

Fitting Social Capital, Informal Job Search, and Labor Market Outcomes in Hungary⁽¹⁾

Tamás Bartus **(2)**

University of Groningen

Although many studies examined the impact of (both accessed and mobilized) social capital on labor market outcomes, it is not clear what mechanisms are responsible for these "whom do you know" effects. The quest for mechanisms is important when one wishes to compare social capital effects across different societies. This paper explores the empirical implications of three mechanisms (extensive search, intensive search, and favoritism) for the relationship between accessed and mobilized social capital, on the one hand, and labor market outcomes, on the other. The derived implications are tested using data from a survey of young people who completed their secondary vocational education in 1998. I find that high status contacts seem to inform job seekers about jobs with higher income. This contact effect is especially large when the firm has personnel department. Analysis of job offer and job acceptance decisions shows that knowing a high status person increases the likelihood of rejecting a known job offer, and contacts who are employed at the firm do not increase the likelihood that the job seeker is offered the job. These findings imply that the extensive search mechanism is operating.

INTRODUCTION: THE QUEST FOR MECHANISMS⁽³⁾

Many studies investigated the relationship between social networks and labor market outcomes (for recent reviews, see Lin 1999, Marsden and Gorman 2000). The lesson from these studies is that although informal search methods are often used, informal methods in general do not lead to better jobs; rather, returns to informal job search in terms of prestige and earnings depends on the characteristics of the contact person. Social resources theory (Lin, Vaughn and Ensel 1981, Lin 1982) argues that useful job

information can be received through high status people since they have more knowledge about, and more power to control the distribution of scarce opportunities. The theory of employee referrals (Rees 1966) argues that hiring through current employees is a cheap way of recruiting good (i.e., trustworthy and qualified) workers. Since firms offering good jobs are especially interested in getting good workers (Boxman 1992), and good firms can rely on informal recruitment (Kugler 1997), getting a good job requires the contact person to be employed at the firm.

These findings clearly improve our knowledge about the conditions under which social contacts are useful. Still, our knowledge is incomplete because less attention was paid to the question which mechanism generates these contact effects. Empirical research was motivated by the insight that the assumption of uncertainty and cost-benefit considerations provide a better explanation for the use of social contacts than the assumption that the use of contacts simply reflects employers' preference for hiring friends. If the assumption of uncertainty were the only explanatory paradigm then raising the question of which mechanism is present would be pointless. However, empirical findings also show that the assumption of uncertainty is neither unambiguous nor comprehensive. First, there are two distinct information problems: becoming aware of various job opportunities (extensive search), and collecting in-depth information about the quality of one particular opportunity (intensive search) (Rees 1966). Second, favouritism might be present without making the assumption that employers have preferences against meritocratic selection. Even when employers wish to select on a meritocratic base, they may not be able to do so because their social obligations create incentives to favour the friends of their friends, and the bargaining power of their employees pushes them toward favouring the friends or their employees. As a consequence, three mechanisms (favouritism, extensive search, and intensive search) might be responsible for observed regularities (for overview about mechanisms, see also Coverdill 1998, Marsden and Gorman 2000). Knowledge of which contact characteristics have an impact on labour market outcomes does not reveal which of these mechanisms is present. For example, the effect of contact status is compatible with both the assumption of extensive search (since high status contacts have more knowledge about valuable job opportunities) and that of favouritism (since high status contacts have more power to influence the decision of employers).

This paper suggests a strategy for identifying the mechanism that generates observed regularities. I explore the empirical implications of the above mentioned mechanisms for the relationship between accessed and mobilized social capital, on the one hand, and labour market outcomes, on the other. Implications are tested using recent Hungarian data. Interest in the Hungarian situation is intimately related to the theoretical problem of how to identify mechanisms. Information problems, the bargaining power of employees, and social obligations depend on the institutional environment. Therefore the knowledge of mechanism might entail knowledge of institutional environment. Clearly, evidence about institutional environment is important for the evaluation of transformation processes.

MECHANISMS AND HYPOTHESES

This section explores the implications of various mechanisms for the relationship between net-work/tie effects and labour market outcomes. I will consider two contact characteristics, status and being an employee, that are often found to affect labour market outcomes. As mentioned above, the effect of contact status is compatible with both the assumption of extensive search and that of favouritism. The effect of being an employee is also compatible with two mechanisms: contacting an employee is useful either because employees pass information to the employer and the job seeker (and thereby both learn about each other), or because employees have considerable power to influence hiring decisions. Our objective is to find a procedure which enable us to draw inferences about the existence of mechanisms from observed contact effects. To achieve this, I single out three hypotheses that have the purpose to differentiate between these three mechanisms.

Explaining the Effect of Contact Status: Favouritism Versus Extensive Search

Additional implications of extensive search mechanism are elaborated using standard search theory (see e.g. Mortensen 1986). Consider the following scenario. Job seekers know a job offer and they have to decide about accepting or rejecting it. If job seekers believe that in the future they will receive a better offer they will reject the known offer and search further. Naturally, if the known offer is good then the job seeker accepts the offer. Social resources theory claims that high status people know about various job opportunities. This also can mean that high status people select among these opportunities and they pass the best one to job seekers. If this is true then we arrive at the known hypothesis that high status contacts provide job seekers with better job offers in terms of earnings and status than low status contacts (this is known as the social resources proposition). As mentioned above, this hypothesis can also be derived assuming favouritism. Search theory can help to differentiate between these two explanations. Note that the social resources proposition captures only the incentives to accept a job offer: good jobs are more likely to be accepted than bad job offers, and high status contacts produce good offers. More interestingly, social networks might affect the incentives to reject the known offer. Following the suggestion of Montgomery (1992), network composition in terms of status and network heterogeneity create incentives for rejecting the known offer. If one has high status network members then one can expect even better job accepts in the future since high status people tend to know good jobs. If one has network members in various occupations then one can expect heterogeneous job offers. According to standard search theory, heterogeneity of job offers make people selective in accepting job offers because heterogeneity of offers increases the expected value of the highest offer.

To sum up, if extensive search generates the relationship between contact characteristics and labor market outcomes then our application of search theory suggest the following hypothesis:

(Extensive Search Hypothesis:) The likelihood of accepting a job offer is negatively related to the number of high status network members and to the number of different occupations one can access.

Now I turn to the favouritism mechanism. Favouritism does not suggest network effects in the context of job acceptance decisions. Additional implications can be derived on the assumption that favouritism is constrained by institutional factors. When making hiring decisions and setting wages, employers might be constrained by formal procedures. Especially the presence of personnel departments push employers towards meritocratic procedures (Pfeffer and Cohen 1984). Since it is more easy to formalize job descriptions and wages than to check all details of the application procedure, I expect that personal departments constrain the allocation of jobs to newcomers. Therefore,

(Favouritism Hypothesis:) The returns to contact status in terms of earnings and status is lower in firms where personnel departments exist.

Explaining the Effect of Employee Referrals: Favouritism Versus Intensive Search

When a job offer is found, job searchers have to collect more information about unobservable aspects of the job, like working conditions, working climate. To collect more information about unobservable details, job seekers might visit the firm. However, this strategy is time consuming, and other applicants might take the job. Obtaining the job information through personal contacts naturally reduces this risk since in-depth information is acquired quickly. Contrary to this, people who heard about the job through formal channels are faced with the risk of having an unpleasant job when they accept the offer. People matched formally either avoid this risk by rejecting the offer, or they take the risk. Accepting a job without much information, however, increases the risk of leaving that job. Since job seekers can be assumed to prefer jobs where they are satisfied with working conditions, keeping status and earnings constant, getting a job through an employee increases the likelihood of accepting the job offer. Unfortunately, this hypothesis can also be derived on the favoritism assumption that current employees have the power to determine who is hired.

The intensive search and favouritism mechanisms can be separated when observing how returns to employee referrals depend on employers' use of interviews. The intensive search mechanism claims that employees transmit information about applicants and employers. Employees may have knowledge of what employers like to see during formal screening. If selection decisions are influenced by the outcome of formal screening, people who heard about the job through an employee will increase their advantage since they receive insider information about how to behave during the interview, or how to present their CV (see Fernandez and Weinberg 1997). Therefore we expect that

(Intensive Search Hypothesis) The impact of hearing about the job through an employee on the likelihood of being offered the job increases when employers interview the applicants.

This hypothesis is hard to reconcile with favouritism. More specifically, favouritism implies the opposite of this hypothesis. As described above, favouritism is constrained by formalized selection practices. Thus, we might expect that when employers interview applicants then the room for exercising power is reduced. Thus, under the assumption of favouritism, the impact of hearing about the job through an employee on the likelihood of getting the job decreases when employers use formal screening.

Summary

These hypotheses suggest the following strategy to separate the three mechanisms. First, observe whether status or being employee is the contact characteristic that has an effect on the value of job offer. If contact status has an effect then examine both the impact of personnel departments on returns to contact status, and the impact of network characteristics on job acceptance decisions. If, however, employee has an effect, examine employers' job offer decisions, and check whether there is an interaction between employee contacts and interview.

DATA AND MEASUREMENT

Data come from a recent survey that was conducted among young people who finished their secondary vocational education in 1998. The choice of school-leavers enables us to assess the impact of pre-existing social ties on mobility outcomes in various stages of the job search process. The survey was held in 7 large cities of Hungary. For practical reasons, data collection was restricted to those individuals who were resident in these cities. The sampling procedure consisted in two steps. First, schools in the cities were visited and addresses of school-leavers were collected in order to obtain a sampling frame. Second, individuals were randomly selected from the sampling frame. The respondents were interviewed two times: first between December 1998 and February 1999, then during September-October 1999. This process resulted in 690 interviews.

The analyses reported in this paper use between 436 and 461 cases. Out of the 690 individuals, 612 heard about a job after completing their studies. About 150 cases were deleted due to missing observations. Missing cases occur mainly because interview data are not observed for those who did not apply for the job, and many respondents did not report on the income of the job offer. Our analyses are limited to the extent that no attempt was made at either imputing missing values or modelling nonresponse behaviour.

Our hypotheses refer to both the value of the job offer and the outcomes of the hiring process. This paper uses only one measure for the value of job offer, the natural log of the

net monthly earning that was offered to the job seeker. Outcomes of the hiring process are measured with two dummies: being offered a job, and accepting the offer.

The source of job information is captured only by two *characteristics of contact persons*: status and whether they are employed at the firm where the job is located. Note that hearing about the job offer through formal channels or directly correspond to zero values of these dummies. Because no recent Hungarian prestige scale exists, contact status is based on the type of occupation. High status includes managerial, professional, and technical occupations (see Granovetter 1974), while low status contacts work in clerical, service, and (skilled or unskilled) manual occupations. The measurement of employee contacts, on the one hand, and the measurement of formal screening, on the other, are straightforward.

Network characteristics are measured with two variables: knowing high status people, and knowing people in various occupations. Knowing a high status person is a dummy variable identifying those who have at least one high status person among their network members. Network membership was elicited using three name generators: whether the respondent has parents and siblings; whether the respondent has an employed friends; and whether the respondent knows an employed person who could help to find a job for a friend of the respondent. Thus, our measure does not differentiate between family and friendship ties. The number of occupations one can access was based on the Lin-Dumin (1986) technique. Respondents were asked whether they know somebody in certain occupations. The list comprised 17 manual, service, and clerical occupations. Note that I did not include high status occupations in the list. The reason is that the question was intended to reflect access to various industries or workplaces which will be approached by our pupils, rather than access to people with various status. Since I wanted to measure personal networks prior to looking for a job, but the data collection took place when people searched for a job, both the name generators and the Lin-Dumin style questions were retrospective questions.

Besides the variables describing contact and network characteristics, several *control variables* are employed. Control variables were grouped into two blocks: job characteristics, and individual characteristics. The job-level characteristics that might influence the value of job offer are firm size, existence of foreign property in the firm, and the type of occupation. Firm size is measured with a dummy identifying firms with at least 50 employees. The existence of foreign property identifies firms where there is some foreign property. Type of occupation is a dummy identifying white-collar occupations. Individual characteristics include educational level, years of training outside school, sex, living place, being qualified for the job, and the time of the job offer. Educational level is a dummy indicating those whose vocational education is connected to the general A-level. To some extent, the education dummy captures the type of occupation studied: those who studied technician or clerical occupations obtained an A-level, while many people who studied service and manual occupations attended apprentice schools or classes, where obtaining the general A-level is not possible. Training was included in the analyses because some pupils were trained exclusively within the school, and training outside school was assumed to improve vocational

qualifications. Living place was measured in terms of region: this dummy identifies the capital of Hungary, and the 2 other cities in the sample which belong to the economically more developed Western part of the country. The time of job offer is assumed to influence job acceptance decisions. This variable is recorded in months. Value 1 refers to May 1998, the time when individuals were about finishing their studies. Since the last second wave interviews took place in October 1999, the highest value of this variable is 18.

Summary statistics for the variables can be found in Table 1.

Empirical analyses use multivariate regression techniques. Coefficients for variables are computed using familiar OLS and logistic regressions. However, standard errors are computed using the so-called Huber/White/sandwich variance estimates (Greene 1993), with classes as unit of clustering (Rogers 1993). This method takes into account the fact that data come from a multilevel design (individuals are nested within classes, classes are nested within schools, etc.).

TABLE 1: Summary statistics for variables

	Variable	N	Mean	S.D.	Min	Max
(A)	Dependent variables					
	offered monthly net earning (in 1000 HUF)	461	27.62	9.56	5	62
	Job offer was made to the applicant	458	0.95	0.21	0	1
	Applicant accepted offer	436	0.94	0.23	0	1
(B)	Key explanatory variables					
	Contact characteristics					
	Hearing about the job informally	461	0.51	0.50	0	1
	High status contact	461	0.14	0.34	0	1
	Contact is employee at the firm	461	0.25	0.43	0	1
	<i>Formal screening</i>					
	applicant was interviewed	461	0.65	0.48	0	1
	personnel department exists	461	0.25	0.43	0	1
	<i>Interaction terms</i>					
	High status contact * interview	461	0.08	0.27	0	1
	High status contact * pers. dep	461	0.05	0.22	0	1
	employee * interview	461	0.16	0.37	0	1
	<i>Network characteristics</i>					
	N of occupations accessed	461	7.56	3.48	0	17
	High status network member	461	0.37	0.48	0	1
(C)	Control variables					

Job characteristics						
existence of foreign property	461	0.24	0.43	0	1	
more than 50 employees	461	0.24	0.43	0	1	
job is white-collar	461	0.75	0.43	0	1	
<i>Individual characteristics</i>						
educational level: R. has A-level	461	0.51	0.50	0	1	
years of training outside school	461	1.62	1.37	0	4	
sex (1 if male)	461	0.56	0.50	0	1	
region (1 if west)	461	0.58	0.49	0	1	
time heard about job (in months; 1 = May 1998)	461	5.50	4.52	1	18	
qualified for job	461	0.70	0.46	0	1	

EMPIRICAL ANALYSES

Contact Characteristics and Earnings

First, I examine the value of the job offer in terms of earnings. Our main objective is to distinguish between favouritism and extensive search. Both mechanisms are consistent with the social resources proposition (i.e, a positive relationship exists between the value of job offer and contact status), but only favouritism implies that this effect is conditional on the existence of personnel departments.

TABLE 2: Analysis of offered log earnings: OLS coefficients (robust t statistics)

	bivariate results	Models		
		(1)	(2)	-3
<i>Contact Characteristics</i>				
High status contact	0.104		0.087	-0.002
	-1.825		(1.844)	-0.029
Contact is employee at the firm	0.007		-0.002	-0.028
	-0.201		(0.049)	-0.533
<i>Formal Screening</i>				
applicant was interviewed	0.121			0.049
	(3.504)***			-1.396
personnel department	0.154			0.002
	(4.061)***			-0.048
<i>Interaction terms</i>				
employee * interview	0.089			0.017
	(2.152)*			-0.261
high status contact * interview	0.238			0.027
	(4.557)***			-0.306

high status contact * pers. dep	0.346			0.234
	(4.878)***			(2.787)**
<i>Characteristics of the job offer</i>				
existence of foreign property	0.262	0.197	0.197	0.175
	(7.562)***	(5.465)***	(5.636)***	(4.834)***
more than 50 employees	0.104	-0.011	-0.017	-0.029
	(2.754)**	(0.303)	(0.446)	-0.784
job is white-collar	-0.157	-0.099	-0.092	-0.082
	(4.565)***	(3.266)**	(3.073)**	(2.803)**
<i>Individual characteristics</i>				
educational level	0.096	0.04	0.045	0.025
	(2.758)**	(1.345)	(1.493)	-0.832
years of training outside school	-0.025	-0.013	-0.015	-0.016
	(2.017)*	(1.147)	(1.38)	-1.568
sex (1 if male)	0.118	0.125	0.12	0.108
	(3.529)***	(4.291)***	(4.03)***	(3.655)***
region (1 if west)	0.267	0.223	0.223	0.223
	(8.485)***	(7.734)***	(7.676)***	(7.831)***
Constant		3.09	3.08	3.069
		(76.184)***	(75.006)***	(65.193)***
R squared		0.266	0.273	0.293

NOTES: N = 461 for all models; * : $p < 0.05$, ** : $p < 0.01$, *** : $p < 0.001$

The intensive search explanation cannot be tested here since it does not imply a positive or negative effect of a contact characteristic. To identify the underlying mechanism, I estimated three multivariate regression models. Model (1) is the baseline model, it includes only the control variables. Model (2) adds contact characteristics to the baseline model to test the social resources proposition. Model (3) introduces interaction effects between formal screening and contact characteristics in order to test the favouritism hypothesis. Note that the interaction terms also include the interaction between employee contacts and being interviewed. This interaction effect controls for the intensive search mechanism. I also present bivariate regression results in order to see the total effects of the variables. Estimation results are displayed in Table 2.

Examining the parameter estimates of control variables in our models might help to check model specification. Mainly the characteristics of the firm and the job that determine the wage offer. As expected, people living in the Western part of the country,

men, and people accessing a foreign company have receive better job offers. Contrary to this, white collar jobs are associated with worse earnings. It is interesting to note that educational characteristics do not play an important role (parameter estimates are not significant).

Model (2) indicates that contacts who are employed at the firm do not lead to better offers: the parameter estimate is virtually zero. More difficult is to judge whether contact status has the expected effect: the sign of the coefficient is positive, but not significant at the usual 5 percent level. Nevertheless, the t statistics is relatively large ($t=1.844$, the corresponding p value with $df=251$ is 0.066).

If, despite the nonsignificant parameter estimate, one is willing to accept that contact status has an effect, model (3) can be used to explain this effect. If the returns to contact status become lower in firms where personnel department exist then the favouritism explanation can be accepted. Looking at model (3), only the interaction between personnel department and contact status has a significant coefficient among the interaction effects. However, the sign is positive, which is contrary to our expectations. Thus the favouritism explanation should be rejected.

Job Offers, and Job Acceptance

Next, I turn to the analysis of job offers and job acceptance decisions. If the extensive search mechanism is present then network characteristics should increase the chance of rejecting an offer. Favouritism and intensive search accounts are related to the contact person being employed at the firm. Intensive search suggests that interview enlarges the returns to employee contacts in terms of receiving a job offer since insiders teach applicants how to behave during interviews. Favouritism suggest the opposite: information received through interviews constrain the influence of insiders.

First I examine job offers in order to distinguish between favouritism and intensive search. Both mechanisms are consistent with the importance of receiving job information through employees of the firm where the job is located. The two mechanisms have competing implications about the impact of the interaction between employee contacts and interview. I estimated three multivariate logistic regression models. Model (1) is the baseline model, it includes only the control variables. Model (2) adds contact characteristics to the baseline model. Model (3) introduces interaction effects between interview. I also present bivariate regression results in order to see the total effects of the variables. Estimation results are displayed in Table 3.

The results do not enable us to make a decision about mechanisms. Most of the parameter estimates are statistically not significant. Hearing about a job has the expected positive coefficient in both model (2) and model (3), but the effect is not significant. If both effects were significant, we could conclude that employee contacts have a positive effect on receiving a job offer, and this effect is also present when applicants are interviewed. Note that this conclusion is consistent with the favouritism explanation. The findings do not support the intensive search explanation. Looking at model (3), the sum of the two

coefficients is close to zero (1.167-1.199=-0.032), which means that employee contacts have no influence on job offer decisions when employers interview the applicants.

Now I turn to job acceptance decisions in order to test the extensive search explanation. If this explanation is true then network characteristics should have a negative impact on job acceptance decisions. I estimate four multivariate logistic regression models. All models will control for individual characteristics. The first model also includes the monetary value of the job offer.

TABLE 3: Receiving a job offer: Logit estimates (robust z statistics)

	bivariate results	Models		
		-1	(2)	-3
<i>Contact Characteristics</i>				
High status contact	0.487		0.723	0.903
	-0.653		(0.871)	-1.055
Contact is employee at the firm	0.43		0.435	1.167
	-0.846		(0.784)	-1.1
<i>Interaction interview * contact</i>				
contact employee * interview	0.225			-1.199
	-0.386			-0.902
Applicant was interviewed	0.483			0.945
	-1.092			-1.939
<i>Characteristics of the job offer</i>				
existence of foreign property	-0.218	-0.3	-0.371	-0.469
	-0.464	(0.473)	(0.588)	-0.707
more than 50 employees	-0.193	-0.143	-0.304	-0.32
	-0.415	(0.235)	(0.498)	-0.515
job is white-collar	0.374	0.234	0.329	0.382
	-0.709	(0.412)	(0.583)	-0.703
<i>Individual characteristics</i>				
educational level	-0.514	-0.709	-0.655	-0.76
	-1.162	(1.383)	(1.33)	-1.544
years of training outside school	-0.189	-0.253	-0.271	-0.272
	-1.365	(1.729)	(1.946)	-1.89
sex (1 if male)	0.067	0.067	-0.014	-0.02
	-0.141	(0.132)	(0.026)	-0.037
region (1 if west)	0.748	0.855	0.947	0.957
	-1.604	(1.864)	(2.083)*	(2.117)*
time heard about job	-0.042	-0.041	-0.039	-0.05
	-0.943	(0.856)	(0.793)	-0.973

qualified for job	-0.147	-0.293	-0.35	-0.396
	-0.309	(0.591)	-0.675	-0.74
Constant		3.771	3.618	3.197
		(3.729)***	(3.632)***	(3.071)**
Pseudo R ²		0.05	0.06	0.079

NOTES: N = 458 for all models; * : p<0.05, ** : p<0.01, *** : p<0.001

Pseudo R² is the percentage reduction in log likelihood, compared to the constant-only model.

Model (2) adds network characteristics to the first model. Models (3) and (4) are similar to the first two models: based on the assumption that job characteristics and the characteristics of the contact person have an impact on the value of wage offer, wages are replaced by job and contact characteristics. Thus, model (3) contains contact and job characteristics, while model (4) also includes network characteristics. The nice feature of model (4) is that contact and network effects can be compared directly. I also estimated bivariate models for each independent variables. Estimation results are shown in Table 4.

Coefficients in models (1) and (2) are surprising: the monetary value of the job offer has a negative, but statistically not significant effect on job acceptance decisions. Network characteristics have the expected negative effect, but only having a high status network member has significant coefficient. Models (3) and (4), which use the determinants of offered wage instead of the value of wage offer, also show the minor role of firm characteristics and the importance of network characteristics in job acceptance decisions. More interestingly, high status contact has a positive coefficient, which means that contacting a high status person might have a positive effect on accepting the job. Unfortunately, the coefficient is not significant at the usual 5 percent level (the z score is 1.805, the corresponding p value is 0.071). Thus, contact and network characteristics (or mobilized and accessed social capital) have opposite effects on job acceptance decisions. Contacting a high status person is likely to increase the value of job offer (see table 2), which creates incentives to take the job. However, knowing a high status person creates incentives to reject the job. The contact effect is larger than the network effect (see the sum of coefficients in model (4): 1.867-1.278=0.589). This means that if mobilizing a high status contact were strictly determined by having access to high status people, then access to high status people would have a positive impact on job acceptance decisions.

The finding that network characteristics have an influence on job acceptance decisions is consistent with the extensive search explanation. The favouritism mechanism cannot account for the fact why network characteristics in themselves have this effect. Also the intensive search explanation can be ruled out. Models (3) and (4) show that neither the main effect of employee contact nor its interaction with interview is significant. Thus, the results support the extensive search explanation.

CONCLUSIONS AND DISCUSSION

This paper addressed the question how can the importance of two contact characteristics, status and being an employee, be explained. I sketched three mechanisms, and I formulated hypotheses that can differentiate among these mechanisms. The hypotheses were tested by examining the impact of contact characteristics on the monetary value of job offer, on getting job offer, and on accepting the offer.

The results can be summarized as follows. First, high status contacts seem to inform job seekers about better job opportunities (keep in mind that the p-value is 0.066). Since personnel departments do not diminish the returns to contact status, the favoritism explanation should be ruled out (see the favoritism hypothesis). Second, the analysis of job offers was not conclusive due to nonsignificant coefficients. I found a negative coefficient for the interaction between employee contacts and interviews. If the coefficient were significant, we could reject the intensive search account (see the intensive search hypothesis). Finally, the analysis of job acceptance decisions support the extensive search explanation: knowing a high status person creates incentives to reject the job offer (see the extensive search hypothesis). To sum up, our analyses support the extensive search explanation.

One objection to this conclusion is the following. Looking at table 1 (panel A), one can see that job offers are very rarely rejected. This observation does not support our argument behind the extensive search hypothesis, namely that applicants are selective in accepting job offers. Although this selectivity assumption is not expressed in numbers, the fact that only 5 percent of people rejected the offer casts doubt on search theory.

Before one generalizes the results, one should keep in mind that findings about contact effects are very often conditional on the outcome studied (Marsden and Hurlbert 1988). In our case, the finding that contact status has an impact on offered wages does not imply that contact status will also have an impact on other job characteristics. Investigating other job characteristics is necessary since the wage offer does not reveal much information about job quality and subsequent earnings. Analyses (not published here) suggest that contact effects are absent when other indicators of good job are used as dependent variables.

REFERENCES

Boxman, Ed A.W. (1992). *Contacten en Carriere. Een Empirisch-Theoretisch Onderzoek naar de Relatie tussen Sociale Netwerken en Arbeidsmarktposities*. Amsterdam: Thesis Publisher.

- Coverdill, J.E. (1998). Personal Contacts and Post-Hire Job Outcomes: Theoretical and Empirical Notes on the Significance of Matching Methods. *Research in Social Stratification and Mobility* 16: 247-269.
- Fernandez, R. M. and N. Weinberg (1997). Sifting and Sorting: Personal Contacts and Hiring in a Retail Bank. *American Sociological Review* 62: 883-902.
- Granovetter, M. (1974). *Getting a Job. A Study of Contacts and Careers*. Cambridge (Mass.): Harvard University Press.
- Greene, W. (1993). *Econometric Analysis*. New York: Macmillan.
- Kugler, A. (1997). Employee Referrals and the Inter-Industry Wage Structure. Barcelona, Universitat Pompeu Fabra, *Economics Working Paper* 252.
- Lin, N. (1999). Social Networks and Status Attainment. *Annual Review of Sociology* 25: 467-87.
- Lin, N, W.N. Vaughn and J.C. Ensel (1981). Social Resources and Strength of Ties. *American Sociological Review* 46: 393-405.
- Lin, N. and M. Dumin (1986). Access to Occupations through Social Ties. *Social Networks* 8: 365-385.
- Marsden, P.V. and Jeanne S Hurlbert (1988). Social Resources and Mobility Outcomes: A Replication and Extension. *Social Forces* 66: 1038-1059.
- Marsden, P.V., and E. H. Gorman (1990). Social Networks, Job Changes, and Recruitment. To appear in Ivar Berg and Arne L. Kalleberg (eds.) *Sourcebook on Labor Markets: Evolving Structures and Processes*.
- Montgomery, J.D. (1992). Job Search and Network Composition: Implications of the Strength-of-Weak-Ties Hypothesis. *American Sociological Review* 57: 586-596
- Mortensen, D.T. (1986). Job Search and Labor Market Analysis. in: O. Ashenfelter and R. Layard (eds.): *Handbook of Labor Economics (Vol. 2.)* Amsterdam: North-Holland.
- Pfeffer, J., and Y. Cohen (1984). Determinants of Internal Labor Markets in Organizations. *Administrative Science Quarterly* 29: 550-572.
- Rees, A (1966). Information Networks in Labor Markets. *American Economic Review* 66 (May): 559-566.
- Rogers, W. H. (1993). Regression standard errors in clustered samples. *Stata Technical Bulletin* 13: 19-23.

1. Paper presented at the International Social Network Conference. Vancouver, April 13-16, 2000

2. Dept. of Sociology / Interuniversity Center for Social Science Theory and Methodology, University of Groningen, Grote Rozenstraat 31, 9712 TG Groningen, The Netherlands. E-Mail: t.bartus@ppsw.rug.nl.

3. The paper reflects the current state of research within the PhD research project "Getting the first job in Hungary", which is carried out under the supervision of Tom Snijders, Jules Peschar (University of Groningen), and Beate Völker (University of Utrecht). Their comments are acknowledged.