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# The Changing Significance of Ties

## *An Exploration of the Hiring Channels in the Russian Transitional Labor Market*

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**abstract:** This article explores the relative change in significance among various means of getting a job in Russia in the period of transition from state socialism. The article argues that the transition neither makes personal connections obsolete nor transforms them in a market-like fashion. In accordance with the path dependency argument, they persist strongly while formal labor market mechanisms are weakened by the devaluation of workers' formal credentials as a hiring criterion. The authors' theoretical propositions are supported by empirical analyses based on ethnographic and survey data collected in four Russian cities. Unstructured interviews indicate that the specific skills acquired by job candidates through the formal education system have a minor impact on hiring decisions. At the same time, personal connections preserve their influence and are being formally incorporated in decision-making. We treat the channels of help, channels of information and the formal market as alternative means of a getting a job described by a competing risk event history model with repeated events. The model confirms that the informal channels persist while the formal labor market is shrinking, although the relative increase in the value of personal contacts vis-a-vis the formal market is statistically insignificant. The shrinkage of the formal labor market becomes negligible when we control for the interaction of the educational credentials and the start of the reform period. Thus, this phenomenon can be primarily attributed to the diminished role of educational credentials.

**keywords:** event history analysis ♦ labor market ♦ post-communist  
Russia ♦ social network analysis ♦ transitional societies

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The initial public support and enthusiasm surrounding the socioeconomic reforms in Russia were largely based on the expectation that such reforms would rapidly lead to the extinction of the pervasive patronage which accompanied the distribution of jobs, goods and services in the former Soviet Union. In practice, while the commodity market did emerge and basic goods did become widely available after the liberalization of prices, the role of personal contacts in getting a job appears to be more crucial than ever before, according to popular wisdom and anecdotal evidence.

This article explores in a systematic fashion whether the significance of personal contacts has indeed increased and, if so, how it can be explained. Our approach to this problem is based on the mainstream tradition in economic sociology of labor markets which emphasizes the role of pre-existing social networks in hiring (Granovetter, 1973). However, to achieve our purpose, this approach needs to be developed further to grasp the changing relative utility of personal ties versus formal means in hiring over time. The specific challenge of our case emerges from the fact that the accumulation and loss of potentially useful social contacts as well as the development of the formal segment of the labor market take place in three temporal dimensions: in addition to age and tenure at the previous job, which always affect individual opportunities in a labor market, we must deal with a drastic transformation of the social structure in both positional and relational terms within a very short historical period.

To address emerging theoretical and methodological questions, we proceed in the following manner. First, we review existing theoretical studies of the process of getting a job and derive from them specific predictions about the changes in the ways and means in which people obtain their jobs during the transition from state socialism. In the second section, we describe the data collected from a large-scale survey of the local labor markets in four Russian cities: Moscow, Kemerovo, Samara and Syktyvkar. The analytical methods and statistical models which we employ to test the theoretical hypotheses and overcome some methodological difficulties are discussed in detail in the third section. Finally, we present empirical findings from our analysis and discuss their implications.

### **Theoretical Background and Hypotheses**

After approximately 35 years of quite intensive debate within the sociology of labor markets (for a review, see Granovetter, 1995), one can

distinguish three theoretical paths to exploring the role of personal ties in an economy which undergoes a transition from central planning.

The first one considers a free market of anonymous buyers and sellers as the best remedy for inefficiencies caused by the penetration of non-economic relationships into economic transactions. From this perspective, the market-oriented reforms undertaken around the world over the last decade should, at least, limit the damaging effect of corrupt personal ties on the economic behavior of firms and individuals and, eventually, bring such practices to extinction.

It is important to keep in mind that the Russian labor market already contained a substantial market element in the late Soviet period. State socialism failed to establish direct control over the labor supply and made extensive ideological and political compromises over this issue (McAuley, 1979). Although, on the demand side, the state as effectively the sole employer exercised full control over wages and job creation in the formal economy, the system as a whole reacted, albeit with a significant delay, to the dynamics of supply and demand. Unemployment was illegal, but by and large workers were allowed to change jobs freely. One of the first steps of Gorbachev's economic reforms in the mid-1980s was the introduction of flexible employment opportunities which, together with the institutions of self-employment and private property rights, were expected to mobilize individual economic initiative. As a result, almost any form of recruitment found in a market economy was present, at least in an embryonic state, in the late Soviet labor market. At the same time, the general liberalization of an economy can affect hiring practices as far as employers and employees are motivated to look for the best workers and jobs, respectively, rather than to treat hiring as a favor which can be exchanged for other goods and services. The latter is often the case in centrally planned economies operating with chronic shortages. Thus, one could expect that the introduction of basic free-market mechanisms into the Russian labor market at the beginning of the 1990s would lead to a diminishing role of personal connections in the hiring process. More precisely:

*Hypothesis 1:* Following the introduction of the market-oriented reforms, the chances of being hired through personal contacts diminish relatively to the chances of being hired through formal labor market mechanisms.

Basic free-market mechanisms were indeed introduced in Russia. First of all, their predecessor, the redistributive mechanism of jobs allocation, collapsed altogether. To deal with potentially high unemployment, the government created the Federal Employment Service, whose tasks included the provision of unemployment benefits and the dissemination of information about job vacancies. Private employment agencies

mushroomed, and the mass media were flooded with offers of jobs and labor (Clarke, 1999; Otsu, 1992; Oxenstierna, 1990). All of these new labor market intermediaries were supposed to promote genuine competition among employers for workers and among workers for jobs; however, in practice their role in this regard appears to be rather modest. By and large, neither workers nor employers are satisfied with the work of the Federal Employment Service and private agencies, mainly because they fail to equip them with a satisfactory range of choices of jobs and job candidates, respectively. Despite the liberalization of prices and elimination of shortages, jobs continue to be allocated primarily through personal connections. Recent studies of the Russian labor market consistently show that 40–60 percent of hiring is carried out through social networks (Clarke, 1999; Gimpelson and Magun, 1994; Kozina, 1997, 1999). This finding does not look peculiar from the comparative perspective. The reviews that have been done of multiple surveys show that about 50 percent is the most consistent estimate of the number of hirings taking place through personal contacts in the market economies of the USA, Britain, Japan and the Netherlands (Montgomery, 1991; Granovetter, 1995). The real issue is what kind of contacts leads to jobs or, to put it differently, what is being transmitted through these ties.

Both economic and sociological perspectives on hiring account for the fact that buyers and sellers have incomplete information on the market. From this standpoint, personal connections serve as channels for specific and often sensitive information about the transaction partners which cannot be passed through formal channels. As a result, better matches between potential employers and employees are achieved and the hiring process as a whole becomes more efficient. Moreover, the existence of even an indirect social relationship between an employer and their new employee may serve as a third party's warranty that the obtained information is correct and thereby nurtures mutual loyalty and commitment. Finally, in the situation of ongoing economic turmoil, such as that which accompanies the transition from state socialism, the production process is so uneven that employers do not have much time to go through the formal search and hiring process when an additional workload suddenly emerges. The use of personal contacts allows employers to economize on the transaction costs (Williamson, 1975) attached to hiring.

This argument differentiates personal ties that provide only information from those which can help a job candidate in getting the position found. The proponents of the incomplete information argument would still argue that the market undermines the role of personal ties in hiring; however, it acts selectively, neutralizing pressures from those ties which carry help and preserving those which provide the transaction partners with better and cheaper information about each other.

**Table 1** *Theoretical Perspectives on Relative Effect of Market Reforms on Probability of Hiring Through the Alternative Channels*

Theoretical Argument	Relative Change in Significance of Hiring Channels		
	Help versus Formal Market	Information versus Formal Market	Help versus Information
Free market	Negative	Negative	N/A
Incomplete information	Negative	Positive	Negative
Path dependency	Positive	Positive	Zero

*Hypothesis 2:* During the transition from state socialism, the relative significance of the channels of help in the hiring process diminishes vis-a-vis the formal market and the channels of information. The importance of the channels of information increases with regard to the formal market.

These two hypotheses are made under the tacit assumption that the transition from the state socialist to market institutions is a direct process without any intermediate states, detours or dead-ends. However, the existing literature does not support such a claim. On the contrary, there is a growing body of evidence that the abolition of the old institutions and the creation of new ones are relatively autonomous processes. As a result, a society in transition can experience a vacuum of institutional arrangements. At the same time, informal practices inherited from the past persist because the personal networks in which they are embedded resist abrupt changes in the social order (Bunce and Csanádi, 1993; Grabher and Stark, 1997; Stark, 1996).

The path dependency argument is not captured by personal contacts as they are incorporated in the incomplete information argument of hypothesis 2. If the argument is correct, channels of help and information should show relative inertia and persistence in comparison with the formal market and should not change in significance vis-a-vis each other.

*Hypothesis 3:* The chances of getting a job through channels of help and information increase relatively to the chances of hiring in the formal market, following the introduction of the market-oriented reforms.

The outlined theoretical propositions, which are summarized in Table 1, make clear the central tenet of our overall argument: the process of transition from state socialism neither makes personal connections obsolete nor transforms them in a market-like fashion. Instead, we witness their relative persistence in the institutional vacuum emerging when the old institutions of state socialism collapse and the new market institutions are weak and immature.

If left here, the changing significance of ties argument would fall into a broad category of institutional ideas which are too general to be useful for explaining transitional phenomena (Walder, 1996). One wants to know more precisely what is missing in the transitional institutional order (or disorder) that makes the role of social ties so persistent in the hiring process.

As a consequence of ineffective centralized planning, the labor market under state socialism is characterized by yawning discrepancies between the required skills and the actual composition of the labor force and, in particular, by chronic overproduction of certified specialists. This drawback used to be balanced by the official policy of full employment implemented through the centralized system of job creation and assignment of workers to jobs (*raspredeleniye*) which was the first victim of the transition. In combination with the economic recession, the death of the centralized system accelerated the separation of the external and internal labor markets for qualified labor. Our case studies consistently show that Russian enterprises prefer to fill their vacancies from within and tend to reassign their employees from obsolete jobs to new positions in those cases where some restructuring takes place. Outsiders are more likely to be offered positions which do not match their credentials and former experience.

Theoretically, this collapse of the old institutional structure of the labor market could be mitigated by the opportunities in the new private sector. In practice, this new segment of the labor market inherited the same feature, albeit in new clothes. Job seekers' credentials do not match the requirements of the available positions for different reasons. According to some economists, this mismatch lies within the old system of education and training in the former Soviet Union, which focused on the 'mastery of a fixed, specialized body of knowledge to be applied in narrowly defined jobs' and neglected subjects which are crucial for modern market economies, such as economics, management, law, psychology, foreign languages and computers (World Bank, 1996: 124). However, much more often the most highly rewarded jobs do not require any educational credentials at all when, for example, a former engineer or teacher can earn a much bigger salary as a street trader. Such deskilling is extremely common. Very often, the new requirements themselves are too vague to be useful for evaluating a candidate. Acting together, the trends outlined depreciate educational credentials and make them practically irrelevant in the transitional labor market.

This mass deskilling does not imply that the return to education in terms of monetary rewards declined in the 1990s. In fact, the empirical evidence on this issue is inconsistent. Gerber and Hout (1998) find that low returns to education, typical for the late Soviet era, persist during the transition. Brainerd (1998) argues that the return to education increased,

but at the same time notes that returns to unmeasured skills grew even faster.<sup>1</sup> These findings are not inconsistent with our argument, because the statistical models tested by their authors do not control for an individual's social resources. We do not argue that more highly educated people are more likely to fail in the Russian labor market. Our ethnographic evidence shows their relatively successful adjustment. However, this happens through the mobilization of personal contacts and is only weakly related to the specific skills acquired through formal education.

These forces of supply and demand could be sustained by a well-functioning formal labor market where job seekers' credentials are evaluated and compared in a systematic and objective manner. In fact, the attempts to set up such practices were undertaken in the relatively successful enterprises we studied.<sup>2</sup> A genuine effort was made to convert Soviet era personnel departments which used to rubber-stamp hiring decisions made by management into western-type offices performing thorough evaluations of job seekers. However, this move faced strong resistance from middle management. In 15 enterprises, we found either the old familiar hiring practices or an institutional vacuum. This vacuum is filled by ad hoc hiring decisions, which create extra room and demand for information and help carried out by personal ties between employers and their potential employees. The 16th enterprise has succeeded in standardizing and formalizing its hiring practices. But rather than contradicting the general trend described, the success story sheds unexpected light on our argument and, therefore, is presented here in some detail.

The enterprise studied is located in Samara and produces confectionery. In the early 1990s it was acquired by an established western company, which moved aggressively to impose its traditional work practices, including hiring policies. The social factor was not suppressed or ignored. On the contrary, the management perceived it as a positive force in transforming the enterprise into a 'family company'. To achieve this goal, the 'personal tie' criterion was formalized and incorporated into the hiring process. Any worker from that enterprise can register her or his relative as a potential job candidate. When a vacancy opens, the database of such relatives is screened before an outsider is even considered for the position. This genuine attempt to formalize the informal indeed altered the social expectations on which hirings through patronage are based. As one respondent, who was assisted by her mother, put it:

I thought my mother would ask for me and that was it. It turned out they had a line for the children of the company's employees. I waited a year before a vacancy in the second shop opened and my mother told me to apply.

From our standpoint, it is important to understand how this creative institutional transformation changed the role of meritocratic criteria in hiring.

The database of relatives contains information about their education, occupation, work experience, knowledge of foreign languages and computers. In an interview, the head of the personnel department emphasized:

First, we hire the children and relatives of our employees. This does not mean that we accept the uneducated. People with quite a high educational level come to us now. Even ordinary workers have specialized secondary schools and universities behind them.

This quote is remarkable, it clearly demonstrates that a kinship tie is a prerequisite for hiring. At the same time, the level and content of education do not determine the position for which the worker can be considered as qualified. Thus, the institutional creativity revealed in this peculiar case does not contradict our major argument – personal ties substitute qualifications as hiring criteria in the Russian transitional labor market. It is important to remember that qualifications are not just ignored, they lose their influence due to systemic changes in both educational and economic structures of society.

The consequences of the skill mismatch factor, if they are indeed present, should disproportionately affect workers with specialized training or education. Therefore, the following hypothesis is expected to hold:

*Hypothesis 4:* The socioeconomic reforms significantly decrease the chances of workers with specialized skills vis-a-vis those with only a general secondary education to be hired in the formal market.

## **Data**

To test our hypotheses, we use the data from a survey of workers from 16 large industrial enterprises situated in four Russian cities: Moscow, Kemerovo, Samara and Syktyvkar. The survey was carried out by the Inter-Regional Institute for Comparative Studies of Labor Relations (ISITO) and the Centre for Comparative Labour Studies in the University of Warwick during spring 1997.

The selected firms are the research sites where the authors of the survey have spent the past five years collecting detailed ethnographic information about economic restructuring and employment policies. The results of the ethnographic studies serve as a source of the theoretical insights and formal hypotheses developed in this article. About 50 workers were randomly selected from the employee list in each enterprise to form the sample of 800 individuals. The sample from each enterprise was stratified by the tenure in this enterprise and the workers hired within the last five years were oversampled. The weights, which were subsequently

developed to adjust for the stratification effect, are used everywhere in our analysis below.

The research team carried out face-to-face structured interviews with all the respondents. Among other items, the questionnaire solicited information about the individuals' work histories between 1985 and 1997, including how the jobs were obtained. Only the change of an employer was considered as the start of a new work episode. Neither the survey nor this article deals with internal labor markets.

The questionnaire contained two closed-end questions about getting a job: 'How did you find out about this job?' and 'How did you get this job?' The possible answers to the first question included the following channels: kinship ties, neighbors, colleagues and classmates, Federal Employment Service, private employment agencies, visits to enterprises, posting and searching ads, state distribution and other. The same scale was duplicated for the second question with one exception: 'independently' replaced 'visits to enterprises'. These categories can be aggregated in two broad groups: personal contacts (kinship ties, neighbors, colleagues and classmates) and formal market (Federal Employment Service and private employment agencies, visits to enterprises and getting a job independently, posting and searching ads). The system of state distribution collapsed soon after the reforms began and therefore any statistical comparison of this channel's role before and after the start of the reforms is meaningless. This category, together with the residual category 'other', was excluded from our analysis. The questionnaire format allowed for multiple responses; however, very few respondents seized this opportunity and therefore only the first answers received are used to determine the hiring channel.

In their answers to the two key questions, respondents could indicate that they learned about the job through some personal contact, but got it independently. This would mean the use of a personal contact as an information channel. On the other hand, they could answer that they did both, learned about the job and then got the job, through a personal contact. Such an answer would point out the direct assistance in getting the job. Thus, combining the answers to the two questions, we can distinguish channels of information from channels of help. We treat as help those cases in which the job was obtained through any type of personal contacts as indicated by the answers to the second question about getting a job. If the respondent found out about the job through personal contacts, but got it on their own or through some formal labor market intermediary, a personal channel of information was activated. Finally, if the respondent got the access to both information about the job and the job itself through formal labor market intermediaries and without any involvement of personal contacts, the formal labor market mechanism was at work.

The nature of the data makes it impossible to explore hiring processes from the employers' perspective. We limit our attention to information and help available to job seekers.

### **Event History Model of Getting a Job**

Temporal dimensions are largely ignored in the vast literature on hiring, which is based exclusively on the results of cross-sectional surveys consistently replicated among different populations within one country and across countries (Granovetter, 1995). The major general conclusion, that informal means of getting a job do matter, is drawn from the comparisons of the marginal distributions of hiring methods for the subpopulation of those who got jobs which might be either their current jobs, the most recent ones obtained within some fixed time period, or first jobs. Such research designs disregard the fact that hiring takes place in a number of temporal dimensions such as historical time, individual life course, time since the previous job change, to name the most important ones. Taking into account only those who got the jobs, we tacitly assume that the timing of the hiring is exogenous to the way in which it occurs or, to put it differently, one causal mechanism determines the time when the hire takes place while another determines the hiring method conditional on the fact that the hire happens at the specific time point. Such models would be satisfactory if the process of getting a job had been reducible to choosing among alternative job search methods. Sociological studies convincingly show that this is not the case; actors use any means available at a given point in time and, on the other hand, very often are not searching for a job at all at the time when the offer suddenly arrives (Granovetter, 1974). In particular, the tenure at the previous job is a temporal dimension along which the chances to be hired through a specific channel can vary. It is extremely unlikely that a recently hired employee will immediately start looking for another job in the formal labor market. At the same time, it is plausible that he or she will soon get a more attractive offer through personal contacts.

We suggest the competing risk event history model (Allison, 1984; Blossfeld et al., 1989; Tuma and Hannan, 1984; Yamaguchi, 1991) as the most adequate way to grasp multiple temporal dimensions and relative autonomy of alternative hiring methods which characterize the process of getting a job. It assumes that there is a finite number of mutually exclusive events  $\{e_i, i = 1 \dots N\}$ , each of which has its own hazard rate  $h_i$ . In our case,  $N = 3$ ,  $e_1$  is a hiring through social ties,  $e_2$  is a hiring through work-related ties and  $e_3$  is a hiring in the open labor market. The occurrence of any type of event removes the individual from risk of all the other events. Therefore, the likelihood function for each event treats all the other

events as censored observations. Each hazard rate,  $h_i(t)$ , is modeled as a function of time and other covariates which can be either constant or varying over time. We use the Cox model (Cox, 1972) to capture the relationship between the hazard rate and covariates:

$$h(t) = \lambda_0(t)\exp\{\beta_1x_{1t} + \dots + \beta_kx_{kt}\}$$

where  $h_0(t)$  is a baseline hazard function, namely the hazard function for the individuals all of whose covariates are equal to 0,  $\{x_1 \dots x_k\}$  is a set of covariates, and  $\{\beta_1 \dots \beta_k\}$  is a corresponding set of the coefficients to be estimated.

The event history approach is highly developed for transitions into absorbing states which imply unique events such as death and first job. Because these techniques ignore the interdependencies among the events happening to the same individual, they can underestimate the variance and even bias the estimates of the coefficients in the case of repeated events such as job changes which are our primary concern. Unfortunately, there are not many satisfactory solutions to this problem. In the majority of cases, the interdependencies among the events are simply ignored and all the conventional event history techniques are applied without any changes. It would be imprudent to follow the same path in our case, because the data set is relatively small, heavily clustered and weighted. Consequently, one can expect particularly high interdependencies and relatively low statistical power to produce reliable estimates.

Instead, we implement the fixed-effect partial likelihood (FEPL) method to estimate the specified Cox models. This method controls for the unobserved interdependencies by estimating a separate baseline model for each individual (Allison, 1996; Chamberlain, 1985). Certainly, any solution to a statistical problem carries its price. The FEPL method excludes from the analysis two types of individuals: those who do not have any job changes within the given time period and those who have only one change such that the tenure in the current position until the interview time is less than the tenure at the previous position. More importantly, if the number of job episodes varies across individuals or the censoring time (the length of an episode which terminated without the event) depends on the lengths of the preceding intervals, the estimates can be biased and inefficient (Chamberlain, 1985). Our data have these pitfalls. However, using Monte Carlo simulations, Allison (1996) shows that they do not cause much trouble in practice.

According to our theoretical discussion, three temporal dimensions are important for getting a job: age, tenure in the previous job and historical time. We singled out the length of the time period since the start of the previous job as the underlying time scale for the process at hand. This

allows us to treat age and historical time as time-dependent covariates whose effects on the chances to get a job are to be estimated. Because we want to see how the hazard rates of being hired through various channels changed after the Russian economic liberalization in 1992, the historical dimension is represented by the dichotomous time-dependent variable 'before/after'.

As any other fixed-effects method, the FEPL provides coefficient estimates for time-dependent covariates only. Because all time-independent effects are adequately controlled for by fixed effects and the time-dependent ones are the only concern for us, this limitation does not cause any problems.

### **Empirical Findings**

Table 2 presents descriptive statistics for the variables of interest. There were 61.8 percent of women in the sample, reflecting the gender composition of the enterprises where the sample was drawn. The fact that these enterprises are currently or previously state owned explains the relatively small percentage of the job episodes in the new private sector. These peculiarities have to be accounted for in an interpretation of our findings.

Because January 1992 is when the Russian market reforms started, it is important to know how the hires through different channels are distributed before and after this date. As the findings from Table 3 demonstrate, there were 669 instances of transition to a new job between 1985 and 1997 including 298 instances, 44.5 percent of the total, before 1992 and 371 instances, 55.5 percent of the total, after January 1992.

Before 1992, the formal market dominated the channels of information and channels of help with the total of 122 episodes or 40.9 percent. Note that this number is consistent with all the previous research on the subject – taken together, the channels of information and help handle the majority, 59.1 percent, of hirings in the 1985–91 period. After the reforms start, the general picture shifts drastically in favor of personal contacts, which now handle about 72 percent of all the new hires. Both the channels of help and information increase their presence from 32.9 to 44.2 percent and from 26.2 to 27.8 percent respectively. With regard to our theoretical discussion presented earlier, these descriptive results appear to confirm an even stronger statement that the significance of social ties increases not only relatively to the formal market but absolutely as well. At the same time, we should be cautious with the descriptive statistics that do not control for relevant characteristics of individuals and, most importantly in our case, do not adequately capture the temporal dimension of the hiring processes. As is well known from the literature on event history analysis (see, for example, Tuma and Hannan, 1984), any

**Table 2** Descriptive Statistics (Sample Size = 800 cases and 1469 Episodes)

Variables	Cases		Episodes of Getting a Job	
	N	%	N	%
Female	496	61.8		
Education				
General	225	28.1		
Professional degree	575	71.9		
Economic sector				
Industry			1155	78.6
Service			314	21.4
Property form				
State			746	50.8
Privatized			658	44.8
New private			65	4.4
Occupational status				
Manager			147	10.0
Specialist			163	11.1
Clerical worker			117	8.0
Skilled worker			790	53.8
Unskilled worker			252	17.2
			Mean	Std. Dev.
Age at the start of the episode (in years) <sup>a</sup>			27.0	8.5

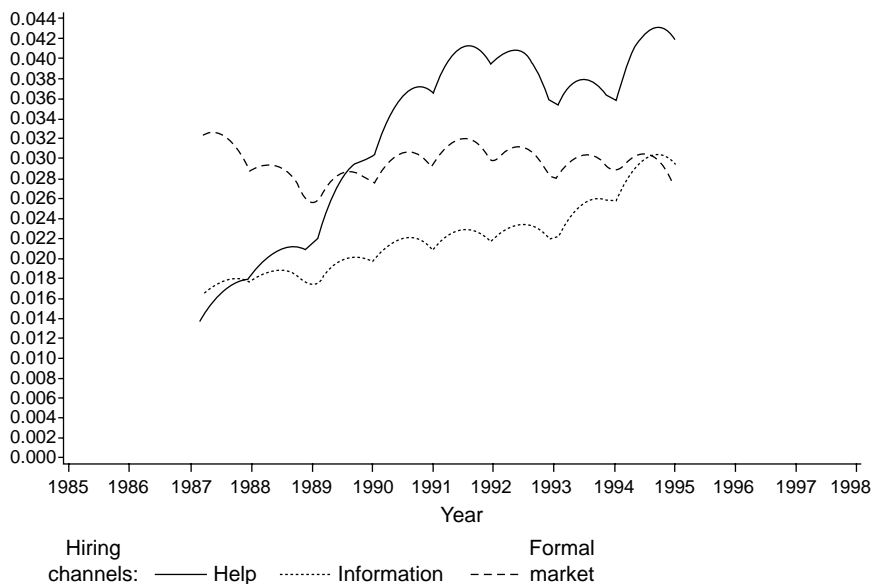
<sup>a</sup>In the models in Table 4, age is a time-variant covariate, that is its value changes as time progresses. We present the descriptive statistics for age at the start of the work episode only.

**Table 3** Getting a Job by Hiring Channel and Time Period

Hiring Channel	Before January 1992		After January 1992	
	N	%	N	%
Help	98	32.9	164	44.2
Information	78	26.2	103	27.8
Formal market	122	40.9	104	28.0
Total	298	100.0	371	100.0

analysis of processes must adequately deal with not only the occurred event, but also the ‘non-events,’ namely so-called censored episodes which do not end within the observation period.

Figure 1 presents the hazard rates of being hired through the different



**Figure 1** Hazard Rate of Changing Job in Four Russian Cities, 1987–95

channels over the time period studied, which are predicted by the Cox model with controls for gender and education.

The results are remarkably different from those obtained from the descriptive statistics. Since 1989, the channels of help dominate the labor market. However, the peak of their influence was reached in 1991–2 and it does not look as if there was any further increase afterwards. At the same time, the hazard rate of being hired through the information channels is increasing steadily over the whole period while the hazard rate of hiring in the formal market fluctuated on about the same level with a slight decline after 1992.

The plots on Figure 1 are drawn for a male with a general education. Because the hazard rates are estimated from a proportional hazard rate model, they may move up or down for the respondents of different gender and education without shifting the overall pattern. This pattern, while it captures the increasing utility of personal contacts, in general, and those contacts that provide help, in particular, over time, does not yet deliver an adequate test of our hypotheses. This task is accomplished by the estimates of the coefficients of the Cox model in Table 4, which controls for the time-dependent covariates.

The overall significance of contacts is depicted by model 1 estimated

for each hiring channel. The introduction of the market reforms has a significant effect on the hazard rate of being hired on the formal market; this hazard rate plunges about 64 percent ( $\exp(-1.02) = 0.36$ ) after January 1992. The effects of the reforms on hiring through the channels of help and information, which are  $-0.47$  and  $-0.23$  respectively, are relatively small and insignificant. Taken together, these findings provide support for Hypothesis 3. They suggest continuity rather than change in the role of personal contacts on the Russian labor market and, at the same time, the shrinking domain of the formal market. To accurately test if there is a relative increase in the utility of the personal contacts, we compare the coefficient estimates using 1-degree-of-freedom Wald chi-square statistics (Allison, 1995; Lagakos, 1978). It turns out that the highest value of chi-square, 1.95 for the comparison between the effects of the reforms on the channels of information and formal market, falls short of being significant. Thus, statistical support for Hypothesis 3 is rather weak, even if the overall trend points in that direction.

To explore the interplay between formal qualifications and hiring channels (Hypothesis 4), we include in the model the interaction between education and the start of the market reforms. The FEPL estimates in the 'model 2' columns of Table 4 show that for someone with professional qualifications the hazard rate of getting a job in the open market after the liberalization of prices diminishes by a factor of 2.86 ( $1/\exp(-1.05)$ ) in comparison with the pre-reform period. This coefficient is significant on the .05 level and thereby the finding supports Hypothesis 4, which states that the role of formal education in getting a new job is diminished on the transitional formal labor market. Moreover, as the same model shows, the effect of the reforms itself, which is now equal to  $-0.23$ , becomes statistically insignificant and indistinguishable in magnitude from the analogous estimates in the models for the channels of help and information.

## Discussion

Our findings from event history analysis suggest that the increasing role of personal contacts, depicted by case studies and descriptive statistics, is an aberration of the non-proportional shrinkage of the more formal segment of the Russian labor market. It looks like the individuals in our study do not move from the formal market to the informal one, but rather give up on the idea of getting a new job altogether. This is particularly common for people with vocational and professional training who find their educational credentials largely irrelevant in an economy characterized by mass deskilling and deep recession. In these circumstances, emerging vacancies are filled predominantly in the internal labor market. A limited number of newly created well-paid jobs require rare skills such

**Table 4** Fixed-Effects Partial Likelihood Estimates for the Cox Model of Getting a Job through Alternative Channels<sup>a</sup> (Sample Size = 1469 Episodes)

	Channels of Help		Channels of Information		Formal Market	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Age	.08**b	.08**	.11**	.11**	.09**	.09**
Service sector						
Property form (state) <sup>c</sup>						
Privatized	.44*	.43	.77**	.78**	.66**	.59
New private	-1.15***	-1.16***	-1.33***	-1.31***	-.98**	-1.10***
Occupation (unskilled worker)						
Manager	-.47	-.46	.46	.65	-.70	-.82
Specialist	-.54	-.57	.79	1.03	-.01	-.11
Clerical worker	-.26	.31	1.02	1.17	-.02	-.24
Skilled worker	-.37	-.38	.13	.21	-.11	-.23
Market reforms start in January 1992	-.47	-.24	-.23	-.77	-1.02***	-.23
Reforms *						
professional degree		-.27		.76		-1.05**
-2 Log L	158.8	158.6	128.5	126.8	225.1	221.3
$\Delta$ (-2 Log L)						
for $\Delta df = 1$		.2		1.7		3.8**

<sup>a</sup> Coefficients for time-invariant variables, such as gender and education in this case, cannot be estimated by a fixed-effect model, but they are controlled for.

<sup>b</sup> Significance levels: \* p < .1; \*\* p < .05; \*\*\* p < .01 (two-tailed test).

<sup>c</sup> Reference categories are given in parentheses.

as foreign languages and computers, and jobs in the few growing sectors such as trade and services often do not need any formal qualifications at all. Educational credentials are the most obvious formal criterion which has to be taken into account in hiring decisions. If they are largely irrelevant, there is not much a formalized hiring process can accomplish. On the contrary, informal evidence of the candidate's abilities and trustworthiness may become crucial.

Why does the increasing relative significance of personal ties during the transition from state socialism appear counter-intuitive? First, because the baseline is quite high, as the widespread practice of favoritism under state socialism was common knowledge (Berliner, 1957; Grossman, 1977; Ledeneva, 1998), and its importance in the labor market was documented as well (Bian, 1997). Second, even skeptics acknowledge that the Russian reforms eliminated the persistent shortage of food, goods and services which is believed to be the mechanism behind the Soviet economy of favors. Yet, our findings become less surprising if we remember that social structure underlies any economy, even a market one (see Granovetter, 1985; Swedberg, 1994). The question is not whether social ties are present, because this is usually the case, but rather what kind of social ties are present. Do they disseminate information and enforce non-contractual transactions by promoting mutual trust or do they reinforce exchanges based on the non-market logic of reciprocity. Paraphrasing Granovetter (1973), we would argue that the essence of the transition from state socialism to market is the gradual substitution of strong ties with weak ones in the social structure of economic exchanges. In this regard, our empirical evidence is mixed. As Figure 1 shows, the role of close social ties facilitating mutual help was increasing between 1988 and 1991, namely in the period when limited reforms were directed toward the creation of the second economy and accompanied by persistent shortages of goods and services. On this stage, reciprocity is even more necessary as a substitute for the increasingly dysfunctional system of redistribution (Szelenyi and Kostello, 1998). Since 1992, channels of information, which we identify with weak contacts, appear to be the most persistent and advantageous although it does not look like their domain expands considerably. Rather, the prevalence of weak personal contacts is rooted in social inertia (see Grabher and Stark, 1997) which manifests itself in the resistance of the society's social fabric to purely economic forces. Although such a resistance may not continue forever, social ties do show a tendency to be broken or transformed later than any formal arrangements.

We do not argue that personal contacts are necessarily corrupt and inefficient in purely economic terms. It may well be the case that they make workers' collectives more cohesive and thereby enhance productivity. Future research has to show if the quality of matches achieved through

personal contacts is higher than the quality of matches made in the formal labor market. It may also be true that the very shortage of jobs and high unemployment create a rationing situation in which a hiring is more likely to be treated as a favor. Thus, the economic recession itself rather than the institutional vacuum discussed earlier turns reciprocity into a preferable hiring method. In this regard, the institutional vacuum does not cause the proliferation of personal contacts but creates opportunities for it. Reciprocity is always out there, ready to squeeze through any hole in the fence of formal institutional arrangements. Therefore, the creation and strict enforcement of anti-discriminatory labor laws and proper functioning of labor market intermediaries are of major importance.

More generally, a smart labor market policy cannot ignore the persistence of social influences in hiring, not least because it will leave its imprint on the emerging institutional structure anyway. Our ethnographic data show that, either intentionally or spontaneously, institutional actors produce creative responses to the challenges posed by the transition. Let us recall here the confectionery factory whose personnel department maintains the database of workers' relatives who would like a job at the enterprise. This practice can certainly be considered as a step toward the formalization of hiring practices, albeit with attention to habits and customs. The very fact that the qualifications of the job candidates are recorded makes the personnel department accountable for its hiring decisions, which now require justification in meritocratic terms. At the same time, the employees' desire to help their relatives is still respected. In this way, the employer limits the propensity of reciprocal relationships to subvert market exchanges. The key question is where this transitory system will move next. A study of a representative sample of Samara enterprises and organizations, which we undertook in 1999,<sup>3</sup> shows that the practice of creating a labor market around a single firm gains recognition among personnel officers. On one hand, it is driven by a desire to keep track of those workers who are currently being downsized, but may be needed later when production picks up even temporarily. A large-scale return mobility, when a worker comes back to the firm she or he worked for in the past (Clarke, 1999), shows that this rationale makes perfect sense. On the other hand, employers are deeply dissatisfied with both the Federal Employment Service and private employment agencies and react to weaknesses of the emerging market institutions. Remarkably, the 1999 study suggests that qualified 'off-the-street' candidates, even if they are not relatives or friends of an enterprise's employees, can often be included in the database of potential job candidates. Thus, a move toward a true market-like institutionalization of hiring is self-evident.

Interpreting the results of our analysis, it is important to keep in mind its methodological limitations. First, the survey was carried out in 16

large state and privatized enterprises where our respondents ended up by the middle of 1997. We cannot say much about the new private sector, which is only now emerging in Russia, and therefore rely on a substantially different underlying social structure. Also, we cannot generalize our conclusions for the Russian labor market as a whole from the statistical evidence *per se*. At the same time, the rich ethnographic evidence compensates for the weakness of our sample, at least partially. Second, the distinction between channels of help and information may not capture all the changes in the content of social ties during the transition from state socialism. The intrinsically illusive and ambivalent character of human relations allows them to avoid comprehensive scrutiny by a structured questionnaire. For instance, our ethnographic research strongly suggests that, in the period of transition, social relations become more pragmatic and calculating even if they do continue to provide help. To capture such subtleties, one has to explore the whole social context in which the transaction of interest takes place. We believe this can be done in a large-scale survey, but only if the survey is narrowly focused on a specific transaction rather than attempts to cover a number of transitional phenomena at once. In this regard, our article makes just the first step in a dynamic analysis of the social underpinnings of a transitional labor market.

## Notes

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1. Brainerd defines returns to unmeasured skills as the differential between the first and last deciles of the residual income distribution in her regression models after education and occupation are controlled for.
2. For a project description, see the Data section below.
3. Here, we refer to the data from the project 'Reciprocity in the Russian Labor Market: Its Role in the Transition from State Socialism' funded by US National Science Foundation grant #97-10531, principal investigator Mark Granovetter, research assistant Valery Yakubovich. The fieldwork in Samara was done in collaboration with the Samara branch of ISITO.

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