search has been unsuccessful.

One study that did detect evidence of address-based screening among employers was conducted in Paisley in the 1970s. This study compared the experiences of a group of residents in a particularly renowned deprived public housing estate in the town with the experiences of the residents of Paisley more generally. Once corrections had been made for a range of personal characteristics, the study found that residents in the renowned deprived area suffered increased durations of unemployment in relation to their counterparts in other parts of the town. The authors concluded that employers' use of address screening was one part of the explanation for this. However, they also noted that what they detected was a feedback effect whereby purposive residential sorting occurred through local authority housing policies which concentrated those with the most severe deprivation within the estate to begin with. The effect of this was to produce widespread reputational factors which impacted on the capacity of all residents on the estate (McGregor, 1977). The implications of the study are that, where it exists, address-based discrimination and screening is a second-order driver of worklessness, reinforcing, compounding and generalising a combination of spatial, personal and area-based influences.

While the available evidence base in the existing literature makes it difficult to assess the validity and scale of postcode discrimination, there is evidence of employers' use of other information shortcuts such as qualifications (Psacharopoulos 1979; Arabsheibani and Rees, 1998), age (Urwin, 2004; Metcalf and Meadows, 2006; Nunn et al., 2006) and employment history (Blanchard and Diamond, 1994; Machin and Manning, 1999; Arulampalam et al., 2000; Arulampalam, 2001; Gregg, 2001) as proxy indicators for desirable workplace characteristics and productivity.

3.4 Employer recruitment behaviour

Government policy towards employer recruitment behaviour (in the form of both incitements and legislation/regulation) has stressed the importance of both firm level competitiveness (including labour market flexibility) and a potentially contradictory emphasis on fairness, social justice and equality. Though these two concerns might sometimes be understood to sit in tension, there are instances where they can be seen to be mutually reinforcing and some considerable effort has gone into generating policy frameworks – such as the EU's current emphasis on 'flexicurity' – that can bring them together (European Commission, 2007; Wilthagon, 2007).

Recruitment processes can be both formal and informal and are often split into a variety of stages from advertising a vacancy through to screening, shortlisting, interview and selection (Hogarth and Wilson, 2001; Hogarth and Wilson, 2003; Swailes, 2007). Employers tend to use different methods depending upon the seniority of the post being recruited for, the degree of risk associated with this and the costs of recruitment. For a less senior post, cost considerations may be more important and employers may be willing to recruit with less information. At more senior levels they may be more willing to invest in a longer and more staged recruitment process in order to collect more robust information in order to judge candidates' likely productivity and performance. The use of informal recruitment processes in either case are useful, not only in terms of cutting costs; they can help provide better quality information and ensure more rapid and secure assimilation into organisational practices, especially where this results in recruits who already have strong ties with the existing workforce (Grieco, 1997; Loury, 2000; Gronovetter, 2004).

Social networks can be strongly advantageous for individuals seeking work, but the benefits of these vary by the type of network involved. The evidence suggests that wider and weaker networks may confer greater advantage than deeper but narrower social ties (Gronovetter, 2004; Ioannides and Loury, 2004). Employers too can benefit from networks which help in the take-up of high performance HR practices and in their embedding in the organisation. Employer networks can also help with organisational learning and with information availability when recruiting (Erickson and Jacoby, 2003).

3.5 Using information networks to change employer behaviour

Efforts to use information networks to change employer behaviour usually adopt one of two different approaches: First, the 'business case' stresses the economic and competitiveness benefits that arise from the equal treatment of staff (Ross, 1992; Rees, 1998; Diversity, 2004; Department for Trade and Industry, 2005). Drawing on human capital theory (Becker, 1957) this approach emphasises criteria associated with the skills and productivity of candidates in making recruitment decisions and shows how issues related to personal identity (race, gender, age and residential address) are irrelevant to these primary factors.

Second, the 'equality case' stresses the importance of equal treatment in the workplace as one aspect of a broader social picture of fostering equality (Taylor and Walker, 1998; Roscigno, 2007; Weller, 2007). The point here is that inequality has multiple and mutually reinforcing sources which combine to create disadvantage for particular groups. Tackling inequality in one domain (such as the workplace) is central to, and requires, tackling inequality in other domains also (such as the family). As such, tackling discrimination in recruitment is just one very necessary part of a broader social agenda.

Information networks have been used in a wide variety of ways to try to change employer behaviour, especially with regard to age, ethnicity and gender. However, these efforts also include employability programmes that have successfully worked with networks of employers to promote the recruitment of job seekers from deprived neighbourhoods. Here the defining success factors appeared to be the resources devoted to continual employer engagement and support and ongoing mentoring and support to individuals themselves once they had entered work.

4 Qualitative evidence of employers' use of information shortcuts

4.1 Employers' recruitment processes

4.1.1 Recruitment processes and approaches

Employers used a variety of recruitment processes ranging from highly formalised and systematic approaches to extremely informal processes. In general, larger employers and public sector organisations tended toward more formal approaches whereas small organisations, especially locally owned organisations, tended to have more informal practices. Construction, manufacturing, hotel, catering and retail sector employers appeared to be most likely to use informal methods. Employers also varied their recruitment practices based on the role being recruited for, with informal methods being more prominent in relation to unskilled or semi-skilled roles. This included different expectations about the geographical scope applied to advertising and search in relation to more and less senior posts. It also included decisions about where and how to advertise positions and the number of stages in the process. Employment agencies also reported that employers were making more use of informal recruitment practices (as opposed to seeking recruits through agency intermediaries) as a result of the current downturn.

In relation to address-based discrimination several common aspects in recruitment processes appeared to be relevant. First, the more informal the recruitment process, the more scope exists for area-based discrimination. In the most informal methods recruitment is based on word-of-mouth recommendations and through informal 'conversations' with managers. These methods involve the least audit, scrutiny or formal linkages between role requirements and judgements about selection, though most employers using these methods did tend to report that their primary interests were getting the right candidate for the role.

More formalised methods placed constraints on the scope for area-based discrimination. For example, more detailed and regimented scoring and selection frameworks linked to competencies or role requirements appeared to drive a more merit-based approach. Several larger employers used multi-stage processes with an institutional separation between the initial application and screening process undertaken by human resource (HR) departments and the actual selection process often undertaken by local managers. In one or two cases recruitment decisions were taken outside the control of local managers by nationally oriented HR departments, where there was unlikely to be detailed knowledge of area, neighbourhood or estate reputations; in other cases these functions were outsourced to recruitment agencies. However, in a wider range of organisations this institutional separation was imperfect, with equalities information removed from application forms prior to them being forwarded to managers, but with the address usually left on. In addition, other indicators of personal details such as name (which often reveals gender or ethnicity) and dates of schooling (which often reveal age) were also left on. To the extent that these practices are intended to limit the scope for discrimination, they appear to be flawed. Use of more sophisticated practices such as psychometric testing was not widespread but where they were used tended to be part of a more competency-focused approach in which discriminatory considerations were more systematically excluded. Where recruitment agencies were involved in initial shortlisting of applicants they frequently reported that they would not provide information to employers other than name, qualifications and relevant work history, thereby overcoming these issues. In the case of agencies, these practices appeared to arise from a concern that employers weren't able to contact applicants directly, thereby meaning that they would not get commission.

Additionally, some recruitment approaches may themselves be exclusionary. For example, approaches which place a heavy emphasis on online applications may work to the disadvantage of certain social groups. Informal, word-of-mouth advertising tends to privilege those in the same social group as existing recruits. While it was not clear that the use of these methods had resulted in area or address-based discrimination among the employers we interviewed, they certainly created the conditions in which this could exist. Online recruitment practices were particularly prominent among employment agencies where the majority of advertising tended to be via shop-fronts and recruitment websites. Recruitment agencies also reported using social networking websites to advertise positions.

4.1.2 Considerations in the recruitment process

The most prominent considerations cited by employers in shaping their recruitment decisions were related to employment history and experience; qualifications and education and a range of other factors, including commitment to the post and willingness to work under specific conditions or hours. For the most part, underpinning all this were considerations related to suitability for the requirements of the role. Where formal processes were adopted this was expressed through scoring criteria matched to the person/role-specification for the post.

Employment experience was considered in several different ways. For example, some employers were simply looking for a track record of working, to indicate general commitment to work and likely attendance, time keeping and application. Considerations might be affected by both the number of previous employers a candidate had or spells of unemployment. Others were more specific about the nature of experience needed to undertake the role and that this was either in the same sector/occupation or in an occupation with functionally similar competency demands, with an understanding of the general and often technical aspects of the position being important. Clearly, a key determinant of this was the seniority of the posts in question, but this was the case for relatively low paid positions also. Prior experience was thought to help limit the amount of resources required to train a new recruit as well as ensuring their ultimate competence to undertake the role. Several employment agency respondents noted that they saw the impact of the recession as meaning that employers were more sensitive to considerations of prior experience precisely because they had less resources available to train new recruits. This context also means they are more able to demand prior experience than in the past. Agencies also reported an additional concern with ensuring that applicants' prior experience was genuine as they felt that part of the agency's credibility with clients depended on their ability to source effective and high quality recruits. However, problems with making experience a formal criterion in recruitment/selection activity were raised by one public sector employer as a result of compliance with age discrimination legislation. Additionally, some respondents suggested that previous direct experience of working in the sector for another firm might be seen as a disadvantage as it may limit the scope to adapt the candidate to the organisation's distinctive procedures and systems.

Similar to employment history, different employers suggested three different reasons for focusing on qualifications and education. In some cases, this involved using qualifications as a proxy indicator for general capacity to work:

'...well someone that can, you know doesn't have to be in the hospitality industry, the qualification, it can be in something completely different but can show that they can apply themselves, that they're hard workers, that they um, that they can be committed when required you know. Um the other side of it, people with hospitality um qualifications we know this is what they want to do so if we're looking for someone long term perhaps they're the right candidate but again are they going to be happy just on a bar position?'

(Manager, hotel, Wales)

In other cases qualifications were used as a more specific indicator of suitability for a particular post and therefore the qualifications looked for by employers were more specific and related to role requirements. This differed again between those employers who were looking for specific qualifications on the basis of their own definition of what is required and therefore might indicate positive performance in the role, and those that were mandated to require specific qualifications by statutory requirements, such as construction safety certificates, food hygiene or social care qualifications. Nevertheless, others were adamant that qualifications

were a very poor indicator of suitability for the post, particularly where soft skills such as communication, dedication or enthusiasm and innovation were deemed to be important:

'...it means absolutely jack to me to be honest. If someone comes in here and shows enthusiasm... the will to get out there, want to work hard for the rewards that we pay...'

(Managing Director, shopfitting company, Wales)

Employers did note the importance of qualifications in indicating likely characteristics of young people coming straight out of full-time education who lacked work experience. However, some suggested that this meant that they simply had to adopt different recruitment practices to allow candidates to demonstrate their ability to do the job (e.g. more in-depth or group-based interviews). By contrast, some employers suggested that older applicants might be better judged on experience (both employment and personal) than qualifications, as proxy indicators for their suitability for the post.

The way in which applicants present themselves in both written applications and at interviews was also felt by employers and employment/recruitment agencies to be important in judging their potential suitability for the role. For example, poorly written applications with poor spelling and grammar or inappropriate dress at interview were felt to work against candidates. Importantly, one employer noted that the general labour market context over recent years meant that they were unable to use strict screening in this regard. For example, they suggested that they had accepted applicants where aspects of presentation were below their desired standard in recent years but would have rejected them had there been larger numbers of potential recruits.

4.1.3 Use and choice of screening criteria

While many respondents indicated that they did use screening criteria, analysis of their responses suggests that they were in the main referring to the considerations used in shortlisting. The general lack of use of screening may reflect labour market conditions over recent years with high levels of employment meaning that vacancies often had few applicants and many employers experienced recruitment difficulties. Indeed, one nightclub manager who had been forced to use genuine screening recently demonstrated this point and how changing labour market conditions might lead to additional screening. He had placed an advert for a receptionist in the autumn of 2008 and received ten applications, none of which were deemed suitable and had subsequently recruited a candidate by informal means. That person subsequently left and the same advertisement was placed in the same outlets in January 2009, and apparently resulted in several hundred applications, resulting in an ad hoc screening process, based around candidates' willingness to get back in touch after receiving more information about the employer and the role in question. Evidence from employment agencies suggested that they had witnessed a huge reduction in the number of employers seeking to fill elementary

positions through them. This was considered to result, firstly, from employers having fewer vacancies to fill; secondly from employers' feeling that they can find plentiful candidates themselves; and thirdly a desire to cut costs. Some agency respondents felt that this may lead to increased informal screening, potentially using arbitrary information shortcuts such as applicants' area of residence.

In the small number of cases where employers suggested that they had used genuine screening approaches to reduce the number of applications that they needed to deal with, employment history and qualifications were the most important considerations. However, several employers suggested that they regarded qualifications in particular to be a poor indicator of suitability for the post. This tended to be where roles required key communication skills such as in sales or recruitment. In these cases, informal screening tended to be prominent through initial telephone or face-to-face 'conversations' where employers made decisions about the applicant's ability and ease in communication. In some organisations these approaches were formalised as part of a multi-stage application process whereas in others these were much more informal.

One financial sector organisation using screening criteria employed complex combinations of screening interviews and psychometric testing prior to full interview. This was justified as enabling managers to recruit from a pool of candidates based on their ability to do the job in question rather than other considerations about their capacity to meet minimum standards or commitment to work. What was interesting about these types of screening processes was that they involved an organisational separation in the process between the initial screening function undertaken by HR professionals and the final recruitment undertaken by line managers, with support from HR. This sort of separation was found in other large-scale organisations also, including a major high street retailer.

Other examples of screening criteria used to reject applications at an initial sift included poorly presented application forms, letters or CVs or gaps in information with no apparent justification:

'...you know obviously little things like grammar, poor spelling within applications, you know would probably be a contra-indicator ... We would also potentially, this is part of safeguarding as well, so it's all interrelated so if the CV or the application form is shall we say disjointed with many gaps, for no apparent reason in career history, then that may be a contra-indicator.'

(Secondary school head teacher, Ealing)

Where both employers and agencies suggested that they might use screening criteria these tended to be linked to the demonstration of competencies required to fulfil the job role or possession of adequate employment expertise and experience. This included the possession of specific occupational or technical qualifications or just general qualification levels or types thought necessary for the role. For example, one employer spoke about the general need for degree level qualifications but also noted that not having a specific type of degree

would likely lead to a candidate being rejected prior to shortlisting. Several other respondents suggested that general employment history was as important as specific employment experiences. For example, candidates with a track record of long periods of unemployment or a history of long periods of absence related to illness or family problems may occasionally be screened out by some employers:

'I think the only one that you would probably [screen for would be] employ[ment] history, I mean if somebody's not worked for ten years or else you tend to worry about that, you know why have you not worked for ten years ...'

(General manager, retailer/wholesaler, Dundee)

4.1.4 Evidence of potentially discriminatory considerations in selection and screening

Most employers denied using any discriminatory criteria in the selection and screening process. However, several employer respondents suggested that considerations in the recruitment process were linked to the scope for candidates to 'fit in', including potentially discriminatory factors, such as age. For example, one employer suggested that they purposefully looked for younger applicants to fit with the company's organisational culture:

*'I would look at age definitely, we are by default, we are quite a young company and we tend to employ younger people because it's quite long hours, you work quite long hours on site when you are on conference and you tend to find that most of the applicants, therefore, are younger in to the track, that sort of cross-section of people... We are a young company and I wouldn't not interview someone because they were 45 but I would, they would hate the job, you know it's hard work. It's for a younger person, obviously different roles, 'horses for courses' but for administrator junior role, it's hard bl*dy work and actually.... Well, past experience tells me a 45 year old is not going to like it.'*

(Director, private sector business services provider, Ealing)

While no additional direct admissions of discrimination were reported in relation to selection considerations, some employers suggested that this may exist. For example, one financial services employer denied any consideration of race in selection practices but did suggest that they were concerned about this issue because of previous negative reactions from customers to staff from ethnic minorities. Others suggested that they had similar problems at times with customer-facing staff with strong regional or national accents.

In several cases, respondents suggested that they used age- or gender-related screening for specific positions where this had a clear (sometimes statutory) rationale. For example, several employers were in sectors where there are minimum age considerations in relation to specific roles; for example, on licensed premises or in relation to financial agreements.

In others cases, however, age appeared to be screened on the basis of the employer's perception of age-related employment characteristics (where younger candidates were thought to have less relevant experience and be less likely to demonstrate commitment to the job). Others worried about the capacity of older workers to perform heavy manual tasks such as lifting and in several examples, managers in public houses were concerned that only younger workers should work on the bar:

'Yeah, you do have to look at the age because obviously we need people on the bar that's 18 and also you wouldn't employ somebody that was ... 60 or something to work behind the bar.'

(Manager, public house, Dundee)

In several cases, employers appeared to use gender-based screening. On one occasion this related to considerations of personal safety while working alone in the building at night and on another it related to same-gender personal care delivery where it was felt necessary to maintain a gender balance in the workforce to reflect the gender profile of the service user population.

4.1.5 Recruitment difficulties

Around a quarter of respondents suggested that they had experienced recruitment difficulties over the last two years. Where this was the case, these problems tended to be specifically related to particular occupational roles rather than all staff. For example, several suggested that they had experienced difficulty in recruiting and retaining chefs and several employers noted niche occupations in the health sector as problematic (clinical coders and theatre technicians).

As such, most respondents felt that the local, regional or national labour market offered them adequate access to staff with the skills that they require. Where this was the case responses were split between those who suggested that recruitment difficulties related to insufficient candidates and those who suggested inadequate quality among candidates for the post.

The geographical extent of the labour market in question related to the seniority of the relevant post. Unsurprisingly, professional, managerial and clinical/academic occupations were seen as related to a national or international labour market, while more elementary occupations (production operatives, basic personal services, retail and hospitality/catering) were often seen as more localised. However, this was not always a simple distinction and sometimes related to localised characteristics. For instance, in one area an employer reported that they had been unable to recruit carers and had been forced to look overseas to fill these positions. Where respondents did identify recruitment problems, location was occasionally part of the problem. This was the case, for example, where employers were located in difficult to reach areas or where they were not on public transport routes or had insufficient parking provision.

However, several employers noted that they had very recently experienced an increase in the number of applicants for posts, as a result (potentially) of the economic downturn, as the example in Section 4.1.3 demonstrates.

4.2 Area-based issues in recruitment decisions and processes

4.2.1 Evidence of awareness of area-based reputations

An important precursor to area-based selection relates to the reputation of local areas among employers. If the address-based selection hypothesis holds then employers would first need to recognise specific areas, neighbourhoods or estates as having a negative reputation that might affect their willingness to recruit job applicants living in them. Employers were asked about their awareness of area-based reputations in two main ways: First, employers were asked to nominate any local areas, neighbourhoods or estates that they perceived to have a negative reputation. Second, employers were then prompted with a number of areas in each case study location which were selected on the basis of local and national media reports.

Most employers were able to cite some form of awareness of area-based negative reputations. This differed, however, between different areas and between different types of respondent, rather than the type of employer represented. Respondents who were themselves from the broad area (case study location) in question or who had lived or worked there for some time were much more aware of local area-reputations than those who had not worked in the area for very long or who controlled recruitment over a wide geographical region. Even those who began by citing very little awareness of the case study location, for the most part, did indicate that they 'had heard of' the prompted list of local areas.

Respondents differed too over the nature of their awareness. Where they had a detailed knowledge of the case study location, some respondents were able to identify detailed areas, neighbourhoods and estates which they perceived to have a negative reputation and in some cases this extended to a detailed knowledge of one or two streets which they perceived differently to the wider surrounding area. In addition, some respondents had such detailed knowledge that they challenged the prompted areas (suggesting that some had a more problematic reputation than others) while additional areas were also suggested.

Other dimensions of these differences in perception included varying degrees of knowledge about the reputation. In some cases this was a high-level acknowledgement of the name of an area as being perceived problematically. In other cases, respondents reported more detailed perceptions, linking a particular area with the personal characteristics of individuals that reside there, such as key elements of employability like communication skills or commitment to work:

Interviewer: *'Yeah. But, I mean is there ... is a person's residence, if they come from, one of the poor areas of Swansea, is that a concern for you ...?'*

Respondent: *'No, it does have implications, of course, in itself it's not necessarily a concern, but unfortunately, frequently, of course, that person's unable to express themselves...and their personality is not there, through no great fault of their own, but I mean, if you're a salesperson, you've got to be able to project yourself...you must be able to speak properly. And we have a peculiar difficulty in [the wider region], somebody would kill me if they hear me saying this, you know, but we have a lot of bad accents, you know.'*

(Managing Director, two-site retail business, Wales)

At the other end of the spectrum this included a very detailed knowledge of the residents of different areas and the reputations associated with particular families and individuals. These perceptions then were drawn from a range of sources, including the media and direct experience of both customers and employees (see Section 4.2.3). For example, in the case of customers, a manager in a veterinary surgery reported a negative perception of particular areas based on the types of pets that people from those areas have and how they are treated.

4.2.2 Employers' perspectives and recruitment practices in relation to applicants from deprived areas

The majority of employers involved in the research were anxious to suggest that their recruitment and employment policies are generally merit-based. However, in one or two instances respondents (in public sector organisations) suggested that they also had social justice concerns and would even go to additional lengths to recruit people from deprived areas.

This is not to suggest that the residential location of applicants for jobs were never considered in the selection process but where these issues were considered to be important, they were often linked to some functional consideration. For example, several employers raised travel to work issues associated with some residential locations. This was related not only to distance to the place of work but also to possession of personal transport or the availability of public transport or was occasionally related to the specific occupational demands of the role in question such as early, unsocial or evening working patterns which make access to the workplace by public transport difficult. Both employers and employment/recruitment agencies suggested that proximity to the job opportunity was a factor:

'I mean I ideally if um if we can get a job for somebody and it's walking distance from their house they tend to be a bit more reliable than if we were sending them driving round the M60 for 45 minutes ...'

(Recruitment adviser, recruitment agency, Manchester)

Several recruitment agency respondents suggested that the travel to work distances that applicants are willing to undertake appears to be rising in the context of the downturn and increasing unemployment and this means that this consideration is increasing in importance as a result.

Additional locational issues raised by employers related to connections with customers and service users. These factors might work in favour or against people living in deprived areas. For example, several employers located in or close to deprived areas suggested that this proximity was an advantage not only because of travel considerations but because it generated greater understanding of customers. Several recruitment agency respondents also mentioned similar positives, for example in relation to driving roles where local knowledge was potentially beneficial, though they also said this was a declining factor as a result of the spread of satellite navigation technology. However, in a very small number of other cases, particularly in relation to public service provision, this was identified as an occasional disadvantage. For example, in one school it was suggested that it might be a disadvantage for staff to reside in the local deprived community because adverse relationships with children and their families at work could result in difficulties at home. This was exemplified by the experience of a teacher who had purposefully bought a house close to the school but had faced difficulties with a particular family who objected to the teacher's treatment of their child. At the same time however, the respondent in question noted that several administrative and support staff (e.g. lunch time supervisors and catering staff) lived locally without a problem. In another example, a respondent in a health centre suggested that social connections between staff and patients could result in preferential treatment, for example in relation to the scheduling of clients. Given the importance of equal treatment of patients, this was felt to be a potential problem of recruiting local staff but the respondent did not suggest that this consideration had actually influenced recruitment decisions.

However, a very small number of employers did suggest that they do focus on the place of residence of job applicants when making recruitment decisions. In some cases, respondents again maintained that they ultimately made decisions on merit-based considerations but that they may subject an applicant from an area that they perceived negatively to additional scrutiny in the recruitment process:

'It's whether or not before the interview I'd have it in my head possibly, perhaps there's things I'd look out for, perhaps I'd make sure they were polite and knew how to ... approach people ... knew how to greet people... Possibly they ... it wouldn't be a disadvantage to them but perhaps they'd be tested slightly more in the interview.'

(Manager, hotel, Wales)

For other respondents, locational issues appeared to condition their expectations regarding recruitment with indirect implications for recruitment practices. For example, some suggested that they would only expect to be able to recruit staff for low level occupational roles from areas identified as deprived, whereas higher level occupations might be recruited from elsewhere. As such, this may limit the advertising of particular positions with negative implications for areas with negative stereotypes.

Other respondents did suggest that they would have direct concerns about

job applicants from particular areas and also suggested that they thought these concerns were widespread within their organisation. In different cases, respondents suggested that they had previously worked in organisations with area-based recruitment policies and practices, linked to concerns about recruiting from areas thought to have mono-ethnic and potentially discriminatory cultures for positions delivering services to customers with a wide range of ethnic and cultural backgrounds. Again, no specific suggestion was made or proof offered that current recruitment decisions were actually made on this basis. The one possible exception to this was a retail store in Southampton where the manager indicated that they had experience of employing people from deprived areas and that they felt those staff to be among the lower performing in their workforce. The same respondent suggested that they regularly hosted school children, on work placements, and that they had had negative experiences with particular schools and so had now informed the relevant intermediary organisation that they no longer wished to take placements from those schools:

'I employ people from [deprived areas] ... yes we have, you know, a lot of our staff from those areas. Unfortunately the majority of them would be um probably of the least capable percentage ... what I would say actually is perhaps to help you with what you've just asked me is we have work experience um children here and we have ... I would say in excess of probably about 70 to 80 over a 12-month period and they come here for a fortnight and they come as a group from certain schools and over the last few years the calibre of the schools within those areas that you've just mentioned to me ... we've now taken the decision to say to the people that bring these people into us ... they've been told by us that we don't want children from certain schools anymore because of the experience we're having with them.'

(Manager, retail outlet, Southampton)

In addition to this, several recruitment agency respondents suggested that they had been asked to screen out applicants from particular locales in a very few cases in the past:

'Yeah, there has been, a couple of occasions where we've, been speaking to, clients in say, Manchester, and the [deprived areas] and [the employer] actually said to us, "We don't want anybody from that estate".'

(Recruitment adviser, recruitment agency, Manchester)

Recruitment agency respondents suggested one final dynamic in relation to the employment prospects for residents of deprived areas. They reported that both they and many of their clients had purposefully targeted eastern European candidates from accession countries in recent years due to a widely held perception that they were more diligent and productive, than the remaining unemployed workforce in the UK. This shaped their recruitment practices with adverts placed in specific languages and in specific places designed to attract these candidates; however it was not possible to determine the scale and scope of this behaviour. Clearly, though, this could constrain the opportunities available to the residents of deprived areas,

with that constraint at least partly based on their place of residence. In addition, one recruitment agency adviser reported that while he would have no problem recruiting candidates from deprived areas for clients, he himself would not reveal in his own applications his place of residence because it had a negative reputation.

4.2.3 Experiences of recruitment from deprived areas

Theories of imperfect information (see Section 3.1) suggest that one mechanism that might disadvantage people from stigmatised areas is related to employers' negative experiences of previously employing people from those areas. The theory suggests that one or two bad experiences might lead employers to judge the average quality of labour from such areas to be commensurate with these experiences and therefore, lead employers to be reluctant to employ people from these areas in the future. This was explored in the qualitative interviews with employers through questions designed to examine employers' current and previous experiences (prompted and unprompted) of employing people from deprived areas.

Responses to these questions were in the main positive. However, a small number of respondents did suggest that they had negative experiences of employing people from what they perceived as stigmatised areas. These included people not arriving at work on time, missing shifts or performing poorly at work. Where this was the case employers were divided over whether it had impacted on their willingness to recruit people from areas with a poor reputation in the future. Some appeared simply to regard this as a risk in recruitment whereas others appeared to suggest that it may impact on their recruitment in the future, if only by suggesting that they needed to give additional scrutiny to applicants from stigmatised areas. Several recruitment agency respondents suggested that where they had been asked not to source applicants from a particular area, this was determined by their clients' previous negative experience.

4.3 Employers and information networks

As detailed in Chapter 3, efforts to use information networks to change employer behaviour have tended to adopt either a 'business case' approach – where economic and competitive benefits are stressed; or the 'equality case' approach – where equal treatment in the workplace is stressed as an important element in encouraging broader social equality. Employers are also considered to potentially benefit from business networks that can introduce firms to, or directly influence them in respect of, the take-up of enlightened HR practices.

4.3.1 Awareness of information campaigns and networks

No discernible pattern or identifiable regularity of responses emerged from the interview data in relation to the extent or level of awareness of government information campaigns. Neither did the size or sector of the firms who responded appear to carry any influence on whether the interviewee indicated they were aware or not of past or current information campaigns.

Some respondents provided a firm negative response to questions relating to awareness and stated that they took no personal or commercial interest in information produced by government, and that they were not aware of any campaign advertisements or literature. Others initially indicated no awareness but were able to confirm some awareness when prompted. Indeed, some of these respondents were able to broadly outline the general policy underpinning the information campaigns highlighted by the researchers once they had been prompted with the campaign name (including 'Age Positive'), or a brief description of its main aspects.

Several interviewees spoke of their organisation's engagement of external HR consultants who, they indicated, kept the firm abreast of relevant issues relating to legislative compliance or government information campaigns through 'study sessions' arranged at the firm's premises, or via dedicated written 'briefings'. Some other respondents, who indicated poor awareness, appealed to their own HR department or colleagues in respect of equality-related policy or knowledge and its relevance to internal recruitment practices. Employment and recruitment agency respondents suggested that they are often used by employers to provide information on employment/recruitment related legislation. However, these respondents themselves showed low awareness of the specifics of information campaigns (they recognised high profile campaigns such as 'Age Positive' or 'Skills: it's in your hands') as opposed to statutory requirements about which they appeared to be more familiar.

There were also a number of respondents who mentioned having been contacted by organisations or companies indicating that they have secured government funding to offer training courses. Those reporting such contact indicated that it related to apprenticeships, work placements, literacy and numeracy, or more generic training provision. Indeed, of all the recent government information campaigns, 'Train to Gain' was the one most commonly cited but it wasn't clear whether this related to the attraction of subsidised training as opposed to the advertising element of it.

As well as those firms directly contacted by consultants, agencies or providers, there were several respondents who mentioned receiving government-sponsored information or promotional material via their membership of an employer network or trade organisation. Only very few respondents indicated having no knowledge of either sector-specific or more general employer networks or organisations. Yet, knowledge of such networks did not necessarily indicate subsequent engagement or membership. Of those reporting no membership, the reasons given tended to be either pragmatic (*'I don't have time'*); uncertain (*'No. Well, not as far as I know'*); or from a lack of interest or necessity (*'I think we've just never really felt the need'*). A few respondents mentioned that whilst their firm did not take advantage of any trade or professional network, they themselves had individual membership to certain professional bodies – such as the Chartered Institute for Personnel and Development (CIPD) or the Institute of Directors (IOD).

Those organisations reporting a regular or long-term awareness and membership of an employer network tended to be engaged with either local business partnerships or dedicated trade or professional associations. Several organisations involved in different areas of social care, for example, cited national membership associations, local provider forums, or other dedicated professional bodies. Others reported membership of a range of relevant sector bodies – for example, the Association of British Professional Conference Organisers, the National Access Scaffolders Confederation, and the National Federation of Housing. Agency respondents were typically organisational members of the Recruitment and Employment Confederation as well as a range of other organisations such as the local Chamber of Commerce or CBI, with some individuals being members of the CIPD. Many also reported that their organisation was a member of official regulatory bodies such as the Gangmasters Licensing Agency (GLA).

4.3.2 Employers' use of information networks

'I do, I trust it. I'm not sure I use a lot of it in terms of recruitment, but I trust it.'

This quote is fairly representative of the kind of responses received from the organisations participating in the research in respect of the usefulness of information obtained through professional networks, or from government sources. A few respondents dismissed any source as potentially reliable, whilst a number of others mentioned a level of trust – but with the caveat that they would seek their own clarifications if they needed to take firm-specific decisions relating to the external information.

Several respondents reported close and regular involvement with employer networks and using information made available through them. For example, employers made use of breakfast seminars, conferences, and other meetings. They also suggested that some employer networks maintained important specialist networks, for example of finance or HR officers. For example:

'I was at an HR Directors summit down in Birmingham two weeks ago and had the opportunity to set up meetings, so I set up a few with HSBC and Morgan Stanley, and we were having a chat about employee engagement, flexible benefits, senior management development, and I followed up on a few of those just to see what they do, and I've shared information with them about our HR business partner model. [I]t's a really good way to really generate ideas and keep up to date with what other people are doing.'

(HR manager, financial services company, Dundee)

Similarly:

'Well, obviously we trust our HR consultants because that is what we are paying them for. Government information – we act on that and we trust that because of the nature of where it has come from, and that is normally a heads-up or a warning that something is about to change. So, we are pretty keen to act on those things.'

(Manager, housing association, Southampton)

However, whatever level of engagement or amount of information received, no respondent directly mentioned or confirmed that such information directly influenced their recruitment practices – at least not beyond information relating to legislative compliance. The following quotes are quite typical of the kind of responses received:

'I know there is a recruitment group to the British Computer Society but to me, I have looked at what they do and it's just another kind of recruitment consultant kind of arm, and I have got enough recruitment consultants, thank you very much.'

(Infrastructure manager, construction company, Ealing)

In the same vein:

Interviewer: *'What sort of information do you trust? Information from government marketing campaigns; information from professional associations; information from sector-wide representative bodies?'*

Respondent: *'I suppose to an extent you would trust all of the information but if I were looking to act on any of it, I would follow it up and check it out myself first.'*

(HR manager, further education college, Dundee)

Recruitment agencies tended to report acting on government-provided information but this tended to be in respect to legislative requirements/changes rather than exhortation or information campaigns.

4.3.3 Engagement with welfare to work services

Respondents were asked about their current or potential future engagement with welfare to work services. A range of the services on offer by Jobcentre Plus were taken in turn and awareness, familiarity or experiences of each service were discussed. A large number of the respondents mentioned placing vacancies with their local Jobcentre Plus, either on a rolling, regular or occasional basis. The ease of placing vacancies with Jobcentre Plus was discussed by some – particularly the service offered by the vacancy website. Yet experiences in relation to general or specific recruitment varied a little. No distinct pattern could be discerned but certain respondents mentioned a very successful response to a posted vacancy, whilst others spoke of their disappointment with the response – or the perceived quality of the applicants. These experiences, either good or bad, tended to colour the responses received.

A small number of respondents reported experience of using Jobcentre Plus services in relation to interviewing or selection, with mixed responses to this. One respondent spoke of a very successful screening and interview exercise conducted in partnership with Jobcentre Plus when they needed to recruit a large number of new employees in a short period of time, and stated that they would have no hesitation undertaking a similar exercise in the future. However, another respondent remembered an unsuccessful large-scale interview process at their

Jobcentre Plus where a lot less than the expected number of candidates were considered suitable, and which has dissuaded them from pursuing that particular service again.

Again, there were a relatively small number of respondents who reported direct experience of offering a jobseeker a work trial. Several of these stated that the process had proved successful, with more than one jobseeker taking advantage of the placement over a period of time. Another firm reported having offered both temporary and permanent positions to jobseekers who had successfully completed their work trial. A larger number of organisations were interested in offering work trials in the future, with one mentioning that they were in the process of negotiating this with their local Jobcentre Plus.

A similar range of responses applied to the question asked about employers' use or knowledge of recruitment fairs, with one interviewee regretting the withdrawal of this service locally. Another mentioned previous involvement with job fairs but noted that this was no longer necessary as they used temporary agency staff to cover during busy periods. Other respondents – particularly those from larger retail employers – mentioned involvement with previous job fairs but stated that nearly all recruitment was now handled internally. No respondents mentioned any direct involvement with a Local Employer Partnership but those who were aware of them did not rule out possible future involvement or membership.

The majority of those who indicated that they were not interested in using Jobcentre Plus services at all stated reasons associated with the specialist nature of their occupation, or not having to draw upon external services to fill vacancies. However, only a few respondents stated an intention never to use Jobcentre Plus services in the future.

Recruitment and employment agency representatives reported that they have occasionally used Jobcentre Plus services, but this tended to be either simply placing vacancies or using office space to conduct interviews, including of Jobcentre Plus customers. Agency respondents were asked to comment about the role of Jobcentre Plus, and some complained that they would place a vacancy with Jobcentre Plus specifying particular requirements but that they would be swamped with a high volume of unsuitable candidates, without the required experience or qualifications (including occupational licences e.g. fork lift truck licences). Some also commented that employers find this off-putting and that at least part of their business comes from this dissatisfaction.

5 Quantitative evidence of neighbourhood effects and the implications for neighbourhood discrimination

5.1 Scope of the quantitative work

There are two dimensions to the quantitative work. The first involves a preliminary exploration of the National Benefits Database (NBD) to examine whether it is possible to use the data to identify the effects of adverse or advantageous employment and income characteristics on the neighbourhood location of individuals.

This part of the work focuses the 'sorting effect', in particular, the extent to which individuals with disadvantageous income characteristics gravitate towards more deprived neighbourhoods. While the present research has taught us a great deal about the interrogation of the NBD it has only scratched the surface in terms of its analysis. The present results suggest that downward sorting effects may be of little significance for at least Jobseeker's Allowance (JSA) recipients, but this is far from proof that, overall, sorting effects do not play a significant role, with potentially important policy implications.

The second avenue of work, based on the exploration of the Labour Force Survey (LFS), has, in many respects, been much more productive, at least in generating interesting results with potentially important policy implications. Nevertheless, the failure to establish the precise importance and implications of sorting effects implies the need for caution when translating these findings into concrete policy conclusions.

In essence, this approach investigates whether it is individual (e.g. personal characteristics) or neighbourhood (e.g. degree of neighbourhood deprivation) effects that drive labour market outcomes, or whether it is some combination of the two. Given that it turns out to be some combination of the two, then this generates two principal further questions for investigation: what are the nature and scale of personal and neighbourhood effects; and, in what ways do an individual's personal characteristics interact with the type of neighbourhood in which they live, to advantage or disadvantage them in the labour market? The answers to these types of questions have implications as to whether policies should be designed more around the individual or the neighbourhood in which they live (or both).

5.2 Sorting effects: tentative evidence from the National Benefits Database

The analysis of the NBD focuses on whether it is possible to discern sorting effects amongst, for example, individuals who were particularly disadvantaged in the labour market. This is operationalised by attempting to identify individuals who spend differing amounts of time on (or out of) benefit. The hypothesis is that: individuals in less deprived areas, who experience more extensive periods on, for example JSA, tend to gravitate to more deprived areas; individuals in more deprived neighbourhoods who experience more sustained periods of employment tend to gravitate to less deprived areas.

A stratified random sample was drawn from JSA recipients during the period 2002-07, where stratification was by vigintile¹ of the Index of Multiple Deprivation (IMD). The resulting 400,000 JSA spells were transformed into information about individuals over time, but the numbers of individuals with multiple spells were quite small and, while there were a small minority of individuals with very long single spells, the majority had short spells. The result was a relatively small number of individuals for which changes in postcode could be observed.

The resulting data suggest that the greatest degree of locational change occurs amongst the more deprived postcodes. This high level of activity falls away rapidly as the IMD of the local area rises (i.e. as the neighbourhood becomes less deprived). The extent to which individuals change postcodes carries on falling, although only slowly, as the IMD group improves through to vigintile 19, before rising again in the final and least deprived area.

The results suggest that the activity in the two extremes of the IMD may be different to the remainder of the distribution (the finding is more tentative for the lowest than for the highest levels of deprivation). While too much should not be read into this finding, later results confirm that the extremes of the IMD appear

¹ Categorisation of a sample into 20 equal hierarchically organised groups, similar to a decile where a sample is split into ten such groups.

to be significantly different from the remainder of the distribution. The increasing concentration of postcode changes amongst the more deprived vigintiles may reflect a range of factors, such as lower home ownership rates, higher home rentals, and longer spells out of work amongst those in poorer areas.

The second feature of the results concerns the ratio of 'downward' (e.g. to more deprived) to 'upward' (e.g. to less deprived) changes in location amongst the JSA sample. Despite the small sample sizes, the results are interesting; although they had at least one spell on JSA, individuals in more deprived IMD vigintiles tend to gravitate upwards over the period 2002 to 2007, while those in less deprived IMD vigintiles tend to gravitate downwards. The greatest degree of change is amongst the least deprived IMD vigintiles, which is downwards, offset by the greater number (proportion) of individuals making (on balance) an upward movement from more deprived IMD vigintiles.

5.3 Personal and neighbourhood effects: data and methodology

The second and main part of the study concerns the roles of personal and neighbourhood effects as influences on the labour market outcomes of individuals. This analysis of the links between labour market status, earnings and the characteristics of the individual and their neighbourhood is based upon a unique matched sample of the LFS, 2007 with the 2007 IMD and other local area data. Given the cross-sectional nature of this dataset, it is not possible to directly address issues regarding the role of sorting effects, although some of the results can be qualitatively linked to sorting processes.

The number of variables involved in the analysis and the potential complexity of the ways in which personal and neighbourhood influences affect labour market outcomes, make a two stage procedure the most viable option. The first stage is to estimate the effects of personal characteristics on labour market outcomes, from which a number of Indices of Multiple Personal Disadvantage (IMPDs) are constructed. The second stage is to utilise the IMPDs alongside measures of the IMD to explore their roles in the explanation of labour market status and earnings, using flexible empirical specifications.

During the first stage of the work, the LFS enables a wide range of personal and related characteristics (e.g. age, gender, educational qualifications, family structure, etc.) to be used in the explanation of the individual's labour market status (a list of the variables used in this modelling is reported in Appendix C). Appropriate statistical techniques are used to estimate the labour market status and earnings functions. The results are used to construct three separate IMPDs, which are analogous in many ways to the IMD and its various domains.

The Rank of the IMD (RIMD) can be used as a proxy for employers' rankings of different neighbourhoods and, in addition, the associated overall neighbourhood scores, (Score of the IMD, SIMD) and those for the various domains of the IMD, measure the degree of the associated types of deprivation across areas. Of the score variables available, two are utilised in detail: firstly, the employment deprivation domain score – high values of which represent neighbourhoods with the worst aggregate employment situation; secondly, the income deprivation domain score – high values of which represent neighbourhoods with the worst aggregate income environment.

Potentially complex relationships may exist between the labour market status variables and the indices of personal disadvantage and of neighbourhood deprivation, which, to date have not been investigated in any depth in the empirical literature. In order to carry out such an investigation, tests of flexible functions of the various indices have been included in the regressions, along with an interaction term between the RIMD and the IMPD variables (e.g. to establish whether individuals with adverse employment characteristics are also disproportionately disadvantaged by living in more deprived areas).

5.3.1 Labour market status/earnings: constructing Indices of Multiple Personal Disadvantage

Methodology

The present section focuses on the results of estimating the relationships between: labour market status (e.g. the probability of employment and unemployment, relative to inactivity) and personal (and related) characteristics; earnings and personal (and related) characteristics. These results are used in the construction of indices of personal disadvantage relating to employment, unemployment and earnings.

The influence of personal characteristics on whether an individual will be employed, unemployed or inactive (the base group) is tested using multinomial regressions; the effects of personal characteristics on earnings are estimated using a semi-log regression. A sequential approach is applied in both cases, adding additional blocks of explanatory variables one at a time, mainly to test for any instability in the estimated coefficients. This approach also tests whether the relative values on the personal coefficients change significantly with the introduction of the RIMD.

The findings reported below are either broadly consistent with those found in the earlier descriptive and econometric literatures, or consistent with a priori expectations. Such consistency is taken as a positive outcome insofar as the present results are used to construct IMPDs, which can be taken as likely to be representative of what other studies would have found.

Employment probabilities

The principal results can be summarised as follows:

- there is an inverse 'u-shape' relationship between individual age and probability of employment (relative to inactivity) – youngest and oldest individuals have the lowest employment probabilities;
- there is an almost steadily increasing relationship between the level of qualification, as defined by the National Qualifications Framework (NQF), and the probability of employment (particularly when the effects of qualification held are adjusted for the effects of the number of years of formal education);
- the effects of gender and family structure on the probability of employment are all largely as expected (e.g. males have a significantly higher probability of employment than females);
- the greater the number of health problems reported by the individual, the lower is the employment probability;
- the 'Other Ethnic', Black and Asian groups do relatively less well in terms of their employment probability than other groups, especially the White group;
- the presence of dependent children has an unequivocally negative impact on the probability of employment (relative to inactivity).

Unemployment probabilities

The principal results can be summarised as follows:

- all but one of the age coefficients are negative in the explanation of the probability of unemployment, with an almost monotonic increase in absolute size (greater negativity) for older individuals;
- the combined effect of the level of qualification and years of education is to increase the probability of unemployment relative to inactivity (the pattern is similar to, but the coefficients are smaller than in the case of the employment probability);
- males have a higher probability of unemployment relative to inactivity than females, and the associated coefficient is larger than in the case of employment;
- increases in the number of health problems reduces the probability of unemployment relative to inactivity, although the associated coefficients are smaller in absolute size than their counterparts in the employment results;
- the ethnicity results for the unemployment probability are more mixed than in the employment specification, but suggest important racial differences in the labour market status outcomes across different ethnic groups;
- the effects of family structure largely mirror those for employment, although the sizes of the negative coefficients are systematically smaller in absolute value than in the employment specification.

Earnings

The principal results can be summarised as follows:

- occupations requiring higher skill levels are paid higher earnings relative to those requiring lower skill levels;
- most sectors exhibit lower earnings than the base group (primary sectors and utilities), although there is tentative evidence that earnings per hour are higher in business and administrative services than in the base group;
- estimated premia which combine both the level of qualification and number of years of education are negative for NQF1 and NQF2 (a finding common in the education premia literature) – while the NQF5 earnings premium appears high, the rate of return would be significantly lower;
- combining the effects of the spell with the same employer and the duration of spell with any employer suggests that there is a small gain in earnings from spells up to one year over those who have just started a new job, but the gain rises to over ten per cent for individuals whose spell exceeds 12 years;
- there is a male/female differential of about 33 per cent in gross earnings;
- as expected, the coefficient on hours of work is positive and highly significant, with each additional hour of work raising gross earnings by about 1.4 per cent;
- each additional health problem lowers earnings per hour by about 2.7 per cent.

Indices of Multiple Personal Disadvantage (IMPD) and their Index of Multiple Deprivation (IMD) counterparts

None of the above results are sensitive to the addition of the RIMD, which allows the construction of stable IMPDs independently of neighbourhood effects.

These IMPDs relate to: employment (IMPDEmp); unemployment (IMPDUemp); and earnings (IMPDE). Each index is constructed as the (linear) weighted sum of the coefficients on the personal characteristics which appear in the explanation of the employment probability, unemployment probability and log of earnings, respectively.

These have their counterparts in the measures of neighbourhood deprivation. The corresponding measures are the score of the IMD employment domain (SIMDEmp, with its counterparts in IMPDEmp and IMPDUemp) and the score of the IMD income domain (SIMDE, with its counterpart in IMPDE).

Finally, the interactions between the various IMPD indices and RIMD are utilised to see if the degree of neighbourhood deprivation exacerbates (increases or decreases) the effects of the personal characteristics of individuals that live in that neighbourhood, in determining each individual's labour market status and earnings.

5.3.2 Impact of personal characteristics on labour market status and earnings

The construction of IMPDs allows quite complex and flexible functional forms to be estimated, which contain both individual and neighbourhood characteristics. The fact that the interaction between personal and neighbourhood characteristics is significant in the explanation of both labour market status and earnings is important from a policy perspective, but also means that the discussion of the role of one cannot be entirely separated from that of the other. The present section focuses primarily on the role of personal effects (for certain types of neighbourhood), leaving the next section to consider the role of neighbourhood effects (for certain values of personal characteristics).

Employment

As expected, the probability of employment (relative to inactivity) is monotonically increasing with increases in the IMPD with respect to employment characteristics (IMPDEmp). The relationship is non-linear, however, with the effects of increases in IMPDEmp first having a diminishing effect at the margin and then, towards the least personally disadvantaged individuals, having a slightly increasing effect at the margin.

Interestingly, the effects of any given level of the IMPDEmp on the employment probability are marginally greater in less deprived areas than in more deprived areas, as measured by RIMD. Thus, the results tentatively suggest that those with the very lowest levels of IMPDEmp are relatively less disadvantaged (e.g. relative to others with the same level of personal (dis)advantage) in finding employment in more deprived than less deprived areas (an effect that rapidly disappears as IMPDEmp rises).

As might be expected, individuals with personal characteristics less associated with the probability of unemployment are significantly more likely to appear in employment than in inactivity, while individuals whose personal characteristics are more associated with unemployment are significantly less likely to appear in employment than inactivity. However, the way in which IMPDUnemp impacts upon the probability of employment is interesting and far from straightforward.

In particular, increases in IMPDUnemp result in a relatively small reduction in employment probability (relative to inactivity) when IMPDUnemp is low, but the effect at the margin becomes increasingly large as IMPDUnemp assumes higher values. This result occurs, even though the characteristics defining employment (dis)advantage (IMPDEmp) are already controlled for. In other words, combinations of characteristics much more likely to result in unemployment than inactivity are also much less likely to result in employment than inactivity.

The final feature of the employment probability/IMPDUnemp relationship is that those in less deprived areas (as measured by RIMD) are marginally more likely to appear in employment than those in more deprived areas, irrespective of the

degree to which their characteristics are more associated with unemployment than with inactivity.

Unemployment

The effect of IMPDEmp on the probability of unemployment also shows a non-linear pattern, with, in this instance, higher values of the index associated with a higher unemployment probability relative to inactivity. The curvature is initially positive but diminishing in slope, succeeded (as IMPDEmp increases) by a positive and increasing slope; the pattern is more accentuated than in the case of the effects of IMPDEmp on the probability of employment. The result suggests that individuals with characteristics which are more advantageous to employment not only have a higher probability of employment relative to inactivity, but also, if they do not find employment, have a higher probability of unemployment than inactivity (which may be expected insofar as they are, in some sense, closer to employment).

As in the case of the employment probability, higher values of the RIMD are associated with lower curves and, thereby, somewhat lower values of the probability of unemployment relative to inactivity for any given value of IMPDEmp. The ratio of the curves for the two extremes of neighbourhood (e.g. most to least deprived) is again greatest at low values of IMPDEmp and the difference falls away to a roughly constant positive value at a quite low level of IMPDEmp. It may be the case that individuals in less deprived areas have greater wealth or access to earnings through their partners' employment, which makes them less likely to appear in unemployment than in inactivity, other things being equal.

The effects of IMPDUnemp on the probability of unemployment are, as expected, positive. However, the results also demonstrate that the relationship is marginally non-linear, with higher values of IMPDUnemp associated with slightly higher values of the unemployment probability at the margin. The effects of differences in the degree of deprivation of the neighbourhood (RIMD) on the position of these curves are very minor – the relationship is almost identical for the most and least deprived areas.

Earnings

The effect of the IMPDE is also quite complex. The relationship between log-earnings and IMPDE is positive almost irrespective of the level of deprivation of the neighbourhood. The one exception is that, in the most deprived neighbourhoods (based on RIMD), the relationship log-earnings peaks at fairly high values of IMPDE (the lowest levels of personal disadvantage with respect to income) and then falls away as IMPDE increases further. This peak effect in IMPDE is even more obvious in terms of its effect on the absolute earnings of individuals in the poorest areas.

In less deprived areas, however, the relationship between log-earnings (and earnings) and IMPDE is positive and increasing throughout. The positive effects of a given level of personal advantage can be seen to be larger amongst individuals in less deprived areas than amongst those in more deprived areas. All of the curves

indicate that increases in the level of personal advantage tend to increase the log of earnings, irrespective of the level of deprivation of the area the individual lives in, at least up to very high values of IMPDE. In general, individuals with higher IMPDE are more successful in competition for better paid employment.

As noted, however, at sufficiently high levels of IMPDE, the effect on both log- and absolute values of earnings turns down in the most deprived areas. The results suggest that the earnings of those with the lowest degrees of personal disadvantage are adversely affected in terms of their earnings from employment by living in the most deprived areas – such individuals do disproportionately better the less deprived the area in which they live.² One explanation for this particular result (e.g. in the most deprived areas) is that it might be a reflection of the sorting effect; individuals with high IMPDE in the most deprived areas may be those with unobservable characteristics that are disadvantageous to them finding well-paid employment, which tends to make them gravitate to more deprived neighbourhoods. However, there is a distinct slowing in the improvement to income at the margin (if not a downturn) as IMPDE increases in all areas irrespective of the degree of deprivation (although more accentuated in more than less deprived areas).

5.3.3 Impact of neighbourhood effects on labour market status and earnings

In this section, the focus turns to the effects of neighbourhood on labour market outcomes. However, as in the previous section, as there is a significant degree of interaction between personal characteristics and the individual's neighbourhood, the discussion cannot be entirely compartmentalised to look at neighbourhood effects alone.

Employment

The effects of both employment deprivation, based on the neighbourhood score, (Score of the Index of Multiple Deprivation Employment, SIMDEmp) and the overall RIMD enter the explanation of the probability of employment (vis a vis inactivity) alongside measures of Multiple Personal Disadvantage (IMPDEmp and IMPDUnemp). The estimation, which is based on a flexible functional form, includes all relevant personal disadvantage and neighbourhood deprivation indices.

The estimated relationship between SIMDEmp and the employment probability indicates a more complex and somewhat more counterintuitive outcome than expected – reductions in the recorded employment deprivation of the neighbourhoods result in reductions in the employment probability amongst the most deprived areas. Other things equal, individuals who want to find employment in the most deprived neighbourhoods appear to have a higher probability of doing so than those in areas of somewhat lower employment deprivation.

² Considering that the LFS data on earnings relate to employment and not to income from other sources, which are likely to be more important for individuals at both extremes of the IMPDE and IMD spectra.

This suggests that the most deprived employment areas may not be those where job competition is highest, but where such competition is lower. This may occur because the inward shift of the labour supply curve in such areas (e.g. as a greater proportion of individuals withdraw from the labour market) exceeds any inward shift in the demand curve for labour.

While the employment probability rises with employment deprivation at the most deprived end of the spectrum, other things being equal, the relationship comes close to zero for even moderately less deprived employment areas (SIMDEmp roughly in the range 0.44 to around 0.33)³. The relationship then reverses and employment probability rises as the level of employment deprivation continues to fall, at least to neighbourhoods where employment deprivation is lowest (0.34 to 0.11) but not amongst those where employment deprivation is the very lowest (about 0.11 down to 0).

The results are consistent with the hypothesis that, in the most (and very least) deprived areas, competition for jobs falls, increasing employment probability, other things being equal – in between these extremes, the competition for jobs rises as employment deprivation falls. This complex relationship between SIMDEmp and the employment probability requires further, more detailed investigation, although measures of the degree of competition for jobs in different neighbourhoods appears a useful starting point.

The effects of the overall degree of neighbourhood deprivation (RIMD) on the probability of employment have to be analysed in the context of the individual's degree of personal (dis)advantage (IMPDEmp and IMPDUnemp).

- For individuals with a 'middle of the road' value of IMPDUnemp:
 - likely alternative values of IMPDEmp result in positive relationships between RIMD and the probability of employment – less deprived areas are associated with a **higher** probability of employment, other things being equal;
 - individuals with poorer personal characteristics (as measured by lower values of IMPDEmp) benefit more from neighbourhood improvements than do those with higher values of IMPDEmp – for example, individuals with higher values of IMPDEmp may be less constrained to employment in the locality than those with lower values and, therefore, less influenced by improvements in the RIMD of the neighbourhood in which they live.

³ The highest observed value of SIMDEmp is approximately 0.52 (the most deprived area in terms of the employment score).

- For individuals with a 'middle of the road' value of IMPDEmp:
 - likely alternative values of IMPDUnemp result in positive relationships between RIMD and the probability of employment;
 - unlike the effects of different IMPDEmp values, those with higher values of IMPDUnemp benefit more from neighbourhood improvements (i.e. increases in RIMD);
 - unlike individuals with higher values of IMPDEmp, individuals with higher values of IMPDUnemp may be more constrained in their search for employment to the neighbourhood within which they live and, therefore, more likely to benefit from improvements in the local area.

Unemployment

Reductions in the degree of neighbourhood employment deprivation increase the likelihood of unemployment relative to inactivity throughout (and the associated relationship is somewhat less complex than the corresponding role of SIMDEmp in the employment probability relationship). In other words, the more employment rich the neighbourhood within which individuals live, the more likely they are to seek work rather than to be inactive. Nevertheless, the effects of SIMDEmp on the probability of unemployment relative to inactivity are negative throughout, although only significantly different from zero amongst the most employment deprived neighbourhoods.

While the effects of improvements in the overall neighbourhood deprivation ranking (as measured by RIMD) on the probability of unemployment are, in many respects, similar to those for the probability of employment, they are even more distinctive.

- For individuals with a 'middle of the road' value of unemployment disadvantage (IMPDUnemp):
 - the effect of RIMD on the probability of unemployment (relative to inactivity) depends crucially on the degree of IMPDEmp;
 - those with low values of IMPDEmp show a positive, increasing relationship between RIMD and the probability of unemployment, whilst those with high values of IMPDEmp show a negative, decreasing relationship with the probability of unemployment (relative to inactivity);
 - unlike the employment probability relationship, quite likely combinations of IMPDEmp and IMPDUnemp are associated with a negative relationship between RIMD and the unemployment probability – it is possible that those with the highest employment advantage choose not to move into reported unemployment, particularly when they live in the most advantaged areas, but

into inactivity, whilst waiting for a new employment opportunity to arise.

- For individuals with a 'middle of the road' value of IMPDEmp:
 - the effect of RIMD on the probability of unemployment (relative to inactivity) is positive and monotonically increasing irrespective of the degree of IMPDUnemp;
 - the relationship is most strongly positive for individuals with the lowest levels of unemployment characteristics and least strongly positive for those with the highest values of IMPDUnemp;
 - the shapes of the RIMD unemployment probability relationships are broadly similar for different values of IMPDUnemp;
 - the positive effects of RIMD decline at the margin from the most to moderately deprived areas, before the marginal effect rises towards the least deprived neighbourhoods;
 - the upturn in the relationship at high levels of RIMD is present for all values of IMPDUnemp, but it is smaller for those with lower values of IMPDUnemp.

Earnings

The effect of the level of income deprivation of the neighbourhood on earnings (SIMDE) is also complex. The main feature of the results is that (as in the case of labour market status), having controlled for the IMPDE and the overall deprivation of the area (RIMD), amongst the most deprived areas, higher individual earnings are found the greater the income deprivation of the area in which individuals live (SIMDE).

As suggested earlier, this may be a feature of the relative labour supply and labour demand in more deprived areas, in particular, that: the labour supply in increasingly income deprived neighbourhoods declines to a greater extent than labour demand (other things being equal). An alternative explanation might be linked to the existence of lower levels of stigma attached to unemployment in such areas and, thereby, to non-financial considerations that set the reservation wage higher.

The effect of the overall degree of deprivation of the neighbourhood (RIMD) on earnings is monotonically positive for those with the highest degree of personal earnings advantage (as measured by IMPDE). Such individuals benefit from being in less deprived neighbourhoods, with earnings that increase at a marginally diminishing rate as their neighbourhood improves and, towards the very least deprived neighbourhoods, earnings that increase at a marginally increasing rate. The same is true of those with a 'middle of the road' IMPDE, although the improvement due to living in less deprived areas is smaller, levelling off in the moderately 'better' neighbourhoods, before rising just for the least deprived neighbourhoods.

What is most interesting, however, is the group that is amongst the least

advantaged with respect to individual earnings characteristics. This group exhibit some benefit from living in somewhat better neighbourhoods than those which are most deprived, but the benefits from further reductions in the degree of neighbourhood deprivation fall away and, in the upper half of the RIMD, individuals with poor earnings characteristics do worse than those in the lower half of the RIMD spectrum.

There is a range of possible explanations for this result, for example, improvements in neighbourhood from the most to less deprived may result in improved labour market networks that are suited to the individual's needs, while such networks become less and less appropriate as the individual moves from middle ranking to the least deprived neighbourhoods (e.g. the individual experiences an increasingly 'poor fit' within the socio-economic environment of the least deprived neighbourhoods). This suggests that policies, such as those tried in North America, of moving individuals with poor personal characteristics into less deprived areas, will produce improvements if the new neighbourhoods are specifically chosen and are not too high up the RIMD spectrum.

5.4 Conclusions and policy implications

The results of the estimation of reasonably flexible forms confirm the significant roles of both personal and neighbourhood characteristics in explaining labour market status and in explaining earnings. The use of flexible functional forms (e.g. polynomial functions which are cubic or even quartic in nature), describe the data better than the inclusion of the simple linear versions of the personal and neighbourhood indices. In addition, evidence is presented which suggests that there is a significant interaction between personal characteristics and rank neighbourhood effects.

The results suggest significant and highly policy-relevant non-linearities in the ways in which both personal and neighbourhood effects operate. In the case of the latter, in particular, these tend to be most pronounced amongst the most and the least deprived areas. The causes of these differences in the extremes of the neighbourhood distributions are likely to arise from their special and, at least partially unobserved, characteristics. These may include the effects of accumulated wealth and 'high level networking' amongst the least deprived neighbourhoods and the effects of an absence of wealth, the existence of benefit dependency and a lack of networking related to paid employment, as well as the possibility of employment limiting behaviours in the most deprived areas.

These non-linearities and interactions give rise to a range of interesting results (outlined above) deserving of further investigation, for example:

- the relationship between the degree of personal disadvantage and the individual's employment probability varies systematically with neighbourhood deprivation – those with the lowest levels of personal advantage (IMPDEmp) are **relatively** less disadvantaged in finding employment in more deprived than less

deprived areas (an effect which rapidly disappears as IMPDEmp rises);

- at sufficiently high levels of personal earnings characteristics, the effect of further improvements to IMPDE on both the log and absolute values of earnings turns down in the most deprived areas suggesting that the earnings of those with the lowest degrees of personal disadvantage are adversely affected in terms of their earnings from employment by living in the most deprived areas – **relatively**, they do disproportionately better the less deprived the area in which they live (although this may be the result of unobserved characteristics and sorting effects);
- the group that is amongst the least advantaged with respect to individual earnings characteristics exhibit some benefit from living in somewhat better neighbourhoods (e.g. not in the most deprived areas), but the benefits from further reductions in the degree of neighbourhood deprivation fall away rapidly. Indeed, individuals with the lowest personal earnings characteristics earn less when located in the upper half of the RIMD than in the lower half of the RIMD. Thus, policies, such as those tried in North America, of moving individuals out of the most deprived areas, will only produce improvements if the new neighbourhoods are specifically chosen and are not too high up the RIMD spectrum or if the individuals have (or are given) sufficiently high personal earnings characteristics to, in some sense, cope with or exploit the advantages of the less deprived neighbourhoods.

Several results suggest that, although disadvantaged areas appear to be disproportionately populated by individuals with personal characteristics that make it difficult to find work and the areas themselves tend to be areas of worklessness, controlling for such factors, there appear to be opportunities for individuals to find work. In particular:

- a worsening of the employment deprivation index (SIMDEmp) amongst the most employment deprived neighbourhoods results in increases in the individual's employment probability, other things being equal. This suggests that the degree of competition may fall as deprivation increases, at least amongst the most deprived areas. This may be the result of an inward shift in the labour supply curve in such areas (e.g. as a greater proportion of individuals withdraw from the labour market), which exceeds any corresponding inward shift in the demand curve for labour;
- amongst the most income deprived areas, higher individual earnings are found, the greater the income deprivation of the area in which the individuals live, other things being equal. Again, this may reflect the fact that labour supply in increasingly income deprived neighbourhoods declines to a greater extent than labour demand, other things being equal.

The results indicate the need to better understand the forces of supply and demand at the local level. This understanding is, at present, not entirely aided by the measures of neighbourhood deprivation that are available. For example, the measures of employment deprivation and income deprivation are essentially

imperfect proxies based more upon the extent and nature of benefits and government programmes in different locations than they are on labour market forces or incomes and earnings. While this is entirely understandable given the problems in constructing such measures and the other uses to which they are put, it also suggests that more appropriate and sophisticated measures are needed in the future to enable a better understanding of the labour market outcomes studied here.

It is also possible that these results reflect the impact of sorting effects. Individuals least likely or able to work tend to gravitate towards the most deprived areas. This has the effect of shifting the supply of labour curve inwards in such neighbourhoods and this provides a relative advantage to those actively seeking and able to work. This does not mean, of course, that such areas are conducive to finding work, only that the individuals actively seeking and able to work gain some relative advantage from the more general withdrawal of others from the local labour market. Data such as the Work and Pensions Longitudinal Survey could provide greater insights about sorting effects.

The importance of neighbourhood effects (in particular, the role of the ranking of neighbourhoods, RIMD) to an understanding of individual outcomes suggested in the present study is consistent with, but not proof of, 'postcode' or address-based discrimination. The 'withdrawal of labour' (inward shift of labour supply) posited here amongst the most deprived areas, might be a reflection of individual perceptions of their inability to find employment, for example, because of address-based discrimination. However, there are other explanations for this inward shift in labour supply relative to demand, and the net outcome most consistent with the present results is that the neighbourhood withdrawal of supply may actually benefit those who nevertheless seek work and, for those who find work, also improves their earnings, other things being equal. While this, in itself, is a strong and contentious conclusion, it should be noted that it does not imply that, on balance, those living in a deprived area are advantaged – the feature identified here may well be a relatively marginal effect, having controlled for all the other disadvantages individuals face in deprived areas (which may include address-based discrimination that operates through the RIMD variable).

6 Discussion and interpretation

6.1 Theoretical explanations for worklessness

The first part of the hypothesis being tested in this research project was:

'...that postcode discrimination exists and is part of the explanation for unemployment and worklessness in deprived areas.'

The theoretical underpinning of this hypothesis is related to the 'area effects' category of explanations for spatially concentrated worklessness. These explanations suggest that there is something related to deprived areas that confers additional disadvantage on their residents over and above any particular problems faced by individuals and families themselves. Postcode/area/address-based discrimination is frequently asserted as one potential component of the 'area effects' thesis. However, few studies actually provide evidence of the importance of neighbourhood effects relative to those of individual/personal characteristics and, of those that do, there is little or any evidence relating to the role of postcode discrimination as distinct from a range of other alternative explanations that also exist.

6.2 Explanations of local level worklessness: the qualitative evidence

The research findings provide support for several of the different explanations of local level worklessness. Many employers involved in the research suggested that they select candidates on the basis of their individual merit and identified a range of common barriers to employability noted in the literature which are related to the individual characteristics of job seekers. These include low or inappropriate skills, poor 'employability' skills (for common definitions see Nunn et al., 2008) or inappropriate presentation and behaviour. This links with both labour market supply problems (skills shortages, skills mismatches or other structural barriers to employment) and the residential sorting effect of the housing market. Where

these explanations take prominence they suggest that area or address-based discrimination is only a secondary explanation, of lesser importance. Employers' responses suggested that in the main this is the case.

Where area/address-based considerations were apparent, the majority were not related to the 'area effects' explanation for local worklessness but tended to offer more support to explanations related to 'spatial mismatch'. Most employers identifying candidates' place of residence as being a potential consideration in recruitment decisions suggested that this related to access to the place of employment rather than reputational issues colouring their view of the likely performance of the applicant. These considerations were linked to both distance from the workplace and ease of travel to it, particularly given role requirements (such as unsocial hours) and knowledge or judgments about ease of travel via public transport or applicant's possession of personal transport. Judged comparatively, these were again more prominent explanations than area or address-based discrimination on the basis of 'area effects'.

Nevertheless, the evidence discussed in Section 4.2 suggests that area or address-based discrimination does constitute one possible area effect but that it is marginal and perhaps context dependent. Only a very small number of employers actually acknowledge that they do consider applicants' place of residence when making recruitment decisions and only some of these respondents suggested that these considerations were shaped by concerns related to area-based stigma and reputation. Where this was the case several dynamics appeared to be at work: First, employers had considerations linked to staff relationships to customers and/or service users. This dynamic cut both ways, especially where the place of employment was in, or very close to, an area with a reputation for deprivation; sometimes advantaging local residents and sometimes working against them. For example, in some cases, employers just wanted close and available labour or were positive about the scope for beneficial relationships between locally-based staff and customers. In other cases, employers were concerned either that there was some negative implication for locally-based staff in terms of customer relationships (e.g. confidentiality) or that difficult situations at work may spill over into home life where customers/service users and staff were likely to come into contact outside work.

Second, while some employers were perfectly happy to recruit staff from areas with a negative external reputation, they had preconceived ideas about the level of seniority or skill level of the posts for which residents of such areas might be suitable. Where this leads to decisions not to advertise or make vacancy information available to residents in these areas, this is potentially disadvantageous, and constitutes an 'area effect'.

Third, a very small proportion of employers indeed reported that they would have concerns about employing people from deprived areas, either because of preconceived prejudice or on the basis of a prejudice confirmed through a previous negative experience, in the way that theories of 'adverse selection' (see

Section 3.1) would predict. However, not even all of this small sub-group of employers suggested that these concerns were sufficient to lead them to screen out applicants from an area perceived by the employer in negative terms. Rather, some simply suggested that they would subject such candidates to additional scrutiny in the recruitment process. Added to these respondents were one or two that directly acknowledged the potential or actual adoption of screening on that basis, including one example of rejecting work placement school children from particular schools; opening up an additional potential dynamic of very localised discrimination in the recruitment process (i.e. school reputation). Again, however, both in relation to actual screening and additional scrutiny, there does appear to be some evidence of area or address-based considerations acting as an 'area effect' in the recruitment process.

When considered in the round, this evidence suggests that it is correct to assert that area or address-based discrimination forms one relatively marginal element in the 'area effects' category of explanations for spatial concentrations of poor labour market participation/unemployment. In turn, this evidence offers some support to the 'area effects' thesis itself. However, the evidence presented and discussed here suggests that these (area or address-based discrimination and 'area effects' more broadly) are both relatively secondary factors when compared with issues related to spatial mismatch and individual characteristics, combined with the residential sorting effect of the housing market.

6.2.1 Employers' propensity to screen applicants prior to selection

The evidence presented above suggests that there are key determinants of the extent to which employers will use screening methods in the recruitment process, including in relation to applicants' places of residence. These include:

- Labour market conditions: responses from employers suggested that at least part of the underlying logic underpinning the research hypothesis is flawed. The hypothesis rested on the apparent juxtaposition of unmet labour demand with unemployment and that this might result, in part, from employer screening. However, employers' responses suggested that in a tight labour market, screening is superfluous because few vacancies attract sufficient numbers of candidates to make this necessary. The research also suggested that in conditions of higher unemployment and therefore, increased competition and numbers of applicants for available positions, employers are more willing to screen, even where they are aware of and understand the shortcomings of such approaches. As such, even in the early months of the 2008/09 recession, the changing labour market context was leading employers to be more likely to screen for area or address-based considerations. As the recession has deepened it is sensible to expect this tendency to both continue and increase.

- Recruitment practices: where HR professionals handle all or part of the recruitment process or where they are able to set and monitor processes, there is less scope for screening or where it exists it tends to be more related to systematised competency or role requirement information.
- Local knowledge: responses from employers suggested that area or address-based screening was much more difficult where relevant managers had little detailed local knowledge, thereby ruling out awareness of area-based stigma. This lack of awareness is particularly the case where recruitment or initial screening is centralised or regionalised.
- Labour market regulation: respondents suggested that screening is more prevalent where there are particular occupational requirements, governed either by voluntary or compulsory regulation. This is a simple reaction to the extent to which gaining the licences or qualifications required to meet such regulatory obligations represents a cost to the employer. The evidence did suggest that such regulation might result in individuals rather than employers bearing the costs of gaining relevant qualifications and constitute a barrier to entry to the labour market and mobility within it, though the positive implications (for example, enhanced training, public safety and service delivery) were not considered.

6.2.2 Other screening practices

Given the prevailing labour market conditions over recent years, few employers had actually undertaken screening activity recently. However, where this did appear to be the case, or where some factors were weighed more heavily than others in an initial shortlisting process, educational history (including qualifications) and employment history (both specific and unspecific) were the two most prominently mentioned. Here evidence supported both a 'weak' and 'strong' screening hypothesis (see Section 3.2). In relation to educational history and qualifications, employers suggested that in some circumstances they view both as general indicators of employability and possession of desirable groups of characteristics, while in others specific situations, levels of qualification or particular types of employment history are considered to confer some indication of specific suitability for the particular demands of the role. One employer did raise concerns, however, regarding the role of experience screening in relation to implied age discrimination.

6.3 Role of neighbourhood compared with individual personal effects: the quantitative evidence

The quantitative analysis suggests that there is evidence to support the overall 'area effects' thesis that individuals living in deprived areas may face disadvantages in the labour market additional to their own personal characteristics which result from the nature of the neighbourhood in which they live. Such factors might include 'postcode selection' or address-based discrimination in employers' recruitment decisions.

However, the quantitative analysis suggests that such 'area effects' are complex and do not work in a simple linear fashion. Though the analysis is far from conclusive, the complexity of the effects may actually support the postcode selection hypothesis, albeit at the margins. For example, the quantitative findings suggest that those with relatively less disadvantaging personal characteristics do face additional disadvantage resulting from the comparative deprivation of the area in which they live. However, counter-intuitively, those with relatively more deprived characteristics but who want to work may actually gain some marginal employment/earnings advantage from being in a relatively more deprived area. Though it is only one possible potential explanation of these slightly contrasting findings it may be that the former group (facing less personal disadvantage) tend to compete in wider geographical labour markets and therefore suffer from their residential characteristics relative to competitors in the labour market living in other (less deprived) areas. The second (more personally deprived) group may surprisingly do marginally better in the more deprived area precisely because they are competing in local labour markets where most of their competitors share similar residential characteristics. Again, these are potential interpretations of interesting data but they do fit both the hypothesis being tested and the empirical observation. Clearly, however, other potential interpretations may also fit the same data.

6.4 A final comment on the relative contribution of 'postcode selection'

The evidence presented in this report is useful and provides perhaps the most insight to date into the dynamics of 'postcode selection' or address-based discrimination in employer recruitment decisions as a contributor to worklessness in deprived areas. The qualitative evidence suggests that these factors play a role but that this is on a relatively modest basis and is secondary to a range of additional contributory factors. However, there may be reasons to think that this interpretation of the qualitative evidence slightly understates the contribution of area or address-based considerations. This is because employers and especially recruitment agencies may have been relatively unwilling to admit to various prejudices and therefore, may have overstated their adherence to the merit-based approach. Certainly, the proportion of employers that knew of different deprived areas and were aware of their reputation but asserted that this would not impact on their recruitment decisions was considerably broader than those that indicated that they may either directly or indirectly disadvantage job applicants from deprived areas.

The quantitative analysis is not yet able to offer any more conclusive evidence of the existence or relative contribution of 'postcode selection'/address-based discrimination to the range of other personal and neighbourhood effects that contribute to area-based concentrations of worklessness and negative labour market outcomes. At most, however, the empirical observations offered in the quantitative analysis are consistent with the hypothesis that postcode selection/

address-based discrimination is one potential 'area effect', acting in addition to other personal characteristics in shaping labour market outcomes. However, like the qualitative analysis, the quantitative evidence suggests that if this does exist it is at the margins and in very specific conditions: where individuals have the personal characteristics to compete in labour markets against individuals with similar personal characteristics but living in less deprived neighbourhoods.

Taken together then, the qualitative and quantitative evidence suggest that there are in fact reasons to suggest that postcode selection/address-based discrimination among employers in their recruitment decisions can be supported as one potential area effect. This is not a conclusive finding but it does move the debate on postcode selection as one possible area effect from a simple assertion to one that has some empirical support, until such time as future research can either confirm it or contradict the findings and interpretation offered here.

6.5 Use of information networks to combat 'postcode selection'

The second part of the hypothesis being tested in the research related to the prospect of using employer networks to seed information in support of changing employer behaviour in relation to the employment of people from deprived areas. There is an established evidence base on employers' use of employer networks to share information and tackle common business problems. These networks tend to work where employers build up trust and overcome barriers related to competition and view participation in them as delivering tangible benefits. However, the evidence collected in the qualitative fieldwork suggests that there is only limited scope to change employer behaviour in this regard. Employers were mistrustful of government-provided information and reported limited evidence of changing behaviour as a product of this sort of information. They also suggested only a limited awareness of prominent recent government-sponsored information campaigns. Together this suggests that where employer peer networks take up the information campaign there may be scope to suggest that employers may take this information seriously. This applies equally to employment and recruitment agencies and HR departments and external consultants who appeared to be trusted by employers but tended only to provide information and advice related to statutory requirements.

Appendix A

Further details of the qualitative fieldwork methodology

A.1 Case study selection

A.1.1 Principles of area selection

The initial proposal set out a number of considerations that would need to be addressed in the selection of areas for qualitative fieldwork:

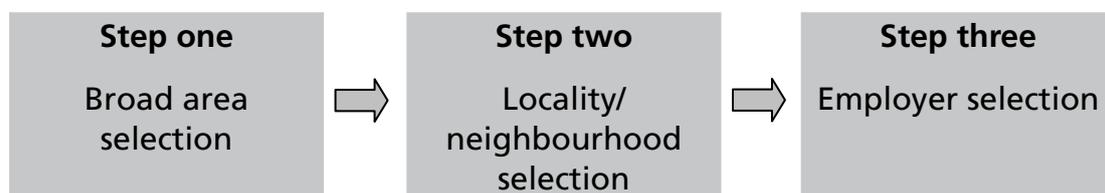
- A buoyant labour market in close proximity to an area of significant deprivation.
- The deprived areas needed to be 'real' areas recognised by local communities rather than merely statistical constructs in order to enable consideration of local reputational issues.
- The case study locations needed to include different demographic characteristics, including some difference in the ethnicity of local residents (for instance through comparing a traditional 'white' area with an area popularly associated with a minority ethnic community and a more mixed area). This would help to identify and explore any differences in employer behaviour related to race and ethnicity (and potentially religious belief).
- The case study locations ideally needed to include representation of England, Scotland and Wales, a north-south split within England and a London case study.

- An urban, rural and coastal mix.⁴

The literature review reinforced the importance of several of these. For instance, the importance of selecting areas to consider in the fieldwork where specific localities have a negative reputation as well as being within reach of achievable vacancies. The literature review also suggested that employers included in the research may be located outside the selected deprived areas so long as they are within reach of residents in the deprived areas.

A.1.2 Steps in area selection

Area selection was undertaken using the following staged approach:



Details of how the first two steps were undertaken are set out below. Details of the third step are set out in the next section.

- Step one – selection of local authority areas – local authority areas were selected using two datasets to reflect two different concerns: first, evidence from employers of high levels of vacancies and second, evidence of worklessness. This data was derived from the National Employer Skills Survey in the first instance and the Labour Force Survey (LFS) in the second. A selection grid was established to select areas with high rates of vacancies (including ‘hard to fill’ vacancies but excluding ‘skills shortage vacancies’) as well as high levels of worklessness (unemployment, not inactivity). The grid sorted potential case study areas according to a range of further geographic criteria. Possible case studies were split between three in England (North, South and London) and one each in Scotland and Wales. Within these criteria two areas were selected in coastal locations and three areas were selected in urban locations. The evidence from the literature review suggested that it is inadvisable to select rural/semi-rural locations because of difficulties with access to work and the potential conflict with the spatial mismatch thesis. Local authority areas within each of these quadrants of the grid were then selected randomly to be included in the research. An initial scan of websites and literature and initial brief stakeholder interviews were undertaken to ascertain whether or not the selected areas met the further requirement of having within them a definable stigmatised locality/neighbourhood within reach of areas of labour market demand and vacancies. It was necessary for these localities/neighbourhoods to reflect a range of

⁴ With five case study locations it was not possible to include semi-rural areas, especially since some of the other broad criteria and considerations suggest that large urban centres may be preferable for the research, in order to discount transport barriers and spatial mismatches.

demographic criteria particularly in relation to ethnicity (two mainly white British areas, two mainly ethnic minority areas and one more mixed area). Where these criteria were met the area was selected for inclusion as a case study. Where they were not met, another local authority area was selected randomly from within the grid until these criteria were met.

- Step two – selection of identifiable deprived localities within each local authority area – in each local authority area, the initial website/literature scan and stakeholder interviews were used to identify the local stigmatised locality/ neighbourhood(s).

A.2 Employer selection

The initial proposal set out a range of considerations that needed to be addressed in the selection of employers for inclusion as respondents. These were:

- location close to and within reach of the deprived area to discount spatial and transport barriers to employment facing local residents;
- experience of having recruited or tried to recruit recently;
- at least some employers who have experienced difficulties with recruitment, preferably with a mixture of 'hard to fill' and 'skill shortage vacancies';
- a range of different sectors, occupational mixes and sizes.

In each area 20 employers were sampled to be broadly representative of the profile of employers by industry and broad size band in all of the selected five areas. This allowed the exclusion of sectors not present in the selected areas. A sample was then obtained from Experian Business Services to match this profile, across a range of occupations, excluding higher level occupations which fell into Groups 1-5 of the Standard Occupational Classification (SOC). The purpose of this was to exclude employers who had only recruited for higher level vacancies where the likely explanation for people from deprived areas not being able to secure a job there was skills mismatch rather than some variant of 'area effects'. Quotas were set for each occupational group to be representative of all employers in the five local areas and then the selection of employers within these quotas was randomised. Employers were contacted and a short screening interview undertaken to confirm some basic details from the sample. Employers were finally selected for interview where they:

- were willing to take part in the research; and
- reported that they had recruited or tried to recruit within the last 2 years in the SOC groups included in the research.

Where these criteria were not met, further employers from the quota were selected randomly until all quotas were met.

A.3 Fieldwork

The fieldwork in each case study area consisted of:

- employer interviews;
- Jobcentre Plus Adviser interviews;
- employment agency interviews.

Details of each of these are provided below under the appropriate heading.

A.4 Employer interviews

In each case study area approximately 20 employer interviews were undertaken. These interviews were conducted using a specially designed topic guide covering the following issues:

- Understanding of local labour market context and how this may differ for different occupations and roles within the organisation.
- Outline of recruitment practices and whether they had experienced recruitment difficulties.
- Problems in accessing/interpreting information about applicants for jobs, including uncertainty about the quality of skills and capacity to work in the organisation.
- The effects that uncertainty and information problems had on recruitment practices.
- Use of screening methods, including both formal and informal and what types (e.g. place of residence, age, gender, race/ethnicity, name, qualifications, previous work history).
- Reasons for use of screening and whether/how these differ between different types of shortcut and for different occupations/roles within the organisation. In particular investigating whether use of screening the result of information problems or ingrained prejudice.
- Awareness and impact of information made available through employer networks and public information campaigns intended to change employer behaviour (e.g. in relation to age and older workers) and whether it appeared to work or not work in making them aware and having an impact.
- Factors which might persuade employers not to use information shortcuts and preferred methods for overcoming information problems they face.
- Willingness to engage with the welfare to work agenda, for instance through Local Employer Partnerships and what might encourage this.

These interviews were recorded digitally, transcribed and analysed using qualitative analysis software (Nvivo).

A.5 Jobcentre Plus Adviser interviews

Up to five of these were undertaken in each case study area. The permission of Jobcentre Plus Operations Managers was sought before approaching local Jobcentre Plus Office Managers. Managers were asked to nominate Advisers for inclusion in the research. In the first instance it was preferable to undertake these interviews on a face-to-face basis in visits to two to three jobcentres, but where managers insisted that this could not be arranged, telephone interviews were used.

Interviews were recorded but not transcribed. Formal research notes were then analysed using qualitative analysis software.

A.6 Employment agency interviews

Up to five employment agencies operating in the local area were approached to offer a representative to take part in the research. These were selected using snowballing techniques from the initial stakeholder interviews and via directories of employment/recruitment agencies in each area. Stakeholders were asked to identify any employment agencies which operate in the local area. In addition to this, where necessary, employment agencies which operate under contract to Jobcentre Plus (e.g. in Employment Zones or Working Neighbourhood Pilots) were also contacted.

These interviews were recorded and sent for transcription prior to analysis using qualitative analysis software.

Appendix B

Topic guides

Topic guide for interviews with employers

| | |
|--------------|--|
| Facilitator: | |
| Location: | |
| Time: | |
| Group No: | |

CHECKS

- Permission slip
- Recorder on
- Introductory statement

Introductory statement (to be read only after recorder started)

We are undertaking research for the Department for Work and Pensions to investigate how employers recruit their staff. We are particularly interested in employers' views and experiences of recruiting people from deprived areas, especially those areas with poor reputations.

The interview should last about twenty minutes. We will not reveal the identity of anyone involved in the research and all findings will be published in such a way as to ensure the anonymity of respondents.

1 Organisation details

Position of respondent

Sector

Size of establishment (no. of employees) at the site and across the whole organisation?

- Note here whether recruitment is managed at this site or by another office within the organisation?

Independent or part of group?

2 Recruitment practices and experience

Do your recruitment processes change depending on the type of job you are recruiting for?

Could you briefly describe how you would go about recruitment to different parts of your organisation?

How do you advertise positions?

(e.g. open advert; local/national press; trade journals (if so, what ones); word of mouth; use Jobcentre Plus; job search websites; recruitment agencies; temporary labour agencies.)

How do you select candidates?

(e.g. How many stages to the process? Does this include a written-form, letter, CV, interviews? How many candidates are shortlisted? Who is involved in shortlisting? Do you consider presentation at interview? Do you use psychometric tests or other tests? Do you seek information on candidates' background through networks? Do you take up references prior to job offer?)

Have you tried to recruit in the last 2 years?

What was your experience with this?

(e.g. How many vacancies have you tried to recruit for? Were you successful? Any problems faced (not enough candidates, candidates not fitting requirements, etc.)

Do you face any problems in the recruitment process which are related to not knowing if applicants are able to do the job to the standard required?

How do previous experiences of recruitment affect your confidence that applicants have the skills you need and are able to fit into your organisation?

Is the local labour market able to offer you the types of applicants that you need in your organisation?

(e.g. In what ways is it able/not able? Does this differ for different roles? Are there specific roles that are problematic? Are there specific age issues?).

3 Screening

Do you ever use criteria to screen applications?

(e.g. if you receive large numbers of applications for one post?)

What criteria would you screen on?

Prompt on each one:

- qualifications
- previous employment history
- educational history
- race
- name
- age
- gender

Why do you use these criteria?

Prompt for each one used.

Would you use different screening criteria for different types of jobs?

(e.g. with different skills needs or at different levels of the organisational hierarchy).

Is there anything about an applicant's place of residence (location, reputation, type of housing) that might affect your recruitment/selection decisions?

- What kind of thing would affect your decision?
- Why?

Are there any areas/neighbourhoods/estates that you wouldn't recruit from?

- Why/Why not?
- What are they?
- Does this differ for different roles?
- Have you ever recruited from that area before?
- What was your experience of this?

Have you ever recruited anyone from the following areas (LIST ALL LOCAL AREAS)?

- If yes, what was your experience of this?
- If not, why not?

Would you ever recruit anyone from these areas?

- Why/Why not?

4 Awareness and use of networks

Are you involved in any employer networks?

(e.g. chamber of commerce, Confederation of British Industry (CBI), roundtables, Institute of Directors (IOD), professional associations (e.g. Chartered Institute of Personnel and Development) or sector bodies)

What sort of information do you get through these networks?

To what extent do you act on information gained through these networks?

(e.g. compliance with equalities legislation)

Are you aware of government information campaigns targeted at employers?

(e.g. 'Age Positive' or the current skills campaign – 'It's in our hands'.

To what extent would you act on the information provided through these campaigns?

What sort of information do you trust?

- Information from government publicity/marketing campaigns
- Word of mouth information from other employers in your sector/local area
- Information from professional associations (e.g. CIPD)
- Information from sector-wide representative bodies
- Information from business network organisations (e.g. CBI)

Do you work with/use Jobcentre Plus services?

- Work trials
- Jobs/recruitment fairs
- Interviewing/selection
- Placing vacancy details
- Local Employer Partnership

Would you be interested in working with/using Jobcentre Plus services?

- Why/Why not?

Topic guide for interviews with stakeholders

| | |
|--------------|--|
| Facilitator: | |
| Location: | |
| Time: | |
| Group No: | |

CHECKS

- Permission slip
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- Introductory statement

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We are undertaking research for the Department for Work and Pensions to investigate how employers recruit their staff. We are particularly interested in employers' views and experiences of recruiting people from deprived areas, especially those areas with poor reputations.

The interview should last about twenty minutes. We will not reveal the identity of anyone involved in the research and all findings will be published in such a way as to ensure the anonymity of respondents.

1 Organisation details

Position of respondent

Organisation name and role

2 Recruitment practices and experience

What sort of recruitment practices are common in the sectors/local labour markets in which you operate?

How do these change between different types of employer (e.g. size/sector)?

Do employers face recruitment difficulties in the sector/local labour market in which you operate and what are these?

3 Screening

To your knowledge do you ever come across employers who use screening criteria to reduce or sift applications? Does your organisation help with this?

What criteria are screened on?

- qualifications
- previous employment history
- educational history
- race
- name
- age
- gender

Why do employers/you use these criteria?

Do you think that different screening criteria are used for different types of jobs?

(e.g. for different skills needs or at different levels of the organisational hierarchy)

- What is the evidence for this?

Is there anything about an applicant's place of residence (location, reputation, type of housing) that might affect employer recruitment/selection decisions?

- What would affect their decision and why?
- What is the evidence for this?

Are there any areas/neighbourhoods/estates that the employers you work with wouldn't or would be reluctant to recruit from?

- Why/Why not?
- What are they?
- Does this differ for different roles?
- Have you ever recruited from that area before?
- What was the experience of this?

**Do any of the following areas suffer from these problems?
(LIST ALL LOCAL AREAS)**

- If yes, what was your experience of this?
- If not, why not?

Awareness and use of networks

Are you involved in any employer networks?

(e.g. chamber of commerce, Confederation of British industry (CBI), roundtables, Institute of Directors (IOD), professional associations (e.g. Chartered Institute of Personnel and Development) or sector bodies)

What sort of information do you get through these networks?

To what extent do you think employers act on information gained through these networks?

(e.g. compliance with equalities legislation)

Are you aware of government information campaigns targeted at employers?

(e.g. 'Age Positive' or the current skills campaign – 'It's in our hands'.)

To what extent do employers act on the information provided through these campaigns?

What sort of information do you think employers trust?

- Information from government publicity/marketing campaigns
- Word of mouth information from other employers in your sector/local area
- Information from professional associations (e.g. CIPD)
- Information from sector-wide representative bodies
- Information from business network organisations (e.g. CBI)

ONLY FOR Non-JCP INTERVIEWS:

Do the employers you work with use Jobcentre Plus services?

- Work trials
- Jobs/recruitment fairs
- Interviewing/selection
- Placing vacancy details
- Local Employer Partnership

Would the employers you work with be interested in working with/using Jobcentre Plus services?

- Why/Why not?

Appendix C

Explanatory variables and definitions

| Variable definition | Base group |
|--|--|
| Age in years | age 16-19 |
| level of qualification 1=lowest and 5=highest (see Bosworth and Kik, 2009 for full definitions) | no qualifications |
| professionals | } soc1 = managers and senior officials |
| associate professionals | |
| secretaries and administrators | |
| skilled trades | |
| personal services | |
| sales and customer services | |
| process plant and machine operatives | |
| elementary | } ind1 = primary sectors and utilities |
| manufacturing | |
| construction | |
| distribution & transport | |
| business and administrative services | |
| non-marketed services | |
| duration of continuous spell with current employer (months) | less than 3 months |

Continued

| Variable definition | Base group |
|--|----------------------------|
| length of time in continuous employ (including self employment) | |
| number of hours worked per week | |
| age at which left formal education (for those not in education) | |
| still in continuous education | |
| no formal education | |
| gender | females |
| spouse lives in household | does not live in household |
| head of household | not head of household |
| head of family | not head of family |
| number of reported health problems | |
| mixed ethnic origin | } white ethnic group |
| asian ethnic group | |
| black ethnic group | |
| chinese ethnic group | |
| other ethnic origins | |
| number dependent child under 2 years | } no dependent children |
| number dependent child 2-4 years | |
| number dependent child 5-9 years | |
| number dependent child 10-15 years | |
| rank index of multiple deprivation | |
| score of index of multiple deprivation | |
| index of multiple personal disadvantage | |
| - employment | |
| index of multiple personal disadvantage | |
| - unemployment | |
| index of multiple personal disadvantage | |
| - earnings | |

References

- Akerlof, G. (1970). 'The Market for 'Lemons': Quality Uncertainty and the Market Mechanism.' *Quarterly Journal of Economics* 84(3): 488-500.
- Albert, R. and Cabrillo, F. (2000). 'Sex Discrimination. Is the Labour Market a Market for Lemons?' *IUDEM Documento de Trabajo* (Working Paper) 2000(4).
- Allen, C. (2005). 'On the Epistemological Limitations of the 'Area Effects' Debate: Towards a Phenomenology of Urban Deprivation.' *Housing, Theory and Society* 22(4): 196-212.
- Arabsheibani, G. R. and Rees, H. (1998). 'On the Weak vs Strong Version of the Screening Hypothesis: a Re-examination of the P-test for the U.K.' *Economics of Education Review* 17(2): 189-192.
- Arulampalam, W. (2001). 'Is unemployment really scarring? Effects of Unemployment on Wages 1.' *The Economic Journal*, 11(475): F585-606.
- Arulampalam, W. et al. (2000). 'Unemployment Persistence.' *Oxford Economic Papers* 52(1): 24-50.
- Atkinson, R. and Kintrea, K. (2001). 'Disentangling Area Effects: Evidence from Deprived and Non-Deprived Neighbourhoods.' *Urban Studies* 38(12).
- Becker, G. (1957). *The Economics of Discrimination*. Chicago, University of Chicago Press.
- Berthoud, R. (2003). *Multiple Disadvantage in Employment: A quantitative analysis: A quantitative analysis*. York, Joseph Rowntree Foundation.
- Blanchard, O. and Diamond, P. (1994). 'Ranking, Unemployment and Wages.' *The Review of Economic Studies* 61(3): 417-434.
- Bosworth, D. (2008). *Skills Gaps and the Role of Workforce Planning Issues paper for SSDA*. Wath-upon-Deerne, SSDA.
- Buck, N. (2001). 'Identifying neighbourhood effects on social exclusion.' *Urban Studies* 38(12): 2251-2275.

- Cheshire, P. et al. (2003). 'Income Inequality and residential segregation: labour market sorting and the demand for propositional goods/2. *Geographies of Labour Market Inequality*. R. Martin and P. S. Morrison. New York, Routledge.
- Christie, I. and Rolfe, H. (1992). 'The TECS and Inner City Regeneration.' *Policy Studies* 13(1): 54-63.
- CIPD (2007). *Recruitment, Retention and Turnover 2007 Survey report*. London, Chartered Institute for Personell Development.
- DCLG (2006). *The Dynamics of Local Economies and Deprived Neighbourhoods*. London, Department for Communities and Local Government.
- Department for Trade and Industry (2005). *Women in the IT Industry: Towards a Business Case for Diversity*. London, DTI.
- Duffill, C. and Hurrell, D.-L. (2006). 'Full Employment, a New Deal for Welfare and the Cities Strategy...the story so far.' *Local Economy* 21(4): 429-438.
- Ellen, I. G. and Turner, M. (1997). 'Does Neighbourhood Matter? Assessing Recent Evidence.' *Housing Policy Debate* 8(4): 833-866.
- Erickson, C. L. and Jacoby, S. (2003). 'The Effect of Employer Networks on Workplace Innovation and Training.' *Industrial and Labor Relations Review* 52: 203-223.
- European Commission (2007). *Towards Common Principles of Flexicurity: More and better jobs through flexibility and security*. Brussels, European Commission.
- Green, A. E. and Owen, D. (2003). 'Skill Shortages: Local Perspectives from England.' *Regional Studies* 37(2): 123-34.
- Green, F. et al. (1998). 'The Meaning and Determinants of Skills Shortages.' *Oxford Bulletin of Economics and Statistics* 60(2): 165-187.
- Gregg, P. (2001). 'The Impact of Youth Unemployment on Adult Unemployment in the NCDS.' *The Economic Journal* 111(475): F626-F653.
- Grieco, M. (1997). *Keeping it in the Family: Social Networks and Employment Chance*. London, Tavistock.
- Gronovetter, M. S. (2004). *Getting a Job*. Cambridge MA, Harvard Press.
- Hastings, A. (2004). 'Stigma and Social Housing Estates: Beyond Pathological Explanations.' *Journal of Housing and the Built Environment* 19(3): 233-254.
- Hastings, A. and Dean, J. (2007). *Challenging Images: housing estates, stigma, and regeneration*. York, Policy Press.
- Hills, J. (2007). *Ends and Means: The Future Roles of Social Housing in England: Centre for Analysis of Social Exclusion Report 34*. London, London School of Economics.

- Hogarth, T. and Wilson, R. (2001). *Skills Matter: A synthesis of the 'Extent, Causes and Implications of Skill Deficiencies' Study*. London, Department for Education and Employment/Skills Task Force.
- Hogarth, T. and Wilson, R. (2003). *Skills Shortages, Vacancies and Local Unemployment: A synthesis of the Exploring Local Areas, Skills and Unemployment Analyses*. Warwick, Institute for Employment Research.
- Houston, D. (2005). 'Employability, Skills Mismatch and Spatial Mismatch in Metropolitan Labour Markets.' *Urban Studies* 42(2): 221-243.
- Ioannides, Y. M. and Loury, D. (2004). 'Job Information Networks, Neighbourhood Effects, and Inequality.' *Journal of Economic Literature* 42(4): 1056-1093.
- Izquierdo, S. S. and Izquierdo, L. R. (2007). 'The Impact of Quality Uncertainty without Asymmetric Information on Market Efficiency.' *Journal of Business Research* 70(8): 858-867.
- Jones, G. (2005). *The Thinking and Behaviour of Young Adults (aged 16-25)*. London, Social Exclusion Unit.
- Kearns, A. and Parkinson, M. (2001). 'The significance of Neighbourhood.' *Urban Studies* 38(12): 2103-2110.
- Keep, E. (2006). *Market Failure in Skills*, SSDA Catalyst – Issue 1. Wath-upon-Deane, SSDA.
- Loury, G. C. (2000). 'Social Exclusion and Ethnic groups: the Challenge to Economics/2. *The Annual World Bank Conference on Development Economics*. B. Pleskovic and J. Stiglitz. Washington DC, World Bank: 225-54.
- Machin, S. and Manning, A. (1999). 'The Causes and Consequences of long-term Unemployment in Europe/2. *Handbook of Labour Economics*. Amsterdam, Elsevier. 3.
- McGregor, A. (1977). 'Intra-Urban Variations in Unemployment Duration: A Case Study.' *Urban Studies* 14: 303-313.
- Metcalf, H. and Meadows, P. (2006). *Survey of Employers Policies, Practices and preferences relating to age*. DWP Research Report No. 325. Leeds, Corporate Document Services.
- Nunn, A. et al. (2006). *Ageing and Working*. Leeds, Fairplay Partnership.
- Nunn, A. et al. (2007). *Factors influencing social mobility*. DWP Research Report No. 450. Leeds, Corporate Document Services.
- Nunn, A. et al. (2008). *The Employability Skills Project*. Wath-upon-Deane, UK Commission for Employment and Skills.

- Palmer, C. et al. (2004). 'Challenging the Stigma of Public Housing: Preliminary Findings from a Qualitative Study in South Australia.' *Urban Policy and Research* 22(4): 411-426.
- Power, A. (1996). 'Area-based Poverty and Resident Empowerment.' *Urban Studies* 33(9): 1535-1564.
- Psacharopoulos, G. (1979). 'On the weak versus strong version of the screening hypothesis.' *Economic Letters* 4(2): 181-185.
- Rees, T. (1998). *Mainstreaming Equality in the European Union*. London, Routledge.
- Roscigno, V. J. (2007). 'Age Discrimination, Social Closure and Employment.' *Social Forces* 86(1): 313-334.
- Rosenbaum, J. et al. (2002). 'How do Places Matter? The Geography of Opportunity, Self-Efficacy and a Look Inside the Black Box of Residential Mobility.' *Housing Studies* 17(1): 71-82.
- Ross, R. and Schneider, R. (1992). *From Equality to Diversity*. London, Pitman.
- Sanderson, I. (2007). *Worklessness and Deprived Neighbourhoods: A Review of Evidence, Report for the Neighbourhood Renewal Unit*. London, DCLG.
- Schömann, K. and Siarov, L. (2005). *Correcting for Labour Market Failure in Lifelong Learning: Synthesis Report*. Brussels, European Commission-DG Employment, Social Affairs and Equal Opportunities.
- Smith, G. (1999). 'Area-based Initiatives: The rationale and options for area targeting.' *CASEpaper* 25.
- Swales, S. (2007). 'The double-edged web (internet networking).' *Human Capital Management* (May June): 13-14.
- Task Force on Race Equality and Diversity in the Private Sector (2004). *Race Equality: The Benefits for Responsible Business*. London, Institute for Public Policy Research.
- Taylor, M. (1998). 'Combatting the Social Exclusion of Housing Estates.' *Housing Studies* 13(6): 819-832.
- Taylor, P. and Walker, A. (1998). 'Employers and Older Workers: Attitudes and Employment Practices.' *Ageing and Society* 18 641-658.
- Urwin, P. (2004). 'Age Matters: A review of existing survey evidence.' *DTI Employment Relations Research Series* 24.
- Weller, S. (2007). 'Discrimination, Labour Markets and the Labour Market Prospects of Older Workers: What Can a Legal Case Teach Us?' *Work, Employment and Society* 21 417-437.
- Wilthagon, T. (2007). *The Future of Flexicurity Policies in Europe: Developing win-win games*. Flexicurity Conference, Lisbon.

Between the mid-1990s and the onset of the 2007/08 economic crisis a strong labour demand appeared to coexist with high levels of worklessness, especially concentrated in deprived areas. Area-based discrimination by employers is one suggested cause of spatially concentrated worklessness, but there is currently limited evidence to support this. This research was commissioned to investigate whether area-based discrimination exists and is part of the explanation for worklessness in deprived areas. The work also considers the value of using employer information networks to combat inaccurate stereotypical perceptions by employers. The project involved a literature review as well as qualitative fieldwork and an analysis of quantitative data.

If you would like to know more about DWP research, please contact:
Paul Noakes, Commercial Support and Knowledge Management Team,
3rd Floor, Caxton House, Tothill Street, London SW1H 9NA

<http://research.dwp.gov.uk/asd/asd5/rrs-index.asp>