

## **WHO GETS THE JOB AND WHY? AN EXPLORATIVE STUDY OF EMPLOYERS' RECRUITMENT BEHAVIOR**

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In the literature of labor economics we find many examples of studies analyzing job seekers search behavior, but few examples of the corresponding analysis of the recruitment behavior of employers. This paper gives a picture of the recruitment behavior of Swedish employers. The analysis is based on about 800 telephone interviews with employers regarding the last person they had hired. This paper relates the lemon's problem in Akerlof with the Spence signaling model, and then it proceeds to relate indices and signals to the hiring behavior of employers. Employers mainly recruit personnel in order to expand a certain activity of their firm. On an average the total recruitment process takes about a month. In first round employers mainly look for job seekers with good education and experience. During the job interview the employer search for persons with professional knowledge, personal engagement and social competence.

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### **I. Introduction**

There are a great number of theoretical and empirical studies of how *job seekers* look for work. For surveys see for example Mortensen (1986) and

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Devine and Kiefer (1990, 1993). Advances in the study of *employers'* recruitment behavior have, however, not matched the progress in this field of research. Therefore, there are good reasons to embark upon studies of employers' search for employees. From the point of view of policy making, knowledge about the use of different recruitment strategies is of importance since it influences the distribution of vacant jobs over different groups of employed and unemployed job seekers (Gorter et al., 1993). By that, employers' recruitment behavior has implications for the design of labor market policy and even to some extent for the design of other policies such as, for example, education policy.

This paper contributes to our knowledge of employer search to fill a position by presenting the results from an empirical study of Swedish employers' recruitment of new employees.

The recruitment process can be separated into three components. The process starts with job planning, which among other things involves analysis of the present and future needs for personnel with different kinds of competence and for different tasks. This first component of the process may result in a decision to prepare for new jobs and announce job opportunities. In the second step of the search process, after a vacancy has been defined on the basis of job planning, the employer has to make his choice between alternative ways to spread and formulate information about the vacant position. He can for example choose between different combinations of search channels and between different ways to formulate information about what kind of work it is, the position's educational and training requirements, the work experience and personal abilities of the potential employee, etc. The third and final search decision confronting the employer is to determine which one of the applicants to hire for the job opening.

The purpose of this article is to present evidence on the choice of search channels in step two and on the selection among applicants in step three of the recruitment process. The study is based on information, collected from Swedish employers, about recruitment for vacancies notified to the public employment service. This means that the scope of the investigation is limited

as regards employers' selection of search channels. It throws light only on the utilization of alternative channels by those employers who make use of the public employment service as one way of circulating information about their vacancies.

Basically, employers' decisions regarding the use of different search channels and judgements regarding the suitability of job applicants relate to the problems of asymmetric information; job applicants have more knowledge of their capabilities than the prospective employers do. The interaction of productivity differences among job applicants and employers' uncertainty as regards the productive capabilities of individuals may explain decisions taken by employers both in steps two and three of the recruitment process. Employers trying to maximize the expected present value of profits make choices and engage in activities to affect the expected productivity of persons hired. Speaking with Akerlof (1970), this also means that the choice of search channels and the selection among applicants will be made with a view to reduce the probability to hire "lemons"—persons with bad job qualifications.

An employer's decision to use a specific search channel (in addition to the public employment service in our case) may of course be influenced by the fact that it can be expected to provide applicants that differ from applicants the employer would otherwise encounter (see for example Barron and Mellow, 1982). Decisions regarding the utilization of different search channels may, however, also be related to problems of asymmetric information, since one search channel may provide information about the background of applicants that differs from the information provided by another channel.

Hiring is a decision under uncertainty in the sense that the productivity of job applicants is not directly observable. Therefore, the employer is interested in obtaining information that can serve as a good statistic for applicants' job capabilities. He will have to rely on observable, personal characteristics—signals and indices are terms used by Spence (1973)—to determine his assessment of an applicant's productive capacity. Indices are immutably fixed attributes such as sex and race, whereas signals are alterable attributes such as education, which is something that the individual can invest in.

The central empirical contribution of the study presented in this paper is to shed light upon the use of signals and indices in the screening and interviewing activities of employers prior to a new hire. This part of the study offers evidence on the relative importance of these two kinds of statistics, reflecting differences with respect to informational content, in employers' hiring decisions. The paper is also about employers' use of different search channels (with the limitation stated above).

The probability that a job seeker and an employer shall find each other, and that an agreement about employment shall be reached, depends on the behavior of both agents and on their characteristics. In the traditional search theory regarding job seekers, which assumes that the job seeker tries to maximize the discounted value of his or her lifetime income, the reservation wage is important for the probability that a person shall get a job within a given period of time and, thereby, for the expected length of the unemployment spell.<sup>1</sup> In a corresponding way, the concept of reservation productivity can be used for employers' recruitment of personnel. The assumption regarding employers is that they try to maximize their profit by employing persons with a value of their expected marginal product that is higher than or equal to their expected total wage and other costs. Everything else being equal, higher requirements put on the persons to be employed mean lower probability to find competent job seekers and also longer expected vacancy durations. Efforts to maximize income and profit also influence the choice of search channels. A job seeker can be assumed to have a higher probability to find a job soon, when actively using several different search channels and an employer can be assumed to raise the probability to find a suitable job applicant soon by actively using several different search channels.

Swedish employers have to follow many laws and rules, which influence their acting when hiring and dismissing staff. A law of special importance is the "employment act" which says that an employer cannot dismiss an employee

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<sup>1</sup> Hicks (1932), Stigler (1960, 1961), Phelps (1968), McCall (1970), Mortensen (1970) and Pissarides (1990) are some of the most influential works in this field.

without “rational reasons”. When reducing the work force the main principle, according to the law, is the “last in, first out-principle”, unless otherwise agreed with the trade union. In the beginning of the 1980s the possibility was introduced for employers to hire personnel on probation, for some restricted time. After that time the firm has the choice of either to terminate the contract or to hire the worker on a regular basis. The laws on the labor market mean that dismissals are quite costly to employers and also that it is complicated to replace employees having low productivity by employees of higher productivity. This may induce increased caution when employing personnel and also a more careful recruitment behavior.

The international literature regarding employers’ search for employees is not very comprehensive. To give some information about “the state of the art” as regards evidence on employers’ recruitment behavior we summarize in table 1 the results of some studies published during the last fifteen years.

**Table 1. Earlier Studies Concerning the Recruitment of Employers**

Name	Main results
Barron & Bishop (1985)	Employers are less strict in screening applicants when facing a lot of offers per vacant position.
Barron, Bishop & Dunkelberg (1985)	Most hirings are the outcome of an employer selecting from a pool of job-seekers, and not of job seekers selecting from a pool of job offers.
Van Ours & Ridder (1991)	Education and work experience are shown not to be substitutes. Employers with many employees put more weight on job requirements than smaller firms.
Van Ours & Ridder (1992)	Employers use a non-sequential search

**Table 1. (Continue) Earlier Studies Concerning the Recruitment of Employers**

Name	Main results
Gorter, Nijkamp & Rietveld (1993)	<p>strategy. Applicants having made contact with the firm within two weeks fill almost 80 per cent of the vacancies.</p> <p>The difficulty for the unemployed to get a job does not depend so much on lack of education as on lack of work experience.</p> <p>The use of advertisement or informal recruitment methods as search channels has a negative effect on the probability that an unemployed will fill the actual vacancy.</p>
Lindeboom, Van Ours & Renes (1994)	<p>Advertisement and informal search are very effective to match employed workers and vacancies, while employment offices and informal search are very effective to match unemployed job seekers and vacancies.</p>
Chan (1996)	<p>Opening up the competition for a position to external candidates reduces the chance of promotion for existing workers and, therefore, their incentive to work.</p>
Barron, Berger & Black (1997)	<p>When filling positions requiring more training, employers search more intensively and extensively. Employers also search more extensively when hiring workers with more education and with prior experience.</p>

The paper proceeds in section 2 with a description of the data sources and the information collected. This is followed in section 3 by a presentation of, first, the results as regards utilization of recruitment channels and, second, the evidence on employers' instruments to form a pool of applicants after a vacancy has been posted and to select a suitable applicant from this pool. Section 4 concludes the paper.

## II. Design of the Study

To investigate the recruitment behavior of employers we have used the following method. The population investigated consists of 1,000 employers who at the beginning of May 1995 had reported at least one vacancy to some employment office.<sup>2</sup> The Swedish National Labor Market Board has then, randomly, chosen 1,000 filled vacancies one for each employer. The stratified random sample has based on criteria regarding the distribution of employers according to size, location and sector of the economy. 785 employers did answer the interviews. To these 785 vacancies there were 16,073 applicants in total, i.e. an average of about 20 applicants to each vacancy. Figures of vacancies and job seekers at national level points out a u/v ratio of 25 for 1995. Of the chosen firms 30 per cent were located in the big cities (Stockholm, Göteborg and Malmö). The rest were scattered throughout the country. 33 per cent belonged to the public sector, 29 per cent were private service firms, and the remaining 38 per cent did belong to the category general private firms. Somewhat more than 70 per cent of the employers had less than 100 employees. Of the vacancies in the sample 84 per cent were full time jobs. About 60 per cent demanded at least two years of secondary school. 20 per cent demanded three or four years of university education. 15 per cent did not demand any experience. For somewhat more than 50 per cent some experience

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<sup>2</sup> For a more extended description of the study, see Behrenz and Delander (1996) or Behrenz (1998).

was demanded. The rest of the investigated vacancies demanded good experience. When we compare the qualifications of jobs in the sample in relation to the average in Sweden we can conclude that it is below average and that the firms in the sample have, in average, more employees.

The employers were asked to answer questions regarding the recruitment process of the specific vacancy included in this random sample. In this way the investigation comprehended a random sample of filled vacancies and concrete questions could be asked about a specific recruitment process of the near past. This should give better information about an employer's actual behavior than if more general questions had been asked regarding the recruitment process. Another advantage is that the investigation is based on 1,000 telephone interviews with those employees of the firms who were in charge of the actual recruitment.

The study comprehensives a random selection of employers having some time during May 95 at least one vacancy reported to the employment service. This material has naturally its limitations. The fact that all employers in this study had reported the vacancy to the employment service means that there is a certain bias in the material. The recruitment behavior of employers who usually do not report their vacancies to the employment service will not be analyzed in this study. Also, the choice of 1000 employers will not allow analyzing each sector and each professional for itself. In the interpretation of the results we have to realize that the picture given in this study is a survey of the recruitment behavior of a random sample of employers who use to report vacancies to the employment service.

During the period investigated, the spring of 1995, the situation on the Swedish labor market was the following. About 7-8 per cent of the labor force was unemployed and almost as many job seekers participated in labor market measures. The relation between the number of unemployed and the number of vacancies, the u/v-ratio, in 1995 was about 25 (in 1990 the figure was about 2). This indicates that, for Sweden, the demand for labor was very low.

### **III. Empirical Results**

In general, it takes some time for employers to fill vacancies, because it takes time to make contacts, then to choose between the applicants and finally to write a contract with an applicant suitable for the actual job. To spread information about the vacancy, so that employers and applicants can make contact (extensive information), the employer has access to many channels with varying direct costs to the employer. Also, the gathering of information about the qualifications and characteristics of applicants (intensive information) usually gives rise to direct costs, Rees (1966). There are also indirect costs of the vacancy, because the assets of the employer are then not used completely.

Somewhat simplified we may assume that the recruitment procedure of an employer announcing a vacancy goes like this: The employer interviews some of the applicants, who have obtained information about the vacancy, e.g. about salary and other conditions. The aim of the interview is to give the employer a basis to judge the marginal product of the applicant. The intention of the employer is naturally to employ the applicant with the highest marginal product relative to the costs of the employment.

#### **A. Search Channels**

A careful choice of the recruitment channel is the means of the employer to increase the average marginal product of the applicants and also to increase the arrival frequency of the applicants. Different recruitment channels also have different costs for the employer. When the employer has to decide which, and how many, recruitment channels he will use, he has to weigh the expected benefits from using one more channel against the costs connected with this extra channel. The employer's search strategy is in principle based on experiences gained from earlier recruitment's, e.g. about special local conditions, (Russo et. al., 1996). The choices to make are, among others, how many and which types of search channels to use. Different types of search channels reach different numbers and different types of job seekers. The

expected benefits of a special method of recruitment have to be related to the expected costs. The employer also has to decide within which local area he wants to stimulate job seekers to apply for the job in question, and how to deal with the specific relation between supply and demand on the local labor market.

Employers recruit personnel mainly for two reasons: first, because some employee has left the job completely or for some time, and second, because they may wish to increase their labor force. Table 2 shows the reasons for the occurrence of the vacancies investigated in this study. One may imagine that in cases where the employers wish to increase their labor force they have somewhat less specific requirements than if their intention is to replace former employees.<sup>3</sup> “Employer wants to expand a certain activity” is the most common reason for the occurrence of a vacancy; “former employee changed employer” and “employee is on leave” are also common reasons behind vacancies. Some employers have more than just one reason for the recruitment. Most of the vacancies caused by “other reasons” are for jobs of limited duration.

**Table 2. Reasons for Occurrence of Vacancies**

Reason	Number	Per cent
Retirement of an employee	27	3.4
Former employee changed employer	154	19.6
Employee changed position	41	5.2
Applicant himself made contact	20	2.6
Employer wants to expand a certain activity	386	49.2
Employee is on leave	130	16.6
Other reasons	66	8.4
Total <sup>a</sup>	784	

Note: <sup>a</sup> In this and some of the following tables the percentages add up to over 100 because some employers have stated more than just one answer.

<sup>3</sup> In nearly 50 per cent of the cases the actual vacancy resulted from the employer wishing to increase his labour force.

The way employers choose to spread information about the vacancies is naturally determined by how efficient the different recruitment channels are relative to the goal, i.e. by weighing benefits and costs connected with the respective channel. Russo et al. (1996) find that favorable labor market conditions lead to the use of many search channels, whereas in areas of high unemployment few search channels are used. They also claim that informal contact result in the fastest recruitment's, whereas advertisements and the use of employment offices lead to recruitments in a few weeks time. In table 3 we report how information about the vacancy is spread. The extensive use of non-formal recruitment channels such as information spread "via other people" and "internal information" is due to the low costs for extensive and intensive information via such channels. These channels are expected to give good results when making contacts with suitable applicants. We may conclude that "head-hunting" and the use of private employment offices have hardly been used at all for recruiting personnel to the vacancies in this study. This could be due to the fact that top executives are seldom hired among the unemployed and therefore these kinds of vacancies are not notified to the employment offices.

**Table 3. How Information about the Vacancy is Spread**

Search channel	Number	Per cent
Employment office	758	96.7 <sup>a</sup>
National news-papers	92	11.7
Local news-papers	137	17.5
Via other people	235	30.0
Via schools	38	4.9
Internal information	315	31.5
Head-hunter and the like	9	1.1
Private employment office	4	0.5
Other channels	76	9.7
Total	784	

Note: <sup>a</sup> Some employers did not know that the vacancy was registered at an employment office.

In table 4 we report how the later on hired did get information about the vacancy. This informs us which channels have been the most effective to spread information to the right applicant. For the vacancies in this study, “via other people” appear to be the most successful recruitment channel, in that this channel has the highest success rate. Success rate defined as: per cent of information hired (table 4) / per cent search channel of vacancy (table 3).

**Table 4. How did the Later-on Hired get Information about the Vacancy?**

Source of information	Number	Per cent
Employment office	397	51.3
National news-papers	46	5.9
Local news-papers	71	9.2
Via other people	159	20.5
Via schools	18	2.3
Internal information	124	16.0
Head-hunter and the like	7	0.9
Private employment office	2	0.3
Other channels	34	3.4
Don't know	21	2.7
Total	774	

Mortensen and Vishwanath (1994) state that the use of informal search channels results in recruitment's at higher wages. In a study of matching processes between job-seekers and vacancies, Lindeboom et al. (1994) found that informal contacts and advertisements were very successful search channels to bring about matchings between those who wanted to change their jobs and vacancies, while employment offices and informal contacts were effective search channels to fill vacancies with unemployed job-seekers.

The fact those informal contacts sometimes called “extended internal labor markets”, play an important role for the recruitment, and causes problems for

some unemployed, see e.g. Adnett (1987). This is true above all for those not having good access to social networks. One may therefore assume that people entering the labor market for the first time, like immigrants and also those re-entering the labor market are disadvantaged by this fact. This is unfortunate from the national economic point of view, because there is no reason to believe that unemployed with none, or little access to social networks should in general have much lower productivity than other job seekers. An American study, Johnson et al. (1985), concluded that the efforts of the public employment offices were partly successful in compensating the consequences of the applicant's lack of access to traditional social networks when trying to get information about vacancies.

In our study 20 per cent of the employers reported that they had informed the employment offices about the vacancy only because there is a law requiring them to do so. The reason for this might be that these employers believe that applicants coming from the employment office had a lower probability to be acceptable for the job offered. An American study supports this idea, Barron and Mellow (1982). American studies that have investigated how employed job-seekers have got the information about the vacancy, state that about 50 per cent of all workers found their jobs through friends and relatives, see e.g. Rees and Gray (1982) and Wial (1988). This type of search method is cheap and has a high probability to give good results, see e.g. Holzer (1988). This strengthens the inference that social networks are of major importance. Also from the firms' point of view it is a good idea to employ persons based on employee referrals, see e.g. Montgomery (1991).

### **B. The Employers' Choice among Applicants**

We may assume that an employer will choose the applicant who is expected to perform best in the job in question. The employer will try to minimize uncertainties by making use of different types of information. Therefore it is of interest to analyze which characteristics the employer takes into account when choosing the person to be employed. Former experience and education

are surely two indicators of how well a person can be expected to do the job. In this study we will also find out what other types of characteristics are used by employers as positive/negative signals about potential productivity.

The notion of “discrimination” is used by labor economists to describe a situation where employers regard personal characteristics not related to productivity as decisive for employment or wages. There are many different models trying to explain why certain groups have greater chances on the labor market than others do, e.g. in getting a job, though they have the same productivity. For an analysis of preferences, e.g. to hire a person from a certain group, see Becker (1957) and for an analysis of so called “statistical discrimination” see e.g. Arrow (1973). First, we can speak of discrimination because of “taste”; e.g. the employer could dislike Africans as employees. We could also think of that white people dislike to work with black people and that the employer because of that refrains from employing black workers. A third case of “taste discrimination” is when the employer refrains from employing e.g. black people because his customers dislike to be served by black people. Discrimination can also be of the type “statistical discrimination”. We have to realize that getting information about differences in productivity is not free of costs. Then one could to maximize profit base the decision to employ on information about a special group’s normal productivity. E.g. women might stay home from work more often than men to take care of their sick children. This then would lower the expected productivity. To maximize profit the decision to employ could then be made on the basis whether the applicant is a man or a woman. That would expose an individual female applicant to discrimination.

It is important to note that the answers in tables 5 to 8 were actually given by the firm’s employee in charge of the specific recruitment process, which makes the answers more reliable and accurate. The data contains only the number of persons with different characteristics for every vacancy. Regarding the selection process itself, it might be suitable to start by looking at the characteristics which, according to the employers would make an applicant directly unsuitable for the vacancy in question, i.e. the characteristics which

according to the employer would be a reason to eliminate the applicant in a first round of the selection process (see table 5).

**Table 5. Characteristics Guiding the First Elimination of Applicants**

Characteristics	Number of vacancies	Per cent
Applicant did not have the education asked for	410	55.8
Applicant did not have the experience asked for	460	62.5
Unemployed	31	4.2
Participated in labor market training (AMU)	9	1.2
Participated in some other labor market policy measures	12	1.6
Over 45 years old	152	20.7
Female, 20-30 years old	48	6.5
Other characteristics (or the employer did not make a "first elimination round")	173	23.5
Total	736	

It is not very astonishing that many employers, about 60 per cent, regarded the lack of education or experience asked for as a reason to eliminate applicants as not appropriate for the vacancy. Education and experience are important "signals". Thus, it might be more "politically correct" for the employers to use education and experience in choice of applicants than other personal characteristics. As many as 15 per cent of the employers in the public sector, 30 per cent in the private service sector and 20 per cent in other private sectors reported that applicants over 45 years of age were eliminated in the first round. On the other hand, the answers indicate that being unemployed or having participated in some sort of labor market policy measure is no major reason to eliminate the applicant. Thus the answers to the question of table 5 do not support the quite common idea in American studies that participation in some

labor market policy measure is regarded as a negative signal. But it should be remembered that this investigation only covers employers who have reported the vacancy in question to the employment office. The answers may therefore not be representative of the recruitment behavior of all employers. Almost 7 per cent of the employers would eliminate female applicants in the age range 20-30 years in the first round. This probably means that some female applicants have been exposed to so called “statistical discrimination”.

Another important part of the selection process is the decision to call an applicant to a job interview. Table 6 shows which of the characteristics the employers regarded as most important, when deciding whether the applicant should be called to an interview or not. The characteristic “experience” and “education” together made up 75 per cent. As can be seen, only few employers regarded “good application papers”, “originality” or “age” as most important for the decision. The answers to this question seem to indicate that barriers for newcomers to the labor market can be quite high. Labor market policy measures such as graduates practice scheme, youth training schemes, relief work and labor market training may therefore be regarded as means to increase the chances of job seekers to be selected for recruitment interviews.

**Table 6. Which Characteristic had the Greatest Importance for the Decision to call a Person to an Interview?**

Characteristics	Number	Per cent
Experience	423	58.0
Education	130	17.8
Age	20	2.7
Originality	29	4.0
Good application papers	54	7.4
Other characteristic or no interview	73	10.0
Sum (Percentage of answers 92,9 %)	729	100.0

To minimize the uncertainties connected with the decision to offer a job, the employer uses such sources of information as given in table 7, i.e. references from earlier employers, references from educational establishments, personal contacts, application papers and interviews with the applicant. From the total information on which the choice of whom to hire was based we have asked the employer to name the most important information. The answers are given in table 7. About 40 per cent of the employers regarded the recruitment interview as very important for choosing the person they later on hired. Many employers also regarded personal contacts or references from former employers as the source of information having the greatest significance. An important task for the employment offices is naturally to get jobs for their clients, especially for those being unemployed. Therefore, according to the statements in table 7, it seems to be important to train the applicants in "how to behave in an employment interview".

**Table 7. The Source of Information Regarded as Having the Greatest Importance when Choosing the Person to be Hired**

Source of information	Number	Per cent
Reference from former employer	165	21.5
Reference from former educational establishment	41	5.3
Personal contacts	196	25.5
Application papers	24	3.1
Information from the employment interview	318	41.4
Other sources	25	3.3
Sum (Percentage of answers 98,0%)	769	100.0

From the employment interviews the employers gather much information about the applicants. Table 8 shows how the answers to the question "which characteristic of those invited to the interviews had the greatest importance for the choice of the one finally hired". Naturally, professional competence

was very important. Many employers answered that the way the applicant personally engaged himself in the job seeking process was decisive in hiring just this person. About half of the employers regarded the social competence of the applicant as an important factor in the decision whom the job should be offered. But only about 13 per cent regarded this as the most important property. The fact that social competence is valued by employers could depend on the fact that teamwork is an important part of the work organization of the 1990's. Again, the answers show that it is very important for the applicant to show personal engagement in the process of seeking a job.

**Table 8. Which was the most Important Characteristic of the Person Hired that Made you Choose him among all those who Were Called to an Interview?**

Characteristic	Number	Per cent
Personal engagement	209	27.8
Family status	3	0.4
Social competence	96	12.8
Professional competence	419	55.7
Ability in the Swedish language	8	1.1
Other characteristic	17	2.3
Sum (Percentage of answers 95,8%)	752	100.0

To get some idea about the extent, to which the answers given by the employers agreed with their actual behavior, we shall compare the characteristics of those who got the job with the characteristics of those who applied for the vacancies.

When we remember that many employers stated that professional competence was the most important characteristic for the choice of the person to be hired, it seems astonishing that, according to table 9, only somewhat less than half of those hired fulfilled the demands for experience completely,

and that this figure (45 per cent) is less than the corresponding figure (52 per cent) for the average of all applicants.

**Table 9. Proportion with Different Characteristics among all Applicants and among Those who got One of the Vacant Jobs**

Characteristics	Percentage among all applicants	Percentage among those who got a job	Number of vacancies investigated
Fulfilled the demands for education completely	64	53 (77) <sup>a</sup>	764
Fulfilled the demands for experience completely	52	45 (78) <sup>a</sup>	765
Unemployed	71	68	760
Participated in some labor market policy measure	17	16	758
Age over 45 years	17	17	758
Female	41	42	758
Immigrant	11	7	758

Note: <sup>a</sup>The number in parenthesis gives the proportion of those who answered the question with "Yes, to a certain extent," instead of "Yes, completely."

The same is true for the percentage of those fulfilling the demands for education (53 per cent for the hired, 64 per cent for the average of all applicants). It seems that, after all, the employers regarded other characteristics than experience and education as more important, e.g. information obtained during the employment interview (table 9).

For the remaining characteristics we see scarcely any difference between those applying for the job and those getting the job, except in the case of immigrants. This means that such characteristics as being unemployed, having participated in some labor market policy measure, being over 45 years of age

and being female do not seem to affect the chances to be hired. An immigrant, however, has a 35 per cent lower chance to be hired than an average applicant.

Regarding the unemployed, we have no information about how many of those who were later on hired came “via employment offices”, but we can assume that the majority were registered at employment offices. The numbers in table 9 seem to indicate that the employment offices have been quite successful when co-operating with their clients to put them into jobs. Again, we have to remind that all employers in this study had informed the employment offices about the vacancy. We can therefore assume that these employers are willing to employ unemployed persons to a greater extent than other employers who did not use the employment offices.

#### **IV. Conclusions**

Studies of the recruitment behavior of employers are rather scarce in the international literature. In this exploratory study we have mainly tried to empirically analyze, and to give a comprehensive picture of, in the ways in which Swedish employers recruit personnel and what kind of persons they want, or do not want, to hire. This paper relates the lemon’s problem in Akerlof (1970) with the Spence signaling model (1973), and then it proceeds to relate indices and signals to the hiring behavior of employers.

Five main issues sum up the contribution of this paper in light of the earlier studies: reasons for occurrence of vacancies; how information about the vacancy is spread; the success rate of different recruitment channels; characteristics guiding: first elimination, decision to call to interview and the greatest importance when choosing the person to be hired; and comparison between characteristics of all applicants and those who got the vacant jobs.

According to the study employers mainly recruit personnel in order to expand a certain activity of their firm. Employment offices are the most effective search channels regarding the transfer of information to the job seekers. About 50 per cent of the persons employed had got the information about the job in question through the employment offices. Again we have to

emphasize that all vacancies in this material had been registered at the employment offices. The highest success rate is non-formal search “via other people”. Participation in labor market measures does not seem to give negative signals.

The employers’ recruitment behavior can be summarized in the following way: Among a group of job seekers some are eliminated in a first round, mainly depending on the fact that these job seekers lack experience and/or education. But we have to be careful to draw fast conclusions, since only somewhat half of those finally hired fulfilled the demands for experience and/or education completely. Also being over 45 years of age leads, in one fifth of the cases, to direct elimination. In a second round, job seekers are called to an interview, almost exclusively based on criteria of experience and education. During the job interview, which the employers, together with personal contacts of all kinds, regard as the most important source of information in the recruitment process, the employer searches for a person with professional knowledge, personal engagement and social competence.

To sum up, regarding the choice to call the applicants to an interview and also the choice among the interviewed applicants of who is to get the job, we see very distinctively different proxy variables of productivity. According to the economic theory of employers’ choice among applicants the employer tries to maximize the job seekers’ future productivity given the costs of making contact with the applicants. In general we may say that Swedish employers seem to be very careful in their recruitment behavior, they do not want to employ “lemons”. Speaking with Spence, we may say that employers put more weight on signals than on indices. From the analyses in the sub-section on the employers’ choice among applicants, it becomes clear that above all experience and to a certain extent education are very important variables for choosing a person for an interview. Then, when it comes to the choice of the actual person to be hired professional competence is the most important variable, but even personal engagement and social competence is seen to have a very large importance for the expected future productivity of the applicant.

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