# le cnam ceet

191

Avril 2017

# The Effects of Firm Size on Job Quality: A Comparative Study for Britain and France

La qualité de l'emploi en France et en Grande-Bretagne : quels effets de la taille de l'entreprise ?

Alex Bryson, Christine Erhel, Zinaïda Salibekyan

# Document de travail

Ceet - Centre d'études de l'emploi et du travail

« Le Descartes » 29, promenade Michel Simon 93166 Noisy-Le-Grand CEDEX Téléphone : (33) 01 45 92 68 00 Télécopie : (33) 01 49 31 02 44 www.cee-recherche.fr

# The Effects of Firm Size on Job Quality: A Comparative Study for Britain and France

La qualité de l'emploi en France et en Grande-Bretagne : quels effets de la taille de l'entreprise ?

> ALEX BRYSON a.bryson@ucl.ac.uk UCL, IZA and NIESR

CHRISTINE ERHEL

christine.erhel@lecnam.net Université Paris 1, Cnam, CEET,

ZINAÏDA SALIBEKYAN zinaida.salibekyan@cee-recherche.fr Cnam, Lirsa, CEET, Lest

# DOCUMENT DE TRAVAIL

N° 191

Avril 2017

Directrice de publication : Christine Erhel

ISSN 1629-7997 ISBN 978-2-11-139599-2

# The Effects of Firm Size on Job Quality: A Comparative Study for Britain and France

Alex Bryson, Christine Erhel, Zinaïda Salibekyan

#### Abstract

Using linked employer-employee data from two comparable surveys we examine the links between non-pecuniary job quality and workplace characteristics in Britain and France – countries with very different employment regimes. We find job quality is better in Britain than it is in France, despite its minimalist regulatory regime. The difference is apparent for all dimensions of job quality (skill development, training participation, job autonomy, job insecurity, work-life balance and relations between employers and employees), except skills' match to a job. Firm size is negatively associated with non-pecuniary job quality in both countries but in France the association is confined to only the largest firms. Internal Labour Markets (ILMs) are associated with higher job quality in France, but not in Britain.

*Keywords*: job quality, firm size, internal labour market, linked employer-employee data, Britain, France, international comparison.

JEL Codes: 131; J30; J81

#### LA QUALITÉ DE L'EMPLOI EN FRANCE ET EN GRANDE-BRETAGNE : QUELS EFFETS DE LA TAILLE DE L'ENTREPRISE ?

#### RÉSUMÉ

Sur la base de deux enquêtes couplées employeurs-employés comparables (*REPONSE* et *WERS*), ce document propose une analyse **des liens entre les caractéristiques des établissements et la qualité de l'emploi en France et en Grande-Bretagne**. Un premier résultat est que **la qualité de l'emploi perçue par les salariés apparaît plus élevée en Grande-Bretagne qu'en France**, malgré un régime d'emploi peu protecteur. Cette différence est observée pour toutes les dimensions de la qualité de l'emploi (développement des compétences, formation, autonomie, sécurité de l'emploi, équilibre vie privée-vie professionnelle, relations sociales), à l'exception de l'ajustement des compétences à l'emploi occupé. Deuxièmement, l'analyse montre que **la taille de l'entreprise diminue la qualité de l'emploi dans les deux pays, mais cet effet négatif n'existe en France que pour les très grandes entreprises.** Enfin, **l'existence d'un marché interne du travail** dans l'entreprise (*i.e.* des pratiques de stabilisation de la main-d'œuvre conduisant à des salaires et à une ancienneté moyenne plus élevés) est associée à une meilleure qualité de l'emploi en France, mais pas en Grande-Bretagne.

**Mots-clefs :** qualité de l'emploi, taille de l'entreprise, marché interne du travail, données couplées, France, Grande-Bretagne, comparaison internationale.

### SYNTHÈSE DES PRINCIPAUX RÉSULTATS

Selon les développements récents de la littérature économique, **la qualité de l'emploi** influence le bien-être des travailleurs, mais aussi leur productivité et la performance des entreprises. Elle varie entre les pays, mais aussi au sein même d'un pays, entre les groupes de travailleurs (selon l'âge, le genre, les niveaux d'éducation...), ou entre les établissements.

Ce document de travail s'intéresse plus particulièrement à deux facteurs qui sont susceptibles d'influencer la qualité de l'emploi à l'échelle de l'établissement : **la taille de l'entreprise** à laquelle l'établissement appartient et **l'existence de « marchés internes du travail »** caractérisés par une stabilité des collectifs de travail et des possibilités de formation et de progression en interne.

Les hypothèses testées sont les suivantes. Premièrement, selon les approches institutionnalistes, le régime d'emploi du pays influence la qualité de l'emploi. Dans cette perspective, on pourrait s'attendre à ce que la qualité de l'emploi soit meilleure en France (régime d'emploi dualiste assurant une forte protection des travailleurs du segment primaire) qu'en Grande-Bretagne dans le cadre d'un régime libéral de fonctionnement du marché du travail, même si des travaux empiriques antérieurs ne valident pas cette hypothèse. Deuxièmement, la taille de l'entreprise a des effets théoriquement ambigus sur la qualité de l'emploi, selon que l'on met en avant ses effets potentiellement favorables sur les salaires, la qualité des politiques de formation ou de gestion des ressources humaines, ou à l'inverse sur l'existence de systèmes de contrôle avec une forte centralisation. Les travaux empiriques sur la satisfaction au travail conduisent plutôt à soutenir cette seconde hypothèse d'un effet négatif de la taille de l'entreprise sur la satisfaction au travail et la qualité de l'emploi. Troisièmement, au-delà de la taille, les pratiques de gestion des ressources humaines peuvent également avoir une incidence sur la qualité de l'emploi, en particulier lorsqu'elles se traduisent par la mise en place de « marchés internes du travail » (au sens de la théorie de la segmentation), s'accompagnant de salaires plus élevés, de formation et d'une certaine stabilité de l'emploi. Les recherches existantes montrent que ces pratiques sont plus répandues dans les entreprises françaises.

L'article s'appuie sur les enquêtes *REPONSE* et *WERS* de 2011 afin de **mener à bien la comparaison franco-britannique et de tester les liens entre taille de l'entreprise, existence d'un marché interne et qualité de l'emploi perçue par les salariés. Ces enquêtes, menées auprès des établissements, donnent un certain nombre d'informations sur des dimensions comparables de la qualité de l'emploi (même si les questions posées diffèrent) : sécurité de l'emploi, intensité du travail, autonomie, participation à la formation, développement des compétences, relations employeur/employés, appariement des compétences, conciliation entre vie familiale et vie professionnelle. Un indice synthétique est construit à partir de ces huit dimensions pour résumer la qualité de l'emploi.** 

En termes descriptifs, les résultats obtenus montrent **une qualité de l'emploi globale supérieure en Grande-Bretagne**, avec des écarts sur certaines dimensions, telles que le sentiment de travailler sous pression du temps, plus répandu en France qu'en Grande-Bretagne, ou le sentiment d'autonomie dans le travail, plus élevé en Grande-Bretagne.

Des régressions permettent d'identifier l'effet de la taille de l'entreprise et de l'existence d'un marché interne (correspondant aux établissements ayant des niveaux de salaire et d'ancienneté supérieurs à la médiane pour un profil d'âge, de genre et de niveau d'éducation des salariés donné), mais également l'incidence de certaines caractéristiques individuelles ou d'établissement. Parmi les résultats montrant des différences entre les deux pays, on observe que **le niveau d'éducation augmente la qualité de l'emploi perçue en France** (conformément à l'hypothèse d'un marché du travail dual, en relation avec le niveau de diplôme), tandis qu'il la réduit en Grande-Bretagne (ce qui pourrait renvoyer à des problèmes d'appariement). Le travail à temps partiel (30 à 35 heures) est associé à une moindre qualité de l'emploi en France, tandis qu'en Grande-Bretagne c'est le cas des durées longues de travail (plus de 41 heures).

Les analyses confirment que **la taille de l'entreprise (au-dessus de 5 000 employés) réduit la qualité de l'emploi dans les deux pays.** De plus, dans le cas britannique, la qualité de l'emploi est également plus faible que dans les petites pour les entreprises de 500 salariés et plus. Cette différence pourrait renvoyer à l'existence de seuils de taille imposant aux entreprises françaises d'assurer une représentation des salariés au-dessus de 50 salariés, qui n'existent pas en Grande-Bretagne.

L'existence d'un marché interne est associée positivement à la qualité de l'emploi dans les deux pays, mais l'effet n'est significatif que dans le cas français, avec, de plus, une interaction positive avec la taille (supérieure à 10 000 salariés) pour ce pays seulement. Ceci renvoie à l'importance plus grande des logiques de marché interne dans les entreprises françaises par rapport aux entreprises britanniques.

Les effets sont également analysés suivant les différentes dimensions constitutives de la qualité de l'emploi : la plupart des résultats confirment les conclusions obtenues avec l'indice synthétique de qualité de l'emploi pour la taille de l'entreprise et l'existence d'un marché interne. Le sentiment de sécurité de l'emploi ou encore la participation à la formation font exception et augmentent avec la taille de l'entreprise en France.

Ainsi, cette analyse comparative sur données d'établissement confirme que la qualité de l'emploi est influencée par les institutions et régimes d'emploi nationaux, mais également par les caractéristiques des entreprises et leurs pratiques en matière de gestion des ressources humaines.

### INTRODUCTION

Job quality affects worker wellbeing (Karasek, 1979; Bryson et al., 2016), worker productivity (Oswald et al., 2015) and thus firm performance (Bryson et al., 2015). It is multi-faceted but its main features are well-known. It varies markedly across countries, partly reflecting differences in national institutional regimes (Gallie, 2007; Holman, 2013; Green et al., 2013; Muñoz de Bustillo et al., 2011). However, there is also substantial within-country variation in job quality across employees and across workplaces. The latter reflects both structural features of workplaces, such as industry affiliation, and the choices employers make regarding investments in job quality, which in turn reflect perceptions of the costs and benefits of such investments. Osterman (2013), for example, has emphasised the importance of accounting for employer decisions over working conditions when seeking to understand variance in job quality.

The article contributes to the literature by focusing on two features of workplaces that are likely to influence job quality: the size of a firm and the existence of internal labour markets (ILMs), characterized by ongoing skill development, opportunities for career progression and higher returns to seniority. This is done in a comparative context to investigate how these workplace features relate to job quality across two very different institutional contexts. The article focuses on Britain and France because they represent very different types of employment regime and because they provide data that are uniquely suited to understanding the associations between structural features of workplaces, workplaces. Data issues limit our ability to compare identical job quality items across Britain and France, but the indicators are sufficiently comparable to provide some indications regarding levels of job quality in the two countries.

Three hypotheses are tested in the current study. First, job quality should be better, on average, in more highly regulated economies such as France, compared to liberal marketoriented economies like Britain. The second proposition is that job quality is negatively correlated with firm size in both countries. The third hypothesis argues that some specific features of the French regime will contribute to better job quality. These features are the presence in French workplaces of specific human resources policies favoring internal mobility through seniority premiums or well developed further training (usually characterized as "internal labour markets" -ILMs), which are often embedded in larger firms, and the existence of compulsory worker representation over a certain firm size. Contrary to expectations, the results show that job quality is better in Britain than it is in France. However, as anticipated, firm size is negatively associated with non-pecuniary job quality in both countries. In both countries job quality is significantly lower in the largest firms (those with 5,000 or more employees) than it is in the smallest firms with fewer than 50 employees). However, whereas in France there is no significant difference in job quality between small and medium sized (500-4,999 employee) firms, in Britain job quality is significantly lower in the medium-sized compared with the small firms. It is possible that in France the main legal threshold (at 50 employees) (Trésor-Eco, 2016), above which firms are required to respond positively to worker demands for union delegates and work councils, helps mitigate the adverse impact of firm size, at least for medium-sized firms. The results also show that being in a firm with an ILM is associated with better non-pecuniary job quality in France but not in Britain.

The article is structured as follows. Section 1 reviews the literature, focusing on the relationship between job quality, firm size and ILMs and outlines our hypotheses. Section 2 describes the linked employer-employee data for the two countries and the empirical methodology. Section 3 presents the results. Section 4 concludes, reflecting on the implications of the analyses while, at the same time, drawing attention to some limitations.

## **1. LITERATURE AND HYPOTHESES**

Job quality should be linked to the sort of employment regime workers face (Gallie, 2007; Davoine et al., 2008). For example, the Varieties of Capitalism (VoC) literature emphasizes the importance of production regimes (Hall and Soskice, 2001). Coordinated Market Economies (CME) like France are characterized by long-term corporate investment, "Social Dialogue" and cooperative employment relations, and substantial initial vocational training, all of which are conducive to higher levels of job quality. Britain, on the other hand, as a prototypical Liberal Market Economy (LME), is characterized by a financial system imposing short-term horizons on firms and high risk taking, which is allied to a deregulated labour market and fragmented, uncoordinated employment relations, and an emphasis on general over vocational education, all of which should be conducive to lower job quality.

According to Gallie (2007), job quality also depends on the way employment regimes build power resources for labour and capital. He considers three ideal-types: inclusive, dualist and market regimes. France is a dualist employment regime, with a well-protected core of workers, surrounded by a precarious periphery. Britain exemplifies a market based employment regime, with very limited regulation and few opportunities for workers to build the power resources which might be used to generate high quality jobs.

Whether one thinks in terms of production or employment regimes it seems likely that average job quality should be lower in Britain than in France. This is the first hypothesis that the article tests.

The expectation is also that job quality should vary with firm size in both countries. Due to their product market dominance, and thus the rents that accrue to them, larger firms may offer their workers higher job quality than might be offered in similar, smaller firms. If so, this may be a form of rent-sharing akin to the well-known wage premium linked to firm size (Oi and Idson, 1999). Larger firms also require formal policies and procedures to manage larger groups of employees efficiently whereas, in smaller firms, less formal systems may suffice. As such Human Resources departments may devote time and energy to human resource management (HRM) systems which are often equated with job quality, such as the formation of teams, payment of incentive pay, and the conscious design of more attractive jobs offering autonomy and variety.

However, there are also strong theoretical reasons to suspect that job quality deteriorates as firm size increases. Bigger firms are able to use their centralized HR resources to create systems of monitoring and supervision which may be inimical to job quality, and may choose to divide up responsibilities and tasks across workers which, in smaller firms, may be retained within the same job, thus offering task variety. Taylorist methods of scientific production were pioneered in large workplaces, such as car plants, and are notorious for deskilling workers in pursuit of profit and managerial control, thus limiting job autonomy (Edwards, 1979).

Although the theoretical literature regarding firm size and job quality may be ambiguous, the empirical literature on employee perceptions of job quality is unequivocal: employees tend to

express greater satisfaction with their jobs in smaller firms (Forth et al., 2006; Clark and Oswald, 1996). Job satisfaction scholars argue that poor management-employee relationships in large firms are one source of such job dissatisfaction (Tansel and Gazioglu, 2013). Forth et al (2006) find that employee job quality in Britain is higher in small firms than in large firms: small firms make less use of shifts, zero hours and annual hours contracts and small firm employees are more likely to say they have high degrees of control and influence in their work when compared with employees in larger firms. The second hypothesis, therefore, is that, in spite of theoretical ambiguities regarding firm size and job quality, firm size will be negatively associated with job quality in both Britain and France.

On balance, one may suspect that job quality will be lower in larger firms for the reasons given above. However, the current study argues that features of the French employment regime may offset some of the firm size effects on job quality. This is for two reasons. First, the segmentation literature highlights the existence of ILMs within larger firms that should contribute positively to job quality as they imply better career prospects and more developed training to develop and retain core workers (Doeriger and Piore, 1971). Segmentation theory suggests the co-existence within countries of a primary sector containing better paying, more stable jobs and a secondary sector, consisting of employees with poor pay, low job security and otherwise unattractive jobs (Piore, 1978). Workplaces with an ILM-type orientation (belonging to the primary sector) may offer better job quality to their employees than workplaces that do not have an ILM orientation. If ILMs are themselves positively correlated with firm size, they may limit any adverse impact firm size has on job quality. It is therefore important to account for ILM practices when investigating links between firm size and job quality.

Recent empirical research indicates that ILMs are more embedded in French workplaces than they are in British workplaces (Forth et al., 2016) and may therefore play a bigger role in determining job quality in workplaces in France. The literature characterizes France as a country with strong ILMs as core workers benefit from employment protection, and have better opportunities for career progression within firms, and high returns to seniority (Maurice et al., 1986; Eyraud et al., 1990). On the other hand, peripheral workers in the secondary sector tend to be excluded from firms' investments in training (Marsden, 1990). In contrast to France, Britain used to be considered a country of occupational labour markets (OLM), in which employers and unions used to organize external mobility inside occupations (Eyraud et al., 1990), but it has evolved through time and today considerable responsibility is placed on individual employees.

The second reason why firm size effects may be mitigated in the French case is that firm size thresholds also feature in French law, offering employees some rights to worker representation (Fulton, 2015) and therefore some semblance of protection and job security, which might be lacking in smaller firms (Holman, 2013). Such regulations are likely to reinforce unions' ability to mobilize core employees of large firms (Culpepper, 1999; Hyman, 2001).<sup>1</sup> In France, by contrast, firms with more than 50 employees have to enable workers to appoint union delegates. It is also necessary for them to accede to employee requests for staff delegates where they have more than 10 employees, as well as a work council where they have more than 50 employees. These regulations suggest that employee

<sup>&</sup>lt;sup>1</sup> To keep their institutional power resources, unions, *de facto*, defend the two-tier labour market reforms as their preferences are dependent on the institutional context (Davidsson and Emmenegger, 2013). When involved in negotiations relating to job security legislation, for instance, unions' main aim has traditionally been to maintain the protection given to workers on permanent contracts, sometimes to the disadvantage of those on temporary employment contracts.

bargaining power is stronger in medium-sized and larger firms in France than in small firms. This is in line with the expectations of the employment regime framework that within dualist regimes the historical involvement of organized labour is much greater in larger firms, which increases its chances of influencing working conditions and employment regulation (Holman, 2013), and therefore job quality.

Contrary to France, in market employment regimes like the UK organized labour has little involvement in decision-making within firms and its influence is uniform across the economy (Holman, 2013). UK unions' objectives generally do not include job protection issues (Davidsson and Emmenegger, 2013). Besides, the standard labour contract is characterized by a high level of flexibility. As a result, employers have greater flexibility to hire and fire workers in Britain than in many other European countries, and unions have less power to affect employment conditions (Green, 2013). It seems unlikely, therefore, that union bargaining power would result in firm size differences in job quality in Britain.

Firm size also matters for training policies in France where firm-funded training aims to provide better opportunities for career development (Paul, 1992). France differs from Britain in placing legal obligations on all firms, but at a higher level for larger firms (more than 10 employees) than for smaller ones. Firms with over 10 employees have to spend at least 1% of their wage bill on training (it was 1.6% before 2014), and small firms 0.55%. The comparative data used in the current study do not contain workplaces with 10 employees or less, so it is not possible to test what effect, if any, this employment threshold has on training-related job quality. Nevertheless, the legal obligation to provide training in France suggests training incidence will be greater in France than Britain, where no such training requirement exists. Vocational training is also a topic for social bargaining at various levels in France (firm, branch, regions and national level).

British governments support training policies, but very few collective agreements exist on continuing training, and firms have to invest voluntarily in their workers with little regulation or subsidy (Greenhalgh, 1999; Ok and Tergeist, 2003). Although employees in larger organisations with 250 or more employees have a right to time off for training after 26 weeks' employment it is a right to unpaid time off.<sup>2</sup>

# 2. DATA AND METHODS

The data come from the *British Workplace Employment Relations Survey* (*WERS* 2011) and from the French *Enquête Relations Professionnelles et Négociations d'Entreprise* (*REPONSE* 2011).<sup>3</sup> The *WERS* and *REPONSE* linked employer-employee surveys are among the most authoritative sources of information on employment relations. Other surveys may offer broader coverage of the two economies or a larger set of harmonized data items, but the *WERS* and *REPONSE* surveys offer the unique advantage that the samples of workplaces and employees are fully linkable in each country. In order to have harmonized datasets workplaces with eleven or more employees were selected with at least 15 months of tenure and include private industries except agriculture. The surveys are based on stratified random samples so that when survey weights are applied analyses are representative for this population in both countries. The analysis uses equivalently defined samples of

<sup>&</sup>lt;sup>2</sup> <u>https://www.gov.uk/training-study-work-your-rights</u>

<sup>&</sup>lt;sup>3</sup> For details of both surveys see Amossé et al. (2016) and <u>http://www.niesr.ac.uk/projects/employment-relations-britain-and-france</u>.

3,947 workplaces and 11,244 employees from *REPONSE* in 2011 and 1,602 workplaces and 11,581 employees from *WERS* 2011.

Using the *REPONSE* and *WERS* surveys, eight dimensions of non-pecuniary job quality can be investigated, although caution should be exercised with regard to comparisons because the wording of the questions is different in the two surveys. Differences in wording partly reflect differences in the institutional context where employees are employed (Coutrot, 1998). Thus, this study takes great care when comparing job quality levels in the two countries.

Responses to questions relating to job quality were coded as 0/1 variables where a code "1" indicates the job has a particular attribute while a "0" indicates it is absent. In a number of cases ordinal responses are elicited from the respondent, and the variables have been collapsed into 0 - 1 dummy variables. Accordingly, eight different aspects of job quality are captured in both surveys as per Table 1 (full details of the survey questions and weighted distributions are presented in Appendix Tables A1-A4. Bivariate correlations between job quality items are presented in Appendix Tables A5-A6). A single job quality index was also constructed by summing the dummy variables, having reverse-coded those dummies capturing poor job quality. The final index runs from zero to eight. Factor analysis was performed to check if there was a single index that could be called job quality. In both countries factor analyses identified a single factor with an eigen value above 1 (2.23 in France and 1.92 in Britain). In France this factor accounts for 96% of the variance in the eight items and in Britain it accounts for 89% of the variance.

	WERS	REPONSE
Job insecurity	16 (0.37)	16 (0.37)
Work intensity	41 (0.49)	72 (0.45)
Job autonomy	85 (0.35)	67 (0.47)
Training participation	52 (0.50)	46 (0.50)
Skill development	56 (0.50)	43 (0.50)
Employee-employer relations	55 (0.50)	51 (0.50)
Skills matched to job	44 (0.50)	63 (0.48)
Adverse effects of work on one's private life	29 (0.45)	36 (0.48)
Job quality additive index <sup>4</sup> $(0,8)$	5,02 (1.76)	4,25 (1.96)
Ν	11,581	11,244
Country	Britain	France

#### Table 1 Employee Job Quality in France in 2011

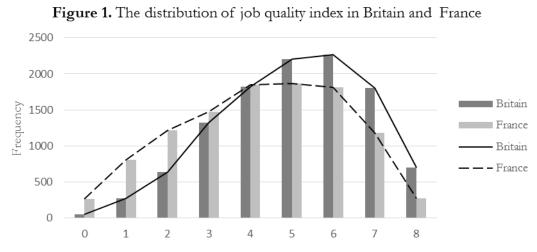
*Notes:* Table is weighted using employee survey weights. Job quality is based on 8-point item scale. The scales for job quality range from 0(low) to +8(high). Standard deviation in parentheses.

*Base:* All employees with at least one year's tenure, in private workplaces with 11 or more employees, and no missing data on job quality.

Table 1 shows the percentage of employees in each survey scoring '1' on each of the job quality items. Relatively few employees in either country perceived their jobs as insecure, even though the surveys took place not long after the Great Recession. Perceptions of understanding between management and employees were also similar across the two

<sup>&</sup>lt;sup>4</sup> The mean value of job quality index sums the scores for all eight items having reverse-coded those dummy variables identifying poor job quality.

countries, with roughly half giving management positive scores. However, in a number of other respects perceptions of job quality across countries were quite different. Nearly threequarters of private sector employees in France (72%) said they were working under time pressure, compared to only two-fifths (41%) of British employees. British employees were more likely to say they were free to decide how to work (85% against 67% in France). Taking all eight items together, the job quality index is higher in Britain than it is in France, running counter to our proposition in our first hypothesis. Of course, this is simply a comparison in mean scores which does not take account of compositional differences in the workforce or the nature of workplaces. Figure 1 shows the distribution of job quality on the index score in the *REPONSE* and *WERS* surveys. The density plot appears to be more skewed to the right in the *WERS* rather than in the *REPONSE* survey.



*Notes:* Figure is weighted. Job quality is based on 8-point item scale. The scales for job quality range from 0(low) to +8(high).

*Base:* All employees with at least one year's tenure, in private workplaces with 11 or more employees, and no missing data on job quality

Appendix Table A7 presents the distribution of employees across the firm size distribution in each country.<sup>5</sup> Employees in France are more concentrated in small firms: 24% are employed in workplaces belonging to firms with between 11 and 49 employees compared with 15% in Britain. British employees are more concentrated in the largest firms: 31% are in workplaces which belong to firms with more than 5,000 employees, compared to 16% in France.

The ILM indicator used in the current study is the one used by Forth et al. (2016) using the same data as the present article does. Workplaces with a strong ILM orientation are those which, for a given gender, age, and education profile within the workforce, sit at or above the median in both the distribution of workplace fixed effects for employee job tenure and the distribution of workplace fixed effects on wages. Appendix Table A8 shows that 13% of employees in Britain are in workplaces with an 'ILM' orientation whereas in France this is the case for 33% of employees, confirming that ILMs are more prevalent in France.

Multivariate models were estimated on the additive job quality indicator having transformed it into a standardized z-score with a mean of zero and standard deviation of 1, which makes it

<sup>&</sup>lt;sup>5</sup> The data contain both firm size and workplace size, which are not used interchangeably. They are identical for single-workplace firms.

easier to interpret the quantitative association between job quality and various individual and workplace characteristics.

Ordinary Least Squares models were estimated to capture the variance in job quality across employees in workplaces with different characteristics, based on the following equation.

$$Y_{ij} = \alpha + \beta X_{ij} + \gamma Z_j + \lambda ILM_j + \mu F_j + \sigma D_{ij} + \varepsilon_{ij}$$
(1)

Where  $Y_{ij}$  is the dependent variable job quality of employee *i* in workplace *j*,

 $X_{ij}$  corresponds to the vector of seven demographic and job characteristics namely gender, age (three categories), education (seven categories), union membership, tenure (four categories), type of contract (three categories) and working hours (five categories).

 $Z_j$  corresponds to the vector of four workplace and firm characteristics, namely single-digit industry (twelve categories), family ownership (25% threshold, three categories), foreign ownership (two categories), location of the workplace (two categories).

ILM is a dummy variable indicating the existence of ILM in the firm j, and F represents firm size (four categories).

 $D_{ij}$  is a dummy variable denoting whether individual *i* in workplace *j* is in the *REPONSE* or WERS survey, and  $\sigma$  is the coefficient for that country dummy.

The empirical analysis includes three steps. First equation 1 includes a country dummy to identify the role of the country on non-pecuniary job quality, thus testing hypothesis 1. In a second step estimations are run separately for each country to test the relationships between individual and firm characteristics (focusing on firm size and ILM) and job quality, and therefore testing hypotheses 2 and 3. Finally in a third step the same equation is run with eight different dependent variables ( $Q_{ij}$  which are (0,1) dummy dependent variables) corresponding to job quality sub-dimensions.

## 3. RESULTS

Table 2 reports pooled regressions both with and without control variables. Although in terms of production or employment regimes the expectation was that job quality was lower in Britain than in France, the findings show the opposite: average job quality is higher in Britain than in France. Thus the first hypothesis is rejected. These findings are in line with the descriptive statistics presented above. Despite the first hypothesis there is, in fact, other empirical support for this finding Europe (Davoine et al., 2008; Green et al., 2013). It is notable that the differential rises when controls are introduced, from -0.27 to -0.39, suggesting demographic and workplace traits are more conducive to higher job quality in France than they are in Britain. The -0.39 coefficient indicates that French employees experience job quality that is about two-fifths of a standard deviation lower than observationally similar employees in Britain<sup>6</sup>.

 $<sup>^{6}</sup>$  The raw estimate of the country dummy variable in a reduced sample size has also been run, and the coefficient is -0.28. This confirms that the shift in the coefficient is due to the additional control variables rather than the change in sample size that occurs when we introduce them.

	Mod	Model 1		del 2
Constant	0.11***	(0.03)	0.18***	(0.06)
REPONSE (Ref.: WERS)	-0.27***	(0.03)	-0.39***	(0.03)
Male (Ref.: Female)			-0.01	(0.03)
Age: 16-29 (Ref. 30-49)			0.05*	(0.03)
50+			0.06	(0.05)
Education: Level 2 (Ref.: Level 0/1)			0.01	(0.05)
Level 3			0.02	(0.04)
Level 5B			0.16***	(0.04)
Level 5A short/med			0.02	(0.04)
Level 5A Long/6			0.24***	(0.05)
Union member: yes ( <i>Ref.: no</i> )			-0.25***	(0.04)
<b>Tenure</b> : less than 5 ( <i>Ref.: 10</i> +)			-0.03	(0.03)
5 to 10 years			-0.01	(0.03)
Hours: 0-29 (Ref.: 36-40)			0.002	(0.03)
30-35			-0.09***	(0.03)
41-49			-0.10***	(0.03)
50+			-0.17***	(0.04)
Contract: temporary (Ref.: permanent)			-0.11	(0.13)
Fixed			-0.04	(0.06)
<b>Firm size</b> : 50-499 ( <i>Ref.: less than 50</i> )			-0.05	(0.03)
500-4,999			-0.08**	(0.04)
5,000 and more			-0.12***	(0.04)
ILM workplace: yes (Ref.: no)			0.19***	(0.03)
Industry: Energy (Ref. : Manufacturing)			0.44***	(0.11)
Construction			0.22***	(0.05)
Wholesale and retail			0.07	(0.04)
Hotel and restaurants			0.04	(0.07)
Transport and communication			-0.002	(0.06)
Financial services			0.17**	(0.07)
Other business			0.14***	(0.04)
Education			0.07	(0.08)
Health			0.30***	(0.05)
Other community services			0.12*	(0.07)
Family ownership: 25% of equity capital			-0.10***	(0.03)
Foreign ownership			-0.05	(0.04)
Capital city: yes ( <i>Ref. no</i> )			0.04	(0.04)
R-squared	0.02		0.07	
Observations	18,793		15,563	
Number of workplaces	4,427		3,897	

#### Table 2. Job Quality (in standardized z-score) in France and in Britain

*Notes:* Weighted pooled OLS regressions. Dummies for missing observations are not presented. Standard errors in parentheses. The job quality index is presented in Section 3. Model 1 presents raw differences and Model 2 contains control variables. \*\*\* p<0.01; \*\* p<0.05; p<0.1.

*Base:* All employees in the *REPONSE* (2011) and *WERS* (2011) surveys with at least one year's tenure, in private workplaces with 11 or more employees, with no missing data on job quality

	Job demands	Insecurity	Skill development	Skills match to a job	Training participation	Job autonomy	Adverse effects of work on one's private life	Employee- employer relations
Constant	0.33***	0.15***	0.49***	0.57***	0.28***	0.86***	0.14***	0.55***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)
REPONSE	0.35***	0.01	-0.15***	0.18***	-0.05***	-0.21***	0.13***	-0.07***
(Ref.: WERS)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.014)
R2	0.14	0.02	0.07	0.06	0.09	0.10	0.08	0.03
N obs	18,512	16,249	18,538	18,597	18,483	18,578	18,625	18,514
N wkplaces	4,169	3,942	4,167	4,167	4,154	4,166	4,168	4,163

 Table 3. Subcomponents of job quality in the pooled data

*Notes*: Weighted pooled OLS regressions. Models control for individual and workplace job characteristics as discussed in the text. Standard errors in parentheses. Statistical significance is denoted by \*\*\* p<0.01; \*\* p<0.05; p<0.1.

*Base*: All employees in the *REPONSE* (2011) and *WERS* (2011) surveys with at least one year's tenure in private workplaces with 11 or more employees, with no missing data on job quality.

The differences between France and Britain on subcomponents of job quality have also been examined, although the direct comparison between job quality items has to be interpreted carefully given differences in the questionnaire items.

Table 3 shows that skill development, training participation, job autonomy, work-life balance and relations between employers and employees are perceived as poorer by employees in France than they are in Britain. Job demands are also higher in France than in Britain. The match between the skills possessed by the worker and those required in the job is the only dimension which offers better job quality to French employees. There are no significant differences between France and Britain in relation to job insecurity.

Table 4 provides estimations testing hypotheses 2 and 3. Before turning to the main results on firm size and ILMs, other results will be briefly discussed that are consistent with our portrayals of France and Britain as different types of employment regime. For example, in France, non-pecuniary job quality is positively correlated with higher levels of education. The finding is consistent with the idea that France has a dualist employment regime in which the more highly educated are able to enter better jobs. In Britain, on the other hand, more highly educated employees report lower job quality, perhaps due to skills mismatch where the expectations of better educated workers do not match the available jobs in the labour market.

In France workplace tenure of less than five years is associated with lower non-pecuniary job quality than being in a workplace ten years or more. This is in line with the expectation that in dualist regimes employees with higher tenure have higher job quality than employees with lower levels of tenure. This does not appear to be the case in Britain, in line with expectations regarding a market-oriented employment regime where the "insider" status conferred by high tenure is less relevant.

Atypical working hours are associated with lower job quality: in France it is part-time workers (30 to 35 hours a week) who suffer lower job quality, while in Britain it is those working long hours (over 41 hours). No association is found to be with temporary or fixed contracts in France, but this may be explained by the fact that short term contracts are not taken into account as the *REPONSE* survey does not include workers who have been employed for less than 15 months. In Britain those on temporary contracts experience lower job quality.

Turning to the association between non-pecuniary job quality and workplace features, the focus is on firm size and the presence of ILM. Concerning firm size, the findings show that working in a large firm (5,000 employees and over) decreases job quality, consistent with hypothesis two. However, the negative association between firm size and job quality is confined to these very large firms in France. In Britain, on the other hand, the negative association is significant and apparent for firms as small as 500 employees. The absence of a firm size effect for medium-sized firms in France may be associated with the worker representation rights accorded workers in firms with at least 50 employees.

ILMs are positively associated with job quality in both countries, but the association is only statistically significant in the case of France. This confirms our third hypothesis that ILMs play an important role in the French labour market and favour job quality. Furthermore, an interaction between ILM and firm size has also been introduced in the model.

	France ( <i>REPONSE</i> )		Britain	(WERS)
Constant	-0.39***	(0.08)	0.43***	(0.09)
Gender: male (Ref. female)	0.05	(0.03)	-0.04	(0.04)
Age 16-29 (Ref: 31-49)	0.04	(0.04)	0.06	(0.04)
50+	0.03	(0.12)	0.01	(0.05)
Education: Level 2 (Ref: Level 0/1)	0.12	(0.09)	-0.20***	(0.06)
Level 3	0.18***	(0.05)	-0.19***	(0.05)
Level5B	0.39***	(0.06)	-0.14**	(0.07)
Level 5A short	0.31***	(0.07)	-0.23***	(0.05)
Level 5A long	0.50***	(0.07)	-0.10	0.06
Tenure: Less than 5 years (Ref: more than 10 years)	-0.09*	(0.05)	0.01	(0.05)
5 to 10 years	0.004	(0.04)	-0.01	(0.05)
Hours: 0-29 hours per week (Ref: 36-40 hours per week)	-0.08	(0.06)	0.03	(0.04)
30-35	-0.09**	(0.04)	-0.02	(0.05)
41-49	-0.01	(0.04)	-0.15***	(0.04)
50+	-0.08	(0.05)	-0.23***	(0.06)
Contract: Temporary (Ref: permanent)	0.16	(0.23)	-0.24*	(0.14)
Fixed	-0.001	(0.08)	0.03	(0.08)
Union member: yes	-0.25***	(0.05)	-0.21***	(0.05)
<b>Firm size</b> : 50-499 ( <i>Ref.: less than 50</i> )	-0.06	(0.04)	-0.04	(0.05)
500-4999	-0.01	(0.05)	-0.15**	(0.06)
5000 and more	-0.09*	(0.06)	-0.15***	(0.06)
ILM workplace: yes (Ref. no)	0.22***	(0.04)	0.07	(0.06)
Industry: Energy (Ref: manufacturing)	0.47***	(0.17)	0.39***	(0.11)
Construction	0.25***	(0.07)	0.22***	(0.09)
Wholesale and retail	0.07	(0.05)	0.03	(0.08)
Hotels and restaurants	-0.01	(0.14)	0.04	(0.09)
Transport and communication	0.02	(0.06)	-0.06	(0.10)
Financial services	0.12	(0.09)	0.18	(0.11)
Other business	0.12**	(0.05)	0.16**	(0.07)
Education	-0.08	(0.24)	0.15*	(0.09)
Health	0.28***	(0.06)	0.32***	(0.08)
Other community services	0.21**	(0.09)	0.07	(0.09)
Family ownership: 25% of equity capital	-0.16***	(0.04)	-0.05	(0.05)
Foreign ownership: yes (Ref. no)	-0.13**	(0.06)	0.02	(0.06)
Capital city: yes (Ref.: no)	-0.02	(0.04)	0.07	(0.06)
R-squared	0.0		0.05	
Observations	7,0		8,5	
Number of workplaces	2,9	35	96	52

#### Table 4. Job Quality (in standardized z-score) and Firm size in France and Britain

*Notes*: Weighted OLS regressions. Dummies for missing observations are not presented. Standard errors in parentheses. The index of job quality is presented in the section 3. \*\*\* p<0.01; \*\* p<0.05; p<0.1.

*Base:* All employees in the *REPONSE* (2011) and *WERS* (2011) surveys with at least one year's tenure, in private workplaces with 11 or more employees, with no missing data on job quality

This interaction appears non significant in both countries. However, in a different specification based on other firm size classes<sup>7</sup>, the interaction between ILM and the largest firm size (10,000 plus employees) is positive and statistically significant in France, whereas it is negative and non-significant for Britain, thus confirming our contention in hypothesis three that ILMs would mitigate the negative association between firm size and job quality, but only in the French case. These results show the relevance of considering ILM practices as important drivers of job quality in the French employment regime, and the need to integrate this feature in workplace oriented analyses of job quality.<sup>8</sup>

The estimates were also run for each of the eight dimensions of job quality: job demand, job insecurity, job autonomy, manager-employee relation, skills development opportunities, training received, skills match and work-life balance. The same controls were used as those in Table 4. The findings relating to firm size and ILMs are presented in Table 5 (for France) and in Table 6 (for Britain). The overall impression from the results is that the associations with firm size and ILMs are quite heterogeneous across dimensions of job quality.

The discussion of results begins by focusing on those two aspects of job quality emphasized in the work of Karasek (1979), namely job demands and job control. Job demands are not significantly associated with firm size in France. However, firm size is positively correlated with job demands in Britain. Job control is lower in larger firms in both countries, consistent with hypothesis two. Employees in large firms with more than 5,000 employees perceive lower job autonomy than employees in small firms in both surveys. This is in line with the expectation that bigger firms are able to use their centralized HR resources to create systems of monitoring and supervision which may be inimical to job quality. Once employees are in ILM workplaces in France, job autonomy appears to be higher, which is not the case in Britain.

There is further support for the proposition in hypothesis two that firm size is negatively correlated with job quality. In France, this is the case in relation to poorer opportunities for skill development, greater skills mismatch and adverse effects of work on one's private life. In Britain it is also the case in relation to adverse effects on one's private life, but also poorer employer understanding of employees' needs. The only positive associations between employment by a very large firm and job quality are in relation to lower job insecurity and higher training participation, both of which are confined to France. One possible explanation for this finding is that organized labour has more capacity to influence employment regulation and working conditions in large firms within dualist regimes than in small firms (Holman, 2013; Thelen and Kume, 1999).

In addition to the evidence on job control noted above, there is further evidence that ILMs improve job quality in France: this is apparent in relation to the match between worker and job skills, and on reductions in the adverse effects of work, on one's private life, to skill development perspectives, and to better employer understanding of employees' needs. In contrast ILMs do not improve job quality in Britain except on one dimension – they reduce the adverse effects of work on one's private life.

<sup>&</sup>lt;sup>7</sup> 11-99, 100-999,1000-4999,5000-9999,10000+.

<sup>&</sup>lt;sup>8</sup> Forth et al. (2016) show ILMs are also relevant to the study of workplace HR practices.

<sup>&</sup>lt;sup>9</sup> In the estimations run for the present article, industry and some ownership information have also been introduced in the workplace variables. Similar industry effects appear in France and Britain: compared to manufacturing, energy, construction, health, and business services have significantly higher job quality. Employment in a family-owned business is associated with lower non-pecuniary job quality in France but not in Britain. Forth and Rebérioux (2016) also show the existence of a wage penalty in family-owned firms. Furthermore, the results show that employment in foreign-owned business is associated with lower non-pecuniary job quality in France, but not in Britain.

	Job demand	Insecurity	Skill development	Skills' match to a job	Training participation	Job autonomy	Adverse effects of work on one's private life	Employee- employer relation
<b>Firm size</b> : 50-499	0.023	-0.01	-0.03	-0.07***	0.02	-0.05***	-0.01	0.01
(Ref.: less than 50)	(0.014)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
500-4,999	0.019	-0.05***	-0.01	-0.07***	0.06***	-0.05***	-0.003	0.004
	(0.016)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
5,000 and more	0.016	-0.07***	-0.05**	-0.14***	0.07***	-0.13***	0.04*	0.002
	(0.019)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
ILM (Ref.: no) yes	-0.14	-0.02	0.08***	0.07***	0.09***	0.04***	-0.04***	0.04***
	(0.013)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Constant	0.70***	0.19***	0.26***	0.69***	0.25***	0.61***	0.30***	0.44***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
R2	0.04	0.03	0.09	0.05	0.09	0.07	0.07	0.03
Number of employees	9,465	7,341	9,459	9,443	9,346	9,463	9,464	9,433
Number of workplaces	3,205	2,977	3,202	3,202	3,189	3,201	3,203	3,198

#### Table 5. Subcomponents of job quality in France

Notes: Weighted OLS regressions. Dummies for missing observations are not presented. All models control for individual and workplace job characteristics. Standard errors in parentheses. Statistical significance denoted by \*\*\* p<0.01; \*\* p<0.05; p<0.1.

Base: All employees in the REPONSE (2011) survey with at least one year's tenure in private workplaces with 11 or more employees, with no missing data on job quality.

	Job demand	Insecurity	Skill development	Skills' match to a job	Training participation	Job autonomy	Adverse effects of work on one's private life	Employee- employer relation
Firm size: 50-499	0.02	0.01	0.002	-0.03	0.05	-0.02	0.01	-0.05**
(Ref.: less than 50)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.02)	(0.03)
500-4,999	0.05*	0.04*	-0.03	-0.05**	0.10***	-0.05***	0.04**	-0.09***
	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.02)	(0.03)
5,000 and more	0.06**	0.03	0.01	-0.03	0.06**	-0.06***	0.06***	-0.08***
	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
ILM (Ref.: no) yes	0.02	-0.01	0.01	0.02	0.04	0.02	-0.03*	0.02
	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Constant	0.31***	0.10***	0.64***	0.68***	0.26***	0.94***	0.09***	0.64***
	(0.04)	(0.04)	(0.05)	(0.04)	(0.05)	(0.03)	(0.03)	(0.04)
R2	0.07	0.05	0.04	0.03	0.10	0.04	0.11	0.05
Number of employees	9,047	8,908	9,079	9,154	9,137	9,115	9,161	9,081
Number of workplaces	964	965	965	965	965	965	965	965

#### Table 6. Subcomponents of job quality in Britain

Notes: Weighted OLS regressions. Dummies for missing observations are not presented. All models control for individual and workplace job characteristics. Standard errors in parentheses. Statistical significance denoted by \*\*\* p<0.01; \*\* p<0.05; p<0.1.

Base: All employees in the WERS (2011) survey with at least one year's tenure in private workplaces with 11 or more employees, with no missing data on job quality.

### CONCLUSION

Using linked employer-employee data this article has undertaken a comparative study on Britain and France that focuses on the effects of firm size and ILMs on non-pecuniary job quality. Three hypotheses were tested which emanate from the literature on institutional systems in France and Britain. Contrary to the first hypothesis, job quality was higher in Britain than in France: skill development, training participation, job autonomy, work-life balance and relations between employers and employees are all rated more poorly in France than in Britain. Job demands are also higher in France than in Britain. Skills' match to a job is the only dimension which offers better job quality to French employees. There are no significant differences between France and Britain in relation to job insecurity. There was broad support for the second hypothesis, which was that firm size would be negatively associated with job quality in both countries. This was the case when estimating a model for job quality using the additive scale, although analyses of subcomponents of job quality in eight of the sixteen models, positively associated with job quality in three of the models, and non-significant in the remaining five models.

There was also broad support for the third hypothesis that ILMs improve job quality in France but not in Britain. Again, the result was apparent for the job quality additive scale though results for the job quality subcomponents were less clear-cut.

There are a number of limitations to this study. It is impossible to tackle the issue of nonrandom exposure of different sorts of worker to different types of job quality environments. Results may differ somewhat once non-random selection is accounted for. Also it is unclear as to whether poorer perceptions of job quality in large firms reflect objective job quality criteria or whether they simply reflect different reference points of employees in small and large firms. It may be, for instance, that those workers who sort into small firms have fundamentally different expectations to those sorting into larger firms, or else they are different sorts of people whose preferences differ in ways that are difficult to observe. Ideally, it is necessary to observe workers switching firms to establish what role unobserved worker heterogeneity plays, but that is not possible with these cross-sectional data.

#### Reférences

AMOSSÉ, T., FORTH, J. and SALIBEKYAN, Z., 2016, "Technical Appendix" in Amossé T., Bryson A., Forth J. and Petit H., *Comparative Workplace Employment Relations: An Analysis of Practice in Britain and France*, Palgrave Macmillan.

BRYSON, A., ERHEL, C., and SALIBEKYAN, Z., 2016, "Job Quality" in Amossé T., Bryson A., Forth J. and Petit H., *Comparative Workplace Employment Relations: An Analysis of Practice in Britain and France*, Palgrave Macmillan.

BRYSON, A., FORTH, J. and STOKES, L., 2015, "Does Worker Wellbeing Affect Workplace Performance?", *IZA Discussion Paper No. 9096*.

CLARK, A. and OSWALD, A.J., 1996, "Satisfaction and Comparison Income", *Journal of Public Economics*, 61, 359-81.

COUTROT, T., 1998, "Relations La force de la loi et le royaume du contrat", Travail et Emploi. No. 75.

CULPEPPER, P. D., 1999, "The future of the high-skill equilibrium in Germany", Oxford Review of Economic Policy, 15 (1), 43-59.

DAVOINE, L., ERHEL, C. and GUERGOAT-LARIVIÈRE, M., 2008, "Monitoring Employment Quality in Work: European Employment Strategy Indicators and Beyond", *International Labour Review*, 147 (2-3), 163-198.

DOERINGER, P. and PIORE, M., 1971, International Labor Market and Manpower Analysis, New York, Sharp.

EDWARDS, R., 1979, Contested Terrain: The Transformation of the Workplace in the 20<sup>th</sup> Century, Basic Books: New York

EYRAUD, F., MARSDEN, D. and SILVESTRE, J., 1990, "Occupational and internal labour markets in Britain and France", *International Labour Review*, 129 (4), 501-17.

FORTH, J., BEWLEY, H. and BRYSON, A., 2006, *Small and Medium-Sized Enterprises: Findings from the 2004 Workplace Employment Relations Survey*, London: Department of Trade and Industry.

FORTH, J., PETIT, H. and SALIBEKYAN, Z., 2016, "Tenure, Skill Development and Pay – The Role of Internal Labour Markets" *in* T. Amossé, A. Bryson, J. Forth and H. Petit, *Comparative Workplace Employment Relations: An Analysis of Practice in Britain and France*, Palgrave Macmillan.

FORTH, J., and REBÉRIOUX, A., 2016, "Workplace Structure and Governance: How Do Employer Differ Between Britain and France" in T. Amossé, A. Bryson, J. Forth and H. Petit, *Comparative Workplace Employment Relations: An Analysis of Practice in Britain and France*, Palgrave Macmillan.

FULTON, L., 2015, *Worker representation in Europe*, Labour Research Department and ETUI. http://www.worker-participation.eu/National-Industrial-Relations.

GALLIE, D., 2007, Employment regimes and the quality of work, Oxford University Press, Oxford.

GREEN, F., MOSTAFA, A., PARENT-THIRION, A., VERMEYLEN, G., VAN HOUTEN, G., BILETTA, I. and LYLY-YRJANAINEN, M., 2013, "Is Job Quality Becoming More Unequal?", *Industrial and Labour Relations Review*, 66 (2), 753-794.

GREENHALGH, C., 1999, "Adult Vocational Training and Government Policy in France and Britain", Oxford Review of Economic Policy, 15 (1), Spring.

HOLMAN, D., 2013, "An Explanation of Cross-national Variation in call centre job quality using institutional theory", *Human Relations*, 27 (1) 21-38.

HYMAN, R., 2001, Understanding European Trade Unionism: Between Market, Class and Society, London: Sage.

KARASEK, J. R. A., 1979, "Job demands, job decision latitude, and mental strain: Implications for job redesign", *Administrative Science Quarterly*, 285-308.

MARSDEN, D., 1990 "Institutions and labour mobility: occupational and internal labour markets in Britain, France, Italy, and West Germany", *in* R. Brunetta R, and C. Dell'Aringa, *Labour relations and economic performance*, Macmillan, London).

MAURICE, M., SELLIER, F. and SILVESTRE, J. J., 1986, *The Social Foundations of Industrial Power*, Cambridge, Mass.: MIT Press.

MUÑOZ DE BUSTILLO, R., FERNÁNDEZ-MACÍAS, E., ESTEVE, F. and ANTÓN, J.-I., 2011, "E pluribus unum? A critical survey of job quality indicators", *Socio-Economic Review*, 9 (3), 447–475.

OK, W. and TERGEIST, P., 2003, "Improving Worker's Skills: Analytical Evidence and the Role of the Social Partners", *OECD Social, Employment and Migration Working Papers*, No. 10, Paris.

OI, W. Y. and T. L. IDSON, 1990, "Firm size and wages", Chapter 33, *In* O. C. Ashenfelter and D. Card, *Handbook of Labor Economics*, Vol. 3, Part B., 2165-2214.

OSTERMAN, P., 2013, "Introduction to the special issue on job quality", *Industrial and Labor Relations Review*, 66 (4), 739-752.

PAUL, J., 1992, "Le congé individuel de formation dans les trajectoires professionnelles", *Formation Emploi*, 39, 55-75.

PIORE, M. J., 1978, "Dualism in the labor market, A response to uncertainty and flux, The case of France", *Revue Economique*, 29, 26-48.

TANSEL, A. and GAZIOGLU, S., 2013, "Management Employee Relations, Firm Size and Job Satisfaction", *IZA Discussion Paper Series*, No. 7308.

THELEN, K. and KUME, I., 1999, "The effects of globalization on labor revisited: lessons from Germany and Japan", *Politics and Society*, 27, 4: 477–505.

TRÉSOR-ECONOMICS, 2016, "30 years of modernizing social relations", January, 160.

#### **APPENDICES**

#### A1. Job Quality variables in the WERS survey

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	Cod	led 1		Coded 0	
Job demand					
I never seem to have enough time to get my work done (N=11,333)	14	27	31	25	3
Employee-employer relations					
Managers are sincere in attempting to understand employees' views (N=11,370)	11	43	24	15	6
Skill development					
Managers encourage to develop their skills (N=11,351)	13	42	26	13	6
Adverse effects of work on one's private life					
I often find it difficult to fulfill my commitments outside of work because of the amount of time I spend on my job (N=11,506)	9	20	25	37	9
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
		Coded 0		Cod	led 1
Job insecurity					
I feel my job is secure in this workplace (N=11,147)	17	46	21	12	4

*Notes*: Weighted frequencies in cells in percentages. 14% of employees reported that they strongly agreed that they never seemed to have enough time to get their work done.

*Base*: All employees with at least one year of tenure, in private sector workplaces with 11 or more employees, with no missing data on job quality.

Source: WERS (2011) survey.

	Weighted Frequencies	Coded
	from health and safety training, how mupped or organized by your employer?	ch training have you had
None	34	0
Less than 1 day	13	0
1 to less than 2 days	16	1
2 to less than 5 days	20	1
5 to less than 10 days	10	1
10 days and more	6	1
N=11,468		
Skills' match to a job: How w need to do your present job?	ell do the work skills you personally h	ave match the skills you
Much higher	20	0
A bit higher	32	0
About the same	44	1
A bit lower	4	0
Much lower	1	0
N=11,489		
Job autonomy: In general, how	much influence do you have over how to	o do your work?
A lot	54	1
Some	31	1
A little	10	0
None	5	0
N=11,446		

#### A2. Other job quality variables in the WERS survey

*Notes*: frequencies in cells in percentages. 34 % of employees reported that they had no training in the last 12 months, 20 % of employees reported that their skills are much higher than the present job they had, and 54 % of employees reported that they had a lot of influence over their work.

Source: WERS (2011) survey.

	Always	Often	Sometimes	Never
-	Cod	ed 1	Code	d 0
<b>Job demand:</b> In your work, is there any time pressure? (N=11,160)	31	41	25	2
Adverse effects of work on one's private life Does your work allow you to organize your private life satisfactorily? (N=11,179)	18	45	30	6
<b>Job autonomy:</b> Are you free to decide how to do your work? (N=11,161)	20	47	23	10
<b>Skills' match to a job</b> : In your work, are you fully able to use your skills? N=11,132	19	45	30	7
<b>Skill development:</b> Does your work enable you to learn new things? N=11,147	11	32	45	12
<b>Employee-employer relations:</b> Does your line manager pay attention to what you say? (N=11,115)	15	36	39	10

#### A3. Job Quality variables in the REPONSE survey

*Notes*: Weighted frequencies in cells in percentages. 18 % of employees reported that work always allowed them to organize private life satisfactorily.

*Base*: All employees with at least one year of tenure, in private sector workplaces with 11 or more employees, with no missing data on job quality.

Source: REPONSE (2011) survey.

#### A4. Other job quality variables in the REPONSE survey

	Weighted Frequencies	Coded
<b>Training participation:</b> During the las training financed by your employer? ( <i>REP</i>		rtaken any vocational
Yes	46	1
No	54	0
N=11,002		
Job insecurity: During the next 12 month	s, what is the likelihood of losin	g the job?
Very high	5	1
High	11	1
Low	47	0
Nil	37	0
N=8,593		

*Notes*: frequencies in cells in percentages. 46% of employees reported that they had vocational training in the past three years, 5% of employees reported that the likelihood was very high to lose the job.

*Base*: All employees with at least one year of tenure, in private sector workplaces with 11 or more employees, with no missing data on job quality.

Source: REPONSE (2011) survey.

	1	2	3	4	5	6	7	8
1. Free to decide how to work	1.00							
2. Believes job is not secure	-0.16	1.00						
3. Work adversely affects private life	-0.20	0.13	1.00					
4. Able to learn or develop skills	0.26	-0.12	-0.11	1.00				
5. Skills matched to job	0.34	-0.19	-0.15	0.39	1.00			
6. Training received	0.11	-0.09	-0.03	0.19	0.13	1.00		
7. Manager pays attention/understands employees	0.31	-0.20	-0.21	0.29	0.34	0.13	1.00	
8. Working under time pressures	-0.06	0.05	0.15	0.03	-0.03	0.03	-0.06	1.00

#### A5. Correlation matrix of job quality measures in the *REPONSE* survey

Base: Employees of all firms with 11 or more employees with at least one year's tenure in private sector workplace. N=8,201

	1	2	3	4	5	6	7	8
1. Free to decide how to work	1.00							
2. Believes job is not secure	-0.13	1.00						
3. Work adversely affects private life	-0.05	0.09	1.00					
4. Able to learn or develop skills	0.19	-0.19	-0.11	1.00				
5. Skills matched to job	0.05	-0.08	-0.06	0.13	1.00			
6. Training received	0.09	-0.08	0.02	0.26	0.03	1.00		
7. Manager pays attention/understands employees	0.19	-0.22	-0.13	0.51	0.09	0.14	1.00	
8. Working under time pressures	-0.01	0.07	0.27	-0.04	-0.02	0.04	-0.08	1.00

#### A6. Correlation matrix of job quality measures in the WERS survey

Base: Employees of all firms with 11 or more employees with at least one year's tenure in private sector workplace. N=10,592

# A7. The distribution of employees across firm size in the *WERS* and *REPONSE* surveys

	Britain (WERS)	France (REPONSE)
11-49	15%	24%
50-499	23%	34%
500-4,999	29%	25%
5,000 and more	31%	16%
Missing	2%	1%
Ν	11,581	11,244

*Notes*: Weighted frequencies in cells in percentages.

Base: All employees with at least one year of tenure, in private sector workplaces with 11 or more employees

# A8. The share of employees in workplaces with an ILM orientation in the *WERS* and *REPONSE* surveys

	Britain (WERS)	France (REPONSE)
Yes	13%	33%
No	80%	65%
Missing	7%	2%
Ν	11,581	11,244

*Notes*: In the WERS survey 13% of employees are in workplaces which have an 'ILM' orientation in the WERS survey. The ILM orientation of the workplace is defined by Forth et al. (2016) as the share of workplaces with high levels of job tenure and the payment of above market wages.

Base: All employees with at least one year of tenure, in private sector workplaces with 11 or more employees

#### **DERNIERS NUMÉROS PARUS :**

téléchargeables à partir du site http://www.cee-recherche.fr

- N° 190 L'évaluation randomisée dans la réforme du service public de l'emploi CLAIRE VIVÉS avril 2017
- N° 189 Réforme des rythmes éducatifs à Paris : quelle politique d'emploi des animateurs ? GÉRALDINE RIEUCAU février 2017
- N° 188 L'impact du diagnostic du cancer sur les transitions professionnelles en France. Une étude sur données de panel administratives
   BEN HALIMA BASSEM, BEN HALIMA MOHAMED ALI, LANFRANCHI JOSEPH, LE CLAINCHE CHRISTINE, REGAERT CAMILLE
   décembre 2016
- N° 187 Relations sociales et ajustements à la crise : une analyse micro-statistique comparative franco-britannique
   THOMAS AMOSSÉ, PHILIPPE ASKENAZY, MARTIN CHEVALIER, CHRISTINE ERHEL, HÉLOÏSE PETIT, ANTOINE REBÉRIOUX

juin 2016

- N° 186 Trouver du travail par annonce : une porte étroite. Exploitation de l'enquête Emploi (2003-2012)
   GUILLEMETTE DE LARQUIER, GÉRALDINE RIEUCAU septembre 2015
- N° 185 L'aide à la création d'entreprise : analyse de quatre cohortes d'entreprises créées par les chômeurs
   DOMINIQUE REDOR
   août 2015
- N° 184 The Impact of Training Programs and Subsidized Public Employment Schemes on Unemployment, Occupations, and Wages / L'impact des programmes de formation et des emplois subventionnés du secteur non marchand sur les durées de chômage et d'emploi, les salaires et les qualifications des emplois retrouvés THOMAS BRODATY juillet 2015
- N° 183 La qualité de l'emploi dans les pays émergents : une approche comparative ADRIEN FRONTENAUD juin 2015
- N° 182 Égypte 1998-2012 : de l'emploi public protégé à l'emploi informel précaire, un marché du travail en déshérence
   ISABELLE BENSIDOUN, AUDE SZTULMAN avril 2015