



Employers' recruitment of disadvantaged groups: exploring the effect of active labour market programme agencies as labour market intermediaries

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This article draws on an original comparative survey of employers in the UK and Denmark to analyse the role of active labour market programmes (ALMPs) in employers' recruitment of disadvantaged groups. Using the framework of Bonet et al. to conceptualise agencies delivering ALMPs as labour market intermediaries (LMIs), the effect of ALMPs on employers' recruitment was tested against organisational factors involving firm size and selection criteria. Although ALMPs marginally increased employers' probability of recruiting the long-term unemployed in both countries and lone parents in Denmark, their effect was negligible compared with firm size and employers' selection criteria. While ALMP agencies have the potential to increase employers' recruitment of disadvantaged groups, this is constrained when they act as basic 'information provider' LMIs. ALMP agencies' inability to act effectively as 'matchmaker' LMIs leads to a failure to overcome rigid intra-organisational barriers to such recruitment.

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INTRODUCTION

Active labour market programmes (ALMPs) aim to place the unemployed and other disadvantaged groups into paid employment and have been the subject of much academic research. However, the majority of studies have been in the domain of social policy, rather than human resource management (HRM). Despite employers being critical to their success, most studies have focused on the supply side of these interventions (jobseekers), but more recently, a subset of social policy and HRM literature has begun to explore the demand side (employers) and, more specifically, employer participation and 'employer engagement' in ALMPs (McGurk, 2014; van Berkel and van der Aa, 2014; Ingold and Stuart, 2015; Bredgaard and Halkjær, 2016). ALMPs are conceived at the institutional level of government and delivered at regional and local levels by agencies positioned between employers and jobseekers, including the public employment service (PES) and private and non-profit organisations. ALMPs can offer employers a channel for recruiting labour that has the potential to enhance workforce diversity and competitive advantage and to contribute to

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‘corporate social responsibility’ (or ‘social responsibility’) (Carroll and Shabana, 2010). We conceptualise agencies delivering ALMPs as labour market intermediaries (LMIs) that can assume specific HR functions. In so doing, we focus on the underexplored dimension of the role of ALMP agencies as LMIs that can facilitate employers’ recruitment of disadvantaged groups (short-term unemployed, long-term unemployed, lone parents, disabled people and young people).

In this article, we draw on surveys of employers in the UK and Denmark (considered pioneers of ALMPs) to estimate whether ALMP agencies elevate the likelihood of employers hiring from disadvantaged groups. We utilise the conceptual framework of ‘information provider’ and ‘matchmaker’ LMIs of Bonet *et al.* (2013) based on the HR functions they fulfil. This framework predicts that ALMP agencies as LMIs will reconfigure employers’ recruitment patterns in a way that is conducive to the employment of unemployed and other disadvantaged groups. In order to test this proposition, our study examined how ALMPs fare in the UK and Denmark compared with internal organisational factors that shape employers’ approaches to recruitment (firm size and selection criteria). This permits a critical analysis of ALMPs, drawing attention to how ALMP agencies could augment or even modify employers’ recruitment practices to promote the recruitment of disadvantaged groups.

A key finding from our study is that the effect of ALMPs on the likelihood of hiring disadvantaged groups is at best moderate. Once firm size is included in the model, accounting for the fact that larger firms are more likely to hire employees from disadvantaged groups, the size of the effect of ALMPs decreases substantially. While ALMPs marginally increased the probability of employers recruiting the long-term unemployed in both countries and lone parents and disabled people in Denmark, the effect was not sufficiently strong to offset the negative impact of employers’ selection criteria. We thus argue that ALMP agencies as ‘information provider’ LMIs have the potential to increase employers’ recruitment of disadvantaged groups, but this is constrained by their inability to act effectively as ‘matchmaker’ LMIs and to overcome rigid intra-organisational barriers to such recruitment.

The following sections critically review the existing literature relating, firstly, to labour market intermediaries and, secondly, in relation to the impact of firm size and selective hiring on the recruitment of disadvantaged groups. The methods and study variables are introduced, followed by the results and discussion and conclusions, including the implications for policy and practice.

THEORISING ACTIVE LABOUR MARKET PROGRAMME AGENCIES AS LABOUR MARKET INTERMEDIARIES

Labour market intermediaries mediate between the individual worker and the employing organisation in a three-way triangular relationship (Forde, 2008). A growing literature recognises LMIs as an increasingly important phenomenon for organisations’ recruitment, particularly when compared with the historical dominance of the PES as a national labour exchange and job matching function (Bonet *et al.*, 2013: 353). However, to date little attention has been paid to the growing number of contemporary, and often competing, private and non-profit ALMP delivery organisations (hereafter referred to as ‘agencies’) funded by public expenditure. The following section briefly sets out the ALMPs contexts in the UK and Denmark before reviewing the literature on LMIs and introducing our conceptual framework.

Active labour market programmes in the UK and Denmark

Both the UK and Denmark are considered to be pioneers of ALMPs (Bonoli, 2010), and despite some differences (such as the role of social partnership in Danish labour market policy), both countries are characterised by flexible labour markets with relatively lax labour market regulation. At the time of our employer survey, both had similar rates of unemployment, as Denmark was adversely affected by the financial crisis compared with its Nordic neighbours (OECD, 2016).

In the 1990s, both the UK and Danish governments intensified the use of ALMPs (known respectively as 'welfare to work' and 'activation') to increase the employment of groups receiving social security benefits who experience difficulties in finding work. The UK's dominant ALMP approach since the 1990s has been 'work first', focused on the quickest (re-)insertion into work. In the UK in the early 2000s, the government contracted private and non-profit agencies to deliver ALMPs. This has since intensified, leading to the dominance of large private sector agencies, including private recruitment agencies, and a relatively minimal role for the PES (Jobcentre Plus), which largely deals with the short-term unemployed. Specific groups are assigned to the caseloads of contracted agencies, predominantly maintaining contact with the PES to comply with benefit eligibility requirements. The most prominent programme since 2011 has been the 'Work Programme' (for the long-term unemployed, young people at risk of long-term unemployment and disabled people assessed as 'fit for work'). The programme is underpinned by a 'payment by results' funding model that rewards agencies for placing the unemployed into 'sustainable employment' (DWP, 2011; Rubery *et al.*, 2016), and agencies adopt 'black box' strategies to achieve this, with little prescription from government.

In Denmark, from 2007, employment policy and the delivery of ALMPs was devolved to municipalities, accompanied by the introduction of municipal-controlled Jobcenters. This effectively dismantled the national PES and coincided with large-scale mandatory contracting-out of ALMPs (Larsen, 2013). The latter has been reduced but municipalities retain autonomy over the extent and nature of contracted activities. During the 2000s, the emphasis of ALMPs shifted from a focus on upskilling, training and education towards a more 'work first' approach, whereby the unemployed were required to participate in repeated 'activation'. Following a government labour market commission in 2014, emphasis has been placed on 'meaningful activation', and the most prominent programmes are *Løntilskud* (jobs with wage subsidies) and *Virksomhedspraktik* (company-based placements).

This article conceptualises the ALMP agencies that stand between jobseekers and employers as LMIs, and the next section explores this further, in particular the concepts of 'information provider' and 'matchmaker' LMIs of Bonet *et al.* (2013).

Active labour market programme agencies as labour market intermediaries

Most studies of LMIs focus on private recruitment or 'temporary help' agencies (Autor, 2009; Bonet *et al.*, 2013) and on executive recruitment and headhunting (Coverdill and Finlay, 1998). Although Bonet *et al.* (2013: 384) acknowledge a gap in the academic understanding of LMIs, surprisingly few studies have paid attention to ALMP agencies, or conceptualised them as LMIs (Gore, 2005; Osterman, 2008; and McGurk, 2014 are exceptions). This section draws on the HRM literature relating to LMIs and explains why the conceptual framework of Bonet *et al.* (2013) is useful for studying the role of ALMP agencies as LMIs in employers' recruitment of disadvantaged groups in the UK and Denmark.

The core defining element of LMIs is that they assume basic aspects of HRM that employers otherwise perform themselves (Bonet *et al.*, 2013: 347). Attempts have been made to explain and to categorise LMIs and their activities. Benner's (2003) study of Silicon Valley LMIs grouped

them into private sector firms, membership associations and public sector agencies, dividing the latter into workforce development 'system' institutions linking disadvantaged workers to employment; providers of adult education and job training for employers; and community and non-profit organisations engaged in job training and placement activities (pp. 624–5). Benner argued that LMIs perform three functions for employees and employers: reducing transaction costs; managing risks associated with volatile economic change; and helping to build social and business networks (p. 622). By examining programmatic interventions in the demand side of the labour market, including LMIs, Osterman (2008) distinguished three types: 'passive' intermediaries that act as bulletin boards to provide 'matching' services for employers and jobseekers; 'more ambitious' intermediaries that attempt to find or to train employees to fill employers' job orders (see also McGurk, 2014); and more 'creative intermediaries' that provide a range of services to employers, including 'HR consulting' to improve job quality and to provide training and placements (p. 29). Osterman's framework provides for a potentially granular analysis of the activities of ALMP agencies as LMIs. Similarly, the taxonomy of Bonet *et al.* (2013: 342) is based on the three main attributes of HR practices that LMIs perform: 'information providers', 'matchmakers', 'administrators'. This provides a useful categorization that is underpinned by an analysis of how LMI involvement in employers' HRM functions alters the way that they are performed and how they can, in turn, affect employment outcomes (p. 348), such as jobseekers' access to employment. Given that ALMP agencies in the UK and Denmark tend not to act as 'administrators' by directly employing workers, this article focuses on the information provider and matchmaker categories. Below we discuss how employers can utilise these LMIs and their potential impact on employers' HRM functions.

Both employers and employees possess imperfect and often asymmetrically distributed information about the other party (Akerlof, 1970; Larsen and Vesan, 2012) that can adversely impact on the effectiveness of the recruitment process. 'Information providers' aggregate, package and convey information about individuals to organisations and about vacancies to individuals (Autor, 2009). A prominent example of information providers is online job boards (Bonet *et al.*, 2013: 348), reflective of the digitalisation of contemporary vacancy-placing (Parry and Wilson, 2009; Cappelli, 2012). A key development in the PES in both the UK and Denmark is the replacement of manual vacancy-placement with self-service digitalised job boards (Universal Jobmatch in the former, Jobnet in the latter). However, effective utilisation of such tools relies on the skills of both employers and jobseekers (Kuhn and Skuterud, 2004), and also potentially on the additional input of LMIs. For disadvantaged jobseekers, information providers can fill gaps caused by absent networks or social contacts (Granovetter, 1995) and they can increase the visibility of employers' vacancies. Employers can use information provider LMIs to reduce their transaction costs of obtaining sufficient information about candidates, including more in-depth information about a wider, more diverse pool (Bonet *et al.*, 2013: 351). Information providers can thus bring to the attention of employers disadvantaged candidates who would otherwise be overlooked.

Employers can also utilise 'matchmaker' LMIs to assume the HR functions of the recruitment, selection and promotion of candidates (Bonet *et al.*, 2013: 354). Beyond basic information provision, matchmakers can oversee the entire process of matching jobseekers and employers, supplying information on both parties, mediating between the two and in many cases guaranteeing the quality of placements (Bonet *et al.*, 2013: 354). Matchmakers are likely to have access to a larger and more diverse pool of candidates and to hold more accurate information about them than information providers because they collect or check information themselves (Bonet *et al.*, 2013: 354–5). Employers can be guided by matchmakers regarding which candidates to consider, with matchmakers acting as a first filter and effectively screening candidates according to their true quality (p. 356). Arguably, the risk of losing potential repeat

business from employers means that matchmakers have an incentive to ensure good matches between jobseekers and employers. However, this is contested in the LMI literature (Bonet *et al.*, 2013: 355). Additionally, Larsen and Vesan (2012: 468–9) have argued that the PES in fact has an incentive to conceal candidates' actual quality from employers, in order to expedite the placement of disadvantaged candidates into employment. Paradoxically, this can backfire, leading to employers assuming that candidates routed through the PES (or ALMP agencies) are 'lemons' (Akerlof, 1970) of uncertain (and likely low) quality because the PES is considered to be a last resort for weaker job candidates (Larsen and Vesan, 2012).

Active labour market programme agencies as matchmaker LMIs can potentially assist the unemployed to bypass employers' 'ordinary recruitment processes' that may disadvantage them (Quinto Romani and Larsen, 2010) in two ways. Firstly, they can offer employability interventions to move disadvantaged groups into, or closer to, the labour market. Secondly, they can build relationships with employers. Employability interventions include pre-employment training in conjunction with employers; job search activities; CV writing; interview skills; work trials or work experience that allow employers to 'test drive' (Akerlof, 1970) potential employees and allow candidates to obtain 'realistic job previews' (Barber, 1998); through to subsidised jobs; mentoring; in-work support and developing employers' future workforce strategies. ALMP agencies have growing 'employer engagement' functions, which in the UK includes former private recruitment sector personnel (Ingold and Stuart, 2014). To conclude, for employers the potential role of ALMP agencies as LMIs is twofold: as information providers, they provide employers with more precise information about candidates; as matchmakers they can bridge the gap between employers and candidates, bring to employers' attention candidates that are not on their radar and reducing the risk of employing candidates who are less 'job-ready'.

Hypothesis 1: ALMP agencies, acting as labour market intermediaries, increase the likelihood of employers hiring employees from disadvantaged groups through ALMPs.

Organisational determinants of recruitment and selection

Two organisational factors are considered as important determinants of employers' recruitment and selection of disadvantaged groups: firm size and selection criteria. By definition, large firms are bundles of resources (Penrose, 1959) that employ large numbers of people and potentially have more capacity to employ from disadvantaged, as well as non-disadvantaged, groups. This is probabilistically true, as, other things being equal, the more people that employers hire, the more likely that amongst them will be disadvantaged candidates. There exists a wealth of empirical evidence to support this proposition. Martin (2004) found that significant factors in employers' participation in ALMPs were firm size and the concomitant size of their HR departments. A study by Atkinson *et al.* (1996) suggests that large employers (over 250 employees) were the most active recruiters in general and that their likelihood of recruiting the unemployed was higher (and higher still for public sector employers). By the same token, McGurk (2014) has argued that the strongest forms of 'employer engagement' in ALMPs were by medium-to-large employers, who supplemented their HR functions with the services of ALMP agencies. The evidence is not entirely unequivocal though, as in a recent survey of Swiss employers (Bonoli, 2014), large companies conversely demonstrated a negative predisposition to employing the long-term unemployed.

Additionally, some studies have emphasised the potential of small and medium sized businesses (SMEs) to increase the employment of disadvantaged groups (*e.g.* Storey, 1994). Based on longitudinal analysis of the UK Labour Force Survey, Urwin and Buscha (2012) have

argued that SMEs are critical to assisting the unemployed and disadvantaged into work, as such groups comprise a larger proportion of SMEs' recruitment, either through small business start-ups or becoming an SME employee (p. 20). Empirical evidence, however, does not support such an optimistic assertion. Numerous studies have found that only a fraction of SMEs had recruited from the UK Work Programme (CIPD, 2012; Shury *et al.*, 2014; Ingold and Stuart, 2015). Similarly, Blackburn and Ram (2006) have asserted that assumptions about small businesses improving the social inclusion of disadvantaged groups are fundamentally flawed, partly due to the heterogeneity of the small business population.

Hypothesis 2: Large organisations are more likely to hire from disadvantaged groups than small and medium enterprises.

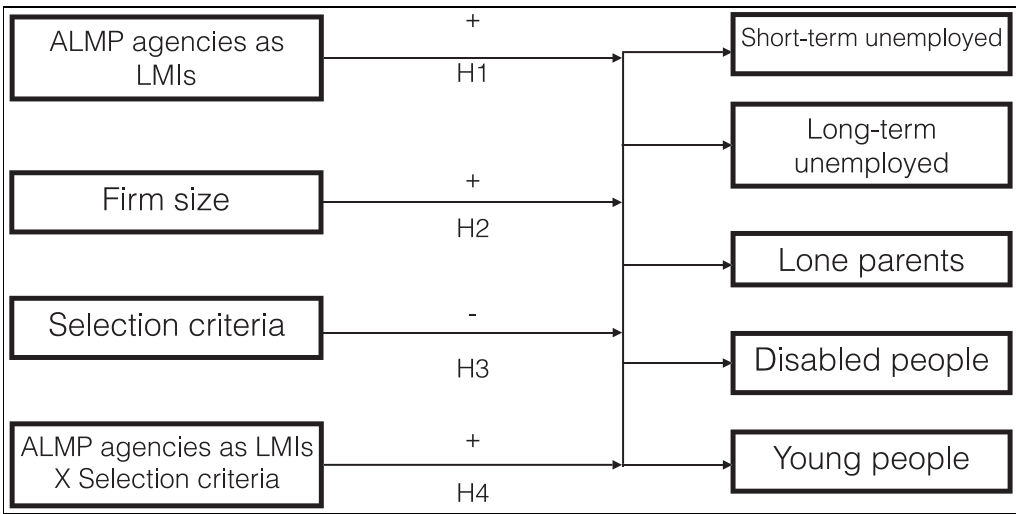
Another relevant determinant of employers' recruitment is selection criteria, or selective hiring. The orthodox view of the hiring process purports that formalised practices can promote the recruitment of disadvantaged groups by helping to reduce the scope for personal judgements and prejudice that can result in discrimination. However, in reality the opposite can occur (Jewson and Mason, 1986), as the selection process is by definition a series of acts of discrimination (Ramsay and Scholarios, 1999; Lockyer and Scholarios, 2004; Noon, 2012). Its discriminatory nature stems from the bifurcation of the selection process into suitability and acceptability criteria (Jenkins, 1986). The former focus on the technical and functionally specific criteria for job performance outlined in the job description, evidenced by qualifications, CVs or answers to interview questions (Noon, 2012: 79). Acceptability criteria relate to more subjective aspects based on personal judgements, such as person-organisation 'fit' (Kristof-Brown *et al.*, 2005), or the notion of the 'best candidate' for the job (Noon, 2012).

Using these criteria, employers scrutinise candidates' qualities alongside their subjective fit with the organisation based on work ethic, motivation and attitudes (Jewson and Mason, 1986). As a result, organisations can (sometimes inadvertently) discriminate against candidates based on group characteristics such as age, gender and ethnicity (Tomaskovic-Devy and Skaggs, 1999) and individual characteristics (Spence, 1973) as this can allow employers to quickly filter large numbers of applications. Long or repeated spells of unemployment may signify to employers atrophying skills or a lack of motivation (Atkinson *et al.*, 1996; Bonoli and Hinrichs, 2010; Larsen and Vesan, 2012), unreliability or a lack of productivity (Bonoli and Leichti, 2014). Likewise, employers may exercise judgements about specific groups, for example, perceiving lone parents to be unreliable, to lack flexibility or to have insufficient work experience or low skills (Holzer, 1999; Connors and Thomas, 2014). Younger workers may be disadvantaged because of their perceived lack of skills and work experience (Snape and Redman, 2003; Loretto and White, 2006). Indeed there is an overt inconsistency between employers' claims to be positively disposed to employing disabled people and low employment rates for this group (Burke *et al.*, 2013). Additionally, disadvantaged candidates who meet employers' suitability criteria may still be disproportionately affected by subjective acceptability criteria, which can amplify minor differences and signals (Brooks *et al.*, 2009).

Hypothesis 3: The importance employers attach to selection criteria in the recruitment process is negatively associated with the likelihood of employers hiring from disadvantaged groups.

Through the supply-side and demand-side interventions described earlier, ALMP agencies have potentially critical roles to play in addressing barriers to employment that are manifest in

FIGURE 1 *Conceptual model*



the selective hiring process. On the supply side, they can provide interventions to address low skills and a lack of qualifications or work experience and to help improve CV writing and interview skills. On the demand side, employer engagement staff in ALMP agencies can attempt to intervene in (or shortcut) the selection process in order to prioritise their candidates (Ingold and Stuart, 2014). These LMIs thus have the potential to alter employers' own selective hiring practices, or to replace them entirely (Bonet *et al.*, 2013: 346). That is to say, although selective hiring restricts the recruitment of disadvantaged groups by filtering out such candidates, ALMP agencies as LMIs have the potential to mitigate this effect, or even overcome it.

Hypothesis 4: ALMP agencies moderate the relationship between selection criteria and the likelihood of employers hiring from disadvantaged groups, such that higher rates of recruitment through ALMPs mitigate the negative effect of recruitment selection criteria on the likelihood of hiring from disadvantaged groups.

Figure 1 shows the conceptual model for the study. It lays out Hypotheses 1–4 as direct effects of independent variables (ALMP as agencies as LMIs, firm size, selection criteria) on the likelihood of hiring from disadvantaged groups. Hypothesis 4 is presented as an interaction effect between selection criteria and the role of ALMP agencies as LMIs, assuming the latter impinges on the negative relationship between selection criteria and the probability of hiring employees from disadvantaged groups.

METHODS

Sample

This article draws on data from an original establishment-level survey of employers in the UK and Denmark that was the first phase of a larger research project analysing employer engagement in ALMPs in both countries. The sample was random and nationally

representative of the business universes in each country, covering all sectors of the economy, geography and size (firms with more than 10 employees in the UK and more than five in Denmark). Fieldwork was undertaken between December 2014 and February 2015 with the person responsible for recruitment, using computer-assisted telephone interviewing. There were 1,003 complete responses in the UK (England, Scotland, Wales and Northern Ireland) and 500 in Denmark; the smaller sample size in Denmark reflected the significantly smaller business universe. Response rates were 12 per cent respectively, which is appropriate for a survey of this design and scale. The business populations in the country samples were similar, formed largely by private enterprises, with a formal approach to recruitment.

Analysis

The regression equation corresponding to the conceptual model (Figure 1) is as follows.

$$\text{Logit} \left(\ln \left(\frac{p}{1-p} \right) \right) = \alpha + \vartheta\phi + \theta\chi + \phi\gamma + \tau\psi$$

where α – intercept; ϕ , χ , γ , and ψ signify independent variables (firm size, selection criteria, employers' recruitment through ALMPs and the interaction effect of the two latter variables), with $\psi = \chi^* \gamma$; ϑ , θ , ϕ and τ are regression coefficients for the respective predictors. Dependent variables signify the probability of employers hiring from disadvantaged groups in the labour market, taking values from zero to one. We employ logistic regression to execute the preceding equation.

Measures

Consistent with the existing literature, the study variables were measured by both categorical (dichotomous and ordinal) and continuous variables. The dependent variable (the likelihood of employers hiring from disadvantaged groups) was measured by five dichotomous variables. Respondents were asked whether in the past 2 years their organisations had hired at least one employee from the following groups: the short-term unemployed (up to 6 months), the long-term unemployed (over 6 months), lone parents, disabled people and young people. The answers 'No' and 'Yes' were coded '0' and '1', respectively.

Independent variables were captured by categorical and continuous variables. Firm size was a dichotomous variable, separating SMEs (up to 250 employees) from large organisations (more than 250 employees). Firm size ought to be treated with caution, as this categorical variable does not allow us to assess the share of workers from disadvantaged groups in the firm's workforce. The analysis conducted is thus restricted to the fact that larger firms are more likely at any point in time to hire employees from disadvantaged groups than SMEs, as such firms have access to a wider pool of candidates. Firm size in our model is not, in its own right, a central predictor, but it serves as a yardstick of ALMPs' performance as an amplifier of the probability of hiring employees from disadvantaged groups.

Following Jenkins (1986), employers' selection criteria were operationalised by five five-point Likert-type variables to reflect technical and functionally specific criteria for job performance: relevant work experience; job-specific skills; literacy, numeracy and IT skills; and qualifications. A composite index of selection criteria was computed, owing to the fact that the foregoing scale was internally consistent (Cronbach's Alpha is 0.743 in a merged sample; $\alpha = 0.734$ in the UK sample and $\alpha = 0.754$ in the Danish sample). The resulting variable thus captures the importance of selection criteria in employers' recruitment.

The key independent variable (employers' recruitment through ALMPs) was the ratio of employees hired from all types of ALMPs to the total number of vacancies placed by employers in the past 2 years. While the data did not allow comparison of the effects of the specific roles of ALMP agencies as LMIs, it nevertheless permitted testing of a fundamental proposition behind Hypothesis 1: that employers' recruitment through ALMPs is beneficial for disadvantaged groups in the labour market. The resulting variable signified the percentage occupied by ALMPs in employers' overall recruitment. This measurement reflects the relative importance of ALMP agencies as LMIs, the assumption being that the higher the share of ALMPs in employers' recruitment, the more likely employers are to recruit from disadvantaged groups. An interaction effect of recruitment through ALMPs and selection criteria was operationalised by first mean-centring these variables and then multiplying them. The resulting interaction term was plunged in the regression equation to capture the $\tau\psi$ component.

Owing to the dichotomous nature of the hypothesised dependent variables, five independent logistic regressions were performed. Regression models were executed hierarchically, such that recruitment selection criteria and firm size were entered into the equation first. Model fit was estimated by Akaike Information Criterion and Nagelkerke R square. Thereafter, employers' recruitment from ALMPs and its interaction effect with selection criteria were added to the model and fit indices were evaluated again.

Statistical models reported were controlled for sector (public and private), employee coverage by collective agreements (dichotomous variable identifying whether employees are covered by workplace collective agreements); level of decision-making authority for participation in ALMPs; organisations' overall approach to recruitment and industry (service sector compared with manufacturing, primary sector, retailing and IT). This reflects a variety of factors that might impact on employers' propensity for hiring employees from disadvantaged groups (Martin, 2004; Ingold and Valizade, 2015).

Descriptive statistics for all study variables including frequencies, means and standard deviations are reported in Table 1. Statistical analysis was executed in the R software environment for statistical programming.

RESULTS

Employers' recruitment of disadvantaged groups through active labour market programmes

This section presents descriptive statistics for the UK and Denmark regarding employers' recruitment of disadvantaged groups through ALMPs. Figure 2 shows the percentage of employers in both countries that had recruited at least one employee from the five disadvantaged groups. Two preliminary conclusions can be drawn. Firstly, the share of employers that had hired employees from disadvantaged groups was higher in the UK across all groups but the differences between the two countries were variable, ranging from 14.7 per cent for recruitment of the long-term unemployed to 24.3 per cent for hiring young people. Secondly, the patterns of recruitment were similar between the two countries, in that employers in the UK and Denmark were more likely to hire young people (90.7 per cent of UK employers and 66.4 per cent of Danish employers had recruited young people in the past 2 years). Employers in both countries exhibited a lower propensity to hire disabled people: only 50.4 per cent of employers in the UK had hired at least one disabled person in the past 2 years and just 33.7 per cent in Denmark.

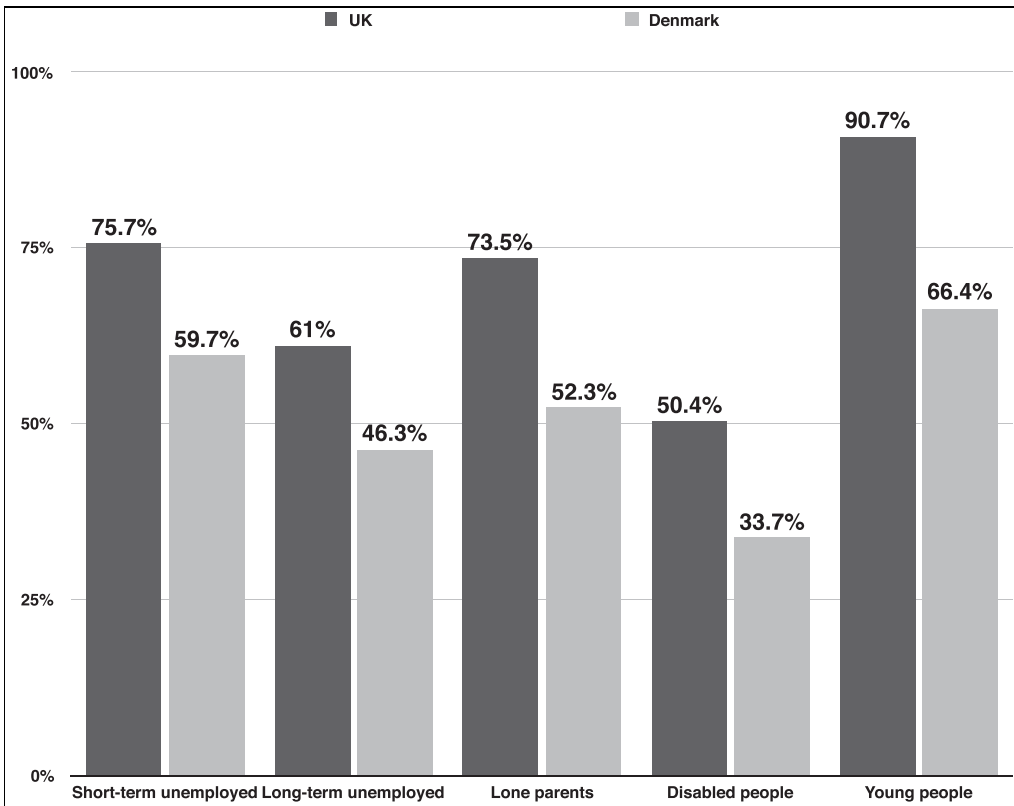
Our descriptive statistics for employers' use of ALMPs for recruitment and selection (and, by extension, their use of ALMP agencies) demonstrated a striking similarity between the two countries. Table 1 shows that the percentage of employers that had placed a minimum of one

TABLE 1 *Study variables*

Auxiliary variables not included in regression analysis (categorical dichotomous)		
	UK Percentage	Denmark Percentage
Vacancy placement with PES	49.7	47.5
Participation in ALMPs	72.8	78.4
Control variables (categorical dichotomous)		
Collective agreement (whether employees are covered by collective agreements)	15.6	56.6
Sector (private)	67.4	53.7
Decision-making (local managers are not involved)	87.6	73.2
Approach to recruitment (written or formal guidelines)	81.2	71.2
Industry (Business, social services and public administration)	73.1	76.2
Independent variables		
Categorical dichotomous		
Firm size (large – more than 250 employees)	18.7	8.8
Ordinal and continuous		
	UK Mean/SD	Denmark Mean/SD
<i>Selection criteria (how important are the following when applicants apply for roles in your organisation)</i>		
Relevant work experience	3.74/1.06	4.02/0.98
Job-specific skills	3.99/0.99	4.21/0.90
Qualification level	3.46/1.12	4.33/0.82
Literacy and numeracy skills	3.95/0.99	3.35/1.10
IT skills	3.21/1.17	3.28/1.18
<i>ALMP agencies as LMIs (share of employees recruited through ALMPs in total number of vacancies placed in the past 2 years)</i>		
Employers' recruitment through ALMPs	0.05/0.18	0.13/0.27
Dependent variables (categorical dichotomous)		
	UK Percentage	Denmark Percentage
<i>Recruitment from disadvantaged groups (whether employers had recruited at least one person from the following groups)</i>		
Short-term unemployed	75.7	59.7
Long-term unemployed	61.0	46.3
Lone parents	73.5	52.3
Disabled people	50.4	33.7
Young people	90.7	66.4
Sample size: UK – 1003; Denmark – 500. Frequencies are reported for categorical variables, measures of central tendency and dispersion (mean and standard deviation) – for continuous variables.		
PES, public employment service; ALMPs, active labour market programmes; LMIs, labour market intermediaries.		

vacancy with the PES in the past 2 years was almost identical between the two countries (49.7 per cent of organisations in the UK and 47.5 per cent in Denmark). Employers were asked about their involvement in specific programmes aimed at assisting disadvantaged groups into work (such as the Work Programme in the UK and *Virksomhedspraktik* in Denmark). Overall, 72.8 per cent of employers in the UK and 78.4 per cent in Denmark had participated in at least one ALMP in the past 2 years (Table 1). However, participation did not translate into actual recruitment through ALMPs. Figure 3 shows the density function of the recruitment variable, demonstrating that a majority of employers (82.6 per cent in the UK and 67.1 per cent in Denmark) had an exact zero rate of recruitment from ALMPs as a share of the total number of vacancies placed in the past 2 years. The probability density function of employers' recruitment through ALMPs resembles a negative binomial distribution, but with visible spikes

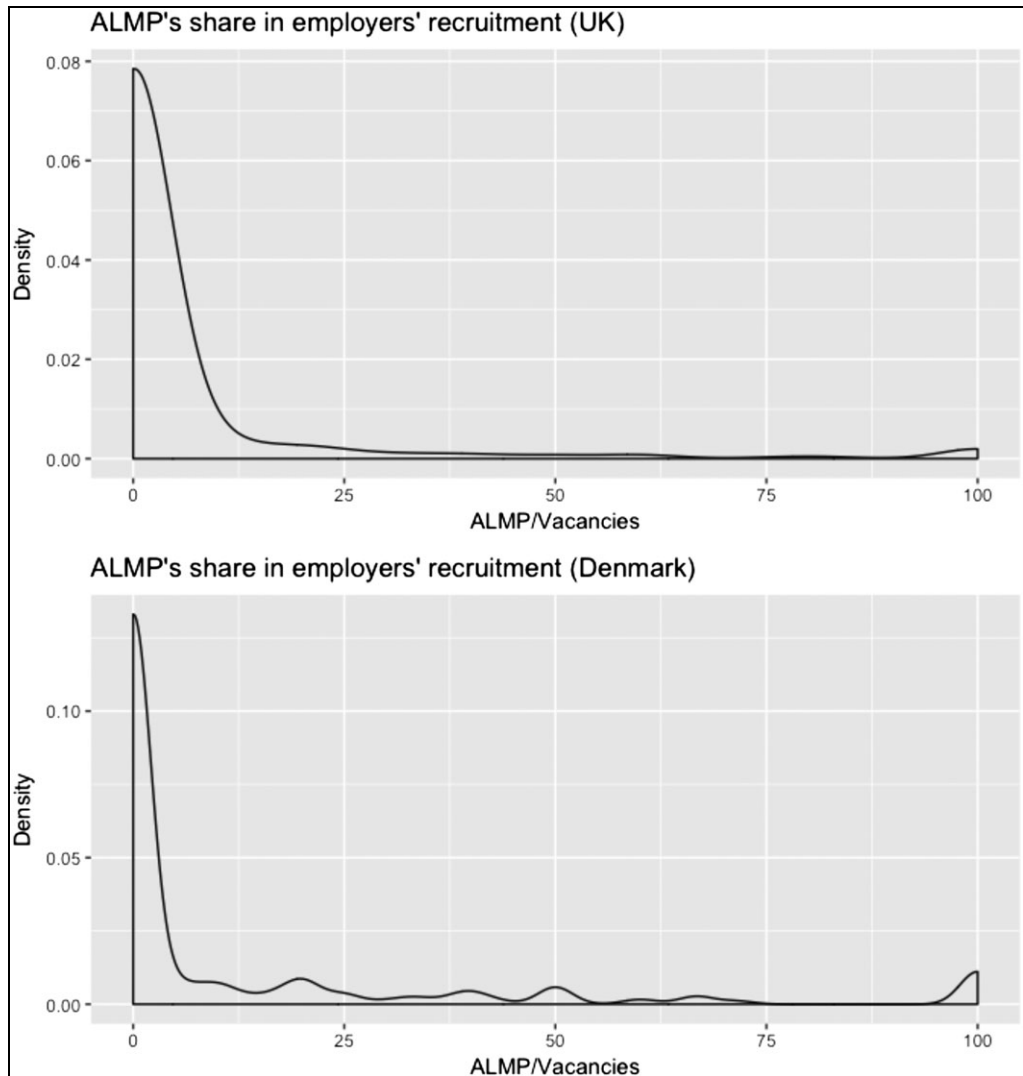
FIGURE 2 *Recruitment of employees from disadvantaged groups*



in Denmark compared with a nearly flat line in the UK. In Denmark, the function hikes towards the right tail of the distribution, signifying a sizeable proportion of employers that in their recruitment activities extensively relied on ALMP agencies. In summary, the descriptive statistics raise the question as to whether an exponential increase in recruitment through ALMPs increases the likelihood of employers hiring from disadvantaged groups. This proposition is reflected in the conceptual model (Figure 1) and was examined through regression analysis.

Hypotheses testing

The hypotheses for the study were tested by five logistic regressions performed on country subsamples in relation to the five disadvantaged groups. Table 2 contains detailed statistical outputs, including raw regression coefficients (logarithm of odds – *Logit* (π)), *z* values and significance levels. Marginal effects at the means are reported for statistically significant independent variables. Marginal effects for firm size indicate how the predicted probabilities of hiring from disadvantaged groups change amongst large organisations, compared with SMEs. In relation to employers' selection criteria and recruitment from ALMPs, marginal effects show an instantaneous rate of change that corresponds to a change in the probability of hiring from disadvantaged groups because of a unit increase in these continuous independent variables. Fit indices are reported for each step in the regression analysis. Firstly, predictors not related to

FIGURE 3 Employers' recruitment through ALMPs

ALMPs were added into the regression equation alongside control variables; thereafter, employers' recruitment through ALMPs and a moderation effect were added. The table is presented to make these steps clearly distinguishable.

Hypothesis 1 was supported only partially, in that employers' recruitment through ALMPs was positively associated with the likelihood of hiring the long term unemployed in the UK and Denmark ($\text{Logit}(\pi) = 0.373$ and 0.307 respectively at $p < 0.05$ and $p < 0.01$). In addition, recruitment from ALMPs in Denmark was positively associated with the likelihood of hiring lone parents and disabled people, with $\text{Logit}(\pi) = 0.210$ and 0.209 at $p < 0.05$. Although recruitment from ALMPs demonstrated statistically significant effects, judging from the fit

TABLE 2 Determinants of employers' propensity for recruiting disadvantaged groups

	Short-term unemployed				Long-term unemployed				Lone parents				Disabled people				Young people			
	UK		Denmark		UK		Denmark		UK		Denmark		UK		Denmark		UK		Denmark	
	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects	Estimate (Z value)	Marginal effects
Sector	-0.177 (-0.34)		-0.461 (-1.41)		0.141 (0.30)		-0.675* (-2.16)		0.449 (0.92)		-0.122 (-0.39)		-0.265 (-0.60)		0.198 (0.30)		-0.217 (-0.68)			
Collective	0.507 (0.14)		0.144 (0.58)		0.348 (0.92)		-0.241 (-0.97)		1.196* (2.15)		0.065 (0.26)		0.296 (0.86)		-0.645 (-1.45)		-0.087 (-0.39)			
agreements																				
Industry (Services)	0.078 (0.32)		0.248 (0.66)		0.188 (0.39)		0.240 (0.67)		0.126 (0.25)		0.089 (0.24)		1.212** (2.61)		1.296** (3.25)		-0.478 (-1.23)			
Decision-making	0.110 (1.05)		0.045 (0.31)		0.281 (0.91)		0.015 (0.11)		0.333 (0.82)		0.061 (0.43)		0.536 (1.78)		0.357 (0.66)		0.027 (0.19)			
(local managers)																				
Recruitment	0.634* (2.03)		0.244 (0.91)		0.502 (1.64)		-0.078 (-0.29)		0.886** (2.89)		0.664* (2.45)		0.867** (2.87)		-0.076 (-0.17)		0.276 (1.02)			
approach																				
(written or																				
formal policy)																				
Size (large)	2.434*** (3.29)	0.276	2.914** (2.83)	0.211	1.787*** (4.04)	0.382	2.261*** (3.51)	0.321	2.066** (2.77)	0.331	3.110** (3.01)	0.236	2.150*** (5.39)	0.491	1.585* (2.10)	0.164	2.050** (2.71)	0.084		
Selection criteria	-0.443** (-3.06)	-0.059	-0.175 (-1.23)		-0.537*** (-4.10)	-0.085	-0.148 (-1.07)		-0.196 (-1.38)		0.114 (0.81)		0.015 (0.13)		-0.225 (-1.07)		-0.444** (-2.92)	-0.023		
Nagelkerke R square	0.221		0.114		0.171		0.139		0.372		0.300		0.265		0.114		0.196			
AIC	358.87		428.92		430.60		432.37		304.02		378.97		476.66		250.21		406.54			
Recruitment from	0.186 (1.07)		0.135 (1.31)		0.373* (2.29)	0.045	0.307** (2.99)	0.068	0.141 (0.87)		0.210* (2.14)	0.049	-0.043 (-0.34)		0.469 (1.29)		-0.015 (-0.15)			
ALMPs																				
ALMPs X Selection	-0.243 (-1.17)		-0.048 (-0.36)		0.148 (1.36)		-0.087 (-0.66)		0.043 (0.39)		-0.010 (-0.09)		0.003 (0.03)		-0.007 (-0.02)		-0.013 (-0.10)			
criteria																				
Nagelkerke	0.231		0.118		0.203		0.172		0.388		0.316		0.268		0.137		0.197			
R square																				
AIC	358.78		431.63		423.66		427.43		302.52		376.65		477.18		249.23		410.36			

Only marginal effects for statistically significant hypothesised predictors are reported.

AIC, Akaike Information Criterion; ALMPs, active labour market programmes.

Significance levels:

*** $p < 0.001$.

** $p < 0.01$.

* $p < 0.05$.

indices and marginal effects alike, it was a far less important predictor of recruitment from disadvantaged groups than other independent variables. Hypothesis 2 was fully supported, as large enterprises in the UK and Denmark elevated the likelihood of hiring from all disadvantaged groups in question. *Logit* (π) values were statistically significant, as indicated in Table 2. According to the marginal effects, the likelihood of hiring from disadvantaged groups was substantially higher amongst large organisations compared with SMEs, with an increase in probability for large organisations within the range 16.4 per cent to 49.1 per cent in the UK and 8.4 per cent to 45.6 per cent in Denmark. We also found partial support for Hypothesis 3, in that selection criteria were negatively associated with the likelihood of hiring the short-term and long-term unemployed in the UK (*Logit* (π) = -0.443 and -0.537 at $\rho < 0.01$ and $\rho < 0.001$, respectively) and the likelihood of hiring young people in Denmark (*Logit* (π) = -0.444 at $\rho < 0.01$). There was no statistically significant relationship between selection criteria and the likelihood of hiring from other disadvantaged groups in both countries. Lastly, we found no support for Hypothesis 4 relating to ALMP agencies as LMIs because of the absence of a statistically significant interaction effect between recruitment from ALMPs and employers' selection criteria.

DISCUSSION AND CONCLUSIONS

In this article, we analysed data from comparative surveys of employers in the UK and Denmark to estimate whether ALMPs increased the likelihood of employers hiring from disadvantaged groups, compared with firm size and the importance employers attach to selection criteria. Drawing on the conceptual framework of ALMP agencies of Bonet *et al.* (2013) as information provider and matchmaker LMIs, we suggest possible explanations for our findings. In our study, we treat the effect of firm size on employers' likelihood of recruiting disadvantaged groups with some caution. Existing studies (Peck and Theodore, 2000) have rightly critiqued supply-sided ALMPs for their lack of attention to employers' demand. However, ALMP agencies may have brought vacancies in large firms to the attention of disadvantaged candidates and channelled candidates to employers who could accommodate large volumes of employees (Ingold and Stuart, 2015). This process seems likely to have increased disadvantaged candidates' probability of becoming employed. That around half of the employers in each country had placed vacancies with the online job boards operated by the PES suggests that, in contrast to the claim of Larsen and Vesan's (2012) that the PES will always fail, ALMP agencies may have had some success by operating predominantly as information providers. These LMIs may have capitalised on employers' demand for labour and possible higher turnover and captured a share of their recruitment of both disadvantaged and non-disadvantaged groups.

The negative effect of selection criteria on employers' likelihood of recruiting disadvantaged groups supports extant research (Noon, 2012), but their impact on the short-term unemployed (who tend to be considered job-ready) as well as the long-term unemployed in the UK and young people in Denmark suggests a more negative picture than existing studies (Atkinson *et al.*, 1996; Bonoli, 2014). This may reflect employers increasing their threshold hiring criteria to filter out candidates in the reasonably slack labour market context at the time of the survey. While ALMPs marginally increased the probability of hiring from disadvantaged groups – including increasing the likelihood of employers recruiting the long-term unemployed in the UK and lone parents in Denmark – they were not capable of counteracting the negative impact of selective hiring. Disabled people featured prominently in terms of significance levels only in Denmark, but in both countries, recruitment from this group was much lower than other

disadvantaged groups, suggesting that there are significant barriers to their employment (Burke *et al.*, 2013). Although the LMI literature suggests that ALMP agencies have the potential to increase employers' recruitment of disadvantaged groups, this is constrained if they act as basic 'information provider' LMIs. ALMP agencies' inability to act effectively as 'matchmaker' LMIs leads to a failure to overcome rigid intra-organisational barriers to such recruitment.

Tailoring of employability services provided by ALMP agencies to employers (and jobseekers) has been a stated policy objective of their contracting out in the UK to private and non-profit agencies (DWP, 2011). However, our comparative data show striking similarities for the differing institutional context of Denmark, where contracting out has been significantly reduced. This suggests that in neither country have ALMP agencies as LMIs assumed matchmaker functions for employers. For ALMP agencies to assume such a function requires much better engagement with employers beyond mere information provision that largely involves online job boards. There is potential for ALMP agencies as matchmakers to positively engage in two-way dialogue with HR practitioners, in order to modify discriminatory recruitment processes that our study (and others) suggests significantly affect the recruitment of disadvantaged candidates. Large employers may be more able to accommodate any associated costs and risks of hiring such groups (Hasluck, 2011); however, other employers may require more in-depth engagement from ALMP agencies to overcome these. Matchmaking is likely to involve ALMP agencies better preparing candidates for employers' recruitment processes. However, these LMIs must ensure that in the process they do not perpetuate employers' existing discriminatory behaviour (Bonet *et al.*, 2013: 381) that may undermine diversity (Coverdill and Finlay, 1998).

It is possible that the activities of ALMP agencies will only ever result in a re-shuffling of the jobs queue (Peck and Theodore, 2000), and from our data, it is unclear how far employers' recruitment of disadvantaged groups reflects this, or ALMP agencies' strategies of 'creaming' of the most job-ready and 'parking' of those further from the labour market (Carter and Whitworth, 2015). Additionally, although ALMPs in both countries aimed to incentivise sustained employment, we do not know the extent to which the ALMP agencies in this study were merely fulfilling employers' short-term labour requirements (Gore, 2005) rather than fostering sustained employment. Nevertheless, at the basic level of information provision, ALMP agencies may lead to employers recruiting some disadvantaged candidates when they would not otherwise have done so.

A key finding from our study concerns the inability of ALMPs to counteract employers' selective hiring, which is detrimental to the probability of recruiting from disadvantaged groups. However, the strategy of channelling large volumes of candidates to large employers may prove less effective in the future, particularly if improved economic conditions result in ALMP agencies having less 'job-ready' candidates on their books. As matchmaker LMIs, ALMP agencies need to better account for the heterogeneity of employers by tailoring their services to both employers and candidates. Extant research (Ingold and Stuart, 2014) has drawn attention to the specific recruitment-related activities of ALMP agencies in their attempts to engage employers. Although this study cannot make claims about the impact of these specific activities, it may provide a foundation on which to build further research, including about the role of firm size and turnover as under-explored criteria in the implementation of ALMPs. Although employers may potentially value the HR services and candidates provided by ALMP agencies, there currently exists a gulf that needs to be bridged between these agencies and HR practitioners. Our study aims to draw attention to this under-explored dimension of HR practice, which has the potential to contribute to the increased recruitment of marginalised labour market groups and to enhance workforce diversity.

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REFERENCES

- Akerlof, G.A. (1970). 'The market for "lemons": quality uncertainty and the market mechanism'. *The Quarterly Journal of Economics*, 84: 3, 488–500.
- Atkinson, J., Giles, L. and Meager, N. (1996). *Employers, Recruitment and the Unemployed*, Report 325, Brighton: Institute for Employment Studies.
- Autor, D. (2009). *Studies of Labour Market Intermediation*, Chicago, IL: University of Chicago Press.
- Barber, A.E. (1998). *Recruiting Employees: Individual and Organizational Perspectives*, Thousand Oaks, CA: Sage.
- Benner, C. (2003). 'Labour flexibility and regional development: the role of labour market intermediaries'. *Regional Studies*, 37: 6&7, 621–633.
- Blackburn, R. and Ram, M. (2006). 'Fix or fixation? The contributions and limitations of entrepreneurship and small firms to combating social exclusion'. *Entrepreneurship & Regional Development*, 18: 1, 73–89.
- Bonet, R., Cappelli, P. and Hamori, M. (2013). 'Labour market intermediaries and the new paradigm for human resources'. *The Academy of Management Annals*, 7: 1, 341–392.
- Bonoli, G. (2010). 'The political economy of active labour-market policy'. *Politics and Society*, 38: 4, 435–457.
- Bonoli, G. (2014). 'Employers' attitudes towards long-term unemployed people and the role of activation in Switzerland'. *International Journal of Social Welfare*, 23: 4, 421–430.
- Bonoli, G. and Hinrichs, K. (2010). Statistical discrimination and employers' recruitment practices for low-skilled workers. REC-WP 10/2010, Edinburgh: RECOWWE.
- Bonoli, G. and Leichti, F. (2014). 'Job market signalling, labour market disadvantage and activation'. *Paper presented at XII Annual ESPAnet Conference*, Oslo.
- Bredgaard, T. and Halkjær, J.L. (2016). 'Employers and the implementation of active labour market policies'. *Nordic Journal of Working Life Studies*, 6: 1, 47–59.
- Brooks, M.E., Guidroz, A.M. and Chakrabarti, M. (2009). 'Distinction bias in applicant reactions to using diversity information in selection'. *International Journal of Selection and Assessment*, 17: 4, 377–390.
- Burke, J., Bezyak, J., Fraser, R.T., Pete, J., Ditchman, N. and Chan, F. (2013). 'Employers' attitude towards hiring and retaining people with disabilities: a review of the literature'. *Australian Journal of Rehabilitation Counselling*, 19: 10, 21–28.
- Cappelli, P. (2012). *Why Good People Can't Get Jobs: The Skills Gap and What Companies Can Do About It*, Philadelphia, PA: Wharton Digital Press.
- Carroll, A.B. and Shabana, K.M. (2010). 'The business case for CSR: a review of concepts, research and practice'. *International Journal of Management Reviews*, 12: 1, 85–105.
- Carter, E. and Whitworth, A. (2015). 'Creaming and parking in quasi-marketised welfare-to-work schemes: designed out of or designed into the UK work programme?' *Journal of Social Policy*, 44: 2, 277–296.
- Chartered Institute of Personnel and Development (CIPD) (2012). *Labour Market Outlook, Autumn 2012*, London: CIPD.
- Connors, C. and Thomas, A. (2014). *Small Employer Recruitment Practices: Qualitative Research into How Small and Medium-sized Enterprises Select Candidates for Employment*, Research Report No. 855, London: Department for Work and Pensions.
- Coverdill, J.E. and Finlay, W. (1998). 'Fit and skill in employee selection: insights from a study of headhunters'. *Qualitative Sociology*, 21: 2, 105–127.
- Department for Work and Pensions (2011). *The Work Programme*, London: DWP.
- Forde, C. (2008). "'You know we are not an employment agency": manpower, government and the development of the temporary help industry in Britain'. *Enterprise & Society*, 9: 2, 337–365.

- Gore, T. (2005). 'Extending employability or solving employers' recruitment problems? Demand-led approaches as an instrument of labour market policy'. *Urban Studies*, 42: 2, 341–353.
- Granovetter, M. (1995). *Getting a Job* (2nd edn), Chicago, IL: University of Chicago Press.
- Hasluck, C. (2011). *Employers and the Recruitment of Unemployed People: An Evidence Review*, Wath-upon-Deane, South Yorkshire: UK Commission for Employment.
- Holzer, H.J. (1999). 'Will employers hire welfare recipients? Recent survey evidence from Michigan'. *Journal of Policy Analysis and Management*, 18: 3, 449–472.
- Ingold, J. and Stuart, M. (2014). *Employer Engagement in the Work Programme*. CERIC Policy Report No. 5, Leeds: Centre for Employment Relations, Innovation and Change.
- Ingold, J. and Stuart, M. (2015). 'The demand-side of active labour market policies: a regional study of employer engagement in the Work Programme'. *Journal of Social Policy*, 44: 3, 443–462.
- Ingold, J. and Valizade, D. (2015). *Employer Engagement in Active Labour Market Policies in the UK and Denmark: A Survey of Employers*. CERIC Policy Report No. 6. Leeds: Centre for Employment Relations, Innovation and Change.
- Jenkins, R. (1986). *Racism and Recruitment: Managers, Organisations and Equal Opportunity in the Labour Market*, Cambridge: Cambridge University Press.
- Jewson, N. and Mason, D. (1986). 'Modes of discrimination in the recruitment process: formalisation, fairness and efficiency'. *Sociology*, 20: 1, 43–63.
- Kristof-Brown, A., Zimmerman, R. and Johnson, E. (2005). 'Consequences of individuals' fit at work: a meta-analysis of person-job, person-organization, person-group, and person-supervisor fit'. *Personnel Psychology*, 58: 2, 281–342.
- Kuhn, P. and Skuterud, M. (2004). 'Internet job search and unemployment durations'. *American Economic Review*, 94: 1, 218–232.
- Larsen, F. (2013). 'Active labour market reform in Denmark: the role of governance in policy change', in E. Brodtkin and G. Marston (eds), *Work and the Welfare State: Street-Level Organisations and Workfare Politics*, Washington, DC: Georgetown University Press, pp. 103–123.
- Larsen, C.A. and Vesan, P. (2012). 'Why public employment services always fail: double-sided asymmetric information and the placement of low-skill work in six European countries'. *Public Administration*, 90: 2, 466–479.
- Lockyer, C.J. and Scholarios, D.M. (2004). 'Selecting hotel staff: why best practice doesn't always work'. *International Journal of Contemporary Hospitality Management*, 16: 2, 125–135.
- Loretto, W. and White, P. (2006). 'Employers' attitudes, practices and policies towards older workers'. *Human Resource Management Journal*, 16: 3, 313–330.
- Martin, C.J. (2004). 'Reinventing welfare regimes: employers and the implementation of active social policy'. *World Politics*, 57: 1, 39–69.
- McGurk, P. (2014) Employer engagement: a human resource perspective, Working Paper No. WEU7, London: WERU.
- Noon, M. (2012). 'Simply the best? The case for using threshold selection in hiring decisions'. *Human Resource Management Journal*, 22: 1, 76–88.
- OECD (2016). *Employment Outlook 2016*, Paris: OECD.
- Osterman, P. (2008). 'Improving job quality: policies aimed at the demand side of the low-wage labour market', in T.J. Bartik and S.N. Houseman (eds), *A Future of Good Jobs? America's Challenge in the Global Economy*, Kalamazoo, MI: Upjohn Institute.
- Parry, E. and Wilson, H. (2009). 'Factors influencing the adoption of online recruitment'. *Personnel Review*, 38: 6, 655–673.
- Peck, J. and Theodore, N. (2000). '"Work first": workfare and the regulation of contingent labour markets'. *Cambridge Journal of Economics*, 24: 1, 119–138.
- Penrose, E. (1959). *The Theory of the Growth of the Firm*, Oxford: Oxford University Press.
- Quinto Romani, A. and Larsen, C.A. (2010). 'Activation as a tool to bypass the ordinary recruitment process: active labour market policy, network and discrimination'. Working paper no. 2010-67. Aalborg: Centre for Comparative Welfare Studies.

- Ramsay, H. and Scholarios, D. (1999). 'Selective decisions: orthodox analyses of the hiring process'. *International Journal of Management Reviews*, 1: 1, 63–89.
- Rubery, J., Keizer, A. and Grimshaw, D. (2016). 'Flexibility bites back: the multiple and hidden costs of flexible employment policies'. *Human Resource Management Journal*, 26: 3, 235–251.
- Shury, J., Adams, L., Garnett, E., Fairburn-Beech, E. and Coburn, S. (2014). *DWP Employer Engagement and Experience Survey*, London: Department for Work and Pensions.
- Snape, E. and Redman, T. (2003). 'Too old or too young? The impact of perceived age discrimination'. *Human Resource Management Journal*, 13: 1, 78–89.
- Spence, M. (1973). 'Job market signaling'. *Quarterly Journal of Economics*, 87: 3, 355–374.
- Storey, D. (1994). *Understanding the Small Business Sector*, London: Routledge.
- Tomaskovic-Devy, D. and Skaggs, S. (1999). 'An establishment-level test of the statistical discrimination hypothesis'. *Work and Occupations*, 26: 4, 422–445.
- Urwin, P. and Buscha, F. (2012). *Back to Work: The Role of Small Businesses in Employment and Enterprise*, London: Federation of Small Businesses.
- van Berkel, R. and van der Aa, P. (2014). 'Innovating job activation by involving employers', *International Social Security Review*, 67: 2, 11–27.