

Hiring and market intermediaries
*A comparative approach to IT labour market
in France and Great Britain*

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Abstract

The British labour market is distinguished by a stronger presence of job placement agencies than the French market. We analyse this difference by pointing out the diverse roles played by labour market intermediaries in each country. Theoretically, we elaborate a framework in order to point out that the role played by intermediaries is linked to the nature of job matching processes. Empirically, we compare two samples of advertisements for job offers found in the IT sector. In Great Britain the considerable involvement of specialised recruitment agencies, which contribute to making information transparent, facilitates standard job matching processes. On the contrary, the asymmetry of information, to the applicant's detriment, noticed in French job offers and the role of pre-selection played by the intermediaries are consistent with more specific matches.

Key words: comparative study, labour market, advertisements for job offers, intermediaries, recruitment, IT workers.

JEL-Code: J44, J41, D83, D4

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1. Introduction

By introducing the hypothesis of imperfect information, Stigler (1962) helped to renew in-depth analysis of the labour market dynamics. Nevertheless, even today very few authors deal with the role of intermediaries within the recruiting process of the labour market, and this, in spite of the greater role of private employment agencies. In studies dedicated to different recruiting channels and their efficiency, these intermediaries are typically described as “black boxes”(formal vs. informal channels). Furthermore, there are very few cross- national comparative studies that focus on the interface between the labour market dynamics and the structure of recruiting channels. This structure itself depends on different institutions that formalise recruitment practices in each country, for instance the importance of the public monopoly in job placement, the regulating of private agencies, the regulation within matters of discrimination, etc ...

In a previous work (XXX, 2001), we have applied such an approach within the framework of a comparison between France and Great Britain’s labour markets. Our results indicate a higher level of worker mobility in Great Britain, as well as a more developed job placement structure. The French labour market is more often characterized by very important channels of informal job recruitment (Marchal and Renard-Bodinier, 2001). If we focus on press job advertisements, which are typical of formal research channels, their use is three times more frequent in Great Britain than in France, and similarly the intervention of private employment agencies, is twice as important.

Historically, the prominent role for job placements within the British labour market emerged from the political will of Beveridge to organise the labour market with a diversity of agencies that function simultaneously with public labour exchanges, but acted on different segments. In 1973, the Employment Agencies Act was introduced to provide a regulatory framework for employment agencies. This Act sought to regulate private agencies by a combination of licensing and statutory standards of conduct. The requirement for private agencies to license was revoked with effect from January 1995 by the Deregulation and Contracting Out Act 1994. Consequently, the number of private agencies has strongly increased (Hasluck & Purcell, 1997). In contrast, in France, the public monopoly

in job placement, which was enacted in 1945 and is still officially in force, has always interfered with the rise of private activity. Nevertheless, prohibition primarily concerns recruitment activities by private agencies and not personnel consulting (including selection) or temporary work. For the past few years, the regulatory framework has become less constraining and the activities of French private agencies are more extensive but remain less developed and less specialised, in narrow market segments, than their British counterparts.

In this paper, we do not revisit the differences between the two structures of recruitment channels and their institutional factors. Instead, we provide an empirical verification of the diverse roles played by private British and French recruitment agencies; and to do so we used a unique empirical evidence consisting of press job advertisements. This kind of media can form a primary source of information on recruitment activities and an international data base at a relatively low cost. It is especially interesting to distinguish job vacancies published by recruitment agencies from those that are directly diffused by employers. In the first case, the agency publishes the job advertisement and manages the recruitment process. In the second case, the employer assumes responsibility for the whole recruitment process. Thus, in order to examine the differences between the two countries and the different role played by agencies, we have created a set of variables drawn from the coding used in job advertisements that specify certain pieces of information such as: recipient of candidates file (employer or agency), salary expectation, location, job description, required diplomas, required experience, personal qualities and means to contact the recruiter. These different kinds of variable can be analysed from the Rees approach (1966), which emphasises the role of the extensive and the intensive search for information.

The second section exposes the Rees approach used to elaborate our own framework in order to point out that the role played by intermediaries is linked to the nature of job matching processes. The third section presents the variables, developed from the coding of information contained within the job advertisements themselves, and our hypotheses regarding their interpretation. The fourth section presents our data set consisting of a merged sample of press job advertisements that were collected from the IT sector in France and Great Britain (see Annex). The characteristics of this sector, notably

the standardisation of the technology, assure a minimum level of equivalents to highlight the differences specific to private recruitment agencies in each country. In the fifth section we present and comment our main results.

2. The labour market and its intermediaries.

Since the acknowledgement of the concept of imperfect information, economists see the labour market as a fog bank, in which employers and employees look for each other and meet each other with a given probability. On both sides, the challenge is to collect a maximum of information in order to minimise the undesired eventuality of an *ex post* low quality match. Therefore, improving upon the earliest job search models, studies on the subject focused on an approach involving methods or channels of research¹. In this way, intermediaries have made their appearance in labour market analyses, linked to information networks.

Rees (1966) proposed such an approach distinguishing formal channels (employment agencies, newspapers, unions) from informal channels (professional and personal relations). In this context, a given agent (worker or employer) is able to increase his/her initial information on available partners in two ways: the extensive or the intensive margin. At first glance, formal channels prove more efficient for an extensive employment or candidature research, while informal channels prove more reliable when seeking additional information on given partners. This distinction is currently used in evaluating the efficiency of different channels or explaining the need to use one rather than another. In our work, we suggest to link the extensive / intensive opposition with the nature of the implicated match: standard vs. specific.

A match has a standard nature if the prior expectation of its *ex post* quality is highly reliable, based on a knowledge of standard criteria linked to the partners involved (employee and position). Consequently, an agent willing a standard match commitment would select the largest number of candidates or employment possibilities, using a minimal number of immediately evaluated criteria: the

¹ We better understand the reasons for leaving behind these models with the Osberg's fish hatchery metaphor (1993) about job search, where people seem to be only interested in "big enough" fish to keep and not in the best strategy to catch the right one!

necessary research will be extensive. A match is considered to have a specific (or risky) nature when the prior expectation based on standard criteria is of poor quality. It is necessary, in this case, to anticipate the requisite characteristics specific to this relationship prior to actively entering an employment relationship: here, an intensive research is required. In fact, a look at the standard criteria of two potential partners may make them appear equivalent, and only an intensive research can provide specific information to distinguish one from the other.

This distinction opens the way to a better appreciation of the role of intermediaries, going beyond their “black box” typification, by justifying the different work they carry out: “matchmaking” and evaluation. The more standard the matches are, the greater the probability that the intermediary will limit his/her role in “matchmaking” is (with an extensive research of candidates and jobs). Whereas, the more specific the matches are, the more important the task of evaluation will be (with an intensive research of information on each partner).

To our knowledge, no model is able to explain the task of intermediaries (matchmaking or evaluation) according to the nature of matches on the labour market². Nevertheless, certain studies, starting with a transaction cost economics approach (Williamson, 1985), attempt to model this type of arbitrage. For example, Lesueur in his study (1997) tried to explain the type of intervention performed by French public agencies. Unfortunately, our data do not allow us to use this kind of approach. Indeed, we do not have any precise information on the specificity of the job that is advertised.

² The two models we consider most important in illustrating the opposition between extensive and intensive modes of research, do not belong specifically to the labour economics. On the one side, Rubinstein and Wolinsky (1987) consider a market where buyers and sellers meet each other through a time-consuming and stochastic process. Under these conditions, a private third agent enters the picture and, in taking advantage of the impatience of the first two, is able to exercise a profitable business activity as a “matchmaker”. On the other side, Biglaiser’s model (1993) is affiliated with economic models of quality whereby adverse selection problems are central (and so is evaluation problem). It leads to a segmentation of the market: “high” quality goods pass through intermediaries (experts who had made a sunk investment), whereas “bad” quality ones are directly exchanged between sellers and buyers alone.

3. Classified job advertisements: a unique information source with regards to labour matching process

Empirical studies³ indicate that press job advertisements are an important recruitment channel on the labour market. They are costly for employers but provide inexpensive and easy resource materials to candidates. Compared to others channels, resorting to job advertisement is the most extensive research mode. So, according to the previous section, it should be associated with standard matches. We assume the empirical hypothesis that we are able to distinguish the job advertisements according to their more or less intensive characteristics in their information research. Therefore, we develop indicators based on information gathered in job advertisements and carry out a set of interpretative hypotheses.

Beyond the nature of the recipient of candidate's application, we consider three types of information: the job conditions, the explicit selective criteria mentioned in the job vacancy and the means to be used by the applicant to contact the recruiter. The job conditions (wage, location and title) allow a first set of criteria which indicate the degree of transparency of the labour market. The second set of criteria (diploma, experience and personal skills) is traditionally called the employer's hiring criteria. It constitutes an indicator of pre-selection intensity. Finally, from information about means of contacting, we draw inferences about the costs related to pre-selection.

Indicators of labour market transparency

Among the indicators of the degree of visible competition between enterprises, we consider the mentioning or non-mentioning of wage and location in the job advertisement. We have also added another indicator measuring the degree of explicitness in the text for the job description. Job openings, whose definitions are specific, are very difficult to compare from one firm to another. The candidate's research of information is more intensive and the wage is likely to be determined after bargaining with the recruiter. In this case, the advertisement is more expensive (because of a more detailed and longer

³ See Holzer (1988), Jones (1989) and Osberg (1993) for the use by candidates of want ads; Russo (1996), Gorter *et al* (1996) and Roper (1988) for the use of wanted ads by employers; Lindeboom *et al* (1994) for an estimation of the matching function through wanted ads.

text), but that may improve the expected match quality. In contrast, when the title of the job is in itself sufficient to define it, firms and applicants have common knowledge of the required tasks of the job; its nature is thus standard.

Finally, we assume that when wage and location are explicitly mentioned but the title of the job is given without further description of the tasks to achieve, then the job advertisement is linked to a standard match.

Selection criteria for candidates

The kind of matching process can also be characterized by the use of explicit criteria found within job advertisements, especially those making reference to experience, diplomas or personal qualities. These employer's hiring criteria allow the recruiter to limit the field of his/her extensive research of information. We assume that the multiplicity of hiring criteria provides a positive indicator of pre-selection intensity, and the research of information on each pre-selected candidate will be more intensive. When there are few hiring criteria, then the job advertisement may be linked to a standard match. Finally, let us note that the pre-selection intensity may also depend on the labour market conditions.

The costs of pre-selection

Information related to means of making contact with candidates (mailing, telephone, electronic mail...) provides information regarding the opportunities of interacting (or not) with recruiters before applying for a job. The motivation for this type of interaction is to reduce the number of candidates, thus allowing both sides to adjust to a more continuous recruiting process, which can reduce selection costs. We assume that a continuous process leads the recruiter to measure each candidate according to pre-set evaluation criteria and stop his/her research as soon as an applicant satisfies the criteria required. The recruiter does not compare one candidate with another in order to select the most suitable employee for the enterprise. The candidate having an average quality is not necessarily the best one for the job. Recruitment costs for standard short-term jobs are obviously reduced.

Other factors of recruiting costs are connected to the composition of a candidate's application, especially if CVs or application letters are required.

Finally, we assume that when a more interactive process of contact is proposed and the candidate's file required is not too substantial, then the job advertisement is linked to a standard match.

Recipient of candidate's application

The key variable in our analysis is the recipient of a candidate's application: i.e. the employer or the agency. We assume that when an agency is the recipient, it will manage the whole process of recruitment (at least, the pre-selection phase). Our data allow us to distinguish specialised agencies⁴ in the IT sector from "general" agencies that operate in various sectors. We assume that specialised agencies, in addition to exhibiting economies of scale and scope, acquire an expertise within their field of recruitment, which can function to limit their recruiting costs. They can increase the transparency of the market by centralising information on wages and job quality. In this perspective, they favour standard matches.

With the help of these different interpretative hypotheses about the job advertisements content, we are now able to characterize them according to their link with a standard or specific match. We can also compare the different roles of private agencies in the British and French IT labour markets.

4. Construction of the sample and method of coding

To demonstrate evidence of the existence of national differences, it is necessary to ensure that a certain number of equivalents are present in the data set of press job advertisements. To assure equivalence in our study, we have chosen to restrict our sample to job advertisements related to the recruitment of IT workers. On the one hand, the standardisation of technology introduces a certain basis for comparison in contrast to other professions. On the other hand, both countries have witnessed a shortage in IT workers during the end of 1998 and the beginning of 1999, the period to which the

⁴ Within the frame of our coding, the specialisation of an agency is identified from the number of different ads it placed in a given medium.

data are related. We assume that these shortages existed in both countries. Finally, even though it is evolving very quickly, we consider this profession relatively well identified to carry out our comparison.

We assume that the nature of the medium leads to a particular mode of characterising the position available and the qualities of candidates. For this reason, we have been very selective in our study in choosing equivalent media in Great Britain and in France. We cannot guarantee the representativeness of our data set because we do not have precise information on the parent population⁵. Nevertheless, in choosing a great diversity of media, we can control the differences between the types of media in both countries (see Annex).

Our sample is composed of 600 job advertisements extracted from twelve publications. Each country accounts for half of the sample. The media (five British, seven French) are either weeklies or weekly supplements to a daily published for a national readership. Five newspapers, out of which two are British, publish job openings linked directly to IT (qualified as *specialised media*); five others, two of which are British, address a general audience (qualified as *general media*); and one British and one French are edited by private associations subsidised either by private or public funds (which we call *institutional media*), and address all professions. Each of these three categories of media represents a third of the total sample, or 200 job advertisements. Whenever a publication classifies its job advertisements, they are laid out by heading or sub-heading in order to give each an equivalent weight. When job advertisements are not classified, they are laid out at random. Table 1 shows the distribution of the job advertisements with regard to the type of medium, the national origin of the publications and its share in the sample.

⁵ According to available studies, the use of want ads in the recruitment process is twice more important in Great Britain than France (Marchal and Renard-Bodinier, 2001).

Table 1: The sample of job advertisements

	Frequency	%	Nationality
<i>Professional periodicals:</i>			
“Computer Weekly”	50	8,3%	GB
“Computing”	50	8,3%	GB
“Informatiques Magazine”	30	5,0%	F
“Le Monde Informatique”	32	5,3%	F
“01 Informatique”	38	6,3%	F
<i>National daily Newspapers:</i>			
“Inter//face”	29	4,8%	GB
“Le Figaro Économie”	35	5,8%	F
“Le Marché du Travail”	30	5,0%	F
“Le Monde Interactif”	35	5,8%	F
“The Guardian”	71	11,8%	GB
<i>Institutional periodicals:</i>			
“Courrier Cadres”	100	16,6%	F
“Prospects Today”	100	16,6%	GB
Total	600	100,0%	

In this text, we undertake an analytical comparison based on sub-samples comprised uniquely of specialised and general media (400 job advertisements), because “institutional media” seem too specific to each country (see annex). Indeed, these types of media mainly advertised jobs for young graduate workers. It is also important to notice that the sub-samples of job advertisements are comparable in terms of skill levels. All the media we have selected in our reduced sample publish job vacancies mainly for highly qualified IT workers. The rate of professional workers reaches 94.0 % for British media and 85.0% for the French ones. The remainder corresponds to jobs for technical workers (low level programmers or people who make maintenance or assistance).

Our method of coding differs from previous studies (Rivard, Saussois and Tripier [1982], Todd *et al* [1995])⁶, which include intensive application for certain job advertisement items to the exclusion of others. Our method is more focused on using all aspects of job advertisement content in order to develop the indicators we have presented. The principle of our coding scheme is based on the presence or absence of information. In all, the coding was composed of 97 items separated into six groups: the

⁶ These two studies are carried out on the IT sector but with historical perspectives and focusing on training issue for the first and skills for the second.

medium, the job advertisement, the employer, the position, the candidate and the application process. The comparative focus brought us to the selection of certain items.

5. Results

The results presented here bring together our first three indicators by crossing them with the recipients of candidates' application, i.e. agency or employer. In order to show the intermediaries' role in each country, relative to the employers, we proceed systematically to Chi-squared tests.

Table 2: The recipients of candidates (frequency, %)

Nationality	France	Great Britain
Recipients of candidates		
Employer	71.5	37.5
Intermediary	29.5	62.5
Private specialised agency	8.0	49.4
Private non spec. Agency	21.5	13.1
Total	100.0	100.0

Table 2 shows that the distribution of the job advertisements among the types of the recipients of the candidate's application (employer or middleman) is very different between the two countries. Thus, 29.5% of French job advertisements emanate from recruiting agencies, while the proportion for their British counterparts is 62.5% (see Table 1). This distribution appears to approximate more closely the respective weight on the market of intermediaries in both countries. Even though statistics concerning the IT labour market are not available, this pattern could be applied regardless of the sector, i.e. 34% of published French job advertisements are published by intermediaries⁷ compared to 85% of British job advertisements. The distribution of these job advertisements testifies to the most important role played by British private agencies. Where general intermediaries in both countries play nearly identical roles, specialised agencies in Great Britain have a more important role than in France (49.4% vs. 8.0%).

5.1. The British market's higher transparency

⁷ Statistics from the French newspaper *La Tribune* (April 2000). They have to be related to the number of recruiting agencies in each country: 1300, in France; 7000, in Great Britain.

The most noticeable difference (see Table 3) between the two countries is probably the nearly systematic publication of information concerning wage in Great Britain (85.5% of the job advertisements) in contrast to a very low occurrence in France (12.5%). There is no significant difference pertaining to the type of recipient of candidates (agency or employer).

By publishing wages, enterprises get into the position of competition by attracting new candidates. They confirm to the line of the market's pricing, which they can influence, although published wages are always negotiable. In contrast, the non-disclosure of wages undermines market transparency and can weaken candidates' bargaining power in the decentralised process⁸.

In Great Britain, the wage is more often accompanied by a mention of location (86.0% vs. 57.5% in France). In both countries, it is to notice that this piece of information is significantly more mentioned by agencies than by employers.

Table 3: Market transparency indicators (frequency, %)

Nationality	France				Great Britain			
	Overall	Agency	Empl.	Val χ^2	Overall	Agency	Empl.	Val χ^2
Wage	12.5	18.6	9.9	2.9	85.5	84.8	85.3	0.01
Location	57.5	78.0	48.9	14.3** *	86.0	91.2	77.3	7.5**
Job description	75.0	89.3	68.8	9.8**	58.5	51.2	70.7	7.3**

Chi-squared test on the influence of type of recruiter (agency or employer); Val χ^2 : value of the Chi-squared statistic.

***: significant at the 0.1 per cent level (probability under the null hypothesis of independence)

**: significant at the 1 per cent level,

*: significant at the 5 per cent level.

French job advertisements are more explicit in defining the position itself than British job advertisements (75.3% as opposed to 58.5%), especially when the advertisement is published by a recruiting agency (89.3% vs. 68.8% for French Employers). This is opposite to British job advertisements (51.2% vs. 70.7%). This last difference (significant at 1% level) indicates the unique

⁸ So, on the goods market, Wang (1995) analyses – for a given seller – the arbitration between two popular selling methods – bargaining and posted price selling. He finds that the bigger the seller's bargaining power, the more a selling negotiated price is being used. On the contrary, an augmentation of the competition increases the probability of using posted prices.

role played by specialised British agencies in the IT sector, as opposed to their French counterparts⁹. These specialised British agencies occupy for the most part a relational function between employers and candidates, both having common knowledge about the job and its tools. Only 42.0% of the job advertisements published by specialised agencies embody an explanation of the job's content.

5.2. A stronger pre-selection by French intermediaries

As far as the different criteria for selecting candidates are concerned, the mention of a qualification introduces the main difference between the two countries (see Table 5). From the coding, we have ascertained 6 headings with reference to the type of education required by the advertisers for a position in the IT field. Obviously, the difficulty of analysis has come from the difference between the two countries with regard to the organisation of higher education and , we have therefore created for our study a new “diploma” variable including three categories: i) no diploma mentioned; ii) diploma in computer science (regrouping the British university qualifications in IT and the French qualifications in IT such as *IUT*, *BTS*, etc.); iii) general diploma (regrouping British graduates without a specific major, and the French *bac + 2, 4 or 5* without further specification and *les Grandes Ecoles*). Among the candidate's profiles designated by their diplomas, we contrast, then, between “specialists” and “generalists”.

In Great Britain, 70.5% of the job advertisements outline the ideal candidate profile without necessarily specifying his/her education. On the contrary, in France, 66.5% of the profiles specify a diploma. The ideal IT worker, according to the job advertisements, is more often a generalist than a specialist (43.0% vs. 23.5%). In Great Britain, the tendency is reverse with a smaller proportional gap (10.4% of the job advertisements for specialists, compared to 12.8% for generalists). Where British job advertisements do not use a qualification as a discriminatory element in the selection process, the French job advertisements specify a degree level by default (“*Bac + years of studies*”).

⁹ Notice that, in each country, the mention of a job description is independent on the nature of media. See Annex.

Table 5: Pre-selection criteria (frequency, %)

Nationality	France				Great Britain			
	Overall	Agenc	Empl.	Val χ^2	Overall	Agenc	Empl.	Val χ^2
Make mention of	l	y			l	y		
“Diploma”								
No reference	33.5	17.0	40.4		70.5	76.8	60.0	
IT graduate	23.5	25.4	22.7		13.5	10.4	18.7	
Graduate (general)	43.0	57.3	36.8		16.0	12.8	21.3	
Total	100.0	100.0	100.0	11.1**	100.0	100.0	100.0	6.4*
Experience								
No reference	11.5	1.7	15.6	7.9**	3.5	2.4	5.3	Not
Job experience	59.0	79.7	50.4	14.8**	69.5	72.0	65.3	valid
Technical experience	75.0	79.6	73.1	*	89.0	91.2	85.3	1.0
Mention of duration	32.5	52.5	24.1	1.0	35.5	39.2	29.3	1.6
				15.3**				2.0
				*				
Experience and “diploma”	34.0	33.9	34.4	0.0	25.5	13.6	45.3	24.9**
								*
Personal skills								
No reference	48.5	49.2	47.0		42.0	54.9	30.4	
One or two	25.2	21.8	29.8		27.0	23.3	30.4	
More than two personal skills	26.3	30.2	23.2		31.0	21.8	39.2	
Total	100.0	100.0	100.0	3.6	100.0	100.0	100.0	14.0**
								*

Chi-squared test on the influence of type of recruiter (agency or employer); Val χ^2 : value of the Chi-squared statistic.

***: significant at the 0,1 per cent level (probability under the null hypothesis of independence)

**: significant at the 1 per cent level,

*: significant at the 5 per cent level.

An interpretation of this result can be the specificity of the French education system. Indeed, in a country where education is very centralised and where the value of a “diploma” is guaranteed by the State, this element gives a clear signal which is more frequently used by the recruiters. But this interpretation can only be valid for initial education corresponding to French “*Bac* +2 years of

undergraduate studies” level¹⁰. As concerns superior level of education we can assume that the quality of the signal given by the degree is the same in each country.

One can then wonder about an eventual “intermediary” effect on the editing of the ideal profile. So, on the one hand, it appears that 83.0% of the French employers using agencies will mention a degree, when 59.6% of those not using agencies, will not mention it (significant at 1% level). On the other hand, among British employers not using intermediaries, the mention of a degree occurs much more frequently: 40.0% compared to 23.2% in the reverse case (significant at 5%). The “intermediary” effect we just mentioned can be noted here but with opposite results across the two countries: French intermediaries tend to demand qualifications (more likely general education), whereas their British colleagues ignore this selection criterion at this stage of the recruitment process.

We approached the issue of a candidate’s experience in three ways. We distinguished experience acquired in a particular and identical field (sector, duty, type of business) from experience related to a specific technology. In this perspective, we can notice that the first type of experience we described could correspond to competency acquired in the world of business. That would allow us to take into account the cases in which the recruiters are looking for candidates who do not necessarily have IT experience. The second type would target IT competency. In other respects, we have also taken into consideration whether the job advertisement specifies a minimum amount of experience required or not, which provides another good indicator of the selective aspect of the job advertisement.

Of the three criteria above mentioned, the difference between the two countries is rather insignificant. Nevertheless, French intermediaries mention more frequently a “job experience” or a minimum length of experience than French employers : respectively 79.7% as opposed to 50.4%, 52.5% as opposed to 24.1% (significant at 0.1% level). There are not such striking differences within the British job advertisements.

It may be noted that the simultaneous mention of experience and diploma is more frequent within French job advertisements than within British ones (34.0% as opposed to 25.0%). In the former, it

¹⁰ On the specificity of the French education system and on the role played by the French State in the certification of intermediary level of education, see Buechtmann and Verdier (1998).

does not depend on the type of recruiter. In contrast, this simultaneous mention is significantly less used (at 0.1% level) within the job advertisements published by British agencies than within those directly published by employers (13.6% as opposed to 45.3%).

For each job advertisement, we have pointed out the presence of a personal skill (or not) used to complete the ideal candidate's profile (enthusiasm, curiosity, tenacity, relational qualities, etc.) and accounted of them numerically (see Table 5). There is no difference between the two countries. But again British agencies mention less frequently personal skills than British employers : 21.8% as opposed to 39.2% (significant at 0.1% level).

Thus, it appears that, depending on employers' practises, British intermediaries stress less the pre-selection of applicants than their French counterparts. According to our interpretation of pre-selection criteria, they participate to more standard matches.

5.3. Initial interactive pre-selection more customary in Great Britain

Generally speaking, pre-selection costs are lower in Great Britain than in France according to the indicators we have applied (see Table 4).

Table 4: Pre selection costs (frequency, %)

Nationality Make mention of	France				Great Britain			
	Overall	Agency	Empl.	Val χ^2	Overall	Agency	Empl.	Val χ^2
Way of contacting								
Conventional mail solely	33.0	37.3	31.2		8.0	3.2	16.0	
Alternative mail/interactive way	60.0	61.0	59.6		59.5	50.4	74.7	
Interactive way solely	7.0	1.7	9.2		32.5	46.4	9.3	
Total	100.0	100.0	100.0	3.8	100.0	100.0	100.0	34.1** *
Application								
CV	78.5	84.5	75.9	1.9	38.0	28.8	53.3	12.0** *
Covering letter	73.0	79.7	70.2	1.9	4.5	3.2	6.7	Not valid

Chi-squared test on the influence of type of recruiter (agency or employer); Val χ^2 : value of the Chi-squared statistic.

***: significant at the 0.1 per cent level (probability under the null hypothesis of independence)

**: significant at the 1 per cent level,

*: significant at the 5 per cent level.

Hence, 33.0% of French job advertisements mention conventional mail as the means of making contact in the recruiting process, whereas this figure is only 8.0% for British recruiters who prefer (most frequently) either conventional mail or telephone, fax or e-mail (50.4%), or solely interactive way (46.4%).

Moreover, whereas in French job advertisements, the way of contact does not distinguish the job advertisements in function to the type of recruiter, the difference is very striking in British job advertisements. British agencies favour more interactive ways of contact than employers. Due to this very significant statistical difference (at 0.1% level), we can deduce that the process of selection by British intermediaries is more continuous and less costly, which would be consistent with standard matches.

Other factors related to lower recruiting costs in Great Britain are observed through the composition of candidates' applications. The mention of a C.V. is more frequent in France than in Great-Britain (78.5% as opposed to 38.0). Moreover, British intermediaries make significantly less reference to a C.V. than employers (28.8% as opposed to 53.3%).

French recruiters ask for a covering letter (73.0% in France; 4.5% in Great Britain). This gap reflects the presence of the French school of graphology within the recruiting profession (Marchal and Renard-Bodinier, 2001)¹¹.

5.4. Discussion

The overall observations converge on the idea that French intermediaries, which are not specialised agencies, make more severe and more costly pre-selection than their British counterparts. This could be an indicator of their "evaluative" orientation, whereas British intermediaries are more likely positioned in a relational one ("matchmaking") as specialists in IT recruiting.

These results can be interpreted depending on the nature of the activity of private agencies in each country (XXX., 2001). The typical French agency would more often be a recruitment consulting firm capable of providing other related consulting services (such as defining and parametrizing skills,

training, etc.), but not other placement related activities. The agency's aim is to find and place the right candidate within a long-term perspective (the client enterprise is more truthfully an internal labour market). This process tends to lead the agency to enlarge its operations of evaluation. The severity of the selective criteria found in their job advertisements may be due to the employers' demand related to their investment in using the agency's services. In contrast, in Great Britain, the typical agency is a specialised one that answers quickly to firms' labour demand. A look at their job advertisements indicates they deal with permanent and temporary openings as well as with contracts for independent workers. This shows how specialised they are in the IT sector and more involved into customer contacts than skills evaluation.

The different role played by private agencies in the two countries is obviously linked to the specificity of the institutional environment in the matter of job placement structure. In Great Britain, the most important part of specialised agencies alters the conditions of the trade-off concerning the eventual recourse to an external intermediary. Indeed, this more competitive configuration reduces the bilateral dependence between employers and agencies.

These results seem coherent with a Transaction Cost Economics approach (Williamson, 1985). But for further verification of this approach, we need data on the actual role played by the agencies in the recruitment process and on their degree of investment specificity. Indeed, we have made the assumption that the agencies manage the whole process of recruitment. In contrast, we can assume that agencies manage only the diffusion of the job advertisement and constitute a pool of applicants. In this perspective, the recourse to an agency can be explained by its complementary activities that supplement those of an employer¹². Co-operation between the two entities is made possible because it allows the co-ordination of activities that corresponds to different production process phases. This complementary aspect can explain why, during phases of manpower shortages, employers turn to employment agencies, even when an in-house recruitment department is available. A good illustration of this configuration is given by the "contingency recruiting" procedures in which several agencies

¹¹ Also, French recruiters ask for a photograph (24% of the cases), whereas this practice is non-existent in Great Britain.

¹² See Lesueur (1997) who finds evidence in the works of Richardson (1972)

compete for delivering CVs to the employer but do not participate to the selection step. The agency is paid only if one of the applicants who has been presented by it, is actually recruited¹³.

Our main difficulty is to assess the specificity of the job from information found in job advertisements. Whether an explicit job description testifies to a larger employment specificity, and contrarily non-explicit job advertisements signal a standardisation in which a job description is not necessary among specialists in the field, is a fragile hypothesis. Our work with coding is indeed dependent on the way job advertisements are edited, certain editors using more redundant information than others.

Finally, our last concern was the labour market situation in each country during our period of observation (the end of 1998-the beginning of 1999). We have assumed that IT workers shortages were identical in both countries. In contrast, if we assume that shortages are stronger in Great Britain than in France¹⁴, it can explain the fact that British recruiters make less reference to qualification and, more generally, less selection than their French counterparts. Nevertheless, that does not explain the differences in job advertising between the agencies and the employers in each country.

6. Conclusion

In this paper we provide a framework in order to point out that the role played by private recruitment agencies within the labour market is linked to the nature of job matching processes. In a comparative study of the IT labour market in France and Great Britain, using a merged sample of press job advertisements, we show the differences between the two countries. In Great Britain, standard matches are linked to the involvement of specialised recruitment agencies in the IT field. They contribute to the transparency of information by the way they edit their job advertisements (systematically announcing wage levels and job location) and procedures for continuous interaction that are put in place to inform the candidate. In contrast, the degree of asymmetry of information (to the detriment of the candidate) is much higher in French job advertisements. In other respects, French intermediaries play a more pre-

¹³ According to our observations on placement markets in each country, this practise is more developed in Great Britain than in France (XXX, 2001).

¹⁴ According to a rapport of OCDE (2000), in 1999, IT workers shortages raised to 80 000 in Great Britain and to 25 000 in France. This difference is explained by a more voluntary education policy set out by the French State for training qualified IT workers.

selective role than their British counterparts, in particular by focusing on the “general diploma” as a pre-selection criterion. That is coherent with more specific matches.

These results remain fragile because our data do not allow us to determine exactly neither the specificity of the job nor the actual role of agency in the recruitment process. Besides, our analysis of the dynamics of the IT labour market based on an exploitation of classified job advertisements would be improved by expanding the scope of the analysis to a more general study on the different recruitment channels in this market. Along the same lines, an extension of our work would be to apply the same type of analysis to other sectors in order to confirm the differences we have found between the two countries in the realm of private agencies’ role and in reference to qualification within the job advertisements. Indeed, in our study we have assumed that the two labour markets are completely separate. Nevertheless, in the highest level jobs, the IT sector has a more international labour market than most industries, and maybe British specialist agencies recruit for vacancies in other countries. The development of “e-recruitment” provides a powerful support for the internationalisation of this activity. By widening the comparison to other sectors, we could test more precisely the influence of institutional environment of the national labour markets.

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Annex: Job advertisements media and their characteristics in the large sample (n=600)

The nature of the medium modifies the definition of the jobs and the employee qualities sought. This link of dependency is statistically verified for each country by taking into account most of the variables considered in our analysis (see Tables 6 and 7), even though, for certain variables, the null hypothesis of independence is accepted (Chi squared test). In this annex, we justify the choice of our sub-sample by eliminating the “institutional media”.

Table 6: Kind of media (frequency)

Media Characteristics	French media				British media			
	General	Institut.	Special	Val χ^2	General	Institut.	Special.	Val χ^2
Employer (recipient)	77	23	64	64,10***	43	83	32	57,79***
<i>Market transparency</i>								
Wage	13	98	12	201,48***	75	80	95	15,60***
Location	56	95	59	44,85***	84	56	88	33,33***
Job description	74	79	76	0,70	64	49	53	4,88
Training	11	8	5	2,44	11	48	14	45,87***
<i>Pre-selection Costs</i>								
Conventional mail only	36	86	30	75,64***	11	13	5	3,97
Covering letter	70	56	76	9,57**	5	19	4	16,62***
CV	77	56	80	16,61***	56	85	49	31,37***
<i>Pre-selection criteria</i>								
No mention of diploma	34	26	33	1,77	62	11	79	100,20** *
IT graduate	44	42	42	0,10	22	27	10	9,66**
Graduate (general)	22	32	25	2,71	16	62	11	75,75***
No mention of experience	11	5	12	3,38	3	37	4	59,81***
Job experience	61	67	57	2,14	70	18	69	70,90***
Technical experience	72	78	78	1,31	90	60	88	34,31***
Mention of duration	32	47	33	6,01*	30	11	41	23,19***
No mention of personal skills	50	47	47	0,24	43	37	46	1,72
More than two personal skills	24	29	26	0,65	32	36	25	2,89

Chi-squared test on the influence of type of media; Val χ^2 : value of the Chi-squared statistic.

***: significant at the 0,1 per cent level (chi-square test, probability under the null hypothesis of independence)

** : significant at the 1 per cent level,

* : significant at the 5 per cent level.

With regards to French job advertisements, among the transparency indicators within the labour market, only the description of job’s tasks is not dependent on the medium. The differences in terms of indicating wage and job location are attached to job advertisements advertised by “*Courrier Cadres*”,

a publication by *APEC (Agence Nationale pour l'Emploi des Cadres)*¹⁵, which plays, in France, an important role in executive placement. For selection costs indicators, we observe a dependency link that needs to be related to *APEC* recruitment procedures (application by mail only and implicit requirement of a C.V. plus a covering letter). In contrast, criteria of selection are not significantly different across the three types of media.

The specificity of this French institutional medium is, in a certain way, duplicated by the British publication “*Prospects Today*”, a journal from the Association of university placement offices. With this type of medium, the recipient of the candidate’s applications is more often the employer and the mention of job location is less frequent. These job advertisements target young graduates and that explains the common reference to a C.V., a letter of candidature, a degree notably in IT, but also the non- mention of some prior experience.

To make the best use of our data, we have characterized media by the employers’ strategy to resort to job advertisements and some defining elements of the employers.

Table 7: Advertising Strategies and employers’ characteristics following media (frequency, %)

Media Characteristics	French supports				British supports			
	General	Institut.	Special.	Val χ^2	General	Institut.	Special.	Val χ^2
Advertising Strategies								
Slogan	36	1	36	44,35***	18	37	38	11,87**
Employer identity	84	25	83	99,04***	52	88	41	50,50***
Only one job	51	49	52	0,911	64	17	47	46,30***
Several identical jobs	29	43	16	17,59***	14	39	26	16,11***
Several different jobs	20	8	32	18,00***	22	42	27	10,25**
Employers								
IT conceptors/SSII	55	70	42	33,5***	35	64	38	25,91***
IT users	41	22	53					
No precise	4	8	5					
Private firm	89	90	72	19,23***	50	82	59	24,50***
Public firm	7	1	13					
No precise	4	9	15					
Manufacture	8	11	20	6,92	3	18	10	22,35***
Services	87	84	76					
No precise	5	5	4					

Chi-squared test on the influence of type of media; Val χ^2 : value of the Chi-squared statistic.

***: significant at the 0,1 per cent level (chi-square test, probability under the null hypothesis of independence)

**: significant at the 1 per cent level,

*: significant at the 5 per cent level.

¹⁵ *APEC* is a private organisation subsidised by the French State.

It seemed to us that if announcers were carrying out a veritable campaign to seduce potential applicants, they would be using certain means, such as publicity slogans, identifying specifically the employer and the abundance of job offers. This is in particular the case with the British publication "*Prospects Today*".

We have categorised employers by the presence (or not) of advertisement content as far as they are concerned. Coding this kind of information required us to perform a type of interpretation, which weakened our analysis. Apart from the sector of the enterprises and their public or private status, their position with regards to the usage of IT, also seemed to us to be a determining factor. We have distinguished, on the one hand, those, not necessarily specialists, who make an IT infrastructure available to their employees, and on the other hand, those who are developers of IT materials, environments and software, as well as those actually working with these tools. We have thus gathered constructors, software editors, engineering and IT service enterprises and consulting agencies in the same category.

Beyond the employer's identity, his/her specific activity gives information to candidates (see Table 7). To apply as an IT "professional" to an enterprise, which seeks such worker, does not mean the same thing as wanting a position in an IT constructor or in a service and consulting IT enterprise. Both institutional media of our sample show a common but particular approach to the degree where they publish in large part offers from IT specialised enterprises, which guarantees the latter with an important distribution at low cost.

Due to their specificity, both publications seem to blur the differences observed in the two countries and especially, in regard to the selection criteria contained in the job advertisements, Which introduces a bias into our sample. This specificity symbolises, in a way, the two national labour markets: the existence in Great Britain of structures to place students, and a job placement organism for executives in France. Nevertheless, it damages a concrete comparison of the job advertisements since the objectives of these institutional media differ in the two countries. Hence, that justifies the necessity to continue the analysis with a restricted sample.