

Job Search Methods in the Labour Market

An Empirical Analysis

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How do people go about finding jobs? A widely acknowledged presumption is that that 'job-search process' plays a critical role in the determination of labour market outcomes. This essay underlines the critical importance of understanding the process by which people find jobs. It examines the search behaviour of workers in the labour market, with special reference to the workers employed at an industrial area in Bangalore, Karnataka

The functioning of labour markets has conventionally been confined to two fundamental axioms of the market: the demand for and the supply of labour. While the demand for labour is constituted by firms, workers represent the supply of labour. As with goods markets, there is a trade-off between the demand for and the supply of labour with respect to wages that are paid in return for workers' allocation of time in the labour market. In fact, the wages, the cornerstone of the labour market analysis, balance the conflicting interests between the two forces. Interestingly, within the conventional framework, the assumption of perfect information, albeit quixotic, allows little scope for the occurrence of any form of distortions such as involuntary unemployment or wage differentials. From a pragmatic point of view, job searchers, for instance, hardly possess the complete information about the availability of various job offers in the labour market. Taking cues from Stigler (1961) and Akerlof (1970), the labour market information imposes various forms of constraints in the interaction between workers and firms.

In this context, getting suitable job opportunities become a strenuous task without being engaged in search process. Job search, like any other activities in the labour markets, incurs money and time. As often as not, search is associated with more than one possible offers and the probability of each offer is unknown. Search being uncertain, job searchers are likely to undergo a series of untoward events such as protracted search, incongruous offers, and human capital degradation. Moreover, accepting a job offer may be a leap in the dark. Therefore, on the part of job seekers, search needs to be carried out judiciously by possessing fruitful labour market information. That is why, as Stigler (1962), put it: "the information a man possesses on the labour market is capital: it was produced at the

costs of search, and it yields a higher wage rate than on average would be received in its absence” (p.103). It throws light on the widely acknowledged presumption that that ‘job-search process’ plays a critical role in the determination of labour market outcomes. Search is a multifaceted term and has been contextualised, albeit differently, by scholarly community within the spectrum of social science discipline. For instance, while a plethora of economic studies attempt to underline various criteria for an optimal job search strategy (McCall 1970; Mortensen 1970; Mortensen, D and Pissarides 1999; Burdett 1978), the sociological analysis is mainly concerned with two aspects: first, the job search mechanism by which the job searchers possess labour market information; and second, the underlying structural features of search process (Reynolds 1951; Wilcock and Sobel 1958; Granovetter 1973 and 1995). Generally speaking, job search takes place through two distinct channels: formal and informal. In fact, by examining the type of intermediaries, it is plausible to distinguish formal from informal job search. While the formal methods specifically emphasize the impersonal intermediaries between searchers and firms, the informal methods are more of personal in nature. By definition, formal search methods include advertisement in newspaper, employment exchanges and private agencies. By comparison, informal search methods such as referrals from employee or employer, personal contacts, family members are frequently used.

An important point to be noted here is that the job search process involves not only the choice of search methods, but also the number of firms to be contacted, rate of job offers, and decision to accept or reject an offer (Blau and Robins 1990). In essence, an anatomy of these four aspects would reveal that the choice of search methods has a decisive role in determining the magnitude of job offers and firms to be contacted over the course of job search. In this context, it would be interesting to pose a pertinent question that has been little addressed: what accounts for the choice and efficacy of job-finding methods? It is worth mentioning that, barring a few studies in the developed countries (Reynolds 1951; Wilcock and Franke 1968; Wilcock and Sobel 1958; Granovetter 1973), developing countries such as India, where a significant proportion of its workforce are engaged in vast array of unorganised economic activities¹, have not witnessed any attempts to identify the underlying personal and household characteristics influencing the choice of search methods, and to examine the impact of differences in search methods on the labour market outcomes. Against this backdrop, this paper aims to explore some of the discernible structural features of job search based on the field survey conducted at Peenya Industrial area in Bangalore, Karnataka.

The remainder of this paper is structured as follows: Section I lays out a theoretical framework that encapsulates the state of embeddedness in the functioning of labour markets. Section II explains the details of field survey conducted at Peenya Industrial area in Bangalore. Taking cues from the field survey, section III presents the dichotomy

¹ It is estimated that about 94 per cent of the workforce are engaged in the unorganized sector

between formal and informal means of job search and its implications in the labour market, followed by section IV, which describes the link between personal characteristics of job searchers and search methods. In continuation of section IV, section V presents the effects of different search methods on labour markets. Section VI describes the role social networking in the search process by examining the type of relationship between searchers and their personal contacts and the degree of tie strength between them. Section VII provides discussion and concluding remarks.

Theoretical framework

Job search is a widespread phenomenon in the labour markets, irrespective of the dichotomy between developed and developing countries. Essentially, search is an activity carried out by those who are looking for jobs, but not able to find suitable jobs. In fact, search became a formal part of the labour supply theory in the 1970s when economists had confronted the unemployment conundrum emanating from the provision of unemployment insurance benefits. Taking cue from Mortensen (1986), the conventional approach to labour supply analysis consists of two distinct constituents: leisure and work. While leisure delineates the allocation of time in non-labour market activities, work represents the category of economically active participation. Given the time constraint, individuals decide to allocate the time by way of generating various combinations between work and leisure. In addition, the approach discards the chances of being unemployed in the labour market, a situation of individuals' willingness to participate in the labour market, coupled with difficulty in finding suitable jobs. Presumably, the assumption of perfect information about the conditions of work, wages, and availability of potential job opportunities does not pave the way for a situation of job search. Pragmatically, job searchers hardly possess the complete extent of job offers available in the labour market, and more importantly, job offers are to be found through a process called 'search'. Like work and leisure, search is an activity, entailing money and an investment of time. Over the course of job hunting, a typical searcher is likely to receive a range of job offers with multifarious wages. It is worth mentioning that the job offers arrive at random and the probability associated with each job offer is unknown. Therefore, in the context of uncertainty, the task of the searchers is to seek out a suitable offer congruent with their skill and choice. The difference between offer and reservation wages determines the 'stopping rule' for the job search. When the offer wage is higher than the reservation wage, job searchers are more likely to accept the offer and to participate in the labour market.

A major lacuna of economic models of job search is that it seldom explains the role of social networks, an arrangement of social relation in which a group of people interact and share information, in the job search. The gist of classical and neo-classical analysis is based on the presumption that human beings behave rationally and the interaction

of agents does not take into account the role of social structure (Granovetter 1985; 2005). There are various approaches to understanding the degree of networking in rationality model, but most of these approaches may be subsumed under the following three frameworks: over-socialized, institutional embeddedness and under-socialized. By discarding the notion of individuals being rational, the 'over-socialized' approach emphasizes that the degree of networking, to a great extent, influences the actions of agents. Put simply, it indicates that the decisions are inextricably linked with social structure, which, in turn, shapes up the functioning of labour market (Wrongs, 1961). On the contrary, taking cue from Turk (1965), the mainstream economic analysis is predominantly based on the assumption that human actions have nothing to do with social structure and markets more or less operate in a self-regulating mode. For instance, human capital theory postulates that wages are mainly determined by the years of investment in schooling and labour market experience, providing little scope for seemingly important variables such as social stratification, rural-urban dichotomy, and social networks. The fact is that agents in the real-world economies are rather embedded in various forms of formal and informal institutions that influence the behaviour of firms, workers and their interaction in an economic system. Although the concept of embeddedness dates back to Polanyi (1944), Granovetter (1985), who has made significant attempts to explicate the state of 'embeddedness' in the functioning of the labour market, points out that economic actions are not only driven by profit and cost, but also embedded in networks of contacts. Strictly speaking, the state of embeddedness is regarded as neither over-socialised nor under-socialised, but somewhat between these two extreme positions.

Data Source

Generally, the major unit of analysis in job search is people who are looking for jobs. Identifying individuals who are engaged in job search poses a challenge from a pragmatic viewpoint. It is quite reasonable to choose employed workers as the unit of analysis and one of the prerogatives of choosing them is that a great deal of information about the search process can be gathered, including the efficacy of different search methods. The data used for the present study are from the field survey conducted in 2010 at Peenya Industrial area in Bangalore, one of the largest industrial areas in South Asia. At present, the area is known for the sundry manufacturing units in India and over one-fifth of the firms are involved in the manufacturing of machine-tools. By using simple random sampling, the survey covered 367 workers located at Peenya. The firms that employed the workers sampled were comprised of small, medium and large scale industries and the size of employment in these units ranged between 7 and 536. Considering the workers sampled, the following features are noteworthy: first, migrants constituted a significant proportion of the sample compared with urban natives; second, the sampling frame covered only regular/salaried workers aged between 15 and 70, excluding those who

were not on the payroll; third, the workers reported that a significant proportion of them had changed their jobs before being employed in the present jobs.. It should be noted that the analysis of job search methods is limited to the principal methods through which the workers sampled gained access to the labour market. In the subsequent session, we present the major findings from the field survey.

Job Search: Formal-informal Dichotomy

A significant proportion of the sample workers applied informal job search methods to access the labour markets (Table 1). In point of fact, this finding is quite consistent with the general pattern observed in the vast majority of job search literature. The use of informal methods in job search is widespread, irrespective of developed or developing countries. This compels us to ask an important question.

According to Brown (1967), Rees (1966), Reid (1972), the informal search methods are widely regarded as an efficient search mechanism because of low search cost and short duration of search. Moreover, the labour market information provided by personal contacts is favourable in seeking job opportunities. Quite importantly, job searchers would rather choose informal methods because it is highly structured (Reid 1972). In addition, the dissemination of job related information through personal contacts takes place much faster than that of formal search methods (Lee 1969). Unlike informal methods, formal methods are likely to disseminate redundant information about jobs offers and working conditions. Besides being used by job searchers, informal methods are frequently applied by firms as well. The majority of firms would rather use informal recruitment practices such as employee referrals partly because of its ability to screen employees' inherent skills and knowledge and, more importantly, low cost of hiring (Rees 1966). Within the narrowly defined spectrum of informal methods, personal contacts and family members are the most frequently used methods in job search, irrespective of employers or employees (Holzer 1988). By comparison, the application of formal methods in job search generally accounts for less than 20 per cent (Granovetter 1973). Interestingly, the proportion of formal methods reported in the present study, which accounts for roughly 10 per cent, appears to conform to the Granovetter's result, albeit varying in magnitude.

Table 1: Association between job search method and age (per cent)

Job search method used in present job	Age groups		Total
	15-34	35-70	
Formal methods	9.7	6.9	9.3
Family members	28.2	44.8	30.8
Personal contacts	38.2	29.3	36.8
Directly to firm	23.9	19.0	23.2
Sample size (n)	232	135	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .094$)

Personal characteristics and job search methods

The role of personal contacts in job search has invariably been a thorny issue in the job search literature. As we indicated in the previous session, one of the major aims of this study is to portrait the link between workers' personal characteristics such as age, educational attainment, social groups, and job satisfaction. An analysis of age and search methods indicates that the majority of workers in the age group of 15-34 years would rather use personal contacts (Table 1). Presumably, as shown by Reynolds (1951), there is a greater degree of natural inclination to form a strong networking among youths in the early stages of career development. Essentially, workers have an inclination for personal contacts because it provides not only better job offers, but favourable working conditions (Granovetter 1995). Moreover, Sheppard and Belitsky (1966) underlined that the likelihood of accepting jobs through personal contacts is higher than that of other means of search. Firms would rather apply informal means of job search as workers who get access through personal contacts appear to be 'stayers'. It is important to note that those who are in the age group of 35 years and above are inclined to take the help of family members.

The next line of enquiry is to examine whether social stratification such as caste influences the choice of different job search methods. For the purpose of analysis, the sample workers are grouped into six groups: Forward caste, Vokkaliga, Lingayat, Scheduled caste (SC), Scheduled tribe (ST), and other/unspecified. The test measure indicates that social groups and search methods are associated, implying that social identities are likely to influence the choice of search methods (Table A-1, Appendix). The survey reveals that half of the workers, except scheduled castes, informally gained access to job markets. An analysis of search through personal contacts by social groups shows that forward castes account for the highest proportion. While slightly above 75 per cent of the forward castes find their jobs through personal contacts and family members, the deprived social groups -SCs and STs in particular- predominantly depend on the information displayed at firms' gate or from firm directly, which commonly referred to as 'direct application'. What with low wage rates, longer hours of work, lack of social security, delay in receiving payments, the majority of workers who found their jobs in a direct way tend to look for another job. In other words, the access to the labour market through direct application, coupled with high degree of on-the-job search,

clearly reflects the prerogatives of networking. Within the dominant social groups, the proportion of workers using informal methods varies.

Does the choice of search methods influence the level of job satisfaction? Although job satisfaction is primarily a function of wages, economic activities, work environment, and labour mobility, the study shows that the association between job satisfaction and search methods seems to be robust, implying that job satisfaction is also determined by the different means of job search. The workers who found their jobs through formal means of search relative to that of informal methods, particularly direct applications, are likely to report a high degree of job satisfaction (Table A-6, Appendix). Similarly, departing from Granovetter's (1995) viewpoint that educational attainment is impervious to the choice of search methods, the study, however, finds evidence that job finding-methods and investment in various levels of education are associated. It should be noted that higher the levels of education, greater the chance of using family members (Table A-2, Appendix). Based on the place of origin, the workers sampled are classified into two: urban natives and migrants. While family members are instrumental in gathering the availability of job opportunities among urban natives, migrants largely make use of personal contacts to gain access to the labour market (Table A-3, Appendix).

Labour market outcomes: role of search methods

A plethora of empirical studies suggests that access to the labour market through personal contacts paves the way for positive effects on the labour market outcomes such as wages and social security benefits (Holzer 1987a; Simon and Warner 1992, Addison and Portugal 2002). Bentolila *et al* (2004), however, underlined that the entry into the labour market through personal contacts does not necessarily bring about a positive impact on wages and other outcomes. In fact, the present study throws light on the extent to which job search methods account for the various segments of the labour market by taking income and occupational division as proxy indicators. Considering income, slightly more than half of the respondents under the category of informal methods report the wages of less than Rs 8000 per month, while the corresponding figure for direct application is about 60 per cent and for formal methods, it is slightly over 35 per cent (Table A-4, Appendix). By way of classifying informal methods into personal contacts and family relatives, it is clear that about one-fifth of those who gained access to job market through family members earn more than Rs 16,000 per month, whereas the corresponding figure for personal contacts is marginal. Similarly, to examine the possible effects of the different search methods, the various types of occupations are classified according NCO 2004² one-digit classification: Managerial, Professional, Plant and machine operators and assemblers, Craft and related trade workers. It is striking that highly-skilled occupations such as managerial and professional occupations are more likely to be accessed through family members (Table A-5, Appendix). On the contrary, low-skilled and semi-skilled workers such as plant and machine operators predominantly depend on personal contacts. Interestingly, approaching firms directly account for one-third of the workers employed in the craft and related occupations, and majority of them are engaged in on-the-job search (Table A-6, Appendix).

² National Classification of Occupation

Network of personal contacts

Although the role of personal contacts in the job search has been acknowledged widely, there is a little empirical evidence to pinpoint its implications in the job market. In his pioneering paper, Granovetter (1973), based on 100 personal interviews and 182 mail surveys among the male workers, shows that more than 50 per cent of workers (about 56 per cent) applied personal contacts to seek out jobs. An imperative aspect that needs to be explored in great detail is the rationale for searchers to seek out jobs through personal contacts. In other words, why do searchers, in general, would rather use personal contacts? Available evidences points to four reasons behind the widespread application of personal contacts in job search. First, job information through personal contacts are not only productive in generating suitable job offers, but cost-effective. Second, the network of personal contacts weakens the forces inhibiting the access to the labour market (Granovetter 1995).

More specifically, personal contacts provide additional information about a range of labour market characteristics such as work environment, working conditions, wages, availability of social security benefits, and so on. Third, the degree of job satisfaction and wages among workers seeking jobs through personal contacts is high relative to the workers finding jobs through other forms of search methods. Note that workers with prolonged labour market experience would capable of expanding the networks of personal contacts with ease. Our analysis suggests that gaining access to the labour markets through family members is more efficient than that of personal contacts. Considering the labour market features of workers employed through family members, it is quite clear that family members also facilitate search process by providing access to gainful employment and favourable working conditions. Whether a successful job can only be found through personal contacts or family members is merely a question of debate. But, how does being part of a large system of social network help job seekers to gain access to the labour market? To answer this question, one has to take into account the following three major aspects: nature of relationship, the number of intermediaries between workers' job informants and employer, and the tie strength between workers and their personal contacts.

Nature of relationship: To examine the nature of relationship, the workers sampled were asked the following question: how did they happen to know their personal contacts? By examining the nature of relationship between the workers and their personal contacts, it is possible to trace the dissemination of job information through various categories of personal contacts in the course of job search. The following categories were adopted for the present study: studied at same college/school, neighbour/hometown, through contacts, during travelling/social events, previous employment, through internet/social media. As is evident in table 2, 40 per cent of the sampled workers' personal contacts are neighbours, whereas slightly over 20 per cent of them are school or college mates, implying that they had made the acquaintance of their personal contacts before being employed in the job. With the increasing pace of technological advancement, the application of internet as a method of job search seems to have gained momentum, albeit at a snail's gallop.

Table 2: The nature of relationship between respondent and their personal contacts

Relation with personal contacts	Frequency	Per cent
Studied at same school or college	31	23
Neighbour/hometown	54	40
Through another contact	12	8.9
During travelling/social events (marriage, festival, party campaign etc)	14	10.3
Previous employment	23	17
Internet/social media (Facebook, Orkut)	1	0.7
Sample size (n)	135	100.0

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Role of Intermediaries:

As often as not, job search by the unemployed induce their personal contacts and family members to carry out a parallel job search. An interesting aspect that has not been dealt with much in the search literature is to examine whether the sampled workers' personal contacts and family members possessed the job information through intermediaries or not. In fact, the number of intermediaries involved in job search is one of the crucial determinants of the efficacy of personal contacts and family members (Granovetter 1995). As shown by Reynolds (1951), when the number of intermediaries between the job informants and the employer increases, the quality of job information gets deteriorated, decreasing the likelihood of receiving gainful job offers.

Against this backdrop, we assess the effectiveness of informal job search methods, particularly family members and personal contacts, by taking into account the number of intermediaries as a proxy variable. Our results suggest that a typical contact is connected to an employer, on average, with 0.52 intermediaries (table 3). As is evident in table 3, more than half of the informal contacts -be it personal or family- happened to know about the sampled workers' present jobs from the employer directly. The classification of informal methods into family members and personal contacts shows that while the majority of the family members obtain job information from the employer directly, personal contacts possess job information mostly through intermediaries. More aptly, three-fourth of the family members obtains information about present job from the prospective employer directly, whereas the corresponding figure for personal contacts is just one-third. Presumably, due to this reason, the sampled workers who found jobs through personal contacts are more likely to look for jobs while employed.

Table 3: Number of intermediaries between the employer and the respondent's contacts

Definition	Family / Relatives	Personal contacts	Informal contacts
Directly from the employer	76.10	31.85	52.01
One intermediary between the contact and the employer	20.35	48.14	35.4
Two intermediaries between the contact and the employer	03.5	16.29	10.5
Three or more than three intermediaries between the contact and the employer	Nil	3.7	2.01
Sample size (n)	113	135	248

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Are ties strong or weak?

By tie strength, we mean how often the agents interacted with each other in a group. The ability of social networks, to a great extent, is influenced by the intensity of interaction between the two agents. It should be noted that greater the degree of interaction, higher the likelihood of gaining access to the labour market.. Figure 1 represents 50 agents and 37 ties between them. Each agent marked in green colour represents participants and the tie between two agents indicates interaction between them. In a typical labour market, workers, unemployed people, firms, and unions generally constitute the agents. For the purpose of analysis, it is assumed that the interaction is undirected. Suppose, if two agents are connected by a line, it signifies the interactive relationship between them, otherwise not. One of the salient features of the interaction is that it does not necessarily take place among all the agents.

A careful analysis of Figure 2 shows that it is constituted by sub-graphs or components and isolated agents that are not connected to the rest of the agents in the graph. Each agent, on average, accounts for 1.5 degrees or contacts. Agents who are marked in red colour have the highest number of degrees. Intuitively speaking, the probability of getting gainful job offers tends to increase as the magnitude of personal contacts increases. At this juncture, we introduce a network concept called 'structural hole', which refers to a disconnected network structure in which there is an absence of the direct line between two agents. In other words, the interaction between two agents is led by a strategically positioned agent (Burt, 1992). Because of this strategic position, the agent has many advantages, including the availability of job information from different sources.

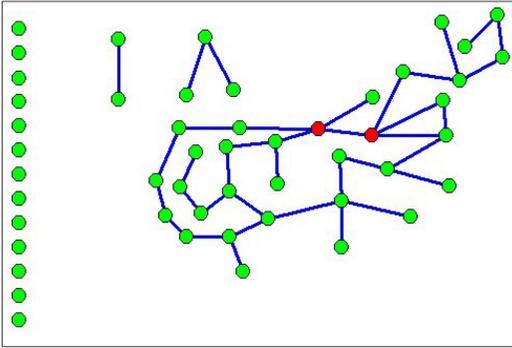


Figure 1: Social interaction in a typical labour market

Taking cue from Granovetter (1973), the tie strength is measured using the frequency of interaction. More specifically, the respondents were asked the following question: how often did the workers interact with their personal contacts around the time of accepting the job offer. The tie strength may be classified as either strong or weak depending upon the frequency of interaction. In fact, Granovetter (1973)³, based on male workers from a Boston suburb, classified the frequency of interaction between workers and their contacts into three categories: *often*, *occasionally*, and *rarely*. Often refers to at least twice a week, occasionally refers to more than once a year but less than twice a week, and rarely refers to once a year or less. Quite interestingly, while 17 per cent of the workers in the Granovetter’s study report *often*, the other two categories, occasionally and rarely, account for 58 per cent and 28 per cent respectively. Considering the category of rarely, the figure presented appears to be striking. This finding led Granovetter to conclude that job searchers obtain information about the availability of job offers from distant contacts with whom they interact rarely. Put it in a slightly simple way, weak ties are the major source of diffusing labour market information, commonly referred to as *‘strength-of-weak-ties*.

³ Granovetter used mail survey targeting 100 personal interviews and 182 mail surveys. The study covers workers who have changed their jobs within last five years, excluding the occupational mobility internal to the firm.

Unlike Granovetter’s ‘strength of weak ties’, the present study shows that the tie between the workers sampled and their personal contacts appears to be quite strong and the interaction between them takes place quite often. In fact, the survey reveals that nearly two-third of the sample respondents frequently interacted with their contacts before being employed in the present job. Those who found their jobs through ‘weak ties’ constitute marginal share (Table 4)

Table 4: Strength of Weak Ties vs. Strength of Strong Ties

Category	Granovetter (1973)*	Present study(2012)+
Often At least twice a week	16.7	62.12
Occasionally More than once a year but less than twice a week	55.6	34.85
Rarely Once a year or less	27.8	3.03
Sample size (n)	54	135

*Granovetter (1973), ‘The strength of weak ties’, *American Journal of Sociology* Vol.78, No.6

+ Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Discussion and Conclusion

The major purpose of this paper was to examine the search behaviour of workers in the labour market, with special reference to the workers employed at an industrial area in Bangalore, Karnataka. Interestingly, the paper provides ample evidences to conclude that job searchers’ personal and household identities account for the choice of job search methods, which, in turn, have implications for the labour market outcomes. What is striking is that only a marginal proportion of the workers sampled made use of the formal search methods. But, as is evident from the field survey, the workers who found jobs through formal methods reported to have more satisfied than workers who found jobs through other forms of search.

In India, employment exchanges are perceived to have been used frequently in the job search. In accordance with the Employment Exchanges (Compulsory Notification of Vacancies) Act in 1959, the employment exchange system was set up in 1960 under the aegis of the Ministry of Labour and Employment to facilitate the search process in the labour market. Essentially, the employment exchanges in India function as an intermediary between job providers and job seekers by disseminating information about the job vacancies. As per this act, it is compulsory for the all the private and public firms employing 25 or more to register job vacancies with the employment exchanges in India (Telang 2013). It is worth mentioning that the Act does not cover certain economic activities such as agriculture and horticulture. While reporting the job vacancies to the employment exchanges, firms are mandatorily required to submit the completed details of vacancies including the wages and job tenure in writing. It is assumed that such institutional procedure would attenuate the labour market distortions resulting from the skewed job information.

Notwithstanding their impressive labour market outcomes, the formal search methods, employment exchanges particular, are not very successful in providing the job placement. Although the employment exchanges are widespread across the states in India, the fact is that they have become dormant for the last three decades. More specifically, while the major online job portals report, on average, 15 per cent placements per month, the corresponding figure for the employment exchange is just below 0.5 per cent (Aarti 2013). Addison and Portugal (2002), based on the Portugal labour force surveys, put forward a viewpoint similar to that. Unequivocally, empirical evidences presented in the paper clearly point to a pressing need for revamping the prevailing institutional structure of employment exchanges by adopting seemly technology and incentive mechanisms.

Appendix

Table A1: Association between job search method and social groups (per cent)

<i>Job-search method used in present job</i>	<i>Types of social groups</i>						Total
	Forward caste	Vokkaliga	Lingayat	SC	ST	Others/ unspecified	
Formal methods	7.9	11.0	11.8	5.9	13.9	5.1	9.3
Family members	26.3	29.4	23.5	29.4	27.8	40.4	30.8
Personal contacts	52.6	38.5	33.8	17.6	27.8	37.4	36.8
Directly to firm	13.2	21.1	30.9	47.1	30.6	17.2	23.2
Sample size (n)	38	109	68	17	36	99	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .067$)

Table A2: Association between job search methods and level of educational attainment (in per cent)

<i>Job-search method used in present job</i>	<i>Level of education attainment</i>						Total
	Up to Secondary	ITI	Higher secondary	Diploma	Graduate-General	Graduate-Technical	
Formal	2.9	9.5	2.2	22.2	12.7	27.3	9.3
Family members	26.3	22.2	31.1	44.4	32.7	50.0	30.8
Personal contacts	43.1	46.0	33.3	22.2	36.4	9.1	36.8
Directly to firm	27.7	22.2	33.3	11.1	18.2	13.6	23.2
Sample size (n)	137	63	45	45	55	22	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .000$)

Table A3: Association between job search method and place of origin (per cent)

Job-search method used in present job	Respondent's place of origin		Total
	Urban natives	Migrants	
Formal methods	9.6	9.2	9.3
Family members	38.4	28.9	30.8
Personal contacts	28.8	38.8	36.8
Directly to firm	23.3	23.1	23.2
Sample size (n)	73	294	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test = .34

Table A4: Association between monthly wages and search methods (per cent)

Monthly wage earnings in present job (in Rs)	Job search method used in present job				Total
	Formal	Family members	Personal Contacts	Direct Application	
Less than 4000	2.9	6.2	10.4	14.1	9.3
4001-8000	35.3	47.8	48.9	61.2	50.1
8001-12000	26.5	15.9	25.9	15.3	20.4
12001-16000	17.6	10.6	8.1	3.5	8.7
16001 and above	17.6	19.5	6.7	5.9	11.4
Sample size (n)	34	113	135	85	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .001$)

Table A5: Association between job search method and type of occupation (per cent)

Job-search method used in present job	Present occupation (NCO 2004-one digit)				Total
	Managerial	Professional	Plant and machine operators and assemblers	Craft and related trade workers	
Formal methods	8.3	20.8	6.6	5.4	9.3
Family members	60.4	31.9	26.5	22.5	30.8
Personal contacts	20.8	30.6	44.9	37.8	36.8
Directly to firm	10.4	16.7	22.1	34.2	23.2
Sample size (n)	48	72	136	111	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .000$)

Table A6: Association between levels of job satisfaction and job search methods (per cent)

Level of job satisfaction	<i>Job-search method used in present job</i>				Total
	Formal methods	Family members	Personal contacts	Directly to firm	
Satisfied	47.1	41.6	35.6	17.6	34.3
Not satisfied	52.9	58.4	64.4	82.4	65.7
Sample size (n)	34	113	135	85	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .001$)

Table A7: Association between job search methods and social security benefits (per cent)

Social security	<i>Job search method used in present job</i>				Total
	Formal	Family/ Relatives	Personal contacts/ friends	Directly to firm	
Yes	76.5	59.3	58.5	47.1	57.8
No	23.5	40.7	41.5	52.9	42.2
Sample size (n)	34	113	135	85	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .029$)

Table A8: Association between job search method and on-the-job search (per cent)

On-the-job search	<i>Job-search method used in present job</i>				Total
	Formal methods	Family members	Personal contacts	Directly to firm	
Yes	52.9%	58.4%	61.5%	76.5%	63.2%
No	47.1%	41.6%	38.5%	23.5%	36.8%
Sample size (n)	34	113	135	85	367

Source: Field Survey, Peenya Industrial Area, Bangalore, Karnataka, 2011-2012

Significance level by chi-square test ($p = .03$)

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