



UNIL | Université de Lausanne

Unicentre

CH-1015 Lausanne

<http://serval.unil.ch>

Year : 2019

Employers and unemployment policies: Can public interventions influence hiring behaviour?

Liechti Fabienne

Liechti Fabienne, 2019, Employers and unemployment policies: Can public interventions influence hiring behaviour?

Originally published at : Thesis, University of Lausanne

Posted at the University of Lausanne Open Archive <http://serval.unil.ch>

Document URN : urn:nbn:ch:serval-BIB_03D8ABAC46365

Droits d'auteur

L'Université de Lausanne attire expressément l'attention des utilisateurs sur le fait que tous les documents publiés dans l'Archive SERVAL sont protégés par le droit d'auteur, conformément à la loi fédérale sur le droit d'auteur et les droits voisins (LDA). A ce titre, il est indispensable d'obtenir le consentement préalable de l'auteur et/ou de l'éditeur avant toute utilisation d'une oeuvre ou d'une partie d'une oeuvre ne relevant pas d'une utilisation à des fins personnelles au sens de la LDA (art. 19, al. 1 lettre a). A défaut, tout contrevenant s'expose aux sanctions prévues par cette loi. Nous déclinons toute responsabilité en la matière.

Copyright

The University of Lausanne expressly draws the attention of users to the fact that all documents published in the SERVAL Archive are protected by copyright in accordance with federal law on copyright and similar rights (LDA). Accordingly it is indispensable to obtain prior consent from the author and/or publisher before any use of a work or part of a work for purposes other than personal use within the meaning of LDA (art. 19, para. 1 letter a). Failure to do so will expose offenders to the sanctions laid down by this law. We accept no liability in this respect.



UNIL | Université de Lausanne

Unicentre

CH-1015 Lausanne

<http://serval.unil.ch>

2019

Employers and unemployment policies: Can public interventions influence hiring behaviour?

Fabienne Liechti

Fabienne Liechti, 2019, Employers and unemployment policies: Can public interventions influence hiring behaviour?

Originally published at : Thesis, University of Lausanne

Posted at the University of Lausanne Open Archive <http://serval.unil.ch>

Document URN :

Droits d'auteur

L'Université de Lausanne attire expressément l'attention des utilisateurs sur le fait que tous les documents publiés dans l'Archive SERVAL sont protégés par le droit d'auteur, conformément à la loi fédérale sur le droit d'auteur et les droits voisins (LDA). A ce titre, il est indispensable d'obtenir le consentement préalable de l'auteur et/ou de l'éditeur avant toute utilisation d'une oeuvre ou d'une partie d'une oeuvre ne relevant pas d'une utilisation à des fins personnelles au sens de la LDA (art. 19, al. 1 lettre a). A défaut, tout contrevenant s'expose aux sanctions prévues par cette loi. Nous déclinons toute responsabilité en la matière.

Copyright

The University of Lausanne expressly draws the attention of users to the fact that all documents published in the SERVAL Archive are protected by copyright in accordance with federal law on copyright and similar rights (LDA). Accordingly it is indispensable to obtain prior consent from the author and/or publisher before any use of a work or part of a work for purposes other than personal use within the meaning of LDA (art. 19, para. 1 letter a). Failure to do so will expose offenders to the sanctions laid down by this law. We accept no liability in this respect.



UNIL | Université de Lausanne

FACULTÉ DE DROIT, DES SCIENCES CRIMINELLES ET D'ADMINISTRATION
PUBLIQUE
INSTITUT DE HAUTES ÉTUDES EN ADMINISTRATION PUBLIQUE (IDHEAP)

**Employers and unemployment policies:
Can public interventions influence hiring behaviour?**

THÈSE DE DOCTORAT

présentée à la

Faculté de droit, des sciences criminelles et d'administration publique
de l'Université de Lausanne

pour l'obtention du grade de

Docteur en administration publique

par

Fabienne Liechi

Directeur de thèse
Prof. Giuliano Bonoli

Jury

Prof. Laure Athias, Université de Lausanne
Prof. Lucio Baccaro, Max-Planck-Institut für Gesellschaftsforschung
Prof. Valentina di Stasio, Universiteit Utrecht

Lausanne
2019



UNIL | Université de Lausanne

IDHEAP

Institut de hautes études
en administration publique

IMPRIMATUR

Le Décanat de la Faculté de droit, des sciences criminelles et d'administration publique, sur proposition d'un jury formé du professeur Giuliano Bonoli, de la professeure Laure Athias, du professeur Lucio Baccaro et de la professeure Valentina di Stasio, sans se prononcer sur les opinions de la candidate, autorise l'impression de la thèse de Madame Fabienne Liechti, intitulée :

Employers and unemployment policies:

Can public interventions influence hiring behaviour?

Lausanne, le 8 mars 2019

Prof. Andreas Ladner

Vice-Doyen de la Faculté de droit,
des sciences criminelles
et d'administration publique

Content

Acknowledgements.....	3
Summary report	4
Introduction.....	4
Public interventions to address unemployment.....	7
Hiring behaviour of employers.....	12
Existing literature.....	18
ALMPs and the PES in Switzerland.....	24
Theoretical mechanisms and expectations.....	26
Conclusion.....	33
Discussion of the contribution.....	33
Significance of findings.....	37
Policy implications.....	40
Challenges and Limitations.....	42
Concluding remarks.....	46
References.....	48
Chapter 1: Connecting employers and workers: Can recommendations from the public employment service act as a substitute for social contacts?	59
Introduction.....	60
Connections in the labour market.....	62
Social contacts.....	62
The role of PES.....	63
The PES as a connector.....	64
Heterogeneous effects of recommendations.....	66
The PES in Switzerland.....	69
Data and Method.....	70
The experiment.....	71
Data and estimation strategy.....	73
Results.....	74
Discussion.....	81
Conclusion.....	84

Endnotes	87
References	88
Appendix	96
Chapter 2: The signalling value of labour market programmes.....	113
Introduction.....	114
Literature	116
Labour market programmes in Switzerland	118
A theoretical framework.....	119
Study design.....	124
The experiment	125
Estimation Strategy	127
Results and Discussion	128
Conclusion.....	133
Endnotes	137
References.....	138
Appendix	143
Supplementary Material.....	150
Chapter 3: Employers' interpretation of ALMPs in hiring decisions.....	159
Introduction.....	160
ALMPs and employability: developing the theoretical argument.....	163
Case Selection.....	167
Data and Method.....	169
Results.....	172
How employers interpret ALMP participation.....	172
Temporary employment programmes	176
Training.....	177
Wage subsidies	180
Discussion.....	181
Conclusion.....	183
Endnotes	185
References.....	186
Appendix	191

Acknowledgements

The completion of this thesis was only possible with the support and feedback of many different people to whom I would like to thank. First, I am grateful to my colleagues and friends at the University of Lausanne for the stimulating and friendly work atmosphere. I would like to thank Giuliano Bonoli for your continuous support and encouragement throughout the PhD. Flavia Fossati, you are not only a great co-author but you were also always there with a piece of good advice when it was needed the most. Thank you to Delia Pisoni, Mailys Korber, Daniel Auer, Anna Wilson, Cyrielle Champion and Nicolas Turtschi for fruitful discussions but also for making the IDHEAP such a great place to work.

The data collection for this thesis would never have been possible without the close collaboration with Giuliano Bonoli, Flavia Fossati, Daniel Auer, Daniel Oesch and Patrick McDonald. It was always a pleasure working with you and exploring new methods and ideas.

I am grateful to my jury members, Laura Athias, Lucio Baccaro and Valentina di Stasio. Your comments and suggestions on previous versions of this thesis helped me to improve and strengthen its contribution.

Over the past years, I had the opportunity to present and discuss parts of my thesis on several occasions. In particular, I benefitted from my visit at the European University Institute in Florence and the comments of Klarita Gërxhani, Mario Spiezio and Nevena Kulic. Thank you for hosting me at this great location.

Finally, I would like to thank my friends and family for accompanying me on this journey. Riding bike trails, climbing mountains and skiing snowy hillsides are probably the best way to clear one's mind.

Summary report

Introduction

Addressing unemployment has always been a key concern of modern welfare states. From early on in its evolution, the welfare state has made efforts to foster labour market participation and offered help to re-integrate unemployed individuals into the labour market. For this aim states have developed and implemented a variety of different public policies interventions. Early interventions are the introduction of an unemployment insurance that compensates for income losses and the establishment of public employment services (PES) to overcome problem of information asymmetries and facilitate the matching of labour demand- and supply. Recently, unemployment policy has undergone fundamental changes (Bonoli, 2010; Weishaupt, 2010). Western welfare states have to deal with new risks emerging from the transformation of the labour market towards a service economy and process automatization. They are confronted with seemingly ever growing unemployment rates and at the same time tightening financial means. This development has put pressure on existing unemployment compensation arrangements (Sol, 2005) and called for an adjustment of the respective policies. As a reaction, governments all over Europe and beyond have replaced passive safety nets through activation policies that place high emphasis on activating jobless individuals and bringing them back into work. This so called activation turn includes the introduction of measures of active labour market policies (ALMPs) (Martin and Grubb, 2001) but also changes in the governance of the PES with intensification of placement efforts (Sol, 2005; Weishaupt, 2010) and a more demand-oriented service involving employers (van der Aa and Berkel, 2014). Different academic disciplines have investigated the consequences of this activation turn on the micro and macro level. The effects of ALMP interventions, such as training courses,

employment programmes or wage subsidies, have been thoroughly evaluated by labour economist. These econometric evaluations focus mainly on the effect of a specific measure on labour market participation of the participants. Meta-analyses of the numerous evaluations show that the effects are at best slightly positive, depending on the type of programme. For some programmes, especially employment programmes, some evaluations even find negative effects and the effect seems to vary across different sub-groups (Card et al., 2010).

It is puzzling that measures intended to improve the labour market situation of individuals have only a small or even negative effect on their labour market chances. We know that some interventions work better than others but we do not really know why this is the case. Is it because they fail to provide the relevant skills or alter participants' behaviour in a positive way? Or has it something to do with how employers perceive participants of such measures? To solve this puzzle, this thesis sheds light on how employers perceive specific measures of public interventions for their hiring decisions.

There are at least three reasons why it is important to look at employers hiring behaviour when it comes to the effect of ALMPs. First, so far evaluations have focused solely on data on the supply side, which allows capturing the overall effect on labour market participation but not why the effect occurs. What is neglected is that employers' hiring behaviour contributes to the overall effect of these interventions. Knowing how employers perceive these interventions might help to explain some of the contradicting results found by previous research. Second, employers are the main gatekeepers to employment as they ultimately decide who to hire and therefore who has access to the labour market and who does not. Employers' behaviour therefore contributes to an important extent to the stratification of the labour market and the resulting inequalities (Reskin, 2000). Third, ALMP interventions target exactly the part of the

population that is usually avoided by employers. It is therefore interesting to investigate in how far interventions designed for individuals suffering from the consequences of hiring decision are able to influence exactly these decisions. In order to be successful, employment policies should have a positive effect on employers' hiring behaviour and counteract the disadvantage caused by unequal hiring behaviour.

Research has focused on the two fields, employment policies and employers' hiring behaviour, separately but not much on their intersection. This thesis addresses this gap in research and aims to contribute to a better understanding of how public policies can influence employers' hiring behaviour. Therefore, it contributes to several stands of the literature. First, it contributes to the literature on policy evaluation by investigating to what extent the effects of ALMP interventions are caused by employers' hiring behaviour. Second, it relates to the literature on activation by demonstrating that the effect on employers' hiring behaviour varies for different ALMP measures and across the candidates' distance to the labour market. Third, it relates to the literature on employers' hiring behaviour by showing the degree to which it is influenced by different kind of information available to them.

The focus of this thesis will be on short term interventions targeted at the unemployed individuals, other, more structural policies such as demand management or industrial policy will not be addressed. In what follows, I will outline how public employment policies evolved historically and discuss the literature on employers' hiring behaviour. I will briefly review the existing literature on employers' hiring behaviour in relation to employment policies before I formulate some expectations about the kind of effects employment policies can exert on employers hiring behaviour. The testing of the formulated expectations will then be pursued in three separate chapters, which constitute this thesis. Each chapter will be briefly

summarized before I conclude with a discussion of the contribution of this thesis for research and policy and a critical reflection of the results.

Public interventions to address unemployment

Public employment services (PES) are early interventions of the state into the labour market to match the demand and supply of labour and coordinate the workforce. Some countries established PES as early as in the late 1800s as local collaborations between employers' association, municipalities and labour unions (Weishaupt, 2010) or as a reaction to eliminate low-quality private employment agencies doing malpractices (Lee, 2009). PES can be seen as intermediaries in the labour market that reduce job search costs and uncertainty for both sides, jobseekers and employers. In the 1990s, with the persistence of high unemployment, the PES became increasingly under pressure as liberalization, privatization and contracting out became new trends in organizing public services (Weishaupt, 2010). Countries such as the UK, Australia and the Netherlands were forerunners in contracting out placement services, in particular for specific groups such as hard-to-place or long term unemployed (Sol, 2005) but in many other countries the matching function of labour supply and demand remained among the core tasks of the PES.

Another important development in the area of labour market policies is the shift towards active labour market policy (ALMP). ALMPs aim at re-integrating jobless individuals into the labour market by providing job search support, training, work experience or wage subsidies to unemployed individuals in combination with job search requirements and benefit conditionality. The policies are administered by the PES, who is allocating unemployed to the different measures but is also imposing benefit reduction and other sanctions in case of non-compliance (Bonoli, 2010). During the last three decades, most OECD-countries have devoted

growing shares of public finances to ALMPs, however, as illustrated in figure 1, countries differ widely in their level of spending on ALMPs and the share devoted to active and passive labour market policies. Denmark and the Netherlands have the highest level of spending. In Denmark the larger share of the total spending is devoted to activation policies, while in the Netherlands the picture is reversed with a larger share spent on passive protection. The Netherlands, Switzerland and Sweden have similar levels of spending for activation policies. Germany, a conservative welfare state, devotes more means to passive protection. Finally, Italy and the liberal US spend little on both policies.

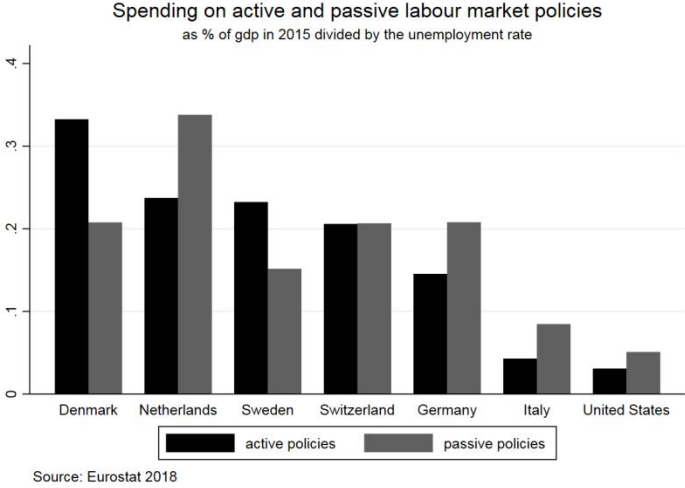


Figure 1: Spending on active and passive labour market policies in selected countries

Initially, ALMPs were a genuinely social democratic policy that was implemented in Sweden in the early 1950s as part of the macroeconomic strategy to achieve balanced, noninflationary growth and full employment with a solidarity wage policy in an open economy (Toft, 2003). To secure the goal of full employment ALMPs were introduced as micro-economic policies aiming at enhancing labour market mobility at the occupational and geographical level and enabling people to take new job opportunities when they arise (Armingeon, 2007). The idea

was to reallocate labour from declining to expanding parts of the economy (Anxo and Niklasson, 2006) by providing training opportunities and mobility allowances. The model was put forward by two trade-union economists, Rhen and Meidner. The economic power of the trade unions and the political power of the social democratic party allowed the implementation of a costly and effective system of labour market policy (Bonoli, 2010).

Sweden's labour market policy has been extremely successful and in the face of labour market problems arising in the 1990s and on initiatives on the supranational level, ALMPs have diffused to other countries and across different welfare state regimes. Despite its origin as a social democratic policy, ALMPs have been widely accepted by conservative and liberal politicians. Since ALMPs are market enabling and do not sort to redistributive measures, ALMPs fit a liberal ideology (Armingeon, 2007).

While originally mainly concerned with re-training and upskilling of laid off workers, ALMPs had to deal with a new problem in the 1970s; the one of mass unemployment. In the context of short labour demand, traditional ALMPs were of little help. To address this problem a new type of ALMP emerged; occupational programmes that were meant to occupy unemployed individuals (Bonoli, 2010). Finally, in the 1990s, ALMPs were reoriented towards their present form and to what we now call "activation". The main challenge is the oversupply of unskilled labour, which is addressed by ALMPs by providing work incentives and employment assistance (Bonoli, 2010). Pushed by initiatives at the supranational-level such as the OCED's Job Strategy launched in 1994 or the Employment Strategy by the European Union in 1997, many countries reformed their labour market policy towards activation (Goetschy, 2001; Martin and Grubb, 2001). Denmark and the Netherlands took a pioneering role in implementing activation policies. The so-called "flexicurity model", a strategy to enhance

labour market flexibility and at the same time provide social security (European Commission, 2019) spread to other countries. In the UK, the new Labour government introduced activation measures based on a centrist approach also known as the “Third Way”. Sweden, where ALMP originated, has also adopted a more pro-market employment orientation of ALMPs (Bonoli, 2010).

Even with the often mentioned convergence of labour market policies and efforts at the supranational-level for a common employment strategy, ALMPs remain a broad category, measures differ widely in terms of their content and objective and there exist considerable cross-country variation (Bonoli, 2010). They range from extensive vocational training programmes in the Nordic countries to workfare approaches, which combine placement services with job search requirements and sanctions in Anglo-Saxon countries. Bonoli (2010) distinguishes between policies that invest in human capital and those with a pro-market employment orientation. Along these two dimensions four types of ALMPs can be distinguished; occupational ALMPs such as job creation schemes and non-employment related training, incentive reinforcement with benefit conditionality, employment assistant consisting of placement services and job subsidies and finally, upskilling through job-related vocational training. There is considerable cross-country variation in the spending on different types of ALMPs. Sweden and Denmark invest more in training while Germany spends more on occupational measures and the Anglo-Saxon countries put the emphasis on benefit conditionality (Bonoli, 2010). Welfare-to-work programmes, especially those in the UK and the US, are also criticized for producing a labour supply for insecure work by pushing people into low paid employment and placing the responsibility for unemployment entirely to the individual (Peck and Theodore, 2000).

More recently, many countries have started to involve employers into the implementation and provision of ALMPs and adopt more demand-led policies (Bredgaard and Halkjær, 2016; Ingold and Stuart, 2015; van der Aa and Berkel, 2014). A small but growing literature is looking at employers' motive to participate in measures of ALMPs. Employers become involved for various reasons; some see ALMPs as a source of labour or want to lower hiring costs, while others see participation as a social responsibility.

While high hopes have been put into ALMPs, evaluation results show that ALMPs are only an imperfect solution to address the unemployment problem. Meta-analyses of the numerous evaluations of various programmes show that the picture is not entirely rosy. The best results are achieved by job search assistant programmes, class-room- and on the job training programmes show positive effect only in the medium run and subsidized public sector employment programmes seem to be ineffective (Card et al., 2010). Programme effects are influenced by the time horizon, the effects are mostly around zero in the short run but positive after 2-3 years. Programmes focusing on human capital intervention show larger gains, women and participants from long-term unemployment profit more from programme participation (Card et al., 2015).

What these evaluations cannot capture is the different mechanisms through which programmes unfold their effects. Programmes can change participants search behaviour, for example by making the search more efficient or putting job search requirements on them, increase their human capital, or provide signals with respect to a candidate's productivity, which are used by employers to sort applicants (Lalive et al., 2009). Moreover, ALMPs and particularly the PES can also be seen as labour market intermediaries between jobseekers

and employers, potentially assuming human resources roles and facilitate employers' recruitment of disadvantaged individuals (Ingold and Valizade, 2017).

While the existing research has thoroughly evaluated the effects different activation measures have on the participants it is puzzling how little is known about how these policies actually influence the demand-side of the labour market. Most studies exclusively address the effects on the supply-side and ignore the demand-side of the labour market. However, at the end it is employers who decide who they will hire or not and thereby acting as a gatekeeper to the labour market. It is therefore important to know what employers think of this important area of social policy as their behaviour effects the policies' effectiveness. Effective ALMPs require that employers hire candidates coming from such activation schemes (Bredgaard, 2017). Participation in ALMPs might influence and change employers' hiring behaviour either through direct substantive effects such as increasing participants' human capital or decreasing wage costs or through signalling effects by providing information about a candidate's productivity or other desirable worker characteristics.

Hiring behaviour of employers

In this section I provide a short overview of the existing theories that have emerge in different academic disciplines for explaining employers' hiring behaviour and discuss the different factors that have found to impact hiring outcomes. In particular, these are educational credentials, social networks and group membership such as gender or ethnicity. From a sociological perspective, understanding employers hiring behaviour is important since the allocation of jobs is a main source of social stratification and inequality (Bills et al., 2017). Despite its importance in shaping the social structure, the hiring process is still the least understood process of the employment relationship (Petersen and Togstad, 2006). The

literature addresses the topic of labour market inequality mainly from a supply-side perspective. However, employers play an important role in shaping employment outcomes. Eventually, labour market inequalities can be seen as a macro result of micro level decisions by employers (Jackson, 2007). In order to understand employers' hiring behaviour one must understand on what kind of information employers rely on when taking these decisions. They are characterized by uncertainty since a candidate's productivity is not directly observable and actors are not directly connected to each other (Burt, 1998; Rees, 1966; Spence, 1973). To reduce this uncertainty employers rely on various kind of information. Bills et al. (2017) provide an encompassing overview on employers' hiring behaviour and identify human-, social, and cultural capital as the sources of information employers rely on in the hiring process.

Educational credentials are seen as the main determinant for occupational attainment and the literature distinguishes different mechanisms of why education matters to employers. First, human capital models focus the learning aspect of education. Education provides necessary skills that are valued by employers (Becker, 1993). Second, signalling theory assumes that educational credentials reflect productivity differences that were present already before acquiring the education and schooling serves as sorting mechanism (Spence, 1973). According to signalling theory, employers rely on educational credentials since they are believed to tell something about a candidate's productivity level. Sorting models of education combine both approaches; they allow for learning but at the same time focus on how schooling serves as a signal. The effect of an additional year of schooling is a combination of an additional year of learning and of being identified as someone who completed one year of additional schooling (Weiss, 1995). Research has shown that role played by educational credentials is overestimated and context dependent. This illustrates that employer must not only be provided with

information but this information must be received in a context of the social infrastructure that ensures the trustworthiness and relevance of this information (Miller and Rosenbaum, 1997). In countries with a closer connection between education and labour market, for example through Vocational Education and Training like this is the case in Switzerland, Germany or the Netherlands, employers might rely more heavily on educational credentials. These countries rely heavily on skill certification. Social closure theory stresses the importance of skill certification as a mean to secure access to specific occupations since access is restricted to those with the matching educational credentials. Indeed, Di Stasio and Van De Werfhorst (2016) show that there are various reasons why and how employers rely on education for screening and that sorting applicants and the mechanisms at play depend on the institutional context. Their results show that employers are more responsive to years of schooling in the Netherlands than in England. Dutch employers also use the field of study as a filter of subject-specific knowledge. Employers in England instead value grades as a signal for trainability. In line with social closure theory, dropping-out is more damaging in the occupational labour market of the Netherlands than in England. Overall, education in the Netherlands matters to employers due to the human capital and social closer while in England education is used as a screening device for trainable employees.

Miller and Rosenbaum (1997) show in qualitative interviews that employers in the US, mistrust information provided by the educational system and instead rely on information from social networks, another source for social closure and the next important factor of labour market inequality. The relevance of social network for employment outcomes is well-documented in the sociological literature. In his seminar work about how men find work in the US Granovetter (1974) shows that social networks, and in particular weak ties

(Granovetter, 1973), are the most important source for finding employment. Since then an encompassing literature about the features and consequences of social networks has developed. The effect of social networks on labour market outcomes has mainly been approached from a supply-side perspective but research focusing on the demand-side has shown that employers often turn to informal recruiting (Behrenz, 2001) and rely on referrals (Rubineau and Fernandez, 2015; Rees, 1966; Montgomery, 1992). The importance of referrals from current employees has been documented by various firm case studies, where the outcomes among a pool of applicants for candidates with and without referrals were compared. Generally, these studies find that referred candidates had higher success rates than candidates without referral (Petersen et al., 2000; Fernandez et al., 2000; Fernandez and Weinberg, 1997; Fernandez and Fernandez-Mateo, 2006). Experimental evidence exist for referrals from business partners; in a factorial survey Di Stasio and Gërkhani (2015) show that employers rated candidates that were described as being referred by a business partner more favourable than those without such a referral. Besides the empirical evidence, little is known about the mechanisms causing preferences for referred candidates. Several signalling-related explanations are suggested (Rubineau and Fernandez, 2015; Castilla et al., 2013). Castilla et al. (2013) describes both, resources and signalling mechanisms, which often complement each other, to explain the influence of social network on employment outcome. Social networks constitute resources since they provide information, facilitate learning, and provide influence. However, when it comes to explaining an employers' preference for a specific candidate, signalling-related explanations might be more appropriate. Employers might draw inferences about a candidate's ability, status, and trust after observing a candidate's network relationship (Castilla et al., 2013). When associated with low-performing or low-status actors, signals about ability can also be negative. Other signalling-related explanations are provided by Rubineau

and Fernandez (2015); that of homophily and trustworthiness. The first relates to the tendency of similar people to become friends with each other meaning that referred candidates are similar to the referrer – someone the employer already knows and potentially employed. The mechanism of trustworthiness is described by Gërkhani et al. (2013), the authors argue that the fact someone is referred reflects his or her position in an informal information network characterized by higher levels of trustworthiness, which makes employers prefer referrals. Moreover, employers might trust referrals from their social networks since the referrer is concerned about his or her reputation and will therefore only recommend suitable candidates (Fernandez et al., 2000).

The drawback of the importance of social networks is that they are associated with social closure as those without social ties are excluded (Bills et al., 2017). Part of the disadvantage experiences by women and ethnic minorities stems from a gender and ethnic minority bias in social networks (Petersen et al., 2000; Fernandez and Fernandez-Mateo, 2006; Fernandez and Sosa, 2005; McDonald, 2011). Network disadvantage of specific groups might be compensated by the existence of labour market intermediaries that connect jobseekers and employers (Autor, 2009; Holzer, 1999; Fernandez, 2010). The PES can potentially play an important role in this respect by matching supply- and demand of labour. Harsløf (2006) for example, shows that in countries with encompassing welfare state arrangements that provide measures facilitating job-matching processes, social networks are less important for job search.

However, research has also shown that even when controlling for different network ties, disadvantage against minority groups does not entirely disappear. There exists an extensive literature addressing the persistent disadvantage of women and ethnic minorities and show that part of it can be attributed to discriminatory hiring behaviour of employers. Women and

ethnic minorities seem to suffer from discriminatory practices resulting in lower hiring chances, lower wages, and less promotion. It is beyond the purpose of this summary to review the extensive evidence on labour market discrimination, especially since this has been done elsewhere (for ethnic minorities see Zschirnt and Ruedin, 2016; for gender, age, and ethnic minority see Riach and Rich, 2002; for an extensive overview of experimental evidence see Neumark, 2016). Furthermore, some studies have also investigated the effect of sexual orientation (Weichselbaumer, 2003; Baert, 2015), family status and children (Ridgeway and Correll, 2004; Correll et al., 2007; Oesch et al., 2017). Others documented discrimination against homosexual applicants and mothers. Other signals that have been found that employers rely on when hiring are volunteering and hobbies (Rooth, 2011; Baert and Vujic, 2016) or appearance (Agerström and Rooth, 2011; Rooth, 2009; O'Brien et al., 2013).

Finally, employers do not only use signals to spot desirable candidates but likewise might also use negative signals to avoid candidates that are believed to be unproductive. Such stigmatizing screens might entail information about unemployment spells (Eriksson and Lagerström, 2006; Oberholzer-Gee, 2008), job hopping or gaps in the CV (Bills et al., 2017), or being available for a wage subsidy (Burtless, 1985; Baert, 2016). Negative screens are also important for ALMPs as these are typically attributed to low-skilled individuals further away from the labour market and therefore might be used by employers to identify and exclude weak candidates. Eventually, ALMPs and the PES should have an influence on employers' hiring behaviour when they are able to reduce uncertainty with regard to a candidate's productivity and to act as a connector between the two actors. However, their effect is not necessarily positive but can also be negative when employers draw negative inferences about the

Existing literature

This section discusses the small but growing literature on employers' perception of ALMPs and how these policies have been found to influence hiring decisions. The existing literature has approached the issue from three different perspectives: First, comparative research addresses the employers' role in the implementation of social policies to explain differences in ALMPs across countries. Second, literature investigating employers' involvement in and perception of ALMPs at the single country level. Third, studies examining how individual ALMP participation of candidates affects employers hiring behaviour.

From a comparative perspective, scholars have stressed the importance of employers in the implementation process of ALMPs by attributing cross-country differences in these policies to different modes of organization of business interests. These contributions show that even with a convergence of policy ideas, as this is often claimed to be the case with ALMPs, welfare state regimes and historical legacies play an important role for shaping the actual implementation of these policies. Martin (2004) starts from the fact that the wide adaptation of activation measure by the majority of OCED countries has brought a large amount of policy convergence across various welfare state regimes. The differences between countries emerge at the level of policy implementation with some countries having much higher levels of involvement of employers than others. The aim of her contribution is to explain why participation rates in ALMPs are much higher among Danish employers than among their British counterparts. The findings show that the former hold a much more positive view of ALMPs and especially of unemployed people than British employers. While Danish employers participated to access training benefits or a new pool of labour and out of social responsibility, British employers did so because they felt political pressure to participate and to access cheap labour. Moreover, the

institutional variables play out differently in the two countries. While membership in an employer's association is a positive determinant of employers' involvement in ALMPs in Denmark, it has a negative impact in 'pluralist' Britain. Martin (2004) concludes that even with convergence of policy ideas the underlying assumptions about social protection in each welfare state regime and historical legacies persists and significantly influence how such a policy is implemented.

Similarly, Nelson (2013) shows from a two cases study with Denmark and Germany that the form of business organization mode plays a crucial role for investment in ALMPs. Her results show that neocorporatist modes of organizations are associated with higher level of ALMP spending than firm-level organisation of business interests. Neocorporatist organizations are linked to a higher level of compassion and trust among actors and provide the capacity to coordinate and solve collective action problems at the national level while firm-level organization solve problems at a sub-national level, which leads to a lower support of policies at the national level. Employers in Germany, the country with stronger firm-level organization, have lower participation rates than Danish employers, where business interests are organized at the national level. These results show that the social infrastructure, in which a policy is implemented matters for its success.

Concerning employers' relation to existing ALMPs, two approaches can be distinguished; employers can differ in their *attitudes towards* ALMPs as well as in their *participation or involvement* in ALMPs. Along these two lines Bredgaard (2017) develops a typology of four different types of employers and their role in ALMP provision; the passive, the committed, the dismissive, and the sceptical employer. The committed and dismissive employers have congruent attitudes and behaviour of participation in ALMPs. The former has positive

attitudes and participates in ALMPs while the latter has a negative attitude towards ALMPs and is therefore not participating. The passive employer has a positive attitude towards ALMP but does not engage in them. The most puzzling type is the sceptical employer. Despite the employer's negative attitude she or he is still involved in ALMPs. The motivation to participate in ALMP is explained by strategic accommodation (employer receives favours on other issues) or selective incentives (access to services). Bredgaard (2017) then analyses survey data from Danish employers to identify the most common types of employer. Surprisingly, the most common type of employer is the dismissive one. Almost half of the employers would not recruit through the jobcentre, would not hire long-term unemployed, candidates with a wage subsidy or available for a flex-job. Another third of employers can be classified as passive employers, while only a minority seems to fall into the category of the committed employer. These findings raise some doubts about the prevailing idea that Danish employers are comparatively more supportive of ALMPs and participate more actively in these measures than their peers in other countries as this has been found by other authors (Martin, 2004; Nelson, 2013). Similarly, Bredgaard and Halkjær (2016) show that only a very selective sample of firms is willing to participate in providing subsidised jobs; those with many unskilled workers, a deteriorating economic situation, covered by collective agreements or those active in the public sector.

Regarding employers' involvement in ALMPs, the literature shows that employers have different motives to participate in ALMPs. van der Aa and Berkel (2014), investigating employers' involvement in demand-led ALMPs, which focus on employers' willingness to hire unemployed, find three different groups of employers, the first becomes involved for facilitating recruitment of new workers, the second group participates to reduce wage costs

and the third out of social responsibility. Moreover, the authors show that involving employers as co-producers in ALMPs raises their satisfaction with the policy. Studies focusing on the UK mostly find that employers become involved because of economic advantages such as access to cheap labour (Gore, 2005). Based on survey data collected among employers in two disadvantaged labour market regions in England, Ingold and Stuart (2015) show that only a minority of employers are recruiting participants from the 'Work Programme', UK's flagship welfare-to-work-programme. The main reasons for not participating were that employers did not know the programme or had a negative perception of the labour supply. This negative perception of the candidates from ALMPs is not uncommon and seems to be the main reason why employers are not getting involved in ALMPs. Studies focusing on employers' perception of ALMPs and/or candidates that participated in specific measures support this conclusion. Generally, employers express concerns about the skills and personal attributes of candidates coming from specific ALMP measures. Belt and Richardson (2005) investigate whether training programmes that aim to provide low-skilled unemployed with the necessary skills to perform social labour, which requires communication skills and personality, rise the employability of these candidates. By conducting qualitative interviews with employers in North England, the authors find that employers are often reluctant to hire from pre-employment training programmes due to the risk involved in employing unemployed people in terms of reliability. Moreover, employers state that the content of the training does not match their skill demand. Other authors have found similar negative effects for candidates coming through the PES (Larsen and Vesan, 2012; Bonoli and Hinrichs, 2012). This negative perception of the PES is caused by employers' negative view of (long-term) unemployed individuals. As Larsen and Vesan (2012) elaborate, employers do not trust candidates from the PES as these candidates are perceived as the least productive ones. The PES is caught in a low-

end equilibrium of the labour market. Similarly, Bonoli and Hinrichs (2012) find that employers perceive candidates referred by the PES as lacking motivation and applying only out of obligation. Sissons and Green (2017) stress the fact that it is not only important to look at employers' engagement when it comes to the hiring of unemployed through ALMPs but also at the job quality of the match, as ALMPs and the PES are often used as a source for cheap labour. The authors show that getting employers involved into increasing skills and advancement of low-skilled workers is difficult as this contradicts the very nature of the low-skilled labour market, where ALMPs participants are most likely to end up.

Finally, a small number of studies address how participation in ALMPs influences employers' actual hiring behaviour towards the participants. Burtless (1985) shows that welfare recipients available for a wage subsidy were less likely to find employment than those without such a subsidy. The most likely explanation for this unexpected result is that the availability of a wage subsidy had a stigmatizing effect and allowed employers to identify disadvantaged jobseekers. A similar negative signalling of wage subsidies was found by Baert (2016) for disabled jobseekers in Belgium. In a field experiment, where application of fictional candidates with and without wage subsidy were sent to real employers, the author shows that the callback rates between the two groups do not differ in a statistically significant way. The same result was found by Deuchert and Kauer (2013) for young adolescence from sheltered Vocational and Training Programmes in Switzerland. The positive financial incentive of wage subsidies is likely to be offset by a negative signalling effect as it reveals limited productivity. Ingold and Valizade (2017) conceptualize ALMPs as labour market intermediaries (LMI) and investigate how employers' involvement in ALMPs influences their likelihood to hire from disadvantaged groups. Their results show that the influence is marginal. Hiring from ALMP

measures did not fully compensate for employers' selection criteria and the positive effect decreased dramatically when firm size was included in the statistical models. The authors conclude that ALMPs can act as information provider but not necessarily as matchmaker.

Other measures that have been analysed are placement efforts of the PES by the means of referrals. In a factorial survey experiment van Belle et al. (2018) find that applicants that apply under a vacancy-referral system, where the employer is informed about the fact that the unemployed individual was referred by his or her caseworker to apply for the job, are evaluated less positively than candidates without such a referral. However, this negative result might also have to do with the configuration of the system; once caseworker and jobseeker agreed that the vacancy is suitable for the person, the jobseekers is obliged to apply and the employer is informed about this obligation. This obligation might influence an employers' view of candidates negatively.

Overall, the here discussed literature shows that employers attitudes towards ALMPs is shaped by their perception of unemployed individuals. In countries where employers assume that they are able to find skilled or suitable candidates within this population, perception of and attitudes towards ALMPs are more positive than in countries where being low-skilled and unemployed is more stigmatizing. Concerning the actual behaviour of employers, there is evidence that ALMPs that put a strong emphasis on pushing people into employment might be perceived negatively by employers. Given their importance in regulating the access to the labour market, employers' behaviour towards candidates that participated in ALMP measure is underexplored. ALMP have the potential to influence employers' hiring decision by delivering crucial pieces of information that are used by employers to take their decisions. So far, the existing studies investigate mostly the effect of wage subsidies, measures which

address the demand-side of the labour market. However, ALMPs consists of a much more diverse set of measures including training- or temporary employment programmes and placement efforts addressing the supply-side. The different chapters of this thesis deliver insight into this research gap.

ALMPs and the PES in Switzerland

As the empirical analysis in the first two chapters focuses on the Swiss case, the present chapter provides some information about the particularities of the Swiss system and, as these are important to understand, the mechanisms through which specific interventions influence employers' hiring behaviour. Switzerland has a comparatively strong labour market performance with a unemployment rate that reached on average 2.5% in 2018 (Seco, 2019a). Activation in Switzerland is characterized by a generous benefit system combined with a strict job-search control and strong incentives to move into jobs. The expenditures on ALMPs are comparatively high and the Swiss PES is well equipped to intervene in the unemployment spell (Duell et al., 2010).

Services related to unemployment are delivered mostly at the cantonal level by the 142 regional employment offices (REO) (Behncke et al., 2010). In order to obtain benefits, unemployed individuals have to register at the REO and meet on a regular basis with their caseworker. The first meeting usually takes place within the first two months of unemployment and subsequently the same caseworker and the unemployed individual are required to meet at least once a month (Behncke et al., 2008). Caseworkers provide counselling services, refer clients to measures of ALMPs, and carry out placement services. They have considerable scope in the choice of their reinsertion strategy and can apply whatever strategy

they think is best for their client. Caseworkers at the REO can assign clients to the programmes they think are most suitable to speed up labour market integration.

Switzerland has developed a comprehensive system of ALMPs with a wide range of different measures. The largest share of ALMP expenditures is devoted to supported employment and rehabilitation followed by training programmes, a smaller share is spend on employment incentives (Duell et al., 2010). Training courses include collective courses organised by private or public providers, which are exclusively for clients referred by the PES, or individual courses offered on the private market. The majority of unemployed follows a collective course. Other important categories are practice firms that offer work experience and temporary employment programmes. The later are often attributed towards the end of the eligibility for unemployment benefits (Gerfin and Lechner, 2002) and are also used as sanctioning tool by caseworkers and thereby include stigmatizing effects. When a caseworker assigns a client to an ALMP, participation is mandatory and non-compliance can be subject to sanctions in the form of benefit reduction.

An important aspect of the caseworkers' activity is to establish and maintain contacts with local employers as these contacts are an important placement strategy for caseworkers. Since employers are not obliged to register open vacancies to the PES¹, caseworkers have to provide good quality service to employers in order to get information about vacancies and to be valued as a source of labour (Behncke et al., 2008a). Caseworkers have considerable discretionary power in their decision of whether they want to refer a client to a specific vacancy or not.

¹ Since July 2018 there is a job registration requirement for occupations with an unemployment rate of at least 8% to the local REO. Before it can be advertised elsewhere, the job vacancy has to be published exclusively on the online job portal of the REO that can only be accessed by jobseekers registered with the REO for the first five working days (Seco, 2019b).

However, since employers are an important partner for pursuing an effective placement strategy, it is important for caseworkers to be selective in their referrals as otherwise employers will not work with them in the future.

The performance of each RPO and each single caseworker is evaluated using a benchmarking system giving strong incentives for a quick reintegration of the unemployed. The performance is monitored at the federal level by the State Secretariat for Economic affairs (SECO) using four indicators: the speed of reintegration (50%), prevention of benefit exhaustion (20%), prevention of long-term unemployment, and prevention of repeated registration (10%) taking into account differences in the local economic structure of each canton (Duell et al., 2010). The ranking of the single RPO is meant to exert peer-pressure on RPO to improve their performance. The performance indicators are assumed to have an important influence on the activation strategy of caseworkers as they favour quick labour market integration (Duell et al. 2010).

Theoretical mechanisms and expectations

Given the strong focus on activation in many countries, it is not uncommon for unemployed individuals to participate in an ALMP measure or to be referred by the PES. While participation in ALMPs might have an effect on the unemployed individual itself, for example by providing new skills or improve job search behaviour, ALMPs might also influence employers hiring behaviour. ALMPs intervene in the matching process of the demand and supply of labour by revealing information about a candidate's productivity or skills and add the caseworker as a third actor into the game.

The main reason why labour market policies should influence employers' hiring behaviour is due to the uncertainty that characterizes the labour market induced by a situation of

information asymmetry. A candidates' productivity is not directly observable and often employers and jobseekers are not directly connected to each other. Public interventions can address these deficits by delivering information that reduces the uncertainty associated with a candidate's productivity and by connecting the two actors. Employers are likely to use and interpret all kind information in order to select the best candidate. ALMP might provide relevant information to employers as participation can serve as a signal for productivity or other important capabilities of the candidates. This signalling effect of ALMP is an unintended consequence of a specific policy arising due to labour market asymmetries and employers' need to reduce uncertainty. Essentially, the effect of ALMP interventions on employers' hiring decisions can only occur in a situation of labour oversupply. In such a situation, employers can be particularly picky in choosing candidates and, as they are concerned with choosing the best candidate, they are likely to consider the information provided by ALMP participation. The signalling effect of ALMPs is ideally positive, but can also be negative when it allows employers to identify and stigmatize vulnerable groups or reveals a lack rather than an improvement of relevant skills depending on the exact policy design (see for example van der Belle et al., 2018 or Falk et al., 2007 in the literature review above).

Similarly, the PES can deliver relevant information but also act as a labour market intermediary by connecting otherwise disconnected workers and act as a matchmaker (Bonet et al., 2013). A long line of research has demonstrated the importance of social networks for employment outcomes (Granovetter, 1974; Pellizzari, 2010; Lin, 1999; Marsden and Gorman, 2001; Fernandez et al., 2000). Social networks have the advantage that they connect otherwise disconnected actor and can provide trustworthy information (Castilla et al., 2013). However, they also put those with a weak social network at disadvantage and it has been showed that

returns to social networks vary between groups (Bonoli and Turtschi, 2015). To the extent that the PES is able to create connections between employers and jobseekers, it fulfils a similar function as social contacts in the labour market. This might be especially relevant for otherwise disadvantaged and vulnerable groups as they usually have less access to social contacts.

Is it necessary that employers' know about the functioning of the ALMP- and PES-system in order to use and interpret the information entailed in them? Not necessarily, even when employers do not know about how participants are allocated to ALMP programmes, they might have some beliefs about how programme allocation works and base their interpretation on their assumption about how they believe programmes are assigned. When programme participation is revealed to an employer, they are confronted with this kind of information and are likely to interpret it.

Micro-economic evaluations of ALMPs show that there are considerable heterogeneous effects of ALMPs, meaning that their effects vary among different sub-groups. It can be expected that part of this heterogeneous effect arises because employers interpret ALMP participation depending on other candidate's characteristics. Generally, it can be assumed that ALMP and PES recommendations are more important for groups that are more distant to the labour market. As the productivity of these groups is less certain, the information entailed in the ALMP participation is more important to diminish the uncertainty. ALMP interventions might compensate for the difficulties caused by low education or migration background, while for individuals that are closer to the labour market the stigmatizing effect of these interventions might prevail.

Not only unemployed individuals but also employers are a heterogeneous group and it is likely that the interpretation of ALMP participation varies across them. Depending on

employers' beliefs of how ALMPs are attributed to participants, the signalling value of such a programme can vary. For recommendations of the PES, previous contact with the PES and the frequency of the contact might influence how employers value such a recommendation. In cases where a trustful relationship could be established, such recommendations are likely to be more successful.

Another factor that is likely to influence employers' evaluation of ALMPs is the recruitment context. In sectors with high unemployment and consequently many individuals participating in ALMP, as this is for example the case in low-skilled occupations, the stigmatizing effect of ALMPs might be less severe and due to the oversupply of labour ALMPs might be more important for the sorting of candidates. Finally, whether a policy has a positive or negative effect on employers' hiring behaviour depends on the specific policy design and how well it fits the actual requirements of a specific job.

The following thesis examines the different aspects of how public interventions of activation policies influence employers' hiring behaviour and sheds some light on the interaction between policy design, characteristics of the unemployed and the job they are recruited for.

The *first chapter* focuses on the ability of public policies to create connections between jobseekers and employers and to what extent these connections can substitute connections created by social contacts. In particular, the chapter investigates how employers value recommendations from caseworkers at the PES and compares it with recommendations from social networks. A crucial factor for referrals to be a source of valuable information is that the referrer can be selective in who she refers to vacancies. This is usually the case for social contacts but not necessarily for the PES. Since caseworkers in Switzerland have considerable discretionary power in their activation strategy and also in their decision to refer clients to

vacancies (Duell et al., 2010), caseworkers are in a similar position as social contacts when it comes to the selectivity of recommendations.

Since the benefits of social networks are distributed unequally, otherwise disadvantaged candidates often have a less beneficial network (see e.g. Bonoli and Turtschi, 2015) with lower returns (Marsden and Gorman, 2001). Therefore, recommendations of the PES can be an alternative source for improving labour market outcomes of disadvantaged groups. I find that recommendations by the PES have a positive effect on employers' rating of candidates but in a selective way, namely in instances of higher uncertainty, while recommendations from social contacts are valued consistently in all instances.

The second chapter looks at how different measures of ALMPs, such as training, employment programmes and wage subsidies are used by employers to sort candidates. It is investigated whether candidates that participated in a specific programme are evaluated better or worse than candidates without programme participation and whether the effect differs for specific groups and over occupations. We argue that programme participation reveals information about a candidate's productivity. This signalling effect can be direct by providing information about a candidate's ability or skills, for example, by showing that the candidate was able to complete a certain training programme or accepting the harsh working condition of an employment programme, or indirect, by providing information about a caseworker's evaluation of a candidate. Participation in a specific programme is often decided by the caseworker and therefore reflects the caseworker's evaluation of a candidate. Some programmes are used as sanctioning tools (employment programmes) and might reveal behavioural problems or low productivity (wage subsidy). These signalling effects are often unintended consequences of a specific policy. We show that programmes are useful for

candidates further away from the labour market in terms of education and migration background and for those applying to low-skilled occupation but entail negative signalling effects for those closer to the labour market.

A particular challenge when studying employers' hiring behaviour is that data on hiring processes is difficult to obtain and, if at hand, with observational data it is difficult to address the problem of endogeneity as employers might base their hiring decisions on factors that are unobservable for the researcher (Mouw, 2003). To better understand employers' hiring behaviour and what is cause and what is consequence, experimental methods constitute a fruitful alternative (Gërxhani, 2017) as they provide the advantage of control. Researchers have full control over the information available to the employer, which eliminates the biases due to unobserved confounders (Jackson and Cox, 2013), therefore, one is able to isolate the mechanisms leading to an employer's decision.

The first two chapters of this thesis rely on factorial survey experiments or vignette study. Such experiments have become increasingly popular to study employers' behaviour (Biesma et al., 2007; Di Stasio and Van De Werfhorst, 2016; Damelang and Abraham, 2016; Di Stasio, 2014). In factorial survey experiments employers are confronted with fictional hiring scenarios and are asked to judge fictional candidates that vary on several dimensions. In this case, among other factors, whether the candidates were recommended by someone and whether they participated in an ALMP. The random combination of the different dimensions allows disentangling their effects.

Compared to traditional surveys, factorial surveys have several advantages (Wallander, 2009; Auspurg et al., 2014; Auspurg and Hinz, 2015). First, by giving a concrete description of a situation one can study the context and conditions that affect a judgement. Second, because

the different elements of vignettes are varied at the same time, the respondents are less aware of the manipulation and their answers less biased due to social desirability. Third, compared to other experimental approaches, such as field experiments, the experimenter is able to collect additional data about the respondent. Overall, factorial surveys seem particularly suitable for studying sensitive issues and are less prone to social desirability bias than traditional survey research (Auspurg et al., 2014).

Finally, the *third chapter* takes a qualitative approach and examines the underlying motives and reasoning employers apply when considering ALMPs for their hiring decisions. While the results from survey experiments show whether a certain type of information, such as education or the participation in an ALMP, have an influence on employers' hiring behaviour, these results tell us little about the reasons why this is the case. Therefore, the third chapter presents findings from semi-structured interviews with employers in the hotel- and retail sector. Employers were asked about their experience with candidates from ALMP measures and how and why participation in such a measure influenced their impression of the candidates. The aim is to understand employers' motives to consider ALMP participation of candidates when taking hiring decisions. We developed a theoretical argument of how employers interpret ALMP participation and identify assumed agency, i.e., whether employers believe that the agency for initiating ALMP participation lies with the jobseeker (voluntary participation) or the job centre (mandatory participation), as a crucial factor that determines whether their evaluation of ALMPs is positive or negative.

Conclusion

Discussion of the contribution

The three chapters have shed light on different aspects of employers' perception of public interventions to address unemployment. Such interventions mainly target individuals that suffer from the consequences of employers' hiring decisions. The question therefore arises whether such interventions can successfully influence employers' hiring behaviour. So far, little research has focus on the employers' perception of these policies. However, employers' evaluations of these measures contribute to an important extent to their overall effectiveness. The main finding emerging from the three chapters is that employers' evaluation of candidates participated in ALMPs or are recommended by the PES depends on other characteristics of the candidates. Generally, for candidates further away from the labour market ALMP participation can improve hiring outcomes while for those closer to the labour market stigmatizing effects might prevail, especially those of employment programmes. Similarly, recommendations from the PES could narrow the gaps in the rating between some groups, as for example between natives and non-natives or between candidates with a general and a vocational education. However, the interaction effects between the type of recommendation and the specific characteristics were in most cases not statistically significant. The fact that in many cases the interaction effects were not statistically significant might be due to the low number of cases in each category. Ideally, one would run the survey on a bigger sample of employers in order to increase the number of respondents.

The qualitative work in chapter 3 delivers important insights to explain the findings of the first two chapters. In chapter 1, I find that employers rated candidates that were recommended by the PES more favourable than candidates with no recommendation. This finding is in contrast with other studies that find that employers were reluctant to hire candidates from the PES

(Larsen and Vesan, 2012; Bonoli and Hinrichs, 2012). These contrasting findings might have to do with the form of the recommendation. In the vignette study in chapter 1, the candidates were personally recommended by a caseworker, while in previous studies employers were asked more generally about their view of candidates being sent by the PES, suggesting a less personal relationship between caseworker and employers.

From the qualitative interviews in chapter 3 it emerged that those employers with a close personal contact at the PES, with whom they interact on a regular basis, were more likely to turn to the PES for recruiting new staff and had in general a more positive view of the PES. This illustrates that investing in personal contacts with employers is an important strategy for caseworkers to place their clients in employment. This is also supported by the findings of Behncke et al. (2008) who show that caseworkers who maintain direct contacts with employers achieve higher re-integration rates. Other employers see the PES as last resort for labour and turn to the PES only when they were not able to successfully recruit candidates through other channels or when they have to recruit a large number of employees, for example when opening a new site.

However, the quantitative analysis in chapter 1 does not reveal any differences between employers that announce their position to the PES and those who do not. This might have to do with the setting up of the vignettes. In the experimental setting, employers might assumed that the recommendation is coming from a caseworker they know. Here the limitation of the experimental survey methodology becomes apparent, while we can control for the kind of information respondents get, we cannot know why they interpret the piece of information in a certain way. I therefore believe that it is important to complement findings from experimental research with insights from qualitative research.

This is also true for the signalling value of ALMPs investigated in chapter 2. The quantitative results showed that employers interpret the information of ALMP participation and use it to sort candidates but it does not reveal why this is the case. Chapter 3, which looks more closely into employers' motive to use ALMP participation when hiring candidates, reveals that the majority of employers does actually not know much about how participants are allocated to ALMPs. However, to interpret this kind of information, it is not necessary to know how the system works but the interpretation depends on employers' beliefs about how system works. Different beliefs about ALMP allocation lead to a different interpretation of ALMP participation. However, interpreting the information entailed in ALMPs requires that employers generally trust in the system of ALMPs. The fact that ALMPs are used and interpreted when evaluating candidates, as found in chapter 2, means that employers generally trust in the current ALMP system in Switzerland and consider this information as useful. Otherwise, ALMP should not have an effect on their hiring behaviour. Future research should take these differences in beliefs about the functioning of labour market policies into account and control for this variable in the analysis.

In this thesis, I have looked at ALMPs and PES recommendations separately; however, these two factors are often entangled. It is likely that many unemployed individuals participate in ALMPs and are subsequently recommended by their caseworker. The data from the survey experiment in chapter 1 entails the two variables, ALMP participation and PES recommendation and therefore allows looking at their interaction. The contrasts of predictive margins displayed in figure 2 show that recommendations from the PES are relevant only for the groups with no ALMP participation and the interaction effect is not statistically significant.

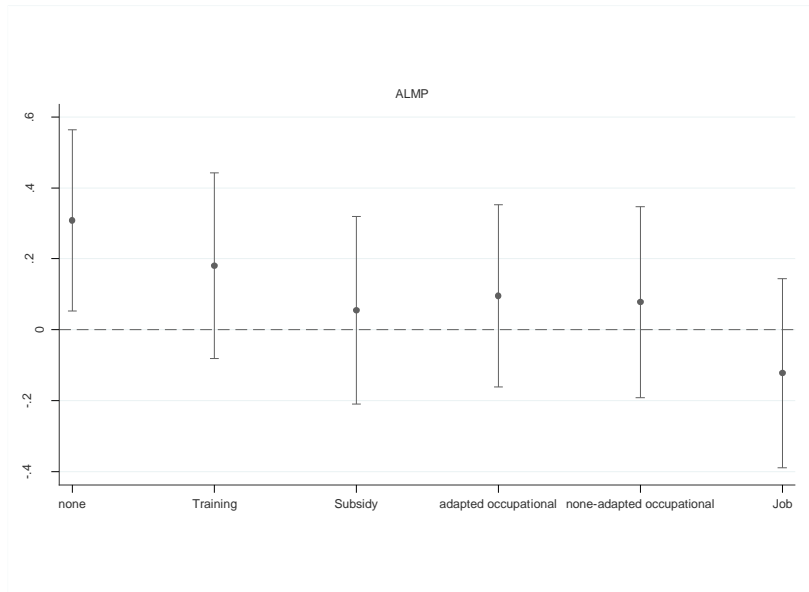


Figure 2: Contrast of predictive margins of PES recommendations over ALMP participation

Notes: Dependent variable: rating on an 11-point Likert scale. Horizontal bars represent the 95% confidence intervals (available from the author on request).

For candidates participating in an ALMP a recommendation by the PES does not significantly improve the rating of the candidate. This finding might be a consequence of the low number of cases in each ALMP category per type of recommendation (only about 200 for each combination of the ALMP and recommendation variable). Unfortunately, the sample was too small to run further sub-analysis such as for example between natives and non-natives with ALMP participation and recommendations or over occupations with different skill-levels. However, the interplay between different measures of ALMPs and then subsequently being recommended by the PES would be interesting to investigate further, especially, because such a combination is not uncommon.

Another main finding emerging from the three chapters is that employers appear to be a homogenous group. In both survey experiments we also captured variables at the employers' level such as education, position, age, or migration background. However, when controlling

for these factors the results regarding PES and ALMPs did not change. The experiment for chapter 2 was run exclusively among employers in the hotel sector. The level of variance in the rating of the candidates that can be attributed to the respondents-level is around 30 per cent (30 for the cleaning position, 27 for the receptionist position). The survey experiment in chapter 1 was run with HR-professionals from different sectors and hiring for different positions, consequently, the level of variance in the rating of the candidates that can be attributed to the respondents-level is somewhat higher, namely 45 per cent. However, controlling for these factors did not have any influence on the results². Surprisingly, whether a respondent's firm announces open positions to the PES or not does not matter for the influence of ALMPs or PES recommendations.

The same result emerges from the qualitative interviews, although the number of respondents was smaller; there were no obvious differences in terms of respondent's gender, age, nationality, or the sector of activity in the responses. The recruitment strategy of employers seems to follow a common pattern. Of course, the positions for which employers were asked to imagine hiring someone were all in the low- to mid-skilled sector; however, it can be assumed that recruitment patterns are similar for other positions. What we did not capture in these experiments were attitudinal variables. A recent study (Wilson, 2017) shows that recruiters with a more egalitarian attitude were more likely to hire youths from disadvantaged background for apprenticeship positions.

Significance of findings

The findings of these three chapters help us to better understand employers' hiring behaviour and how public policy interventions might influence employers' selection of candidates as

² See the results for the fixed-effects models as well as models with control variables in chapters 1 and 2.

well as to understand the different mechanisms through which ALMP programmes unfold their effects. This thesis contributes to the literature by combining the research on employers' hiring behaviour and the one on effectiveness of ALMPs by investigating the policies' effect on the demand-side. From the different contributions three main findings emerge; first, employers interpret and consider carefully the information provided in a CV, also participation in ALMPs, when assessing candidates. Second, part of the effect of ALMPs is generated through the behaviour of the demand-side, which is important to take into account for the overall effectiveness of these programmes. Third, public policy interventions do not produce uniform effects but interact with other characteristics of applicants. Generally, public interventions are more helpful for individuals further away from the labour market, thus, those that suffered from the selectivity of employers hiring behaviour in the first place. I will elaborate on these three points in more detail below.

Compared to a whole CV, that was carefully build by choosing the adequate education and accumulating work experience, participation in a measure of ALMP or a recommendation by the PES might seem like a minor detail, however, as shown in this thesis, this kind of information is not unimportant for employers' hiring decisions and thus directly affects a candidate's chances on the labour market. This illustrates that the hiring process is characterized by a lack of information, which employers are keen to reduce as they would like to know as much as possible about the expected productivity of a candidate. Public policy interventions are an important source that contributes to the reduction of this uncertainty.

The fact that employers use the information about ALMP participation shows that an important part of the effect of ALMPs is produced through the demand-side. Even though measures are often intended to upskill or change the behaviour of the supply-side, the

demand-side should be taken into account when evaluating the effect of these policies. Effects that are generated through the demand-side's hiring behaviour might also be able to explain some of the puzzling results found by ALMP evaluations, which show that sometimes programmes intended to improve jobseekers chances on the labour market sometimes do not work out and produce negative effects. Employers might use the information that someone participated in an ALMP programme to identify and avoid weak candidates. When evaluating the effects of public policies it is important to distinguish the different effects generated through affecting either the behaviour of the supply- or the demand-side. It might be possible that these two effects are contradictory and cancel each other out or one mitigates the other. Disentangling these effects might help us to understand the puzzling effects found for some programmes.

It is important to know that public policy interventions do not produce uniform ratings of candidates but interact with other characteristics and proxies employers use when assessing the suitability of candidates. How ALMP participation is interpreted depends not only on the type of intervention but also on how informative other characteristics and signals are and on the level of uncertainty. For example, in the first chapter it has been showed that recommendations from the PES have a positive effect on the rating of a candidate when uncertainty is higher, which is the case for candidates with general education, migrant background, and applicants to higher-skilled positions. Similarly, the second chapter demonstrates that ALMPs are more helpful for individuals further away from the labour market such as low-skilled and migrants, and when applying for low-skilled occupations. Moreover, in a companying study (Auer et al., 2019), we found that employers apply a matching hierarchy strategy by combining ethical and occupations rankings and prefer

migrant candidates for low-skilled jobs but Swiss applicants for mid-skilled jobs. Similarly, in an additional study, we (Fossati et al., 2018) found that employers give less favourable ratings to migrants when they present signals of cultural attachment to their country of origin.

There are complex interactions between different characteristics of the candidate as well as the occupation and public interventions. In sum, information provided by the PES or ALMPs are considered as positive when either uncertainty about a candidate is high or for those it is well known that they struggle on the labour market, like migrants or low-skilled. For such candidates, public policy intervention can be seen as common. However, programme participation might turn out to have a negative effect for candidates that appear closer to the labour market, as new information about their productivity is revealed in a negative way.

Policy implications

These findings are relevant beyond academic purposes and have some implications for policy. Since employers' interpretation of ALMP participation varies between different groups, one should carefully consider who to assign to which programmes. ALMP seem particularly helpful for individuals further away from the labour market. Unfortunately, as we show by analysing data from evaluation studies in a systematic review, those individuals that potentially benefit the most from ALMPs from an employers' perspective, the migrants and low-skilled, are often excluded from the most effective ALMP interventions (Bonoli and Liechti, 2018) This is not only unjust but can also be seen as an inefficient allocation of publicly financed means. Caseworkers should thus be trained and instructed in how to assign their clients to programmes. While every unemployed client should get the best possible treatment including ALMP measures and recommendation for vacancies, it is important to leave discretionary power to caseworkers in the choice of their reinsertion strategy. Especially, for

the recommendations to employers it is important for caseworkers that they can be selective in referring candidates for establishing and maintaining a trustful relationship with employers. Such an individualized strategy requires that caseworkers thoroughly evaluate their clients' competences and meet with them on a regular basis.

A particular challenge for public policy interventions is that measures designed to help disadvantaged jobseekers eventually help employers to identify them as such and produce negative signalling effects. However, sanctioning tools and benefit conditionality are a key element of ALMPs to ensure job-search effort. While some interventions such as employment programmes might be important for the supply-side, for example for providing a structured course of the day or as a sanctioning tool to ensure job search effort, and are therefore needed, they should not necessarily be revealed to employers when applying for a job as they might be interpreted negatively. The same is true for training programmes that might reveal a lack of relevant skills. Again, when to reveal what kind of programme depends on the other characteristics of the candidate as well as the occupation and is not an easy to answer question. However, it is important that caseworker at the PES are aware of this dilemma and that programmes suitable to their clients should not necessarily be revealed to employers.

The most promising avenue is to design programmes that are directly relevant for the job and signal a positive motivation, as found out in the third chapter (Fossati et al., 2018). The involvement of employers into the provision of ALMPs might be a promising way since this helps to create connections between unemployed and employers and might reduce employers' biases against and reluctance to hire certain candidates. However, this is challenging as this entails the danger of unintended negative signalling effect once employers are aware that certain measures are used as sanctioning tool or targeted to unproductive candidates. ALMP

interventions should not only be targeted to change the behaviour of the supply-side but also include the demand-side perspective by influencing employers' condition to hire certain candidates.

Challenges and Limitations

Of course this thesis does not come without limitations and room for improvement. In this chapter I critically discuss these limitations and the decisions made during data collection. The limitations refer to the scope conditions as well as to the applied methodology and choices in the design of the experiment.

Let us first discuss the scope conditions. All studies were conducted in Switzerland, although chapter 3 adds a comparative perspective by also looking at Sweden. A discussion of the scope conditions is necessary when considering the limitations of this work and the generalizability of the results. Switzerland is a country with a traditional low unemployment rate and consequently being unemployed might be more stigmatizing than in contexts with higher unemployment. How does this affect employers' perception of ALMP participants and the PES? On one hand, the overall good labour market situation might facilitate the PES to establish contacts with employers and find appropriate vacancies for their clients. On the other hand, employers might be more reluctant to hire through the PES, as they think only the least productive workers are registered at the PES. In countries with higher unemployment rate, this stigmatizing effect might be smaller and consequently, the positive effect of PES referrals and ALMP participation is more pronounced. This might be reinforced by the fact that Switzerland can be characterised as a continental welfare state with a liberal face (Armingeon, 2001), in which interventions into the labour market are regarded somewhat sceptical.

Another important scope condition is the configuration of the Swiss ALMP system. Miller and Rosenbaum (1997) show that employers only consider information received in a context that ensures trustworthiness. Although, state interventions are perceived sceptically and employers have in general little knowledge about ALMPs in Switzerland (chapter 3), the fact they employers use participation in ALMP measures (chapter 2) and information by the PES (chapter 1) demonstrate that they generally trust the system, as otherwise they would not consider this information as trustworthy. The specific institutional setting might influence the trustworthiness of information and consequently whether employers use it for evaluating candidates. It would be interesting to run the same study in other contexts with a different organization of unemployment policy to test for the influence of different institutional settings. To a limited extent this thesis addresses different country contexts in a qualitative perspective by including the case of Sweden. These results indicate that employers' view and knowledge of ALMPs does not significantly differ between the two countries. However, in terms of existing ALMP measures Sweden and Switzerland are comparative.

Another difficulty that arises when studying employers is the access to a sample of employers. Employers are a difficult population to survey (Di Stasio, 2013) and generally response rates are low (Damelang and Abraham, 2016). This is a particular challenge for running vignette studies as one would ideally get access to a large representative sample of employers. Collaboration with employers' association, as we have chosen to do in the first two chapters, might be the most promising strategy to approach this kind of population.

Next, the limitations steaming from the applied methodology are discussed. Survey experiments have many advantages. They are less biased than item-based questions and are characterized by a high internal validity (Auspurg et al., 2014). Experiments are considered as

a useful tool to study employers' hiring behaviour (Gërkhani, 2017), especially, because observational data on this sensitive issue is not easily available. However, the shortcomings of the method are that respondents are put into an artificially created situation. Employers are aware of the fact that they are in a fictional setting and their decisions have no real life consequences and they are forced into a specific setting. In reality, whether a candidate is chosen or not does not only depend on the characteristic of the candidate but also on who else applies. The pool of applicants in vignette studies is artificially created and consists of relatively few applicants. However, even when the choices in vignette studies might not reflect real hiring decisions, their results reveal whether a certain piece of information is used by employers to sort candidates and might influence the latter's position in the labour queue.

Another limitation results from the choice of the vignette dimensions. In the two vignette experiments presented here all candidates were presented as short-term unemployed and this unemployment was involuntary due to the closure of the firm the candidates previously worked at. It can be assumed that employers are more sceptical about hiring a candidate the longer he is unemployed (Oberholzer-Gee, 2008) and when the reason for unemployment are less attributable to external factors such as the closure of the firm. What does this mean for employers' evaluation of ALMP participation and PES recommendations? As our results show, candidates further away from the labour market profit more from public interventions. It can therefore be assumed that ALMP participation and PES recommendations get more important with the length of the unemployment spell and other reasons for unemployment than involuntary ones. To test these assumptions these dimensions could easily be added and varied in a vignette study. However, since adding too many dimensions entails the danger of cognitive overload of the participants (Auspurg and Hinz, 2015), these dimensions were not

tested in the two surveys. Which bring us to the next shortcoming; in vignette studies one can only test the influence of the dimensions included in the vignettes, in reality, employers might have more detailed information about candidates, on which they base their decisions. In our experiments, for example, we did not vary experience and previous employers, two factors that might influence employers' hiring decisions. However, as this thesis is mainly focused on low-skilled positions, it can be assumed that experience is less important than in more qualified positions.

Moreover, even if the information presented in vignettes should be as precisely as possible, there is always room for interpretation. Concerning recommendation from the PES and social contacts investigate in chapter 1 this means that the person giving the recommendation was not further specified. Whether an employer trusts in a recommendation also depends on the relationship with the referrer, who the referred person is, and how frequently the two parties interact.

Future research should look more into the relationship between the three parties. For example, the qualitative interviews for chapter 3 show that employers trust more in recommendations from caseworkers with whom they established a personal contact. Similarly and as discussed above, employers' beliefs about ALMP allocation remain unknown in a vignette study. However, as shown in chapter 3, they are crucial for the way employers interpret ALMP participation for their hiring decisions. Future contributions could therefore ask questions about ALMP allocation processes and use these as control variables. Vignette studies deliver information about which dimensions matter for employers hiring behaviour and in which direction but do not tell us why employers interpret information in a certain way. Therefore,

complementing results from quantitative analysis with insights from qualitative studies can be a promising strategy.

Concluding remarks

The chapters of this thesis were concerned with the question in how far efforts made by the state to re-integrate individuals into the labour market in the form of public policies have an influence on employers' hiring behaviour. This is important to know in order to design and implement effective policies. The results of this thesis illustrate that the effect generated by public interventions are complex and that they are depended on other factors such as the skill segment of the labour market or other candidate's characteristics. Overall, the results show that measures of activation policies such as ALMP programmes and PES recommendations are particularly relevant for individuals that are more distant to the labour market while those with good labour market prospect might suffer from ALMP participation. From a policy perspective it is important to carefully consider these different effects and avoid interventions that stigmatize unemployed jobseekers. The construction of measures that combine control mechanisms and that are perceived positively by employers is the key challenge of an effective public policy. From an inequality perspective it is important not to create social division through stigmatization and not to prioritize employment by legitimizing employers' to offer low-wages and insecure jobs social inclusion over individual well-being.

Future research needs to look into how difference in the institutional contexts and social infrastructure play out. It can be expected that different forms of how actors coordinate with each other might have an influence on how employers perceive measures of public policies. The same measures might play out differently in coordinate than in liberal market economies. Moreover, labour market disadvantage has multiple dimensions that can be influenced

differently by the same ALMP. Focusing on how these aspects play out on the demand-side of the labour market is important to fully understand the effects and consequences ALMPs have on individual labour market outcomes.

References

- van der Aa, P. and Berkel, R. van (2014) 'Innovating Job Activation by Involving Employers', *International Social Security Review*, **67**, 11–27.
- Agerström, J. and Rooth, D.-O. (2011) 'The Role of Automatic Obesity Stereotypes in Real Hiring Discrimination.', *The Journal of applied psychology*, **96**, 790–805.
- Anxo, D. and Niklasson, H. (2006) 'The Swedish Model in Turbulent Times: Decline or Renaissance?', *International Labour Review*, **145**, 339–371.
- Armingeon, K. (2001) 'Institutionalising the Swiss Welfare State', *West European Politics*, **24**, 145–168.
- Armingeon, K. (2007) 'Active Labour Market Policy, International Organizations and Domestic Politics', *Journal of European Public Policy*, **14**, 905–932.
- Auer, D., Bonoli, G., Fossati, F. and Liechti, F. (2019) 'The Matching Hierarchies Model: Evidence from a Survey Experiment on Employers' Hiring Intent of Immigrant Applicants', *International Migration Review*, **53**, 90–121.
- Auspurg, K. and Hinz, T. (2015) *Factorial Survey Experiments*, Los Angeles, SAGE.
- Auspurg, K., Hinz, T., Liebig, S. and Sauer, C. (2014) 'The Factorial Survey as a Method for Measuring Sensitive Issues'. In Engel, U., Jann, B., Lynn, P., Scherpenzeel, A., and Sturgis, P. (eds) *Improving Survey Methods: Lessons from Recent Research*, New York, Routledge, pp. 137–149.
- Autor, D. H. (2009) 'Studies of Labor Market Intermediation: Introduction'. In Autor, D. H. (ed) *Studies of Labor Market Intermediation*, Chicago, University of Chicago Press, pp. 1–

23.

Baert, S. (2015) 'Hiring a Homosexual , Taking a Risk ? A Lab Experiment on Employment Discrimination and Risk Aversion', *IZA Discussion Paper*, **9536**, 1–20.

Baert, S. (2016) 'Wage Subsidies and Hiring Chances for the Disabled: Some Causal Evidence', *European Journal of Health Economics*, **17**, 71–86.

Baert, S. and Vujic, S. (2016) 'Immigrant Volunteering : A Way Out of Labour Market Discrimination ?', *IZA Discussion Paper*, **9763**, 1–12.

Becker, G. (1993) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Chicago, Chicago University Press.

Behncke, S., Froelich, M. and Lechner, M. (2008) 'Public Employment Services and Employers: How Important Are Networks with Firms?', *Zeitschrift für Betriebswirtschaft*, **1**, 151–178.

Behncke, S., Frölich, M. and Lechner, M. (2010) 'A Caseworker Like Me - Does The Similarity Between The Unemployed and Their Caseworkers Increase Job Placements?', *Economic Journal*, **120**, 1430–1459.

Behrenz, L. (2001) 'Who Gets the Job and Why? An Explorative Study of Employers' Recruitment Behavior', *Journal of Applied Econometrics*, **IV**, 255–278.

Van Belle, E., Caers, R., De Couck, M., Di Stasio, V. and Baert, S. (2018) 'The Signal of Applying for a Job UNDER a Vacancy Referral Scheme', *GLO Discussion Paper*, **173**, 1–34.

Belt, V. and Richardson, R. (2005) 'Social Labour, Employability and Social Exclusion: Pre-Employment Training for Call Centre Work', *Urban Studies*, **42**, 257–270.

- Biesma, R. G., Pavlova, M., van Merode, G. G. and Groot, W. (2007) 'Using Conjoint Analysis to Estimate Employers Preferences for Key Competencies of Master Level Dutch Graduates Entering the Public Health Field', *Economics of Education Review*, **26**, 375–386.
- Bills, D. B., Di Stasio, V. and Gërxhani, K. (2017) 'The Demand Side of Hiring: Employers in the Labor Market', *Annual Review of Sociology*, **43**, 291–310.
- Bonet, R., Cappelli, P. and Hamori, M. (2013) 'Labor Market Intermediaries and the New Paradigm for Human Resources', *The Academy of Management Annals*, **7**, 341–392.
- Bonoli, G. (2010) 'The Political Economy of Active Labor-Market Policy', *Politics & Society*, **38**, 435–457.
- Bonoli, G. and Hinrichs, K. (2012) 'Statistical Discrimination and Employers' Recruitment', *European Societies*, **14**, 338–361.
- Bonoli, G. and Liechti, F. (2018) 'Good Intentions and Matthew Effects: Access Biases in Participation in Active Labour Market Policies', *Journal of European Public Policy*, **25**, 894–911.
- Bonoli, G. and Turttschi, N. (2015) 'Inequality in Social Capital and Labour Market Re-Entry among Unemployed People', *Research in Social Stratification and Mobility*, **42**, 87–95.
- Bredgaard, T. (2017) 'Employers and Active Labour Market Policies: Typologies and Evidence', *Social Policy and Society*, **17**, 365–377.
- Bredgaard, T. and Halkjær, J. L. (2016) 'Employers and the Implementation of Active Labor Market Policies', *Nordic Journal of Working Life Studies*, **6**, 47.
- Burt, R. (1998) 'The Gender of Social Capital', *Rationality and Society*, **10**, 5–46.

- Burtless, G. (1985) 'Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment', *Industrial and Labor Relations Review*, **39**, 105–114.
- Card, D., Kluve, J. and Weber, A. (2010) 'Active Labour Market Policy Evaluations: A Meta-Analysis', *The Economic Journal*, **120**, 452–477.
- Card, D., Kluve, J. and Weber, A. (2015) *What Works? A Meta Analysis of Recent Labor Market Program Evaluations*, Bonn, IZA.
- Castilla, E. J., Lan, G. J. and Rissing, B. A. (2013) 'Social Networks and Employment: Mechanisms (Part 1)', *Sociology Compass*, **7**, 1013–1026.
- Correll, S. J., Benard, S. and Paik, I. (2007) 'Getting a Job: Is There a Motherhood Penalty?', *American Journal of Sociology*, **112**, 1297–1339.
- Damelang, A. and Abraham, M. (2016) 'You Can Take Some of It with You!', *Zeitschrift für Soziologie*, **45**, 91–106.
- Deuchert, E. and Kauer, L. (2013) *Hiring Subsidies for People with a Disability : Helping or Hindering ? - Evidence from a Field Experiment*, St.Gallen, 35.
- Duell, N., Tergeist, P., Bazant, U. and Cimper, S. (2010) 'Activation Policies in Switzerland', *OECD Social Employment and Migration Working Papers*, **112**, 1–139.
- Eriksson, S. and Lagerström, J. (2006) 'Competition between Employed and Unemployed Job Applicants: Swedish Evidence', *Scandinavian Journal of Economics*, **108**, 373–396.
- European Commission (2019) 'Flexicurity', accessed at <https://ec.europa.eu/social/main.jsp?langId=en&catId=102> on January 22, 2019.
- Fernandez, R. M. (2010) *Creating Connections For the Disadvantaged: Networks and Labor Market*

Intermediaries at the Hiring Interface, Cambridge.

Fernandez, R. M., Castilla, E. J. and Moore, P. (2000) 'Social Capital at Work: Networks and Employment at a Phone Center', *American Journal of Sociology*, **105**, 1288–1356.

Fernandez, R. M. and Fernandez-Mateo, I. (2006) 'Networks, Race, and Hiring', *American Sociological Review*, **71**, 42–71.

Fernandez, R. M. and Sosa, M. L. (2005) 'Gendering the Job: Networks and Recruitment at a Call Center', *American Journal of Sociology*, **111**, 859–904.

Fernandez, R. M. and Weinberg, N. (1997) 'Sifting and Sorting: Personal Contacts and Hiring in a Retail Bank', *American Sociological Review*, **62**, 883–902.

Fossati, F., Liechti, F., Bonoli, G. and Auer, D. (2018) 'Can Signaling Assimilation Mitigate Hiring Discrimination? Evidence from a Survey Experiment', *Paper presented at the XIX ISA World Congress of Sociology*, July 15-21.

Gerfin, M. and Lechner, M. (2002) 'A Microeconomic Evaluation of the Active Labour Market Policy in Switzerland', *The Economic Journal*, **112**, 854–893.

Gërxhani, K. (2017) 'The Experimental Approach to Studying Employers' Hiring Behavior', *Emerging Trends in the Social and Behavioral Sciences*, 1–14.

Gërxhani, K., Brandts, J. and Schram, A. (2013) 'The Emergence of Employer Information Networks in an Experimental Labor Market', *Social Networks*, **35**, 541–560.

Goetschy, J. (2001) 'The European Employment Strategy From Amsterdam to Stockholm: Has It Reached Its Cruising Speed?', *Industrial Relations Journal*, **32**, 401–418.

Gore, T. (2005) 'Extending Employability or Solving Employers' Recruitment Problems?

- Demand-Led Approaches as an Instrument of Labour Market Policy', *Urban Studies*, **42**, 341–353.
- Granovetter, M. (1974) *Getting a Job: A Study of Contacts and Careers*, Chicago, The University of Chicago Press.
- Granovetter, M. S. (1973) 'The Strength of Weak Ties', *American Journal of Sociology*, **78**, 1360–1380.
- Harsløf, I. (2006) 'The Impact of Welfare and Labour Market Institutions on Informal Recruitment in European Youth Labour Markets', *European Societies*, **8**, 555–576.
- Holzer, H. J. (1999) 'Will Employers Hire Welfare Recipients? Recent Survey Evidence from Michigan', *Journal of Policy Analysis and Management*, **18**, 449–472.
- Ingold, J. and Stuart, M. (2015) 'The Demand-Side of Active Labour Market Policies: A Regional Study of Employer Engagement in the Work Programme', *Journal of Social Policy*, **44**, 443–462.
- Ingold, J. and Valizade, D. (2017) 'Employers' Recruitment of Disadvantaged Groups: Exploring the Effect of Active Labour Market Programme Agencies as Labour Market Intermediaries', *Human Resource Management Journal*, **27**, 530–547.
- Jackson, M. (2007) 'How Far Merit Selection? Social Stratification Andthe Labour Market', *British Journal of Sociology*, **58**, 367–390.
- Jackson, M. and Cox, D. R. (2013) 'The Principles of Experimental Design and Their Application in Sociology', *Annual Review of Sociology*, **39**, 27–49.
- Lalive, R., Morlok, M. and Zweimüller (2009) 'Do ALMPs Increase the Probability of Job

Interviews ?', *Mimeo*, 1–39.

Larsen, C. A. and Vesan, P. (2012) 'Why Public Employment Services Always Fail. Double-Sided Asymmetric Information and the Placement of Low-Skilled Workers in Six European Countries', *Public Administration*, **90**, 466–479.

Lee, W. (2009) 'Private Deception and the Rise of Public Employment Offices in the United States, 1890-1930'. In Autor, D. H. (ed) *Studies of Labor Market Intermediation*, Chicago, Chicago University Press, pp. 155–182.

Lin, N. (1999) 'Building a Network Theory of Social Capital', *Connections*, **22**, 28–51.

Marsden, P. V. and Gorman, E. H. (2001) 'Social Networks, Job Changes, and Recruitment'. In Berg, I. and Kalleberg, A. L. (eds) *Sourcebook of Labour Markets: Evolving Structures and Processes*, New York, Kluwer Academic/Plenum Publishers, pp. 467–502.

Martin, C. J. (2004) 'Reinventing Welfare Regimes: Employers and the Implementation of Active Social Policy', *World Politics*, **57**, 39–69.

Martin, J. P. and Grubb, D. (2001) 'What Works and for Whom: A Review of OECD Countries' Experiences with Active Labour Market Policies', *IFAU Working Paper*, **14**, 1–55.

McDonald, S. (2011) 'What's in the "Old Boys" Network? Accessing Social Capital in Gendered and Racialized Networks', *Social Networks*, **33**, 317–330.

Miller, S. R. and Rosenbaum, J. E. (1997) 'Hiring in a Hobbesian World: Social Infrastructure and Employers' Use of Information', *Work and Occupations*, **24**, 498–523.

Montgomery, J. D. (1992) 'Job Search and Network Composition : Implications of the

- Strength-Of-Weak-Ties Hypothesis', *American Sociological Review*, **57**, 586–596.
- Mouw, T. (2003) 'Social Capital and Finding a Job : Do Contacts Matter?', *American Sociological Review*, **68**, 868–898.
- Nelson, M. (2013) 'Revisiting the Role of Business in Welfare State Politics: Neocorporatist versus Firm-Level Organization and Their Divergent Influence on Employer Support for Social Policies', *Comparative European Politics*, **11**, 22–48.
- Neumark, D. (2016) 'Experimental Research on Labor Market Discrimination', *NBER Working Paper Series*, **22022**, 1–98.
- O'Brien, K. S., Latner, J. D., Ebnetter, D. and Hunter, J. A. (2013) 'Obesity Discrimination: The Role of Physical Appearance, Personal Ideology, and Anti-Fat Prejudice', *International Journal of Obesity*, **37**, 455–460.
- Oberholzer-Gee, F. (2008) 'Nonemployment Stigma as Rational Herding: A Field Experiment', *Journal of Economic Behavior & Organization*, **65**, 30–40.
- Oesch, D., Lipps, O. and McDonald, P. (2017) 'The Wage Penalty for Motherhood: Evidence on Discrimination from Panel Data and a Survey Experiment for Switzerland', *Demographic Research*, **37**, 1793–1824.
- Peck, J. and Theodore, N. (2000) 'Work First': Workfare and the Regulation of Contingent Labour Markets', *Cambridge Journal of Economics*, **24**, 119–138.
- Pellizzari, M. (2010) 'Do Friends and Relatives Really Help in Getting a Good Job?', *Industrial and Labor Relations Review*, **63**, 494–510.
- Petersen, T., Saporta, I. and Seidel, M. D. M. L. (2000) 'Offering a Job: Meritocracy and Social

- Networks', *American Journal of Sociology*, **106**, 763–816.
- Petersen, T. and Togstad, T. (2006) 'Getting the Offer: Sex Discrimination in Hiring', *Research in Social Stratification and Mobility*, **24**, 239–257.
- Rees, A. (1966) 'Information Networks in Labor Markets', *The American Economic Review*, **56**, 559–566.
- Reskin, B. F. (2000) 'The Proximate Causes of Employment Discrimination', *Contemporary Sociology*, **29**, 319–328.
- Riach, P. A. and Rich, J. (2002) 'Field Experiments of Discrimination in the Market Place', *The Economic Journal*, **112**, 480–518.
- Ridgeway, C. and Correll, S. J. (2004) 'Motherhood as a Status Characteristics', *Journal of Social Issues*, **60**, 683–700.
- Rooth, D.-O. (2009) 'Obesity, Attractiveness, and Differential Treatment in Hiring', *The Journal of Human Resources*, **44**, 710–735.
- Rooth, D.-O. (2011) 'Work out or out of Work — The Labor Market Return to Physical Fitness and Leisure Sports Activities', *Labour Economics*, **18**, 399–409.
- Rubineau, B. and Fernandez, R. M. (2015) 'How Do Labor Market Networks Work?' In Scott, R. A., Buchmann, M. C., and Kosslyn, S. (eds) *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource*, Hoboken, John Wiley & Sons, pp. 1–15.
- Seco (2019a) 'Die Lage Auf Dem Arbeitsmarkt', accessed at <https://www.seco.admin.ch/seco/de/home/Arbeit/Arbeitslosenversicherung/arbeitslose>

nzahlen.html on January 22, 2019.

Seco (2019b) 'Stellenmeldepflicht', accessed at

<https://www.seco.admin.ch/seco/de/home/Arbeit/Arbeitslosenversicherung/stellenmeldepflicht.html> on January 9, 2019.

Sissons, P. and Green, A. E. (2017) 'More than a Match? Assessing the HRM Challenge of Engaging Employers to Support Retention and Progression', *Human Resource Management Journal*, **27**, 565–580.

Sol, E. (2005) 'Contracting out of Public Employment Systems from a Governance Perspective'. In Bredgaard, T. and Larsen, F. (eds) *Employment Policy from Different Angles*, Copenhagen, DJOF Publishing, pp. 155–174.

Spence, M. (1973) 'Job Market Signaling', *The Quarterly Journal of Economics*, **87**, 355–374.

Di Stasio, V. (2013) *Why Education Matters to Employers: A Vignette Study in Italy, England and the Netherlands*, Amsterdam, Wöhrmann Prin Service.

Di Stasio, V. (2014) 'Education as a Signal of Trainability: Results from a Vignette Study with Italian Employers', *European Sociological Review*, **30**, 796–809.

Di Stasio, V. and Gërkhani, K. (2015) 'Employers' Social Contacts and Their Hiring Behavior in a Factorial Survey', *Social Science Research*, **51**, 93–107.

Di Stasio, V. and Van De Werfhorst, H. G. (2016) 'Why Does Education Matter to Employers in Different Institutional Contexts? A Vignette Study in England and the Netherlands', *Social Forces*, **95**, 77–106.

Wallander, L. (2009) '25 Years of Factorial Surveys in Sociology: A Review', *Social Science*

Research, **38**, 505–520.

Weichselbaumer, D. (2003) 'Sexual Orientation Discrimination in Hiring', *Labour Economics*, **10**, 629–642.

Weishaupt, T. (2010) 'A Silent Revolution? New Management Ideas and the Reinvention of European Public Employment Services', *Socio-Economic Review*, 1–26.

Weiss, A. (1995) 'Human Capital vs . Signalling Explanations of Wages', *Journal of Economic Perspectives*, **9**, 133–154.

Wilson, A. (2017) 'A Silver Lining for Disadvantaged Youth on the Apprenticeship Market - An Experimental Study of Employers' Hiring Preferences'. In *Paper presented at the Labour Market Colloquium*, Lausanne, University of Lausanne.

Zschirnt, E. and Ruedin, D. (2016) 'Ethnic Discrimination in Hiring Decisions: A Meta-Analysis of Correspondence Tests 1990-2015. Mimeo', *Journal of Ethnic and Migration Studies*, **42**, 1115–1134.

Chapter 1

Connecting employers and workers: Can recommendations from the public employment service act as a substitute for social contacts?

*Fabienne Liechti*³

Forthcoming in Work, Employment and Society

Abstract

This article investigates how employers value recommendations from the public employment service (PES) compared to recommendations from a social contact for their hiring decision. The importance of social contacts in the labour market creates inequality by putting those with a weak social network at disadvantage. It is therefore important to know if public agencies designed to act as labour market intermediaries (LMI) can compensate for this disadvantage by successfully connecting jobseekers to employers. This question is investigated by means of a factorial survey experiment conducted among Swiss HR-professionals. The results demonstrate that employers value recommendations from social contacts but the influence of recommendations from the public employment service is more selective and compensates only partially for the disadvantage experienced by certain groups.

³ I would like to thank Laure Athias, Daniel Auer, Giuliano Bonoli, Marlis Buchmann, Benita Combet, Valentina di Stasio, Flavia Fossati, Klarita Gërxhani, Mäilys Korber, Delia Pisoni, Leen Vandecasteele and Anna Wilson for their valuable feedback on previous versions of this article. This work was supported by the National Centers of Competence in Research – ‘NCCR Lives, which is financed by the Swiss National Science Foundation (Grant number: 51NF40-160590).

Introduction

Social networks have been proven to be an important determinant of individual labour market outcomes (Castilla et al., 2013; Granovetter, 1995; Oesch and von Ow, 2017; Pellizzari, 2010; Rubineau and Fernandez, 2015). This is because they reduce uncertainty (Castilla et al., 2013) and connect otherwise disconnected actors (Burt, 1992; Rees, 1996). While social networks yield many advantages, their importance in the hiring process is also held accountable for causing job segregation and labour market inequality, since social capital is distributed unequally (Castilla et al., 2013; Behtoui and Neergaard, 2010; Lin, 2000; Marsden and Gorman, 2001).

Against this background, this article considers the question of whether public agencies, such as the public employment service (PES), can provide a substitute to network contacts for jobseekers, especially those who are poorly connected. Some scholars argue that social policy should focus on 'creating connections' between disadvantaged jobseekers and employers to remediate networks deficits (Fernandez, 2010; Holzer 2009; Ingold and Valizade, 2017). Policies designed as labour market intermediaries (LMI), which means agencies that stand between jobseekers and employers, could be a valuable strategy to ameliorate the labour market prospects of disadvantaged groups and create equal employment opportunities. While research confirms that employers value recommendations from social contacts (Di Stasio and Gërkhani, 2015; Fernandez et al., 2000; Neckerman and Fernandez, 2003), little is known about what they think of recommendations by the PES or other public agencies. In other words, it is not known whether connections created by public agencies that act as LMIs are an effective substitute for social contacts in the labour market.

By addressing this issue, this article relates to several strands of the sociological and labour market literature. First, it connects to the literature on social networks, by investigating whether formally created connections can act as a substitute for social contacts. Little is known about how the type of connector, i.e. the agent standing between jobseeker and employer, influences the value of a recommendation. The knowledge of whether social contacts can be replaced by other types of connections is especially relevant for groups suffering from labour market disadvantage due to a weak social network. Second, it relates to the literature on the PES and LMI, by investigating the demand-side's view of such services. This is important to know, because more recently many countries have made attempts to adapt activation policies and services to the needs of employers, with some countries having contracted out these services to private providers. There is growing scholarly and practical interest in the recruitment of disadvantaged groups and how public services can be made attractive to employers (van Berkel et al., 2017; Bunt et al., 2007; van der Aa and van Berkel, 2014). Therefore, employers' perception is important for the overall effectiveness of these services, as they require candidates coming from the PES to be assessed positively. Third, it contributes to the literature on activation, which so far has paid little attention to the potential of social networks and their substitute for the reintegration of unemployed jobseekers into the labour market.

These research gaps are addressed by means of a factorial survey experiment among HR-professionals in Switzerland. The experiment tests how employers rate job applicants who are recommended either by a social contact or by the PES. In addition, it examines whether recommendations can compensate for the labour market disadvantage of certain groups.

Connections in the labour market

The labour market is characterized by uncertainty and structural holes, meaning that employer and jobseekers are not directly connected to each other (Burt, 1992; Rees, 1966). Third parties that stand between jobseekers and employer can solve these problems by providing information and connecting these actors. The benefit of social networks is that they convey the rich and trustworthy information that employers seek (Marsden and Gorman, 2001) and eventually reduce the cost of selection errors (di Stasio and Gërxhani, 2015). While the benefits of social contacts in the labour market are well-known, their importance is also causing inequalities, since those without or only a weak social network are put at disadvantage (Behtoui and Neergaard, 2010). Moreover, social networks leave employers vulnerable to stereotypes and favouritism (Marsden and Gorman, 2001). Here, public institutions can play an important role by taking over the role of connecting jobseekers and employers and thereby act as an LMI. The presence of public LMIs might reduce the importance of social networks since they fulfil similar functions by providing information and acting as matchmakers (Autor, 2009; Bonet et al., 2013). Harsløf (2006), for example, demonstrates that in countries with encompassing welfare state arrangements, social networks are less important for job search as the former facilitates job-matching processes. The question arises of whether employers value information provided by public agencies such as the PES for their hiring decisions. The following section outlines the theoretical mechanism of how social contacts and the PES influence employers' hiring decisions and expectations are formulated on their basis.

Social contacts

Informal search via other people is the most successful search channel not only for jobseekers but also for employers (Behrenz, 2001). According to Fernandez et al. (2000), there are several mechanisms through which social contacts can reduce uncertainty with regard to employers'

hiring decisions. First, since individuals who recommend someone are concerned about their reputation, they will only recommend suitable applicants. This ensures that recommendations are perceived as trustworthy. Second, social networks are characterised by homophily - the tendency of similar people to befriend each other - which allows the employer to infer the characteristics of the recommended person. Third, recommendations can pass on information that is hard to observe otherwise. Moreover, social networks provide signals about a candidate's productivity; an employer may not only consider the content of a recommendation but also the connectors' reputation and draw inferences about the jobseeker's ability or status depending on who the connector is (Castilla et al., 2013). Since connectors are assumed to be concerned with their reputation, they are highly selective in who they refer. To the extent that connectors share information selectively, based on assumed productivity-related characteristics, connectors implicitly provide signals that are valued by employers (Fernandez et al., 2000; Rubineau and Fernandez, 2015). The results of several studies, drawing on data from the applicants' pool within a firm, document clear advantages for jobseekers referred by an incumbent employee compared to those who are not referred (e.g. Fernandez et al., 2000; Neckerman and Fernandez, 2003). Altogether, it can be assumed that recommendations from a social contact have a positive impact on an employer's evaluation of a candidate.

The role of PES

Historically, the PES plays an important role in coordinating the workforce and can be seen as an early form of LMI. Most countries established such institutions in the early 1900s with the main purpose of reducing job search cost and informational asymmetries (Bonet et al., 2013; Lee, 2009). The PES also plays an important role in governing and delivering labour market services. Recently, the PES has been subject to substantial reforms and deregulations. Contracting out services and the establishment of a quasi-market seems a major trend with

Australia, the Netherlands and Great Britain as forerunner countries (Finn, 2005; Sol, 2005). The role of the PES and other similar providers is not only to connect unemployed jobseekers to employers but also to provide other services, such as counselling or training, in order to facilitate labour market reintegration. This article, however, focuses solely on how information (recommendations) provided by the PES are interpreted by employers and therefore focuses on the PES's role as an information or matching provider (Bonet et al, 2013). It can be expected that the mechanisms explored here also hold for private providers as long as their function of matching unemployed individuals to employers is concerned.

The PES as a connector

Surprisingly, little is known about how employers perceive the PES or similar actors that potentially reduce disadvantage and offer hiring opportunities for vulnerable individuals. The PES could provide important information to both sides of the labour market. Since caseworkers have to evaluate their clients and meet with them several times in order to deliver the right service to them (Duell et al., 2010), they often know the capabilities and skills of their clients. Moreover, in many countries, the PES has made attempts to provide a valuable service to employers and position itself as the main source for labour (Behncke et al, 2008; Bunt et al., 2007). For such a strategy to work, caseworkers must be concerned with their reputation and only recommend suitable candidates, as otherwise they would not be able to place clients in the future. This requires that caseworkers can be selective in their choice of which candidates they recommend. Obviously, the extent to which this strategy can equalise chances is limited, as candidates further away from the labour market are less likely to be recommended, which excludes the most disadvantaged (Bonoli and Liechti, 2018). However, there are reasons to believe that employers might draw negative inferences about candidates referred by actors that are associated with low-performing workers (see also Castilla et al., 2013). As argued by

Larsen and Vesán (2012), employers perceive candidates sent by the PES negatively. According to the authors, the PES is caught in a low-end equilibrium of the market because it is obliged to help all workers, including the less productive ones. Therefore, employers cannot trust the quality of the referred workers. This reasoning is reinforced by the fact that the unemployed are often perceived as the most unproductive workers, since it is assumed that they have been laid off first. As most countries require unemployed jobseekers to register at the PES in order to obtain benefits, the employer knows that the PES has many potentially unproductive candidates in their database. Knowing that the PES is obliged to also help the least suitable worker, employers therefore avoid hiring through the PES. The authors support their theoretical argument by data from qualitative interviews illustrating that employers are reluctant to hire candidates sent by the PES as these candidates are assessed as unsuitable. A similar finding is provided by Bonoli and Hinrichs (2012), who present evidence from qualitative interviews showing that employers consider candidates sent by the PES as less motivated. However, these studies do not directly ask about recommendations from the PES but rather ask about employers' impressions of candidates who apply through the PES. It is possible that the negative evaluation of the PES is in fact a negative assessment of unemployed candidates and not of the PES per se. Other studies more closely examine how employers' actual hiring behaviour is influenced by agencies that stand between (unemployed) jobseekers and employers. Ingold and Valizade (2017) conceptualize active labour market policies (ALMPs) as LMI, i.e. as actors standing between employers and jobseekers, and test whether these influence employers' likelihood to hire from disadvantaged groups. Their results indicate that compared to employers' selection criteria and firm size, ALMPs play a negligible role in the hiring of disadvantaged groups. Other studies suggest that social policy interventions focusing on creating contacts between jobseekers and employers are actually

effective. Holzer (2009) summarises that intermediaries, which bring together workers and employers, can overcome employers' resistance to hiring disadvantaged workers. Relying on data from a pool of applicants, Fernandez (2010) establishes that applicants with institutional connections are more likely to be offered jobs and to be hired than other applicants. Research shows that caseworkers at the PES are aware of the importance of employers and that direct contact with them is an effective strategy to place their clients in employment (Behncke et al., 2008; Bellis et al., 2011) This is the case for local employment partnerships developed by Jobcentre Plus in the UK. In their evaluation, Bellis et al. (2011) find that these partnerships were perceived as effective by employers due to the worth-of-mouth and their direct contact to the Jobcentre Plus staff. Similarly, Behncke et al. (2008) demonstrate that caseworkers in Switzerland that maintain direct contact with firms achieve higher reintegration rates than the colleagues. These findings indicate that the PES seems to be able to create and maintain valuable contacts with employers in different country contexts.

Heterogeneous effects of recommendations

The reason why the results from previous research do not lead to a clear conclusion of how employers perceive candidates coming through the PES might be because the effect of recommendations is heterogeneous and depends on other factors that affect employers' evaluation of a candidate. It can be assumed that the influence of recommendations on the evaluation of a candidate depends on the uncertainty associated with the candidate. First, reducing uncertainty is especially important when the costs of making a poor decision are high. In terms of hiring, this means when salaries and turnover costs are high and when the position entails responsibilities where mistakes are costly (Marsden and Gorman, 2001; Di Stasio and Gërkhani, 2015). This situation is usually the case in higher-skilled occupations. For these positions, the importance of recommendations from a current employee might be

reinforced by the fact that higher-skilled employees might be perceived as delivering more trustworthy information. This is the case because these employees anticipate that wrong hiring decisions are costly; since they are concerned with their reputation within the company, they will only recommend suitable candidates. For the PES, in turn, the negative signalling effect described above might be especially pronounced for these positions since the unemployment rate of high-skilled is lower than that of low-skilled individuals (Eurostat, 2017). For low-skilled positions, it is more common to register with the PES, and such recommendations, therefore, might not entail a strong negative signal.

Second, the influence of recommendations depends on how precisely other information provided by the candidate signals his or her capabilities (Spence, 1973). The less precise these other signals are, the more weight should be given to recommendations. Müller and Shavit (1998) describe education as the single most important determinant employers rely on when hiring new employees. Di Stasio and Gërxhani (2015), for example, find that referrals from business partners matter when education is seen as a noisy signal, that is when employers have less trust in the information provided by educational credentials. Switzerland provides a good case for testing how the value of a recommendation varies depending on the precision of the signal. The Swiss educational system has a strong focus on vocational education and training (VET). Most adolescents follow a dual track programme that combines practical training in a specific occupation in a company with theoretical classes. Employers thus train and educate these young people and are involved in designing their curriculum; as a consequence, they are well informed about their skills and competencies. The VET track signals high competencies in relevant occupational skills and a strong connection to the labour market at a relatively young age (Levels et al., 2014). The other path is to obtain a baccalaureate

diploma in general education that provides access to a university education. Although following this second track requires good school performance, the skills are less specific to a certain occupation, and students are less connected to the labour market. Since employers are less certain about the competencies of these candidates, it is assumed that recommendations from both types of connectors, a current employee and the PES, are more important for candidates who have followed the general track.

Finally, research demonstrates that a group that particularly suffers from labour market disadvantage are non-native candidates (Brekke and Mastakaasa, 2008; Wiborg and Møberg, 2010). Some of this disadvantage arises due to employers' discriminatory hiring behaviour because of stereotypical beliefs or statistical discrimination (Kingston et al. 2008; Auer et al., 2019) but also from unequal access to and lower returns from social capital (Behtoui and Neergaard, 2010; Bonoli and Turtschi, 2015). The recommendations from current employees and the PES could potentially play an important role in counteracting negative stereotypical beliefs associated with a foreign background and the PES might be helpful in compensating for the network disadvantage of non-natives. For natives, however, PES recommendation might have a stigmatizing effect, as they are expected to find employment more easily on their own or through their social network.

Overall, it is expected that recommendations from a social contact have a positive influence and are especially relevant for applicants to higher-skilled positions, for those with general education and non-natives. Expectations with regard to the PES are less straightforward; positive and negative effects are both possible but it is expected that the PES has a positive impact for non-native candidates.

The PES in Switzerland

This study relies on data from Switzerland, which is a suitable case to study these questions because, first, social networks are important for obtaining employment. Bonoli and Turtschi (2015) find that 44% of a sample of previously unemployed people found their job through social networks. Second, since unemployed persons have to register at the PES in order to access unemployment benefits, the PES plays an important role in re-integrating jobless people into the labour market (Duell et al., 2010). The service is decentralized at the cantonal level, where each canton has several regional placement offices; in total there are approximately 110 offices (Behnecke et al., 2008). Compared to other OECD-countries, the benefit system is generous but with a strong emphasis on job-search requirements and incentives to move into jobs. Caseworkers at the regional PES office play an important role in placing individuals in ALMPs but also in supporting them in their job search. Besides monitoring job search efforts, the PES provides job brokering services. Employers can report vacancies directly to the PES, which can then either transmit information about the job to suitable candidates or directly refer specific candidates to the job. An important feature of the Swiss system is that it leaves substantial leeway to caseworkers in the choice of the best reinsertion strategy. Caseworker can implement an individual strategy for each client. This means that caseworkers can be selective in their choice of which client they refer to employers. In contrast to other countries, the placement service of the PES has not been outsourced but remains among its key competences (Duell et al., 2010). However, since employers are not obliged to register open vacancies to the PES, the PES has to aim for an active placement strategy if employers are to perceive it as a useful recruitment channel (Behncke et al., 2008). Caseworkers' performance is monitored at an individual level using a benchmarking system¹, therefore, they have incentives to invest and maintain a good relationship with employers in their regions in order

to successfully place clients in the future. Kaltenborn und Kaps (2013) demonstrate that the majority of caseworkers are aware of the benchmarking system and that it influences their re-integration strategies. Moreover, the authors reveal that in all cantons, caseworkers consider cooperation with employers as a high priority, and Behncke et al. (2008) find that the unemployed counselled by caseworkers who maintain direct contact with employers have higher employment probabilities. Given the discretionary power caseworkers have in their reinsertion strategy, it can be assumed that they use recommendations selectively in order to maintain a trustful relationship with employers to be able to place clients in the future. Switzerland has a strong labour market; at the time of the experiment, in June 2016, the unemployment rate had reached merely 3.4% (Seco, 2016). On the one hand, this low rate allows caseworkers to work more closely with their clients and recommend them only for suitable jobs. On the other hand, given the low overall unemployment rate, being unemployed might be more stigmatizing than in other countries, since employers might think that productive jobseekers would not become unemployed in the first place.

Data and Method

Data on recruitment processes are difficult to obtain. Usually, it is not possible to observe who applies for a job and it is difficult to control for all confounding factors. As suggested in the literature (Di Stasio and Gërkhani, 2015; Mouw, 2003) this article relies on an experimental setting, more specifically, on a factorial survey (FS) experiment, to overcome this difficulty. In such experiments, respondents are asked to evaluate descriptions of hypothetical situations (vignettes). These descriptions consist of different dimensions that can take on different values and are varied randomly. FS are widely applied in social sciences (Wallander, 2009) and are increasingly popular for investigating employers' behaviour (Damelang and Abraham, 2016;

Di Stasio and Gërkhani, 2015, Liechti et al., 2017). This method captures a stated preference for a candidate rather than a real behaviour of an employer. However, Hainmueller et al. (2015) demonstrate that stated preferences in experimental settings are close to real behaviour. At the same time, the advantage of a FS-experiment is that it reduces the risk of endogeneity, meaning attributing the employers' preferences to a characteristic that is unobserved by the researcher but observed by the employer and enables the testing of the influence of several dimensions simultaneously. Overall, FS deliver a more valid measurement of attitudes and are less biased by social desirability than item-based techniques in standard surveys (Auspurg et al., 2014).

The experiment

The experiment consisted of a number of vignettes presenting descriptions that approximate schematic CVs of fictional job applicants, entailing information usually disclosed in a standard CV in Switzerland. These vignettes were submitted to HR-professionals via an online survey. The regional association of the HR-organization sent out the survey link to all their members (approximately 4500 individuals) and asked them to participate in the survey. For three jobs at different skill levels (high, mid and low skilled), participants were asked to evaluate a set of four vignettes for each job (12 vignettes in total) and indicate on an 11-point Likert scale from 0 to 10 (not at all likely – very likely) how likely they are to invite the candidate for a job interview.

In the experimental setting, the candidates' descriptions consisted of 11 different dimensions, from which the main variable of interest is the type of recommendation (see the technical appendix online for all dimensions and examples of vignettes). The values of the dimensions were varied randomly. Since the number of possible combinations yields a larger number than the number of respondents, a d-efficient sub-sample that minimises the correlation between

the different dimensions was drawn from the vignette universe (Auspurg and Hinz, 2015)².

From this sub-sample, vignettes were randomly assigned to the respondents.

The main variable of interest was manipulated in the following way:

No recommendation (written application): 'You receive the written application as a response to your advertisement from [Name of candidate] by post' or 'You received an unsolicited application from [Name of candidate] by post'.

For the analysis the two levels with no recommendations, the application as a response to an advertisement and an unsolicited application, were grouped together.

Employee recommendation: '[Name of candidate] was recommended to you by one of your current employees'.

PES recommendation: '[Name of the candidate] was recommended to you by the local PES'.

Before introducing the vignettes, a general description of the situation was presented in which all candidates were described as having been unemployed for the last six months due to the closure of the firm where they previously worked and as having completed compulsory schooling in Switzerland (see technical appendix). Participants were asked to imagine that they have an open position for an accountant, HR assistant and caretaker, and were given a description of the tasks for each position. These occupations were chosen since they reflect different skill levels according to the ISCO-08 classification of occupations and because they are found in most companies, meaning that it is likely that the respondents are familiar with these job profiles. Of course, in some occupations hiring on recommendations is more common than in others. However, studies show that the importance of recommendation is primarily influenced by the skill-level, with the low-skilled working class being more likely to use social

networks for job search (Oesch and von Ow, 2017). Therefore, it is assumed that the effects found here also hold for other occupations with the same skill level.

The order of the jobs and the order of the vignettes within each job were randomised. The study was framed in general terms as a project about hiring needs and could either be taken in German or French, the two main national languages. Questions regarding participants' hiring experience, position in the firm and socio-economic variables were also covered. The data were collected between June and November 2016.

Data and estimation strategy

In total, 712 respondents rated a total of 5,674 vignettes, which yielded a response rate of approximately 15%. This low response rate is similar to those of other vignette studies with employers (Damelang and Abraham, 2016) and seems to be unavoidable when surveying this type of population. Since the sample is a homogenous group of specialised HR-professionals, the low response rate still enables meaningful conclusions to be drawn as long as every vignette was rated by several respondents, which is the case here. To test how well the firms the respondents work in represent the Swiss firm structure, the data obtained were compared with statistics on the Swiss firm structure (Federal Office for Statistic, 2015) This comparison revealed that in the study sample, medium and large firms with up to 250 employees and more are overrepresented. While the majority of Swiss firms have 0-9 employees, in the study sample, the majority of respondents worked in a firm with more than 250 employees. This result is not surprising, since most medium and large firms have a professional HR service to recruit new employees. Since these firms employ approximately 42% of the Swiss workforce (Federal Office for Statistic, 2015), their screening and evaluation techniques for applicants are relevant to a large share of jobseekers in Switzerland. Another source of bias could result from

the overrepresentation of HR professionals working in the public sector; compared to their share (9%) in the total labour force, they are overrepresented in the sample (14%). Employees in the public sector might be more favourable towards applicants from the PES. Models with fixed effects for the respondent were run as a sensitivity analysis to control for this fact. These models did not yield different results. A majority of the respondents are female (63%), Swiss nationals (87%) and had received tertiary education (54%) (technical appendix).

To consider the nested data structure, linear models with random intercepts for the respondents and clustered standard errors at the respondent level were estimated³ (Auspurg and Hinz, 2015; Rabe-Hesketh and Skrondal, 2012). To test the effects for different groups, models with interactions between the recommendation variable and the vignette variables of education, skill level of the job applied to, and nationality respectively were estimated.

Results

This section presents and interprets the results from the FS-experiment. First, the main effects of recommendations from social networks and the PES are presented, followed by the interaction effects between the different types of recommendations and other candidates' characteristics. In a multilevel structure, like this is the case here, variance in the outcome variable can come from two sources, the respondents-level and the vignette-level. The intraclass correlation coefficient reveals that 55 per cent of the variance in the outcome can be attributed to the vignette variables, while 45 per cent can be attributed to the respondents-level. When adding control variables at the respondents-level (models in the appendix table A9), such as age, experience, gender, education, sector, and whether open positions are announced to the PES, the main results do not significantly change. The only two variables that had a significant effect on the rating of the candidates were the age of the respondent and

the sector of activity. Respondents from public administration, consulting, and transportation had a more favourable view of candidates and younger respondents judged them more positively. Surprisingly, whether respondents announced open positions to the PES or not did not influence their rating of candidates sent by the PES.

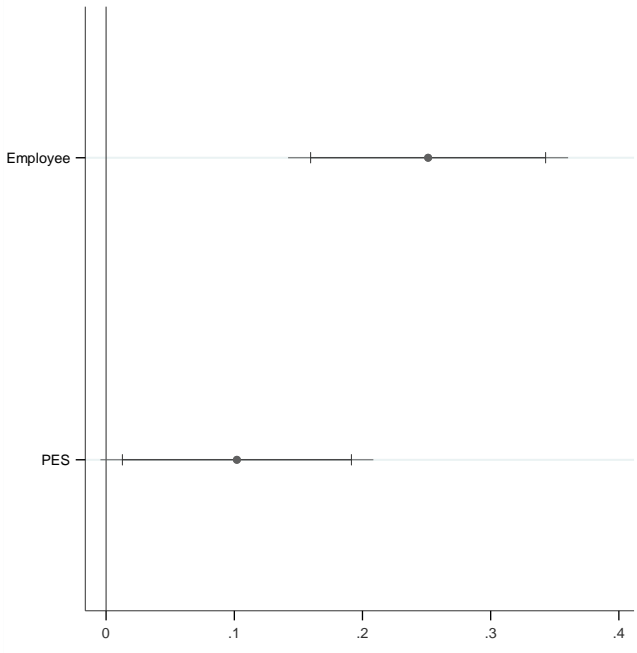


Figure 1: Effect of a recommendation on the rating of the candidate¹

Notes: Plotted coefficient from Model 1 in the appendix (table A7). Dots represent the difference in the rating compared to the reference category, i.e. no recommendation (vertical line). Horizontal bars represent the 95% confidence intervals; the vertical segments at the bar represent the 90% confidence intervals.

¹ Dependent variable: likelihood to invite the candidate for an interview on a 10-point Likert scale.

Figure 1 plots the effects of the two types of recommendations on the employers’ stated likelihood to invite the candidate for a job interview. In all figures, the vertical line represents the reference category (candidates without recommendation). The symbol represents the difference in the predicted ratings between candidates without any recommendation and those with a recommendation (a table (A6) with the estimated models can be found in the appendix). It is evident that employers valued both types of recommendations, those by a current employee (rating 7.00) and those by the PES (rating 6.85⁴). Recommended candidates received significantly higher ratings than those without recommendation (rating 6.75).

Although having a smaller effect than recommendations from a social contact, employers valued recommendations from the PES.

Next, the results from the interaction effects are presented to observe whether there are specific groups for which employers value recommendations more than for others. As displayed in models 3 and 4 in the appendix (table A7), the interaction effect between recommendation and education, nationality respectively, are not significant, meaning that the effect of a recommendation does not vary over the two groups. However, as interaction terms are difficult to interpret from regression coefficients, the following figures (2-4) show contrasts of predictive margins. Predictive margins compute the average response when certain variables, in this case the recommendation and education, nationality, or occupation respectively, are fixed at a certain value while the other variables are left as they are (see also Jann, 2013 for further explanation). Contrasts show the difference in these predicted margins. For example, contrasts of predictive margins for education show the difference between candidates with and without recommendation, separately for candidates with a vocational or a general education (see figure 3). These contrasts reveal that, although the effects of recommendations did not significantly differ between groups, especially PES recommendations significantly improved the rating of some candidates but not of others. This change minimized the difference in the rating between the two groups, for example between those with a vocational and a general education, and lead to an insignificant difference between the two groups among those recommended, while the difference between the groups is significant among those that were not recommended. The contrasts of predicted margins between recommended and not recommended candidates over specific groups as well as the contrasts of predictive margins

between specific groups over the type of recommendation can be found in table A10 and A11 in the appendix.

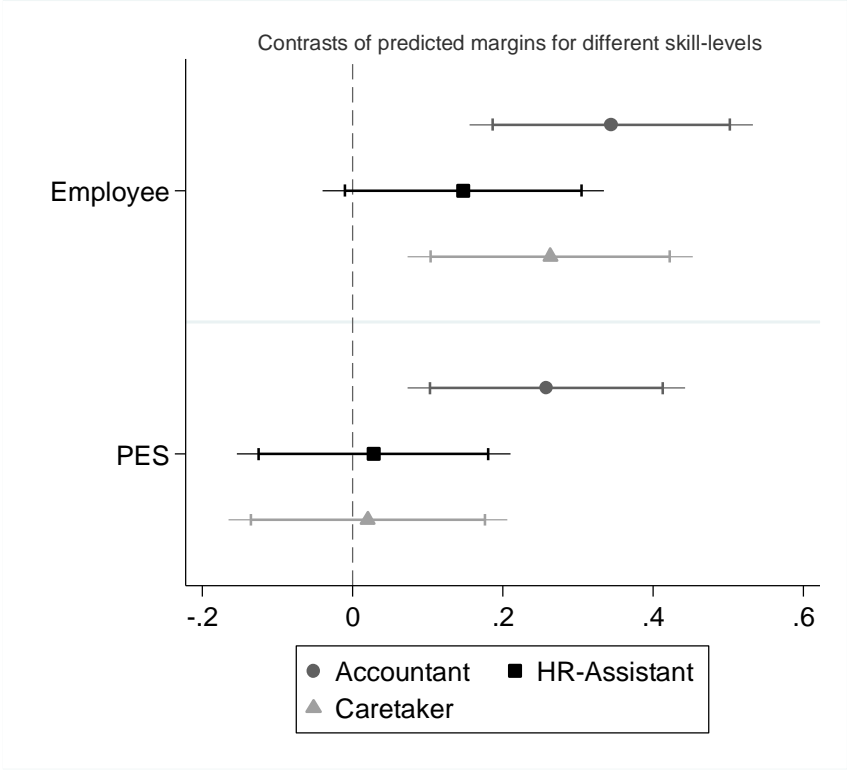


Figure 2: Recommendations and occupation

Note: Based on model 2 in the appendix (table A7). Horizontal bars represent the 95% confidence intervals; the vertical segments at the bar represent the 90% confidence intervals. Contrast in table A10.

First, the effects of the two types of recommendations are presented for the three different types of occupations. The baseline model (model 1 in the appendix) indicates that, compared to candidates applying to the high-skilled position, those applying to the mid-skilled position received significantly lower ratings, while those for the low-skilled position received significantly higher ratings. It was assumed that recommendations should matter more for candidates applying to the high-skilled position, as the cost of wrong hiring is higher and therefore reduction of uncertainty is more important. As demonstrated by figure 2, this is not the case for recommendations from social contacts. Employers value these recommendations

for candidates to the low- as well as to the high skilled position. The picture changes for recommendations by the PES, here only candidates applying to the high(er)-skilled occupation received significantly higher ratings.

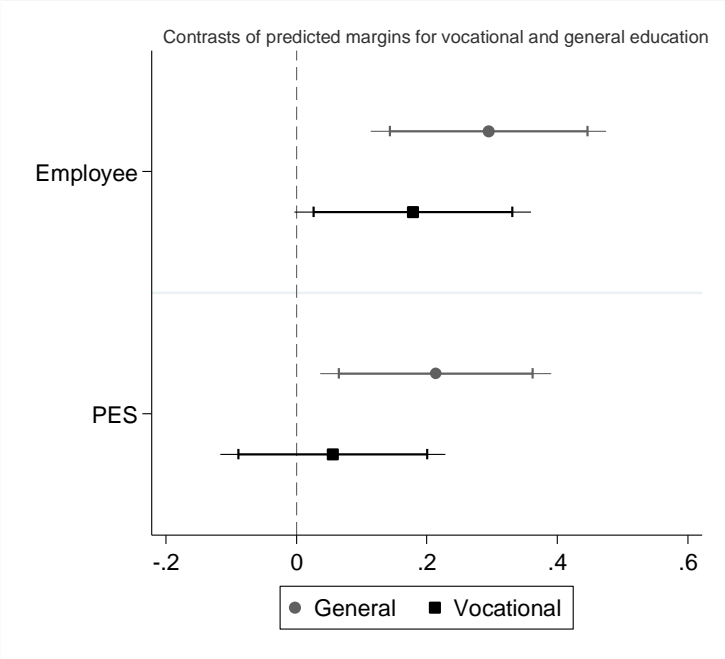


Figure 3: Recommendation and education

Note: Based on model 3 in the appendix (table A7). Horizontal bars represent the 95% confidence intervals; the vertical segments at the bar represent the 90% confidence intervals. Contrast in table A10.

Next, the results for the interaction between the type of recommendation and education are presented. For this purpose, only the vignettes of the high- and mid-skilled positions were analysed, since there was no division in general and vocational education in the vignettes for the low-skilled occupation. The baseline model (model 1) illustrates that candidates with a general education were evaluated more positively than those with a vocational education. It was expected that the effects of a recommendation would be bigger for candidates with a general education than for those with a vocational education. Turning now to the model with the interaction, the coefficient for general education is negative (model 2), meaning that among candidates with no recommendations, those with a general education were evaluated

significantly worse than candidates with a vocational one (see contrast table A11). This points out that recommendations might matter more for candidates with a general education. The contrasts of the predicated margins in figure 3 show that a recommendation from a current employee mattered for both candidates, those with a general and those with a vocational education. In both cases candidates with an employee recommendation received higher ratings than those without a recommendation. The effects of a recommendation for the two groups, vocational and general education, are not statistically significantly different from each other. However, since candidates with a general education profited slightly more from a recommendation, the difference between candidates with a general and a vocational education becomes insignificant among those recommended by a current employee (see table A11 in the appendix). When looking at the recommendations from the PES, one can see that this type of recommendation only improved the rating for candidates with general education. Among them, candidates with a PES recommendation were evaluated more positively than those without recommendations. For candidates with vocational education a PES recommendation did not improve the rating. Again, the effects for the two groups are not statistically significantly different from each other but this type of recommendation improved the rating of candidates with a general education to a slightly larger extent. This results in an insignificant difference between candidates with a general and those with a vocational education (table A11 in the appendix), while this difference is significant among candidates with no recommendation.

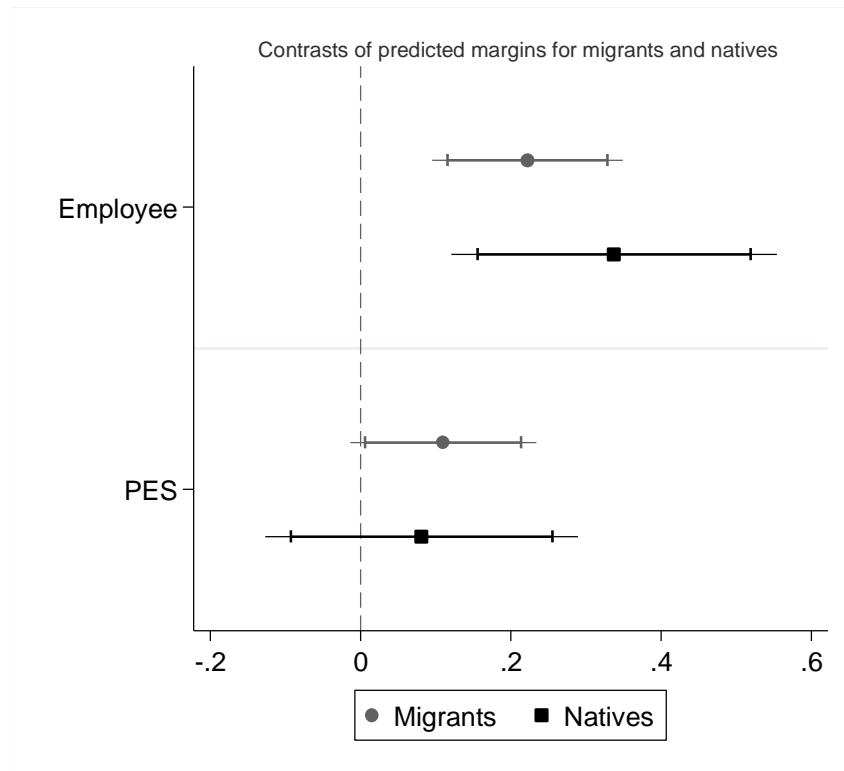


Figure 4: Recommendation and the origin

Note: Based on model 4 in the appendix (table A7). Horizontal bars represent the 95% confidence intervals; the vertical segments at the bar represent the 90% confidence intervals. Contrasts in table A10.

Finally, whether recommendations can compensate for the disadvantage non-natives face in the labour market was tested for. The main effect of nationality (model 1) indicates that candidates with a foreign background received significantly lower ratings than Swiss candidates and it seems that recommendations cannot compensate for this disadvantage. Both, natives and migrants profited from recommendations from current employees, as illustrated in figure 4. Although the effects of the two groups do not statistically significantly differ, the effect is slightly bigger for natives than for non-natives, therefore, the difference between migrants and natives remains statistically significant (see contrast in table A11). When examining the effect of a recommendation from the PES, such a recommendation slightly increased the ratings of non-natives but not those of natives. Again, the difference in the effect

for native and non-natives is not statistically significant but, as this type of recommendation increased the rating for non-natives slightly more than for natives, this leads to an insignificant difference between native and non-natives among those with a recommendation from the PES (see contrasts in table A11), while difference between natives and non-natives remains significant among candidates with no or a recommendation from a social contact.

Discussion

It was assumed that recommendations from a current employee have a positive effect on employers' evaluation of a candidate. Overall, this expected positive influence is confirmed. The expectations with regard to recommendations from the PES were more ambiguous; from a theoretical perspective, positive and negative effects can be expected and the results from previous research do not clearly point in one direction. The results of this article demonstrate that, although smaller than the effect of social contacts, PES recommendations had a positive influence on employers' rating of candidates but cannot fully compensate for the disadvantage of those with a weak social network. Nevertheless, given the strong importance of social ties, it is surprisingly how close recommendations from the PES come to the one of social networks. This means that recommendations are an important instrument for a caseworker's reinsertion strategy and it is important that caseworker use recommendations selectively in order to maintain employers' trust and that they use a personalized approach.

In qualitative interviews⁵ with employers in the hotel and retail sector, employers revealed that the way the PES sends candidates matters to them. Those that have personal contact with a specific caseworker at the PES said that they trusted the recommendations from this caseworker. These employers did not announce positions to the PES but were approached directly by the caseworker when she had a good candidate to place. Employers that have

announced positions to the PES but without having a personal contact there were less satisfied with the quality of the candidates sent. This finding illustrates that the way the PES sends candidates matters. Selective recommendations from a known caseworker work well, while just sending candidates once an employer announces a position is less successful. This is also illustrated by the following quotes from the qualitative interviews:

I already had contact in cases when they [the PES] have referred candidates to us but we do not directly turn to them but leave it a bit open so that they can recommend us specific candidates (HR-manager of a hotel, Switzerland)

[...] but then we approach them [the PES] directly and explain them the situation so that they can recommend us someone that they are counselling at the moment if they know someone or then [in case of advertising to the PES] we are were specific in our requirements so that the applicants are already filtered. (Manager of a hotel, Switzerland).

This differentiation between personal contact and sending candidates might also explain that the results found here contradict those of previous studies. Bonoli and Hinrichs (2012) and Larsen and Vesan (2012) conclude that employers have a negative view of candidates coming through the PES. The authors did not explicitly asked about recommended candidates but about candidates that were sent to them after announcing a position to the PES. The negative effect in these studies might also arise due to the negative effect of being unemployed per se. In reality, unemployed people compete with employed jobseekers, and the former might be disadvantaged compared to the latter. The experimental method allows these two effects to be disentangled. Once a person is unemployed, the information delivered by the PES is valued by employers. This is also supported by the findings of Fernandez (2010) and Holzer (2009),

who conclude that intermediaries can overcome employers' resistance to hiring disadvantaged workers. The contradictory result from previous studies might also illustrate that the effects of recommendations are not the same for all individuals but are shaped by other characteristics of the job or the applicant.

This article has accounted for these differences by examining the effects of recommendations for different sub groups that are expected to have different labour market outcomes. It was expected that, for candidates whose productivity was associated with higher uncertainty or in situations where wrong hiring decisions were more costly, employers value recommendations more. Such a heterogeneous effect cannot be confirmed, the interaction effects between the type of recommendation and other variables, such as education, occupation applied to, and migrant background, were in most cases not statistically significant. However, while the effect of recommendations did not differ between different groups, the contrasts of the predictive margins show that recommendations changed the difference in the ratings between specific groups compared to the groups with no recommendation. Employee recommendations were especially important for candidates applying to high skilled positions but less for those applying to low-skilled positions, indicating that in situation where mistakes are more costly, reduction of uncertainty is more important. Recommendations from the PES and a current employee could also decrease the difference between candidates with a vocational and those with a general education. The latter were rated significantly lower than the former when not recommended, however, once recommended, the difference between the two groups, vocational and general education, becomes insignificant.

What is concerning from an inequality perspective is that recommendations from social contacts were not able to diminish the gap between native applicants and their non-native

counterparts. Given the overall higher preference for Swiss candidates, it might be the case that a recommendation by a Swiss worker was valued more than one made by a foreign employee. Unfortunately, the PES was not able to fully compensate for the disadvantage migrants face also due to the weaker returns from social capital. Recommendations from the PES indeed increased the rating of migrant candidates and narrowed the gap between native and migrants, in such a way that it becomes insignificant. However, when considering the fact that natives that can rely more on social networks and migrants that are more likely to rely on the PES as they do not have the same beneficial social ties, the PES cannot compensate for the overall labour market disadvantage of migrants. Overall, recommendations from a current employee had a positive influence on employers' evaluation of candidates and recommendations from the PES could partially act as substitutes.

Conclusion

This article investigates whether recommendations from the PES are a valuable strategy to connect employers and jobseekers and can act as a substitute for social contacts in the labour market, and therefore help to integrate disadvantaged individuals into the labour market. The results contribute to a better understanding of whether public policies conceptualized as LMI can successfully fulfil the matching function between unemployed jobseekers and employers. As many countries have oriented their services to the needs of employers, it is important to understand how employers perceive candidates coming through such services. Concerns raised by previous research were that employers have a negative image of candidates coming through the PES (Larsen and Vesan, 2012). The results of this study demonstrate instead that, when the PES is proactive and recommends a candidate, it is able to improve the hiring chances for selected groups, although to a lesser extent than social contacts. It is therefore a

promising strategy for social policies to focus on the creation of connections between unemployed and employers. As a result, it can be argued that, for caseworkers at the PES or similar services, it is worthwhile to invest in establishing and maintaining a good relationship with employers to successfully help their clients into employment. In the experimental setting applied here, it could only be tested how a recommendation by a caseworker who is unknown to the employer influences employers' evaluation of a candidate. In reality, the effect of a recommendation might be even stronger when caseworkers and employers know each other personally and have established a trustful relationship.

To what extent can these results be generalised beyond the setting of this study? Although, this study focuses on recommendations from the public PES, it can be assumed that the results would also hold for private service providers as long as they are concerned with the placement of unemployed individuals. In fact, similar as in countries that have contracted out placement service, the Swiss PES is subject to strict evaluation criteria, which place high emphasis on swift labour market integration, therefore, the aims and challenges for the two providers are similar. Other factors that could influence the findings of the study are the low unemployment rate and the study's specific features. In countries with a higher unemployment rate, the PES might play a more important role in placing unemployed individuals into the labour market, and being unemployed might be less stigmatizing than in the context of an overall good labour market situation. Given the general trend towards activation and liberalization of the labour market (Bonoli, 2013), it can be assumed that the effects found here, in a country with a relatively liberal labour market and strong activation tendencies, are valid beyond the case of Switzerland.

Regarding the specificities of the study, the results might be affected by the unemployment duration and the experimental setting. The unemployment duration of candidates in this

study was rather short; for long-term unemployed individuals contact with employers generated through the PES might become even more important, as their connections to the labour market deteriorate with elapsed unemployment duration and employers become less sure about the productivity of these candidates. Similarly, other reasons for unemployment than the closure of the firm might have a more stigmatising effect, making recommendations and contacts to employers even more important. Finally, as the results stem from an experimental setting, employers were aware that these are not real but hypothetical decisions and so it must be kept in mind that the results reflect what employers intend to do, not what they are actually doing. In reality, bias against certain groups might be even higher as they combine several disadvantageous characteristics. Due to these considerations, it is assumed that the effects found here represent conservative estimates for the effect of social networks and the PES but more research is needed to fully understand how different organizational structures of the PES play out for different groups and in different contexts.

Endnotes

- 1) The speed of reintegration (50%), prevention of long-term unemployment (20%), prevention of benefit exhaustion (20%), prevention of repeated registration (10%).
- 2) The correlation matrix for the vignette dimensions can be found in the supplementary data.
- 3) A Hausman test for endogeneity was run between a fixed and a random-effects model. The test indicates that the coefficients of the two models are not statistically significantly different from each other.
- 4) The effect for the PES is significant at the 10%-level
- 5) In total 31 interviews were conducted between September 2016 and March 2018 (see chapter 3 for more details).

References

- Auer D, Bonoli G, Fossati F and Liechti F (2019) The matching hierarchies' model: Evidence from a survey experiment on employers' hiring intent of immigrant applicants. *International Migration Review* 53(1): 90-121.
- Auspurg K, Hinz T (2015) *Factorial Survey Experiments*. Los Angeles: SAGE.
- Auspurg K, Hinz T, Liebig S, and Sauer C (2014) The Factorial Survey as a Method for Measuring Sensitive Issues. In: Engel U, Jann B, Lynn P, Scherpenzeel A, and Sturgis P (eds) *Improving Survey Methods: Lessons from Recent Research*. New York: Routledge, 137–149.
- Autor DH, Houseman SN (2017) Do Temporary-Help Jobs Improve Labor Market Outcomes for Low-Skilled Workers? Evidence from 'Work First'. *Applied Economics* 2: 96–128.
- Behncke S, Froelich M, and Lechner M (2008) Public Employment Services and Employers: How Important Are Networks with Firms? *Zeitschrift für Betriebswirtschaft* 1:151–178.
- Behrenz L (2001) Who gets the job and why? An explorative study of employers' recruitment behavior. *Journal of Applied Econometrics* 4(2): 255–278.
- Behtoui A, Neergaard A (2010) Social Capital and Wage Disadvantages among Immigrant Workers. *Work, Employment and Society* 24(4): 761–779.
- Bellis A, Sigala M, and Dewson S (2011) *Employer Engagement and Jobcentre Plus*, London: Department for Work and Pensions.

- Bonet R, Cappelli P, and Hamori M (2013) Labor Market Intermediaries and the New Paradigm for Human Resources. *The Academy of Management Annals* 7(1): 341–392.
- Bonoli, G (2013) *The origins of active social policy. Labour market and childcare policies in a comparative perspective*. Oxford: Oxford University Press.
- Bonoli G, Hinrichs K (2012) Statistical Discrimination and Employers' Recruitment. *European Societies* 14(3): 338–361.
- Bonoli G, Liechti F (2018) Good intentions and Matthew effects: access biases in participation in active labour market policies. *Journal of European Public Policy* 25(6):894-911.
- Bonoli G, Turtschi N (2015) Inequality in social capital and labour market re-entry among unemployed people. *Research in Social Stratification and Mobility* 42: 87–95.
- Brekke I, Mastekaasa A (2008) Highly Educated Immigrants in the Norwegian Labour Market: Permanent Disadvantage? *Work, Employment and Society* 22(3): 507–526.
- Bunt K, McAndrew F, and Kuechel A (2007) *Jobcentre Plus Employer (Market View) Survey 2006-07*, Leeds, Department for Work and Pensions.
- Burt RS (1992) *Structural Holes. The Social Structure of Competition*. Cambridge MA: Harvard University Press.
- Castilla EJ, Lan GJ, and Rissing BA (2013) Social Networks and Employment: Mechanisms (Part 1). *Sociology Compass* 7(12): 1013–1026.
- Damelang A, Abraham M (2016) You Can Take Some of It with You!. *Zeitschrift für Soziologie* 45(2): 91–106.

- Di Stasio V, Gërxhani, K. (2015) Employers' social contacts and their hiring behavior in a factorial survey. *Social Science Research* 51: 93–107.
- Duell N, Tergeist P, Bazant U, and Cimper S (2010) Activation Policies in Switzerland. *OECD Social Employment and Migration Working Papers* 112: 1–139.
- Eurostat. (2017) *Unemployment Statistics 2017*. Available at:
http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics.
- Federal Office for Statistic. (2015) *STATENT Statistik der Unternehmensstruktur 2014*. Available at: <https://www.bfs.admin.ch/bfs/de/home/statistiken/industrie-dienstleistungen/erhebungen/statent.html>.
- Fernandez RM (2010) Creating Connections For the Disadvantaged: Networks and Labor Market Intermediaries at the Hiring Interface. *MIT Sloan School Working Paper* 4778-10: 1-60.
- Fernandez RM, Castilla EJ, and Moore P (2000) Social Capital at Work: Networks and Employment at a Phone Center. *American Journal of Sociology* 105(5): 1288–1356.
- Finn D (2005) The Role of Contracts and the Private Sector in Delivering Britain's "Employment First" Welfare State. In: Sol E, Westerveld M (eds) *Contractualism in employment services: a new form of welfare state governance*. The Hague: Kluwer Academic Publishers, 101–117.
- Gore T (2005) Extending Employability or Solving Employers' Recruitment Problems? Demand-Led Approaches as an Instrument of Labour Market Policy. *Urban Studies*, 42(2): 341–353.

Granovetter MS (1995) *Getting a job: A study of contacts and careers*. Chicago: The University of Chicago Press.

Hainmueller J, Hangartner D, and Yamamoto, T (2015) Validating vignette and conjoint survey experiments against real-world behaviour. *Proceedings of the National Academy of Science of the United States of America* 112(8): 2395–2400.

Harsløf I (2006) The impact of welfare and labour market institutions on informal recruitment in European youth labour markets. *European Societies* 8(4): 555–576.

Holzer HJ (2009) Workforce Development as an Antipoverty Strategy: What do we know? What should we do? *Focus* 26(2): 62–68.

Ingold J, Valizade D (2017) Employers' Recruitment of Disadvantaged Groups: Exploring the Effect of Active Labour Market Programme Agencies as Labour Market Intermediaries. *Human Resource Management Journal* 27(4): 530–547.

Jann B (2013) Predictive Margins and Marginal Effects in Stata. *11th Stata Users Group Meeting*, Potsdam, Germany. Available at:
https://www.stata.com/meeting/germany13/abstracts/materials/de13_jann.pdf

Kaltenborn B, Kaps P (2013) Steuerung der öffentlichen Arbeitsvermittlung. *SECO Publikationen Arbeitsmarktpolitik* 35:1-544.

Kingston G, McGinnity F, and O'Connell PJ (2015) Discrimination in the Labour Market: Nationality, Ethnicity and the Recession. *Work, Employment and Society*, 29(2): 213–232.

Larsen CA, Vesán P (2012) Why public employment services always fail. Double-sided

- asymmetric information and the placement of low-skilled workers in six European countries. *Public Administration* 90(2): 466–479.
- Lee W (2009) Private Deception and the Rise of Public Employment Offices in the United States, 1890-1930. In: Autor DH (ed.) *Studies of Labor Market Intermediation*. Chicago: Chicago University Press, 155–182.
- Levels M, van der Velden R, and Di Stasio V (2014) From School to Fitting Work: How Education-to-Job Matching of European School Leavers Is Related to Educational System Characteristics. *Acta Sociologica* 57(4): 341–361.
- Liechti F, Fossati F, Bonoli G and Auer D (2017) The signalling value of labour market programmes. *European Sociological Review* 33(2): 257–274.
- Lin N (2000) *Inequality in Social Capital*. Durham: Duke University.
- Marsden PV (1994) The Hiring Process - Recruitment Methods. *American Behavioral Scientist* 37(7): 979–991.
- Marsden PV, Gorman EH (2001) Social Networks, Job Changes, and Recruitment. In: Berg I, Kalleberg AL (eds) *Sourcebook of Labour Markets: Evolving Structures and Processes*. New York: Kluwer Academic/Plenum Publishers, 467–502.
- McGinnity F, Lunn PD (2011) Measuring discrimination facing ethnic minority job applicants: an Irish experiment. *Work, Employment and Society* 25(4): 693–708.
- Mouw T (2003) Social Capital and Finding a Job : Do Contacts Matter? *American Sociological Review* 68(6): 868–898.

- Müller W, Shavit Y (1998) The Institutional Embeddedness of the Stratification Process. In: Müller W, Shavit Y (eds) *From School to Work: A Comparative Study of Educational Qualifications and Occupational Destinations*. Oxford: Clarendon Press, 1–48.
- Neckerman KM, Fernandez RM (2003) Keeping a Job: Network Hiring and Turnover in a Retail Bank. *The Governance of Relations in Markets and Organizations* 20: 299–318.
- Oberholzer-Gee F (2008) Nonemployment stigma as rational herding: A field experiment. *Journal of Economic Behavior & Organization* 65(1): 30–40.
- Oesch D, von Ow A (2017) Social Networks and Job Access for the Unemployed: Work Ties for the Upper-Middle Class, Communal Ties for the Working Class. *European Sociological Review* 33(2): 275–291.
- Pellizzari M (2010) Do friends and relatives really help in getting a good job? *Industrial and Labor Relations Review* 63(3): 494–510.
- Rabe-Hesketh S, Skrondal A (2012) *Multilevel and Longitudinal Modeling using Stata*, College Station: Stata Press.
- Rees A (1966) Information Networks in Labor Markets. *The American Economic Review* 56(1): 559–566.
- Rubineau B, Fernandez RM (2015) How Do Labor Market Networks Work? In: Scott RA, Buchmann MC, and Kosslyn S (eds) *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource*. Hoboken: John Wiley & Sons, 1–15.
- Russell H, O’Connell PJ (2001) Getting a Job in Europe: The Transition from Unemployment to Work among Young People in Nine European Countries. *Work, Employment and*

Society 15(1): 1–24.

Seco (2016) *Die Lage auf dem Arbeitsmarkt Juni 2016*, Neuchâtel: State Secretariate for Economic Affairs.

Sol E (2005) Contracting out of Public Employment Systems from a Governance Perspective.

In: Bredgaard T, Larsen F (eds) *Employment Policy from Different Angles*. Copenhagen:

DJOF Publishing, 155–174.

Spence M (1973) Job Market Signaling. *The Quarterly Journal of Economics* 87(3): 355–374.

Van Berkel R (2010) The Provision of Income Protection and Activation Services for the

Unemployed in “Active” Welfare States. An International Comparison. *Journal of Social*

Policy 39(1): 17–34.

Van Berkel R, Ingold J, McGurk P, Boselie P, and Bredgaard T (2017) Editorial Introduction:

An Introduction to Employer Engagement in the Field of HRM. Blending Social Policy

and HRM Research in Promoting Vulnerable Groups’ Labour Market Participation.

Human Resource Management Journal 27(4): 503–513.

Van der Aa P, van Berkel R (2014) Innovating Job Activation by Involving Employers.

International Social Security Review 67(2): 11–27.

Wallander L (2009). 25 years of factorial surveys in sociology: A review. *Social Science*

Research 38(3): 505–520.

Wiborg ØN, Møberg RJ (2010) Social Origin and the Risks of Disadvantage in Denmark and Norway: The Early Life Course of Young Adults. *Work, Employment and Society*, 24(1): 105–125.

Appendix

Supplementary Material for the article ‘Connecting employers and workers: Can recommendations from the public employment service act as a substitute for social contacts in the labour market?’

List of Abbreviations

ALMP Active Labour Market Policies

LMI: Labour Market Intermediaries

PES Public Employment Service

VET Vocational Education and Training

Vignettes – Construction and Sampling

Table A1: Dimensions and Levels of the vignettes	
Dimension	Level
<i>Personal information</i>	
1) Gender	Male Female
2) Age	35, 40, 45, 50, 55 years old
3) Civil status	Single Married Divorced
4) Children	None 1 child 2 children 3 children
5) Nationality (random allocation of names)	Swiss Spanish Polish Turkish
6) Mother tongue	French/ German (depending on the region) French/ German and other language (Spanish/ Polish or Turkish for the foreign candidates)
7) Hobby	Nothing Trainer for the local life-saving swimmers Chairperson of a Swiss/Spanish/Polish or Turkish cultural association Volunteering for the Swiss Red Cross
<i>Work-related experience</i>	
8) Education	Lower <ul style="list-style-type: none"> - Building maintenance: compulsory schooling - HR-assistant: apprenticeship (EFZ/CFC) as merchandiser

	<ul style="list-style-type: none"> - Accountant: apprenticeship as merchandiser and federal diploma in Controlling and Accounting <p>Higher</p> <ul style="list-style-type: none"> - Building maintenance: Apprenticeship (EFZ/ CFC) as caretaker - HR-assistant: Federal Matura - Accountant: BA in business administration
9) Work experience	<p>Private sector</p> <p>Public sector</p>
Labour market related information	
10) Channel of application	<p>Advertisement</p> <p>Unsolicited application</p> <p>Referral by the local job center</p> <p>Referral by an employee</p>
11) ALMP participation	<p>Nothing</p> <p>Training</p> <ul style="list-style-type: none"> - Building maintenance: further education in facility management - HR-assistant: Further education in HR management - Accountant: CAS in accounting <p>Adapted employment programme: participation in a practice company</p> <p>Non-adapted employment programme: recycling of old clothes</p> <p>Subsidy: 40% of the salary is paid by the local job centre for the first 6 months</p>

Sampling of the vignettes

Since the whole vignette universe consist of 307200 combination a d-efficient sub-sample (d-efficiency = 90.07) of 720 vignettes was drawn from the total vignette universe. A d-efficient design maximizes the orthogonality of the profiles and allows to specify which parameters you want to be able to identify as some dimensions will be confounded when choosing only a sub-sample of vignettes (Auspurg and Hinz 2015). Our design allows us to estimate all two-way interactions as well as two three-way interactions. The 720 vignettes were blocked into 180 blocks of 4 vignettes each for each job. These blocks were than randomly distributed to the survey participants. Every participant rated 3 blocks (one for each job) of 4 vignettes, 12 vignettes in total. Since we draw a sub-sample of vignettes the vignettes dimensions are correlated with each other. In table A3 Cramer's V for the correlation is reported, all correlations are statistically insignificant.

Table A2 : Correlation of vignette dimensions

	1	2	3	4	5	6	7	8	9	10	11
1 ALMP	1										
2 Channel	0.020	1									
3 Gender	0.014	0.009	1								
4 Age	0.019	0.012	0.011	1							
5 Children	0.012	0.011	0.026	0.015	1						
6 Civil Status	0.021	0.008	0.014	0.029	0.009	1					
7 Hobby	0.015	0.015	0.011	0.019	0.011	0.006	1				
8 Education	0.013	0.016	- 0.000	0.019	0.006	0.014	0.015	1			
9 Nationality	0.014	0.012	0.008	0.012	0.019	0.012	0.024	0.006	1		
10 Experience	0.006	0.021	0.000	0.010	0.013	0.008	0.006	- 0.006	0.013	1	
11 Language	0.020	0.009	0.000	0.019	0.010	0.004	0.020	0.000	0.015	- 0.011	1

Note: All variables are categorical, Cramer's V is reported, all correlations are not statistically significant.

Table A3: Description of tasks

Occupation	Description
Accountant	Imagine you have an open position for an accountant in the company you are working in. The tasks are the following: direct the affairs of factory and financial accounting, deliver monthly and quarterly reports as well as income and annual financial statement, calculating and visualization of key performance indicators. You are involved in the hiring process and are asked to evaluate the subsequently described candidates. All candidates have completed their education in the <i>German/French-speaking (depends on language in which survey was taken)</i> part of Switzerland, are currently unemployed for a period of six months and have lost their previous position due to the closure of the firm they were previously working.
HR- assistant	Imagine you have an open position for an HR-assistant in the company you are working in. The tasks are the following: administrative tasks in the area of human resources, furnish particulars to job applicants, preselection of job applications, settle wage and social contributions, draft working contracts. You are involved in the hiring process and are asked to evaluate the subsequently described candidates. All candidates have completed their education in the <i>German/French-speaking (depends on language in which survey was taken)</i> part of Switzerland, are currently unemployed for a period of six months and have lost their previous position due to the closure of the firm they were previously working.
Caretaker	Imagine you have an open position for a building caretaker in the company you are working in. The tasks are the following: cleaning of stairway, small repair work (change light bulb etc.), gardening work (cut the grass, clip the hedge, clear of weeds). You are involved in the hiring process and are asked to evaluate the subsequently described candidates. All candidates have completed their education in the <i>German/French-speaking (depends on language in which survey was taken)</i> part of Switzerland, are currently unemployed for a period of six months and have lost their previous position due to the closure of the firm they were previously working.

Table A4: Example of vignette (translated version, original is in German or French)

Please indicate for this candidate the probability that you would invite this candidate for a job interview (0=very unlikely, 10=very likely) as well as the salary that you think is appropriate.

Candidate Building Caretaker

Channel of application Mister Pedro Martinez is recommended to you by PES
Personal information He is 45 years old, has no kids and is married
Education He has a vocational training degree as building maintenance specialist
Experience He has 8 years of experience as caretaker in the private sector
Language Mister Martinez speaks German
Hobby In his leisure time he engages at the Swiss Red Cross as a driver
Additional information While looking for a job he is working part time as a cashier in a supermarket.

Invitation											Monthly gross salary, 100%
0	1	2	3	4	5	6	7	8	9	10	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Table A5: Experimental protocol

First Screen	Description of the 1 st job and tasks (see table A3)
Second Screen	Presentation of 1 st vignette for the 1 st job(see table A4)
Third Screen	Presentation of 2 nd vignette for the 1 st job
Forth screen	Presentation of the 3 rd vignette for the 1 st job
Fifth screen	Presentation of the 4 th vignette for te 1 st job

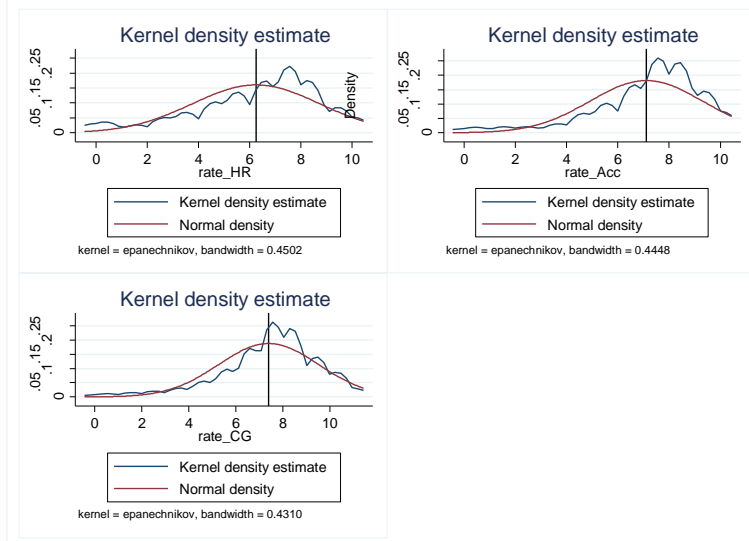
This procedure was repeater for the other two jobs. The order of the job and within the job, the order of the vignette was randomized.

Analysis

Descriptive Statistics, Data, Models and Sensitivity Analysis

Gender	Female:	62.79%
	Male:	37.21%
Age	Mean	45.83
	Sde	9.54
Nationality	Swiss	87.16%
	Italian	1.38%
	German	2.75%
	French	3.67%
	Portuguese	0.69%
	Spanish	0.46%
	Serbia	0.23%
	others	3.67%
Education	Apprenticeship	2.97%
	Upper Secondary II vocational track	1.14%
	Upper Secondary II general track	39.50%
	Federal diploma	25.11%
	Applied University	29.00%
	University	
Size of firm	Small (0-9 employees)	9.72%
	Small-Medium (10-49 employees)	6.90%
	Medium to large (50-249 employees)	31.19%
	Large (>249 employee)	52.19%
Sector of firm	Gastronomy	1.07%
	Baking and Insurance	10.81%
	Construction	2.44%
	Real Estate and Consulting	11.42%
	Health	6.54%
	Retail	5.94%
	Chemistry and Synthetic	0.91%
	Education	5.18%
	Metal, Machine, Vehicle	7.61%
	Electronics and Watches	3.20%
	Public Administration	13.85%
	Transportation	2.13%
	Leather and Wood	0.46%
	Other	28.46%

Graph A1: Distribution of dependent variable



Note: This graph shows the rating for the different occupations.

Table A7: Multilevel models for the influence of candidate's characteristics on employers' rating of the candidate

	(1) Model 1 Basic	(2) Model 2: Interaction Occupation	(3) Model 3: Interaction Education	(4) Model 4: Interaction Nationality
Recommendation (Ref. none)				
Current employee	0.251*** (0.056)	0.344*** (0.096)	0.178+ (0.093)	0.338** (0.111)
PES	0.102+ (0.054)	0.258** (0.094)	0.056 (0.088)	0.081 (0.106)
ALMP (Ref. none)				
Training	0.261*** (0.077)	0.262*** (0.077)	0.237** (0.089)	0.258*** (0.077)
Subsidy	0.181* (0.078)	0.181+ (0.078)	0.174+ (0.091)	0.181* (0.078)
Adap_Occup	0.043 (0.077)	0.042 (0.077)	0.046 (0.089)	0.042 (0.077)
NAdap_Occup	-0.235** (0.078)	-0.235** (0.078)	-0.245** (0.091)	-0.237** (0.078)
Job	-0.025 (0.077)	-0.024 (0.077)	-0.054 (0.090)	-0.026 (0.077)
Education (Ref. specific education)				
General education	0.107* (0.045)	0.109* (0.045)	-0.247** (0.076)	0.107* (0.045)
Gender (Ref. male)				
female	0.022 (0.045)	0.022 (0.045)	0.209*** (0.052)	0.023 (0.045)

Age (Ref. 35)				
40	-0.004 (0.071)	-0.006 (0.071)	-0.015 (0.082)	-0.004 (0.071)
45	-0.033 (0.070)	-0.033 (0.070)	-0.040 (0.082)	-0.034 (0.070)
50	-0.154* (0.071)	-0.153* (0.071)	-0.066 (0.083)	-0.155* (0.071)
55	-0.553*** (0.070)	-0.554*** (0.070)	-0.538*** (0.081)	-0.554*** (0.070)
Children (Ref. none)				
1 child	-0.018 (0.064)	-0.018 (0.064)	-0.040 (0.074)	-0.017 (0.064)
2 children	-0.093 (0.064)	-0.092 (0.063)	-0.161* (0.074)	-0.093 (0.064)
3 children	-0.122+ (0.064)	-0.122+ (0.064)	-0.173* (0.075)	-0.119+ (0.064)
Civil Status (Ref. none)				
Divorced	0.021 (0.055)	0.021 (0.055)	0.019 (0.064)	0.022 (0.055)
Single	-0.198*** (0.055)	-0.198*** (0.055)	-0.140* (0.064)	-0.198*** (0.055)
Hobby (Ref. none)				
Swim	0.179** (0.064)	0.179** (0.064)	0.179** (0.064)	0.100 (0.075)
Cultural	0.027 (0.064)	0.025 (0.064)	0.027 (0.064)	-0.097 (0.074)
Volunteer	0.148* (0.064)	0.148* (0.064)	0.148* (0.064)	0.049 (0.075)
Nationality (Ref. Swiss)				
not Swiss	-0.160** (0.052)	-0.140+ (0.074)	-0.160** (0.052)	-0.230*** (0.061)
Experience (Ref. public)				
private	0.023 (0.045)	0.023 (0.045)	0.066 (0.053)	0.024 (0.045)
Language (Ref. German)				
Native CH&other	-0.006 (0.045)	-0.005 (0.045)	0.014 (0.053)	-0.006 (0.045)
Occupation (Ref. Accountant)				
HR	-0.859*** (0.053)	-0.751*** (0.077)	-0.854*** (0.050)	-0.860*** (0.053)
CG	0.243*** (0.054)	0.323*** (0.077)		0.242*** (0.054)
Interaction Terms				
Interaction Education				
Referral # general education			0.116 (0.131)	
Job Center # general education			0.158	

			(0.126)	
Interaction Nationality				
Referral # not Swiss				-0.116 (0.128)
Job Center # not Swiss				0.029 (0.124)
Interaction occupation				
Referral # HR		-0.197 (0.135)		
Referral # CG		-0.081 (0.137)		
Job Center # HR		-0.230 ⁺ (0.132)		
Job Center # CG		-0.238 ⁺ (0.134)		
Constant	7.170 ^{***} (0.137)	7.081 ^{***} (0.140)	7.319 ^{***} (0.159)	7.131 ^{***} (0.142)
Variance Constant	0.449 ^{**} (0.034)	0.443 ^{**} (0.034)	0.568 ^{**} (0.035)	0.443 ^{**} (0.034)
Variance Residual	0.488 ^{***} (0.010)	0.480 ^{***} (0.010)	0.411 ^{***} (0.012)	0.480 ^{***} (0.010)
ll	-11443.7	-11395.3	-7560.0	-11397.3
aic	22945.4	22856.5	15180.0	22856.6
N vignettes	5674	5674	3798	5674
N respondents	537	537	513	537

Note: Models with random intercept and clustered standard errors at the respondent level. Standard error in parentheses. *** significant at the 0.1%-level, ** significant at the 1%level, *significant at the 5%-level, + significant at the 10%-level.

Table A8: Random- and fixed-effects models

	(1) Model 1: Random effects b/se	(2) Model 2: Fixed-effects b/se
Recommendation (Ref. none)		
Current Employee	0.251*** (0.056)	0.244*** (0.058)
PES	0.102+ (0.054)	0.108+ (0.056)
ALMP (Ref. none)		
Training	0.261*** (0.077)	0.278*** (0.081)
Subsidy	0.181* (0.078)	0.192* (0.075)
Adap_Occup	0.043 (0.077)	0.051 (0.075)
NAdap_Occup	-0.235** (0.078)	-0.227** (0.079)
Job	-0.025 (0.077)	-0.020 (0.079)
Education (Ref. VET)		
General education	0.107* (0.045)	0.109* (0.052)
Gender (Ref. male)		
female	0.022 (0.045)	0.018 (0.047)
Age (Ref. 35)		
40	-0.004 (0.071)	-0.000 (0.067)
45	-0.033 (0.070)	-0.028 (0.068)
50	-0.154* (0.071)	-0.144+ (0.075)
55	-0.553*** (0.070)	-0.556*** (0.075)
Children (Ref. none)		
1 child	-0.018 (0.064)	-0.027 (0.070)
2 children	-0.093 (0.064)	-0.104 (0.070)
3 children	-0.122+ (0.064)	-0.125+ (0.069)
Civil Status (Ref. none)		
Divorced	0.021 (0.055)	0.021 (0.050)
Single	-0.198** (0.070)	-0.194*** (0.075)

	(0.055)	(0.051)
Hobby (Ref. none)		
Swim	0.179**	0.169**
	(0.064)	(0.060)
Cultural	0.027	0.014
	(0.064)	(0.065)
Volunteer	0.148*	0.140*
	(0.064)	(0.063)
Nationality (Ref. Swiss)		
not Swiss	-0.160**	-0.169***
	(0.052)	(0.048)
Experience (Ref. public)		
private	0.023	0.021
	(0.045)	(0.049)
Language (Ref. German)		
Native CH&other	-0.006	-0.004
	(0.045)	(0.044)
Occupation (Ref. Accountant)		
HR	-0.859***	-0.868***
	(0.053)	(0.085)
CG	0.243**	0.226**
	(0.054)	(0.082)
Constant	7.146**	7.195***
	(0.136)	(0.122)
Variance Constant	2.425**	
	(0.167)	
Variance Residual	2.612**	
	(0.052)	
<hr/>		
Sigma u		1.679
Sigma e		1.619
Rho		0.518
<hr/>		
ll	-11397.9	-10490.0
aic	22853.8	21032.0
N vignettes	5674	5674
N Respondents	537	537
Note: Both models include clustered standard errors at the respondent level.		
Standard errors in parentheses.		
***significant at the 0.1%-level; **significant at the 1%-level, *significant at the 5%-level, +significant at the 10%-level.		

Table A9: Model with control variables at respondents level

	(1) Model 1: Controls b/se	(2) Model 2: Interaction PES b/se
Vignette Variables		
ALMP (Ref. none)		
Training	0.334*** (0.083)	0.332*** (0.083)
Subsidy	0.245** (0.084)	0.242** (0.084)
Adap_Occup	0.044 (0.082)	0.041 (0.082)
NAdap_Occup	-0.247** (0.084)	-0.249** (0.084)
Job	-0.000 (0.083)	-0.000 (0.083)
Recommendation (Ref. none)		
Current employee	0.230** (0.060)	0.274*** (0.068)
PES	0.125* (0.058)	0.133* (0.067)
Education (Ref. specific education)		
General education	0.082+ (0.049)	0.082+ (0.049)
Gender (Ref. male)		
female	0.007 (0.048)	0.008 (0.048)
Age (Ref. 35)		
40	-0.026 (0.076)	-0.024 (0.076)
45	-0.049 (0.075)	-0.049 (0.075)
50	-0.190* (0.076)	-0.191* (0.076)
55	-0.618*** (0.075)	-0.617*** (0.075)
Children (Ref. none)		
1 child	-0.017 (0.068)	-0.017 (0.068)
2 children	-0.090 (0.068)	-0.090 (0.068)
3 children	-0.129+ (0.068)	-0.130+ (0.068)
Civil Status (Ref. none)		

Divorced	0.046 (0.059)	0.045 (0.059)
Single	-0.202** (0.059)	-0.200** (0.059)
Hobby (Ref. none)		
Swim	0.147* (0.068)	0.149* (0.068)
Cultural	0.018 (0.068)	0.019 (0.068)
Volunteer	0.129+ (0.069)	0.129+ (0.069)
Nationality (Ref. Swiss)		
not Swiss	-0.176** (0.056)	-0.177** (0.056)
Experience (Ref. public)		
private	0.027 (0.048)	0.030 (0.049)
1b.Language vignette	0.000	0.000
Language (Ref. German)		
Native CH&other	0.001 (0.048)	0.003 (0.048)
Occupation (Ref. Accountant)		
HR	-0.861*** (0.057)	-0.860*** (0.057)
CG	0.258** (0.057)	0.260** (0.057)
Respondent level		
Year of birth	0.019+ (0.011)	0.019+ (0.011)
Sector of activity (Ref. Gastronomy)		
Banking and Insurance	0.816 (0.675)	0.801 (0.675)
Construction	0.195 (0.786)	0.181 (0.786)
Consulting	1.225+ (0.669)	1.215+ (0.669)
Health	0.815 (0.696)	0.807 (0.696)
Retail	0.291 (0.697)	0.282 (0.698)
Chemistry & Synthetic	0.814 (1.002)	0.802 (1.002)
Education	1.111 (0.732)	1.098 (0.732)

Metal and Machine	0.912 (0.681)	0.901 (0.681)
Electronics	0.039 (0.750)	0.032 (0.750)
Public Admin	1.360* (0.656)	1.349* (0.657)
Transportation	1.257+ (0.756)	1.244+ (0.756)
Leather and Wood	1.398 (1.250)	1.388 (1.250)
Other	0.929 (0.643)	0.918 (0.643)
Experience	-0.001 (0.014)	-0.001 (0.014)
Educational attainment (Ref. Mandatory School)		
Applied High School Diploma	0.814 (0.849)	0.812 (0.849)
High School Diploma	1.001 (1.017)	1.001 (1.017)
Secondary Education II	-0.049 (0.496)	-0.049 (0.496)
Applied University	0.030 (0.506)	0.031 (0.506)
University	0.235 (0.502)	0.235 (0.502)
Gender (Ref. Female)		
Male	-0.102 (0.164)	-0.103 (0.164)
Announce to PES	0.061 (0.185)	0.117 (0.194)
Announce to PES * Employee referral		-0.186 (0.140)
Announce to PES * PES referral		-0.038 (0.139)
Constant	-30.318 (22.118)	-30.538 (22.120)
Variance Constant	0.370*** (0.038)	0.371*** (0.038)
Variance Residual	0.490*** (0.010)	0.489*** (0.010)
ll	-10012.5	-10011.6
aic	20127.0	20129.2

N vignettes	4989	4989
N respondents	537	537

Notes:

Standard errors in parentheses.

***significant at the 0.1%-level; **significant at the 1%-level, *significant at the 5%-level, +significant at the 10%-level.

Table A10 : Contrasts of predictive margins

	Contrast	Std. Error
Occupations		
Employee recommendation		
Accountant	0.344**	0.096
HR	0.147	0.096
Housekeeper	0.263**	0.097
PES recommendation		
Accountant	0.258**	0.094
HR	0.028	0.093
Housekeeper	0.020	0.095
Education		
Employee recommendation		
Vocational education	0.178*	0.093
General education	0.295**	0.092
PES recommendation		
Vocational education	0.056	0.088
General education	0.214**	0.090
Migrants		
Employee recommendation		
Native	0.338**	0.111
Non-native	0.222**	0.064
PES recommendation		
Native	0.081	0.106
Non-native	0.110*	0.063

Notes: Contrast of predictive margins from model 2, 3, 4 in table A7. **Contrast significant on the 95%-level, *contrast significant on the 90% level.

The reference category is always a candidate without recommendation. For example, candidates applying to an accountant position with an employee recommendation were on average 0.344 point higher rated than those applying to the same position but without recommendation.

Table A11 : Contrasts of predictive margins

	Contrast	Std. Error
Education General vs vocational		
No recommendation	-0.247**	0.076
Employee recommendation	-0.130	0.107
PES recommendation	-0.089	0.103
Non-natives vs natives		
No recommendation	-0.140*	0.074
Employee recommendation	-0.255**	0.106
PES recommendation	-0.111	0.100
Accountant vs HR		
No recommendation	-0.751**	0.077
Employee recommendation	-0.948**	0.110
PES recommendation	-0.981**	0.106
Accountant vs. housekeeper		
No recommendation	0.323**	0.077
Employee recommendation	0.242	0.111
PES recommendation	0.086***	0.108

Notes: Contrast of predictive margins from model 2, 3, 4 in table A7. **Contrast significant on the 95%-level, *contrast significant on the 90% level.

Chapter 2

The signalling value of labour market programmes

Fabienne Liechti, Flavia Fossati, Giuliano Bonoli, and Daniel Auer⁴

2017, *European Sociological Review* 33(2): 257-274

Abstract

This paper investigates how employers interpret participation in labour market programmes when assessing job candidates. We hypothesise that employers use programme participation to sort applicants. On the basis of a factorial survey experiment, we simulated the recruitment process for two positions requiring different skills in the hotel sector. Recruiters were asked to evaluate fictitious candidates that differ in their participation in active labour market programmes. Our results show that employers take programme participation into account when assessing a candidate. Its impact can be positive or negative depending on the candidate's distance from the labour market. Candidates more distant from the labour market are evaluated better if they have participated in a programme. For stronger candidates, instead, participation can act as a stigma and worsen the assessment made by the recruiter.

⁴ The authors would like to thank Katrin Auspurg and Andreas Schneck for their generous advice and feedback whilst planning this study. This article also benefitted a lot from the comments of the three anonymous reviewers. The authors also would like to thank Daniel Oesch, Rafael Lalive, Dominik Hangartner, and the participants of the 'Factorial Survey in Labour Market Research' workshop at the University of Lausanne in May 2015. This work was supported by the National Centers of Competence in Research – The Migration-Mobility Nexus 'NCCR on the move', which is financed by the Swiss National Science Foundation (Grant number: 51NF40-142020).

Introduction

Over the last three decades, OECD countries have invested vast amounts of public funds in labour market programmes for unemployed people. These programmes, which aim at bringing jobless people back into employment, include a broad range of interventions, such as training courses, wage subsidies and employment programmes in the public or non-profit sector. These interventions, collectively known as “active labour market policies” (ALMPs), have been subjected to detailed scrutiny by several disciplines of the social sciences. However, it is somewhat surprising that very little research has focused on the perception employers have of these policies. There are a few exceptions (e.g. Ingold and Stuart, 2014; Martin, 2004; van der Aa and Berkel, 2014) but the reality is that we know little about what employers think of these important labour market instruments. Yet, their perspective seems essential, since it is ultimately employers who decide who gets a job and who does not.

In particular, we do not know how employers consider participation in active labour market programmes when assessing an applicant. Does participation improve the assessment of a candidate by a recruiter? Intuitively, since these interventions aim at increasing jobseekers’ chances to find employment, we would expect a positive impact of participation on employers’ perceptions. On the other hand, however, since some of these programmes are meant for disadvantaged jobseekers, participation could also act as a stigma or negative signal.

Theoretically, we rely on literature on statistical discrimination and sorting. When recruiting new staff, employers act in a situation of uncertainty, which is induced by asymmetric information. They need to uncover the true qualities and productivity of the various candidates in a short time, with the latter having a strong incentive to hide their weaknesses and to emphasize their strengths. In such a context, employers apply statistical reasoning and

use observable characteristics (signals and group characteristics) to sort the applicants according to unobserved abilities (Weiss, 1995).

In empirical studies, employers' reliance on signals like education (e.g. di Stasio, 2014) and group characteristics like ethnic origin (for an overview, see Zschirnt and Ruedin, 2016) are well documented. There is, however, little research on how employers interpret the information "participated in a labour market programme". The few available studies, which focus mostly on specific sub-groups or programmes, suggest that at least in some cases programme participation conveys a negative signal that can offset or even exceed the potential benefit of the programme. This is the case with wage subsidies (Burtless, 1985; Baert, 2016) or for participation in low ambition training (Falk et al., 2005).

In this paper we take this line of inquiry further in two ways. First, we adopt a more encompassing perspective and compare employers' views on the most common types of ALMPs. Second, we examine how participation in labour market programmes is interpreted by employers in interaction with different jobs and candidate features. In fact, as we will argue below we expect employers' interpretation of participation in these programmes to depend both on the characteristics of the job and on the candidate's distance from the labour market.

Usually, the effectiveness of these programmes is assessed by analysing their impact on participants' employment rate (for a synthesis see Greenberg et al., 2003; Kluve, 2010). Kluve (2010) shows that wage subsidies, as well as services and sanctions, are most effective in reintegrating the unemployed into the labour market. Training programmes have a modest positive effect, while employment programmes tend to be detrimental. Whether a programme is effective or not, eventually depends on two factors: the behaviour of a candidate, that is, programme participation might increase job search skills, human capital or motivation, and

the perception employers have of the candidate. In our study, we contribute to the understanding of the second important determinant of effectiveness: employers' interpretation of programme participation.

Empirically, we rely on a factorial survey experiment, carried out with employers in the hotel sector in Switzerland, which we describe in detail below. The article proceeds as follows. In the next section, we briefly review the relevant literature. We then provide some information on ALMPs in Switzerland (section 3) and present our theoretical framework (section 4). Section 5 presents the experimental design and the estimation strategy. In section 6, we present and discuss our results and we conclude in section 7 by summarising the main contribution of the paper and highlighting some promising avenues for future research.

Literature

The selection of candidates is a task that involves uncertainty because the productivity and other qualities of a candidate are not directly observable in the initial stage of the recruitment process. What employers can observe are the applicant's group memberships, such as age or gender, as well as some imperfect signals of a worker's productivity, like education, or the impression he or she makes at the job interview. According to the model of statistical discrimination, when confronted with incomplete information, an employer will turn to statistical reasoning to assess the candidates. Thereby, entire groups may be avoided if their average productivity is assumed to be too low. In addition, employers are expected to rely on signals that convey relevant information (Arrow, 1971; Spence, 1973). For example, educational attainment may signal certain qualities (cognitive and non-cognitive skills). A vast empirical literature suggests that employers interpret and consider a large variety of observable candidate characteristics.

To identify the information employers use to select candidates, one needs to analyse employers' behaviour while holding preferences and search behaviour of the candidates constant (Kübler and Schmid, 2015). This is the case in experimental settings, where the researcher manipulates the variable of interest and controls the information available to the employer. Studies relying on experimental settings have demonstrated that employers make use of all sorts of observable information when sorting candidates. Well investigated is the effect of ethnicity (see Bertrand and Duflo, forthcoming; Zschirnt and Ruedin, 2016). Some experimental studies are also available for the effect of gender (e.g. Riach, 2015), age (e.g. Ahmed et al., 2012; Lahey, 2008), unemployment (Oberholzer-Gee, 2008; Eriksson and Rooth, 2014) and sexual orientation (e.g. Baert, 2015; Weichselbaumer, 2003).

Regarding the participation in labour market programmes, there is only selective evidence for specific measures. In Germany, Kübler and Schmid (2015) show that youths who have been out of school for two years, benefit from participating in publicly funded training programmes. In Switzerland, Falk et al. (2005) found that unemployed people, who attended a course on basic computing skills and then applied for positions that actually required such skills, were less likely to be invited for a job interview after the course than before. The most likely explanation of this result is that employers interpreted participation in this course as a signal of limited competence in computing.

Recent studies on the effect of wage subsidies provide a similarly mixed picture. In Switzerland, wage subsidies were found to be ineffective or even counterproductive for applicants at the end of their vocational training, but helpful for clients of a job coaching service (Deuchert and Kauer, 2014). In a Belgian study, disabled candidates with and without a subsidy reached about the same call-back rate (Baert, 2016). The authors of these studies

explain the somewhat counterintuitive results by distinguishing between a positive substantive effect (reduction of labour cost) and a negative signalling effect (problematic candidate) that in many cases even each other out.

The limited number of studies available on employers' perception of labour market programmes suggests that participation can be seen positively or negatively, and that the substantive positive effect may be offset by the negative signal associated with some of these programmes. Existing studies have focused on specific subgroups like youths or disabled, and on a limited range of programmes, mostly wage subsidies. By providing a systematic assessment of employers' perceptions of all the main programmes and by focusing on interactions with job type and candidate characteristics, our study constitutes a step forward in this strand of analysis.

Labour market programmes in Switzerland

Over the last 20 years, Switzerland has developed a rather comprehensive system of ALMPs (Bertozzi et al., 2008). The public employment service (PES) and the administration of ALMPs are decentralized at the cantonal level. Compared to other OECD-countries Switzerland has a generous benefit system with a strong emphasis on job-search requirements and incentives to move into jobs. The ratio of active to passive labour market expenditure is above OECD-average and over a quarter of all registered jobseekers participate in at least one activation programme (Duell et al., 2010). Switzerland is a country with low unemployment rates, in fact, at the time of our experiment, in November 2015, the unemployment rate reached merely 3.4% (SECO, 2015).

In order to receive unemployment benefits, eligible persons must register with the local PES. They are then assigned to a caseworker who monitors their job search activities. The

caseworker can offer participation in a labour market programme, but can also impose it. In theory, programmes are chosen together with the jobseeker and should ideally reflect his or her career plan. However, labour market programmes tend to be used also as monitoring tools and for putting pressure on claimants. Typically, jobseekers who are believed to engage in undeclared work or are found to be insufficiently active in their job search can be required to participate in low skill unrewarding employment programmes provided by the public or non-profit sector. If jobseekers refuse to participate, they can be subjected to sanctions consisting of benefit reductions¹.

A theoretical framework

Building on the literature discussed above, in this section we develop a theoretical framework that allows us to generate hypotheses with regard to how employers are likely to interpret and thus make use of the information pertaining to participation in labour market programmes.

We expect programme participation to convey three types of potentially relevant information to an employer. *First*, participation can have a substantive effect. This may refer to an improvement in human capital or a reduction in the labour costs (with a wage subsidy). In principle, if we rule out the possibility that participation destroys human capital, this effect cannot be negative. *Second*, participation can *directly* signal a quality of the applicant, such as a given level of cognitive skills or motivation. For instance, to be able to follow a foreign language course or a computing course, a given level of skills is required. This effect is likely to be positive, but can also be negative, like in the study by Falk et al. (2005) on basic computing courses mentioned above. *Third*, participation can convey information with regard to the assessment a caseworker makes of an applicant. Some programmes are more likely to be used for job-seekers who are deemed difficult to place or unmotivated. In this respect, participation

could also act as a negative signal. Thereby, ALMPs introduce a third actor in the signalling process, the caseworker, whose assessment is likely to be related to the true qualities of the applicant and hence considered by recruiters. We will refer to this indirect effect as the “caseworker signalling effect”.

The overall effect of programme participation on the assessment that an employer makes of a candidate will thus depend on the way in which the three effects described above are combined. This is likely to vary across programmes, but also among applicants with different characteristics. Let us first look at how we expect the three effects to play out in the three different programme types that are investigated in our study.

Training programmes - There are various types of training programmes, including language courses and short vocational courses in various professions (Bieri et al., 2006). To access training, jobseekers have to be proactive by proposing a particular course to the caseworker. Unmotivated jobseekers are unlikely to be assigned to training programmes. Assignment thus implies a positive caseworker signalling effect. In addition, since some cognitive skills are needed to be considered for a course (Focus group interviews¹), participation acts as a positive signal regarding the applicant’s qualities. Consequently, we expect the overall impact of participation in training programmes to be positive, because of both, the substantive value of the course in terms of human capital improvement and because of its signalling value, direct or in terms of the caseworker’s assessment.

Wage subsidies - For unemployed people who are considered particularly difficult to place, the PES can provide a wage subsidy of up to 40% of the wage costs for the first 6 months of employment, which can produce a positive substantive effect. As mentioned above, however, previous research has shown that the financial incentive of a wage subsidy may be offset by

its negative signalling effect (Baert, 2016). Possibly, the fact that someone is entitled to a wage subsidy reflects a negative assessment by the caseworker. Therefore, whether the overall effect is positive or negative depends on whether the substantive or the negative caseworker effect prevails.

Temporary employment programmes - Employment programmes are provided by the public (or non-profit) sector and aim to provide an activity to jobseekers. Officially, their objective is to maintain the skills of unemployed people and they could therefore produce a positive substantive effect. In reality, these programmes entail mostly low skill activities, such as recycling or crafting objects. In this respect, participation (especially completion of the programme) may be interpreted as acceptance of physically demanding and unrewarding work (positive signal of applicant's qualities). Although jobseekers can participate on a voluntary basis, these programmes are often imposed by caseworkers to jobseekers that seem unmotivated in their job search effort (Focus group interviews¹) and therefore entail a negative caseworker signalling effect.

Table 1 summarises our hypotheses about how programme participation affects employers' perception of a candidate. Participation in a particular programme can generate different effects which either go in the same direction (training programme) or against each other (employment programmes and wage subsidies). Table 1 shows that we expect some programmes (employment programmes and wage subsidies) to generate opposite effects. We argue that the outcome of these contrasting effects will depend on the interaction between the type of programme and (1) the candidate's distance from the labour market, and (2), the job someone applies to.

Table 1: Expected effects of programme participation on employers' assessment of candidates

Programme	Type of effect	Hypothesised interpretation	Sign of effect
Training	Substantive effect	Increase in human capital	Positive
	Signal of applicant's qualities	Motivation / cognitive skills	Mostly positive
	Signal of caseworker's assessment	Motivation / cognitive skills	Positive
Wage subsidy	Substantive effect	Reduction in labour costs	Positive
	Signal of applicant's qualities	<i>Nil</i>	
	Signal of caseworker's assessment	Low productivity, hard to place worker	Negative
Temporary employment programme (low skill)	Substantive effect	Increase in or preservation of human capital	Positive
	Signal of applicant's qualities	Motivation and acceptance of unrewarding working conditions	Mostly positive
	Signal of caseworker's assessment	Lack of motivation; suspicion of undeclared work	Mostly negative

First, by distance from the labour market we mean the fact of displaying socio-demographic characteristics that are known to be associated with bigger difficulties in re-entering the labour market, such as old age, immigrant background or low education (see e.g. Oesch and Baumann, 2015). In a nutshell, we expect that candidates perceived as more distant from the labour market will benefit more respectively suffer less from programme participation. We argue that this is due to a change in the caseworker signalling effect. Since candidates closer to the labour market (like a young native jobseeker with upper-secondary education) are expected to find employment without help, participation in a low skilled temporary employment programme or entitlement to a wage subsidy are most likely interpreted as a

negative assessment by the caseworkers. In contrast, for candidates who are more distant from the labour market (e.g. an older migrant with compulsory education only), wage subsidies and low skilled employment programmes are common. These profiles are the intended target group of such programmes. As a result, the signal of the caseworker's assessment is consistent with the profile of the candidate and does not add any new information for the employer. In the latter case, we can expect the other two effects, substantive and direct signal of the candidate's qualities, to prevail. Accordingly, the overall effect should, by tendency, be positive.

Second, employers can deduce applicant's qualities from the job this person is applying to. Jobseekers applying to low-skilled, unrewarding, badly paid jobs can be assumed to face obstacles in re-entering the labour market. Otherwise they would apply to better jobs. As a result, we expect candidates who apply for this type of low quality jobs to gain more respectively suffer less from programme participation than candidates applying for more attractive mid-skilled positions.

To sum up these complex patterns of interactions, we can say that the more distant from the labour market a candidate is, the less likely he or she is to suffer from the negative effect of a caseworker's assessment and the more likely he or she profits from the potentially positive effects (both substantive and signalling). In contrast, the more a candidate is perceived as being close to the labour market the more he or she is likely to suffer from the caseworker signalling effect in a way that can offset the other, potentially positive, effects.

Obviously, our reasoning assumes that employers are aware of the use that is made of labour market programmes by the PES. This assumption is reasonable, since the hotel sector is one with unstable employment and recruitment difficulties, and we can expect the majority of

hotels to have had contact with the PES at some stage. Qualitative studies have shown that in general employers know how the PES operates (Larsen and Vesan, 2012).

Study design

Our study is based on a factorial survey (FS) experiment. FS are a widely used method to study decisions and preferences, but has seldom been applied to study employers' hiring behaviour (for exceptions see Biesma et al., 2007; Damelang and Abraham, 2016; de Wolf and van der Velden, 2001; Di Stasio and Gërxhani, 2015; Di Stasio, 2014, Protsch and Solga, 2014). In such experiments, participants are presented with descriptions of fictitious candidates and are asked to evaluate them. Candidates' profiles consist of a random combination of several characteristics. FS have the advantage to be less prone to social desirability bias than item based questionnaires. Auspurg et al. (2014) show that for socially sensitive phenomena, such as gender-based wage discrimination, FS minimized social desirability bias compared to direct questions. A further advantage of FS is that one can fully control the information available to the respondent, thereby limiting potential biases due to unobservable characteristics.

We decided to run our experiment in the hotel sector because it is a large source of employment for low skilled workers. Low skilled individuals are the main beneficiaries of labour market programmes and are more likely to be dependent on welfare state transfers than mid- and high skilled people. What is more, the sector is characterised by a relatively strong mismatch between supply and demand. On the one hand, the unemployment rate of 9.9% in the hotel sector at the time of the survey was above the Swiss average of 3.4% (SECO 2015). On the other hand, employers indicate that 15.9% of the positions that require vocational training are hard to fill (which is above the average of 9.7% for the service sector) (FOS 2015). Hence, we can expect ALMPs to play an important role in this sector.

The experiment

We ran two separate experiments for two different jobs: receptionist and room cleaner. Beside our main independent variable, the participation in a labour market programme, we focused on the influence of five additional dimensions, which were varied randomly (table 2). All applicants were presented as having been unemployed for a period of six months and as having lost their previous job because of the closure of the hotel where they previously worked. In addition, we specified that all applicants completed their education in Switzerland to ensure the comparability of education credentials for candidates with foreign nationality. The experiment started with a description of a vacancy followed by the presentation of four fictitious candidates per job. Participants were asked to indicate the likelihood to hire the candidate on a scale from 1 to 10 (not at all likely - very likely).

The training programme was operationalized as a Russian language course (Table 2). We chose this type of course because language courses are by far the most common training programmes financed by the job centre (Bieri et al., 2006). We did not choose courses in English or in another national language because mastering these languages is a basic requirement for a receptionist. Moreover, we wanted to avoid that training participation is interpreted as a negative signal (limited knowledge of important foreign languages). Since only 12% of the hotels in our survey need Russian language we can interpret a positive effect as a signalling rather than a substantive (improvement in human capital) effect.

Table 2: Dimensions and levels of vignettes

Dimension	Level
ALMP	<ul style="list-style-type: none"> - <i>(nothing mentioned)</i> - <i>Russian course paid by the public employment service (training)</i> - <i>40% wage subsidy paid by the public employment service</i> - <i>Temporary employment program (temp) involving clothes</i> - <i>Two temporary employment programs (2 temp): one involving clothes recycling and the other consisting of packaging objects</i>
Gender	<ul style="list-style-type: none"> - <i>Mr.</i> - <i>Ms.</i>
Nationality	<ul style="list-style-type: none"> - <i>Swiss citizen, unmarried, without children</i> - <i>Portuguese citizen, unmarried, without children</i> - <i>Serbian citizen, unmarried, without children</i> - <i>Senegalese citizen, unmarried, without children</i>
Age	<ul style="list-style-type: none"> - <i>Is 25 years old</i> - <i>Is 32 years old</i> - <i>Is 40 years old</i>
Education ¹	<ul style="list-style-type: none"> - <i>Completed obligatory school in Switzerland</i> - <i>Completed a 3-year VET- program as merchandiser (receptionist)</i> - <i>Completed a 2-year VET-program as hotel employee (cleaner)</i>
Hobbies ²	<ul style="list-style-type: none"> - <i>Likes listening to music</i> - <i>Two times a week plays checks in the local association</i> - <i>Two times a week practices kick-boxing</i> - <i>Two times a week plays soccer (volleyball for female) in the local association</i> - <i>Volunteers for an association taking care of the elderly</i>

¹ Switzerland has a strong vocational education and training system (VET) similar to the German one, where the majority of adolescents follows a dual track program that combines practical training in the company with theoretical classes of one or two days. There exist programs for over 230 occupations of, most are three or four year VET programs with a federal diploma, there exist shorter programs of 2 years with a federal certificate. The two-year VET program as hotel employee consists of courses in laundry service, looking after guests, housekeeping, logistic, interior decoration. The three-year VET program as merchandiser consists of course in German, foreign language, economics, communication, and administration.

²Beside the effect of ALMPs we were also interested in whether employers use hobbies as a sorting criteria. However, we found no significant results. For the sake of completeness we included them in our models.

The subsidy, which would be awarded to the new employer, consisted in the payment of 40% of the candidates' salary by the PES for a period of six months. For the temporary employment programme, we chose two variants. The first consists of a programme in clothes recycling. In

the second variant, applicants attended two such programmes, one in clothes recycling and one in packaging. These programmes were chosen because they do not increase the unemployed individuals' human capital in ways that are relevant for either of the two positions used for the experiment (room cleaner and receptionist). It is thus possible to interpret a (negative or positive) effect as being a signalling rather than a substantive effect.

The combination of all the features listed in table 2 yields a number of profiles that is far bigger than our survey sample. Following standard practice in factorial surveys, we drew a d-efficient sample of 200 profiles. A d-efficient design maximizes the orthogonality of the profiles, thereby maximizing the statistical power one can obtain from a given number of observations (see Auspurg and Hinz, 2015).

The data was collected in November 2015 using an online survey. 1,982 managers of hotels, all members of the major Swiss hotel employer association, were invited to participate. Employers were first contacted by regular mail to announce the study, and then the survey link was sent by email. Those who did not take the survey were reminded one and two weeks after the link was circulated². In total 238 participants completed the survey, yielding a response rate of 12 percent³, which is not unusual for this type of population (Damelang and Abraham, 2016).

Estimation Strategy

In order to identify the effect of the different characteristics we attributed to our fictitious candidates, the rating of the candidate (which was assumed to be metric) was regressed on the six dimensions. Figure S1 in the supplementary material shows that the dependent variable is approximately normally distributed. We estimated models with interaction terms between programme participation and education, nationality respectively to detect variation in the

effect of programme participation with other vignette dimensions. Data obtained from survey experiments is structured hierarchically as each respondent rates several profiles. To adjust for the dependency of the error term within respondents, we estimated linear multilevel models with random intercepts (Rabe-Hesketh and Skrondal, 2012; Steenbergen and Jones, 2002). In these models the intercept is not fixed but is allowed to vary across level-2 units, in our case respondents⁴. Thereby, we followed the standard procedure suggested in the literature for nested data structures in vignette studies (Auspurg and Hinz, 2015). As robustness tests, we estimated models controlling for respondents' characteristics and contextual variables at the level of the Swiss cantons, as well as a respondent fixed-effects model. These alternative estimation strategies yield the same results (see tables A1 and A2 in the Appendix).

Results and Discussion

As expected and shown in figure 1, participating in most labour market programmes has an impact on employer's assessment of a candidate. Most effects differ in sign for the two positions: effects tend to be positive for those applying for a cleaning position and negative for those applying for a receptionist position.

First, a Russian language course has a positive but statistically insignificant impact on the rating of candidates for either position. According to a question asked elsewhere in the survey, Russian is needed in only 12 percent of the hotels in our sample, and the effect is similar across all hotels, regardless of whether they need Russian as a working language. The absence of a significant effect might indicate that the signalling and substantive impacts of this measure are too weak to manifest themselves for the positions we considered.

A more intriguing result is found for the wage subsidy, which has a positive effect for candidates applying for a position as room cleaner but not for those wishing to work as

receptionists. On the basis of our theoretical understanding we argue that this difference in outcomes must be understood with reference to the substantive and signalling effects that play out differently for the two jobs. For the receptionist, the two effects, i.e. the positive substantive effect and the negative caseworker signalling effect, cancel each other out (as in Baert, 2016). For the position of room cleaner, instead, the positive substantive effect dominates. We argue that applicants for the cleaning position are less likely to suffer from a negative caseworker signalling effect, because among the applicants to this job, one is more likely to find jobseekers who are rather distant from the labour market. Those applying to such a position can be assumed to be individuals who face some obstacles in accessing employment, otherwise they would apply for more attractive jobs. Qualitative evidence supports the idea that employers hiring in the low skill segment of the labour market are aware of this (Zamudio and Lichter 2008; Bonoli and Hinrichs, 2012). As a result, being entitled to a subsidy does not add much relevant information on the candidate and the negative signalling effect is limited or inexistent.

Let us now turn to participation in temporary employment programmes. These measures train skills that are largely irrelevant to the jobs included in the study, so that we can rule out any substantive effect. We hypothesised that participation in these programmes may signal acceptance of physically demanding and unrewarding work, a quality that is essential for a room cleaner, but largely irrelevant for a receptionist. This helps to understand why the overall impact of participation is positive for those applying to work as room cleaner. In order to explain the negative impact for the candidates for a job as receptionist, we need to turn to the caseworker signalling effect. Candidates to this more attractive occupation are expected to be closer to the labour market, and as a result unlikely to be sent to a largely irrelevant low skill employment programme. If this happens, it will be interpreted as a signal that “something is

wrong” with the candidate, for example lack of motivation in job search or suspicion of undeclared work. The positive signalling effect prevails for the low-skilled occupation, while the negative caseworker effect is dominant for the mid-skilled position.

The results obtained by comparing the effects for the two positions corroborate our main hypothesis, i.e. that the positive effects prevail over negative ones for candidates applying to the low-skilled position and negative effects prevail for those applying to the mid-skilled position.

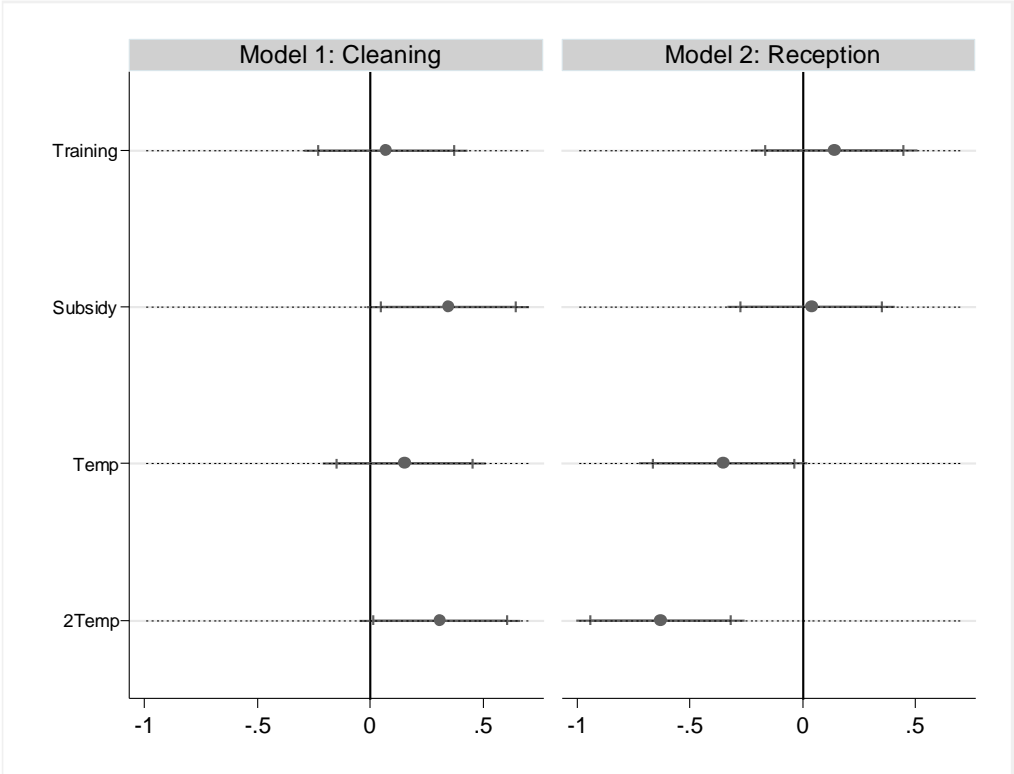


Figure 1: Effects of programme participation on the rating of the fictitious candidate for the cleaning (left panel) and receptionist (right panel) position.

Notes: Plotted coefficients for the ALMP-variable from model 1 (table A1 in the appendix) and model 4 (table A2 in the appendix). Dots represent the difference in the rating compared to the reference category, i.e. no programme participation (vertical line). Horizontal bars represent the 95% confidence intervals; the vertical segments at the bar represent the 90% confidence intervals.

We further expect the signalling value of labour market programmes to interact with other features that determine a candidate's distance from the labour market: educational attainment and nationality. First, we focus on the education level. In figure 2, we provide marginal effects of programme participation at different levels of education for the two positions. For the room cleaner, the effect of participation is strongly related to the education level. Basically, all the positive effects observed in figure 1 concern the candidates with compulsory education only. There is no positive effect for the candidates with a vocational qualification. This result is in line with our hypothesis. Candidates with a vocational degree are closer to the labour market and if sent to a low skill employment programme or if deemed eligible for a wage subsidy, have probably been assessed by a caseworker as being somewhat problematic. This negative signal cancels out the putative positive signal or the positive substantive effect (acceptance of harsh working conditions or reduction in wage cost). In contrast, for a candidate with compulsory education only, it is not unusual to be required to participate in an employment programme or to be eligible to a wage subsidy. Hence, in this case, the positive signalling and/or substantive effect is not offset by the (weaker) negative signal.

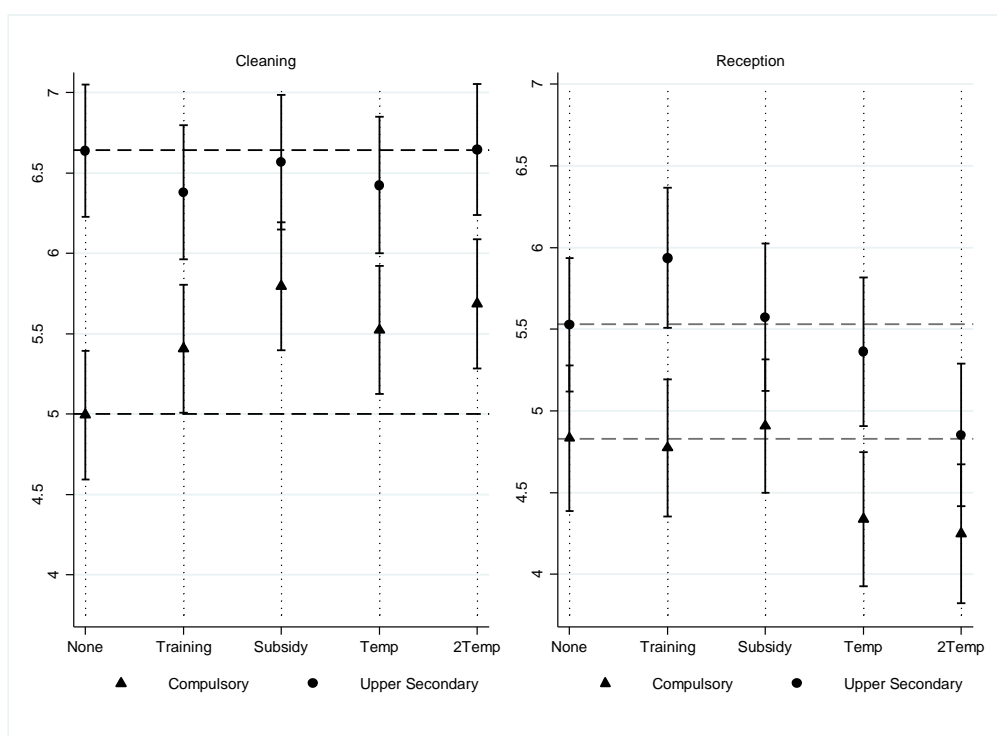


Figure 2: The effect of ALMP participation for different levels of education.

Notes: Average marginal effects obtained after the estimation of model 7 (cleaning) and model 8 (receptionist) (table A3 in the appendix). The dots/triangles represent the rating of a fictitious candidate with upper secondary/compulsory education for the different programmes (indicated at the x-axis). The vertical lines represent the 95% confidence intervals. The horizontal lines represent the ratings for the reference category (no programme participation). Contrast can be found in the supplementary material online (Table S5)

Let us now turn to the receptionist position. Here the main effects are present in a roughly similar way at both levels of education, except training, which is more positive for the candidate with vocational training.

With regard to a candidate's nationality (figure 3), the negative caseworker assessment signal for the receptionist position prevails for the Swiss and is smaller for the foreign candidates. This is in line with our expectation that the effects of programme participation are less negative for candidates that are farther away from the labour market (migrants) than for closer candidates (natives). Most of the negative effect associated with participation in low skill employment programmes concerns the Swiss candidate.

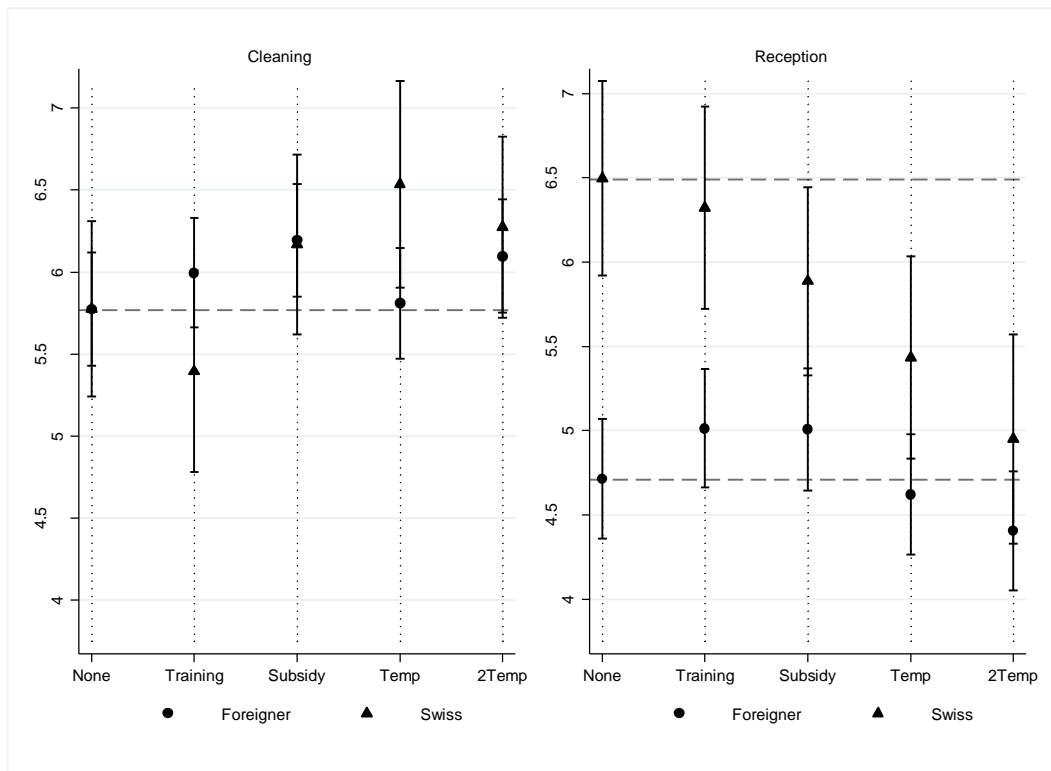


Figure 3: The effect of ALMP participation for Swiss and foreign candidates

Notes: Average marginal effects obtained after the estimation of model 9 (cleaning) and model 10 (receptionist) (table A3 in the appendix). The triangles /dots represent the rating of a fictional candidate with Swiss/foreign nationality for the different programmes (indicated at the x-axis). The vertical lines represent the 95% confidence intervals. The horizontal lines represent the ratings for the reference category (no programme participation). Contrast can be found in the supplementary material online (table S6).

Things are different for the other occupation, room cleaner. We expect the overall effect to be more positive for foreign than for Swiss candidates. However, our results show that the effects are very similar across nationalities. Presumably, for a Swiss candidate it is so unusual to apply for this kind of position that in this case employers drop the assumption that Swiss candidates are less distant from the labour market. As a result, positive and negative effects play out in similar ways regardless of the nationality.

Conclusion

This study is among the first attempts to systematically investigate the way in which employers interpret participation in labour market programmes. Our theoretical model

assumes three possible effects: a substantive effect, a direct signalling effect of the applicant's qualities and an indirect signalling effect of the caseworker's assessment of the candidate. Moreover, these effects can reinforce or offset each other

Our results show that different ALMPs entail different substantial and signalling effects depending on the job and characteristics of the candidate. We have also shown that the extent of the negative signal depends on the candidates' assumed distance from the labour market. Applicants who, on paper, are not expected to need particular help or pressure to re-enter the labour market are more likely to suffer from negative signalling effects. In our experiment, this is the case of applicants to a mid-skilled job (receptionist), of applicants who have upper-secondary education, and of natives. These individuals have a comparatively good level of employability. Thus, if entitled to measures meant for candidates who are rather distant from the labour market (like wage subsidies or employment programmes), they are likely to suffer more from negative signals than candidates who can be assumed to face difficulties re-entering the labour market. The fact that we do not observe the expected positive effect for training suggests that the training programme, as it was operationalized here, does not entail a sufficiently strong signal of motivation and/or – as intended by design – only a marginal increase in human capital.

Our study does not come without limitations. The participants evaluate hypothetical situations and not real hiring decisions where employers have access to more information than we provided here. Also, in reality employers' assessment of candidates is likely to be influenced by the composition of the candidate pool. At the same time, survey experiments reduce the ethical concerns linked to more realistic experimental methods, such as

correspondence testing and maximise the flexibility of the study design allowing to test multiple interactions.

Our findings are relevant for our understanding of why some programmes are more effective than others. In particular, in line with existing studies, it confirms the potentially ambivalent effect of wage subsidies, which may combine a positive substantive effect with a signal of low productivity (Baert, 2016). Participation in a low skill employment programme generates a similar mix of positive and negative signals. The positive signal may be acceptance of physically demanding and unrewarding work. This signal is likely to prevail if the candidate is more distant from the labour market and if these qualities are important for the job he or she applies to. In contrast, for a candidate who is closer to the labour market and applies for a position where acceptance of physically demanding work is not relevant, the negative signal prevails.

The fact that the negative signalling effect can offset and even replace a positive substantive effect may help to understand why employment programmes have sometimes been found to have a negative impact on the employment chances of participants (Kluve 2010).

In conclusion, our study highlights the importance of considering the employer's perspective when evaluating the effectiveness of ALMPs. In particular, our findings speak in favour of a very careful consideration of individual and job characteristics before assigning jobseekers to programmes, and before deciding whether or not to reveal eligibility/ participation to a prospective employer.

These findings, we believe, are significant beyond the narrow field of labour market programmes. Our results suggest that the process of interpreting information on candidates is

highly complex, and effects should not be assumed to be constant across occupations and applicants' characteristics (see also Auer et al., forthcoming).

Future research should take these insights forward. Our paper allowed us to glimpse into interactions and how different signals are combined to produce an assessment of a candidate. Clearly, we need a more sophisticated thinking than a simple one-dimensional model where candidates are ranked from best to worst according to the presence-absence of a given signal. We also call for studies that control for job type. Our findings strongly suggest that signals can only be interpreted in relation to the job that is being applied for.

The apparent sophistication of signalling processes could also benefit from qualitative research based on in depth interviews with employers. True, direct interviewing is exposed to the risk of a social desirability bias. However, there are some studies suggesting that at least some employers are willing to reveal their true preferences to researchers (e.g. Author 2012; Pager and Karafin, 2009). This type of qualitative research could be helpful in understanding the meaning behind the signalling effects highlighted by the experimental literature.

Endnotes

1 To gain information on the use that is made of ALMPs we carried out two focus group interviews with caseworkers of the PES, in Bulle (French speaking, 27.11.2015) and Murten (German speaking, 17.02.2016).

2 A detailed experimental protocol can be found in the supplementary material online.

3 The descriptive statistics of the respondents (table S4) and a correlation matrix for the vignette dimensions and independent variables (tables S1 and S2) is presented in the supplementary material. Since every vignette is rated by several respondents and the vignette dimensions are only weakly correlated, we do not consider the low response rate as problematic. Some hotel-level variables (language region, city type, number of hotel stars) are available for the whole population. There is no systematic response-bias with respect to these variables between respondents and non-respondents (table S3 in the Appendix).

4 The random intercept represents the effect of omitted respondent-specific covariates on the candidate's rating. Including covariates at the respondent-level can lead to cluster-level confounding: the random intercept is correlated with covariates at the respondent-level. A Hausman test for endogeneity between the fixed and random-effects model indicates that the difference between the coefficients of the two models is not systematic. The distribution of the error term is presented in the supplementary material (figure S2).

References

- Ahmed, A.M., Andersson L., and Hammarstedt M. (2012). Does Age Matter for Employability? A Field Experiment on Ageism in the Swedish Labour Market. *Applied Economics Letters*, **19**, 403–406.
- Arrow, K. (1971). *Some Mathematical Models of Race Discrimination in the Labour Market*. Santa Monica: The Rand Corporation.
- Auer, D., Bonoli, G., Fossati, F., and Liechti, F. (forthcoming). *The matching hierarchies model: Evidence from a survey experiment on employers' hiring intent of immigrant applicant*. NCCR-Working Paper Series.
- Auspurg, K., Hinz T. Liebig S. and Sauer C. (2014). The Factorial Survey as a Method for Measuring Sensitive Issues. In Engel, U., Jann, B., Lynn P., Scherpenzeel, A. and Sturgis P. (Eds.), *Improving Survey Methods: Lessons from Recent Research*. New York: Routledge, pp. 137-149.
- Auspurg, K. and Hinz, T. (2015). *Factorial Survey Experiments*. Los Angeles: SAGE.
- Baert, S. (2016). Wage subsidies and hiring chances for the disabled: some causal evidence. *European Journal of Health Economics*, **17**, 71–86.
- Baert, S. (2015). Hiring a Homosexual, Taking a Risk? A Lab Experiment on Employment Discrimination and Risk Aversion. *IZA Discussion Paper*, **9536**, 1–20.
- Bertozzi, F., Bonoli, G. and Ross, F. (2008). The Swiss Road to Activation : Legal Aspects, Implementation and Outcomes. In Eichhorst, W., Kaufmann, O. and Knole-Seidl, R. (Eds.), *Bringing the Jobless into Work?* Heidelberg: Springer, 121-159.

- Bertrand, M. and Duflo, E. (forthcoming) . Field Experiments on Discrimination. In Duflo, E., and Banerjee A (Eds.), *Handbook of Field Experiments*. Amsterdam: Elsevier.
- Bieri, O., Bachmann, R., Bodenmüller, D. and Balthasar A. (2006). RAV-Strategien zur Arbeitsmarktintegration und deren Wirksamkeit. *Arbeitsmarktpolitik*, **17**, 1-113.
- Biesma, R. G., Pavlova, M., van Merode, G. G. and Groot, W. (2007). Using conjoint analysis to estimate employers preferences for key competencies of master level Dutch graduates entering the public health field. *Economics of Education Review*, **26**, 375–386.
- Bonoli, G. and Hinrichs, K.(2012). Statistical Discrimination and Employers' Recruitment. *European Societies*, **14**, 338-361.
- Bonoli, G. (2008).
- Burtless, G. (1985). Are targeted wage subsidies harmful? Evidence from a wage voucher experiment. *Industrial and Labour Relations Review*, **39**, 105-114.
- Damelang, A. and Abraham, M. (2016) You Can Take Some of It with You! *Zeitschrift für Soziologie*, **45**, 91-106.
- Deuchert, E. and Kauer, L. (2014). Hiring subsidies for people with a disability: Helping or hindering? - Evidence from a small scale social field experiment. *International Labour Review*, **postprint**, 1-31.
- De Wolf, I. and van der Velden, R. (2001). Selection Processes for Three Types of Academic Jobs An Experiment among Dutch Employers of. *European Sociological Review*, **17**, 317–331.
- Di Stasio, V. (2014). Education as a Signal of Trainability: Results from a Vignette Study with Italian Employers. *European Sociological Review*, **30**, 796–809.

- Di Stasio, V. and Gërkhani, K. (2015). Employers' social contacts and their hiring behavior in a factorial survey. *Social Science Research*, **51**, 93–107.
- Duell, N., Tergeist, P., Bazant, U. and Cimper, S. (2010). Activation Policies in Switzerland. *OECD Social Employment and Migration Working Papers*, **112**, 1–139.
- Eriksson, S. and Rooth, D.O. (2014). Do Employers Use Unemployment as a Sorting Criterion When Hiring? Evidence From a Field Experiment. *American Economic Review*, **104**, 1014–1039.
- Falk, A., Lalive, R. and Zweimüller, J. (2005). The success of job applications: a new approach to programme evaluation. *Labour Economics*, **12**, 739–748.
- FOS Federal Office for Statistic. (2015). Detaillierte Ergebnisse der BESTA. Retrieved February 5, 2016, from <http://www.bfs.admin.ch/bfs/portal/de/index/themen/03/02/blank/data/02.html>
- Greenberg, D. H., Michalopoulos C., and Robins P.K. (2003). A meta-analysis of government-sponsored training programmes. *Industrial & Labour Relations Review*, **57**, 31-53.
- Ingold, J. and Stuart, M. (2014). The Demand-Side of Active Labour Market Policies: A Regional Study of Employer Engagement in the Work Programme. *Journal of Social Policy*, **44**, 443–462.
- Kluge, J. (2010). The effectiveness of European active labour market programmes. *Labour Economics*, **17**, 904–918.
- Kübler, D. and Schmid J. (2015.) Take your Time to Grow: A Field Experiment on the Hiring of Youths in Germany. *WZB Discussion Paper*, **205**, 1–17.

- Lahey, J.N. (2008). Age, Women, and Hiring: An Experimental Study. *Journal of Human Resources*, **43**, 30–56.
- Larsen, A. C. and Vesan, P. (2012). Why public employment services always fail. Double-sided asymmetric information and the placement of low skill workers in six European countries. *Public Administration*, **90**, 466-479.
- Martin, C. J. (2004). Reinventing Welfare Regimes: Employers and the Implementation of Active Social Policy. *World Politics*, **57**, 39–69.
- Oberholzer-Gee, F. (2008). Nonemployment stigma as rational herding: A field experiment. *Journal of Economic Behavior & Organization*, **65**, 30–40.
- Oesch, D. and Baumann I. (2015). Smooth transition or permanent exit? Evidence on job prospects of displaced industrial workers. *Socio-Economic Review*, **13**, 101-123.
- Pager, D. and Karafin, D. (2009). Bayesian Bigot? Statistical Discrimination, Stereotypes, and Employer Decision Making. *The ANNALS of the American Academy of Political and Social Science*, **27**, 70–93.
- Protsch, P. and Solga, H. (2014). How Employers Use Signals of Cognitive and Noncognitive Skills at Labour Market Entry: Insights from Field Experiments. *European Sociological Review*, **31**, 521-532.
- Rabe-Hesketh, S. and Skrondal, A. (2012). *Multilevel and Longitudinal Modeling using Stata*. College Station, Texas: Stata Press.
- Riach, P.A. (2015). A field experiment investigation age discrimination in four European labour markets. *International Review of Applied Economics*, **29**, 608-619.

- SECO (2015). *Die Lage auf dem Arbeitsmarkt*. Bern: State Secretariat for Economic Affairs.
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, **87**, 355–374.
- Steenbergen, M. R. and Jones, B. S. (2002). Modeling Multilevel Data Structures. *American Journal of Political Science*, **46**, 218–237.
- van der Aa, P. and Berkel, R. van. (2014). Innovating job activation by involving employers. *International Social Security Review*, **67**, 11–27.
- Weichselbaumer, D. (2003). Sexual orientation discrimination in hiring. *Labour Economics*, **10**, 629–642.
- Weiss, A. (1995). Human Capital vs. Signalling Explanations of Wages. *The Journal of Economic Perspectives*, **9**, 133-154.
- Zamudio, M.M. and Lichter, I.M. (2008). Bad Attitudes and Good Soldiers: Soft Skills as a Code for Tractability in the Hiring of Immigrant Latina/os over Native Blacks in the Hotel Industry. *Social Problems*, **55**, 573-589.
- Zschirnt, E. and Ruedin, D. 2016. Ethnic Discrimination in Hiring Decisions: A Meta-Analysis of Correspondence Tests 1990-2015. *Journal of Ethnic and Migration Studies*, **42**, 1115–1134.

Appendix

Table A1: Multilevel Models for the Determinants of Employers' rating of the Candidate for the Cleaning Position

	Model (1) Baseline Multilevel	Model (2) Respondent and Regional Covariates	Model (3) Fixed Effects
Vignette Dimensions			
ALMP (Ref.: None)			
Training	0.086 (0.182)	0.065 (0.185)	0.141 (0.186)
Subsidy	0.384* (0.182)	0.384* (0.185)	0.425* (0.186)
Temp	0.167 (0.183)	0.172 (0.186)	0.227 (0.187)
2 temp	0.352+ (0.182)	0.337+ (0.186)	0.391* (0.186)
Education (Ref.: Compulsory)			
Upper Secondary	1.055** (0.114)	1.069** (0.117)	1.070** (0.116)
Gender (Ref.: Male)			
Female	1.255** (0.115)	1.280** (0.117)	1.254** (0.116)
Nationality (Ref.: Swiss)			
Portugal	0.306+ (0.162)	0.286+ (0.166)	0.302+ (0.165)
Serbia	-0.166 (0.162)	-0.183 (0.165)	-0.175 (0.164)
Senegal	-0.284+ (0.162)	-0.287+ (0.166)	-0.283+ (0.164)
Age (Ref.: 25 years)			
32 years	0.134 (0.140)	0.145 (0.143)	0.140 (0.143)
40 years	-0.130 (0.144)	-0.131 (0.148)	-0.137 (0.147)
Hobby (Ref.: None)			
Volunteer	0.247 (0.185)	0.221 (0.188)	0.255 (0.189)
Team	-0.020 (0.186)	-0.014 (0.189)	-0.013 (0.190)
Kick	-0.244 (0.184)	-0.236 (0.188)	-0.224 (0.188)
Chess	-0.044 (0.184)	-0.035 (0.187)	-0.010 (0.188)

Respondent Characteristics			
Gender (Ref.: Male)			
Female		-0.168 (0.194)	
Age		-0.044*** (0.010)	
Education (Ref.: Below upper secondary)			
Upper Secondary		-0.290 (0.773)	
Tertiary		-0.263 (0.784)	
Other		-0.322 (0.829)	
Regional Characteristics			
Number of Employees		0.003* (0.001)	
Language Region (Ref.: German-Speaking)			
French		-0.654* (0.332)	
Italian		-0.587 (0.372)	
Romansh		1.550* (0.772)	
Unemployment		0.234+ (0.127)	
Constant	4.704*** (0.241)	5.724*** (0.998)	4.640*** (0.230)
Random Effects Parameters			
Var (Constant)	1.727* (0.231)	1.340 (0.201)	
Var (Residual)	3.018 (0.160)*	3.057 (0.164)	
Rho			0.450
Log Likelihood	-2031.4	-1953.0	-1748.6
AIC	4098.8	3962.0	3529.20
N Vignettes	958	928	958
N Employers	237	232	237
Note: Standard errors in parentheses. Significance Level: + p < 0.10, * p < 0.05, ** p < 0.01.			

Table A2: Estimated Models for the Determinants of Employers' rating of the Candidate for the Receptionist Position

	Model (4) Baseline linear Multilevel	Model (5) Respondent and Regional Covariates	Model (6) Fixed Effects
Vignette Dimensions			
ALMP (Ref.: None)			
Training	0.174 (0.187)	0.135 (0.190)	0.228 (0.191)
Subsidy	0.069 (0.189)	0.041 (0.192)	0.078 (0.193)
Temp	-0.338 ⁺ (0.190)	-0.367 ⁺ (0.193)	-0.330 ⁺ (0.194)
2 temp	-0.622 ^{**} (0.190)	-0.703 ^{**} (0.193)	-0.632 ^{**} (0.194)
Education (Ref.: Compulsory)			
Upper-Secondary	0.833 ^{**} (0.119)	0.817 ^{**} (0.121)	0.839 ^{**} (0.121)
Gender (Ref.: Male)			
Female	0.792 ^{**} (0.120)	0.790 ^{**} (0.121)	0.784 ^{**} (0.122)
Nationality (Ref.: Swiss)			
Portugal	-0.897 ^{**} (0.167)	-0.963 ^{**} (0.169)	-0.900 ^{**} (0.169)
Serbia	-1.067 ^{**} (0.167)	-1.126 ^{**} (0.169)	-1.064 ^{**} (0.169)
Senegal	-1.257 ^{**} (0.167)	-1.332 ^{**} (0.170)	-1.252 ^{**} (0.168)
Age (Ref.: 25 years)			
32 years	0.166 (0.147)	0.166 (0.150)	0.215 (0.151)
40 years	-0.599 ^{**} (0.149)	-0.603 ^{**} (0.152)	-0.579 ^{**} (0.152)
Hobby (Ref.: None)			
Volunteer	-0.040 (0.192)	0.013 (0.196)	-0.030 (0.197)
Team	-0.217 (0.190)	-0.165 (0.194)	-0.259 (0.194)
Kick	-0.424 [*] (0.192)	-0.422 [*] (0.195)	-0.458 [*] (0.196)
Chess	-0.244 (0.190)	-0.271 (0.193)	-0.286 (0.194)
Respondent Characteristics			

Gender (Ref.: Male)			
Female		0.021 (0.215)	
Age		-0.036** (0.011)	
Education (Ref.: Below upper secondary)			
Upper Secondary		-0.280 (0.859)	
Tertiary		-0.543 (0.872)	
Other		-0.350 (0.923)	
Regional Characteristics			
Number of Employees		-0.003+ (0.002)	
Language Region (Ref.: German-Speaking)			
French		-0.196 (0.368)	
Italian		-0.994* (0.413)	
Romansh		1.136 (0.858)	
<hr/>			
Unemployment		0.009 (0.141)	
Constant	5.493*** (0.251)	7.201*** (1.105)	5.477*** (0.238)
Random Effects Parameters			
Var (Constant)	2.063** (0.266)	1.790 (0.246)	
Var (Residual)	3.271** (0.172)	3.251 (0.174)	
Rho			0.465
Log Likelihood	-2097.55	-2005.53	-1805.02
AIC	4231.11	4056.06	3642.05
N Vignettes	967	931	967
N Employers	243	233	242
<hr/>			
Note: Standard errors in parentheses. Significance Level: + p < 0.10, * p < 0.05, ** p < 0.01.			

Table A3: Linear Multilevel Models for the Effect of Candidate's Characteristics on Employers Evaluation with Interaction Effects

	Model (7) Interaction ALMP Education	Model (8) Interaction ALMP Education	Model (9) Interaction Education, Nationality ALMP	Model (10) Interaction Education, Nationality ALMP
Dependent Variable	Employers Rating Cleaning	Employers Rating Reception	Employers Rating Cleaning	Employers Rating Reception
ALMP (Ref.: None)				
Training	0.412 (0.262)	-0.059 (0.285)	0.526 ⁺ (0.306)	0.113 (0.322)
Subsidy	0.800 ^{**} (0.268)	0.075 (0.285)	0.802 [*] (0.312)	0.265 (0.321)
Temp	0.528 [*] (0.267)	-0.496 ⁺ (0.286)	0.240 (0.304)	-0.304 (0.322)
2 temp	0.691 ^{**} (0.267)	-0.585 [*] (0.289)	0.705 [*] (0.315)	-0.203 (0.324)
Gender (Ref.: Male)				
Female	1.253 ^{***} (0.114)	0.792 ^{***} (0.119)	1.290 ^{***} (0.115)	0.790 ^{***} (0.120)
Nationality (Ref.: Swiss)				
Portugal	0.334 [*] (0.163)	-0.918 ^{***} (0.167)		
Serbia	-0.169 (0.162)	-1.099 ^{***} (0.168)		
Senegal	-0.258 (0.162)	-1.262 ^{***} (0.167)		
Nationality (Ref.: Foreigner)				
Swiss			-0.255 (0.463)	1.617 ^{**} (0.574)
Age (Ref.: 25 years)				
32 years	0.142 (0.139)	0.145 (0.148)	0.103 (0.140)	0.084 (0.149)
40 years	-0.120 (0.144)	-0.589 ^{***} (0.149)	-0.103 (0.146)	-0.538 ^{***} (0.150)
Education (Ref.: Compulsory)				
Upper Secondary	1.645 ^{***} (0.279)	0.694 [*] (0.293)	1.491 ^{***} (0.332)	0.546 (0.340)
Hobby (Ref.: None)				
Volunteer	0.222	-0.063	0.238	-0.013

	(0.185)	(0.193)	(0.189)	(0.196)
Team	-0.017	-0.235	-0.008	-0.148
	(0.185)	(0.190)	(0.190)	(0.197)
Kick	-0.216	-0.434*	-0.195	-0.400*
	(0.184)	(0.192)	(0.187)	(0.194)
Chess	-0.025	-0.266	0.002	-0.229
	(0.184)	(0.191)	(0.187)	(0.192)
ALMP x Education (Ref.: None x Compulsory)				
Training x Upper Secondary	-0.672+	0.469		
	(0.400)	(0.422)		
Subsidy x Upper Secondary	-0.872*	-0.029		
	(0.410)	(0.430)		
Temp x Upper Secondary	-0.743+	0.331		
	(0.409)	(0.425)		
2 temp x Upper Secondary	-0.687+	-0.090		
	(0.402)	(0.423)		
ALMP x Education x Foreigner (Ref.: None x Foreigner x Compulsory)				
None x Swiss x Upper Secondary			0.411	0.362
			(0.628)	(0.709)
Training x Foreigner x Upper Secondary			-0.645	0.408
			(0.462)	(0.481)
Training x Swiss x Compulsory			-0.505	-0.683
			(0.667)	(0.752)
Training x Swiss x Upper Secondary			-0.786	0.485
			(0.849)	(0.905)
Subsidy x Foreigner x Upper Secondary			-0.807+	0.087
			(0.484)	(0.510)
Subsidy x Swiss x Compulsory			0.039	-0.666
			(0.646)	(0.741)
Subsidy x Swiss x Upper Secondary			-0.382	-0.725
			(0.795)	(0.878)
Temp x Foreigner x Upper Secondary			-0.430	0.490
			(0.463)	(0.485)

Temp x Swiss x Compulsory			1.187 ⁺	-0.899
			(0.652)	(0.722)
Temp x Swiss x Upper Secondary			0.299	-0.185
			(0.857)	(0.933)
2 temp x Foreigner x Upper Secondary			-0.764	-0.246
			(0.473)	(0.480)
2 temp x Swiss x Compulsory			0.081	-1.926 [*]
			(0.669)	(0.802)
2 temp x Swiss x Upper Secondary			-0.084	-0.593
			(0.813)	(0.906)
Constant	4.392 ^{**}	5.599 ^{**}	4.409 ^{**}	4.347 ^{**}
	(0.275)	(0.301)	(0.278)	(0.297)
Var (Constant)	1.728	2.068	1.765	2.0221
	(0.230)	(0.266)	(0.235)	(0.263)
Var (Residuals)	2.996	3.257	3.006	3.232
	(0.158)	(0.171)	(0.159)	(0.170)
Log Likelihood	-2028.64	-2096.11	-2031.69	-2091.03
AIC	4101.27	4236.21	4121.39	4204.05
N Respondent	242	243	242	243
N Vignettes	958	967	958	967

Note: Standard error in parentheses.

Significance level: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Supplementary Material

Experimental Protocol

Date	Step
9 november 2015	Postal letter announcing the survey and a leaflet with more information on the survey
11 november 2015	Electronic survey link
16 november 2015	Reminder to those that did not yet respond
23 november 2015	Second reminder to those that did not yet respond
19 january 2016	Survey closed

First screen vignette experiment

Recruitment Decision Receptionist

In this section we would like to capture your staff requirements the best possible. Instead of traditional question batteries, we will therefore **present you four candidate profiles and ask you to evaluate them.**

The following candidates apply for a position **as a receptionist** in your hotel. All four candidates hand in a written application and have already worked as a receptionist in different hotels in Bern. They have lost their current position due to the closed down of the hotel six months ago and are currently unemployed and are looking for a new position.

Second screen vignette experiment

Please indicate for each candidate the likelihood that you would engage him for a position as a receptionist.

(1=very unlikely; 10=very likely)

You receive the written application of the candidates below. Both have already worked as a receptionist in different hotels in Bern. They have lost their current position due to the closed down of the hotel six months ago and are currently unemployed and are looking for a new position.

	Candidate 1	Candidate 2
	Mr. G.	Ms. F
	Serbian citizen, unmarried, no children	Swiss citizen, unmarried, no children
	Is 32 years old	Is 40 years old
	Has completed a 2-years education as hotel employee	Has completed compulsory education in Switzerland
	Is currently in an occupational programme for the recycling of old cloths, before he completed one in packaging.	
	In his free time he is volunteering for an organisation that support elderly people	In her free time she likes to listen to music.
Hiring	(-) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (++)	(-) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (++)
	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

Third screen vignette experiment: two additional candidates in the same form as on the second screen

Forth screen vignette experiment: All four candidates were presented next to each other and participants were asked to bring them in their preferred order from 1 (liked best) to 4 (liked least).

This experiment was followed by a second one for the position of a room-cleaner. The set up was the same as presented above.

Correlation Matrix for candidate' attributes

The tables below show the correlation between the different vignette dimensions from the rated vignettes as well as the correlation between the vignette dimensions and the respondents' characteristics. Since not every vignette of the whole vignette universe was rated but we draw a d-efficient sample the vignette dimensions are correlated with each other but this correlation should be close to 0. The correlation between the observed respondent characteristics and vignette dimensions indicate whether the random allocation of vignettes to respondent has worked out. The vignette dimensions should not be correlated with the respondent characteristics. Meaning for example that female respondent should not have rated significantly more female vignettes than male respondents. The correlation indicated below show that randomization was successful, all correlations are close to 0 and non-significant.

Table S1: Pairwise Correlation for the rated Cleaning Position Vignettes

Vignette Variables	Gender	Nationality	Age	Education	ALMP	Hobby
Gender	1					
Nationality	0.0092	1				
Age	0.0047	0.0399	1			
Education	0.0441	-0.0087	0.0785**	1		
ALMP	0.0092	0.0214	0.0597*	-0.005	1	
Hobby	0.0072	-0.0246	0.0404	-0.0011	-0.0015	1
Respondent Variables						
Gender	-0.0048	-0.0027	-0.0123	-0.0027	0.0069	0.0041
Age	-0.0009	-0.0042	0.0078	-0.0042	0.1350	0.0044
Education	0.0047	-0.0050	-0.0170	-0.0050	0.0138	-0.0053
N Employees	-0.0010	-0.0023	-0.0054	-0.0023	0.0029	-0.0196
Lang. Region	-0.0004	0.0021	-0.0030	0.0021	0.0003	-0.0138
Unemployment	0.0034	-0.0020	0.0012	-0.0020	0.0040	-0.0007

Note: **Significant on the 5%-level, *Significant on the 10%-level.

Table S2: Pairwise Correlation for rated Receptionist Vignettes

Vignette Variables	Gender	Nationality	Age	Education	ALMP	Hobby
Gender	1					
Nationality	0.0443	1				
Age	0.0049	0.0112	1			
Education	-0.0102	-0.0615*	0.0293	1		
ALMP	0.0378	0.0176	0.08**	-0.0465	1	
Hobby	0.0407	0.0361	-0.0129	-0.0131	0.0198	1
Respondent Variables						
Gender	0.0119	-0.0025	0.0032	-0.0048	-0.0079	0.0002
Age	0.0122	-0.0027	0.0057	-0.0173	0.0107	0.0071
Education	0.0086	0.0068	-0.0038	-0.0104	-0.0047	-0.0076
N Employees	0.0275	-0.0014	-0.0163	0.0025	-0.0025	-0.0083

Lang. Region	0.0006	0.0036	-0.0075	0.0006	-0.0054	0.0020
Unemployment	0.0037	-0.0004	-0.0135	0.0028	-0.0082	-0.0065

Note: **Significant on the 5%-level, *Significant on the 10%-level.

Response Bias in Hotel Variables

Table S3: Descriptive Statistics for Respondents and Non-Respondents

	Non-Respondents	Respondents
<i>Language Region</i>		
Geman-speaking	68.69%	68.95%
French-speaking	20.65%	20.97%
Italien-speaking	7.79%	8.06%
Romanesque-speaking	2.88%	2.02%
<i>City Type</i>		
Central city of agglomeration	26.01%	29.44%
Agglomeration	22.72%	25.40%
Isolate city	2.25%	2.42%
Rural area	49.02%	42.74%
<i>Hotelstars</i>		
1star	0.87%	1.22%
2 stars	9.13%	6.91%
3 stars	47.09%	46.34%
4 stars	23.55%	23.58%
5 stars	4.48%	6.50%
Swisslodge	11.28%	10.57%
Other classification	3.60%	4.88%

Descriptive Statistics of Respondents

Table S4: Descriptive Statistics of Respondent and Regional Variables

Respondent Level Variables

<i>Gender</i>	
Male	54.47%
Female	45.53%
<i>Age</i>	
	Mean: 31.54
<i>Hiring Experience (years of experience in recruiting)</i>	
	Mean: 15.43
	Sde: 9.66
<i>Nationality</i>	
Swiss	79.59%
German	8.57%
French	3.27%
Other	8.57%
<i>Educational Attainment</i>	
Compulsory Education not	1%
Compulsory Education	1%
Pre-vocational Training VET	15%
Vocational Training VET	51%
Professional Training	24%
University or Applied	8%
<i>Size</i>	
Small (1-19 employee)	45.45%
Medium (20-60 employee)	37.60%
Large (more than 60 employee)	16.94%
Contextual Variables	
<i>Language Region</i>	
German speaking	69%
French speaking	21%
Italian speaking	8%
Romansh speaking	2%
<i>Unemployment rate</i>	
	Mean: 3.25
	Sde: 1.05

Distribution of Dependent Variable

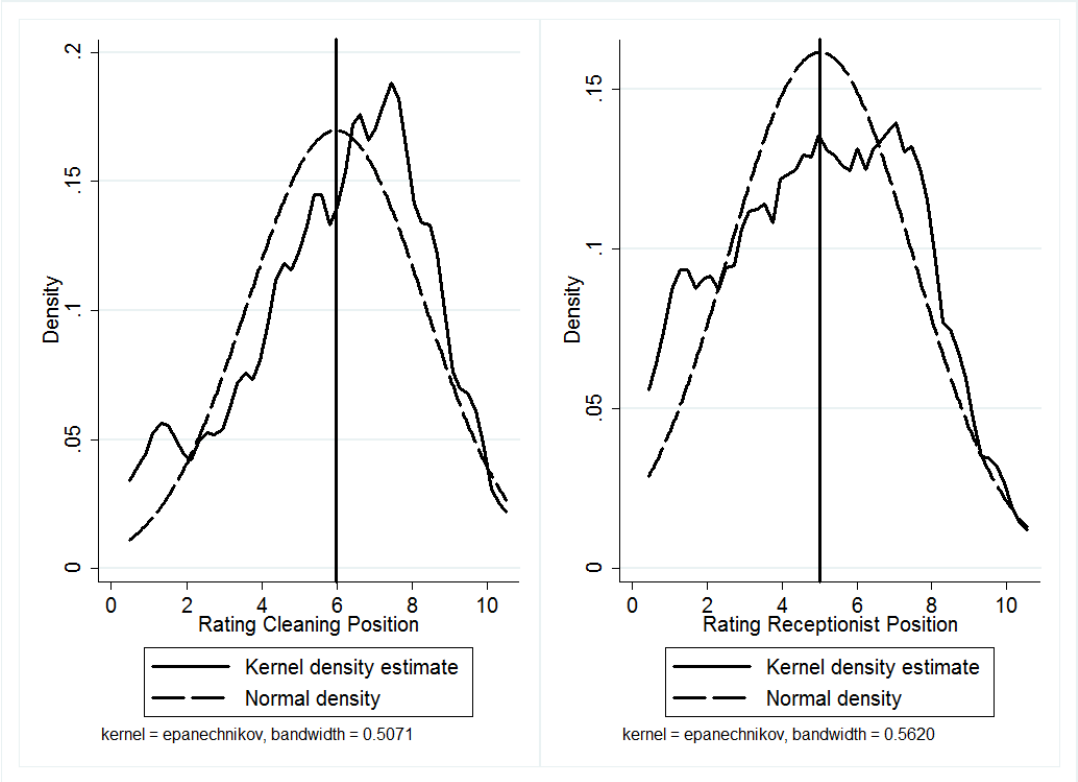


Figure S1: The Distribution of the Dependent Variable for the Cleaning Position (left panel) and Receptionist Position (right panel)

Note: Dependent variable is measured on a Scale from 1-10. The vertical line represents the mean (5.98 for the cleaning position and 5.02 for the receptionist position).

Contrasts of Predictive Margins

Contrasts show the difference between the rating of a candidate of the reference category (no programme participation) and those with participation in the respective programme.

Table S5: Contrasts of predictive margins of ALMP for compulsory and upper-secondary education

	Compulsory Education	Upper-Secondary Education
Cleaning (Model 7 table A3)		
Training vs. None	0.412 (0.262)	-0.260 (0.277)
Subsidy vs None	0.800 (0.268)**	-0.072 (0.280)
Temp vs. None	0.528 (0.267)*	-0.215 (0.281)
Temp vs None	0.691 (0.267)**	0.004 (0.275)
Receptionist (Model 8 table A3)		
Training vs. None	-0.059 (0.285)	0.410 (0.280)
Subsidy vs None	0.075 (0.285)	0.046 (0.287)
Temp vs. None	-0.496 (0.286)+	-0.165 (0.285)
2 Temp vs None	-0.585 (0.289)*	-0.675 (0.280)*

Note: Standard error in parentheses. Predictive margins are obtained after the estimation of a multilevel model (respective model in parentheses). Significance level: +p<0.1

*p<0.05 **p<0.01

Table S6: Contrasts of predictive margins of ALMP for Swiss and Foreigners.

	Cleaning (Model 9, table A3)	Receptionist (Model 10, table A3)
Training vs None, Foreigner	0.223 (0.2159)	0.299 (0.221)
Training vs None, Swiss	-0.380 (0.404)	-0.175 (0.411)
Subsidy vs None, Foreigner	0.422 (0.217)+	0.293 (0.226)
Subsidy vs None, Swiss	0.394 (0.379)	-0.610 (0.399)
Temp vs None, Foreigner	0.037 (0.216)	-0.094 (0.226)
Temp vs None, Swiss	0.759 (0.410)+	-1.063 (0.413)*
2 Temp vs None, Foreigner	0.324 (0.223)	-0.310 (0.225)**
2Temp vs. None, Swiss	0.499 (0.382)	-1.545 (0.418)

Note: Standard error in parentheses. Predictive margins are obtained after the estimation of a multilevel model. Significance level: +p<0.1 *p<0.05 **p<0.01. Contrasts of predictive margins obtained after estimation of a linear multilevel model (respective model in parentheses).

Residual Diagnostic

An important assumption when estimating regression models is that the error term behaves well. Since one respondent rated several vignettes, the assumption of independency of the error term is violated. As explained in the text we addressed this issue in estimating a linear multilevel model. In addition, the error term should have zero mean and be normally distributed.

Zero mean

Table S7: Mean of Residuals for Models 1-10

Model	Mean Residual Levels 1	Mean Residual Level 2
1	-4.43e-10 (0.909)	8.12e-10 (1.094)
2	-1.34e-09 (0.917)	-1.38e-09 (0.922)
3	-1.49e-09 (2.179)	N.A.
4	9.14e-10 (0.906)	-4.74e-10 (1.214)
5	-6.95e-10 (0.910)	-2.79e-09 (1.109)
6	.9585538 (2.464)	N.A
7	-7.06e-11 (0.909)	-1.32e-09 (1.096)
8	-1.40e-10 (0.906)	-2.03e-09 (1.218)
9	8.23e-10 (0.908)	-3.19e-09 (1.111)
10	-9.25e-10 (0.906)	1.13e-09 (1.201)

Note: Standard errors in parentheses

The above table shows the mean of error terms. They should be 0. As one can see, this condition is fulfilled. The error terms for all models are close to 0.

Normality of the error term

Furthermore, the error term should follow a normal distribution. We tested this assumption graphically. The distribution of the error term for all estimated models is plotted in Figure S1. Although there are some deviations for the normality line this assumption seems not to be violated.

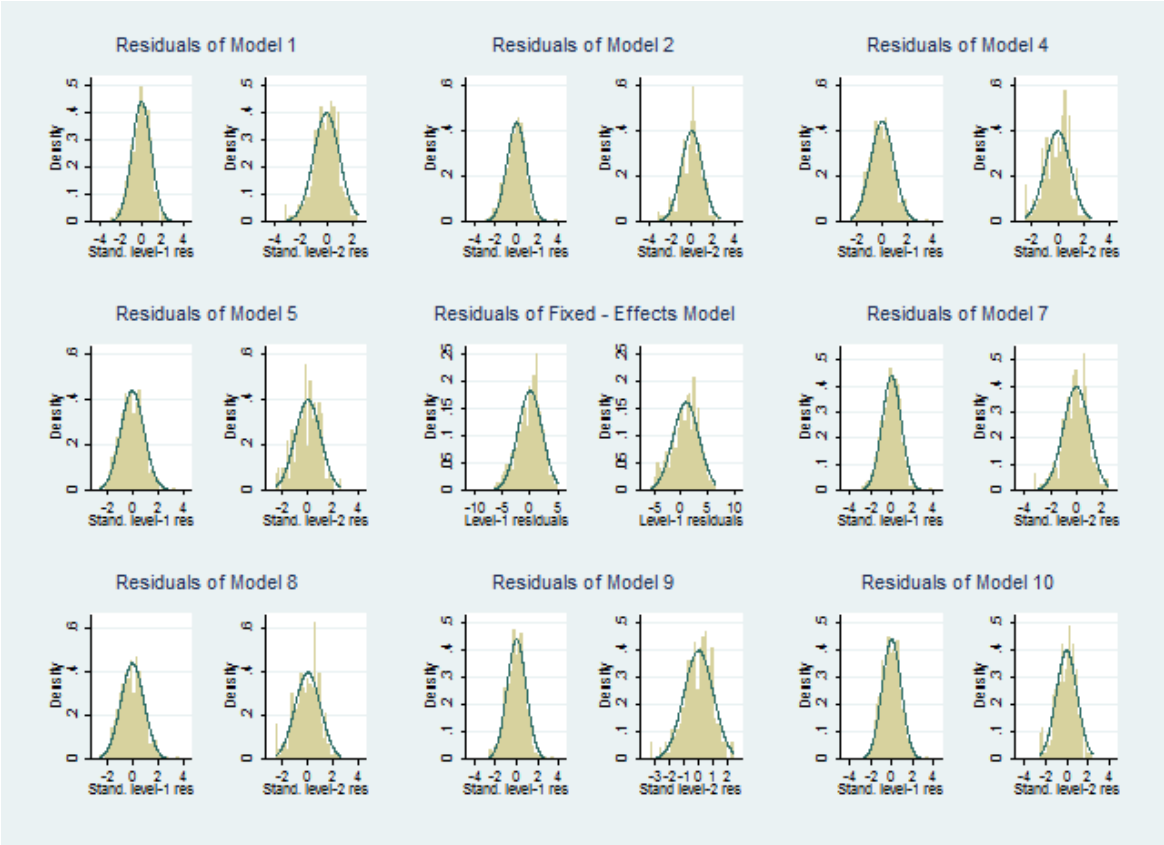


Figure S2: Distribution of the Residuals for all estimated models. For multi-level models Residual on level-1 on the left panel, for level-2 on the right panel.

Note: Histogram represents the residuals, blue line the normal density.

Chapter 3

Employers' interpretation of active labour market policies in hiring decisions

*Flavia Fossati, Fabienne Liechti, Anna Wilson*⁵

Abstract

Active labour market policies (ALMPs) are widely diffused measures that aim to re-integrate jobseekers into the labour market. Despite their crucial role in acting as gatekeepers to employment, the literature scarcely takes into account employers' perspective on these measures. We analysed whether and how employers *consider ALMP participation* in the hiring process. We developed a theoretical argument about how employers interpret ALMP participation and identified *assumed agency*, i.e. whether employers believe that the *agency* for initiating ALMP participation lies with the jobseeker (voluntary participation) or the job centre (mandatory participation), as a crucial factor that determines whether employers' evaluation of ALMPs is positive or negative. To examine our expectations, we conducted qualitative interviews with employers hiring for low-skilled occupations in Switzerland and Sweden – two countries with comprehensive ALMP systems. We find that the interpretation of ALMP programmes differs depending on assumed agency. In fact, if employers believe that participation is voluntary, then they interpret it as a signal of motivation; however, if employers believe that participation is mandatory, then it is interpreted as a signal of lower productivity.

⁵ We would like to thank Giuliano Bonoli, Manuel Fischer, Gemma Scalise for their helpful comments and suggestions. This work was supported by the NCCR on the move, which is funded by the Swiss National Science Foundation [Project 7]

Introduction

Active labour market policies (ALMPs) are a key element of modern welfare states. These measures address the increasingly high levels of unemployment by adapting the skills and capabilities of unemployed individuals to the changing needs of the fast-evolving labour market. ALMPs consist of a set of diverse measures that focus mainly on the labour supply side and that include training, employment programmes and wage subsidies (Bonoli, 2010; Filges et al., 2010).

Economic evaluations of these policies have mostly focused on their supply side effects. Only recently, there has been a growing interest in the involvement of *employers* in the implementation and provision as well as the perception and evaluation of ALMPs (Bredgaard, 2017; Ingold and Stuart, 2015; Ingold and Valizade, 2017; van der Aa and van Berkel, 2014). Scarce existing evidence suggests that employers rely on information provided by ALMP participation when sorting candidates (Falk et al., 2005; Liechti et al, 2017; van Belle et al., 2018). However, the effects of such measures are ambiguous. While some measures seem to have a positive effect, others have no or even a negative effect on employers' hiring decisions. Overall, we know little about employers' motives to consider ALMP measures when hiring. However, such knowledge is essential to fully understand the effects of ALMPs and for ameliorating these policies to ensure that ALMP participation is perceived as an asset rather than as a stigma.

In the light of the limited research on employers' preferences regarding ALMPs, in this paper, we investigate whether and why employers consider ALMPs for their hiring decisions. As ALMPs target foremost low-skilled individuals and these workers are most likely to be affected by unemployment, due to post-industrialization as well as the newest labour market

transformations (automation, robotisation), we focus on this segment of the labour market. Thus, we investigate how ALMPs affect employers' evaluation of applicants for low-skilled service-oriented jobs, which we define as occupations that do not necessarily require formal training but that can be quickly learned on the job. Such occupations include, for instance, sales personnel in supermarkets, cleaning staff, waiters in restaurants and bars, or kitchen help. In a service economy employers seek two different types of qualities. Beyond basic qualifications, employers in the low-skilled labour market increasingly demand soft skills, particularly the "right attitude" for front-line service work (Belt and Richardson, 2005; Moss and Tilly, 2001; Nickson et al., 2012; Waldinger and Lichter, 2003).

We develop a theoretical argument that expects ALMPs to influence employers' hiring behaviour through two mechanisms. First, participation in ALMPs can directly increase the employability of a candidate by adding relevant human capital (e.g., Kluge, 2010; Breedgard, 2015¹). Second, ALMPs provide relevant *signals* with regard to a candidate's productivity (Phelps, 1972; Arrow, 1973). Because the real productivity of a candidate is not directly observable, employers have to rely on other information that acts as a signal for productivity and the right attitude. Ideally, and as is desirable from social policy perspective, the signalling effect of ALMPs should be positive. However, it can also be negative, for instance, when it allows employers identifying a lack of relevant skills or is used to identify unproductive candidates and, therefore, is stigmatising (Liechti et al., 2017).

Our main hypothesis is that whether employers consider participation in ALMPs as a positive or negative signal depends on to whom the employer attributes the *agency* about initiating programme participation. In other words, the nature of the ALMP signal depends on whether employers believe that the main agency of programme participation was exerted by the state,

the job centre, or the caseworker and thus was the result of an institutional constraint; or whether they believe that the unemployed person took an active role in the decision to participate. In the latter case, participation is likely to be interpreted as a positive signal (i.e., motivation). Conversely, when agency is assumed to lie with the caseworker, ALMP participation should entail a negative signalling effect (e.g. sanction). Importantly, for these effects to manifest, employers do not need to know how the system of ALMP allocation actually works, but the interpretation depends on their beliefs about how they assume participants are allocated to ALMPs (Stryker, 1980²).

From a social policy perspective, the signalling effect of ALMPs should be positive and thus have a beneficial effect for the participants. This is all the more important because especially individuals from lower social classes, including immigrants, perform low-skilled service jobs. Accordingly, from a sociological perspective, it would be essential to ensure that these policies also have a positive effect on their labour market (re-)integration chances to ensure economic independence and possibly social mobility. However, in the light of previous research, it is plausible that ALMPs may have a negative effect on employment chances because they allow employers to identify a lack of relevant skills or because they use such programmes to identify unproductive candidates. Accordingly, we expect that ALMPs may be stigmatising in certain instances (Liechti et al., 2017).

To test our theoretical argument, we carried out semi-structured interviews with employers in the retail and hotel sectors, two sectors that rely heavily on low-skilled labour, in Sweden and Switzerland. These countries are interesting because they are characterised by an extensive investment in ALMPs focusing on human capital enhancement and because they offer extensive (re-)training schemes (Bertozzi et al., 2008; Köhler et al., 2008).

ALMPs and employability: developing the theoretical argument

In this section we develop our theoretical argument and formulate some expectations about how and why employers consider individual ALMP participation when taking hiring decisions. Research on this topic is still scarce. The existing evidence indicates that employers are rather sceptical of ALMPs and these policies exert only a limited influence on employers' hiring behaviour. Breedgart (2017) develops a typology of employers' engagement in ALMPs and submits it to an empirical test with Danish employers. The results reveal that a majority of employers is of the dismissive or passive type, meaning that they do not actively participate in ALMPs and hold either negative (dismissive) or positive (passive) attitudes towards ALMPs. Ingold and Valizade (2017) conceptualize agencies delivering ALMPs as labour market intermediaries and test how ALMPs affect employers hiring behaviour of disadvantaged groups. Their results demonstrate the ALMPs have only a limited influence on employers' hiring behaviour and are negligible when compared to firm size and employer's selection criteria. Finally, Liechti et al. (2017) rely on a factorial survey experiment simulating a hiring process and find that ALMPs matter for hiring decision but that employers' evaluation of ALMP participation depends on the ALMP type and the candidate's distance to the labour market (i.e. employability). Temporary employment programmes had a positive influence on candidates that were, in terms of education and migration background, more distant from the labour market but a negative one for candidates with otherwise good labour market prospects. Overall, the results from previous studies suggest that employers consider ALMPs but are sceptical about their usefulness. Clearly, what these findings leave open is the employers' reasoning on why they consider ALMPs or not for their hiring decision and what kind of measures they perceive as useful for different groups of applicants.

Before we formulate our expectations about how specific ALMP measures influence hiring behaviour, we develop a general argument of why ALMPs should theoretically have an impact on employers' hiring decisions. Basically, ALMPs influence employers' hiring behaviour for two reasons. First, ALMP measures can have a *substantive effect* on a jobseekers' ability or employability, for example by increasing a candidate's human capital or reducing wage costs (Breedgard, 2015). Second, participation in ALMPs can have a *signalling effect*. This effect occurs due to the uncertainty with regard to an applicant's productivity. Participation in ALMPs conveys additional information regarding, for instance, a candidate's trainability and motivation, which is considered by employers to reduce uncertainty (Liechti et al., 2017). As forcefully argued by several scholars, in the low-skilled sector, employers are on the lookout for motivation and a positive attitude towards work (Belt and Richardson, 2005; Moss and Tilly, 2001; Nickson et al., 2012; Waldinger and Lichter, 2003). Thus, employers will try to extrapolate relevant information about candidates' attitude (also) from their participation in ALMP measures. From a social policy perspective, it is desirable that ALMP measures are designed in such a way that they convey positive signals. In practice, however, they can also act as negative signals and thus carry unintended negative consequences (Burtless, 1985, van Belle et al., 2018, Falk et al., 2005). We argue that the nature of the signal depends on whom the employers attribute the main *agency* of programme participation. Employers can attribute –correctly or incorrectly – the decision to participate to either the jobseeker her- or himself or to the caseworker. In other words, we expect that these signalling effects unfold independently of whether the assumption about how the ALMP system works – and therefore who has the agency – is correct or incorrect. It is employers' beliefs that affect their decision behaviour (Stryker, 1980). Even without knowing the exact features of the ALMP-system, employers have some beliefs about how the system works and base their interpretation on these beliefs.

ALMP participation serves as positive signal when employers believe that the main agency about the decision to participate lies with the jobseeker. When employers believe that the unemployed themselves asked to be assigned to an ALMP measure, then this action would be an excellent way to detect their motivation (positive signal). In such cases, programme participation should signal a positive attitude towards work, as it conveys the willingness to do whatever it takes to find employment. Completion of a more demanding measure might also reflect a certain level of skills and cognitive capabilities (see also Liechti et al., 2017).

However, employers can also attribute the main agency about programme participation to the caseworker or institutional constraints. If this is the case, and ALMP participation is perceived for instance as mandatory or imposed by the caseworker, the positive signalling value of a programme is lost. Depending on the programme, participation then reveals a lack of relevant skills or problematic behaviour. At best, participation is no longer meaningful because assignment is assumed to happen automatically after a certain period of unemployment.

The expectation is that these two effects, the substantive effect and especially the signalling effect, play out differently for different programme types. In the following we focus on the main ALMP interventions, namely training, employment programmes (TEP), and wage subsidy (Martin and Grubb, 2001). Job search assistance was excluded from our analysis, as this is typically not revealed and thus unlikely to be considered by employers.

In terms of signalling effects, *training programmes* are often assigned upon a jobseekers' request (see PES interviews³) Thus, participation can signal a jobseeker's motivation to update relevant skills or adequate cognitive capabilities and programme completion reveals the participant's perseverance. However, sometimes participating in a training programme can also reveal a lack of skills (Falk et al., 2005) and therefore entail a negative signalling effect. In fact, when it

is assumed that jobseekers are assigned to a specific programme by the caseworker, assignment to a training programme can be interpreted as a caseworker's assessment of a skill deficit. In terms of substantial effects, training programmes are implemented to close gaps in relevant skills. In the low-skilled sectors many candidates have low or obsolete qualifications due to rapid technological change (see Bonoli, 2005). Thus, employers should value training-based ALMPs because they increase the human capital and, in turn, the expected productivity of a candidate. However, we expect training programmes to unfold a substantive positive effect most of all when they teach *specific* skills that are directly relevant for a job (see Kluge, 2010: 905).

Participation in *TEPs* might be especially valued in the low-skilled segment of the labour market when employers assume voluntary participation, as this signals the willingness to engage in the unrewarding and repetitive activities that are typical for these occupations. Sometimes caseworkers use *TEPs* as a sanctioning tool when clients do not comply with job search requirements (Liechti et al., 2017; Duell et al., 2010; Filges and Hansen, 2017). Consequently, if employers believe that *TEPs* are assigned to sanction recalcitrant jobseekers, they can use participation to identify unproductive candidates. Finally, we do not expect a substantial positive effect of *TEPs* because the setup of these measures hardly increases the human capital of participants (Gerfin and Lechner, 2002). Tellingly, these strategies are also referred to as "parking strategies" (Considine, 2001, Van Berkel et al., 2007). However, these programmes can serve as a framework to structure the jobseeker's day and provide networking opportunities (see Auer and Fossati, 2016; Bonoli, 2013; Duell et al. 2009).

Concerning *wage subsidies*, we do not expect a positive signalling effect related to a jobseeker's agency, as employers should be aware that jobseekers cannot request wage subsidies but that

these are assigned by caseworkers without consultation with the unemployed person. However, the signalling value of wage subsidies can be negative because it may suggest that the ability of the candidate is below average (see also Liechti et al., 2017) and allows employers to identify unproductive candidates (Baert, 2016; Burtless, 1985). However, by reducing the monetary consequences of a “riskier” hiring behaviour, wage subsidies should have a straightforward positive substantive effect (Kluve, 2010; Breedgard, 2015).

In summary, we expect that the crucial difference between situations in which employers perceive ALMPs as a signal of motivation (positive) and instances where they use ALMPs to avoid candidates (negative signal) depends on their assumption about who has the main agency in the decision to participate in a measure. If employers perceive participation as an active decision by the jobseeker, then we expect even low-skilled ALMPs to be an asset for jobseekers in the low-skilled labour market. If instead the agency is assumed to lie with the caseworker, then ALMPs might reveal shortcomings or behavioural problems. Finally, if employers assume that ALMPs are assigned automatically, then ALMP participation should not carry a signal.

Case Selection

As described above, our interest is to uncover the general mechanisms of how employers interpret ALMPs for hiring decisions in the low-skilled sector of the labour market. For this purpose, we conducted interviews with employers in Switzerland and Sweden. These countries provide good cases for analysing ALMPs, as the PES offers extensive counselling services and an encompassing set of different ALMP measures are available, thereby making a great effort to re-integrate unemployed individuals into the labour market. In fact, to obtain a reliable assessment of how employers perceive ALMPs, it is important to choose countries in

which these instruments are well developed and widely used. Within the sample of countries with comprehensive ALMPs, we chose two cases that are most different in terms of their welfare state traditions, i.e., a Social Democratic welfare state regime in Sweden and a “continental welfare state with a liberal face” in Switzerland (Armingeon, 2001). These countries are interesting because they are characterised by an extensive investment in ALMPs focusing on skill enhancement and because they offer extensive (re-)training schemes (Bertozzi et al., 2008; Köhler et al., 2008). By analysing different institutional settings, our aim is to allow for conclusions that are more generalizable than insights relying on a single case.

In terms of ALMP organisation, both countries are similar: the PES offers extensive services, including a vast choice of different ALMPs. In particular, human capital-centred measures such as skill enhancement or re-training are a core pillar in both countries and a substantive investment is dedicated to these measures (Sweden and Switzerland invest 0.15% and 0.18% of GDP, respectively, in training measures, see Kriesi et al, 2019; OECD, 2017). At the same time, the PES closely monitors job search progress and has strict sanctioning schemes to punish non-compliance (Duell et al., 2010; Köhler et al., 2008; Løedmel and Trickey, 2001; Sianesi, 2008: 372).

Also, the economic conditions are comparable. Unemployment is low and unemployment provision is extensive for both passive and active schemes (Duncan and Paugam, 2000; Esping-Andersen, 1990; Kriesi et al., forthcoming, figure 3.2). Furthermore, Sweden and Switzerland have a skill system biased towards specific skills and are characterised by a wage bargaining system that is coordinated at the industry level (Estevez-Abe et al., 2001).

However, there are differences as well. Sweden has a long tradition of ALMPs starting already in the 1940s and it has played a pioneering role regarding activation policies (Bonoli, 2013;

Köhler et al., 2008; Swenson, 2002). In Switzerland, these policies were adapted only in the 1990s as a reaction to the rapidly deteriorating labour market (Bertozzi et al., 2008). The extent to which the unemployed resort to the PES is higher in Sweden than in Switzerland (Köhler et al., 2008; OECD, 2017). In the former, 81% of jobseekers contact the PES to find work, whereas in the latter, only approximately 52% do the same (OECD, 2015: 165). Similarly, participation in ALMP programmes is very common in Sweden. For instance, in the period 2004-2015 between 3.0 and 5.22% of the total labour force participated in an ALMP. In contrast, the participation rates in Switzerland varied between 1.0 and 1.6% of the total labour force (Duell et al., 2010; Köhler et al., 2008; OECD, 2017). Moreover, in many respects, Switzerland comes closer to liberal type of welfare state than Sweden (Armingeon, 2001). However, among the Nordic countries, Sweden's labour market policy also contains clear elements of commodification (Furåker et al., 1990).

Our case selection was guided by the intention to obtain a reliable assessment of how employers perceive ALMPs. To this aim it is important to choose countries in which these instruments are well developed and widely used. Moreover, within the sample of countries with comprehensive ALMPs, we chose two cases that are most different in terms of their welfare state traditions. If similar results are obtained in different settings, our conclusions will be more easily transferrable to other settings with a comprehensive ALMP system but different welfare institutions (Gesthuizen and Sheepers, 2010).

Data and Method

To understand the meaning that employers attach to ALMPs in their hiring decisions, we conducted semi-structured interviews in the hotel and retail sector. We asked questions about the desirable qualities in candidates, the employers' hiring strategies and their perception of

candidates. The interviews focused on the employers' view off the three most common ALMP interventions, training courses, TEPs, and wage subsidies. We also chose these ALMPs because they are easily observable by employers, other measures, such as counselling and monetary sanctions, are unlikely to affect employers' hiring behaviour because they are unable to observe these measures.

The employers were sampled according to size of the establishment and by ensuring that they have a person responsible for hiring (HR-manager, HR-assistant or similar) and whether the site is easily accessible. This also means that the establishment needed to be of a certain size in terms of employees. These criteria were chosen to make sure that the interviewed employers all had hiring experience and that the hiring procedure they apply are relevant for a none-negligible portion of jobseekers. Within these criteria employers were chosen on the basis of convenience. Since our sample covered large retail chains that are present all over the country, we decided to interview a smaller sample of retail establishments. In these cases, we interviewed HR-responsible from the middle-management to make sure to capture the company's overall recruitment strategy. The number of interviews was not fixed but we decided to stop interviewing once we had the feeling additional interviews did not add any new insights.

We conducted the interviews between September 2016 and March 2018 in Sweden (Malmö/Örebro) and Switzerland (Bern/Zürich/Basel). They were recorded (except for two cases where informed consent was not given) and subsequently transcribed in the original language. We carried out 17 interviews in Switzerland and 14 in Sweden (31 interviews in total). Regarding our respondents, 14 were male and 17 female; 24 interviews were carried out in hotels, with the remaining interviews being conducted in retail enterprises. The experience

of the interviewees varied from less than 5 years to well over 10 years, and the interviewees had different functions: 12 were involved in the hiring process as HR professionals, 7 were line managers, and 12 were in management positions or the owner of the hotel (see table A1 in the appendix for more details).

We developed a coding scheme (table 1) to classify employers' statements into different categories. The coding procedure was theory led but inductively refined, meaning that we capture the reasoning employers gave for considering (or not) the three main ALMP types (training, TEP and subsidy) in their hiring process. As outlined in the theory section, these reasons could either be classified as substantive effects, in terms of human capital or reduction of wage costs, or in terms of positive or negative signals. Within the categories "awareness of ALMPs", "type of programme", and "reasoning", the categories are exclusive.

If employers were not aware of ALMPs, their answers concerning how they would evaluate candidates who participated in such measures were still coded. Because, as we explained in the theory section, it is not absolutely necessary to fully understand or know the ALMP system, rather we expect that employers' hiring behaviour is influenced by beliefs of how the system works.

The coding scheme was validated several times by choosing some interviews that were (re-) coded by all the authors. This iterative procedure allowed adjusting unclear codes or discussing difficulties in the categorisation of specific interview parts (Charmaz, 2001; Yin, 2003). After this validation process, each author was responsible for coding a number of interviews. First, the relevant passages were assigned to thematic fields, i.e., awareness of ALMPs and type of programme. Second, within each thematic group, the statements⁴ were assigned to different lines of reasoning as to how ALMP participation was interpreted.

Table 1: Coding Scheme	
Step 1:	Thematic Fields
Awareness of ALMPS	<i>Is aware of ALMPS</i> <i>Is not aware of ALMPS</i>
Type of programme	<i>Training (further vocational training or specific courses)</i> <i>Temporary employment programmes</i> <i>Wage subsidy</i>
Step 2:	Reasoning
Reasoning for considering ALMPs	<i>Human capital</i> <i>Incentives to hire (wage subsidy)</i> <i>Screening device:</i> <i>-Positive signal</i> <i>-Negative signal</i> <i>Neutral</i>

Results

How employers interpret ALMP participation

In this section, we discuss first whether employers take ALMPs into account when hiring; then, we proceed to their perception of different ALMPs and analyse whether this depends on the assumed agency of ALMP participation.

In general, our findings show that employers in both countries are not very familiar with ALMPs and their allocation process. Nevertheless, they consider ALMP participation when hiring. This result shows that it is not necessary to have specific knowledge about how the system works to interpret an information, rather employers try to make sense of any kind of information that is provided and use it to improve their assessment of a candidate. This is in line with other studies showing that employers pay attention to different kind of information, including hobbies, attractiveness, social background and many more (see e.g. Rooth 2011,

2012). The results further show that there are no systematic differences between employers in the two countries, Switzerland and Sweden, regarding their interpretation of ALMPs.

Overall, only a minority thinks that ALMP participation is altogether irrelevant. Such employers draw a clear distinction between the person and her skills and her unemployment experience. Consequently, they do not consider a person's ALMP experience when evaluating the candidate, therefore ALMP participation results in a neutral signal.

Employers who instead consider ALMPs when hiring can be divided into two groups. According to our theoretical argument, some believe that ALMPs are mandatory either by law or are imposed by the caseworker – possibly as a sanctioning tool. Employers who believe that ALMP participation is imposed automatically once someone is unemployed tend to read little into this information (neutral signal). This way of interpreting ALMPs is nicely summarized by this respondent:

The way I see it, it is not the person per se who can be held responsible for the fact that they have gone through these measures. They have to do it: they have to do something according to the PES. Those are the rules, so I don't think anything of that. [...] Their experience with these programmes doesn't signal anything in particular. (Hotel5SWE)

A substantial number of employers indeed believed that ALMP participation is voluntary and thus at least partly actively initiated by the unemployed person. In instances where ALMP participation is assumed to reflect an *individual decision by the unemployed individual*, ALMP participation is also considered a relevant positive signal and is associated with a particularly high motivation to work. In this regard, employers often mentioned that ALMP participation shows the motivation to work.

This shows me that there is the will to work. I think this is an important sign. (Hotel3CH)

That's great because I think it is much better to do something like that than sit at home and do nothing. (Hotel8SWE)

These findings are in line with our expectation that, depending on the attribution of agency, the signals of specific programmes may be altered. Finally, we find that a minority of employers interpreted programme participation as a clear negative signal of behavioural or other shortcomings of a candidate.

Whether or not and in which way employers considered ALMPs in their recruitment decisions did not seem to vary systematically among different types of employers. The only difference emerging was that larger companies with a more professionalized HR- management seemed to be more likely to hire from disadvantage groups, such as migrants or long-term unemployed with little experience, and were more willing to offer training opportunities to this population. Often, employers highlighted their social responsibility as a reason for why they give a chance to weaker candidates. A manager of a big hotel chain puts it the following way:

This is also something nice, if you can even give someone a chance. [...] So it is also a responsibility of the employers somehow that they find a way back into working life. (Hotel13CH)

Smaller establishments could instead less easily afford to take the risk of hiring the wrong person, or as a hotel manager told us:

So far this has not happened. Because we have too little support capacities. (Hote7CH)

So it would certainly give me an incentive to try someone you wouldn't try otherwise.

Someone who feels like I don't know exactly, but then you would say "ok, try it".

(Hotel3CH)

If they were willing to hire jobseekers with wage subsidies, they often mentioned the financial aspect of the subsidy that would allow them giving a chance to a potentially "problematic" candidate:

So, [a wage subsidy] would certainly give me an incentive to try someone you wouldn't

try otherwise. Someone who feels like I don't know exactly, but then you would say "ok,

try it". (Hotel3CH)

Table 2	Identified reasoning
Substantive effect	
<i>Human capital</i>	<ul style="list-style-type: none"> • ALMPs allow collecting experience in relevant tasks (training and TEP) • Basic training is not enough, therefore ALMPs are needed • Training must match the job
<i>Wage subsidy</i>	<ul style="list-style-type: none"> • Allows for a testing period • Does not have time to supervise (low-productivity) candidates • Important not to exploit the person but to hire her after subsidies expire
Screening device	
<i>Positive signal</i>	<ul style="list-style-type: none"> • It is good that the person does something and has a daily structure (TEP) • Shows that someone is motivated and really wants to work (TEP)
<i>Negative signal</i>	<ul style="list-style-type: none"> • TEPs do not correspond to the reality, generate expectations that are too high • TEPs: Reveal problems: What is the reason why someone needs a TEP? • Basic training: Reveals a lack of competences • Wage subsidy: Reveals a lack of productivity
<i>Neutral</i>	<ul style="list-style-type: none"> • It is better than nothing (TEP) • It must match with the job (training and TEP)

Let us now discuss how employers evaluate the substantive and signalling value of the different programmes. In Table 2, we summarise these interpretations based on the categories developed in the theoretical argument, distinguishing between substantive and signalling effects and discuss them in detail in the following sections.

Temporary employment programmes

We assumed that participation in TEPs either signals the acceptance of unrewarding work and high motivation to re-integrate into the labour market. Alternatively, we expected that TEPs might be used to screen for unproductive candidates, meaning that participation in such programmes can have a negative signalling effect.

Most of the respondents said that TEP participation was better than doing nothing and that it might be a way of providing the jobseekers with a daily structure.

I would say: "Okay, but at least this person has done something, not just being unemployed and collecting money. They probably want to do something and want to feel useful, and they have a drive" – that's what I would like to look into. (Hotel7SWE).

Approximately one-fourth of the respondents use programme participation to detect motivation, i.e. a service oriented attitude, and said that following such a programme shows them that the candidate is motivated to work and can carry out basic monotonous work:

I have already said that with the breakfast buffet, that is more like basic work, and when someone keeps up with doing that [participating in a TEP] for five months, he will also keep up with the breakfast buffet even though it is kind of monotonous work. (Hotel3CH)

Clearly, however, the respondents' interpretation of ALMPs is influenced by their understanding of how TEPs are assigned to the unemployed. The respondents who mentioned

positive signalling effects often attributed agency to the unemployed individual. That these employers judged programme participation as showing the jobseeker's willingness to re-integrate into the labour market reveals that they are not familiar with the working of the PES and programme allocation, which can be enforced by caseworkers as a sanctioning tool.

The respondents who were aware of the allocation process were more critical regarding TEPs:

Yes, I mean the question always arising is why? Why does a person reach that point [of being assigned to a TEP]? (Retail 10CH)

As we expected, taking part in a less rewarding ALMP can be interpreted in different ways. On the one hand, if agency is attributed to the jobseeker, it can signal motivation and willingness to work. On the other hand, if agency is attributed to the caseworker, it might be interpreted as an indication of behavioural or other problems and therefore have a negative signalling effect, which may explain why some evaluations of TEPs find that this type of measures has a negative effect (Card et al., 2010; Kluve, 2010). However, the majority of employers were either neutral regarding TEPs or interpreted participation as a signal of high motivation.

Training

Training programmes are expected to have a positive substantive effect on the human capital endowment of a jobseeker since these programmes should provide skills that are lacking. However, the interviews reveal that oftentimes training programmes do not teach the skills needed for the job. Some employers doubt that training is useful either because these skills are soon forgotten or because most of the time these measures do not target the occupation for which a candidate is applying. Two hotel managers explain that training is relevant only when close to their business needs:

I mean, it's not a bad thing. But, then, I don't know if that certain course can help. Let's say, someone took a course in cooking for two years, comes here and asks for a job. It's more likely that we take that person than someone who has not. So, it's not a bad thing.

But [it needs to be] close to our business. (Hotel6SWE)

The benefit of it is limited because the computer course they had to do would be our booking system and this cannot be offered by the PES. (Hotel6CH)

This finding suggests that training programmes are not used for assessing the level of trainability of a candidate, probably because the occupations require only basic skills.

Some respondents in Switzerland stated that the only training programmes that they consider are those offered in the private market and that provide the participants with an official diploma. This finding reflects the importance of skills certification in the Swiss labour market. Although certification might matter less for low-skilled positions, documentation of formal qualification might still be important, as the quote of this HR-manager in retail suggests:

Yes, or a computer course. I don't know; if the PES would say we have paid a "SIZ" [specific computer course] or a "BEC" [language diploma] or an "Alliance Français" [language diploma] or something like that, then this has more weight for me. (Retail16CH).

The following quote supports the expectation that the negative signalling effect of training programmes, as revealing a lack of relevant skills, is likely to manifest only when hiring for mid- to high-skilled positions.

But if the vice director did a computer course, he would not be suitable for me. Or even a receptionist; here, you expect that the candidate already has this knowledge. (Hotel3CH)

The situation is different for candidates with a migration background. For these jobseekers most programmes seem to have a positive substantive effect. In these cases employers appreciate the effort made to learn the language or to acquire the specific knowledge necessary in the kitchen or for housekeeping:

Such stories, for migrant workers, where they can do an apprenticeship after some time, that is brilliant. And this is also a very good sign. (Hotel3CH)

And I know that we also have people in the kitchen who also come from that Snabbsparet [a programme called “Fast track to employment”]. [...] Some of them are just new in Sweden: they come from Syria, Afghanistan [...]. The main thing is that their Swedish is not very good, so that’s what they help them with. (Hotel7SWE)

Such programmes are judged positively by almost all of our respondents because they match with the tasks that are carried out on the job and provide relevant experience.

Yes, it [such a programme] is a plus because he [the candidate] was already in the working structure, he already knows what to expect, he has already heard about hygiene regulations. (Hotel5CH).

Overall, our findings regarding training suggest that these programmes are valued only if they provide knowledge that is *directly* relevant to the job and are mostly interpreted according to their substantial effect. This is especially the case for migrants, for them, training programmes might compensate for the disadvantage that they experience due to discrimination (Liechti et al., 2017; Pager et al., 2009). In the low-skilled sector, training programme participation is almost never interpreted as a positive signal of motivation and hardly ever as a negative signal of a lack of skills.

Wage subsidies

As subsidies reduce wage costs, they should have a positive substantive effect. However, as shown in previous research, wage subsidies might also be used by employers to sort out unproductive candidates (Baert, 2016, Liechti et al., 2017) Our interviews provide more evidence for a negative signalling effect than for a positive substantive effect. Many respondents suggested that applicants eligible for wage subsidies are less employable. Those employers who would consider hiring candidates eligible for a wage subsidy mentioned at the same time that it is important to not exploit the person or the system and to employ the person only when, after the subsidy expired, a job can be offered, as two respondents specify:

I think that it is important not to exploit someone but that there is a real hiring prospect later, that there is a supervisor who can work the person in [and] show her everything.

(Retail15CH)

Then, I think, when he had become so good that he could work full-time, then they [the PES] offered us to go subsidised full-time for two years! [...] With us paying 10% of his salary. But, then, we said, "Ah, no... that's not right." Because [...], in reality, he is substituting another guy at the moment. [...] It felt so wrong towards the guy, who had shown that he was good and would be able to do the job. And we had that position to offer!

So, we hired him. (Retail2SWE)

In most cases, the respondents said that they use wage subsidy as a testing period. In fact, employers are eager to see whether a candidate integrates well into the team and is friendly with customers. In other words, this measure provides a legal way to "try" candidates for a period of time without financial risk:

For me, it would be an incentive to try someone whom you would otherwise not hire.

Someone, where you have the feeling that you are not so sure, but then, [with the subsidy] you would say, "Okay, I'll try." You cannot lose much. (Hotel3CH)

However, most respondents were sceptical and stated that a wage subsidy would not incentivise them to hire someone. In fact, they associated the wage subsidy with lower productivity and higher costs of supervision for which they do not have the necessary resources:

So, having someone who is like free or who has financial help or someone who doesn't know how to work, who is lazy, then I prefer to have someone regular. Because it is just a waste of time. If we have a person for free [e.g., on subsidies] who doesn't do anything, we need to pay another person to do the job. (Hotel1SWE)

Other employers say that they would pay attention to any possible behavioural problems of a candidate who comes with a subsidy and that they would perform a background check. This result is in line with the findings of Baert (2016) and Liechti et al. (2017) who show that employers most likely use wage subsidies as a screening device to identify unproductive candidates.

Discussion

Our findings suggest that employers in both countries (Switzerland and Sweden) are not very familiar with ALMPs and their implementation. Employers were unaware of whether unemployed individuals could request participation in an ALMP or whether caseworkers assigned these measures (also as punishment). However, we found that precisely the belief about whom to attribute the agency had a deep impact on how ALMP-related signals are interpreted by employers. In order to interpret the information that someone participated in

an ALMP, it is not necessary to know how the system works, rather the interpretation depends on beliefs about how the system works.

In general, the findings with regard to employers' interpretation of ALMPs are at best modestly positive. Employers' interpretation of ALMP participation seems also to depend on the candidate's distance to the labour market. For candidates that are generally perceived as having a harder time to find a job, ALMP participation is evaluated more positively than for stronger candidates.

Employers value training programmes for migrants the most because these programmes directly prepare migrants for basic work in the low-skilled sector of the labour market (substantive effect). For other candidates the use of training programmes is questioned. The skill-level of the job also has consequences for employers' judgement of ALMP participation. Employers interpret TEPs as positive signals for low-skilled tasks that do not require any formal qualifications, such as room cleaning or working at the breakfast buffet in hotels. However, employers evaluate the measures positively only when they assume that individuals decided to participate on a voluntary basis; because then it suggests the "right work attitude". Otherwise, employers use programme participation to sort out unproductive candidates or view ALMP participation as a waste of time.

As our research reveals, a better understanding of the system and the awareness of the practice of using TEPs as a sanctioning tool, is likely to increase the unintended negative signalling effect. Therefore, our research questions the utility of TEPs from the employers' perspective, not only because they are not perceived as providing a substantial added value but also because they can be interpreted as a negative signal. Finally, whether ALMP training is more useful in higher-skilled occupations remains an open question. However, our argument

suggests that employers hiring for skilled jobs may interpret course participation as a lack of human capital rather than focusing on the possible substantive advantages linked to increased human capital, likely because training is oftentimes not targeted to a specific occupation.

Conclusion

Employers in the low-skilled sector are increasingly likely to be confronted with jobseekers who participated in ALMP measures. These programmes have been widely implemented in OECD countries to address high levels of structural unemployment and the mismatch of labour supply and demand (e.g., Bonoli, 2013). While the aim of social policy interventions should be to help re-integrating unemployed into the labour market, the effectiveness of these measures is controversial (Card et al., 2010; Kluve, 2010). The suspicion is that some ALMPs unfold unintended negative consequences –including stigma effects– that prevent the unemployed from successfully re-accessing the labour market.

We argued that to better understand why some programmes are more effective than others, it is important to consider the *employers' perspective* and to analyse both, the substantive and the signalling value these measures unfold. In particular, we theorised that ALMPs are successful only if employers consider them an asset in a resume and that this is most likely to be the case if employers perceive the jobseeker to have the main *agency* in the decision to participate in such a measure (positive signalling effect) or if there are non-trivial substantive effects (i.e., monetary benefit).

Our results reveal that indeed employers' evaluation of ALMP varies with the assumed attribution of agency. Especially, TEPs unfold their positive signalling effect only when the agency is attributed to the jobseeker and not to the caseworker, otherwise, these measures are

used to identify weak candidates. Training programmes are evaluated positively only for migrants and people who are further away from the labour market.

Future research should inquire how other characteristics such as the length of the unemployment spell, the gender, and other factors, which are known to influence labour market outcomes, intervene with employers' interpretation of ALMP participation. As especially low-skilled are affected by ALMPs, due to their higher risk and duration of unemployment, it is important to create measures that are helpful for these individuals and do not further penalize them in their labour market integration.

The fact that the attributed agency influences how these measures are perceived by employers poses a dilemma for public policy: on the one hand, increasing employers' engagement in such measures could be helpful in improving the link to the labour market (van der Aa and van Berkel, 2014); on the other hand, deeper knowledge of these measures might incline employers to use programme participation to sort out unproductive candidates. This trade-off should be analysed more in depth by future research.

Policy makers are undoubtedly confronted with a dilemma that is difficult to solve. However, given the high amount of financial resources devoted to these programmes over the last three decades, a closer examination of the reasons why some of these programmes may develop unintended consequences seems crucial in order to address their shortcomings. In fact, in the foreseeable future atypical work biographies – and with them frequent unemployment spells and ALMP participation – will likely become even more common than they are today.

Endnotes

1 Breedgard (2015: 439) defines this as the “participation effect”.

2 As argued by Stryker (1980), beliefs can have real actions as consequences.

3 We conducted interviews with PES employees who confirm that these programmes are considered ways to occupy the day of the unemployed rather than to provide meaningful training. See the summary table A1 in the appendix

4 We define statements as units of sentences where the interviewees make an argument or a point. When a statement refers to two analytical categories, we code it twice.

References

- Auer D and Fossati F (2016) Efficiency or Equality: Immigrants' Access Bias to Active Labour Market Policies. *Paper presented at the nccr – on the move Summer School, Measuring discrimination*, Neuchâtel, Switzerland.
- Armingeon K (2001) Institutionalising the Swiss welfare state. *West European Politics* 24(4): 145-168.
- Baert S (2016) Wage Subsidies and Hiring Chances for the Disabled: Some Causal Evidence. *European Journal of Health Economics* 17(1): 71–86.
- Belt V and Richardson R (2005) Social Labour, Employability and Social Exclusion: Pre-Employment Training for Call Centre Work. *Urban Studies* 42(2): 257–270.
- Bertozzi F, Bonoli G and Ross F (2008) The Swiss Road to Activation: Legal Aspects, Implementation and Outcomes. In Eichhorst W, Kaufmann O, and Konle-Seidl R (eds) *Bringing the Jobless into Work? Experiences with Activation Schemes in Europe and the US*. Berlin: Springer Verlag, pp. 121–155.
- Bonoli G (2013) *The Origin of Active Social Policy: Labour Market and Childcare Policies in a Comparative Perspective*. Oxford: Oxford University Press.
- Bonoli G (2010) The Political Economy of Active Labor-Market Policy. *Politics & Society* 38(4): 435–457.
- Bonoli G (2005) The Politics of the New Social Policies: Providing Coverage against New Social Risks in Mature Welfare States. *Policy & Politics* 33(3): 431–449.
- Bredgaard T (2017) Employers and Active Labour Market Policies: Typologies and Evidence. *Social Policy and Society* 17(3): 365–377

- Bredgaard T (2015) Evaluating what works for whom in active labour market policies. *European Journal of Social Security* 17 (4): 436-452.
- Burtless G (1985) Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment. *Industrial and Labor Relations Review* 39(1): 105–114.
- Card D Kluge J and Weber A (2010) Active Labor Market Policy Evaluations: A Meta-Analysis. *NBER Working Paper No. 16173*.
- Charmaz K (2001) Grounded Theory. In R. Emerson (ed) *Contemporary Field Research: Perspectives and Formulations*. Waveland: Prospect Heights, pp. 335-352.
- Constant AF and Rinne U (2013) Labour market information for migrants and employers: the case of Germany. *Institute for the Study of Labor: Research Report* 50: 1-30.
- Duell N, Tergeist P, Bazant U and Cimper S (2010) Activation Policies in Switzerland. *OECD Social, Employment and Migration Working Papers No. 112*.
- Duncan G and Paugam S (2000) The Experience of Unemployment in Europe: The Debate. In Duncan G and Paugam S (eds) *Welfare Regimes and the Experience of Unemployment in Europe*. Oxford: Oxford University Press, pp.1-22.
- Esping-Andersen G (1990) *Three worlds of welfare state capitalism*. Princeton University Press, Princeton.
- Estevez-Abe M, Iversen T and Soskice D (2001) Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State. In Hall PA and Soskice D (eds) *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press, pp. 145–183.
- Falk A, Lalive R and Zweimüller J (2005) The Success of Job Applications: A New Approach to Program Evaluation. *Labour Economics* 12(6): 739–748.

- Filges T and Hansen AT (2017) The threat effect of active labour market programs. *Journal of Economic Surveys* 31(1): 58–78.
- Filges T, Geerdsen LP, Smedslund G, Klint Jørgensen AM and Geerdsen LP (2010) Active Labor Market Programme Participation for Unemployment Insurance Recipients. *Campbell Systematic Reviews*, 1–342.
- Furåker B, Johansson L and Lind J (1990) Unemployment and Labour Market Policies in the Scandinavian Countries. *Acta Sociologica* 33(2):141-164
- Gesthuizen, M and Scheepers, P (2010) Economic Vulnerability among Low-Educated Europeans: Resource, Composition, Labour Market and Welfare State Influences. *Acta Sociologica* 53(3): 247-267.
- Ingold J. and Stuart M (2015) The Demand-Side of Active Labour Market Policies: A Regional Study of Employer Engagement in the Work Programme. *Journal of Social Policy* 44(3): 443–62.
- Ingold J. and Valizade D. (2017) Employers' recruitment of disadvantaged groups: exploring the effect of active labour market programme agencies as labour market intermediaries. *Human Resource Management Journal* 27(4): 530–547.
- Kluge J (2010) The effectiveness of European active labor market programs. *Labour Economics* 17(6): 904–918.
- Köhler PA, Thorén KH and Ulmestig R (2008) Activation Policies in Sweden: Something Old, Something New, Something Borrowed and Something Blue. In; Eichhorst W Kaufmann O, Konle-Seidl R (eds) *Bringing the Jobless into Work?* Berlin: Springer pp. 257-296.
- Kriesi H, Fossati F and Bernhard L (forthcoming, 2019) The political contexts of the national policy debates. In: Bernhard L, Kriesi H. Fossati F and Hänggeli R (eds) *Debating*

- Unemployment Policy: Political Communication and the Labour Market in Western Europe*.
Cambridge: Cambridge University Press.
- Lindsay C, McCracken M and McQuaid RW (2003) Unemployment Duration and Employability in Remote Rural Labour Markets. *Journal of Rural Studies* 19(2): 187–200.
- Lødemel I and Trickey H (2001) *An Offer You Can't Refuse: Workfare in International Perspective*. London: The Policy Press.
- Martin CJ and Swank D (2004) Does the Organization of Capital Matter? Employers and Active Labour Market Policy at the National and Firm Level. *The American Political Science Review* 98(4): 593–611.
- Martin CJ (2004) Reinventing Welfare Regimes: Employers and the Implementation of Active Social Policy. *World Politics* 57(1): 39–69.
- Martin JP and Grubb D (2001) What Works and for Whom: A Review of OECD Countries' Experiences with Active Labour Market Policies. *IFAU Working Paper* 14: 1–55.
- Moss P and Tilly C (2001) Stories Employers Tell. Employer Perceptions of Race and Skill. In: Wharton AS (ed) *Working in America. Continuity, Conflict, and Change*. Boston: McGraw Hill, pp. 235–260.
- Nickson D, Warhurst C, Commander J, Hurrell, SA and Cullen AM (2012) Soft Skills and Employability: Evidence from UK Retail. *Economic and Industrial Democracy* 33(1): 65–84.
- OECD (1994) *The OECD Jobs Study*, Paris: OECD.
- OECD (2015) *OECD Employment Outlook 2015*, Paris: OECD.
- OECD (2017) Public expenditure and participant stocks on LMP Number of participants as a percentage of labour force. Available at <http://stats.oecd.org>, (accessed 10.01.2018).
- Pager D Western, B and Bonikowski B (2009) Discrimination in a low wage labor market: A field experiment. *American Sociological Review* 74(5): 777–799.

- Rooth DO (2011) Work out or out of Work — The Labor Market Return to Physical Fitness and Leisure Sports Activities. *Labour Economics*, 18(3): 399–409.
- Rooth DO (2012) Obesity, Attractiveness, and Differential Treatment in Hiring. *The Journal of Human Resources*, 44(3): 710–735.
- Sianesi B (2008) Differential effects of active labour market programs for the unemployed. *Labour Economics* 15(3): 370-399.
- Sianesi B (2004) An evaluation of the Swedish system of active labor market programs in the 1990s. *The Review of Economics and Statistics* 86(1): 133-155.
- Spence M (1973) Job Market Signaling. *The Quarterly Journal of Economics* 87(3): 355–374.
- Stryker S (1980). *Symbolic Interactionism: A Social Structural Version*. Menlo Park, California: Benjamin/Cummings Publishing Company
- Swenson PA (2002) *Capitalist against Markets: The Making of Labor Markets and Welfare States in the United States and Sweden*. Oxford: Oxford University Press.
- van der Aa P and van Berkel, R (2014) Innovating Job Activation by Involving Employers. *International Social Security Review* 67(2): 11–27.
- Van Belle E, Caers R, De Couck M., Di Stasio V. and Baert S. (2018) The Signal of Applying for a Job Under a Vacancy Referral Scheme. *GLO Discussion Paper* 173: 1–34.
- Waldinger RD & Lichter MI (2003) *How the Other Half Works: Immigration and the Social Organization of Labor*, Berkeley: University of California Press
- Yin R (2003) *Case Study Research: Design and Methods*. Thousand Oaks: Sage.

Appendix

Table A1 : Details about the respondents

Code	Gender	Position	Hiring experience	ALMP experience	Sector	Country
Hotel1CH	male	HR-manager	< 5 years	yes, but no experience	hotel	CH
Hotel2CH	male	manager of the hotel	5 - 10 years	no	hotel	CH
Hotel3CH	female	HR-manager	5 - 10 years	yes, has experience	hotel	CH
Hotel4CH	male	manager of the hotel	5 - 10 years	no	hotel	CH
Hotel5CH	male	the hotel	> 10 years	yes, has experience	hotel	CH
Hotel6CH	female	HR-manager	< 5 years	yes, has experience	hotel	CH
Hotel7CH	female	line manager	5 - 10 years	no	hotel	CH
Hotel8CH	female	HR-manager	5 - 10 years	no	hotel	CH
Hotel9CH	male	manager of the hotel	> 10 years	yes, but no experience	hotel	CH
Retail10CH	female	HR-manager	< 5 years	yes, but no experience	retail	CH
Retail11CH	male	HR-manager	> 10 years	yes, has experience	retail	CH
Hotel12CH	female	HR-manager	< 5 years	no	hotel	CH
Hotel13CH	female	HR-manager	5 - 10 years	no	hotel	CH
Hotel13CH	female	line manager	5 - 10 years	no	hotel	CH
Retail14CH	male	HR-manager	> 10 years	yes, has experience	retail	CH
Retail15CH	female	HR-manager	5 - 10 years	yes, but no experience	retail	CH
Retail16CH	female	HR-manager	> 10 years	yes, has experience	retail	CH
Hotel1SWE	male	manager of the hotel	< 5 years	yes, has experience	hotel	SWE
Hotel2SWE	female	line manager	5 - 10 years	yes, but no experience	hotel	SWE
Hotel3SWE	female	line manager	5 - 10 years	no	hotel	SWE
Hotel4SWE	male	manager of the hotel	> 10 years	yes, has experience	hotel	SWE
Hotel5SWE	female	manager of the hotel	> 10 years	yes, has experience	hotel	SWE
Hotel6SWE	male	line manager	> 10 years	yes, has experience	hotel	SWE
Hotel7SWE	female	manager of the hotel	> 10 years	yes, has experience	hotel	SWE

Hotel8SWE	female	line manager	5 - 10 years	yes, has experience	hotel	SWE
Hotel9SWE	female	HR-manager	< 5 years	yes, has experience	hotel	SWE
Hotel10SWE	male	manager of the hotel	> 10 years	yes, has experience	hotel	SWE
Hotel11SWE	female	manager of the hotel	< 5 years	yes, but no experience	hotel	SWE
Hotel12SWE	male	manager of the hotel	5 - 10 years	yes, has experience	hotel	SWE
Retail1SWE	male	supermarket	> 10 years	yes, has experience	retail	SWE
Retail2SWE	male	line manager	> 10 years	yes, has experience	retail	SWE
PES interview1	female	Caseworker at PES	-	-	-	CH
PES interview2	female	Caseworker at PES	-	-	-	CH