

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

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## Abstract

The British labour market is characterised often considered by a more important intervention of job placement agencies to be more competitive than the French market ~~which would rather be « internal »~~. ~~We~~ ~~The object of this text is to~~ 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, ~~a French one with a British one~~, gathered in the IT sector. ~~This expanding sector seemed homogeneous enough on both sides of the Channel to justify the comparison.~~

In Great Britain the considerable involvement of specialised recruitment agencies, which contribute making information transparent, facilitates standard job matching processes (wage and working place systematically given) ~~and the market visible, reveal a competitive mechanism~~. 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 ~~in France, based on university certification~~, are consistent with ~~the existence of « internal » labour markets~~ more specific matches.

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

JEL-Code: J44, J41, D83, D4

## 1. Introduction

Stigler (1962), introducing the hypothesis of imperfect information, helped to renew in-depth analyses of the ~~labor~~labour market dynamics. Nevertheless, even today, very few authors deal with the role of intermediaries within the recruiting process of the ~~labor~~labour market, and this in spite of the great increase in private employment agencies. More often with studies dedicated to different recruiting channels and their efficiency, these intermediaries are described as “black boxes”(formal versus informal channels). Also, there are very few comparative studies that focus on the relations between the ~~labor~~labour market dynamics and the structure of recruiting channels among different countries. A structure that is itself dependent on different institutions that ~~formalize~~formalise recruitment practices in each country: the importance of the public monopoly in job placement, the regulating of private agencies, the regulation within matters of discrimination, ...

We have therefore tried such an approach within the framework of a comparison between France and Great Britain ~~labor~~labour markets (Bessy *et al*, 2001). Our results indicate a higher level of ~~workers' mobility~~competition in Great Britain *vis-à-vis* France, as well as a more developed job placement structure. The French ~~labor~~labour market is more often ~~characterized~~characterised by very important channels of informal job recruitment (Marchal and Renard-Bodinier, 2001). If we focus only on private employment agencies, their intervention is twice more important in Great Britain than France. Moreover, it seems that they not play the same role. British private agencies are rather involved in extensive search of information (“matchmaking activity”), whereas their French counterparts make more intensive search (“evaluation activity”). In this text, we would offer an empirical verification

of the diverse roles played by private recruitment agencies using unique empirical evidence: help wanted ads<sup>1</sup>. ~~The main idea is that these form a primary source of information on the laborlabour market dynamics and an international data base at a relatively low cost<sup>1</sup>. Thus, in order to examine these differences between the two countries, we have created a set of variables drawn from the coding used in helps wanted ads that specify certain information (recipient of candidates file, wage, locale, diplomas, experience, personal qualities, means to contact recruiter, ...). The hypotheses we hope to test are not taken from a single model. On the contrary, it is with reference to a group of disparate models that our hypotheses were formulated and our results interpreted. In fact, to our knowledge, a model of the various role of intermediaries within the laborlabour market has yet to be done.~~

Help wanted ads can form a primary source of information on the labour market dynamics<sup>2</sup> and an international data set at a relatively low cost. In particular, it is interesting to distinguish between wanted ads published by agencies and these that are directly diffused by employers. In the first case, the agency publishes the ad and manages the recruitment process. In the second case, the employer assumes 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 help wanted ads that specify certain information: recipient of candidates file (employer or agency), wage, locale, job description, diplomas, experience, personal qualities, means to contact recruiter.

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<sup>1</sup> We have to thank François Eymard-Duvernay and Emmanuelle Marchal for their encouragement to continue the task to which they were initially associated, as well as Marie-Madeleine Vennat for her help in the gathering and coding of information.

<sup>2</sup> We do not come back here to the role played by help wanted ads as a particular channel of recruitment. Typical to formal research channels, empirical studies indicate that help wanted ads are very present on the labour market as a channel. They are especially costly for employers but provide inexpensive and easy resource materials to candidates (in particular, the unemployed). 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.

Within existing ~~litterature~~literature, we have drawn principally on analytical distinctions introduced on the one hand by Rees (1966) between the extensive search of information and the intensive one, enabling us to qualify the employment relationships (standard or specific) and, on the other hand, the transaction costs economics (Williamson, 1985), providing an ~~explanation~~explanation of whether an intermediary was necessary or not according to the assets ~~specifieities~~specificity underlying the transaction. We can therefore distinguish between two kind of job matching process that allows us to ~~e~~characterizecharacterise the specificityies of each country and in particular of the role of intermediaries.

In the second section- of our text, we look at the different approaches which take into account the role of intermediaries in the ~~laber~~labour market. We elaborate a framework in order to point out that the role played by intermediaries is linked to the nature of job matching processes. Then we present the variables, built from the coding of information contained within the ads themselves, and our hypothesis (section 3). The fourth section is dedicated to our data set constituted by a double sample of help wanted ads, French and British, collected from the IT sector (see Annex). The characteristics of this sector, notably the ~~standardization~~standardisation of the technology, assure a minimum level of equivalents to spotlight the differences specific to each country. In the fifth section we present and comment our main results.

## 1.2. The ~~labor~~labour market and its intermediaries.

Since the work of Stigler (1962) introducing the hypothesis of imperfect information, economists view the ~~labor~~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 obtain a maximum of information in order to ~~minimize~~minimise the undesired eventuality of an *ex post* low quality ~~matching~~match. Therefore, leaving behind the first job search models, studies on the subject concentrated on an approach in terms of methods or channels of research. We view this phenomenon through Osberg's fish hatchery metaphor (1993) about job search models, where we are only interested in "fish enough" to keep and not in the best strategy to catch the right one. In this way, intermediaries have made their appearance in market analyses, linked to information networks.

Beginning in 1966, Rees proposed such an approach distinguishing between formal channels (employment agencies, newspapers, unions) and 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: extensive or intensive margin. At first glance, intermediaries connected to formal channels prove more efficient for an extensive employment or candidature research, while, those connected to informal channels, prove more reliable when seeking additional information on given partners. A distinction currently used in evaluating the efficiency of different channels or explaining the need to use one over another. Wherefore Rees (1966) links the extensive / intensive opposition with the nature of the implicated ~~matching~~match: standard versus risky.

An employment relationship have 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 desiring a standard ~~matching~~match

commitment will select the largest number of candidates or employment possibilities, using a minimal number of immediately evaluated criterion: the necessary research will be extensive. Besides, a [matchingmatch](#) is considered to have a risky nature when the prior expectation based on standard criteria is of poor quality. It is necessary, therefore, 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 criterion of two potential partners may make them appear equivalent and only an intensive research can provide specific information to distinguish one from the other.

Rees' second distinction opens the way to a better appreciation of intermediaries going beyond their "black box" typification by justifying the different work they carry out: "matchmaking" and evaluation. However, few works have focused on the placement industry and its impact on employment. The theoretical literature which does treat the role of intermediaries on the market is in greater number when it comes to the goods market or the financial sector<sup>3</sup>. To our knowledge, no study is able to explain - using the basic same model - what will be the involvement of the intermediary if it takes place: matchmaking or evaluative. Nevertheless, certain studies starting with a transaction cost economic approach attempt to modelize this type of arbitration. We can give as an example the work of Lesueur (1997) who tried to explain this type of intervention by French public agencies in using a grid based on the costs of the transactions, frequency and degree of specificity of the assets underlying transactions (Williamson, 1985).

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<sup>3</sup> The two models we consider most important in illustrating the opposition between extensive and intensive modes of research do not appear in the labour economics. On the one side, Rubinstein and Wolinsky (1987) consider a market where imperfect information does not hinge on the *ex post* match quality – therefore standard – but rather on the localisation of the agents. Employees and employers 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. On the other side, Biglaiser's model (1993) is affiliated with economic models of quality whereby adverse selection problems are central. 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.

On the one hand, if the number of transactions is low and the employment relationship “standard”, the enterprise can resort to an anonymous contract with the placement agencies. On the other hand, if the position, being more specific, requires more intensive recruitment with regards to the job and company specifications, the agency’s investment becomes more important. This can result in a quasi-integrated relation based on a bilateral contract (long term) between the employer and the agency. If the frequency of transactions need is greater and the risks of *ex post* opportunistic behavior behaviour, in presence of weigh-on specific assets underlyinggoverning the transaction, lead the enterprise to may integrate the agency’s services into its recruiting practices.

Lesueur also finds evidence in the works of Richardson (1972) to show that the necessity of an agency can be explained by its complementary activities that supplement those of an employer. Cooperation Co-operation between the two entities is made possible because it permits the co-ordination of activities that correspond to different production process phases. According to the author, this complementary aspect explains why, during periods of manpower shortages, employers turn to employment agencies, even when an in-house recruitment department is available. Nevertheless, we do not take into account this issue in our reasoning.

Looking at these theoreitical theoretical elements as a whole, we are able to distinguish two kinds of matching process in which intermediaries play a different role.

Linked to a high frequency of standard employment transactions, the occurrence of this competition (resulting from employee mobility and periods of short term adjustment) is consistent with the presence of an intermediary. With standard matchings matches, a possibility for profit exists for intermediaries capable of undertaking more efficient extensive search than workers or employers could do themselves. In this case, the intermediary is

expected to be a matchmaker bringing partners together, as well as being a central source of information concerning ~~labor~~labour market prices and conditions.

On the contrary, in the cases of a higher specificity of jobs or risky ~~matching~~matches, the employer need to evaluate carefully the potentials. One expects firms to develop their own in-house recruiting department or resort to intermediaries such as human resource consulting agencies. The latter is considered as an “evaluator” more than as a market operator which could create durable links, even partnerships, based on specific investments.

### **3. Classified ads: a unique information source with regards to labour market dynamics.**

To characterise different job matching processes ~~theory~~for IT workers, we start from a series of four indicators based on information contained in want ads: market transparency, costs related to ~~pre~~-selection, explicit selective-criteria mentioned in the ads, the nature of the ~~recipient of candidate~~job-opening’s profile.

#### ***Indicators of ~~labor~~labour market transparency***

Among the indicators, we consider to signify visible competition between enterprises ~~or~~ the mention (or non-mention) of wage and locality in the ad. To this, we have added another indicator measuring the degree of explicitness for the job opening. Job openings, defined as specific in nature, are very difficult to compare from one firm to another. If the job description contributes to make the information more transparent, we make the hypothesis that ads containing explicit information on the job opening are more often indicative of specific matches~~labor~~. In this case, the designation of the job (the “title”) is insufficient to define it.

#### ***The costs of ~~pre~~-selection***

Information related to means of making contact with candidates (post, telephone, electronic mail...) provides indications regarding to the opportunities of interacting (or not) with

recruiters before applying for a job. The theory behind this type of interaction is to reduce the number of candidates allowing to the both sides to adjust to a more continuous recruiting process that also benefits from low cost selection. Other indexes for limiting costs of recruiting are connected to the composition of a candidate's file, whether CVs or motivation letters are required. Thus, ~~we assume one can theorize~~ that the presence of interactive pre-selection is the reflection of a ~~mobile~~ and well-used ~~external~~ market. This is a process that leads recruiters to measure each candidate according to pre-set evaluation norms and not to compare one candidate against another in order to select the most adapted future employee for the enterprise. ~~Recruitment~~ costs for standard employment of ~~short term~~ contracts is ~~obviously~~ reduced.

### ***Selection criteria for candidates***

The kind of matching process ~~labor~~ can equally be exemplified by the use of explicit criterion contained within help wanted ads, notably those making reference to experience, diplomas or personal qualities. *A priori*, a reference to experience, especially with regards to technological experience, reflects standard matches, ~~labor~~ whereas with more specific matches the ads would focus on diplomas (especially traditional diplomas) and personal qualities in the selection process. Recruiters evaluate the "potential" of applicants.

The mention of selection criteria can be also interpreted as an indicator of pre selection intensity. Several criteria can be mentioned simultaneously or certain criteria can be stressed: level of diploma, duration of experience, range of personal qualities. That allows us to better specify the role played by intermediaries. Moreover, the mention of diploma can be connected to the institutional characteristics of education and training systems of each country in order to know if the diploma is a signal of workers capabilities for the employers.

### *Recipient of candidate's file*

This key variable in our analysis rests on clarifying the recipient of a candidate's file, hence the person who will manage the recruitment: the employer or the agency. Our data allow us to distinguish between specialised agencies<sup>4</sup> in IT sector and “general” agencies that operate in different sectors. We consider that specialised agencies, beyond the economies of scale and scope, acquire an expertise within their field, which can function to limit their recruiting costs.

Our main hypothesis is that the recourse to an agency, in particular a specialised one, is consistent with standard matches, whereas ~~n-external-labor~~ help wanted ads directly published by employers reveal more specific matches ~~an-internal~~. Nevertheless an employer can recourse to an agency if the latter had made specific investments in the way the firm works.

We are going to characterise two job-matching processes in which intermediaries play different roles:

An important use of specialised intermediaries would be linked to a ~~characterized~~ high transparency of information, interactive and less costly pre-selection that valued technological experience. That would reveal standard matches within the British IT labour market.

Contrarily, a sparse use of intermediaries would be linked to a ~~characterized~~ slightly transparent information, a more formal (and thus, more costly) pre-selection that valued diplomas and personal qualities. That would reveal more specific matches within the French IT labour market.

These hypotheses will be tested on our data set of help wanted ads in the IT sector of both countries.

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<sup>4</sup> 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.

#### 4. Construction of the sample and method of coding

To demonstrate evidence of national differences assumed one has ensured at the beginning that a certain number of equivalents are present in the double body of help wanted ads. For this desire to assure equivalence in our study, we have chosen to restrict our sample to ads related to the recruitment of IT workers. On the one hand, the standardisation of the technology introduces a certain basis for comparison in contrast to other professions. On the other hand, the two countries have witnessed a shortage in IT workers during 1998 (the end of the year) and 1999 (the beginning of the year), the period constituting our body of work.. We assume that these shortages are identical in both countries. Finally, even though this evolves very quickly, we see this profession relatively well identified to carry out our comparison.

If the choice of a particular medium does not always guarantee a focused homogeneity followed by the employers, it is also true that the nature of the medium defines the ad content and leads to a particular mode in qualifying the opening and candidates. For this reason, we have been very selective in our study in choosing equivalent media in Great Britain and France. We can not guarantee the representativeness of our data set because we not have a precise information on the mother population<sup>5</sup>. Nevertheless, in choosing a great diversity of media, we can control the differences between media in both countries (see Annex).

Our sample is made up of 600 ads appearing in 1998 and 1999 and taken from twelve publications in the two countries. 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 titles, of which two British, publish job openings linked directly to IT (qualified as *specialised media*); five others, with two British, address a general audience (referred as to *general media*); two, one being British, are edited by private associations

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<sup>5</sup> 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).

subsidised either by private or public funds (which we call *institutional media*), and address all professions. Each of the three categories of media represents a third of the total sample, or 200 ads. Whenever a publication classifies its ads, they are laid out by heading or sub-heading in order to give each an equivalent weight. When ads are not classified, they are laid out at random.

Table 1 shows the distribution of the ads with regards to the type of medium, of national origin of the titles and the part it plays in the sample.

**Table 1: The sample of ads**

	<b><u>Frequency</u></b>	<b><u>%</u></b>	<b><u>Nationality</u></b>
<b><u>Professional periodicals:</u></b>			
“ <u>Computer Weekly</u> ”	<u>50</u>	<u>8,3%</u>	<u>GB</u>
“ <u>Computing</u> ”	<u>50</u>	<u>8,3%</u>	<u>GB</u>
“ <u>Informatiques Magazine</u> ”	<u>30</u>	<u>5,0%</u>	<u>F</u>
“ <u>Le Monde Informatique</u> ”	<u>32</u>	<u>5,3%</u>	<u>F</u>
“ <u>O1 Informatique</u> ”	<u>38</u>	<u>6,3%</u>	<u>F</u>
<b><u>National daily Newspapers:</u></b>			
“ <u>Inter//face</u> ”	<u>29</u>	<u>4,8%</u>	<u>GB</u>
“ <u>Le Figaro Économie</u> ”	<u>35</u>	<u>5,8%</u>	<u>F</u>
“ <u>Le Marché du Travail</u> ”	<u>30</u>	<u>5,0%</u>	<u>F</u>
“ <u>Le Monde Interactif</u> ”	<u>35</u>	<u>5,8%</u>	<u>F</u>
“ <u>The Guardian</u> ”	<u>71</u>	<u>11,8%</u>	<u>GB</u>
<b><u>Institutional periodicals:</u></b>			
“ <u>Courrier Cadres</u> ”	<u>100</u>	<u>16,6%</u>	<u>F</u>
“ <u>Prospects Today</u> ”	<u>100</u>	<u>16,6%</u>	<u>GB</u>
<b><u>Total</u></b>	<b><u>600</u></b>	<b><u>100,0%</u></b>	

The method of coding is obviously linked to difficulties issuing from the analysis of help wanted ads. Contrary to preceding studies (Rivard, Saussois and Tripier [1982], Todd *et al* [1995])<sup>6</sup> which include intensive application for certain ad items to the exclusion of others, our method is more focused on using the totality of ad content in order to build the indicators we have presented. The principle of our coding grid lies with the presence or absence of information. In all, the coding was comprised of 97 items separated into six groups: the

<sup>6</sup> 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 ad, the employer, the position, the candidate and the application process. The comparative focus brought us, afterwards, to the selection of certain items.

### **5A3. Results**~~ANALYSIS OF 600 HELP WANTED ADS~~

We will now undertake an analytical comparison based on sub-samples comprised uniquely of specialised and general media (400 ads), because “institutional media” appear too specific to each country (see annex).

The results presented here bring together our first three indicators by controlling them with the recipients of candidates’ files: agency or employer. In order to show the intermediaries’ role in each country, we have systematically made Chi-squared tests .

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

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

Table 2 shows that the distribution of the ads to the recipient of the candidate’s file (employer or middleman) is very different in both countries. Thus, 29.5% of French ads 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 structure could be applied regardless of the sector: 34% of published French ads compared to 85% of British ads are published by intermediaries<sup>7</sup>. The distribution of these ads testifies the most important role playing by British private agencies. Where

<sup>7</sup> 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.

general intermediaries in both countries play nearly identical roles, specialised agencies in Great Britain have a more important role than in France (49.4% versus 8.0%).

### **3.2. 1. Hirings for specific positions and recruitment campaigns**

~~We begin by analysing~~analyzing~~analysing~~ our sample in distinguishing between ads for a specific job opening and those for several identical or different openings.

**Table 2 : Number of vacancies mentioned in the advert (frequency, %)**

~~The distribution of the three ad categories within the two sub-samples is not significantly different, the French panel being~~ characterized~~characterised~~ by a slightly higher percentage on the specific jobs side, to the detriment of ads for several different jobs (50,7 % to 42,7 %).

~~If we look at the recipient of candidate's file side, we note that ads published directly by British employers are more often for different positions currently vacant (39,9 % to 29,3 %).~~

~~As concerns ads passing through middlemen, French agencies differ from their British counterparts by publishing more ads for several identical positions (31,6 % to 23,2 %) than for different positions (8,8 % to 19,8 %).~~

~~Nevertheless, the correlations between these two types of variables for the two countries follow the same path. Agencies tend to publish more ads concerning a single vacant position (Phi coefficient = 0,16 for France and 0,27 for Great Britain)<sup>10</sup>, whereas ads published by employers are for different positions (Phi coeff = 0,25 for France and 0,22 for Great Britain). In both cases, we note a significantly positive correlation between the fact the ad is written for several different positions and that the employer's identity is being revealed. This~~

~~indicates that the ads are used as recruitment campaigns by the employer who also exploits his brand recognition to attract potential candidates. However, there appears to exist an independance between these two variables, within both national samples, concerning ads for several identical positions.~~

### **25.1. The British market's higher transparencyvisibility**

The most startling difference (see Table 33) between the two countries must definitely be the nearly systematic publication of information concerning wage in Great Britain (85.353% of the ads) and a very low occurrence in France (12.4151%). ~~Consequently, a flexible part in the salary is more often mentioned in Great Britain (11,7 % to 1,7 % in France), testifying to a greater compensation adjustment based on individual performance. With regards to information indicating that the position's wage is negociable, the difference between Great Britain (14,3 %) and France (11,6 %) is not very significant.~~ There is no significant difference in function to the recipient of candidates (agency or employer).

By indicating proposed wages, enterprises position themselves with the competition by attracting new candidates. They align themselves within the market's pricing which they can influence, although published wages are always negotiable. By contrast, to not make public a wage is to not be involved in market transparency and can weaken candidates' power in the decentralised bargaining process<sup>8</sup>.

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

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<sup>8</sup> 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

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more a selling ~~negotiated~~negotiated price is being used. On the contrary, an augmentation of the competition | increases the probability of using posted prices.

**Table 33:** Market transparency indicators (frequency, %)

<u>Nationality</u>	<u>France</u>				<u>Great Britain</u>			
	<u>Overall</u>	<u>Agency</u>	<u>Empl.</u>	<u>Val <math>\chi^2</math></u>	<u>Overall</u>	<u>Agence</u>	<u>Empl.</u>	<u>Val <math>\chi^2</math></u>
<u>Wage</u>	<u>12.5</u>	<u>18.6</u>	<u>9.9</u>	<u>2.9</u>	<u>85.5</u>	<u>84.8</u>	<u>85.3</u>	<u>0.01</u>
<u>Localisation</u>	<u>57.5</u>	<u>78.0</u>	<u>48.9</u>	<u>14.3***</u>	<u>86.0</u>	<u>91.2</u>	<u>77.3</u>	<u>7.5**</u>
<u>Job description</u>	<u>75.0</u>	<u>89.3</u>	<u>68.8</u>	<u>9.8**</u>	<u>58.5</u>	<u>51.2</u>	<u>70.7</u>	<u>7.3**</u>

Chi-squared test on the influence of type of recruiter (agency or employer); Val  $\chi^2$ : 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.

~~A compared analysis between the mention or non mention of the wage with the recruiter's request of finding (or not) in the candidate's file his/her wage expectation, allows to oppose two ways of wage determination. Within these 600 ads, one observes that, if there is no mention of the wage, wage expectation will probably be asked to candidates (19,4%, to 305 % in the reverse case). Inversely, if wage expectations are requested, the probability of the recruiter offering this information is only 33,7 % to 77,2 % for no information. We find a negative correlation here between these two variables that is statistically significant (Phi coefficient = 0,26).~~

French ads are more explicit in defining the position itself than British ads (75.3% as opposed to 58.5%), especially when the ad is published by a recruiting agency (89.3% as opposed to 68.8% for French Employers). This is the contrary with the British ads (51.2% as opposed to 70.7%). This last difference (significant at 1% level) indicates the unique role ~~specialized~~specialised British agencies play in the IT sector, as opposed to their French counterparts<sup>9</sup>. These ~~specialized~~specialised British agencies occupy essentially a relational function between employers and candidates having the same knowledge about the job and its tools: only 42.0% of the ads publish by specialised agencies contain an explanation of the job's content.

### ~~2.3.53.23.~~ *Initial interactive pre-selection more customary in Great Britain*

Generally speaking, pre-election costs in Great Britain are lower than those in France according to the indicators we have applied (see Table 44).

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

**Table 44:** Pre selection costs (frequency, %)

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

Chi-squared test on the influence of type of recruiter (agency or employer); Val  $\chi^2$ : 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 ads cite 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 the telephone, the fax or e-mail (50.4%), or solely interactive way (46.4%).

Moreover, whereas in French ads, the way of contact does not distinguish the ads in function to the type of recruiter, the

difference is very striking in British ads. 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.

Other indexes 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)<sup>10</sup>.

#### **5.34. A stronger pre-selection by French intermediaries**

As concerns the different criteria for selecting candidates, the mention of a diploma introduces the main difference between both countries (see Table 5). From the coding, we have ascertained 6 headings with reference to the type of education required by the announcers for a position in the IT field. Obviously, the difficulty of ~~analysing~~analyzing~~analysing~~ the situation came from the difference between both countries with regards to the ~~organization~~organisation of higher education and so, for our study, we have created a new “diploma” variable comprised of three categories: i) no diploma mentioned; ii) diploma in computer science (regrouping the British university qualifications in IT with the French qualifications in IT such as *IUT*, *BTS*, etc.); iii) general diploma (regrouping British graduates without a specific major, with 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 ads outline the ideal candidate’s profile without necessarily specifying his education. On the contrary, in France, 66.5% of the profiles specify a diploma. The ideal IT worker, according to the ads, is more often a generalist than a specialist (43.0% of the ads, against 23.5% of the ads asking for specialists). In Great Britain, the tendency is the reverse with a smaller proportional gap (10.4% of the ads for specialists, to 12.8% for generalists). Where British ads do not use a diploma as a discriminatory element in the

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<sup>10</sup> Also, French recruiters ask for a photograph (24% of the cases), whereas this practice is non-existent in Great

selection process, the French ads specify a level of *bac* + [...](#) by default. We can interpret this result by the specificity of French education system. In a country where education is more centralised and where the value of a diploma is guaranteed by the State, this element gives a clearer signal, more frequently used by the recruiters.

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

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

Chi-squared test on the influence of type of recruiter (agency or employer); Val  $\chi^2$ : 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.

One can then ask questions 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 probably mention a diploma, when 59.6% of those, not using an agencies, will not mention a diploma (significant at 1% level). On the other hand, among British employers, not using intermediaries, -the mention of a diploma occurs much more frequently: 40.0% against 23.2% in the reverse case (significant at 5%). The “intermediary” effect we just cited can be noted here but with reverse results in the two countries: French intermediaries have a

tendency to ask for diplomas (more likely general education), whereas their British colleagues ignore this selection criterion.

We approached the issue of a candidate's experience in three ways. We have distinguished between experience acquired in a particular and identical field (sector, duty, type of business) and experience related to a specific technology. With this perspective, we see that the first type of experience could correspond to competency acquired in the world of business which would allow to take into account ads looking for candidates who don't necessarily have IT experience.- The second type would target IT competency. In other respects, we have also taken into consideration whether the ad specifies a minimum amount of experience or not, which provides another good indicator of the selective aspect of the ad.

Of the three criteria mentioned, the difference between both countries is relatively insignificant. Nevertheless, French intermediaries mention more frequently a "job experience" or a minimum length that 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 ads.

Note that the simultaneous mention of experience and diploma is more frequent within French ads than within the British ones (34.0% as opposed to 25.0%) and that, in the former, that does not depend on the type of recruiter. On the contrary, this simultaneous mention is significantly less frequent (at 0.1% level) within the ads published by British agencies relatively to the ads directly diffused by employers (13.6% as opposed to 45.3%).

For each ad, 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 are no differences between both 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, relatively to employers' practises, British intermediaries stressed less the pre-selection of applicants than their French counterparts.

#### **5.4. Discussion**

The overall observations converge to the idea that French intermediaries, which are not specialised agencies, make more severe and more costly pre-selection in reference to more specific jobs. That would indicate their "evaluative" orientation, whereas British intermediaries are positioned more likely in a relational one ("matchmaking") as specialists in IT recruiting.

The results can be interpreted following the nature of activity of private agencies in both countries (Bessy *et ali.*, 2001). The typical agency in France would more often be a recruitment consulting firm capable of providing other related consulting services (defining and parametrizing competencies, training, etc.), but not other placement related activities. The agency's aim is to find and place the right candidate with 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 ads can be due to the employers' exigency related to their investment in using the agency's services. On the contrary, in Great Britain, the typical agency is a specialised one that answers quickly to firm's labour demand. A look at their ads indicates they deal with permanent and temporary openings as well as with contracts for independent workers. This illustrates how specialised they are in a sector – IT – and more dedicated to customer contacts than competency evaluation.

These results are coherent with a Transaction Cost Economics approach although our data may not verify the nature of investment made by agencies and their actual role in recruitment process. Moreover, our prediction in matter of technical experience and personal skills are not verified. Our main difficulty is to assess the specificity of the job from information contained

in wanted ads. Concerning whether an explicit job description testifies to a larger employment specificity, and contrarily non-explicit ads 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 in fact dependent on the manner of editing ads, certain editors using a more redundant information than others.

### ~~32.5. Attracting candidates with diplomas~~

~~For each ad, we've pointed out the presence of a personal quality (or not) used to complete the ideal candidate's profile (enthusiasm, curiosity, tenacity, relational qualities, etc.) and accounted of them numerically (see Table 5). In Great Britain, 58 % of the ads contain a reference to one personal quality, to two, 31 %; in France, the numbers are 52 % and 26,3 %, respectively. The differences become more significant when we consider the applicant's recipient, since the structures are reversed between the two countries. French intermediaries demand a greater number of personal qualities than the British (30,2 % cite more than two qualities, as opposed to 21,8 %) and conversely, for employers (23,2 % against 39,2 %). One wonders if each process is based on a strategy to attract highly qualified candidates.~~

~~At the intermediary level, there is no significant relation, within each country, between the mention of several personal qualities and the mention of a diploma. This co-occurrence is, however, more frequently used by French intermediaires (12 % of ads, to 5 %). At the level of employers who don't use intermediaries, the correlation is significantly positive for French ads (Phi coefficient = 0,24), whereas one concludes there is an absence of correlation for the British ads. French job openings published directly by the employer would be targeted more~~

towards esteeming personal qualities with an end to rendering the position more attractive to qualified candidates.

If we now look at solely the reference of « general » diplomas without noting the candidate's application recipient, we observe a significantly positive correlation in Great Britain when several personal qualities are demanded (Phi coefficient = 0,2) and a correlative absence in French cases. The British mention of numerous personal qualities would therefore attract qualified candidates from fields other than the IT field.

Hence, the hypothesis of mentioning personal qualities as a means of attracting qualified candidates is not yet completely validated.

In other respects, one can imagine that the training offered by British employers (24,3 % against 8,0 % in France) acts to attract first employment candidates and render them directly operational within a structure where short term manpower is administered. On the candidates side, this type of training can be referenced as acquired skills for future employers.

This hypothesis is substantiated by the percentage of ads targeting first time employees, attaining the same figure in the two sub-samples (23,7 % for British ads and 20 % for the French). One does not, therefore, automatically offer training to French first timers, but 54,8 % of British ads, aimed at first time employees, do. And moreover, 72,5 % of the latter possessed IT diplomas. *A priori*, this is not a question of providing a training to candidates having a general university background but rather proposing a preliminary professional skills acquisition which could enhance their possibilities with employers. Moreover, the mention of training is more systematic in British ads (36,1 %) when the recipient of the ad is the employer. Additionally, in this configuration, the ads take on a stronger dimension of attraction. Whereby, the enterprise bets on its image by using its name in the ads, to the contrary of ads coming from ~~specialized~~ specialised agencies.

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### ~~3.4. THE « MEDIUM » EFFECT~~

~~The professional specificity (or not) of the medium modifies the definition of the jobs and the employee qualities sought. With the case of the IT ~~labor~~labour market, we felt it necessary to construct two sub-samples, each comprised of three different media : general media, ~~specialized~~specialised media and institutional media (institutional agencies). This has provided us with a base for comparison, even though each type of publication has its own specificity according to the country (see Annex 2).~~

~~The nature of the ads medium conditions the way we define jobs and candidates. This link of dependency is statistically verified for each country by taking into account most of the variables considered in our analysis (see Table 6), even though, for certain variables, this hypothesis of dependency is not maintained (Khi 2 test).~~

**Table 6 : Kind of media (frequency), %)**

\*\*\*: 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 ads, among the visibility indicators within the laborlabour market, only the description of job's tasks is not dependent on the medium. The differences in terms of indicating wage and job locality are attached to ads advertizedadvertised by «*Courrier Cadres*», a publication by APEC (Agence Nationale pour l'Emploi des Cadres)<sup>12</sup>, which plays, in France, an important role in manager 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). On the contrary, criteria of selection are not significantly different among the three types of media.~~

~~This 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 locality, less frequent. These ads target young graduates which explains the common reference to a C.V., a letter of candidature, training offered by the employer, a diploma notably in IT, but also no mention of prior experience. Besides, offers from «*Prospects Today*» result from recruitment campaigns involving several job openings in the same or in different categories (see Annex 2).~~

~~We note otherwise that the two institutional publications are identical in the nature of their announcers. It is a question here of enterprises specializedspecialised in the IT sector (see Annex 2). This provides a means for the enterprises to obtain, at low cost, a high visibility of their ads on a laborlabour market characterizedcharacterised, during the period taken into account, by a shortage of qualified candidates in the IT sector.~~

~~Due to their specificity, the two publications seem to blur the differences observed in the two countries and especially, in regards to the selection criteria contained in the ads. Which introduces a bias into our sample. This specificity symbolizessymbolises, in a way, the two national laborlabour markets : the existence in Great Britain of structures to place students, and a job placement organism for managers executives in France. Nevertheless, it damages a concrete comparison of the ads since the structure of these placement organizationsorganisations differ in the two countries. Hence, the necessity to continue the analysis with a restricted sample.~~

~~Besides, we note that the means of making contact, apart from conventional mail, are transversal among the different British media, as well as a less frequent mention of job tasks. Therefore, we suppose that these two variables strongly characterizecharacterise British ads. However, the reference to personal qualities does not vary between both countries.~~

## **4.5. ANALYSIS OF REDUCED SAMPLE**

With the aim to present the more significant aspects of the two countries' respective IT ~~labor~~labour markets, we will now undertake an analytical comparison based on sub-samples comprised uniquely of specialist and general media (400 ads).

### **5.4.1. A new distribution of candidature recipients**

This reduced sample leads to a different distribution of ads regarding candidature recipients. Thus, 29,5 % of French ads 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 ~~labor~~labour market are not available, this structure could be applied regardless of the sector : 34 % of published French ads compared to 85 % of British ads. The distribution of these ads testifies single handedly to the more competitive dynamics of the British ~~labor~~labour market. This obviously modifies the separation within each country between ads for one job opening only and ads for several identical or different openings (see Table 7).

**Table 7 :** Number of vacancies mentioned in the advert (frequency, %) (n=400)

With an overview of the two countries, we obtain an almost identical distribution, for individual positions which represents slightly more than half the ads. British agencies distinguish themselves from their French counterparts by running campaigns for identical positions (24 % to 10,2 %) which testifies to their more important relational role. The results

are reversed when considering identical positions for ads published by employers (13,3 % to 27,7 %).

We will return, in what follows, on the criteria of selection mentioned in ads, since it is on that point that the withdrawal of institutional media reveals important differences between both countries. We will introduce a hierarchy of classed variables according to their discriminating power in order to determine the nationality of a given ad.

#### **54.2. A more marked opposition to the role of private agencies**

Here, we've only taken into account references to diploma and experience (see Table 8), since, as indicated already, the mention of personal qualities provides few differences between the two countries.

**Table 8 :** Selection criteria (frequency, %) (n=400)

As regards a reference to a diploma, the differences are even more pronounced than with the global sample, in particular general diplomas that appear more often in French ads than in the British ones (43% to 16,0 %). This time, the trend is reversed with reference to experience, notably technical where it is systematically demanded in British ads (89,0 % to 75,0 %).

Another aspect is seen more clearly here than in the global sample : this being the role of French agencies. Whatever the reference, whether it be general diplomas, work experience or a minimum of experience, the ratios are distinctly higher with agencies than ads published by employers : respectively, 57,3 % to 36,9 %, 79,7 % to 50,4 % and 52,5 % to 24,1 %. As already cited, the use of general criteria by the French intermediaries indicates their selective

~~orientation, whereas British intermediaries are positioned more likely in a relational one as specialists in IT recruiting.~~

~~The typical agency in France would more often be a recruitment consulting firm capable of providing other related consulting services (defining and parametrizing competencies, training, etc.), but not other placement related activities. The agency's aim is to find and place the right candidate with a long term perspective (the client enterprise is more truthfully an internal laborlabour market). This process tends to lead the agency to enlarge its operations of evaluation, thus to find the right candidate from a pool of candidates. The severity of the selective criteria found in their ads can be due to the employers' exigence related to their investment in using the agency's services.~~

## 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 to IT labour market in France and in Great Britain, using a double sample of help wanted ads, we show the differences between the two countries. In Great Britain, standard matches are linked to the involvement of specializedspecialised recruitment agencies in the IT field. They contribute to the transparency of information in the way they edit their ads (systematically announcing wage and job locality) and procedures for continuous interaction put in place to keep the candidate informed. On the contrary, the asymmetry of information (to the detriment of the candidate) is much higher in French help wanted ads ~~descriptives~~. Otherwise, French intermediaries play a more pre-selective role than their British counterparts, in particular by focusing on “general” diploma as pre-selection criterion. That is coherent with more specific matches. labor

These results remain fragile because our data do not permit us to determine exactly both the specificity of the job and the actual role of agency in the recruitment process. Besides, our

analysis of the dynamics of the IT ~~labor~~labour market drawn from classified ads would gain by being included in a more general study on the different recruitment channels in this market. This raises another problem for comparison. Along the same lines, a prolongation 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 matter of private agencies' intervention. We can test more precisely the influence of institutional environment. In particular, the development of private agencies has always been favoured in Great Britain, whereas in France public monopoly in job placement has strongly prevailed until the beginning of the nineties (Bessy *et ali*, 2001). In the first country the specialisation of agencies would be a guarantee for the employer of applicant skills whereas in the second this guarantee would be constituted by diploma.

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## ANNEX 1 : CONSTRUCTION OF SAMPLE AND METHOD OF CODING

### Choice of sample

To demonstrate evidence of national differences assumes one has ensured at the beginning that a certain number of equivalents are present in the double body of help wanted ads. For this desire to assure equivalence in our study, we have chosen to restrict our sample to ads related to the recruitment of IT workers. On one hand, the ~~standardization~~standardisation of the technology introduces a certain basis for comparison in contrast to other professions. On the other hand, the two countries during 1998 and 1999, the period constituting our body of work, have witnessed a shortage in IT workers. Finally, even though this evolves very quickly, we see this profession relatively well identified to carry out our comparison.

If the choice of a particular medium does not always guarantee a focused homogeneity followed by the employers, it is also true that the nature of the medium defines the ad content and leads to a particular mode in qualifying the opening and candidates. For this reason, we have been very selective in our study in choosing the equivalent media in Great Britain and France (see Annex 2).

Our sample is made up of 600 ads appearing in 1998 and 1999 and taken from twelve publications in the two countries. 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 titles, of which two British, publish job openings linked directly to IT (qualified as ~~specialized~~specialised media); five others, with two British, address a general audience (referred as to *general media*); two, one being British, are edited by private associations ~~subsidized~~subsidised either by private or public funds (which we call *institutional media*), and address all professions. Each of the three categories of media represents a third of the the total sample, or 200 ads. Whenever a publication classifies its ads, they are laid out by heading or sub-heading in order to give each an equivalent weight. When ads are not classified, they are laid out at random.

Table 10 shows the distribution of the ads with regards to the type of medium, of national origin of the titles and the part it plays in the sample.

**Table 10 :** The sample of adverts

### **The method of coding**

The method of coding is obviously linked to difficulties issuing from the analysis of help wanted ads.

We can position our method by looking at two studies carried out on the IT sector but with historical perspectives. The study by Rivard, Saussois and Tripier (1979, 1982) relies on a body of ads published in France between 1966 and 1975. Its aim was to substantiate a more general investigation on the relationships between internal personnel management methods and the academic system. The authors defend the thesis regarding a flexibility between job title and job tasks. The ads are analyzed principally around these questions, ignoring information about enterprises, the conditions of employment and methods of contact between the partners. This analysis allows us to show that, if the newness of the field initially drives employers to recruit essentially « *Grandes Ecoles* » engineers, the progressive stabilization in this field permits these enterprises to seek candidates with inferior education.

The study by Todd *et al* (1995) was carried out on ads taken from different periods (between 1970 and 1990) and from four daily publications (two US and two Canadian), beginning with the distinction of three types of positions (programmers, system's analysts and IT managers), their objective was to examine how help wanted ads described the knowledge and the competencies required for these three positions and to utilize the ads as a focal point to observe the evolution of competencies over the course of time. Around 1600 ads were utilized. Only information relevant to the kind of knowledge and skills were drawn upon with regards to three predetermined categories : technical knowledge / skills ; business knowledge / skills ; systems knowledge.

Contrary to the two preceeding studies which include intensive application of certain ad content to the exclusion of others, our method is more focused on using the totality of ad content and draws out by association the structures illustrating, within the processes of recruitment, the different ways to qualify employment and candidates. The principle of our coding grid lies with the presence or absence of information. In all, the coding was comprised of 97 items separated into six groups : the medium, the ad, the employer, the position, the candidate and the application process. The comparative focus brought us, afterwards, to the selection of certain items.

## Annex: help wanted ads 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 Table 6), even though, for certain variables, the null hypothesis of independence is accepted (Chi squared test).

**Table 6: Kind of media (frequency)**

Characteristics	French media				British media			
	General	Institut.	Special.	Val $\chi^2$	General	Institut.	Special.	Val $\chi^2$
Employer ( recipient)	77	23	64	64,10***	43	83	32	57,79***
Market transparency								
Wage	13	98	12	201,48***	75	80	95	15,60***
Localisation	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***
Pre-selection Costs								
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***
Pre-selection criteria								
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  $\chi^2$ : 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 ads, 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 locality are attached to ads advertised by "Courrier Cadres", a publication by APEC (Agence Nationale pour l'Emploi des Cadres)<sup>11</sup>, 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). On the contrary, criteria of selection are not significantly different among the three types of media.

<sup>11</sup> APEC is a private organization subsidised by the French State.

This 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 locality, less frequent. These ads target young graduates which explains the common reference to a C.V., a letter of candidature, a diploma notably in IT, but also no mention of prior experience.

To make the most use of our data, we have ~~characterized~~characterised media by the strategy of employers to resort to ads and certain defining elements of the employers.

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

Characteristics	Media	French supports				British supports			
		General.	<del>Institut</del> Institut.	Special.	Val $\chi^2$	General.	<del>Institut</del> Institut.	Special.	Val $\chi^2$
<b>Advertising Strategies</b>									
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**
<b>Employers</b>									
IT conceptors/SSII		55	70	42	33,5***	35	64	38	25,91***
IT users		41	22	53		42	30	46	
No precise		4	8	5		23	6	16	
Private firm		89	90	72	19,23***	50	82	59	24,50***
Public firm		7	1	13		23	6	16	
No precise		4	9	15		27	12	25	
Manufacture		8	11	20	6,92	3	18	10	22,35***
Services		87	84	76		72	76	72	
No precise		5	5	4		25	6	18	

Chi-squared test on the influence of type of media; Val  $\chi^2$ : 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.

It seemed to us that if announcers were carrying out a veritable campaign to seduce potential applicants, they were also 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 ~~categorized~~categorised employers by the presence (or not) of ad content concerning themselves. Coding this information required we perform a type of interpretation, which weakens 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, without being 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 grouped constructors, software editors, engineering and IT service enterprises and consulting agencies in the same category.

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

Due to their specificity, the two publications seem to blur the differences observed in the two countries and especially, in regards to the selection criteria contained in the ads. 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 ads since the structure of these placement organisations differ in the two countries. Hence, that justifies the necessity to continue the analysis with a restricted sample.