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**16|2019** Do social networks mitigate stigma effects from long-term unemployment?

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# Do social networks mitigate stigma effects from long-term unemployment?

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## Abstract

The processes of job search and firms' search for employees are subject to some peculiarities when it comes to the chances of long-term unemployed to find a new job. As one group of the supply side of the labour market, these persons face special problems: There is a strong stigma of long-term unemployment attached to these persons. It includes, for example, negative perceptions of the existence of necessary formal qualifications, working experience, resilience or motivation to work. Furthermore, long-term unemployment can lead to social isolation, since social contacts are more likely to evolve between persons that have the same status of employment, which, in turn, reduces the access to useful social contacts to employed individuals. It may be expected that especially the group of long-term unemployed faces advantages when having access to the social contacts of Human Resource Managers, because recommendations may counteract the stigma effects that arise from long-term unemployment and possible prejudice employers' HR decision-makers. Using data from the German Job Vacancy Survey from 2016 and 2018, which is a representative paper and pencil survey on establishments in Germany, I investigate how employers judge the work related skills of long-term unemployed and whether this group has higher chances of being hired when an employer uses his or her social contacts to find candidates. Apart from a large number of establishment-specific characteristics, the survey contains information on the recruiting process with regard to long-term unemployed. Establishments are asked whether they had applications from these persons, whether they invited them for an interview and whether they finally employed long-term unemployed individuals. For all three steps of the recruitment process, it is possible to identify employers that recruited long-term unemployed with or without recommendations. The results indicate that employers do not receive more applications from long-term unemployed when using social contacts for search, but if so, long-term unemployed have higher chances of being invited for interviews and finally of being hired as compared to search through other, more formal search channels. Therefore, even though recommendations to an employer may be helpful for long-term unemployed to find a new job, this group seems to lack useful social contacts that are a necessary prerequisite for an application.

## Zusammenfassung

Die Suche nach einer neuen Arbeit, bzw. nach neuen Mitarbeitern von betrieblicher Seite zeichnet sich durch einige Besonderheiten aus, wenn es um die Gruppe der Langzeitarbeitslosen geht. Aufgrund eines starken Stigmas das sich aus der Dauer der Arbeitslosigkeit ergibt, erleben diese Personen besondere Schwierigkeiten einen neuen Job zu finden. Dieses Stigma beinhaltet unter anderem negative Annahmen über das Vorhandensein der notwendigen formalen Qualifikation, von Arbeitserfahrung, Belastbarkeit oder auch der Arbeitsmotivation. Des Weiteren kann eine lang andauernde Arbeitslosigkeit zu sozialer Isolation führen, da sich soziale Kontakte wahrscheinlicher zwischen Menschen mit gleichem Erwerbsstatus bilden und Kontakte in die Arbeitswelt dadurch verloren gehen. Allerdings sollten gerade Langzeitarbeitslose von der Empfehlung über soziale

Kontakte profitieren können, da diese Empfehlungen die Negativeffekte von Stigmata möglicherweise reduzieren können. Anhand von repräsentativen Betriebsdaten der IAB-Stellenerhebung aus den Jahren 2016 und 2018, wird in diesem Papier untersucht, wie Betriebe die arbeitsrelevanten Eigenschaften und Fähigkeiten Langzeitarbeitsloser einschätzen und ob diese Personen davon profitieren, wenn Betriebe für ihre Suche nach neuen Mitarbeitern ihre sozialen Kontakte nutzen. Neben einer großen Zahl betriebsspezifischer Charakteristika, enthält die Befragung auch detaillierte Informationen zum Verlauf von Rekrutierungsprozessen. So wird erfragt ob ein Betrieb Bewerbungen von Langzeitarbeitslosen erhalten hat, ob er Langzeitarbeitslose zum Vorstellungsgespräch eingeladen hat und ob eine langzeitarbeitslose Person eingestellt wurde. Für jeden dieser Schritte ist es möglich zu identifizieren, ob der Betrieb soziale Kontakte für die Suche nach einem Bewerber verwendet hat. Die Ergebnisse zeigen, dass die Betriebe über die Nutzung sozialer Kontakte weniger Bewerbungen von Langzeitarbeitslosen erhalten. Ist dies jedoch der Fall, so erhöhen sich die Chancen Langzeitarbeitsloser eingeladen und auch eingestellt zu werden. Entsprechend kann geschlussfolgert werden, dass soziale Kontakte ein hilfreicher Weg für Langzeitarbeitslose sein können einen neuen Job zu finden. Bisher scheitert dies jedoch vor allem daran, dass diesen Personen diese hilfreichen Kontakte fehlen um den ersten Schritt zu tun und eine Bewerbung zu schicken.

## JEL-Classification

J63, J64

## Keywords

Long-term unemployment, social contacts

# 1 Introduction

The use of social contacts on the labour market to find a job or to search for employees is often stated as being very helpful in generating more invitations to interviews, more job offers and more job placements than other search channels (e.g. Granovetter 1995). However, when it comes to the chances of long-term unemployed to find a new job, the processes of job search and firms' search for employees are subject to some peculiarities. As one group of the supply side of the labour market, these persons face special problems: There is a strong stigma of long-term unemployment attached to them. It includes, for example, negative assumptions on the existence of necessary formal qualifications, working experience, resilience or motivation to work. Additionally, long-term unemployment can lead to social isolation, since social contacts are more likely to evolve between persons that have the same status of employment (Bramoullé and Saint-Paul 2010, Calvó-Armengol and Jackson 2004), which reduces the access to useful social contacts to working people (Calvó-Armengol and Jackson 2004). Therefore, for long-term unemployed, the limited access to useful social contacts can lead to a scarcer use of them when searching for a job (e.g. Lindsay 2009; Bonoli 2014).

Meanwhile, the labour market research on the use of social contacts to either find a job or find employees has become a large field of interest, which is still not fully explored. While there is a large body of studies that examine the job search behaviour of unemployed (e.g. Bonoli 2014; Bachmann and Baumgarten 2013; Bentolila et al. 2010; Cingano and Rosolia 2012), only few studies evaluate the chances of unemployed and low qualified job seekers to find a new job through social contacts from a firm's perspective (e.g. Rees 1966, Pellizzari 2010, Berardi 2013). To understand the matching mechanism on the labour market, it is essential to take firms' search behaviour into account (Mencken and Winfield 1998), especially, because firms' assessment of long-term unemployed is crucial for their chances to find a new job (Bills et al. 2017). For long-term unemployed in particular, recommendations may counteract the stigma effects that arise from long-term unemployment and possible prejudice of firms' HR decision-makers that refer to the motivation to work of these persons (cp. Oberholzer-Gee 2008). But there is only a scarce literature on the use of referrals on the demand side of the labour market, and to my knowledge, there are no studies that evaluate firms recruitment of long-term unemployed persons through social contacts. This study is the first that evaluates the chances of long-term unemployed to find a new job when firms use their social contacts for search by taking firms judgement and potential stigma that may occur into account. Therefore, the main attempt of this article is threefold: First, I ask whether long-term unemployed benefit from firms' use of social contacts during their search for employees in general. Second, I want to shed light on the question how firms judge the work related (soft) skills of long-term unemployed and third, whether long-term unemployed can profit from firms' network use, when they judge the work related soft skills of these persons as being predominantly negative.

Using data from the German Job Vacancy Survey from 2016 and 2018, which is a representative written survey on firms in Germany, I evaluate those three questions. In the questionnaire, firms were asked, to judge work related (soft) skills of long-term unemployed. Hereby, the survey allows differentiating between firms that had experiences with those persons and those that had not.

Apart from establishment-specific characteristics, the survey contains information on the recruiting process with regard to long-term unemployed. Employers are asked whether they had applications from these persons, whether they invited them to an interview and whether they finally employed them. For all three steps in this recruitment process, it is possible to identify employers that recruited with or without recommendations.

The results indicate that only looking at applications, invitations for job interviews or recruitment without having information on applications through different search channels does not lead to a proper understanding of the role of social contacts for the chances of long term unemployed in recruitment processes. To evaluate the importance of social contacts, it is necessary to look at the recruitment process as a whole and take all steps into account. Analysing each step of the recruitment process separately suggests that firms' use of social contacts in recruiting processes has a rather negative chance on the probability that long term unemployed find a new job. But evaluating the steps of the recruitment process conditional on each other, shows a clear advantage of social contact use.

The paper proceeds as follows: In the second chapter, I describe the specific situation of long term unemployed on the labour market by restraints they face to find a new job, especially from a firm's perspective. The third chapter summarizes the relevant literature on the subject. In the fourth chapter the data and methods are explained and in the fifth chapter, the results of the analyses are presented. The paper closes with a conclusion.

## 2 The specific situation of long-term-unemployed

By focusing on long-term unemployed job seekers I concentrate on a group on the labour market that face certain difficulties in finding a new job, since the chances for an unemployed person to become reemployed decrease with the duration of unemployment. The reasons for that are diverse.

First, it is a stylized fact that unemployment has a negative effect on the quality and quantity of work related skills. During the time of unemployment, these skills are subject of depreciation. Following Human Capital Theory (Becker 1964), productivity, economic returns and employment chances depend on the readiness and the opportunities of a person to investment in formal and professional education, also over the lifespan. Consequently, a higher educational level and longer working experience lead to a higher productivity and better employment prospects. Hence, a successful job search does not least depend on acquired experiences and qualifications. In this respect, a long duration of unemployment is accompanied by the depreciation of human capital, which was acquired through formal and professional educational attempts prior to entering unemployment, if there were any (Heining and Lingens 2006; Beblo and Wolf 2002). Additionally, unemployed persons only have very restricted access to collect further working experiences and lack access to technological and organizational innovations of firms. The assumed negative effect on the employment chances should increase with the duration of unemployment, because over a longer unemployment period, the loss of human capital increases. This explains to some extent

the differences between the employment prospects of long- and short-term unemployed (Thomson 2009).

The second reason for reduced job opportunities is a negative perception of long-term unemployed by some firms resulting from stigma effects of long-term unemployment. Erving Goffman (1980) divides the construct of social identity into a virtual and an actual part. The virtual part includes ideas and expectations about a person belonging to a specific group, which, in turn, may influence her behaviour. The actual part includes attributes and characteristics that a person actually features. Virtual and actual characteristics might differ from each other, because expectations concerning a person can be different from her behaviour in interaction processes. This is not necessarily problematic, but can lead to judging a person as being different and therefore downgrading her. Goffman refers to such attributes as being stigmas, especially when their negative effect is very strong. Therefore, it is not the attribute itself that is stigmatising, but the negative definition of it (Goffman 1980). Furthermore, it is typical for stigmas that beyond the attribute itself, a person is additionally stigmatised by certain other negative characteristics that only have a small, or none at all reference to the original attribute. In this respect, Hohmeier (1975) speaks of a transmission of a certain attribute to the whole person and stigmatising as being a process of generalisation that influences the person in all social processes. Accordingly, stigma does fulfil a social function that directly affects social interactions at the macro and the micro level of societies.

According to Grausgruber (2005), at the macro-level, stigmas help to regulate the interaction between different social groups, due to their function of giving orientation in social processes. Aside norms, moral values and attitudes, they help actors to consolidate their own group affiliation as distinct from other social groups. Additionally, stigmas regulate, aside others, the access to scarce goods such as status, rewards or jobs and are in this respect stabilising the social system. Therefore, they are used as one authority for non-equal treatment and different positions in a social system. At the micro level, the idea of stigmas and what is “normal” help actors to find orientation in interaction processes by structuring situations, but simultaneously lead to selection and distortion of perception and make it therefore more difficult to gain new experiences (Hohmeier 1975). Following the arguments of Hohmeier (1975) and Grausgruber (2005), the effect of the stigma “long-term unemployment” when it comes to firms is twofold. First, due to the mechanism of attributing certain virtual characteristics to long-term unemployed, employers believe long-term unemployed to be not very productive, not motivated, not resilient or else and attest them a loss in necessary skills (Oberholzer-Gee 2008). Second, this negative attribution leads to a non-equal treatment of long-term unemployed in recruiting processes, due to stigmas regulation of the access to tight goods. Therefore, firms’ opinion on a person’s skills and productivity is crucial to the chances of unemployed to find a new job, especially when firms judge this group in a negative manner.

The third reason for reduced job opportunities for long-term unemployed results from the contribution of stigmas for identity building at the micro-level. First, being stigmatised can lead to different forms of self-stigmatisation. For example, persons that are unemployed for a long time might internalise the attribution of certain negative stereotypes and see themselves as being unproductive or not motivated. As a result, this might even lead to the acceptance of the stigma and self-prejudice to a certain degree, where a low self-esteem and low self-efficacy is accepted. Further down the line, these persons react to the attributed and the self-attributed stigma and act in



a way the environment would expect them to do – by giving up the search for a new job (cf. Rüscher et al. 2005). Second, as one additional cause of discrimination and self-discrimination, stigmatised persons experience increasing difficulties to interact with other persons or groups that are not stigmatised in the same manner (Hohmeier 1975). Therefore, an increase in the contacts to other persons that are also stigmatised because of unemployment is more likely. A long lasting unemployment episode can even lead to social exclusion from a work related network structure (Lindsay 2009; Sattler and Diewald 2010), since contacts concentrate on persons with the same employment status (Bramoullé and Saint-Paul 2010, Calvó-Armengol and Jackson 2004). Unemployed persons tend to have smaller networks that consist of strong ties to close friends and family and that are more homogeneous. This results from reductions in the structure and the size of those networks due to becoming and staying unemployed, because helpful contacts to employees become less frequent (Calvó-Armengol and Jackson 2004). Due to the loss of helpful direct contacts with employed persons – one of the main sources of information on open job positions (Cingano and Rosolia 2012; Van Hooft, Van Hooft and Livens 2009; Cappellari and Tatsiramos 2015) - the networks of unemployed are likely to be of limited use, because the lack of access to such networks can keep unemployed from useful information on open positions (Lindsay 2009). Additionally, unemployed persons are often not aware of the usefulness social contacts have for job search and do not use them (Bonoli 2014). This tendency even strengthens, when each unemployed in the network has an interest to keep useful information private to find a new job himself (Calvó-Armengol and Jackson 2004; Sattler and Diewald 2010). Accordingly, the social networks of long-term unemployed show some special characteristics that are not profitable concerning labour market opportunities. The limited information flow and the inclusive structure of unemployed networks create the disadvantage of receiving very few information on open positions in a certain period of time.

### 3 Has firms' use of social contacts advantages for long-term unemployed?

When searching for new employees, firms can decide to use different strategies of search. They can use so-called “formal” search channels, such as advertisements in newspapers or the internet or they may register their vacancies at the Federal Employment Office. Additionally or possibly exclusively, firms might use informal search strategies. In this case, recruiters decide to activate their personal contacts to friends, family or colleagues. Compared to the formal search strategies, informal ways of recruitment have some advantages.

The use of social networks when looking for a job has been considered an especially important way of filling vacancies efficiently and appropriately since the Granovetter study (1995), which has attracted much attention. Granovetter's findings are especially based on the assumption that detailed information about job vacancies and job-seekers can be disseminated more quickly through social networks than through other search channels (see Granovetter 1973, 1995). This should cause the employers to be able to fill vacancies more quickly, which in general would lead to shorter search durations and lower search costs as well. In this context, social contacts should expand the time restrictions personnel-seeking employers are subject to.

According to the Rational Choice Theory, actors in decision-making processes are eager to realize their preferences, while at the same time acting in the framework of their available resources, i.e. under restrictions (see Diekmann and Voss 2004). While employers want to fill their vacancies at the lowest possible costs with a person who possesses the required productivity (profit maximisation), they find themselves restricted by financial resources, time and market-related aspects and by information asymmetries (restriction of room for manoeuvre). Financial restrictions include the costs for staff-search itself, such as the costs for advertisements or screening costs. Closely related are the time restrictions: When a position is to be filled, timely hiring is crucial, as employers will otherwise incur opportunity costs. The market-related restrictions employers are confronted with during the recruitment process mainly refer to the economic situation in the region and the candidate situation: If there are many applicants for a vacancy, the employers face the problem of having to make the right choice. If there is only a small number of candidates, they have the problem of finding at least one suitable applicant. In both cases, the employers need more information, either to identify the suitable person from a pool of candidates or to selectively look for a suitable person externally. However, the acquisition of information itself is always associated with transaction costs. Information asymmetries mostly emerge from the fact that employers only have incomplete information about potential candidates (e.g. Mortensen 1970). In this way, misleading information about the number and qualification of candidates could cause employers to plan a recruitment period that is too short and does not match the market situation.

These information asymmetries can be reduced if employers manage to obtain as many pieces of detailed information about the candidates and about the properties of the potential applicants as possible. As a promising strategy to tackle these restrictions, employers may resort to information from persons who already know the applicant, by making use of their social networks. This strategy is based on the principle of homophily, which says that individuals who cooperate are similar in their socio-demographic, intra-personal and behavioural characteristics (McPherson et al. 2001). For the company seeking for personnel this implies that the HR decision-maker can deduce the characteristics of a person from the recommending employee. Moreover, those who recommend a candidate will only suggest a person if they are convinced that he or she will meet the requirements for the to-be-staffed position. This is based on the assumption that a recommendation which does not fit perfectly can harm the reputation of the referee in the company (see Saloner 1985). Therefore, employers should obtain mostly references via social contacts that meet their requirements (at least to a large extent). This should reduce the uncertainty concerning the suitability of potential candidates and the decision for a certain person. Consequently, staffing should become easier and should most probably be performed in a timely manner, since the seeking company is less dependent on other time and cost-intensive search strategies.

Concerning the usefulness of social contacts for unemployed job seekers, there are clear assumptions, but previous findings are not consistent concerning the advantages of network use on finding a job for unemployed.

Cingano and Rosolia (2012) argue that persons who are connected through strong ties are more likely to share information on open positions and also find evidence that strong ties are helpful to speed up reemployment (Cingano and Rosolia 2012). Brand (2006) argues that the “strength of weak ties” is due to their number, rather than to their efficiency. Concerning the matter of information, strong ties might be more efficient in disseminating information and even in fulfilling a

bridging function between two networks (Burt 2000; Brand 2006). The bridges help to reduce redundancy, because the persons on either side of the bridge that connects two networks have access to different flows of information and have therefore advantages concerning information access. Through the bridge, non-redundant information can reach the network members that might again be helpful in job search processes (Burt 2000). Even though the amount of information is not as large as it would be in large weak tie networks, it ought to be helpful in the job search process. Respectively, studies for Germany find one third of unemployed to become re-employed through social contacts (Brandt 2006) and there is a tendency in firms to fill positions that only need a low qualification more often through the use of social contacts (Holzer 1996; Hellerstein, McInerney, Neumark 2008; Klinger, Rebien 2009).

Strauß (2009), who evaluates the effect of social capital that is acquired through voluntary engagement on reemployment, finds no effects for unemployed persons in Germany, but for young men in Great Britain. The findings of Uhlendorff (2004) are similar. There are only effects of voluntary engagement on the duration of unemployment in Eastern Germany, but not in Western Germany. Brandt (2006) analyses the influence of social contacts and different network characteristics on the duration of unemployment of low-income workers. She finds positive effects of social network use on successful job search and positive effects of network-size and network-heterogeneity on the exit out of unemployment. From the macro-sociological point of view, Freitag (2000) shows that the unemployment rate is lower in regions of Switzerland where there is a high rate of social capital. Operationalized as persons that are of the same age and speak the same language, social networks show positive effects on reemployment of unemployed (Burns, Godlonton, Keswell 2010). A similar analysis from Bertrand, Luttmer und Mullainathan (2000) finds opposite results. The authors evaluate the role of social networks in welfare participation for persons that speak the same language and have more contacts to social welfare recipients. The authors find that rather closed networks have a negative effect on the upward mobility of the respondents, because information on the social security system was spread more efficiently than on vacancies. The results from Van Hove et al. (2009) show that the contact to persons who could help to find a new job does not have any effect on the employment status. Neither does the strength of social contacts, but unemployed who have contacts to status higher persons find their way back into employment faster than unemployed that do not have these contacts. Korpi (2001) analyses the influence of network size on reemployment and finds positive effects on the exit out of unemployment. Thereby, strong ties prove more useful than weak ties, even though the effect is not significant. Last but not least, Mouw (2003) finds that young unemployed that used their social contacts to find a new job had a longer duration of unemployment than others.

To sum up, because of the stigma effects of long-term unemployment (Vishwanath 1989; Calvó-Armengol and Jackson 2004), personal referrals for a job can be of high relevance particularly for this group to outweigh firms' perceptions about long-term unemployed candidates' integration into the job and their motivation to work (Sehringer 1989; Vishwanath 1989, Oberholzer-Gee 2008). Therefore, the use of social contacts to find a new job should still be more helpful to long-term unemployed job seekers than not to use them. Fewer and to some extent redundant information in a dense network should still be more helpful than only formal ways of search, because even in a dense network, the information flow is faster and gives more helpful information on the open position that influence the labour market outcomes of this search way. As seen above, the results

show a variety of possible outcomes of job search from unemployed through referrals, having the supply side of the labour market in focus.

## 4 Data and Method

To explore whether firms' use of social contacts when searching for new employees is helpful for long-term unemployed to find a new job, I use the IAB Job Vacancy Survey of the Institute for Employment Research in Nuremberg (IAB JVS) from 2016 and 2018. This is a representative survey of managing directors and human resource managers in German establishments of all size classes and over all industries. For this cross-sectional survey, a representative sample of up to 110,000 firms with at least one employee subject to social security is drawn from the employment statistics of the Federal Employment Agency. The survey is stratified disproportionately, structured into 28 economic activities and seven company size classes, separately for Eastern and Western Germany and is based on paper-and-pencil questionnaire (for detailed information see Kubis et al. 2017).

One of the main objectives of the survey is it to provide information on the details of recruiting processes. For this purpose, the survey collects in each wave detailed information on the last hiring process for a job subject to social security contributions. In case more than one person was hired at the same time, the respondents are asked to fill out the questions for the person whose first letter of the surname is closest to the beginning of the alphabet.

The survey provides detailed information on individual and job characteristics and the recruiting process itself. The persons' characteristics include – amongst others - the employment status right before the beginning of the new job. This information allows identifying whether the newly hired person was long-term unemployed. Concerning the characteristics of the newly filled position, we gather information on the formal qualification requirements of the position and information on whether the position is a part time and/or fixed-term one (or none of both). Finally, in this part of the questionnaire establishments are asked to report whether the recruitment process was characterized by difficulties to fill the open position. These difficulties may include a lack in the number of candidates, insufficient vocational qualification of applicants or a lack of acceptance concerning working conditions or the provided payment. Concerning the recruitment process, the survey also collects information on the search-strategies establishments used to find new employees.

The data are restrictive in the way that they only provide information on the most recent successful recruitment process. Even though the inclusion of non-successful recruiting processes is not possible, the data provide detailed information on whether long-term unemployed applied for the position and whether firms invited them for job interviews. This approach allows a more detailed look into the black box of recruiting practices of firms concerning this labour market segment that goes beyond an approach that looks only at the match itself. While the lack of information on non-successful recruitments does not allow any predictions about the general chances of long-term unemployed in the labour market, the available information at least allows addressing the first research question:

1. Is establishments' use of social contacts during the recruiting process associated with a higher propensity to hire a long-term unemployed individual?

Additionally, another part of the questionnaire covers questions on firms' judgement of work related skills of long-term unemployed. The questionnaire asks how firms judge the reliability, social competencies, engagement, discipline, flexibility, motivation to work, the ability to cope with pressure, the ability to work in a team and the professional qualification. It is possible to identify whether the establishments' judgement is based on experiences the firm made itself, or whether the judgement is independent of firms' own experiences. With these information, the second research question can be answered:

2. How do firms judge the work related skills of long term unemployed?

Bringing both pieces of information together, the third question arises:

3. Is establishments' use of social contacts during the recruiting process associated with a higher propensity to hire a long-term unemployed individual, even when the establishment judges the work related skills long-term unemployed negatively?

To evaluate the first research question, I use firstly simple logistic regression models to analyse the probability with which a long-term unemployed person applied for a given position, is invited for an interview and is finally hired for the open position. First, I estimate a specification for each outcome variable separately, taking controls into account. In a second step, I estimate a specification with the invitation of long-term unemployed as the outcome variable, conditional on firms' receipt of applications from long-term unemployed and another one on the probability of recruitment after the receipt of applications. In these models, it is necessary to perform a heckman correction for sample selection, because having only establishments in the sample that either received applications from long-term unemployed or invited them for interview might be biased by a selective group. Therefore, I estimate the conditional models with the invitation and hiring of a long-term unemployed individual as the outcome variable using probit models with sample selection correction.

For the second research question, I perform a test of pairwise comparisons of means on firms' judgement of all work related soft skills of long term unemployed. In doing so, I distinguish between firms that already had experiences with long term unemployed during three years prior to the questioning and firms that did not have any experience with this group during this time.

For the third research question again, I use the same exploration strategy as above, but restrict the sample to firms that judge long term unemployed only in a negative way. This means that firms in this sample judge all work related (soft) skills of long term unemployed as being negative.

Table 1 shows the structure of both samples, separately. As one can see, there is no big difference in the variables between both years. There is only a significant increase in the share of firms that judge long-term unemployed in a negative manner and an increase in the share of establishments that had difficulties to fill their open positions. Both variables describe the current state of the German labour market, which recently experienced a stagnation in the number of long-term unemployed, with the number having been constantly decreasing since 2011. Studies by Hohmeier and Lietzmann (2018) show that, while there are fewer entries into long-term unemployment, the duration of long-term unemployment is constantly increasing since 2012. As a result, firms are more likely to judge this group in a negative manner, since their work related skills have been subject to a longer duration of depreciation. At the same time, the need for skilled labour is increasing in

Germany and more firms are experiencing difficulties in filling their open positions due to a lack of skilled workers (Kubis and Rebien 2019).

**Table 1: Structure of the sample**

Variable	Full sample			Restricted sample		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Long term unemployed applied	14,552	0.171	0.376	3,936	0.175	0.380
Long term unemployed were invited for interview	14,142	0.082	0.274	3,805	0.080	0.271
Long term unemployed were hired	16,706	0.039	0.195	4,273	0.038	0.191
Long term unemployed were judged negatively only	11,768	0.513	0.500	6,041	1.000	0.000
Firm used social contacts for search only	10,796	0.249	0.432	2,586	0.257	0.437
No vocational qualification/unskilled	16,763	0.186	0.389	4,323	0.220	0.414
Vocational training	16,763	0.661	0.473	4,323	0.678	0.467
University/college degree	16,763	0.153	0.360	4,323	0.101	0.302
Position is temporary	17,152	0.341	0.474	4,425	0.302	0.459
Position is part time	16,930	0.176	0.381	4,352	0.141	0.348
It was difficult to fill the position	16,928	0.363	0.481	4,376	0.464	0.499
Smallest firms with 1- 9 employees	26,116	0.256	0.437	6,041	0.246	0.431
Small firms (10 - 49 employees)	26,116	0.488	0.500	6,041	0.526	0.499
Medium size firms (50 - 249 employees)	26,116	0.173	0.378	6,041	0.163	0.369
Large firms (250 and more employees)	26,116	0.082	0.275	6,041	0.066	0.248
Agriculture, Forestry, Fishing	26,116	0.039	0.193	6,041	0.045	0.207
Manufacturing industries	26,116	0.318	0.466	6,041	0.332	0.471
Construction sektor	26,116	0.044	0.205	6,041	0.062	0.240
Trade, hospitality industry, transport, communication etc.	26,116	0.170	0.375	6,041	0.176	0.381
Finance, Insurance, Housing, economical services etc.	26,116	0.200	0.400	6,041	0.212	0.409
Private, social, public services	26,116	0.230	0.421	6,041	0.173	0.378
Western Germany	26,116	0.617	0.486	6,041	0.617	0.486

Source: IAB Job Vacancy Survey 2016 and 2018

## 5 Results

Table 2 shows the results of the logistic regression model for the association between firms' exclusive use of social contacts to search for candidates and the overall chances of long-term unemployed in the hiring process. We can see that the use of contacts does not have any advantages for this group of persons. Even worse: When firms rely exclusively on social contacts, the probability of applications from long-term unemployed and the probability of being invited for an interview and of finally being hired are lower than for other search channels. Having a look at the conditional results from the probit models with Heckman-selection, we find the opposite, though. Conditional on having received an application from a long-term unemployed, firms' exclusive use of social contacts raises the probability of inviting this person for a job interview by about 5 per cent. Conditionally on being invited for a job interview, the chances of being hired are about 20 percentage points higher than with other search channels. In this model, the results of the heckman-correction

indicate that the samples are independent, what makes a correction obsolete and allows us to interpret the marginal effects without correction.

Additionally, but not surprisingly, the chances of long-term unemployed are rather restricted to positions that do not require any qualification, with the marginal effects increasing in the two conditional models. Furthermore, long-term unemployed are more likely to be recruited for part-time jobs and for temporary contracts. This last association disappears in the conditional models, as does the positive relationship between the probability of being recruited and the incidence of firms' staffing difficulties.

**Table 2: Results of logistic regressions and heckman-corrected probit models, whole sample**

	Firm received application from LTU	firm invited LTU to job interview	Firm hired LTU	Conditional on application: Firm invited LTU to job interview	Conditional on application: Firm hired LTU	Conditional on invitation to job interview: Firm hired LTU
Search through social contacts only (Reference: No search through social contacts)	-0.212*** (0.016)	-0.0627*** (0.010)	-0.0105** (0.005)	0.0484** (0.020)	0.0788 (0.049)	0.198*** (0.059)
Formal requirements of the position (Reference: vocational training)						
No vocational qualification/unskilled	0.049*** (0.011)	0.051*** (0.007)	0.037*** (0.004)	0.0273** (0.013)	0.0482 (0.032)	0.134*** (0.040)
University/college degree	-0.091*** (0.013)	-0.052*** (0.010)	-0.042*** (0.009)	-0.00889 (0.008)	-0.022 (0.020)	-0.132 (0.085)
Position is temporary	0.027*** (0.008)	0.019*** (0.006)	0.015*** (0.004)	0.00318 (0.004)	0.00784 (0.009)	0.0172 (0.041)
Position is part time	0.039*** (0.010)	0.029*** (0.007)	0.021*** (0.005)	0.011 (0.007)	0.0186 (0.015)	0.0771* (0.044)
It was difficult to fill the position	0.036*** (0.008)	0.033*** (0.006)	0.020*** (0.004)	0.0127* (0.007)	0.00812 (0.009)	-0.00775 (0.041)
Firm size classes (Reference: smallest firms with 1- 9 employees)						
Small firms (10 - 49 employees)	-0.003 (0.013)	-0.016* (0.009)	-0.012** (0.005)	-0.0108 (0.008)	-0.0163 (0.014)	0.0414 (0.057)
Medium size firms (50 - 249 employees)	-0.020 (0.015)	-0.023** (0.010)	-0.026*** (0.007)	-0.0112 (0.009)	-0.0275 (0.020)	-0.0274 (0.068)
Large firms (250 and more employees)	-0.036** (0.017)	-0.034*** (0.013)	-0.044*** (0.011)	-0.00273 (0.010)	-0.0311 (0.029)	-0.167 (0.104)
Classification of branches 2010 (Reference: construction sector)						
Agriculture, Forestry, Fishing	0.023 (0.033)	0.016 (0.025)	0.0024 (0.015)	-0.00496 (0.018)	-0.0202 (0.033)	-0.075 (0.162)
Manufacturing industries	0.038 (0.024)	0.032* (0.018)	0.008 (0.011)	-0.0181 (0.013)	-0.0555* (0.030)	-0.067 (0.118)
Trade, hospitality industry, transport, communication etc.	0.019 (0.025)	0.013 (0.019)	-0.001 (0.012)	-0.00773 (0.014)	-0.0365 (0.031)	-0.0481 (0.126)
Finance, Insurance, Housing, economical services etc.	0.053** (0.024)	0.028 (0.019)	0.015 (0.011)	-0.0292** (0.014)	-0.0625* (0.032)	-0.0472 (0.121)
Private, social, public services	0.050**	0.044**	0.005	-0.0177	-0.0810**	-0.125

	Firm re- ceived ap- plication from LTU	firm invited LTU to job in- terview	Firm hired LTU	Conditional on applica- tion: Firm in- vited LTU to job interview	Conditional on applica- tion: Firm hired LTU	Conditional on invitation to job inter- view: Firm hired LTU
Western Germany (Reference: Eastern Ger- many)	(0.024)	(0.019)	(0.011)	(0.014)	(0.038)	(0.121)
	-0.026***	-0.029***	-0.021***	-0.00448	0.00127	-0.00826
	(0.008)	(0.006)	(0.004)	(0.007)	(0.010)	(0.039)
Year (Reference: 2016)	-0.010**	-0.002	-0.002	0.00481	0.0105	0.0209
	(0.004)	(0.003)	(0.002)	(0.003)	(0.007)	(0.020)
Pseudo R2	0.064	0.065	0.089			0.076
Hosmer-Lemeshow GoF-Test	0.095	0.647	0.629			0.747
Area under ROC curve	0.671	0.696	0.736			0.689
Linktest _hatsq	0.028	0.378	0.696			0.655
(Uncensored) Observations	8362	8151	9480	(1308)	(1251)	552
Sig. of athrho				0.017	0.003	0.254
LR test of indep. eqns. (rho = 0):						
chi2(1)				4.09	4.76	0.86
Prob > chi2				0.043	0.029	0.354

Source: IAB Job Vacancy Survey, own calculations, SE in brackets, marginal effects are shown

The second research question addresses firms` judgement of work related skills of long-term un-  
employed. Table 3 shows the differences in firms` judgement of these skills between firms that  
have already made experiences with long-term unemployed and those who have not.

**Table 3: Firms positive judgement of long term unemployed work related skills**

	Share of firms that judge LTU positive without having expe- rience with these persons	Share of firms that judge LTU positive having experience with these persons	difference	P >  t
Reliability	39.9	32.6	7.3	0.000
Social skills	47.8	42.6	5.1	0.000
Discipline	32.6	29.3	3.2	0.003
Flexibility	36.8	29.8	7.0	0.000
Motivation to work	35.5	31.4	4.1	0.000
Resilience	24.6	19.3	5.3	0.000
Capacity for teamwork	52.4	48.8	3.6	0.011
Professional qualification	31.4	28.9	2.4	0.025
Observations	11,818	10,584		

Source: IAB Job Vacancy Survey 2016 and 2018, own calculations in per cent

The table shows that firms that have actually no experience with long term unemployed judge  
them more often in a positive way than firms that already have made such experience. I cannot  
preclude that these results are biased by social desirability. Nevertheless, only every fifth firm that  
has experience with long term unemployed judge their resilience as being (rather) good. But every  
second firm in both groups attests long-term unemployed a good capability for teamwork. All  
other skills and capabilities are judged positively by around every third firm. All in all, about every



second firm judges long-term unemployed only in a negative way (see table 1). These firms represent the sample for the third research question.

The results in table 4 show a different picture than in table 2. The chances of applications and of becoming invited for an interview are even lower in firms that make exclusive use of social contacts and that have a negative perception of long-term unemployed. However, there is no difference between social contacts and other search channels when it comes to the hiring of long-term unemployed. Furthermore, the results show no advantage of social contacts over other search channels when it comes to the invitation for a job interview conditional on having received applications or to the hiring decision conditional on having invited a long-term unemployed individual for an interview. Here, we can also observe the marginal effects without correction, because the results of the heckman-correction indicate independence of the samples.

But still, if there is an application through the use of social contacts, long-term unemployed persons have higher chances of being hired than through other search channels. Also for firms that judge long-term unemployed in a negative manner, there is a clear domination of positions that do not require any qualification and even more than for the unrestricted sample. Again we see that long-term unemployed are more likely to be recruited on part-time jobs, but there is no effect concerning temporary contracts. Additionally, also firms that judge long term unemployed negatively are more likely to hire them when the firm faces staffing difficulties.

**Table 4: Results of logistic regressions and heckman-corrected probit models, sample of firms that judged long term unemployed negative**

	Firm re- ceived ap- plication from LTU	Firm in- vited LTU to job in- terview	Firm hired LTU	Cond. on applica- tion: Firm invited LTU to job interview	Cond. on applica- tion: Firm hired LTU	Cond. on invitation to job in- terview: Firm hired LTU
Search through social contacts only (Refer- ence: No search through social contacts)	-0.303*** (0.039)	-0.109*** (0.024)	-0.008 (0.010)	0.170 (0.161)	0.156* (0.095)	0.175 (0.178)
Formal requirements of the position (Reference: vocational training)						
No vocational qualification/unskilled	0.052*** (0.020)	0.063*** (0.013)	0.040*** (0.009)	0.257*** (0.057)	0.168*** (0.039)	0.216*** (0.070)
University/college degree	-0.039 (0.027)	-0.042* (0.024)	-0.029 (0.023)	-0.188* (0.102)	-0.025 (0.088)	-0.031 (0.209)
Position is temporary	0.024 (0.018)	0.000 (0.013)	0.013 (0.009)	-0.041 (0.058)	0.008 (0.044)	0.012 (0.089)
Position is part time	0.036 (0.023)	0.029* (0.015)	0.037*** (0.010)	0.083 (0.070)	0.080* (0.048)	0.175** (0.087)
It was difficult to fill the position	0.045*** (0.016)	0.035*** (0.012)	0.025*** (0.009)	0.086 (0.053)	0.079* (0.041)	0.032 (0.086)
Firm size classes (Reference: smallest firms with 1- 9 employees)						
Small firms (10 - 49 employees)	-0.039* (0.024)	-0.024 (0.016)	-0.000 (0.012)	-0.038 (0.078)	0.051 (0.060)	0.170 (0.121)
Medium size firms (50 - 249 employees)	-0.059** (0.028)	-0.033* (0.020)	-0.008 (0.015)	-0.034 (0.093)	0.029 (0.072)	0.167 (0.139)
Large firms (250 and more employees)	-0.116***	-0.055**	-0.048	-0.005	-0.076	-0.087

	Firm re- ceived ap- plication from LTU	Firm in- vited LTU to job in- terview	Firm hired LTU	Cond. on applica- tion: Firm invited LTU to job interview	Cond. on applica- tion: Firm hired LTU	Cond. on invitation to job in- terview: Firm hired LTU
	(0.037)	(0.028)	(0.029)	(0.125)	(0.129)	(0.230)
Classification of branches 2010 (Reference: construction sector)						
Agriculture, Forestry, Fishing	0.071 (0.056)	0.050 (0.043)	-0.001 (0.022)	0.165 (0.186)	-0.073 (0.119)	-0.325 (0.274)
Manufacturing industries	0.060 (0.042)	0.049 (0.034)	-0.020 (0.017)	0.084 (0.143)	-0.124 (0.087)	-0.215 (0.204)
Trade, hospitality industry, transport, commu- nication etc.	0.018 (0.045)	0.019 (0.037)	-0.015 (0.018)	0.031 (0.157)	-0.099 (0.096)	-0.172 (0.225)
Finance, Insurance, Housing, economical ser- vices etc.	0.083* (0.043)	0.053 (0.034)	-0.012 (0.017)	0.065 (0.145)	-0.141 (0.088)	-0.278 (0.206)
Private, social, public services	0.040 (0.044)	0.042 (0.036)	-0.033* (0.019)	0.129 (0.151)	-0.167* (0.099)	-0.364 (0.222)
Western Germany (Reference: Eastern Ger- many)	-0.022 (0.016)	-0.033*** (0.011)	-0.010 (0.008)	-0.123** (0.053)	-0.003 (0.040)	0.054 (0.077)
Year (Reference: 2016)	-0.007 (0.008)	-0.002 (0.006)	-0.000 (0.004)	0.025 (0.028)	0.015 (0.021)	0.020 (0.040)
Pseudo R2	0.089	0.098	0.088	0.090	0.142	0.130
Hosmer-Lemeshow GoF-Test	0.534	0.525	0.263	0.483	0.066	0.261
Area under ROC curve	0.696	0.741	0.744	0.691	0.753	0.733
Linktest_hatsq	0.138	0.074	0.802	0.882	0.305	0.116
(Uncensored) Observations	2.088	2.028	2.273	335	315	134
Sig. of athrho				0.622	0.209	
LR test of indep. eqns. (rho = 0):						
chi2(1)				0.21	0.39	
Prob > chi2				0.646	0.335	

Source: IAB Job Vacancy Survey, own calculations, SE in brackets, marginal effects are shown

## 6 Conclusions

The contribution of this paper is to investigate the chances of long-term unemployed in the labour market when firms use their social contacts to search for new employees. The rationale behind this research question is that long-term unemployed face several problems in the labour market due to human capital depreciation and stigma effects that typically result from long-term unemployment. The use of social contacts is often viewed as a recruitment channel that generates better matches and speeds up recruitment. Furthermore, the use of social contacts reduces uncertainty in the hiring process due to more and detailed information on candidates. In this paper, I analyse whether long-term unemployed in general have better chances of being hired when a firm exclusively uses its social contacts for recruitment. Furthermore, I evaluate whether a negative perception of long-term unemployed can be mitigated by the use of social contacts. I use data of the IAB Job Vacancy Survey that allows to monitor each step of the recruiting process of long-term unemployed. The data give information on firms' receipt of applications from long-term unemployed, whether long term unemployed were invited for job interviews and whether they were hired. Additionally, it is possible to restrict the sample of firms that hired long term unemployed to those that judge their work related skills in a negative manner.

The results indicate that firms' use of social contacts is not helpful to increase the chances of long-term unemployed in terms of applications, invitations or hiring. When evaluated independently, the use of social contacts reduces the probability of applications from long-term unemployed and analogously the probability of invitations for job interviews and recruitment. This result follows the arguments of Lindsay (2009) and Bonoli (2014) that long-term unemployed are often not aware of the usefulness of social contacts and do not use them, respectively. Accordingly, if there are fewer applications from long-term unemployed, there are fewer invitations and fewer recruitments. Actually, the results of the heckman-corrected probit regression models show that if there were applications through the use of social contacts from long term unemployed, the probability of being invited for an interview increases by about 5 percentage points. Additionally, the probability of being hired out of long-term unemployment increases significantly by up to 20 percentage points compared to other search channels.

Still, the results also suggest that a considerable fraction of firms has a rather bad perception of long-term unemployed or has made bad experiences with these persons. Therefore, it is relevant to see whether the use of social contacts as an instrument to reduce uncertainty about candidates is also helpful to counteract employers' negative judgement of these persons. The results of the logistic regression on the sample of all establishments that judge long-term unemployed through-out negative concerning their work related skills show a somewhat different picture. Here again, the probability of an application or an invitation for a job interview is negatively correlated with the use of social contacts. Additionally, conditional on an application long-term unemployed do not exhibit higher chances of being invited for an interview and conditional on the invitation for an interview, they have no higher chances of being hired. But still, if there was an application, the chances of being hired increase by around 15 percentage points when social contacts were used, compared to other search channels.

To conclude, it seems that if firms use of social contacts as a channel to search for candidates, this is positively related to the chances of long-term unemployed to find a new job, even though, social contacts are only to a very small extent capable to mitigate stigma effects that become apparent in employers' judgement on the work related skills of long term unemployed. Nevertheless, the results indicate that the biggest problem with social contacts is their rare use by long-term unemployed. If there are applications from long term unemployed through social contacts, their chances to find a new job increase significantly. It is therefore desirable that long-term unemployed strengthen their social contacts and keep in touch with employees.

# Bibliography

- Bachmann, Ronald; Baumgarten, Daniel (2013): How do the unemployed search for a job? – Evidence from the EU Labour Force Survey. In: *IZA Journal of European Labor Studies* 2:22.
- Beblo, Miriam; Wolf, Elke (2002): Die Folgekosten von Erwerbsunterbrechungen. In: *Vierteljahrshefte zur Wirtschaftsforschung*, Jg. 71, S. 83–94.
- Becker, Gary S. (1964): *Human capital: A theoretical and empirical analysis, with special reference to education*, New York.
- Bentolila, Samuel; Michelacci, Claudio; Suarez, Javier (2010): Social Contacts and Occupational Choice. In: *Economica*, H. 77, S. 20–45.
- Berardi, Nicoletta (2013): Social networks and wages in Senegal’s labor market. In: *IZA Journal of European Labor Studies* 2:3.
- Bertrand, Marianne; Luttmer, Erzo F.P.; Mullainathan, Sendhil (2000): Network Effects and Welfare Culture. In: *The Quarterly Journal of Economics*, S. 1019–1055.
- Bills, David B.; Di Stasio, Valentina; Gërxhani, Klarita (2017): The Demand Side of Hiring: Employers in the Labor Market. In: *Annual Review of Sociology*, Jg. 43, S. 291–310.
- Bonoli, Giuliano (2014): Networking the unemployed: Can policy interventions facilitate access to employment through informal channels? In: *International Social Security Review*, Jg. 67, H. 2, S. 85–106.
- Bramoullé, Yann; Saint-Paul, Gilles (2010): Social Networks and Labor Market Transitions. In: *Labour Economics* 17, p. 188–195.
- Brandt, Martina (2006): Soziale Kontakte als Weg aus der Erwerbslosigkeit. In: *Kölner Zeitschrift für Soziologie*, Jg. 58, H. 3, S. 468–488.
- Burns, Justine; Godlonton, Susan; Keswell, Malcolm (2010): Social networks, employment and worker discouragement: Evidence from South Africa. In: *Labour Economics*, Jg. 17, S. 336–344.
- Burt, Ronald S. (2000): The Network Structure of Social Capital. In: *Research in Organizational Behavior*, Jg. 22, S. 345–423.
- Calvó-Armengol, Antoni; Jackson, Matthew O. (2004): The Effects of Social Networks on Employment and Inequality. In: *The American Economic Review* 94(3), p.426–454.
- Cappellari, Lorenzo; Tatsiramos, Konstantinos (2015): With a little help from my friends? Quality of social networks - job finding and job match quality. In: *European Economic Review*, Jg. 78, S. 55–75.
- Cingano, Federico; Rosolia, Alfonso (2012): People I Know: Job Search and Social Networks. In: *Journal of Labor Economics*, Jg. 30, H. 2, S. 291–332.
- Diekmann, Andreas; Voss, Thomas (2004): Die Theorie rationalen Handelns. Stand und Perspektiven. In: Diekmann, Andreas; Voss, Thomas (Hrsg.): *Rational-Choice-Theorie in den Sozialwissenschaften. Anwendungen und Probleme*. München: R. Oldenbourg Verlag, S. 13–29.
- Freitag, Markus (2000): Soziales Kapital und Arbeitslosigkeit - Eine empirische Analyse zu den Schweizer Kantonen. In: *Zeitschrift für Soziologie*, Jg. 29, Heft 3, S. 186–201.

- Goffman, Erving (1980): *Stigma. Über Techniken der Bewältigung beschädigter Identität*. 4. Auflage Frankfurt am Main: Suhrkamp Taschenbuch Wissenschaft.
- Granovetter, Mark S. (1973): The Strength of Weak Ties. In: *The American Journal of Sociology*, Jg. 78, H. 6, S. 1360–1380.
- Granovetter, Mark S. (1995): *Getting a Job: A Study of Contacts and Careers*. 2nd Chicago: University of Chicago Press.
- Grausgruber Alfred (2005): Formen und Entstehungsmodelle. In: Gaebel Wolfgang; Möller Hans-Jürgen; Rössler Wulf (Hrsg.) *Stigma – Diskriminierung – Bewältigung. Der Umgang mit sozialer Ausgrenzung psychisch Kranker*. Stuttgart: W. Kohlhammer Verlag, S.18–39.
- Heining, Jörg; Lings, Jörg (2006): Determinanten der Verweildauer in Arbeitslosigkeit in Deutschland. In: *Wirtschaftsdienst*, Jg. 86, S. 168–174.
- Hellerstein, Judith K.; McInerney, Melissa; Neumark, David (2008): Measuring the Importance of Labor Market Networks. NBER Working Papers Series, Vol. 14201.
- Hohmeier, Jürgen (1975): Stigmatisierung als sozialer Definitionsprozeß. In: Brusten, Manfred; Hohmeier, Jürgen (Hrsg.): *Stigmatisierung 1. Zur Produktion gesellschaftlicher Randgruppen*. Darmstadt: Luchterhand-Verlag, S. 5–24.
- Hohmeyer, Katrin; Lietzmann, Torsten (2018): Vortrag beim Besuch einer Delegation der Hochschule des Zentralkomitees der Kommunistischen Partei Chinas, Nürnberg, 24. April 2018
- Holzer, Harry J. (1996): *What employers want. Job prospects for less educated workers*. New York: Russell Sage Foundation.
- Klinger, Sabine; Rebien, Martina (2009): Betriebsbefragung: Soziale Netzwerke helfen bei der Personalsuche. IAB-Kurzbericht 24/2009.
- Korpi, Tomas (2001): Good Friends in Bad Times? Social Networks and Job Search among the Unemployed in Sweden. In: *Acta Sociologica*, Jg. 44, H. 2, S. 157–170.
- Kubis, Alexander; Rebien, Martina (2019): Langzeitarbeitslosigkeit in Zeiten von Fachkräfteengpässen. In: *Wirtschaftspolitische Blätter*, Jg. 66, H. 1, S. 39–57.
- Lindsay, Colin (2009): In a lonely place? Social networks, job seeking and the experience of long-term unemployment. In: *Social Policy and Society* 9(1), p. 25–37.
- McPherson, Miller; Smith-Lovin, Lynn; Cook, James M. (2001): Birds of a feather: Homophily in Social Networks. In: *Annual Review of Sociology*, Jg. 27, S. 415–444.
- Mencken, F. Carson; Winfield, Idee (1998): In search of the "right stuff": the advantages and disadvantages of informal and formal recruiting practices in external labor markets. In: *The American Journal of Economics and Sociology*, Jg.57, H.2, S. 135–154.
- Mortensen, Dale T. (1970): Job Search, the Duration of Unemployment, and the Phillips Curve. In: *American Economic Review*, Jg. 60, H. 5, S. 847–62.
- Mouw, Ted (2003): Social Capital and Finding a Job: Do Contacts Matter? In: *American Sociological Review*, Jg. 68, H. 6, S. 868–898.
- Oberholzer-Gee, Felix (2008): Nonemployment stigma as rational herding: A field experiment. In: *Journal of Economic Behavior und Organisation*, Jg. 65, S. 30–40.

- Pellizzari, Michele (2010): Do Friends and Relatives Really Help in Getting a Good Job? In: *Industrial and Labor Relations Review*, Jg. 63, H. 3, S. 494–510.
- Rees, Albert (1966): Information Networks in Labor Markets. In: *The American Economic Review*, Jg. 56, S. 559–566.
- Rüsch, Nicolas; Angermeyer, Matthias C.; Corrigan, Patrick W. (2005): Mental illness stigma: Concepts, consequences and initiatives to reduce stigma. *European Psychiatry*, Jg. 20, S. 529–539.
- Saloner, Garth (1985): Old Boy Networks as Screening Mechanisms. In: *Journal of Labor Economics*, Jg. 3, H. 3, S. 255–267.
- Sattler, Sebastian; Diewald, Martin (2010): Wechselwirkungen zwischen Arbeitslosigkeit und sozialen Netzwerken. In: Stegbauer, Christian; Häußling, Roger (Hrsg): *Handbuch Netzwerkforschung*. 1st edition. Wiesbaden: VS Verlag, S. 695–707.
- Sehringer, Roswitha (1989): Betriebliche Strategien der Personalrekrutierung. Ergebnisse einer Betriebsbefragung. Frankfurt/M., New York: Campus.
- Strauß, Susanne (2009): Ehrenamt in Deutschland und Großbritannien – Sprungbrett zurück auf den Arbeitsmarkt? In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Jg. 61, H. 4, S. 647–670.
- Thomsen, Stephan. L. (2009): Explaining the Employability Gap of Short-term and Long-term Unemployed Persons. In: *Kyklos*, Jg. 62, H.3, S. 448–478.
- Uhlendorff, Arne (2004): Der Einfluss von Persönlichkeitseigenschaften und sozialen Ressourcen auf die Arbeitslosigkeitsdauer. In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Jg. 56, H. 2, S. 279–303.
- Van Hove, Greet; van Hooft, Edwin; Lievens, Filip (2009): Networking as a job search behaviour: A social network perspective. *Journal of Occupational and Organizational Psychology*, Jg. 82, H. 3, S. 661–682.
- Vishwanath, Tara (1989): Job Search, Stigma Effect, and Escape rate from Unemployment. In: *Journal of Labor Economics*, Jg. 7, H. 4, S. 487–502.

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