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The Mechanisms of Labour Market Spatial Mismatch: A realist view

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Abstract

The spatial mismatch hypothesis argues that low-skilled black residents, who are restricted to excluded ghettos, have been isolated from the knowledge of job opportunities by the suburbanisation of jobs. The result of this emerging spatial mismatch is higher rates of unemployment among low-skilled black workers. Research on this question usually relies on a ‘deductive’ methodology in which causal mechanisms are proposed and then tested using sample surveys. The logic of this argument follows the deductive-nomological model of explanation in which statistical associations are established between independent and dependent variables. We argue that this type of explanation has the characteristics of a ‘black box’ explanation because it ignores the social mechanisms that may cause certain outcomes. As an alternative, we propose a ‘realist’ approach to the study of the labour market spatial mismatch that uses a ‘retroductive’ methodology to discover causal mechanisms. By using this approach, we have established that the residents of excluded ghettos in Cape Town are not necessarily isolated from information on the suburban job market. Through a variety of workplace mechanisms, workers create a wide range of social networks that extend well beyond the confines of their neighbours and reach into networks of both employers and colleagues.

Introduction

The spatial mismatch hypothesis (SMH) has a long history in a literature devoted to understanding the persistence of racial inequality in cities. Kain (1968) was the first to argue that low-skilled black residents, who were forced to live in racially segregated inner city neighbourhoods, were isolated from job opportunities by the suburbanisation of jobs. Kain argued that this emerging spatial mismatch caused higher rates of unemployment among low-skilled black workers. Although this theory was developed in the context of cities in the USA, the SMH has been used to explain the persistence of racial inequality in cities all over the world.

The spatial mismatch theory argues that a spatial disconnection between low-wage workers and jobs can cause unemployment in a number of specific ways. These proposed causes, or mechanisms, have been helpfully summarised in a recent review article by Gobillon, Selod and Zenou (2007). The first type of mechanism concerns the spatial disconnection that
makes commuting between home and potential workplaces impossible. Long distances between work and home means that commuting costs are higher, which may deter workers from accepting jobs far from home because their potential net wages would be unacceptably low (Gobillon et al., 2007 p.2408).

The second type of mechanism that causes unemployment concerns the spatial disconnections that restrict the flow of information about job vacancies to workers who reside far from places of employment. Long distances between potential jobs and home mean that workers search less intensively than they otherwise would because of the costs that are incurred in searching for jobs. Alternatively, they may tend to search closer to home, where there are fewer jobs. Also, workers may have only weak knowledge about jobs in distant locations. This weak knowledge may be caused by firms using localised recruitment methods that disadvantage workers who live far away. The result of a weak knowledge about distant jobs means that workers may search for jobs in the wrong places. Finally, workers who live far from job opportunities live in communities with high unemployment rates. The result of this is that they have fewer social connections with employed workers who may be in a position to provide them with information about job vacancies (Gobillon et al., 2007 p.2408).

**Methodological Issues**

On the basis of years of research into this question, our findings have led us to a quite different understanding of the relationship between the spatial mismatch and unemployment among low-wage, manual workers. Initially, we thought that our disagreement was based simply on our new evidence. However, as we engaged with the arguments and evidence of other scholars, we came to realise that our differences had deeper philosophical and methodological roots.

Most of the research that addresses the spatial mismatch hypothesis relies on data collected using questionnaire surveys. As such, the methodology is a deductive one: causal mechanisms are proposed and then tested by collecting statistical evidence using a sample survey. The results of these surveys aim to test if there is a statistically significant relationship between particular variables whose association is consistent with the mechanism proposed in the model. The logic of these arguments therefore relies on the covering law model, or what is alternatively known as the deductive-nomological model (Sayer, 1992, p.171). This model takes the following form, in which variable ‘A’ has a statistical impact on variable ‘B’:

If A occurs then B also occurs
An interesting feature of this covering law model of argument is that it is described as a ‘black box’ explanation, which is considered to be quite a different kind of explanation from a mechanism-based explanation (Hedström and Swedberg, 1998, p.9). The causal mechanism that links variables ‘A’ and ‘B’ is referred to as a black box because the usefulness of the model does not depend on the specific nature of the causal mechanism. In other words, this model will predict changes in ‘B’ due to the influence of ‘A’ without any knowledge of the causal mechanism. Put differently, the covering law model does not distinguish between explanation and prediction (Manicas, 2006). The origin of the covering law model, along with its lack of interest in causal mechanisms, was due to attempts by positivists to avoid metaphysical explanations by restricting their use of evidence to observable phenomena. Since many causal mechanisms cannot be observed directly, they preferred to restrict their conclusions to predictions rather than to invoke unobservable causes that would make their scientific explanations indistinguishable from metaphysical ones (Doyal and Harris, 1986).

However, as we have shown above, it is not true to say that scholars who use the covering law model of explanation have no interest in causal mechanisms. They routinely advance a wide range of causal mechanisms that purport to explain the high levels of unemployment among low-wage, black residents of the inner city. So, how do these scholars reconcile their interest in causal mechanisms with the use of an explanatory model that has no use for such mechanisms? The answer, interestingly enough, is that these scholars treat causal mechanisms as if they were unobservable phenomena. This means that these scholars devise hypotheses that are consistent with the predictions of their causal model but do not conduct research on the causal mechanism itself. The first weakness of this approach is that the proposed causal mechanisms are never the subject of research, only their outcomes. So, a great deal of effort is spent on collecting data concerning the association of variables and proposing hypotheses concerning causal mechanisms. But the causal mechanism is seldom the subject of research itself. The second weakness follows on from the first. Since research is not conducted on the causal mechanism itself, the results cannot eliminate an alternative causal mechanism that produces the same outcome. Instead, the results can only falsify a theory if the outcomes are not consistent with the proposed causal mechanism. I will consider the work by Ihlanfeldt (1997) to demonstrate this point.

On the basis of a study of residents’ knowledge of the spatial distribution of jobs in Atlanta, Ihlanfeldt (1997: pp.234-239) argues that low-skilled residents who lived in the central city and southern suburbs were less likely to know that most of the region’s growing job opportunities for low-skilled
workers were to be found in the northern suburbs. He argues that his findings explain why black residents were more likely to be misinformed about the spatial distribution of jobs than white residents. The reason is that black residents were much more likely to live in the central city and southern suburbs, whereas white residents were much more likely to live in the northern suburbs. Ihlanfeldt concludes by arguing that the spatial mismatch between place of residence and job opportunities therefore goes some way towards explaining why low-skilled black residents had poorer knowledge of the spatial distribution of jobs than their white counterparts.

The important observation that we wish to make is that the main conclusions of Ihlanfeldt’s study make no reference to the social mechanism through which distance is translated into a lack of knowledge of the spatial distribution of jobs. This is not surprising because Ihlanfeldt’s research did not collect any evidence on such social mechanisms. Instead, evidence was collected on the respondent’s (a) knowledge of where jobs were most plentiful, (b) place of residence, (c) race, (d) gender, (e) level of education, (f) health, (g) tenure status, (h) marital status, (i) family income and (j) work experience. Information was also collected on (k) whether children lived at the respondent’s home and (l) the poverty rate of the neighbourhood in which the respondent resided (Ihlanfeldt, 1997, p.232).

So, the information collected with the sample survey was used to measure the independent impact of variables ‘b’ to ‘l’ on the dependent variable ‘a’.¹

This methodological approach to the collection and analysis of data therefore conforms closely to the covering law model described above. The main concern with this approach is to measure the extent to which there is a ‘constant conjunction’ between the independent and dependent variables. The model has no place for incorporating evidence of how the causal mechanisms may explain the impact of the independent variables on the dependent variable. Explanation is therefore synonymous with predicting the variance in the dependent variable through reference to the variance in the independent variables (Manicas, 2006: 11). This is clear from the data that were collected, how they were analysed and how the results were interpreted. Curiously, however, Ihlanfeldt does discuss possible causal mechanisms in some detail. In a section titled ‘Theoretical Framework’, he proposes that residents who live far from employment opportunities will have access to less information about these jobs if they use either the door-

¹ The favoured technique is logistic regression because it allows for the measurement of the independent co-variance of independent variables with a dichotomous dependent variable.
to-door method of searching or if they rely on their social networks to find jobs (Ihlanfeldt, 1997: 230).

If residents search for information about jobs in distant locations using the door-to-door method they will incur transport costs measured in terms of money and time. Residents of the northern suburbs have cheaper access to such information than their central city counterparts. Ihlanfeldt proposes two reasons for this difference in costs. First, residents of the northern suburbs visit the central city more often than central city residents visit the northern suburbs because they do so for both work and non-work purposes. The cost of acquiring information on jobs by residents of the northern suburbs is therefore cheaper because they combine job search trips with trips for other purposes. Second, job adverts in the media are biased in favour of the central city. As a result, residents of the northern suburbs have a cheap source of information on jobs in the central city that city residents do not have on jobs in the northern suburbs (Ihlanfeldt, 1997: 230). If residents use their local social networks to find out about jobs in distant locations, then they are not subject to the costs imposed by travelling. However, following Wilson (1987), Ihlanfeldt puts forward the argument that central city residents are less likely to know about employment opportunities because their local social networks are less likely to comprise employed workers. Although Ihlanfeldt argues that his findings do not support Wilson’s argument, it is nonetheless proposed as a social mechanism (Ihlanfeldt, 1997: 230). So, although Ihlanfeldt presents these social mechanisms as possible reasons for why central city residents have limited knowledge of suburban jobs, his questionnaire survey does not ask questions concerning these mechanisms. Although the mechanisms are acknowledged in theoretical terms, they are treated as if they are unobservable by the way the data were collected and by the way that the results were analysed statistically.

Ihlanfeldt’s study is by no means unique. As we have argued above, this is almost the only methodology that is used in the study of the labour market spatial mismatch. Although the precise research question may differ, a similar approach can be found in a wide variety of studies (for example, Cohn and Fossett, 1996; Cooke, 1993; Naudé, 2008). We believe that underlying reason for this methodology is a commitment, consciously or not, to the deductive-nomological model of causation.

We propose that an alternative approach to the deductive-nomological model will allow researchers to discover causal mechanisms that will provide an understanding of how residents of the excluded ghetto use social networks to find jobs.
The labour market spatial mismatch in Cape Town

Like other large South African cities, the geography of Cape Town is characterized by large distances between the homes of low-skilled, low-wage workers and their jobs. Unlike American cities, where the excluded ghettos are found in the inner cities, most low-skilled residents live in the south-eastern suburbs of Cape Town. This social geography is partly due to the forced removal of poor African and coloured residents from inner-city neighbourhoods by the state and partly due to the geography of post-apartheid low-income housing provision. African residents were forcibly removed from the inner city neighbourhood of Ndabeni in the ?? and relocated to suburban Gugulethu (Fig.1). Coloureds were forced out of District Six during the 1970s and relocated in the suburbs of Mitchell’s Plain (Fig.1). In the 1980s, the apartheid state built new, low-cost housing for Africans in the suburbs of Khayelitsha (Cook, 1991). Since then, the provision of subsidized housing for the poor by the post-apartheid state has reproduced this same geographical pattern by building housing on the south-eastern suburban periphery where land is cheap and plentiful (Turok, 2001).

The largest employment nodes in Cape Town are still located in the central business district, the old inner-city neighbourhoods and the industrial areas of Maitland, Epping, Parow and Bellville South (Netshikulwe, 2010; Rospabe and Selod, 2006, p.269; Turok, 2001). Nonetheless, there is an established, long-term trend of decentralisation as new commercial and industrial areas are developed in the northern and south-western suburbs (Netshikulwe, 2010; Turok, 2001). Low-wage workers are therefore increasingly housed in the far south-eastern neighbourhoods, while jobs are increasingly created in the northern and south-western neighbourhoods. As a result, the spatial mismatch between home and workplace is growing as workers travel long distances to reach industrial and commercial areas in which low-skilled jobs are concentrated.

A recent study of the labour market spatial mismatch in Cape Town concluded that, controlling for all other variables, the probability of unemployment among workers was significantly increased by the distance from places of employment (Rospabe and Selod, 2006: p.278). Rospabe and Selod based their study on the results of the Migration and Settlement in the Cape Metropolitan Area survey. This survey interviewed workers in a wide variety of neighbourhoods, ranging from the inner-city neighbourhoods of Schotschekloof and Woodstock, to remote suburban neighbourhoods in Khayelitsha, Fishhoek and Strand. Using a logistic multiple regression model that measures independent correlation of a wide range of personal, community and household variables with
unemployment, these authors show that the distance from work was one of four variables that had an odds ratio of more than 1.\(^2\)

This study of the spatial mismatch in Cape Town uses the identical methodology to Ihlanfeldt’s (1997) study of Atlanta. The authors propose a number of mechanisms, which we have discussed above, through which the distance from work can result in unemployment. However, their data do not include information on these mechanisms. Instead, they include information on the place of residence and the employment status of each respondent. As such, the results of the analysis do not exclude alternative mechanisms that might explain the association between distance from work and the probability of unemployment. For example, it is quite likely that the causal mechanism operates in the other direction. Since remote suburban neighbourhoods like Khayelitsha are among the cheapest places to live, it is quite likely that unemployed people would choose to live there in order to minimise their expenses.

**Understanding Job Search Dynamics in Cape Town**

In contrast to the study by Rospabe and Selod (2006), this study is committed to discovering the different ways that low-wage residents of remote suburbs search for jobs. In particular, we are interested in the theory that these workers rely on their social networks in the excluded ghetto to find out about jobs.

Our study is based on over thirty unstructured, in-depth interviews with managers and workers in Cape Town.\(^3\) The interviews with workers aimed to provide us with an understanding of the different ways that they found and secured jobs over the course of their working lives. The interviews with managers were concerned largely with the nature of their businesses, their workers and their recruitment strategies. Following the logic of qualitative sampling design, we interviewed workers who lived far from concentrations of employment (Site C, Khayelitsha) and workers who lived on the doorstep of industrial parks (du Noon). Similarly, we interviewed managers of companies that were engaged in a wide variety of activities and that were located near and far from the south-eastern neighbourhoods.

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\(^2\) This survey was conducted in 1998 by Simon Bekker at the University of Stellenbosch. The data are available from the Data First Resource Unit and the University of Cape Town. The independent variables in the model that produce an odds ratio over 1 are African race (1.875), born in a rural area (1.483), time spent in present dwelling (1.021), and distance from work (1.036) (Rospabe and Selod, 2006: p. 276).

\(^3\) Unless cited as otherwise, all interviews were conducted by Deborah Goetz during 2008. Transcripts of the interviews are available for inspection.
Our first important finding is that social networks among unemployed low-skilled black workers are not confined to residents in their excluded ghetto. Instead, these social networks extend to both workers and employers from all over Cape Town. In other words, residents of the excluded ghetto who have work experience develop social networks with their fellow workers and their employees. Since most centres of employment are found outside the excluded ghetto, these social networks are not restricted to their local neighbourhood.

The result of these geographically dispersed networks is that workers living in remote excluded ghettos nonetheless have access to knowledge about jobs that comes to them directly from the workplace, instead of solely through their neighbours and other residents of the excluded ghetto. Furthermore, these social networks are not comprised solely of other workers, but also include social networks among erstwhile employers. In other words, workers and employers have personal knowledge of one another and use these relationships to find jobs and fill vacancies. Furthermore, workers are able to rely on their employer’s social networks with other employers in order to find and secure employment. How is it that unemployed workers have social links directly with employers and that different employers share knowledge about specific workers in order to fill vacancies? The answer lies in our finding that many kinds of low-skilled jobs are found in small businesses where workers are in direct contact with their manager, who was also the person responsible for hiring them. Others worked in private homes as domestic cleaners and were obviously in direct contact with the householder, who was their employer.

**Social networks between employers and workers**

Our respondents had been employed in a diverse range of small businesses. Some were employed as shelf packers, counter packers cleaners and cashiers in supermarkets such as Pick ‘n Pay and Checkers (now Shoprite). Although these particular retail stores employ up to 300 workers on a number of shifts, the management hierarchy is flat, comprising the manager and supervisors. The manager, who is the owner of the franchise, makes the hiring decisions and therefore interacts directly with workers (Robbins, 2008). Other workers were employed in smaller businesses that employed only a handful of workers. These workers found employment in restaurant and coffee shop kitchens as cooks (such as pizza makers), cleaners and dishwashers and also as a ‘barista’ (espresso maker) and bartender. At petrol stations they were employed as a cashier and petrol attendants. Building sub-contractors employed our respondents in the ‘wet’, deskillled trades of bricklaying and tiling.
The relationship between employers and workers in these small businesses is a personal one. Workers are in constant communication with managers as they go about their daily tasks. The obvious reason for this is that managers in these small businesses have a hands-on role in which they not only hire, fire and discipline workers, but also work alongside them. For example, in restaurants, managers are responsible not only for financial administration, but also manage ‘front of house’ waiters and kitchen workers by maintaining an active presence and helping out when necessary (Jones, 2009; Ninemeier and Hayes, 2005; Roberts, 2009; Smith 2009). Similarly, small building sub-contractors employ small teams of workers to carry out building operations associated with particular trades. In the case of our respondents, the owner-managers of these small businesses were the artisans themselves and therefore worked alongside or supervised the workers who they employed. The same kinds of working relationships are found at petrol stations. In private homes, where householders employ domestic cleaners, workers and employers also develop a personal knowledge of one another. Although they do not work side by side, they nonetheless have personal contact because of the one-on-one nature of the worker-employer relationship.

As a result of this personal knowledge of one another, managers kept in touch with our respondents and called on them when particular work opportunities arose. Alfred worked as a barista in the Mugg & Bean coffee shop in the Long Beach shopping mall in the suburb of Sun Valley, near Fish Hoek. Some years later, long after he had left this job, his old manager phoned to offer him a job at another branch of Mugg & Bean in the Bayside Centre shopping mall, in the suburb of Table View. Whereas his first job in the Long Beach shopping mall was a short walk from his home in the informal settlement of Masipumulele, his second job in Table View was at the other end of the city from Khayelitsha, where he had moved to live. This relationship between employer and worker therefore led to the transmission of job information that by-passed Alfred’s local social networks in Khayelitsha. Furthermore, it also secured Alfred a job that was a great distance away from his home.

Private householders who employ domestic cleaners share information about workers and take referrals from one another. As a result, domestic cleaners can secure jobs through the social networks of their employers as well as through the social networks of their neighbours, friends and relatives. For example, take the case of Nbambo, who has worked as a domestic cleaner in the inner-city neighbourhoods since 1998. Her first job was in Sea Point, which she heard about through a close friend who she knew from her childhood in the rural district of Willowvale in the Eastern Cape. In more specific terms, her employer put out the word to his friends
that he wished to employ a part-time domestic cleaner. His friends then passed this information on to the domestic cleaners who worked for them. One of these domestic cleaners was Nbambo’s childhood friend, who passed the information on to her. Nbambo secured her second part-time job in a similar way. Since she was only employed for two days a week, she asked her employer if he knew of anyone who needed a domestic cleaner. As it turned out, he did and Nbambo secured another job for three days a week in Observatory. She later fell out with her first employer and lost the job in Sea Point. Soon afterwards, she found another job for one day every second week, working for the ex-husband of her employer in Observatory.

These social networks not only pass around information about jobs but also provide employers with references about potential employees. Consequently, job applications from workers who use this social network method of searching are likely to be successful.

**Social networks among workers**

In retrospect, it should not have surprised us to find that workers maintain contact with their colleagues who they meet at the workplace. These colleagues provide an important source of information and referrals concerning job vacancies. For example, Alfred was employed for a period at the Cobb Inn restaurant in the seaside suburb of Scarborough. His job was to make and cook pizzas, but this job was brought to an end when the restaurant closed. Two years later, one of the waiters that he had worked with persuaded the manager of the Imhoff Farm Restaurant in Kommetjie to interview him for a temporary job making pizzas.

**The social mechanisms of recruitment**

We have presented evidence to show that certain types of smaller businesses are characterised by social interactions between employers and workers, with the result that they develop personal knowledge of one another. This knowledge then becomes a social network by which employers fill vacancies and workers find jobs. This is an important finding because this type of social network is one that extends beyond the social networks that are found within the geographical boundaries of the excluded ghetto. This finding raises another question. Why do employers use social networks to recruit workers, instead of using recruitment agencies or newspaper advertisements?

Our findings show that although employers use a variety of methods to recruit workers, they do have specific reasons for using social networks to find new staff. The reasons that we have discovered are motivated by the need to find new staff as quickly as possible and to ensure cooperation between workers in the workplace. In the restaurants that we researched,
we found that kitchen staff, including ‘scullers’ were usually workers who lived in the remote excluded ghettos of Phillipi, Gugulethu and Khayelitsha. Typically, managers only know when a worker has left employment when he has not arrived for a shift. A replacement is needed at a moment’s notice and only way to recruit someone immediately is through the social networks of the staff or the manager. As far as kitchen staff are concerned, this usually means recruiting a new sculler and promoting the old sculler into a more responsible position in the kitchen (Roberts, 2009). This form of recruitment has other advantages. The preparation and serving of food in a restaurant is a fast-moving process involving cooperation between different members of staff. Managers reported that they found that employing staff from the same social networks made them more cooperative and that, as a result, the restaurant ran more smoothly (Watson, 2009). This cooperation extended to reducing lateness and absenteeism, since workers who were friends with the absent worker could be relied upon to call them up and pressurise them into coming to work (Smith, 2009). Our interviews with the owner of a boat-building factory provided similar evidence. Mr Mendez (2009), specifically employs workers who belong to the same nuclear family because this promotes ‘harmony’ in the workplace. This is achieved through employing both the parents and their adult offspring as well as siblings. In one particular situation, the father and son worked together as a team, with the artisan father taking charge.

**Conclusion**

Most studies of the mechanisms of the labour market spatial mismatch use a deductive-nomological model of research. These studies hypothesize causal mechanisms without establishing their existence through research. Instead, they treat such mechanisms as if they were unobservable and measure the quantities of variables that might be associated with a proposed mechanism in order to establish the association of independent variables (such as distance from work) on the dependent variable (employment status). As we have argued, this approach cannot exclude alternative hypothesized mechanisms that have the same association with the dependent variable.

This study has taken a different approach by using a qualitative interviewing technique to discover the social mechanisms whereby low-

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4 Many restaurants do employ middle-class university students as ‘waitrons’ but this is by no means the norm and many others employ low-skilled workers from the excluded ghettos. A ‘sculler’ is responsible for clearing dirty dishes off tables and cleaning cooking equipment in the kitchen (known as ‘bussers’ or ‘busboys’ in the USA).
wage workers find out about jobs far from their homes. Our results have established that low-wage workers who live in excluded ghettos are not necessarily excluded from the social networks of employers and employed workers. Instead, we have identified a number of mechanisms that result in employers using social networks among themselves and their workers to recruit new employees. These results have a number of implications for the labour market spatial mismatch hypothesis. First, the nature of social networks among employers and workers is such that they are not geographically restricted to the excluded ghetto and offer workers a means to overcome the spatial obstacles to finding jobs far from home. Second, we have identified some causal mechanisms that explain why managers use social networks in order to recruit new staff.

References


