



centro de estudos da metrópole

ACCESS TO EMPLOYMENT OPPORTUNITIES IN BRAZIL.
AN INTER-METROPOLITAN COMPARISON ON THE MECHANISMS OF THE
CIRCULATION OF EMPLOYMENT INFORMATION AND THE REPRODUCTION OF
INEQUALITIES.

NADYA ARAUJO GUIMARÃES

USP, DEPARTAMENTO DE SOCIOLOGIA E CEM/INCT

E-MAIL: nadya@usp.br

MURILLO MARSCHNER ALVES DE BRITO

USP, PROGRAMA DE PÓS EM SOCIOLOGIA E CEM/INCT

E-MAIL: murillomarschner@yahoo.com.br

PAULO HENRIQUE DA SILVA

CEM/INCT

E-MAIL: paulo@phi.com.br

PAPER PRESENTED AT THE INTERNATIONAL SEMINAR “METROPOLIS AND INEQUALITIES”

SÃO PAULO, 24 - 26 MARCH 2010.

COMMENTS ARE VERY WELCOME.

ACCESS TO EMPLOYMENT OPPORTUNITIES IN BRAZIL.

AN INTER-METROPOLITAN COMPARISON ABOUT THE MECHANISMS OF THE CIRCULATION OF EMPLOYMENT INFORMATION AND THE REPRODUCTION OF INEQUALITIES.¹

NADYA ARAUJO GUIMARÃES²

MURILLO MARSCHNER ALVES DE BRITO³

PAULO HENRIQUE DA SILVA⁴

The debate around social inequalities is strongly based on the thinking about the role of the market as a mechanism for allocating resources and therefore as a strategic instance for reproducing or overcoming inequalities. A large part of the best sociological work has been geared towards understanding the way employment opportunities are allocated and, therefore, the role of the employment market in the structural insertion and social mobility of individuals.

For example, throughout the 1960s and 1970s, the most important studies about social stratification have been directed at the employment market. We could even say that research about the process of status acquisition (such as Blau and Duncan's, 1967 or Hauser and Fetherman's, 1977) became the gateway towards analyses of the employment market within mainstream 20th Century sociology. These studies focused on understanding how individuals were distributed within the finite set of possibilities of employment insertion and shed light on the links established between individual attributes (such as family

¹ Paper presented at the Panel on "Jobs in Metropolitan Regions", International Seminar "Metropolis and Inequalities", São Paulo, Center for Metropolitan Studies, March 24-26 2010. Results come from the Project "Networks and Access to Jobs" supported by FAPESP (Cepid 1998/14.432-9) and National Institute on Science and Technology (NICT) Project - MCT/CNPq/FAPESP (Processos CNPq 5738642008 e FAPESP 2008/57843-1). We benefitted from the Department of Sociology at University of São Paulo and NICT/Center for Metropolitan Studies. institutional support. We also thank Sergio Mendonça, Director of DIEESE (Interunion Socioeconomic Studies Department) who allowed our access to the data basis from the household metropolitan survey "Informations for the public system on employment, work and income", conducted on 2008.

² Chair Professor, Department of Sociology at the University of São Paulo and CNPq Sênior Researcher at the NICT/CMS, coordinatiing the research team on ""Networks and Access to Jobs" E-mail: nadya@usp.br

³ Associate researcher, Project ""Networks and Access to Jobs", NICT/CMS and PhD Student at the University of São Paulo Graduate Program in Sociology. E-mail: murillomarschner@yahoo.com.br

⁴ Associate researcher, Project ""Networks and Access to Jobs", NICT/CMS. E-mail: paulo@phi.com.br

origin, education, gender, race, etc.) and the socio-economic outcomes of these individuals. These studies were prominent and with good reason due to the role they gave to employment demand dynamics, where socio-economic outcomes were mainly investigated in relation to the personal characteristics of those competing for scarce prestige positions within the arena of the employment market. From the 1970s onwards, within the international literature, two new questions gained greater importance. The first related to the effect the structure of opportunities within companies had on the chances of individuals. Indeed, since Harrison White's (1970) seminal work on social "opportunity chains", the focus on the possible inequalities of opportunities had already moved towards being included in the dynamics within organizations which employed individuals. There followed studies focusing more closely on determining factors leading to inequality of outcomes, and above all, the distribution of rewards, concentrating on the study of companies and developing the analysis of determining factors related to the supply side of employment (Baron and Bielby, 1980; Hodson, 1983; Kalleberg and Griffin 1980). It was not long before the argument regarding the importance of vacant positions (and their production dynamics) moved away from the company towards external employment markets; in this way, the same phenomenon described by White started to be looked at from the point of view of individuals distributed within a wider social structure and how this affected economic rewards obtained within social positions occupied by individuals (Sorensen, 1977). But the 1980s brought another way of approaching the subject of the links between the employment market and opportunities. Mark Granovetter's formulation (1974) about the role of personal contact networks on access to information about employment alternatives refocused interest on these issues, placing analysis at the crossroads between employment supply and demand, rather than on either side in isolation. By arguing that the distribution of employment opportunities could only be sociologically well understood if we took into account the presence of social networks mediating relations between employers and those looking for work, Granovetter drew attention to the importance of non-market aspects on the workings of the employment market, revealing an important mechanism through which economic action was rooted within social structure (1985).

His formulation expanded the analytical research agenda about the employment market in that it shed light on an aspect that had been up to that point little studied, that is, the circulation of information about employment. This became increasingly seen as a central element for the production (or overcoming) of inequalities in accessing work opportunities. Thus the position (within the social structure) of the contacts individuals called upon whilst searching for work, and not only their personal attributes, could determine not only their likelihood of finding work, as reported by Granovetter, but the quality of the work obtained, and therefore, the likelihood of socio-economic success and individual mobility (Lin, 2001; Degenne et al 1991; Hsung, Lin and Breiger, 2009); the analytical link between the employment market and mobility, which had been so important for sociologists during the 1960s, was therefore re-established. The research program opened up by Granovetter's seminal study

helped to reveal a sort of passage way in the employment market which had barely been looked at: the intermediation of employment opportunities. Today we know that mechanisms of access to information about available positions, a pre-condition for obtaining employment, involve both networks established within spaces of individual sociability and economic agents whose object is to intermediate employment opportunities. The latter form a market within what we conventionally understand as the employment market. This other market has two specific characteristics: on the one hand, the commodity which circulates within it (information about vacancies, and not the actual workforce); on the other hand, the existence of a third economic agent (the mediator, and not only the buyer and the seller of workforce). We know that this (agent) becomes more importance the more flexible employment becomes and the more uncertain the opportunities are, within the intense re-structuring of the world economy, marked by larger or smaller international crises (Autor, 2008; Benner, Leete e Pastor, 2007; Koene e Purcell, 2004). In face of these new research developments which took place in the 1980s and 1990s, the importance of market institutions and networks for searching and obtaining employment had to be investigated in order to better describe the existing structural differences between markets. In fact, outcomes of research carried out in the 1990s and 2000s showed that the weight of different agents used whilst searching for work varied significantly between societies.

In a comparative study by means of sample surveys carried out in three world metropolises – Paris, Tokyo and São Paulo – we found that commonly used resources for seeking work did not have equivalent weight and varied according to their own context (Kase and Sugita, 2006; Guimarães, 2009). Therefore, mechanisms linking individuals to employment opportunities varied under different forms of work and employment regulation and different types of social protection regimes. In this way, in employment systems where the pattern of work contracts were more stable (such as in Japan), or where unemployment was more socially protected institutionally (such as in France), different mechanisms for finding work were prominent in comparison with those found in Brazil, where the recurrence of employment transitions was associated to the weak social protection given to those seeking work.

Therefore, in São Paulo, personal networks were shown to be the most important mechanism by far, particularly those related to the strong links of family and close friends; individual efforts in directly approaching companies also stood out; economic agents within the intermediation market and other anonymous methods (adverts in newspapers and specialized magazines) had clearly a secondary role. In Tokyo, on the other hand, information available in the public space in the shape of adverts in newspapers and magazines and resorting to public employment agencies were observed as being the most frequent means used by most individuals. In the region of Paris-Île de France seeking vacancies in the market individually, by directly contacting companies, was the most recurrent method, as well as resorting to information available through the solid and wide-reaching public system of support for the job-seeker.

Due to specificities in the way the surveys were conducted in the cases of the metropolitan regions of São Paulo and Tokyo, it was possible to further investigate the mechanism that proved to be most effective in seeking work, that which was used by the interviewee to find his last employment. In São Paulo, personal networking and individual job searching in the market by direct contact with companies were the most efficient means. In Tokyo, social networks (of little relevance in comparison to other methods more often used in job searching) were shown to be, however, a somewhat efficient means of obtaining work, though public mechanisms had greater importance (adverts in newspapers and magazines, agencies in the public system and schools); there, as opposed to São Paulo, direct job-searching seemed to render very few results.

From these findings an important analytical difference between two main ways of classifying the relationship between candidates and vacancies is evident. On the one hand (I) through mechanisms of circulation of employment information institutionalized within the public space and put into practice through market agents or (ii) through mechanisms based on private sociability spaces and put into practice through personal contact networks. On the other hand, the bringing together of candidate and vacancy can take place (I) through the direct relationship of the individual and the employment market (direct contact with companies, adverts in newspapers, public examinations) or (ii) through a relationship mediated either by employment market agents (employment agencies, temporary employment agencies) or through personal contact networks.

In light of research findings comparing these three world metropolises, we note the explicative weight of the macro-institutional aspect, namely, different work and employment regulations and institutionalization of social protection. However, we are faced with two other challenges: the need to explore the importance of other determining factors on individual choices and studying the links between the type of employment search and the quality of employment obtained. These allow us to theorize about what links the way employment information circulates and the reproduction (or overcoming) of social inequalities.

This is the aim of the present paper. Thus, we have built a comparison with a different purpose to the earlier research, that is, we have kept the macro-institutional framework constant. Instead of comparing metropolises subject to different systems of employment and social protection regimes, we have attempted to keep these characteristics constant and have made inter-metropolitan comparisons, at an intra-national level. This is because recently produced data related to some of the main Brazilian metropolitan regions showed that there was significant variation both with regard to how work was searched for and, by extension, the importance of different mechanisms of the circulation of employment information and the efficacy of these mechanisms in relation to the allocation of employment opportunities. For this reason, our aim in this paper is to advance the debate based on the following argument: (1) If individuals are exposed to different alternatives with regard to obtaining access to information about employment opportunities, and (2) if the effects in terms of

opportunities individuals have access to is dependent on the alternatives selected, (3) is it possible to observe a pattern, a set of characteristics, which are more closely associated to each of the means of circulation of employment information? (4) by varying these means, what has more weight, individual characteristics (acquired or ascribed) or those which are related to the context this individual is inserted into, looking for work (the type of segment within the employment market or the type of metropolis he or she is competing in)?

By formulating our analytical object in this way, we move away from the conventional sociological domain of employment markets, where what is at issue is outcomes of a type of employment insertion, observing their effects in terms of social-economic outcomes reached (either through income, prestige of occupation or access to positions within the internal market of a company, for example). In this paper, we would like first of all to think about the movement that brings together the employment seeker and the vacancy; we will argue that the type of information mechanism through which one comes to know about the existence of an employment opportunity affects the characteristics of the vacancy and the profile of those who successfully secure it.

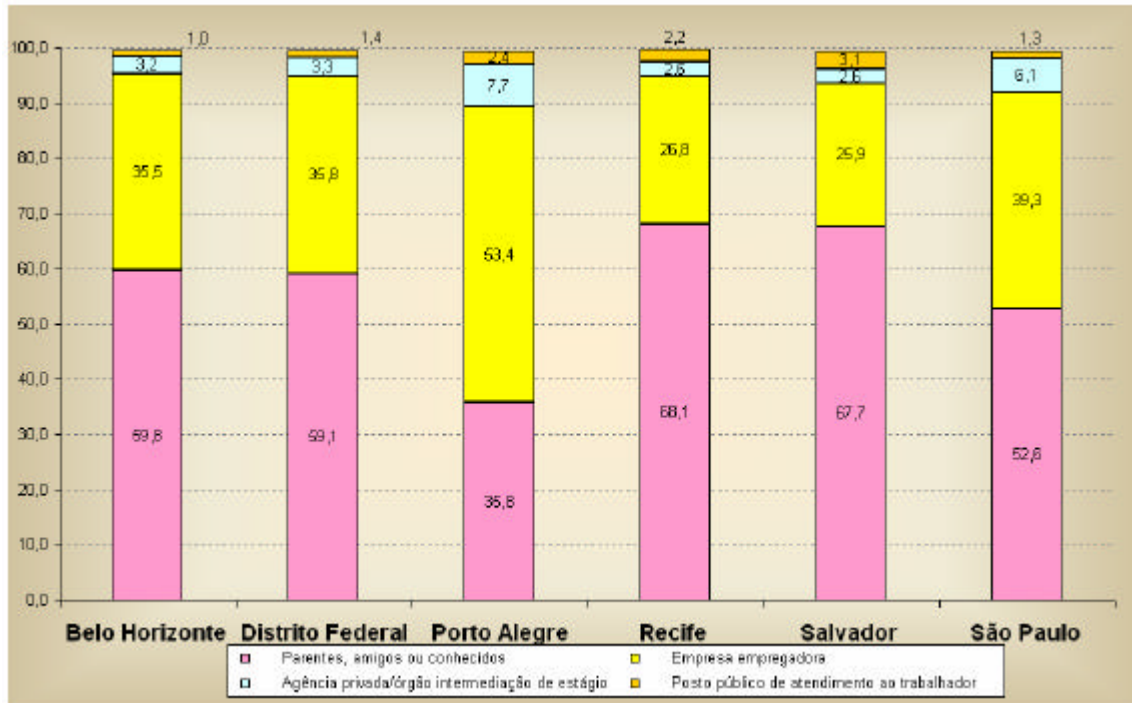
Furthermore, and analytically more ambitious, we would like to sustain the arguments that show that not only is the circulation of information within the employment market imperfect, and the knowledge of those competing for vacancies unequal, but – and we believe that the data which follows will support this argument – how socially segmented access to opportunities is. It is worth mentioning that mechanisms producing employment inequalities are brought about in the first instance from the way one looks for work and obtains information about work opportunities.

1. Where is the vacancy which is being sought? How to find out about an employment opportunity? An exploratory analysis.

In a recent sample survey, it was possible to record a notable difference between the patterns of searching for and securing employment in the Brazilian metropolitan regions.

Graph 1

Access to private employment. Metropolitan diversities (Brazil, 2008)



Source: DIEESE. Household survey “Informations for the public system on employment, work and income”, PED supplementary questionnaire, May-Oct. 2008. Original data.

Graph 1 reproduces the findings as they were collected, grouped into these four mechanisms - as indicated by private sector employees - which led to their last employment. (i) relatives, friends or people they know; (ii) direct contact with an employing company; (iii) resorting to private agencies; (iv) resorting to the public system of employment support. It can be observed that resorting to employment market institutions (both private and public) is, in general, of little importance, with some relevance only in São Paulo and Porto Alegre. Whereas personal contact networks, on the other hand, were pointed out by the majority of those interviewed (in particular in Recife and Salvador) as the efficient means they used to find their current employment. A notable exception is the metropolitan region of Porto Alegre where direct contact with companies stands out.

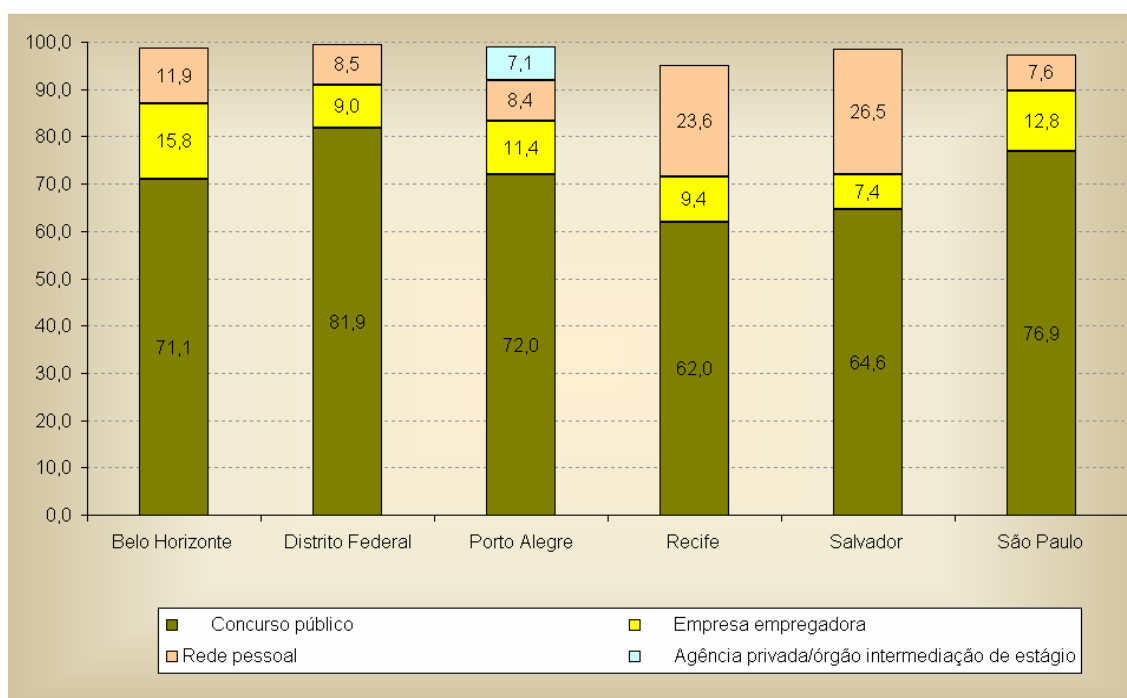
In general, the distribution of employment opportunities offered by the private sector in our metropolises seems to take place through two main mechanisms of information circulation: on the one hand, personal contact networks; on the other, individual action on the part of the worker who, with his working papers in hand, launches himself into the market in search of direct contact with the employing company. From an analytical point of view, it seems to be in this difference that polarization of the two situations is found: that of an

intense embeddedness of market operation in social relations built within private sociability spaces (via networks) and the apparent atomization of the individual institutionally unprotected in search of an employment position (via direct contact with firms).

The weight of these networks is so important that in at least two of the metropolises analyzed - even taking into account the fact that the means of access to positions in the public sector is usually filled through public examinations - personal contacts are given considerable importance. This is what takes place in Recife, and in particular, Salvador (Graph 2).

Graph 2

Access to public employment. Metropolitan diversities (Brazil, 2008)



Source: DIEESE. Household survey "Informations for the public system on employment, work and income", PED supplementary questionnaire, May-Oct. 2008. Original data.

Prompted by these findings, we considered it plausible to assume that characteristics of the metropolitan context could be an important factor in determining the way in which employment opportunities are distributed in Brazil and in this way, the way in which social inequalities are (re)produced. However, behind the differences expressed in the last two graphs, there could be certain peculiarities taking place which may either specify the profile of employment seekers or the profile of job vacancies they have access to, or other characteristics of the metropolitan context.

In order to progress in our reflection and trying to separate the chaff from the wheat we have selected three metropolises - typifying different means of distributing opportunities - for a more detailed analysis: that in which the weight

of personal networks was overwhelming with regard to access to employment opportunities (Salvador), even with regard to employment in the public sector; that where redistribution was mainly based on market mechanisms of employment search, either through direct contact with companies (predominant means) or through agents in the market of employment intermediation (Porto Alegre); and that where mechanisms of access through the market and through personal networks present smaller disequilibrium (São Paulo).

In more detailed operational terms, we will investigate the factors associated to the variation of efficient means of obtaining an employment vacancy by employees within these three Brazilian metropolises – São Paulo, Porto Alegre and Salvador. By “efficient means” we understand the different ways in which interviewees had access to information about the positions they held either as employees, or as domestic servants. For the purposes of the present paper we have not taken into account those self-employed, autonomous university professionals and those who own a family business; that is, all those who were majorly in charge of the reproduction of their own work force. We have focused the analysis on those that needed to sell their work and therefore needed to have access to mechanisms of the circulation of employment information. This is because our aim is to understand the mechanisms for producing inequality which occur when the vacancy supplier meets the employment seeker.

The research we have used as our source studied a wide range of efficient means for obtaining an employment position: direct contact with the current employer, public examination, public workers' service agencies, private employment agencies, community organizations, central unions (or syndicates), work-placement integration institutions, parents, friends or acquaintances. To improve our analytical focus we have reclassified our original categories into four new classes taking into account the combination of two dimensions: (I) the type of relationship that each of the efficient means established with the employment market (if direct or mediated) and (ii) how much they are based (to a greater or lesser degree) on social relations.

In this way we arrive at two types of mechanisms which operate on the basis of the direct relationship between the individual and the employment market: direct contact with the current employer and the public examination.⁵ In the first case the process of contact between the vacancy and the employment seeker is more influenced by the particularism of managerial images which take place during triage; the second case tends to be more universalist and therefore less dependent upon the representations of the individual doing the selecting, built up during the interaction that takes place in the course of the interviewing process.

There are also two mechanisms for the circulation of employment information which assume an indirect relationship between the individual and the market: the institutions acting in the market as employment mediators (employment agencies and other types of labor market intermediaries, either governmental, union-based, community or private) and personal contact

networks established by individuals in their private spaces of sociability (their relatives, friends or acquaintances). Table 1 shows the original categories of the questionnaire and their classification into the new categories of analysis which will be used from now on.

Table 1

Job access effective mean. Original and revised categories

Quadro 1 - Meio Eficaz de Obtenção do Posto de Trabalho - Compatibilização entre categorias originais e recodificadas

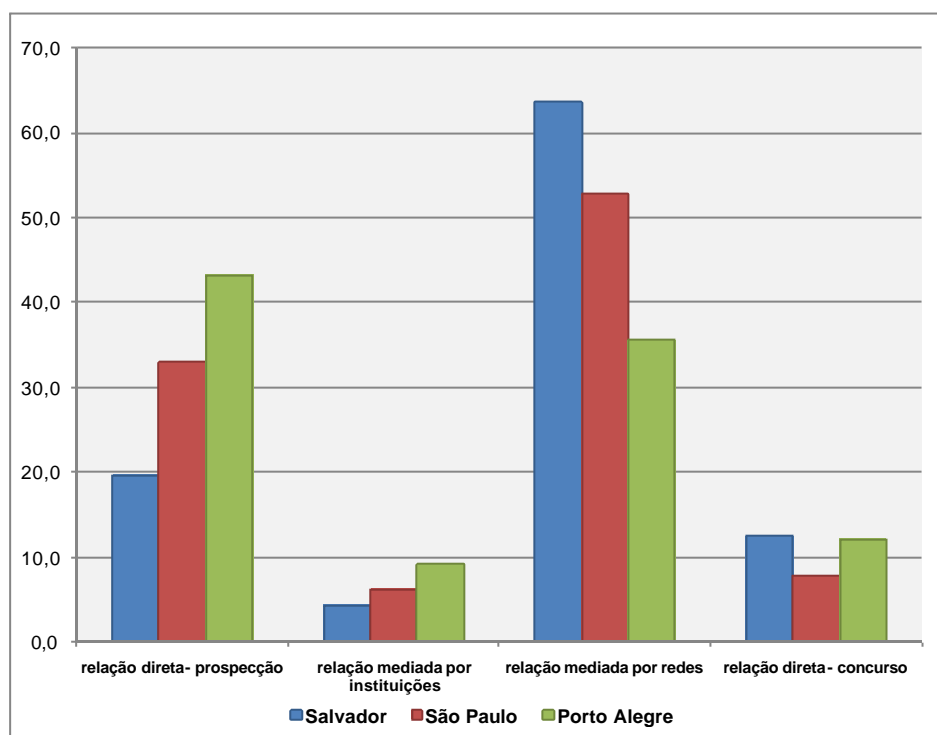
Categoria recodificada	Categoria Original
relação direta - prospecção no mercado	direto com a atual empresa/empregador
relação direta - concurso	concurso público
relação mediada por instituições	postos públicos de atendimento ao trabalhador
	agências de emprego privadas
	organizações comunitárias
	centrais sindicais/sindicatos
	órgãos de integração de estagiários
relação mediada por redes	parentes, amigos ou conhecidos

Having classified the effective means of employment seeking, what can we say about the differences between the three metropolises? Generally speaking, they remain the same (Graph 3). In Salvador and São Paulo employment positions obtained through relations with the employment market which were mediated through a network of friends, relatives and acquaintances remains predominant. In Porto Alegre, there remains a slight predominance of the direct relationship through job searching in the market, which is counter posed by the pattern observed in the other metropolises; but it is also the place where mediating institutions have a more significant role, albeit small, in relation to the two other cities; in other words, in Porto Alegre information about employment access is found in the market, whether that is through isolated individual action or with the support of employment intermediation organizations. São Paulo still seems to represent an intermediary situation between the two poles. So much so that when in Graph 3 we move from Salvador to São Paulo and Porto Alegre, the weight of market mechanisms increases systematically and the weight of non-market mechanisms decreases systematically and significantly.

Apart from the differences between the three metropolises there is a convergence that draws our attention: even though it is 15 years since the introduction of social protection mechanisms related to employment (unemployment insurance, National Fund for Workers Social Support /Fundo de Amparo ao Trabalhador, the Public System on Employment and Income), during which time four social democratic governments (of different shades) have been in power, it falls upon the individual to deal with the lack of transparency in the

market and the imperfections in the meeting point between the vacancy and the employment seeker. In fact - in all three metropolises – it is through individual and isolated action (expressed in the direct search for an employment opportunity, in direct contact with the employer) or with the support of a personal contact network that interviewees came to know about a vacancy that has been transformed into their current employment.

Graph 3
Market or networks? Effective means in job access
Salvador, São Paulo and Porto Alegre (n=30994)



Source: DIEESE. Household survey “Informations for the public system on employment, work and income”, PED supplementary questionnaire, May-Oct. 2008.

However, we return to our first objective, which is to understand the diversity of means of arriving at the opportunity of employment. Do specific characteristics exist associated to the choice of specific strategies? Are they characteristics of the individuals who use these different strategies, or characteristics of the context in which they were competing? Will there be some variation in these associations when we compare the three metropolises?

These three questions take us back to the first step in the argument that we want to verify, that is, whether the strategies of access to information could be associated to factors relative to attributes of the individual who is competing for a vacancy or to attributes of the context in which this competition takes place.

These are the two dimensions which we need to specify from the available data in the comparative inter-metropolitan study, so as to be able to understand the existence of associations.

We look in detail at the individual dimension with variables relative both to individual attributes (such as gender, colour, age, time living in a place) and to acquired characteristics which are factors valued in the employment market (such as level of education, qualifications in the area, knowledge of foreign languages, IT knowledge).

The contextual dimension was specified by means of variables relative to the characteristics of the employment vacancy which the individual was competing for (type of work relations, type of employer, type of contract). Chart 2 shows the variables selected to put into practice the two dimensions chosen for analysis.

Table 2
Identifying factors associated to the effective mean of job search.
Dimensions and variables

Variável	relação direta - prospecção no mercado	relação direta-concurso	relação mediada por instituições	relação mediada por redes
SEXO MASCULINO=1	0,56	0,43	0,48	0,51
COR - BRANCO=1	0,67	0,64	0,65	0,51
FX ETÁRIA 16-24=1	0,22	0,04	0,39	0,24
FX ETÁRIA 50-65=1	0,11	0,26	0,04	0,13
TEMPO DE RESIDÊNCIA - MAIS DE 5 ANOS=1	0,95	0,96	0,95	0,94
TIPO DE REL. DE TRABALHO - ASSALARIADO=1	0,96	1,00	0,97	0,80
TIPO DE EMPREGADOR - EMPRESA PRIVADA=1	0,93	0,06	0,89	0,79
TIPO DE VÍNCULO - COM CARTEIRA =1	0,82	0,25	0,75	0,66
ESCOLARIDADE 3º GRAU=1	0,24	0,58	0,31	0,14
CAPACITAÇÃO NA ÁREA PRETENDIDA	0,21	0,24	0,21	0,13
CONHECIMENTO DE INFORMÁTICA	0,07	0,02	0,12	0,04
SÃO PAULO	0,46	0,35	0,43	0,49
PORTO ALEGRE	0,41	0,37	0,42	0,22
SALVADOR	0,13	0,28	0,15	0,29

As all the variables are of the category type, we chose to use the Cramer coefficient in order to measure the strength of the association between them. The results, presented in Table 2, are telling. It is immediately clear that the characteristics of the context in which individuals compete are more strongly associated to the means by which the vacancy was secured than by individual characteristics. And this is true for the three metropolises. In all of them, the attributes of the vacancy secured bring together the set of variables which are more closely associated to the effective means for securing the post. This suggests that employment positions with similar characteristics (above all related to type of contract, but also to the type of employer) are also secured by means specific to them; that is, not all paths lead to jobs with similar characteristics.

With regard to the individual characteristics those related to qualification attributes, and within these, level of education, presented considerable association with the means by which the post was obtained. This shows that people with different levels of education not only have jobs of differing quality (which is well known), but that their means of securing these jobs are equally diverse; thus, if we were already aware that the type of vacancies which were open to better educated candidates were different, we now know that the way in which he or she finds out about these vacancies is equally different. It is interesting to note that there is a slight difference in this respect between the metropolises: for Salvador and Porto Alegre the level of education is the most important attribute which makes the difference with regard to accumulated cultural capital; whereas in São Paulo there seems to be a better balance, as educational background is not so distant in terms of importance compared with professional qualification indicators (particularly with regard to IT knowledge).

Table 3
Factors correlated to effective means of employment search: individual attributes of context characteristics?

DIMENSÃO	VARIÁVEL	cramer (coeficiente)		
		Salvador	São Paulo	Porto Alegre
ATRIBUTOS DO INDIVÍDUO	SEXO	0,076	0,079	0,088
	COR	0,075	0,054	0,029
	IDADE	0,125	0,105	0,140
	TEMPO DE RESIDÊNCIA	0,030	0,051	0,015
CARACTERÍSTICAS AQUISITIVAS (ESCOLARIDADE E CAPACITAÇÃO)	NÍVEL DE ESCOLARIDADE (POR GRAUS)	0,210	0,175	0,228
	CAPACITAÇÃO NA ÁREA	0,150	0,115	0,164
	LÍNGUA ESTRANGEIRA	0,033	0,063	0,044
	INFORMÁTICA	0,110	0,132	0,099
CARACTERÍSTICAS DO POSTO DE TRABALHO	TIPO DE RELAÇÃO DE TRABALHO	0,152	0,158	0,167
	TIPO DE EMPREGADOR	0,389	0,527	0,480
	TIPO DE VÍNCULO	0,575	0,574	0,590

Source: DIEESE. Household survey “Informations for the public system on employment, work and income”, PED supplementary questionnaire, May-Oct. 2008.

Finally, as stressed before, the variables which measure individual attributes are those which are less associated to the effective means of securing an employment position. Age presents the greatest potential for discrimination, as individuals in different age groups tend to have different effective means of securing employment. Gender and colour are attributes of significant association, despite their association being low; colour is important, slightly more in the case of Salvador, while gender stands out in Porto Alegre. Period of residency in the metropolitan region is only significant in São Paulo.

Nevertheless, despite providing us with some suggestive indications, Cramer's test tells us little about the type of association between variables which

seem to be connected. This prevents us from asserting more accurately which types of effective means of securing an employment position connect individuals to the different types of occupation. In order to answer this question, a multivariate analysis model was estimated and is shown in the next section.

2. What determines the way in which information capable of producing work circulates?

In the final part of this analysis exercise, we aim to identify possible determining relationships between ways in which a vacancy is secured, on the one hand, and groups of individual and contextual characteristics on the other.

In order to define the variables to be included in the model, some adjustments were required. They were the result of a careful analysis both of the association tests shown in Table 3 and of the bivariate tables which were generated by crossing the dependent variable and each of the independent variables. Table 4 shows the result of this analysis. In the first column of this table the variables which we selected to be included in the model and the formats in which they were operationalized are shown. In the following columns descriptive statistics are displayed which reveal some important differences between the individuals according to the means by which they obtained the employment position which they held at the time of the interview.

Thus, amongst those who obtained employment by means of their personal contact networks, there are proportionately more blacks. The use of this means, on the other hand, is what makes it less likely that individuals obtain a formal job with working papers (except in the case of those who obtain employment by passing an examination process). As personal networks, in most cases, are exploited by individuals with considerably lower education levels, they connect them to employment positions which are also less demanding in terms of their skills.

However, accessing employment through market institutions (employment agencies, etc.) is a means more common among younger individuals, and often connects them to formal employment with working papers and it is also more demanding in terms of the qualifications of those who chose these means.

Table 4

Effective means, individual attributes and context characteristics: testing for bi-variate associations and creating a model.

Variável	relação direta - prospecção no mercado	relação direta-concurso	relação mediada por instituições	relação mediada por redes
SEXO MASCULINO=1	0,56	0,43	0,48	0,51
COR - BRANCO=1	0,67	0,64	0,65	0,51
FX ETÁRIA 18-24=1	0,22	0,04	0,39	0,24
FX ETÁRIA 50-65=1	0,11	0,26	0,04	0,13
TEMPO DE RESIDÊNCIA - MAIS DE 5 ANOS=1	0,95	0,96	0,95	0,94
TIPO DE REL. DE TRABALHO - ASSALARIADO=1	0,96	1,00	0,97	0,80
TIPO DE EMPREGADOR - EMPRESA PRIVADA=1	0,83	0,06	0,89	0,79
TIPO DE VÍNCULO - COM CARTEIRA =1	0,82	0,25	0,75	0,66
ESCOLARIDADE 3º GRAU=1	0,24	0,58	0,31	0,14
CAPACITAÇÃO NA ÁREA PRETENDIDA	0,21	0,24	0,21	0,13
CONHECIMENTO DE INFORMÁTICA	0,07	0,02	0,12	0,04
SÃO PAULO	0,46	0,35	0,43	0,49
PORTO ALEGRE	0,41	0,37	0,42	0,22
SALVADOR	0,13	0,28	0,15	0,29

Source: DIEESE. Household survey “Informations for the public system on employment, work and income”, PED supplementary questionnaire, May-Oct. 2008.

On the other hand, employment which is secured by means of an examination process has specific characteristics: it has the smallest proportion of workers with working papers (this can be explained by the fact that many of these jobs are governed by public service legislation), and also the smallest proportion of men and youngsters (it has the largest proportion of individuals over 50). These are also positions where individuals have the highest levels of education

Finally, the group of individuals who resort to directly searching for employment in the market are characterized by a greater proportion of men, of whites and of individuals who secured employment in the private sector, in formal employment with working papers.

Table 4 reiterates previous findings with regard to the importance, in the three metropolises, of the different circuits leading to employment. In Salvador, personal networks and public examination processes are at opposite ends of access to employment. In Porto Alegre, on the other hand, employment is above all secured via the market, whether through individual and direct search or supported by intermediaries. In São Paulo, both the market and networks and also direct search and personal contacts are all part of a set up which combines each of the previous two types.

Looking at these covariates it seems plausible that the characteristics revealed by the study can help us to discover which factors are associated to securing employment positions with regard to the different effective means of

accessing information about employment. Table 5 shows the results of the estimated model. The reference category for the analysis is the obtaining of employment by means of direct search in the market, which means that the analysis of the chance ratio of belonging to the categories of the dependent variable will always be read in relation to this category.

Table 5
Multinomial Regression Model Results (reference: direct prospection)

Tabela 3 - Resultados do Modelo de Regressão Multinomial. (Categoria de referência: relação direta - prospecção no mercado. N=36324).

	B	Sig.	Exp(B)	Razão de chance (%)	
	INTERCEPTO	-2,508	0,000		
relação direta-concurso	MASCULINO=1	1,328	0,000	277,2	
	BRANCA=1	0,278	0,007	32,1	
	16 A 24 ANOS=1	-0,202	0,157	0,817	-18,3
	50 A 65 ANOS=1	-0,082	0,457	0,921	-7,9
	TEMPO DE RESIDÊNCIA - MAIS DE 5 ANOS=1	0,409	0,059	1,505	50,5
	EMPRESA PRIVADA=1	-6,562	0,000	0,001	-99,9
	CARTEIRA ASSINADA=1	2,313	0,000	10,107	910,7
	ESCOLARIDADE - 3º GRAU	1,585	0,000	4,88	388
	CAPACITAÇÃO NA ÁREA	0,359	0,001	1,432	43,2
	INFORMÁTICA	-0,087	0,696	0,916	-8,4
	RMSP=1	-0,446	0,000	0,64	-36
	RMPA=1	-0,895	0,000	0,409	-59,1
	INTERCEPTO	-1,152	0,000		
relação mediada por instituições	MASCULINO=1	-0,179	0,000	0,836	-16,4
	BRANCA=1	-0,178	0,001	0,837	-16,3
	16 A 24 ANOS=1	0,724	0,000	2,063	106,3
	50 A 65 ANOS=1	-0,837	0,000	0,433	-56,7
	TEMPO DE RESIDÊNCIA - MAIS DE 5 ANOS=1	0,214	0,034	1,239	23,9
	EMPRESA PRIVADA=1	-0,525	0,000	0,592	-40,8
	CARTEIRA ASSINADA=1	-0,312	0,000	0,732	-26,8
	ESCOLARIDADE - 3º GRAU	0,341	0,000	1,406	40,6
	CAPACITAÇÃO NA ÁREA	0,073	0,189	1,075	7,5
	INFORMÁTICA	0,492	0,000	1,635	63,5
	RMSP=1	-0,076	0,281	0,927	-7,3
	RMPA=1	0,085	0,257	1,088	8,8
	INTERCEPTO	2,837	0,000		
relação mediada por redes	MASCULINO=1	0,039	0,135	1,04	4
	BRANCA=1	-0,053	0,074	0,948	-5,2
	16 A 24 ANOS=1	0,078	0,010	1,081	8,1
	50 A 65 ANOS=1	0,003	0,938	1,003	0,3
	TEMPO DE RESIDÊNCIA - MAIS DE 5 ANOS=1	-0,144	0,009	0,866	-13,4
	EMPRESA PRIVADA=1	-0,984	0,000	0,374	-62,6
	CARTEIRA ASSINADA=1	-0,625	0,000	0,535	-46,5
	ESCOLARIDADE - 3º GRAU	-0,545	0,000	0,58	-42
	CAPACITAÇÃO NA ÁREA	-0,515	0,000	0,598	-40,2
	INFORMÁTICA	-0,36	0,000	0,698	-30,2
	RMSP=1	-0,728	0,000	0,483	-51,7
	RMPA=1	-1,391	0,000	0,249	-75,1

Fonte: PED, Fundação Seade. XXXX. Elaboração Própria.

We chose to use as reference in our model the direct contact with the employer as the means of effective search, because, it is, so to speak, the minimum common denominator between our three typical situations (Salvador, Porto Alegre and São Paulo); we can see more clearly how alternative ways (and

up to a certain point opposite) of obtaining employment vary in their chances (with regard to the means common in the three metropolises) when we look at the net effect of an individual's characteristics (adscritas or acquired) or of the context (occupational or metropolitan).

The results show that the variables included in the model have a good capacity of prediction, and that most of them show statistical significance in distinguishing individuals of the different types of effective means of securing an employment position.

Thus, we see that individuals who secured an employment position by means of an examination process have significantly more chance of being male and of being white, if compared to individuals who obtained work by means of their direct search in the market. In relation to the attributes of the position secured, there are fewer chances of employment in private companies and much higher chances of formal work (observe that those employed in statutory public positions are excluded from this analysis). From the point of view of skills and level of education, individuals who secure positions through examination processes are more likely to have completed secondary education and have previous skills in this area of work than those who obtained the position by searching for it directly with the companies. In Salvador we observe greater chances of obtaining employment by means of public examination processes, while living in São Paulo or Porto Alegre decreases the chances of obtaining employment through this means.

Securing employment positions mediated by market institutions is significantly more associated to females than that observed for searching directly in the market. This modality is also more likely (than direct search) amongst blacks. The use of this means of obtaining employment varies according to age group: chances are doubled for youngsters between 16 and 24 (106.3% more) and are reduced for individuals over 50, confirming previous findings that the market of mediation organizations are an important path for the entry of youngsters in the employment market (Guimarães, 2009-a). Finally, the type of employment obtained through these institutions tends to demand higher levels of education and IT knowledge than those obtained via direct search in the market. However, and here we suggest problems with the quality of these jobs, employment obtained through market institutions (if compared with that secured by direct search) reduces the chances of it being formal, that is, with working papers, despite being more frequent in the private sector.

What can we say about individuals who get their jobs through relations mediated by their networks? They clearly distinguish themselves from those who secured employment via direct search in the market. In terms of personal attributes, obtaining employment through personal contacts (again, if compared with direct search) occurs more often amongst younger individuals and recent migrants (inversely proportional to those individuals who have lived in the municipality for more than 5 years). It is very interesting to consider that, while personal attributes affect chances, they also bring together the variables with

less potential of distinguishing between direct search in the market and the securing of work through social networks. The characteristics of the employment position indicate significantly smaller chances of securing positions with working papers and positions in private companies. With regard to levels of education and skills, it is less likely that individuals who obtain employment positions via social networks have high levels of education, the skills required and IT training. There are also a higher number of individuals living in Salvador in this group (which is in line with previous findings), the metropolis where one has the best chances of obtaining work through social networks (always in comparison with those who obtain work via direct search in the market).

Taking these findings together, we can say that the results of the analysis model and the estimated parameters indicate that the most secure jobs – those requiring working papers – and those that demand a higher level of education are principally those obtained through public examination processes, in direct relation between the individual and the market. However, despite the fact that this should be a more anonymous, universalist and protected way of securing a position, it is notable that it is precisely in these cases that evidence of gender inequality appears more clearly (when compared to employment obtained via direct search).

While personal attributes mainly have an impact in securing employment via the mediation of market institutions, it is the context characteristics (particularly of the position secured) which are the most important dimension or aspect for making a distinction between all types of effective means of obtaining employment. This suggests that in fact there are specific paths to obtaining positions in accordance with the type of sector and the type of contract (whether with working papers or not).

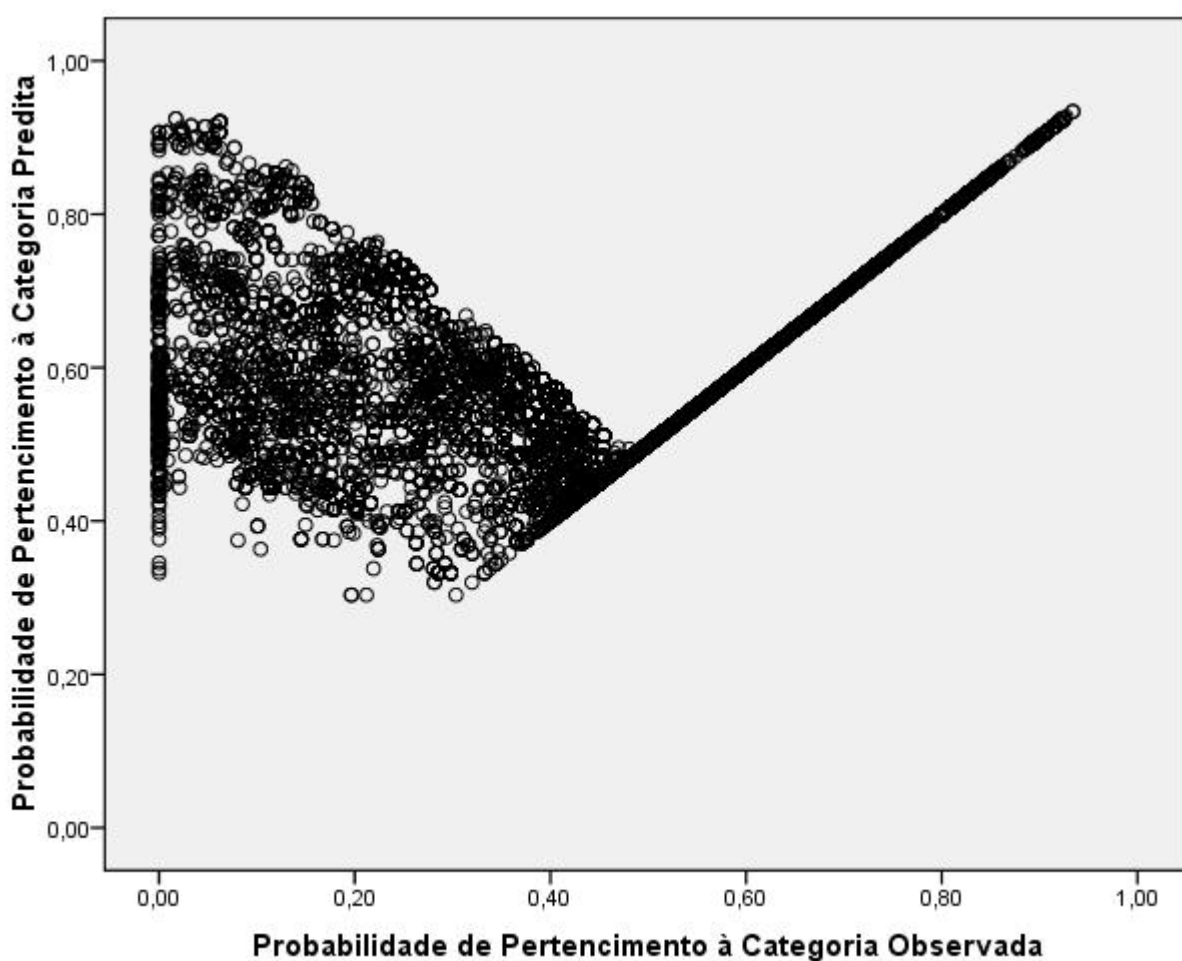
Level of education is another very relevant variable in the proposed analysis, as it has great potential for distinguishing between the different types of effective means, indicating that not only are the attributes of the position important predictors of an effective strategy for securing employment, but that educational capital acts together with these attributes, associating individuals to specific means of obtaining (work), which, in their turn, lead to certain occupations in detriment of others.

On the other hand, relations mediated by networks are the most common, and at the same time, are those that lead to the most precarious occupations, negatively associated to stable employment contracts, and to higher levels of education and skills. Including the regional dimension in the analysis shows that Salvador has a market in which direct relations via public examination processes and relations mediated by networks – the two extremes in a continuum which runs from the most to the least precarious, with regard to securing employment – significantly affects the strategies of workers in their search for employment in this metropolis, in a pattern clearly specific to it, in relation to what is observed in São Paulo and Porto Alegre.

However, if on the one hand, the estimated analysis model casts light on the impact of specific variables on the chances of belonging to the most effective categories for obtaining employment positions, on the other hand it presents variability in its predictive capacity for each of the dependent variable categories. This means that the variables selected for this exercise are the best ones for the prediction of belonging to specific categories in lieu of others. Graph 4 shows the distribution in the cases analysed in a dispersion diagram where the axes represent the probabilities of belonging to the predicted category and to the observed category.

Graph 4

Dispersion diagram: probabilities associated to the predicted and observed individual situation



Source: DIEESE. Household survey “Information for the public system on employment, work and income”, PED supplementary questionnaire, May-Oct. 2008.

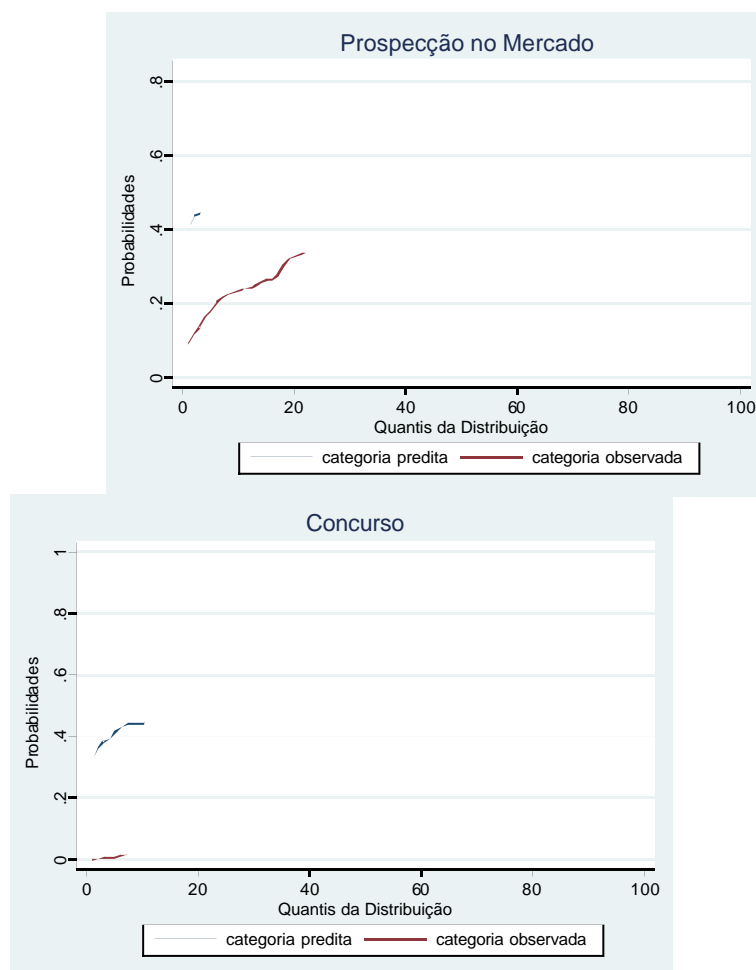
The dispersion diagram shows a linear relation between the probabilities of belonging to the predicted and observed categories for a large part of the cases, represented on the right side of the diagram. For these cases, the

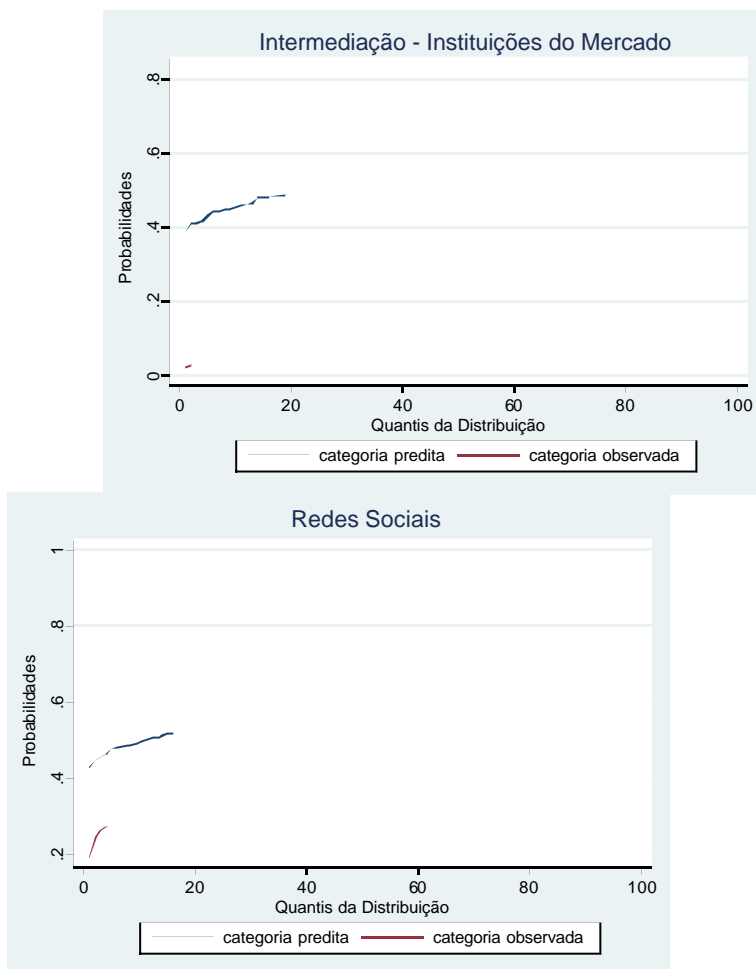
prediction capacity of the model is good, as the estimate manages to "harmonize" the observed category based on the dependent variables used. The rest of the cases represent a certain variance not explained by the model, and the linear pattern, contrary to what we observe in the cases in which the model has a good predictive capacity, is surprising. This indicates that, in these cases, belonging to one of the categories of effective means of obtaining an employment position responds to various other factors apart from those included in the model.

The diagram shows the limitations of the proposed model with regard to its prediction capacity in general, but it does not allow us to identify how it could be specifically adjusted to each of the categories. Graphs 5 to 8, which follow, attempt to cast some light on this. They show the empirical distribution (i) of the probabilities of belonging to the predicted category and (ii) the probabilities of belonging to the observed category.

Graphs 5, 6, 7 and 8

Empirical Distribution of Predicted and Observed Categories Probabilities by type of job access effective means





Source: DIEESE. Household survey "Informations for the public system on employment, work and income", PED supplementary questionnaire, May-Oct. 2008.

The graphs show the empirical distribution of individuals for each of the four categories of the dependent variable, classified in accordance with the probabilities of belonging to the predicted and observed categories. Each of the lines represents the distribution of the probability of belonging to the predicted category (blue) and to the observed category (red). These lines are also a representation of the placement of individuals from the lowest levels to the highest levels of probability of belonging.

A model which is totally adjusted to the distribution of the data would generate lines of probabilities of belonging to the predicted category superimposed onto the lines of belonging to the observed category - that is, the probabilities of belonging to the predicted and observed categories would be equal. Therefore, the larger the superimposed areas on graphs lines, the better the adjustment of the model to the data.

Thus, we can see that the worst adjustment of the model is related to the prediction of belonging to the category "relation mediated by market institutions", where the predictive capacity of the model is very low and the probabilities of belonging to the predicted and observed categories are not very

close. However, on the other extreme, the best adjustment is in the category "relation mediated by social networks", which indicates that the independent variables selected are, for the sample analysed, particularly good for predicting variables associated to individuals for whom the effective means of securing employment are social networks. The adjustment of the model is also good for the "direct relation - public examination process", particularly at the highest levels of probability (as it possible to foresee). Finally, the adjustment for the "direct search in the market" category is reasonable, despite the fact that there is no notable superimposition of the lines at any point for both its distributions of probability.

What can we conclude from this exercise and the data we have presented here?

In the first place, that the inequalities generated by the market need to be understood as a process which precedes the obtaining of employment and needs to be considered from the moment an individual starts looking for work. This is because the means of looking for work - and the way of gaining access to a vacancy - is, as we have seen, strongly dependent on attributes either of the individual (acquired or adscrito) or on the context in which they find themselves (the type of vacancy they are looking for and their metropolitan context). Data strongly suggest the existence of signs of segregation on the paths of employment searches, and the importance of public mechanisms of support to those looking for work.

Finally, if the estimated model seems to contain strong variables which explain the access to employment by means of networks, this does not appear to be the case with regard to the means that has shown most growth recently in the Brazilian employment market - despite the fact that its effects are still relatively small - that of employment mediated by agencies, and similar organizations. This is a challenge suggested by the study presented here.

(Translation: Phillip Winan)

BIBLIOGRAFIA

Autor, David H. (2008) "Studies of Labor Market Intermediation". Paper preparado para a NBER Conference on Labor Market Intermediation, 17-18 de Maio.

Baron, James N.; Bielby, William T. (1980) "Bringing the firms back in: stratification, segmentation, and the organization of work". *American Sociological Review*, vol. 45, pp. 737-65

Benner, Chris; Leete, Laura; Pastor, Manuel (2007) *Staircases or treadmills? Labor market intermediaries and economic opportunity in a changing economy*. New York: Russell Sage Foundation.

Blau, Peter; Duncan, Otis Dudley (1967) *The American occupational structure* . New York: Wiley.

Degenne, Alain; Fournier, I.; Marry, Cathérine; Mounier, Lise (1991) “Les relations sociales au coeur du marché du travail”. *Sociétés Contemporaines*, n. 5, pp. 75-97.

Granovetter, Mark (1974) *Getting a Job. A Study of Contacts and Careers*. Cambridge, Mass. : Harvard University Press.

Granovetter, Mark (1985) “Economic action and social structure: the problem of embeddedness”. *American Journal of Sociology*, vol. 91, pp.481- 510.

Guimarães, Nadya A (2009) *Desemprego: uma construção social*. Belo Horizonte: Ed. Argvmentvm.

Guimarães, Nadya A. (2009-a). *À Procura de Trabalho: instituições do mercado e redes*. Belo Horizonte: Ed. Argvmentvm.

Hauser , Robert Mason; Featherman, David L. (1977) *The Process of Stratification: Trends and Analysis*. New York: Academic Press.

Hodson Randy (1983). *Workers Earnings and Corporate Economic Structure*. New York: Academic Press

Hsung, Ray-May; Lin, Nan; Breiger, Ronald L. (2009) *Contexts of social capital: social networks in markets, communities, and families*. New York: Routledge.

Kalleberg, Arne; Griffin L. J. (1980). “Class, occupation, and inequality in job rewards”. *American Journal of Sociology*, vol. 85, pp. 731–68.

Kase, Kasutoshi e Sugita, Kurumi (orgs.). *The Unemployed and Unemployment in an International Perspective: Comparative Studies of Japan, France and Brazil* . University of Tokyo, Institute of Social Sciences (ISS Research Series, # 19), Tóquio, 2006.

Koene, Bas e Purcell, Kate (2004) “The value of relationships in a transactional labour market: constructing a market for temporary employment”, manuscrito não-publicado.

Lin, Nan. (2001) *Social capital : a theory of social structure and action*. Cambridge, UK ; New York : Cambridge University Press.

Sorensen, Aage (1977) “The structure of inequality and the process of attainment”. *American Sociological Review*, vol 42, pp. 965-978.

Vieira, Priscila P. F. (2009) *A experiência da procura de trabalho. Um estudo de caso*. Dissertação de Mestrado, Programa de Pós-Graduação em Sociologia, Universidade de São Paulo, São Paulo.

White, Harrison (1970). *Chains of opportunity. System models of mobility in organizations*. Cambridge, Mass.: Harvard University Press.