# Give it Another Try: What are the Effects of a Public Employment Scheme Especially Designed for Hard-to-Place Workers?

**Tobias Brändle**
**Lukas Fervers**

# IAW-Diskussionspapiere

Das Institut für Angewandte Wirtschaftsforschung (IAW) e.V. ist ein unabhängiges gemeinnütziges Forschungsinstitut, das am 17. Juli 1957 auf Initiative von Professor Dr. Hans Peter gegründet wurde. Mit der Universität Tübingen wurde im Mai 2014 eine Kooperationsvereinbarung geschlossen. Das IAW hat die Aufgabe, Forschungsergebnisse aus dem Gebiet der Wirtschafts- und Sozialwissenschaften auf Fragen der Wirtschaft anzuwenden. Die Tätigkeit des Instituts konzentriert sich auf empirische Wirtschafts- forschung und Politikberatung.

Dieses IAW-Diskussionspapier können Sie auch von unserer IAW-Website als PDF-Dokument herunterladen:

http://www.iaw.edu/index.php/IAW-Diskussionspapiere

# ISSN 1617-5654

Weitere Publikationen des IAW:

- IAW-News (erscheinen 4x jährlich)
- IAW-Forschungsberichte
- IAW-Impulse (erscheint unregelmäßig)

Möchten Sie regelmäßig eine unserer Publikationen erhalten? Dann wenden Sie sich bitte an uns:

IAW e.V. Tübingen, Ob dem Himmelreich 1, 72074 Tübingen,
Telefon: 07071 9896-0
Fax:     07071 9896-99
E-Mail:  iaw@iaw.edu

Aktuelle Informationen finden Sie auch im Internet unter:

**http://www.iaw.edu**

# Give it Another Try: What are the Effects of a Job Creation Scheme Especially Designed for Hard-to-Place Workers?[1]

Tobias Brändle[2]    Lukas Fervers[3]

04 April 2017

## Abstract

Job creation schemes (JCSs) have for a long time been considered to function as stepping stone into the labour market for unemployed workers. However, previous research has shown that public job creation schemes have mostly negative effects on the employment outcomes of participants, probably due to strong lock-in effects, which are particularly strong for unemployed workers with higher labour market attachment. This raises the question of whether JCSs could be an effective policy tool for very-hard-to-place workers who have very low job chances anyway. We contribute to this discussion by analysing a JCS that employs a special selection mechanism to identify these workers. Relying on a combination of administrative data and survey data, we employ radius-matching with regression adjustment to estimate treatment effects. Our results indicate that the effects are still negative but weaker than the ones reported in previous studies. Furthermore, we point to effect heterogeneity with regard to contract duration which suggests that the results are more optimistic for shorter contracts. Finally, we show that the results are sensitive to the inclusion of survey variables, even if high quality administrative data are available.

Keywords: active labour market programme; job creation scheme; public employment programme; propensity score matching; employability; integrated employment biographies

JEL Codes: J18, J24, J68

---

[2] **Corresponding Author**; Institute for Applied Economic Research (IAW) Tuebingen; tobias.braendle(at)iaw.edu.
[3] Institute for Applied Economic Research (IAW) Tuebingen and Centre for Social Policy Research, University of Bremen; lukas.fervers(at)iaw.edu.

# 1. Introduction

At first glance, the state and development of the German labour market is a success story. Despite the financial crisis towards the end of the 2000s, the unemployment rate has gone down from 11.2% to 4.5% of the working population, which initiated discussions on a second economic miracle in Germany (Rinne and Zimmermann 2012). At the same time, long-term unemployment has remained almost stable within this period, and integration rates of long-term unemployed worker have not been improved over the last decade (cf. Spermann, 2015). Apparently, there are many working-age workers who are unable to participate in the regular labour market, even in case of sound economic conditions and many job vacancies to be filled.

Together with the arrival of more than one million refugees, this has revitalized the discussion on possible strategies for active labour market policies (ALMPs), especially on those who target long-term unemployed and hard-to-place workers.[4] These individuals need both getting used to regular working activities again, as well as improving basic skills to obtain a job in the regular labour market. Job creation schemes have for a long time been employed as a policy tool that tries to achieve both aims at once. However, previous evaluations suggest that JCSs even tend to worsen employment chances of participants (for meta analyses see Card et al. 2010, Kluve 2010). While the causal mechanisms that trigger this finding are not directly observable, two aspects could be of relevance here. First, due to their (often) long duration, JCSs display strong lock-in effects. Participants reduce their search effort for regular employment during programme participation. This reduces integration rates especially for workers with higher labour market attachment who may have found a job during the time of the programme in case of non-participation. This argument is supported by the finding that the negative effect is less severe for workers with less favourable employment histories (for instance long unemployment duration), who have lower integration rates into the labour market anyway (Hujer and Thomsen 2010). Second, the jobs used in JCSs have to be of public utility and must not substitute regular employment. While the necessity for this restriction is apparent from an economic point of view, it means that jobs offered in JCSs are characterized by low productivity and low skill intensity and may therefore not be suitable for improving skills needed in the regular labour market.

---

[4] Long-term unemployed are out of work for over one year, which means they switch from unemployment insurance (ALG I) to social assistance (ALG II). Hard-to-place workers usually exhibit multiple placement obstacles such as no vocational training, health problems, being a single parent, being immobile etc.

We contribute to the literature by analysing the employment effects of an innovative JCS from Germany, *Modellprojekt Bürgerarbeit*, which tries to address the two shortcomings explained above at once.[5] First and most importantly, potential participants do not directly start participation in the JCS, but have to go through a period of intensified counselling and monitored job search activities of at least six months. Only if they cannot find a job during this period, they may apply for the JCS. This special selection mechanism aims at targeting the programme on individuals who have (almost) no chances of finding employment at all. If these workers are successfully identified, the effect of programme participation cannot be negative anymore. Second, the JCS only consists of part-time jobs to enable participants to continue looking for jobs on the labour market, and is accompanied by a mandatory, individualised coaching. The coaching can be of very diverse content and addresses personal problems as well as lacks of skills, and is supposed to overcome the problem that JCSs cannot on their own offer a skill level which is needed in the regular labour market.

Apart from analysing this innovative institutional setting, we make two further contributions. First, we analyse whether employment effects differ with respect to contract duration. This analysis is motivated by the argument that the negative effect on search behaviour is weaker for shorter programme durations, while the added value of further programme participation after a period of, say, one year is very limited. Second, we account for the fact that selection may take place on unobservable by following the approach suggested by Caliendo et al. (2014) and combine register data with pre-treatment survey data on usually unobservable variables, such as motivation, skills, and personal problems. In contrast to the results of Caliendo et al. (2014), we find that the inclusion of additional variables does matter, implying that the validity of relying on administrative data alone depends on the institutional context.

To preview our findings, the results reveal remarkably negative employment effects, similar but slightly weaker to what has been found in the literature, and despite the innovative elements of the programme. When discussing our results in detail, we will point to some special institutional features that seem to have impeded the success of the programme. Since these features may matter for other programmes, too, this points to clear-cut conclusions regarding future (active) labour market policy-making. For instance, the negative effect is weaker for contract durations of up to one year. This means that future policy-making might reconsider the duration of and, more generally, the purpose of JCSs.

---

[5] The Institute of Applied Economic Research (IAW) has been among the institutions responsible for the evaluation of the programme. The final report can be found at IAW, ISG (2015).

The remainder of this paper is organized as follows. In the subsequent section 2, we present a brief overview of the previous literature. Subsequently, we describe the institutional features of the programme in more detail in section 3, before we explain our empirical strategy in section 4. In section 5, we present our results and discuss theoretical implications and policy-conclusions. Section 6 concludes.

## 2. Literature Review

There has been an increasing interest in the impact of JCSs since the end of the 1990s/ beginning of 2000s. Even though JCSs have been part of the ALMP toolbox in almost all countries, they have been particularly heavily employed in times of high structural unemployment or economic transformation, when they functioned as secondary labour markets. Correspondingly, a huge number of studies focus on East Germany in the time after German reunification. Overall, the results are rather negative and reveal that programme participation even reduces the chances of finding regular employment. Based on an administrative dataset, Lechner and Wunsch (2009) analyse different JCSs from East Germany and find negative effects for all programmes, which is consistent with the findings of Kraus et al. (2004). Further research which covers East as well as West Germany has been conducted by Caliendo et al. (2004, 2005, and 2008) as well as Hujer and Thomsen (2010), who consistently report negative average effects on employment probability. These microeconometric studies are complemented by a macroeconomic evaluation conducted by Hujer and Zeiss (2005), who estimate an augmented matching function and confirm a negative impact of an increasing inflow into JCSs on inflow into regular employment at the aggregate level. Similarly, JCSs have gained increasing importance in Switzerland towards the end of the 1990s, when economic and labour market policy-making has been challenged by an (for Swiss standards) exceptionally long period of economic stagnation and rising unemployment. Gerfin and Lechner (2002) rely on administrative data and provide empirical evidence for a wide range of different ALMPs. While the overall results are quite mixed, JCSs are shown to insert a consistently negative effect on employment probability within the first year after programme start. Unlike the German and Swiss case, ALMPs have played an important role in Sweden, regardless of the actual economic circumstances (for a comparative evaluation of different programmes see Frölich et al. 2004 or Carling and Richardson 2004). The most relevant work in our context has been conducted by Sianesi (2008), who relies on administrative data and conducts dynamic matching analyses to estimate the effect of different ALMPs in Sweden. Even though the economic and institutional context strongly

differs from the one in the aforementioned studies, the results again point to negative employment effects. The general notion of JCSs having rather negative employment effects is confirmed by meta-analyses conducted by Card et al. (2010) as well as Kluve (2010) which support the pessimistic conclusion that JCSs have (on average) lower effects than, for instance, training programmes, on employment outcomes of participants. Card et al. (2015) provide another meta-analysis with up to 76 estimates of public sector employment programmes, and find negative short and medium run, but weakly positive long run effects (on average). These results point to potential lock-in-effects while the overall effect of JCSs on long-term labour market chances could be positive. However, only 25 to 32% of all estimates have a positive and significant impact.[6] Card et al. (2015) suggest that private employers do not value the experience or skills gained in JCSs as similar to having a regular job. Therefore, the recovery from the lock-in-phase to unsubsidised employment is slower than policy makers have hoped. The direct effect of JCSs on individual skills or other potentially valuable character traits has, to the best of our knowledge, not yet been analysed.

These negative average effects have raised the question of whether JCSs may at least be beneficial for certain groups. Caliendo et al. (2004, 2005, 2008) have made a start and distinguished the effects with respect to the usual suspects for effect heterogeneity, namely region (East vs. West Germany), gender, and sector of employment. While they do find significant differences for some sub-groups, there is no clear-cut pattern across all analyses. A more unambiguous picture is reported by Caliendo et al. (2008) as well as Hujer and Thomsen (2010) with respect to foregoing unemployment duration. Hujer and Thomsen (2010) stratify their sample according to the number of quarters of unemployment, and show that the effect is clearly less negative for persons with longer previous unemployment duration. This supports the argument that programmes are at least less detrimental to persons with lower labour market attachment who would have had low integration rates in case of non-participation, anyway.

Finally, it is worth looking at the magnitude and the temporal pattern of the effects. The latter are negative right after programme start, and accelerate up to a certain point in time, but get smaller (or sometimes even insignificant) towards the end or after the programme. However, while this suggests lock-in effects, it should be noted that negative effects often persist after the end of the programme (at least for certain groups). Hujer and Thomsen (2010) analyse

---

[6] Public sector employment programmes especially perform worse than other ALMP programmes conditional on other characteristics. For instance, JCSs are often dedicated to long-term unemployed. This group is usually more responsive to ALMP programmes than other groups.

JCSs which typically last for 12 months, and report a reduced employment probability of nine percentage points even two years after programme start (for male worker from West Germany who have entered the JCS during their first quarter of unemployment). Similarly, Sianesi (2008: 386) reports negative effects even five years after programme start. Moreover, the detected impacts are often large in magnitude. For the aforementioned group, Hujer and Thomsen (2010: 45) report negative employment effects of 20.8 percentage points six months after programme start (women: 28.8 percentage points). Even for male workers who enter the JCS during their fifth quarter of unemployment, the effects amount to 15.8 percentage points (women: 22.1 percentage points). While the effects obviously differ between studies, the mentioned findings are not extraordinary. For example, Sianesi (2008: 386) also reports negative short-term average effects of more than 20 percentage points, while Lechner and Wunsch (2009: 685) find a negative effect of about 25 percentage points six months after programme start.

In sum, three main conclusions can be drawn. First, JCSs tend to have large adverse effects on employment outcomes of participants. Second, the effects are very strong immediately after programme start but get weaker towards the end of the observation period. Finally, the effects differ between groups, especially with respect to foregoing unemployment duration. However, it is important to notice that the short-term effects are still quite large, even for long-term unemployed workers. This implies that the counterfactual employment probabilities in case of non-participation would not have been that low. Consequently, this means that in order to be effective, JCSs should target individuals with very low employment probabilities. Yet, the evidence suggests that targeting JCSs on long-term unemployed workers as the main or only criterion of selection might not be sufficient to identify workers with sufficiently low counterfactual employment probabilities. This raises the question of whether there could be alternative selection mechanisms which are able to identify even more suitable target groups.

## 3.  Structure of the Programme

The programme under discussion is a recent JCS that has been run in Germany between 2011 and 2014. As in any other JCSs, its basic idea is that unemployed worker get a publicly financed job that has to be of public utility and must not substitute regular employment. These jobs are mostly located in the public sector or at charity organizations. The activities carried out range from social services (e.g. transport services for the charity organizations) to manual

occupations or administrative tasks.[7] The programme has offered 33,955 publicly funded jobs to unemployed recipients of social assistance (recipients of social assistance are mostly long-term unemployed or have received a very low wage in their previous job). The JCS constitutes a regular employment relation including social security contributions and a gross wage of at least 900 Euros (30 hours / week, 600€ in case of 20 working-hours/week). In case of a 30 hours contract, this is significantly more than total regular welfare receipt (the actual difference depends on household size, marital status or other income sources of the household). The total costs of the programme, including payment for the publicly funded jobs, coaching, and administration, are 986.9 million Euros. In this regard, the policy relevance of the evaluation is undisputable.

Apart from these basic characteristics, there are three special features that make the programme particularly interesting. The first one is the selection into the programme that follows a very special mechanism: Before participants can actually start the JCS, they have to undergo a period of intensified counselling and monitoring lasting for at least six months (*activation period*), in which they have to search for a job in the regular labour market with special support by the local employment agencies. Only if they cannot find a job within the activation period, they become eligible to apply for the JCS. This selection mechanism is based on a simple but plausible idea: If the JCS targets long-term unemployed individuals who cannot even find a job with intensified job search assistance, the lock-in effects of the JCS will – if anything – be very low. In this case, the counterfactual integration rates in case of non-participation would have been close to zero. The evaluation of the activation period has shown that it indeed fosters exit into employment, that is, it successfully filters out workers who could find a job in a short period of time (Fervers 2016). However, the final application for the JCS occurs among activated but still unemployed individuals. In most local employment agencies, a number of individuals are pre-chosen for one job in the JCS. While the JCS-employer usually makes the final hiring decision, it has been observed that the staff in the local employment agency often have a pretty clear picture of who they want to participate in the programme, so that is not absolutely clear who effectively choses the participants. This process has implications both at the substantive as well as at the methodological level. With regard to the substantive level, we will argue that this mechanism

---

[7] The positions are mostly set in social services at communities, cities and counties, for example in schools (23.2%), in transport and catering (21.7%), or gardening (20.4%). Most of the tasks performed are involved in caring (41.1%) or in providing information (30.1%). The job requirements are, in relation to the target group, relatively high. They usually involve a minimum level of autonomy, social skills and technical knowledge. For a detailed description of the activities see IAW, ISG (2015).

essentially creates a principal-agent problem. It is the aim of the local employment agency to integrate very-hard-to-place-workers into the labour market, which suggests positive selection. The JCS-employer will prefer candidates who are likely to stay in the programme, which suggests negative selection. In any case, if the employer can chose between differently suited candidates, it would likely to result in cream-skimming (that is, employers will pick candidates with favourable characteristics and therefore higher counterfactual integration rates), which undermines the idea of the selection mechanism. Therefore, local employment agencies might strategically offer a set of potential employees from which employer will choose the candidate preferred by the former. At the methodological level, this creates additional challenges because it gives rise to positive selection on unobservables. The employers are likely to observe and base their decision on usually unobservable characteristics, such as motivation, skills not observable in a written application or certain character traits such as willingness to commute. The commonly employed strategy to conduct matching analyses that rely on high-quality administrative data may be insufficient. To sum up, the selection mechanism raises hopes about a positive programme effect, even though this mechanism may be counterbalanced by a cream-skimming effect that also creates additional methodological problems.

Second, the JCS-jobs are only part-time jobs (20 or 30 working hours) that are accompanied by a mandatory coaching. The coaching is strongly individualized and therefore of very diverse content. It ranges from support in case of personal problems to job-related coaching or other very special problems (for instance consulting with regard to physical appearance). Both features aim at tackling two natural dilemmas of JCSs. First, the JCS shall contribute to human accumulation both in terms of cognitive and non-cognitive skills. At the same time, the jobs must not substitute regular employment, and therefore have to be of rather low productivity. The coaching is therefore implemented as a means of intensifying the positive effect on human capital accumulation that may have worked suboptimal in previous JCSs. Second, the JCS shall get participants, who have been unemployed for a long time used to regular work routines, but is intended as a stepping-stone into regular employment and should not last for an unlimited amount of time. Therefore participants are required to continue searching for a job in the regular labour market already during the programme, which is difficult while being full-time employed in a JCS. This is circumvented by offering part-time jobs which grant participants enough time for job search even during the programme.

Third, participants are offered contracts of different (initial) durations (one, two or three years). Previous research on JCSs has mostly neglected possible effect heterogeneity with respect to contract duration. However, effect heterogeneity seems to be very plausible here if we consider the causal mechanisms by which JCSs affect employment outcomes. On the one hand, there may be a positive effect because unemployed individuals get used to regular working activities and accumulate additional skills. On the other hand, this positive effect is counterbalanced by the well-known lock-in effect that negatively affects the probability of finding regular employment. While the lock-in effect keeps participants away from the regular labour marker throughout the whole programme duration, the positive marginal effect on human capital accumulation is likely to decrease over time: Given the low intensity of the activities carried out, it is questionable whether there is any marginal utility of ongoing participation in terms of additional skill acquisition after a period of, say, one year. This reasoning suggests that the impact on employment outcomes may be more favourable for programme durations of one year.

In sum, the crucial questions are whether the special features of this programme are sufficient to improve employment outcomes of participants (especially in comparison to previous programmes), and whether the effect differs with respect to programme duration.

## 4. Empirical Analysis

### 4.1 Research Design, Data and Estimation

*Research Design*

The analysis is based on the comparison of employment outcomes of a treatment and control group. Participants from the JCS form the treatment group, whereas the control group consists of persons who have undergone the activation period, but were not chosen to become participants in the JCS and therefore continued to look for a job while being unemployed.[8] The idea for this setting is that participation in the activation period is already a treatment, such that a comparison with a random sample from the universe of long-term unemployed does not make sense, because we would capture two distinct treatments at the same time.[9] The decision on which individuals to activate has been left to the job centres, therefore our choice

---

[8] We further exclude those activated individuals that had already found a job in the labour market during the activation period.
[9] For analysis of the former treatment, see the companion paper by Fervers (2016).

of the comparison group guarantees that treatment and control units come from the same local labour market, hereby avoiding regional selection bias or unobservable differences in job centre quality that is difficult to overcome in the matching analysis. At the same time, the geographical closeness of treatment and control units raises doubts about the stable unit treatment value assumption (SUTVA) which states that control units are unaffected by the treatment status of other units. Even though it is a legal restriction that JCS-jobs must not substitute regular employment, it is questionable whether this restriction per se guarantees the absence of any interference between units. For example, it is possible that the municipalities would have created additional jobs if the programme had not been implemented. This would imply substitution without violating the restrictions in legal terms. In a companion paper (Fervers 2016), we rely on a similar approach as Crépon et al. (2013) and test for substitution by comparing the employment outcomes of control units from participating employment agencies with the ones from non-participating employment agencies. Using semi-parametric difference-in-differences estimation to account for regional selection, we neither find substitution effects for the activation programme nor for the JCS. Therefore, we are confident to assume that our results are not biased due to interference between units.

*Data*

The treatment effect is estimated via propensity-score matching and relies on a combination of administrative data and survey data. The administrative data (the Integrated Employment Biographies, IEB) are a combination of social security records from different sources which are frequently used in German ALMP evaluation. We can record employment status of all treatment and control units, which serves as basis for the measurement of employment outcomes. We measure these outcomes from the start of the employment period for the participants, and from a hypothetical start for the control group.[10] We define our outcome variable, integration in the first labour market, as having a social security job without parallel participation in any ALMP programme. Moreover, we use the administrative data to construct four groups of control variables. First, we rely on the detailed information on past employment biographies (namely all spells of employment, unemployment and programme participation in the last seven years) to construct indices that measure the number of months in the respective employment status in the last, as well as in the second to fourth and in the

---

[10] We can follow the individuals for up to 1,080 days, depending on individual programme entry. The hypothetical starting date is identical to the end of the activation period plus a random variable that mirrors the duration between activation period and the start of the JCS of the treatment group. Observations who have found employment before their hypothetical starting date are discarded from the analysis.

fifth to seventh year before programme start. In addition, we have constructed a dummy variable that indicates whether someone has been regularly employed at all within the last seven years. Second the IEB consist of basic socio-demographic variables such as level of education, family status, age, or the number of children. Third, they contain a number of characteristics of the last job, for instance the degree of complexity. Finally, the subjective assessment of the case worker (who group the unemployed into five categories depending on their perceived future job chances) from the local employment agencies is available for more than 90% of both treatment and control group. In addition to these individual data, we have access to information on local labour market conditions, namely regional employment and unemployment rate as well as GDP per capita. As treatment and control group come from the same local employment agencies, differences in local labour market conditions are very limited and only result from different shares of treatment and control observations between local employment agencies. Our total sample comprises of 69,452 individuals which is a 50% sample of all participants. 13,692 (or roughly 20%) of these individuals enter in the JCS and 11,819 have found a job in the labour market during the activation period, such that they could not enter the JCS. Table A.1 presents an overview on the numerical composition of the different groups. Among the participants, about half of the initial participants stay for the full duration of three years in the programme. About 34% of the participants have an (initial) contract duration of only one year. Descriptive statistics for all variables are summarized in Table A.2.

In spite of the richness and high quality of the data, the validity of the assumptions underlying a matching analysis (especially the conditional independence assumption, CIA) seems questionable. As outlined in Section 3, the application for the jobs in the JCS is a competitive process, in which the local employment agency staff and the employers decide on the most suitable candidate. Even though the employers are not profit-oriented, it still seems reasonable to expect that they will pick applicants who can fulfil the tasks for the whole contract length and therefore require a certain set of skills, for instance better communication skills, or seem to be more reliable. Descriptive comparisons of participants and non-participants before matching support this suspicion (see Table A.2). For example, the share of persons without any kind of school degree or professional qualification is 9% in the treatment group but 12% in the control group, whereas the incidence of individuals who have carried out highly complex activities in their last employment spell is higher in the treatment than in the control group (10% vs. 7%).

To overcome this problem, most evaluations control unobservable character traits by observing the employment history of (potential) participants, which correlates with innate ability, motivation or placement obstacles (Lechner and Wunsch, 2013). However, this approach only captures the time-invariant part of individual heterogeneity. In our case, long-term unemployed are screened and activated six months before they can enter the programme. During this period of increased coaching and counselling, it seems reasonable that personal characteristics which are important for the decision of programme participation may change: Coaching can increase motivation or reduce placement obstacles. Therefore, we follow a similar approach as Caliendo et al. (2014) and combine the administrative data with survey data on usually unobservable characteristics which affect labour market outcomes.

Both the local employment agency and the employers of the publicly funded jobs have an interest in a good match quality of the JCS participant and the job. They pre-select and chose – respectively in personal interviews – well-suited candidates, which implies selection in either direction, that is, positive or negative, see above. In case studies with job centre staff, public employers and coaches, we have identified characteristics that are important in the decision of programme participation. We have then surveyed a subset of potential entrants, that is, individuals that have undergone the activation period, right before the decision on whether they join the JCS has been made. The survey consists of questions on character traits, skills and behavioural attitudes similarly to what one would ask in a job interview. In effect, we have pretty much the same information the local employment agency staff and the JCS-employer have about the potential participants.[11] These characteristics can be grouped into five categories. First, survey participants had to report or rate their non-cognitive skills, for instance their willingness to take over responsibility or to work in teams. The other categories relate to cognitive skills (for instance self-reported capacity to write e-mails or conduct internet research), social problems (for instance whether there are family conflicts), the support individuals receive from their social environment (for instance whether their friends are interested in their situation), and concessions they are willing to make in order to find a job (for instance whether they would be willing to change their place of residence). Out of these 6,540 individuals in the survey 1,781 later became participants in the JCS and 3,846 continued to look for a job while being unemployed (913 found a job within the activation

---

[11] The only information missing is the personal appearance of the candidate. We can, therefore, not control for employer-based discrimination against certain groups of potential participants, such as blondes vs. brunettes, individuals with tattoos or obese individuals. However, because discrimination can be either positive or negative, and because we do not know how employers judge those things, it is plausible to assume that, conditionally on what we observe, some applicants are rejected by pure chance.

period and are therefore discarded from the analysis, see Table A.1). The inclusion of these usually unobservable variables aims at overcoming potential bias from selection on unobservables that is insufficiently captured by the variables from the administrative data alone. We will see that the inclusion of these variables significantly increases the explanatory power of our treatment selection estimations (see Table A.3).

*Estimation*

Based on these data, we conduct propensity-score matching to estimate the treatment effect. Since many different matching algorithms have been suggested, we follow recent Monte-Carlo evidence from the growing body of microeconometric literature on the finite sample properties of different matching and weighting estimators (see e.g. Fröhlich 2004; Abadie and Imbens, 2006, 2011; Busso, DiNardo and McCrary 2009; Hainmueller, 2011). Since classical Monte-Carlo studies rely on an artificial data generating process which also differs from the one in the respective situation of the applied researcher, they have been criticized for being characterized by low external validity. To mitigate this problem and to rely on the advice that is most relevant for our situation, we follow the results presented by Huber et al. (2013, 2014) for two reasons. First, they conduct empirical Monte-Carlo simulations that rely on real rather than artificially created data. Second the dataset they use is a sub-sample of the IEB (SIAB) that is used for our analysis. In this regard, we are confident to assume that their data generating process mirrors the one in our study most closely. Therefore, we follow their results and conduct radius-matching with linear regression adjustment, with the radius being defined as three times the maximum distance that would have occurred in one-to-one nearest-neighbour matching. In spite of the superior performance of this estimator, the robustness of the results with regard to the estimation technique has to be checked. Therefore, we have experimented with both tuning parameters of this algorithm itself (e.g. different sizes of the radius, different modes of regression adjustment) as well as completely different matching algorithms that have performed well in Monte-Carlo studies (e.g. mahalanobis-matching with regression adjustment as suggested by Abadie and Imbens (2006, 2011). All specifications yield qualitatively similar results and lead to the same substantive conclusions.

## 4.2 Results

We start by presenting the results for the whole sample (Figure 5.1), once without (left) and with (right panel) the survey data.[12] The graph displays absolute treatment effects on integration into the first labour market in percentage points at different points in time after programme participation.[13]

**Figure 5.1:   ATT of Participation in the Employment Period on Integration into the First Labour Market**
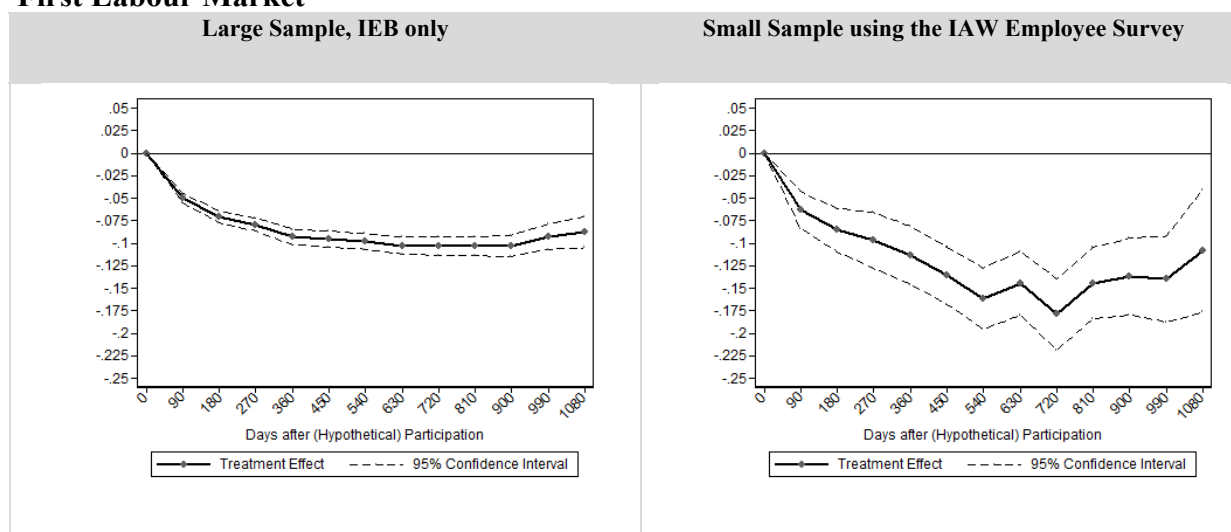


Source: Sample of the IEB, IAW Participants Survey, own calculations.

The left panel already indicates a strong and significant negative treatment effect that reaches up to 10 percentage points within the first two years after programme participation. The treatment effect is weaker towards the end of the observation period, when some of the contracts have expired. Given the rather low absolute integration rates of the treatment group, this absolute effect translates into a negative relative effect of about 50% (depending on the point in time that is considered). The negative treatment effect is larger than the difference in raw integration rates (see Figure A.1 in the Appendix) such that we can acknowledge positive selection. This argument is substantiated by the right panel which shows that the negative treatment effects get even stronger when the survey variables are included. The confidence intervals between both estimators overlap at some of the points in time, so the statistical significance of the difference is ambiguous. Nevertheless, they are large in absolute terms. For example, after 720 days the estimated effect is about 20 percentage points rather than 10 percentage points in the large sample. This points to substantive (and in this case also

---

[12] We have tested for whether survey participants are a non-random selection by running the model using administrative data only on the sample of survey participants. The results indicate no sample selection bias, that is, they are similar to the large sample results.
[13] For the control group, a hypothetical programme start has been defined that is equal to the end of the activation period plus a random variable which mirrors the distribution of the duration between the end of the activation period and the start of the JCS of the treatment group.

14

statistically significant) differences between both estimators, and fits our argument that the estimations based on administrative data alone tend to be upward biased by positive selection on unobservables.

As suggested by the previous literature, these results are likely to be driven by lock-in effects. Given that the contracts of many JCS-participants did not yet expire at the end of our observation period, the estimation for the whole sample does not reveal clear insights on this issue. We therefore proceed by distinguishing the estimation with regard to contract length, and limit the sample to observations with contract duration of only one year.[14] Due to the otherwise too small number of observations, we do not include the survey data (and keep in mind that the results tend to be upper bounds of the real effect, which is not necessarily a problem here because we are mostly interested in the difference between both groups). Figure 5.2 shows the results for one year (left panel) in comparison to the whole sample (right panel).

**Figure 5.2:    ATT of Participation in the Employment Period on Integration into the First Labour Market, Differentiated by Initial Contract Length**
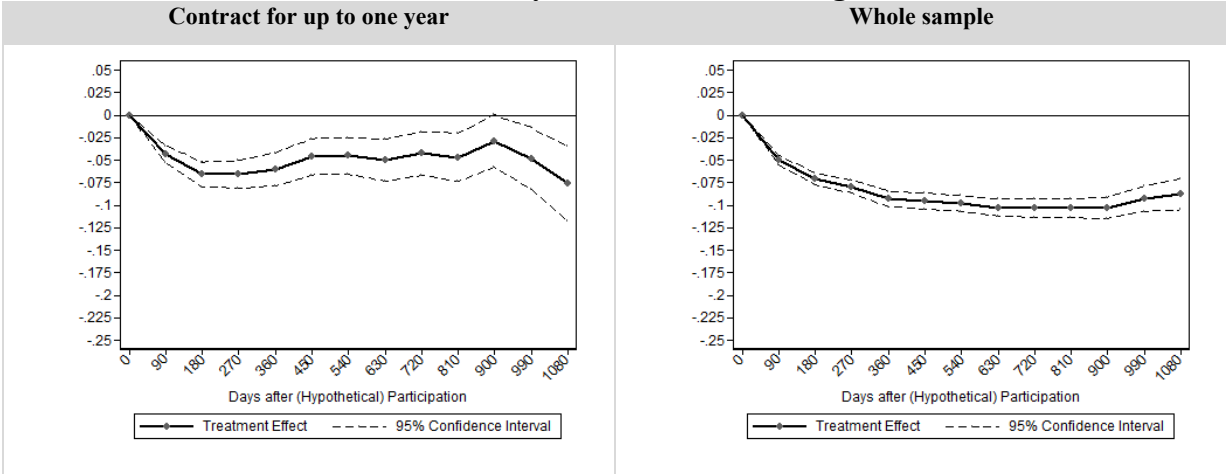


Source: Sample of the IEB, own calculations.

As expected, the results appear to be less negative for contract durations for up to one year. The difference is particularly pronounced in the second year after the start of programme participation. After 360 (720) days, the negative absolute effect is 5.5 (4.2) percentage points, compared to about 10 percentage points in the whole sample. In contrast to our expectations and previous findings from the literature, the difference gets smaller towards the end of the observation period because the negative effect accelerates again for persons with a contract of

---

[14] Since the contracts have often been limited to one year for formal reasons but were immediately extended for another one or two years, we discard observations with immediate renewals of their contract from the analysis. While this would entail conditioning on future employment outcomes under different circumstances, it does not in this case because these contracts were (mostly) only de jure limited to one year. In total, 1,969 treated units have a contract without immediate extension.

only one year. This suggests that the effects are not only driven by lock-in, but also by a negative effect after programme participation. Potential mechanisms are, for instance, negative signalling effects on future employers. Nevertheless, there will be a clear and remarkable difference on cumulated time in employment between different contract durations. It may be claimed that the difference could be driven by stronger endogenous selection into one year contracts, for instance if the contract duration is adapted according to expectations about future job chances. Nevertheless, this seems unlikely to be a problem in this special institutional setting, because JCS-employers have, if anything, an incentive to keep better skilled applicants in the programme for longer time spans, which refutes the aforementioned concerns.

Finally, we have conducted the analyses separately with respect to gender and region. However, these estimations do not point to systematic differences, the estimated treatment effects are sometimes stronger and sometimes weaker for any of the two groups (see Figures A.2 and A.3). This finding is consistent with the previous literature on JCSs, which did not reveal clear patterns with regard to gender or region-specific effect heterogeneity.

## 4.3 Discussion

The results from the econometric analysis reveal three main insights. First, the hope of achieving more favourable effects due to the special selection mechanism of the programme has overall not been fulfilled. The negative treatment effects tend to be weaker than the ones reported in previous evaluations, but it is still significantly negative both in statistical and in economic terms. This finding comes as a bad surprise, because the innovative approach to filter out individuals who are able to find a job within a short period of time seemed promising from a theoretical point of view. Moreover, previous research on the impact of the activation programme (IAW, ISG 2015; Fervers, 2016) shows that it did foster immediate labour market integration. Furthermore, the comparison of the observations who found a job before they entered the JCS reveals that they are indeed characterised by higher labour market attachment than the treatment and control group. This suggests that the selection mechanism successfully managed to target the programme on individuals with worse or no immediate job chances. However, our analysis of the final step of the selection process (that is, whether someone participates in the JCS or continues to look for a job while being unemployed) reveals that the opposite has taken place here. The comparison of both groups points to cream-skimming rather than targeting on very-hard-to-place-workers, because the treatment

group is characterised by more favourable characteristics. While the causal mechanisms of the selection process are not directly observed, it seems convincing to argue that the mechanism involved here is a principal-agent problem: While the purpose of the programme is integration in the labour market, the agents that carry out the programme have an incentive to keep individuals in the JCS. This might undermine the idea of the programme. While it seems to be a rather special case at first glance, this problem may occur with any programme where third party organisations are involved, be it job creation schemes, wage subsidies or job search assistance and training programmes (especially if the salary of the third party organisation depends on the participation duration of the participants). In this regard, it is the central policy conclusion from the main analysis that it remains a promising idea to target on very-hard-to-place-workers by other means than just considering past employment biographies. At the same time, it is worth reconsidering possible mechanisms of identifying groups with very low counterfactual integration rates. This could include restrictions with regard to other characteristics such as health problems or other innovative approaches regarding a certain pre-selection. In any case, our analysis has shown that it is essential to enforce this targeting at all steps of the selection mechanism, especially if third party organizations are involved.

Second, the distinction with respect to contract duration indicates that a shortening of JCSs should be considered. While our empirical analyses show remarkable effect heterogeneity (that is, less negative effects for contract durations of up to one year), it seems again convincing that these findings may be generalized at least to a certain extent to other contexts for two reasons. First, lock-in effects are likely to be stronger for longer programmes. If the programme lasts for three years, participants have a strong incentive to stop any job search activities, especially if the payment received is close or equal to the one they could reach in the first labour market. In contrast, if programmes only last for a couple of months, participants are much more likely to continue their job search activities during programme participation. Second, it seems questionable that participation in the JCS has any additional gain after a period of, say, more than one year. As outlined in Section 1, the original purpose of JCSs was to get long-term unemployed individuals used to regular working activities again (for instance in terms of regular time structure and working routines), and possibly to improve some basic cognitive and non-cognitive skills. However, given that JCSs have to be of public utility, they cannot consist of highly productive activities. Therefore, the activities are in general of rather low intensity (as long as the programme complies with the formal restriction that the JCS-jobs must not substitute regular jobs), and any additional positive effect on skills and behavioural attitudes is therefore likely to diminish after a certain period of time. So

17

while the literature on JCSs suggests that they do not provide the necessary skills valued by employers in the labour market for unsubsidised jobs, we would put that in somewhat more formal terms: the optimal contract duration is reached if the additional gain of any further participation equals the negative effect on employment probability due to lock-in. Even though it does not seem feasible to actually determine this point exactly, programme durations of three years appear to be too long. In this regard, shorter programme durations should be considered for future programmes. Alternatively, it could be worth considering other innovative approaches that have been suggested by the JCS-employers themselves such as the possibility to interrupt the JCS for short internships or trial work periods in regular jobs.

The third aspect is a more methodological one. As noted in section 4.1, the validity of the CIA seems to be questionable in the given institutional context if the analysis relies on administrative data alone. Correspondingly, the results change when the survey variables are additionally included in the matching analysis. While this is consistent with our expectation, it contrasts the results of Caliendo et al. (2014) who rely on a similar approach but do not find differences in the estimated effects. Therefore, they conclude "that rich administrative data that includes detailed labour market histories may be good enough to draw policy conclusions on the effectiveness of active labour market policies (Caliendo et al. 2014: 4)." Their conclusion accounts especially to short- and long-term training, whereas there is a certain difference in the estimated effects when it comes to wage subsidies. Taken together with our results, this reveals a pretty plausible picture. While there may be endogenous selection into training programmes as well, it is likely to be weaker, and it is also less clear whether unobserved factors that increase the likelihood of programme participation will have a positive or a negative impact on future labour market chances. In this regard, it seems convincing that rich administrative data on past employment histories may be sufficient to absorb remaining unobserved differences. In contrast, endogenous selection into wage subsidies and JCS is likely to be stronger, because it involves a third party organization which picks the most suitable candidates. In this regard, the argument that past employment biographies absorb usually unobservable variables seems to hold for some but not for all kinds of ALMP programmes, especially not for those where a third party which has its own objectives is involved in the selection process. In this case, it is important trying to get the additional information which also plays a role in the selection process itself, such as motivation.

## 5.  Summary and Conclusions

This paper has been motivated by the consideration that the high number of long-term unemployed workers in spite of very sound economic conditions calls for policy measures that support very hard-to-place workers. In the past, JCSs may have been considered as suitable policy programmes, because they substitute the non-pecuniary aspects of paid work thus functioning as stepping-stone into regular employment. Previous evaluations have already revealed results which indicate that JCSs even strongly worsen future job chances, probably due to lock-in effects or maybe to the ineffectiveness of JCSs to provide valuable skills to the participants. Less negative effects can be observed for workers with long foregoing unemployment duration, at least in the long run or after the end of the programmes. This is a quite plausible finding given that counterfactual integration rates would have been very low for this group, anyway. Nevertheless, the effect at the beginning of the programmes as well as the effect on cumulated time in employment is still negative, which implies that lock-in effects cannot be completely avoided. This calls for alternative strategies to identify individuals with counterfactual integration rates that are close to zero. The upcoming question is then whether programmes that apply these mechanisms can insert positive effects on participating workers.

We contribute to this discussion by evaluating a JCS which uses a special selection mechanism to target hard-to-place workers. The key idea here is that all potential participants first undergo a counselling and monitoring programme that aims at supporting them to find a job in the regular labour market. By means of this preceding counselling and monitoring programme, all individuals that can still find a job in the regular labour market shall be filtered out and kept away from programme participation. Even though this seems to be a promising approach from a theoretical point of view and empirical support for this procedure can be found (Fervers, 2016), the overall results are again disappointing. The negative employment effects are slightly weaker compared to other JCSs, but still statistically robust and economically substantive, even though the counselling and monitoring programme actually successfully filtered out individuals with better labour market prospects. Our main explanation for the once again negative effects is that those who have undergone the activation scheme without finding a job still have a non-negligible positive probability of finding a job in the labour market, while the JCS-jobs are too generous to provide an

incentive for participants to do the same.[15] In this regard, it is the first central policy conclusion of this paper that applying a selection mechanism could still be a promising approach, but the purpose of targeting on very hard-to-place workers has to be enforced throughout the whole selection process. This especially accounts to programmes where third party organizations who follow their own and possibly contradictory objectives are involved in the selection process.

At the substantive level, another contribution is that we have pointed to effect heterogeneity with respect to contract duration. Employment effects are still negative but weaker for contract duration for up to one year. While the limits of the external validity of our analyses have to be considered, it seems reasonable to argue that this finding also generalizes to other contexts. First, because lock-in effects are by definition weaker for shorter programmes, and second, because the low skill-intensity of the activities carried out in a JCS calls the additional gain of further participation after, say, one year into question.

At the methodological level, we have extended the findings of Caliendo et al. (2014), who also combine rich administrative data with survey data. While they do not find differences in the estimated effects for training programmes after the inclusion of survey variables, there are slight differences for wage subsidies. We have contributed to the question of whether the inclusion of survey variables is important by also comparing the estimated effects with and without survey variables. Our results appear to be sensitive to the inclusion of survey variables, which implies that the results based on administrative data alone are upward biased due to endogenous selection. Together with the results of Caliendo et al. (2014), this suggests that matching analyses with administrative data alone are less reliable if the institutional setting is likely to promote strong endogenous selection, for instance, due to the involvement of third party organizations in the selection process.

To sum up, our analyses as well as previous research on JCSs have implications for both policy-making and future research. With regard to future policy-making, our analyses imply that either it has to be accepted that JCSs cannot foster labour market integration at all, or that it still may be worth applying alternative ways of targeting programmes on very-hard-to-place workers, whereas this goal has to be pursued and enforced at all steps of the selection mechanism. Moreover, the duration of JCSs should be reconsidered, with priority given to

---

[15] While the term generous might not apply to pay: 900 Euros per month in the programme are merely 200 Euros more than social welfare payments, such that hourly net pay is relatively small. However, the potentially long duration together with low hours per week and low-demanding job tasks may induce participants to the notion that no better situation can be achieved working in the first labour market.

programmes with shorter durations. For the scientific evaluations of these programmes, the combination of administrative and survey data should be considered if the institutional setting suggests strong endogenous selection. Finally and again more at the substantive level, future evaluations should focus on the mechanisms through which such programmes can affect the future employment probability of participants. It is still questionable, for instance, whether participants in JCSs can acquire valuable skills in public utility jobs, which are, by definition, not considered valuable enough to be created without the subsidy. This leaves the open question whether it is even possible for active labour market policy to significantly improve the job chances of individuals who seem to have none.

# References

Abadie, A., & Imbens, G.W. (2006). Large sample properties of matching estimators for average treatment effects. Econometrica, 74, 235-267.

Abadie, A., & Imbens, G.W. (2011). Bias-corrected estimators for average treatment effects. Journal of Business & Economic Statistics, 29, 1-11.

Busso, M., DiNardo, J., McCrary, J. (2009): New Evidence on the Finite Sample Properties of Propensity Score Matching and Reweighting Estimators, IZA Discussion Paper No. 3998.

Caliendo, M., Hujer, R. and Thomsen, S.L. (2005): Sectoral Heterogeneity in the Employment Effects of Job Creation Schemes in Germany. Jahrbücher für Nationalökonomie und Statistik, 226, 139-179.

Caliendo, M., Hujer, R., and Thomsen, S. L. (2004): Evaluation der Eingliederungseffekte von Arbeitsbeschaffungsmaßnahmen in reguläre Beschäftigung für Teilnehmer in Deutschland.

Caliendo, M., Hujer, R., and Thomsen, S. L. (2008): Identifying Effect Heterogeneity to Improve the Efficiency of Job Creation Schemes in Germany, Applied Economics, 40(9), 1101-1122.

Caliendo, M., Mahlstedt, R., and Mitnik, A.M. (2014): Unobservable, but Unimportant? The Influence of Personality Traits (and other Usually Unobservable Variables) for the Evaluation of Labour Market Policies, IZA Discussion Paper No. 8337, IZA Bonn.

Carling, K., Richardson, K. (2004): The Relative Efficiency of Labour Market Programs: Swedish Experience from the 1990s, Labour Economics, 11, 335-354.

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 Active Labour Market Programme Evaluations, IZA Discussion Paper no. 9236.

Crépon, B., Duflo, E., Gurgand, M., Rathelot, R., and Zamora, P. (2013): Do Labor Market Policies have Displacement Effects? Evidence from a Clustered Randomized Experiment, The Quarterly Journal of Economics, 128(2), 531-580.

Fervers, L. (2016): Fast Track to the Labour Market or Highway to Hell? The Effect of Activation Policies on Quantity and Quality of Labour Market Integration, IAW Discussion Papers No. 125.

Frölich, Markus (2004): Finite-Sample Properties of Propensity-Score Matching and Weighting Estimators. Review of Economics and Statistics, 86 (1), 77-90.

Frölich, M., Heshmati, A., Lechner, M. (2004): A Microeconometric Evaluation of Rehabilitation of Long-Term Sickness in Sweden, Journal of Applied Econometrics, 19, 375-396.

Gerfin, M., and Lechner, M. (2002): A Microeconometric Evaluation of the Active Labour Market Policy in Switzerland, The Economic Journal, 112(482), 854-893.

Hainmueller, J. (2011). Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. Political Analysis, 20, 25-46.

Huber, M., Lechner, M., & Steinmayr, A. (2014). Radius matching on the propensity score with bias adjustment: tuning parameters and finite sample behaviour. Empirical Economics, 49, 1-31.

Huber, M., Lechner, M., & Wunsch, C. (2013). The performance of estimators based on the propensity score. Journal of Econometrics, 175, 1-21.

Hujer, R. and Thomsen, S.L. (2010): How do the Employment Effects of Job Creation Schemes Differ with Respect to the Foregoing Unemployment Duration?, Labour Economics, 17, 38-51.

Hujer, R., and Zeiss, C. (2005): Macroeconomic Impacts of Job Creation Schemes on the Matching Process in West Germany, Applied Economics Quarterly, 51(2), 203.

Institut für Angewandte Wirtschaftsforschung (IAW) and Institut für Sozialforschung und Gesellschaftspolitik (ISG) (2015): Evaluation der Modellprojekte „Bürgerarbeit" Endbericht zum 30. Juni 2015, Tübingen/Köln/Berlin.

Kluve, J. (2010): The Effectiveness of European Active Labor Market Programs, Labour Economics, 17, 904-918.

Kraus, F., Puhani, P. A., and Steiner, V. (2004): Do Public Works Programs Work?, Some Unpleasant Results from the East German Experience, mimeo.

Lechner, M., and Wunsch, C. (2009): Active Labour Market Policy in East Germany, Economics of Transition, 17(4), 661-702.

Lechner, M., and Wunsch, C. (2013): Sensitivity of Matching-Based Program Evaluations to the Availability of Control Variables, Labour Economics, 21, 111-121.

Rinne, U. and Zimmermann K. (2012): Another Economic Miracle? The German Labor Market and the Great Recession, IZA Journal of Labor Policy, 1(3), 1-21.

Sianesi, B. (2008): Differential Effects of Active Labour Market Programs for the Unemployed, Labour Economics, 15(3), 370-399.

Spermann, A. (2015): How to Fight Long-Term Unemployment: Lessons from Germany, IZA Journal of Labor Policy, 4(1), 1-15.

# Appendix

## Additional Tables

### Table A.1 Overview on Observations

|  | IEB register data | IAW Survey on Participants |
|---|---|---|
| Activated individuals, still unemployed | 43,941 | 3,846 |
| Activated individuals, employed in the first labour market before being eligible to the job creation scheme | 11,819 | 913 |
| Activated individuals, employed in the job creation scheme | 13,692 | 1,781 |

Source: Sample of the IEB, IAW Survey on Publicly Employed, own calculations.

### Table A.2 Descriptive Statistics on Participants and Control Groups

| Variable | Participants | Still Unemployed | Employed in the First Labour Market |
|---|---|---|---|
|  | Mean | Mean | Mean |
| No graduate | 0,09 | 0,12 | 0,07 |
| Intermediate school certificate, no professional qualification | 0,20 | 0,27 | 0,22 |
| High school degree or vocational training | 0,62 | 0,55 | 0,59 |
| High school degree and vocational training | 0,04 | 0,03 | 0,06 |
| Subject-linked university degree | 0,02 | 0,01 | 0,03 |
| University degree | 0,03 | 0,02 | 0,04 |
| Age | 44,17 | 40,87 | 35,86 |
| Family Status: single | 0,42 | 0,43 | 0,53 |
| Family Status: married/living with a partner | 0,32 | 0,34 | 0,28 |
| Family Status: divorced/widowed/living separately | 0,25 | 0,23 | 0,18 |
| Family Status: missing | 0,00 | 0,00 | 0,00 |
| Health problems: yes | 0,26 | 0,25 | 0,19 |
| Semi-skilled worker | 0,13 | 0,16 | 0,10 |
| Professionally oriented activities | 0,69 | 0,68 | 0,71 |
| Complex specialized activities | 0,08 | 0,07 | 0,10 |
| Highly complex activities | 0,10 | 0,07 | 0,10 |
| Complexity: missing / no Employment | 0,00 | 0,03 | 0,00 |
| Relieved receiving of benefit: children | 0,01 | 0,01 | 0,03 |
| Dropout of measure due to inappropriate behaviour | 0,02 | 0,03 | 0,03 |
| Dropout of measure due to other reasons | 0,04 | 0,04 | 0,04 |
| Measure not completed successfully | 0,04 | 0,05 | 0,06 |
| Child < 3 years: no | 0,60 | 0,66 | 0,24 |
| Child < 3 years: yes | 0,02 | 0,04 | 0,03 |
| Child < 3 years: missing | 0,39 | 0,31 | 0,73 |
| Child between 3 and 6 years: no | 0,58 | 0,65 | 0,25 |
| Child between 3 and 6 years: yes | 0,03 | 0,04 | 0,02 |
| Child between 3 and 6 years: missing | 0,39 | 0,31 | 0,73 |
| Child between 6 and 10 years: no | 0,55 | 0,60 | 0,24 |
| Child between 6 and 10 years: yes | 0,06 | 0,09 | 0,03 |
| Child between 6 and 10 years: missing | 0,39 | 0,31 | 0,73 |
| Child between 10 and 15 years: no | 0,52 | 0,59 | 0,23 |
| Child between 10 and 15 years: yes | 0,09 | 0,11 | 0,03 |
| Child between 10 and 15 years: missing | 0,39 | 0,31 | 0,73 |
| Lone parent: no | 0,83 | 0,82 | 0,87 |
| Lone parent: yes | 0,17 | 0,18 | 0,13 |
| Profile: Integrated | 0,03 | 0,07 | 0,13 |
| Profile: Market, activation, promotion | 0,10 | 0,14 | 0,37 |
| Profile: About to develop | 0,48 | 0,35 | 0,22 |
| Profile: About to be stable | 0,22 | 0,20 | 0,05 |
| Profile: Support necessary | 0,15 | 0,18 | 0,03 |
| Profile: missing | 0,03 | 0,08 | 0,21 |
| Number of months employed: 1 years before | 0,36 | 0,26 | 0,84 |
| Number of months employed: 2-4 years before | 1,85 | 2,02 | 5,63 |
| Number of months employed: 5-7 years before | 3,89 | 3,69 | 6,38 |

| | | | |
|---|---|---|---|
| Number of months unemployed: 1 years before | 9,09 | 9,72 | 8,41 |
| Number of months unemployed: 2-4 years before | 26,60 | 26,26 | 19,43 |
| Number of months unemployed: 5-7 years before | 16,26 | 15,28 | 11,71 |
| Number of months seeking work: 1 years before | 1,51 | 0,76 | 0,58 |
| Number of months seeking work: 2-4 years before | 3,15 | 1,76 | 1,33 |
| Number of months seeking work: 5-7 years before | 1,68 | 1,22 | 1,13 |
| Number of months program: 1 years before | 0,43 | 0,52 | 0,68 |
| Number of months program: 2-4 years before | 1,52 | 1,83 | 2,15 |
| Number of months program: 5-7 years before | 8,43 | 6,82 | 4,89 |
| Employed at all in the last 7 years before | 0,43 | 0,40 | 0,66 |
| Regional unemployment rate (level of job centres) | 11,00 | 10,36 | 9,58 |
| Regional employment rate (level of job centres) | 49,53 | 49,77 | 50,27 |
| GDP per capita of employed person (level of job centres) | 53.930,66 | 54.216,25 | 54.973,84 |
| Pers. feature: responsibility | 1,21 | 1,24 | 1,17 |
| Pers. feature: achieve goals | 1,59 | 1,62 | 1,51 |
| Pers. feature: enjoying new things | 1,27 | 1,32 | 1,23 |
| Pers. feature: precise work | 1,25 | 1,26 | 1,25 |
| Pers. feature: teamwork | 1,23 | 1,28 | 1,22 |
| Pers. feature: encounters with friends | 2,01 | 1,99 | 1,90 |
| Pers. feature: lethargic | 3,12 | 3,01 | 3,25 |
| Pers. feature: perception of being needed | 1,71 | 1,71 | 1,54 |
| Pers. feature: good professional qualification | 1,99 | 2,06 | 1,76 |
| Pers. feature: very good job experience | 1,77 | 1,88 | 1,71 |
| Pers. feature: support for job search | 2,51 | 2,49 | 2,32 |
| Reading/writing in native language | 1,98 | 2,09 | 1,97 |
| Emails and web research | 2,76 | 2,86 | 2,22 |
| Friends: receivers of unemployment benefits | 0,56 | 0,55 | 0,46 |
| Friends: professional success | 0,60 | 0,61 | 0,75 |
| Friends: interest in professional situation | 0,83 | 0,81 | 0,89 |
| Problems: none | 0,62 | 0,55 | 0,63 |
| Problems: care for sick relative | 0,11 | 0,12 | 0,10 |
| Problems: psychological problems/addiction | 0,04 | 0,05 | 0,03 |
| Problems: indebtedness | 0,15 | 0,17 | 0,16 |
| Problems: family conflicts | 0,09 | 0,11 | 0,09 |
| Making an effort to find work? (4 weeks) | 0,78 | 0,70 | 0,58 |
| Concession: > 1,5h willingness to commute | 2,64 | 2,69 | 2,66 |
| Concession: unfavourable working hours | 2,21 | 2,30 | 1,82 |
| Concession: changing conditions | 1,99 | 2,00 | 1,82 |
| Concession: change of residence | 3,27 | 3,22 | 3,01 |
| Concession: less than 8€ | 2,75 | 2,69 | 2,82 |

Source: Sample of the IEB, IAW Survey on Publicly Employed, own calculations.

# Table A.3 Estimation for Treatment Probability for Participants and Still Unemployed

| Participation Probability | Specification | | | | | | |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | Personal Characteristics | Former Job Information | Information on Unemployment Spell | Region and Job Centre Type | Employment Histories | Regional Information | Personal Characteristics |
| Female | 0,0070 | -0,0049 | -0,0061 | -0,0039 | -0,0003 | -0,0013 | 0,0026 |
| | (0,0035) | (0,0036) | (0,0038) | (0,0038) | (0,0038) | (0,0039) | (0,0162) |
| Male | (Reference Category) | | | | | | |
| No graduate | (Reference Category) | | | | | | |
| Intermediate school certificate, no professional qualification | 0,0003 | -0,0117 | -0,0127 | -0,0084 | -0,0048 | -0,0036 | -0,0160 |
| | (0,0065) | (0,0063) | (0,0062) | (0,0062) | (0,0061) | (0,0062) | (0,0291) |
| High school degree or vocational training | 0,0378 | 0,0141 | 0,0122 | 0,0153 | 0,0197 | 0,0217 | 0,0157 |
| | (0,0060) | (0,0059) | (0,0058) | (0,0059) | (0,0058) | (0,0059) | (0,0285) |
| High school degree and vocational training | 0,0557 | 0,0352 | 0,0400 | 0,0427 | 0,0533 | 0,0565 | 0,0708 |
| | (0,0103) | (0,0101) | (0,0100) | (0,0099) | (0,0099) | (0,0100) | (0,0409) |
| Subject-linked university degree | 0,0985 | 0,0687 | 0,0697 | 0,0673 | 0,0751 | 0,0807 | 0,0235 |
| | (0,0137) | (0,0136) | (0,0134) | (0,0134) | (0,0134) | (0,0136) | (0,0554) |
| University degree | 0,0884 | 0,0647 | 0,0698 | 0,0694 | 0,0820 | 0,0847 | 0,0989 |
| | (0,0123) | (0,0123) | (0,0121) | (0,0121) | (0,0121) | (0,0122) | (0,0470) |
| Age in years | 0,0056 | 0,0070 | 0,0056 | 0,0053 | 0,0042 | 0,0043 | -0,0034 |
| | (0,0011) | (0,0010) | (0,0010) | (0,0010) | (0,0010) | (0,0010) | (0,0040) |
| Age group < 25 years | -0,2071 | -0,1697 | -0,1681 | -0,1673 | -0,1679 | -0,1617 | -0,2796 |
| | (0,0223) | (0,0210) | (0,0225) | (0,0227) | (0,0226) | (0,0228) | (0,0932) |
| Age group 25 until 30 years | -0,0263 | -0,0174 | -0,0206 | -0,0193 | -0,0164 | -0,0153 | -0,1391 |
| | (0,0128) | (0,0121) | (0,0121) | (0,0120) | (0,0120) | (0,0122) | (0,0497) |
| Age group 31 until 35 years | -0,0031 | -0,0010 | -0,0043 | -0,0050 | -0,0054 | -0,0041 | -0,0771 |
| | (0,0088) | (0,0083) | (0,0084) | (0,0083) | (0,0083) | (0,0084) | (0,0340) |
| Age group 36 until 40 years | (Reference Category) | | | | | | |
| Age group 41 until 45 years | 0,0050 | 0,0012 | 0,0013 | 0,0013 | 0,0009 | -0,0001 | 0,0106 |
| | (0,0081) | (0,0077) | (0,0076) | (0,0075) | (0,0075) | (0,0076) | (0,0302) |
| Age group 46 until 50 years | 0,0078 | 0,0008 | -0,0023 | -0,0021 | 0,0011 | -0,0023 | 0,0802 |
| | (0,0119) | (0,0113) | (0,0112) | (0,0111) | (0,0110) | (0,0112) | (0,0446) |
| Age group 51 until 58 years | -0,0214 | -0,0244 | -0,0303 | -0,0287 | -0,0229 | -0,0261 | 0,0846 |
| | (0,0181) | (0,0173) | (0,0170) | (0,0169) | (0,0168) | (0,0170) | (0,0686) |
| Age group > 58 years | -0,0398 | -0,0346 | -0,0400 | -0,0374 | -0,0332 | -0,0379 | 0,1319 |
| | (0,0247) | (0,0236) | (0,0233) | (0,0231) | (0,0230) | (0,0234) | (0,0925) |
| Family Status: single | (Reference Category) | | | | | | |
| Family Status: married/ living with a partner | -0,0201 | -0,0337 | -0,0273 | -0,0241 | -0,0236 | -0,0250 | -0,0183 |
| | (0,0041) | (0,0039) | (0,0060) | (0,0059) | (0,0059) | (0,0060) | (0,0233) |
| Family Status: divorced/widowed/living separately | -0,0224 | -0,0326 | -0,0227 | -0,0205 | -0,0167 | -0,0162 | -0,0073 |
| | (0,0046) | (0,0044) | (0,0045) | (0,0045) | (0,0044) | (0,0045) | (0,0182) |
| Citizenship: German | (Reference Category) | | | | | | |
| Citizenship: other than German | -0,0967 | -0,0882 | -0,0748 | -0,0665 | -0,0595 | -0,0620 | 0,0081 |
| | (0,0065) | (0,0062) | (0,0061) | (0,0061) | (0,0061) | (0,0062) | (0,0442) |
| Health problems: Yes | -0,0157 | -0,0003 | -0,0073 | -0,0049 | -0,0066 | -0,0059 | -0,0052 |
| | (0,0039) | (0,0038) | (0,0037) | (0,0037) | (0,0037) | (0,0038) | (0,0158) |
| Blue-collar worker | (Reference Category) | | | | | | |
| White-collar worker | | 0,0345 | 0,0353 | 0,0304 | 0,0255 | 0,0261 | -0,0557 |
| | | (0,0166) | (0,0162) | (0,0160) | (0,0159) | (0,0161) | (0,0717) |
| Profession: no employment history | | -0,0588 | -0,0515 | -0,0550 | -0,0421 | -0,0406 | -0,2692 |
| | | (0,0180) | (0,0175) | (0,0175) | (0,0175) | (0,0176) | (0,1443) |
| Profession: missing | | 0,4149 | 0,4085 | 0,4006 | 0,3985 | 0,3997 | 0,4668 |
| | | (0,0085) | (0,0083) | (0,0082) | (0,0082) | (0,0083) | (0,0348) |
| Semi-skilled worker | (Reference Category) | | | | | | |
| Professionally oriented activities | | 0,0060 | 0,0067 | 0,0066 | 0,0024 | 0,0016 | -0,0005 |
| | | (0,0049) | (0,0048) | (0,0048) | (0,0047) | (0,0048) | (0,0210) |
| Complex specialized activities | | 0,0281 | 0,0297 | 0,0287 | 0,0257 | 0,0247 | 0,0141 |
| | | (0,0074) | (0,0073) | (0,0073) | (0,0072) | (0,0073) | (0,0294) |
| Highly complex activities | | 0,0278 | 0,0303 | 0,0279 | 0,0241 | 0,0230 | 0,0237 |
| | | (0,0074) | (0,0073) | (0,0073) | (0,0072) | (0,0073) | (0,0289) |
| Complexity: missing | | -0,0471 | -0,0447 | -0,0441 | -0,0377 | -0,0350 | 0,2974 |
| | | (0,0314) | (0,0305) | (0,0303) | (0,0299) | (0,0300) | (0,1569) |
| Manufacturing/ processing trade / agriculture | | 0,0307 | 0,0236 | 0,0241 | 0,0193 | 0,0203 | 0,0277 |
| | | (0,0035) | (0,0034) | (0,0034) | (0,0034) | (0,0035) | (0,0142) |
| Service sector | (Reference Category) | | | | | | |
| Job returner: no | (Reference Category) | | | | | | |
| Job returner: yes | | 0,0159 | 0,0109 | 0,0132 | 0,0117 | 0,0083 | 0,0572 |
| | | (0,0076) | (0,0098) | (0,0097) | (0,0097) | (0,0099) | (0,0367) |
| Job returner: missing | | -0,1166 | -0,0668 | -0,0583 | -0,0316 | -0,0333 | 0,1774 |
| | | (0,0388) | (0,0385) | (0,0382) | (0,0377) | (0,0379) | (0,1682) |
| Reason for end of receiving social assistance benefits: start of work | (Reference Category) | | | | | | |

26

| | | | | | |
|---|---|---|---|---|---|
| Reason for end of receiving social assistance benefits: relocation | -0,0535 (0,0055) | -0,0555 (0,0055) | -0,0515 (0,0055) | -0,0518 (0,0055) | -0,0412 (0,0228) |
| Reason for end of receiving social assistance benefits: omission of employment | 0,0468 (0,0048) | 0,0518 (0,0048) | 0,0488 (0,0048) | 0,0458 (0,0049) | 0,0899 (0,0195) |
| Special status | -0,0426 (0,0072) | -0,0389 (0,0072) | 0,0039 (0,0081) | 0,0054 (0,0082) | 0,0113 (0,0353) |
| Relieved receiving of benefit: children | 0,0459 (0,0180) | 0,0511 (0,0180) | 0,0169 (0,0179) | 0,0111 (0,0183) | -0,0299 (0,0795) |
| Relieved receiving of benefit: job returner | 0,0432 (0,0117) | 0,0420 (0,0117) | -0,0035 (0,0122) | -0,0059 (0,0124) | -0,0445 (0,0495) |
| Relieved receiving of benefit: none | (Reference Category) | | | | |
| Dropout out of ALMP programme due to inappropriate behaviour | -0,0296 (0,0100) | -0,0343 (0,0100) | -0,0300 (0,0099) | -0,0268 (0,0101) | -0,0789 (0,0428) |
| Dropout out of ALMP programme due to other reasons | 0,0054 (0,0083) | 0,0101 (0,0083) | 0,0113 (0,0082) | 0,0093 (0,0084) | -0,0998 (0,0393) |
| ALMP programme completed successfully | (Reference Category) | | | | |
| ALMP programme not completed successfully | 0,0109 (0,0082) | 0,0068 (0,0082) | 0,0026 (0,0081) | -0,0022 (0,0083) | -0,0200 (0,0343) |
| Child < 3 years: no | (Reference Category) | | | | |
| Child < 3 years: yes | -0,0255 (0,0114) | -0,0215 (0,0114) | -0,0213 (0,0112) | -0,0230 (0,0114) | 0,0462 (0,0521) |
| Child < 3 years: missing | 0,0626 (0,0036) | 0,0630 (0,0037) | 0,0637 (0,0036) | 0,0646 (0,0037) | 0,0735 (0,0150) |
| Child between 3 and 6 years: no | (Reference Category) | | | | |
| Child between 3 and 6 years: yes | 0,0187 (0,0098) | 0,0221 (0,0098) | 0,0229 (0,0097) | 0,0263 (0,0098) | -0,0004 (0,0439) |
| Child between 6 and 10 years: no | (Reference Category) | | | | |
| Child between 6 and 10 years: yes | 0,0157 (0,0073) | 0,0168 (0,0073) | 0,0187 (0,0072) | 0,0184 (0,0073) | -0,0175 (0,0295) |
| Child between 10 and 15 years: no | (Reference Category) | | | | |
| Child between 10 and 15 years: yes | 0,0259 (0,0066) | 0,0252 (0,0066) | 0,0262 (0,0065) | 0,0268 (0,0066) | 0,0397 (0,0260) |
| Role within household: main person | (Reference Category) | | | | |
| Role of within household: partner | -0,0099 (0,0057) | -0,0084 (0,0057) | -0,0008 (0,0056) | -0,0008 (0,0057) | 0,0414 (0,0234) |
| Role of within household: minor | 0,0628 (0,0283) | 0,0703 (0,0284) | 0,0684 (0,0281) | 0,0672 (0,0283) | 0,0131 (0,1453) |
| Number of persons in household: 1 | (Reference Category) | | | | |
| Number of persons in household: 2 | -0,0160 (0,0087) | -0,0141 (0,0087) | -0,0099 (0,0086) | -0,0090 (0,0087) | -0,0232 (0,0347) |
| Number of persons in household: 3 | -0,0331 (0,0104) | -0,0325 (0,0104) | -0,0234 (0,0103) | -0,0227 (0,0105) | -0,0451 (0,0415) |
| Number of persons in household: 4 | -0,0380 (0,0122) | -0,0375 (0,0122) | -0,0267 (0,0121) | -0,0268 (0,0123) | -0,0531 (0,0490) |
| Number of persons in household: 5 or more | -0,0656 (0,0144) | -0,0648 (0,0144) | -0,0506 (0,0143) | -0,0488 (0,0145) | -0,0649 (0,0580) |
| Number of persons of age able to work: 1 | (Reference Category) | | | | |
| Number of persons of age able to work: 2 | 0,0253 (0,0078) | 0,0227 (0,0078) | 0,0167 (0,0077) | 0,0172 (0,0078) | -0,0038 (0,0301) |
| Number of persons of age able to work: > 2 | 0,0364 (0,0111) | 0,0331 (0,0111) | 0,0244 (0,0110) | 0,0254 (0,0112) | 0,0068 (0,0441) |
| Number of persons under age able to work: 0 | 0,0072 (0,0169) | 0,0075 (0,0170) | 0,0078 (0,0169) | 0,0060 (0,0170) | -0,0056 (0,0723) |
| Number of persons under age able to work: 1 | 0,0070 (0,0171) | 0,0089 (0,0171) | 0,0078 (0,0170) | 0,0058 (0,0171) | -0,0216 (0,0730) |
| Number of persons under age able to work: > 1 | (Reference Category) | | | | |
| Number of unemployed persons: 0 | (Reference Category) | | | | |
| Number of unemployed persons: 1 | -0,0125 (0,0117) | -0,0139 (0,0117) | -0,0160 (0,0116) | -0,0136 (0,0118) | -0,0261 (0,0450) |
| Number of unemployed persons: > 1 | 0,0617 (0,0721) | 0,0610 (0,0720) | 0,0459 (0,0707) | 0,0473 (0,0706) | -0,1124 (0,2116) |
| Number of persons above age limit: 0 | (Reference Category) | | | | |
| Number of persons above age limit: 1 or more | 0,0065 (0,0243) | -0,0037 (0,0243) | -0,0154 (0,0243) | -0,0232 (0,0248) | -0,0888 (0,1052) |
| Lone parent: no | (Reference Category) | | | | |
| Lone parent: yes | -0,0044 (0,0074) | -0,0057 (0,0074) | -0,0029 (0,0073) | -0,0027 (0,0074) | -0,0192 (0,0292) |
| Profile: Integrated | (Reference Category) | | | | |
| Profile: Market, activation, promotion | 0,0986 (0,0089) | 0,0982 (0,0089) | 0,0982 (0,0088) | 0,0968 (0,0089) | 0,1895 (0,0353) |
| Profile: About to develop | 0,2028 (0,0080) | 0,2009 (0,0079) | 0,1961 (0,0079) | 0,1943 (0,0080) | 0,2965 (0,0323) |
| Profile: About to be stable | 0,1910 (0,0084) | 0,1938 (0,0084) | 0,1889 (0,0084) | 0,1865 (0,0085) | 0,3224 (0,0343) |
| Profile: Support necessary | 0,1736 (0,0087) | 0,1798 (0,0087) | 0,1753 (0,0086) | 0,1735 (0,0088) | 0,2927 (0,0367) |

27

| | | | | | |
|---|---|---|---|---|---|
| Profile: missing | -0,0100 | -0,0111 | -0,0105 | -0,0118 | 0,0419 |
| | (0,0109) | (0,0110) | (0,0109) | (0,0110) | (0,0452) |
| Responsible administrative body: ARGE/gE | | 0,0917 | 0,0868 | 0,1294 | 0,0106 |
| | | (0,0179) | (0,0177) | (0,0225) | (0,0329) |
| Responsible administrative body: gT/gAw | | 0,0841 | 0,0830 | 0,1450 | |
| | | (0,0191) | (0,0189) | (0,0238) | |
| Responsible administrative body: zkT | | (Reference Category) | | | |
| Regional empl. agency: Baden-Württemberg | | (Reference Category) | | | |
| Regional empl. agency: Bayern | | -0,0080 | -0,0041 | 0,0065 | 0,0275 |
| | | (0,0094) | (0,0093) | (0,0097) | (0,0426) |
| Regional empl. agency: Brandenburg | | 0,1026 | 0,0850 | 0,0664 | 0,0815 |
| | | (0,0087) | (0,0087) | (0,0114) | (0,0482) |
| Regional empl. agency: Hessen | | 0,0291 | 0,0312 | 0,0279 | 0,0531 |
| | | (0,0114) | (0,0112) | (0,0114) | (0,0559) |
| Regional empl. agency: Niedersachsen/Bremen | | 0,0702 | 0,0670 | 0,0512 | 0,0874 |
| | | (0,0097) | (0,0096) | (0,0103) | (0,0445) |
| Regional empl. agency: Nord | | 0,0984 | 0,0885 | 0,0790 | 0,1101 |
| | | (0,0091) | (0,0091) | (0,0114) | (0,0490) |
| Regional empl. agency: Nordrhein-Westfalen | | 0,0687 | 0,0650 | 0,0524 | 0,0765 |
| | | (0,0093) | (0,0092) | (0,0101) | (0,0468) |
| Regional empl. agency: Rheinland-Pfalz/Saarland | | 0,1154 | 0,1080 | 0,1109 | 0,1229 |
| | | (0,0094) | (0,0093) | (0,0098) | (0,0413) |
| Regional empl. agency: Sachsen | | 0,0989 | 0,0924 | 0,0841 | 0,1344 |
| | | (0,0096) | (0,0095) | (0,0128) | (0,0533) |
| Regional empl. agency: Sachsen-Anhalt/Thüringen | | 0,0339 | 0,0291 | 0,0205 | 0,0491 |
| | | (0,0082) | (0,0082) | (0,0121) | (0,0521) |
| No. of months employed: 1 year before | | | 0,0051 | 0,0052 | 0,0064 |
| | | | (0,0014) | (0,0014) | (0,0054) |
| No. of months employed: 2-4 years before | | | -0,0002 | -0,0003 | -0,0014 |
| | | | (0,0004) | (0,0004) | (0,0018) |
| No. of months employed: 5-7 years before | | | 0,0009 | 0,0009 | 0,0016 |
| | | | (0,0003) | (0,0003) | (0,0012) |
| No. of months unemployed: 1 year before | | | -0,0020 | -0,0016 | -0,0024 |
| | | | (0,0008) | (0,0008) | (0,0033) |
| No. of months unemployed: 2-4 years before | | | 0,0009 | 0,0008 | -0,0003 |
| | | | (0,0003) | (0,0003) | (0,0012) |
| No. of months unemployed: 5-7 years before | | | 0,0011 | 0,0011 | 0,0015 |
| | | | (0,0003) | (0,0003) | (0,0010) |
| No. of months seeking work: 1 year before | | | 0,0081 | 0,0082 | 0,0003 |
| | | | (0,0011) | (0,0011) | (0,0041) |
| No. of months seeking work: 2-4 years before | | | 0,0037 | 0,0036 | 0,0055 |
| | | | (0,0005) | (0,0005) | (0,0018) |
| No. of months seeking work: 5-7 years before | | | 0,0031 | 0,0031 | -0,0000 |
| | | | (0,0006) | (0,0006) | (0,0022) |
| No. of months program: 1 year before | | | -0,0019 | -0,0020 | -0,0030 |
| | | | (0,0013) | (0,0013) | (0,0051) |
| No. of months program: 2-4 years before | | | 0,0004 | 0,0004 | -0,0020 |
| | | | (0,0005) | (0,0005) | (0,0019) |
| No. of months program: 5-7 years before | | | 0,0023 | 0,0022 | 0,0018 |
| | | | (0,0003) | (0,0003) | (0,0010) |
| Employed at all in the last 7 years before | | | 0,0133 | 0,0128 | -0,0071 |
| | | | (0,0042) | (0,0042) | (0,0169) |
| Regional unemployment rate | | | | 0,0064 | 0,0030 |
| | | | | (0,0009) | (0,0034) |
| Regional employment rate | | | | 0,0014 | -0,0004 |
| | | | | (0,0005) | (0,0021) |
| Regional GDP per capita | | | | 0,0000 | 0,0000 |
| | | | | (0,0000) | (0,0000) |
| Migration background | | | | | -0,0299 |
| | | | | | (0,0309) |
| Pers. feature: responsibility | | | | | -0,0046 |
| | | | | | (0,0146) |
| Pers. feature: achieve goals | | | | | 0,0038 |
| | | | | | (0,0099) |
| Pers. feature: enjoying new things | | | | | -0,0377 |
| | | | | | (0,0134) |
| Pers. feature: precise work | | | | | 0,0323 |
| | | | | | (0,0149) |
| Pers. feature: teamwork | | | | | -0,0056 |
| | | | | | (0,0130) |
| Pers. feature: encounters with friends | | | | | 0,0104 |
| | | | | | (0,0071) |
| Pers. feature: lethargic | | | | | 0,0002 |
| | | | | | (0,0073) |
| Pers. feature: perception of being needed | | | | | -0,0066 |

|                                                            |            |
| ---------------------------------------------------------- | ---------- |
|                                                            | (0,0079)   |
| Pers. feature: good professional qualification             | 0,0127     |
|                                                            | (0,0077)   |
| Pers. feature: very good job experience                    | -0,0057    |
|                                                            | (0,0085)   |
| Pers. feature: support for job search                      | 0,0002     |
|                                                            | (0,0062)   |
| Health status                                              | -0,0080    |
|                                                            | (0,0061)   |
| Willingness to work: less than 3 hours                     | -0,2013    |
|                                                            | (0,1043)   |
| Willingness to work: 3 to less than 6 hours                | 0,0208     |
|                                                            | (0,0852)   |
| Willingness to work: 6 to less than 8 hours                | 0,1098     |
|                                                            | (0,0846)   |
| Willingness to work: 8 hours or more                       | 0,0951     |
|                                                            | (0,0846)   |
| Reading/writing skills in native language                  | -0,0158    |
|                                                            | (0,0084)   |
| Calculating skills                                         | 0,0068     |
|                                                            | (0,0078)   |
| Emails and web research skills                             | -0,0078    |
|                                                            | (0,0050)   |
| Driver's licence                                           | 0,0023     |
|                                                            | (0,0166)   |
| Availability of car: yes                                   | 0,0364     |
|                                                            | (0,0174)   |
| Friends: receivers of unemployment benefits                | -0,0071    |
|                                                            | (0,0144)   |
| Friends: professional success                              | -0,0223    |
|                                                            | (0,0147)   |
| Friends: interest in professional situation                | 0,0174     |
|                                                            | (0,0193)   |
| Support: partner                                           | 0,0049     |
|                                                            | (0,0165)   |
| Support: family, relatives                                 | 0,0289     |
|                                                            | (0,0154)   |
| Support: friends                                           | 0,0208     |
|                                                            | (0,0153)   |
| Support: support group                                     | -0,0776    |
|                                                            | (0,0391)   |
| Support: job centre                                        | 0,0343     |
|                                                            | (0,0372)   |
| Support: (former) colleagues                               | 0,0505     |
|                                                            | (0,0872)   |
| Support: (former) employer                                 | 0,0798     |
|                                                            | (0,0814)   |
| Support: advisor/caregiver                                 | 0,0302     |
|                                                            | (0,0846)   |
| Support: doctor/therapist                                  | 0,0895     |
|                                                            | (0,0858)   |
| Support: social facility/church                            | -0,1675    |
|                                                            | (0,1404)   |
| Support: responsible administrative body                   | 0,0470     |
|                                                            | (0,0803)   |
| Support: others                                            | 0,0488     |
|                                                            | (0,0734)   |
| Support: none                                              | 0,0187     |
|                                                            | (0,0259)   |
| Problems: none                                             | 0,0282     |
|                                                            | (0,0234)   |
| Problems: home care                                        | 0,0106     |
|                                                            | (0,0283)   |
| Problems: psychological problems/addiction                 | -0,0252    |
|                                                            | (0,0379)   |
| Problems: indebtedness                                     | 0,0090     |
|                                                            | (0,0263)   |
| Making an effort to find work? (4 weeks)                   | -0,1599    |
|                                                            | (0,2566)   |
| Application: in written form                               | 0,2256     |
|                                                            | (0,2573)   |
| Application: by phone                                      | 0,2129     |
|                                                            | (0,2589)   |
| Application: personal presentation                         | 0,2148     |
|                                                            | (0,2571)   |
| Application: contacted job centre staff                    | 0,2501     |

|  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| (0,2592) |
| Application: other | | | | | | | 0,2163 |
| (0,2564) |
| No. of job interviews (6 months) | | | | | | | 0,0002 |
| (0,0013) |
| Concession : > 1,5h to get to work | | | | | | | 0,0045 |
| (0,0062) |
| Concession: unfavourable working hours | | | | | | | 0,0002 |
| (0,0063) |
| Concession: changing working conditions | | | | | | | 0,0010 |
| (0,0066) |
| Concession: change of residence | | | | | | | 0,0017 |
| (0,0065) |
| Concession: working for less than 8€ | | | | | | | 0,0063 |
| (0,0060) |
| Perception of participation in society | | | | | | | 0,0015 |
| (0,0029) |
| Evaluation of current situation in household | | | | | | | 0,0017 |
| (0,0033) |
| Expectation of future situation | | | | | | | -0,0054 |
| (0.0045) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. of Observations | 59,717 | 59,717 | 59,522 | 59,29 | 59,29 | 57,498 | 4,262 |
| Chi$^2$ | 2.068,82 | 8.831,53 | 10.850,86 | 11.480,27 | 12.243,21 | 11.918,21 | 1.185,82 |
| Pseudo R$^2$ | 0,0322 | 0,1373 | 0,1693 | 0,1799 | 0,1918 | 0,1932 | 0,2217 |

Source: Sample of the IEB, IAW Survey on Publicly Employed, own calculations.

## Additional Figures

## Figure A.1: Probabilities of Integration in the Labour Market of Participants and (Potential) Control Observations
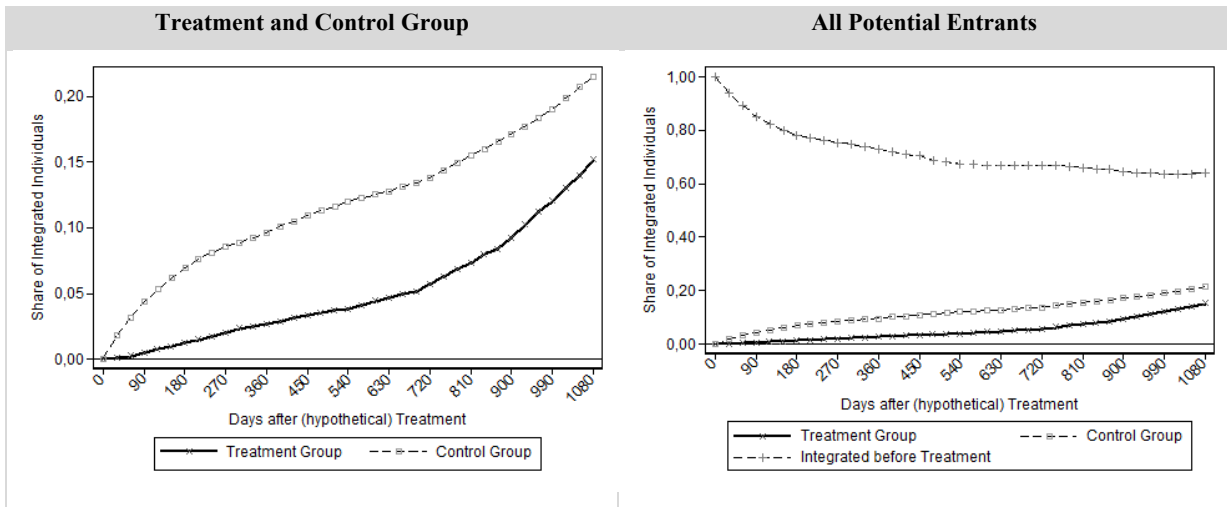


Source: Sample of the IEB, own calculations. Participation in the job creation scheme does not count as integration in the labour market.

## Figure A.2: ATT of Participation in the Employment Period on Integration into the First Labour Market, Differentiated by Gender
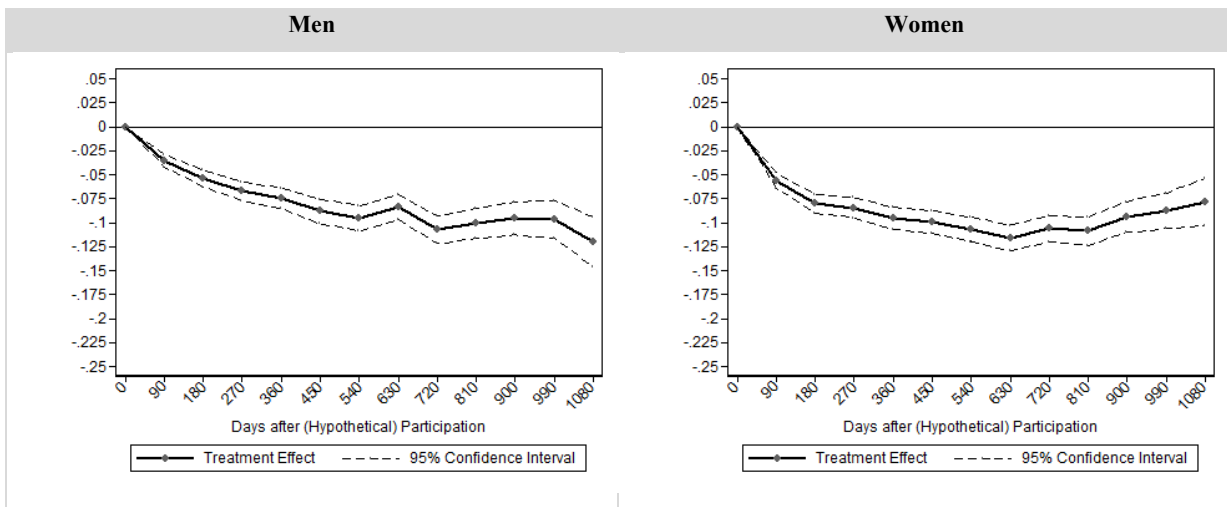


Source: Sample of the IEB, own calculations. Participation in the job creation scheme does not count as integration in the labour market.

**Figure A.3: ATT of Participation in the Employment Period on Integration into the First Labour Market, Differentiated by Region**
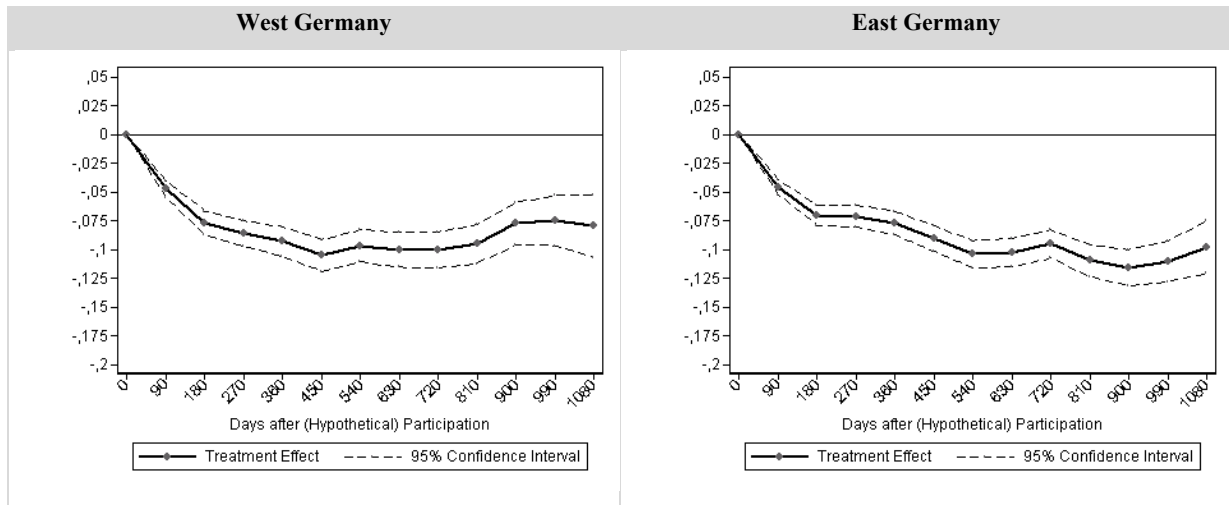


Source: Sample of the IEB, own calculations. Participation in the job creation scheme does not count as integration in the labour market.

**Figure A.4: ATT of Participation in the Employment Period on Integration into the First Labour Market**
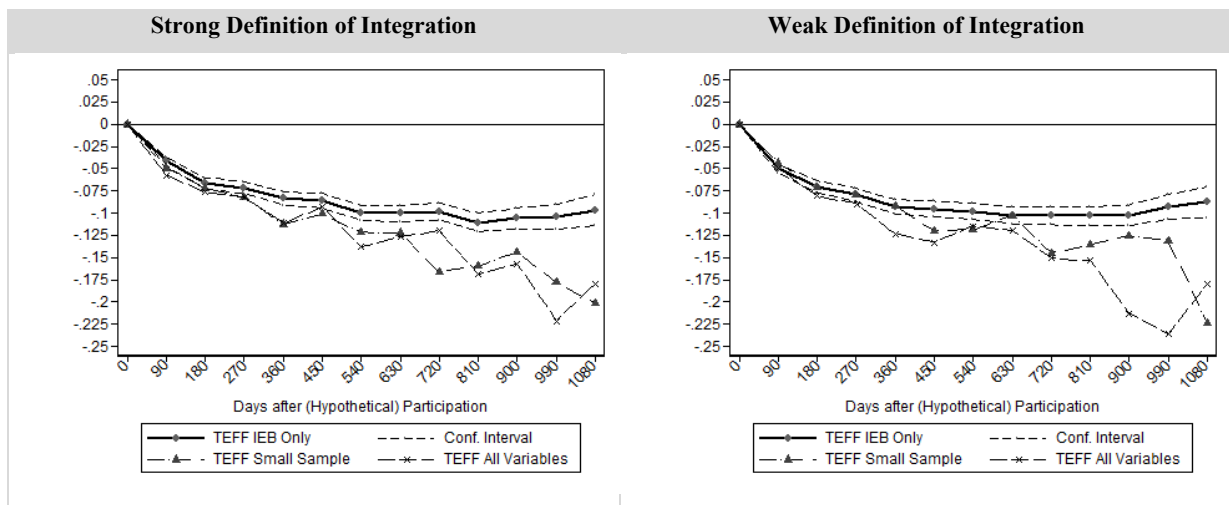


Source: Sample of the IEB, own calculations. Participation in the job creation scheme does not count as integration in the labour market.

# IAW-Diskussionspapiere

Die IAW-Diskussionspapiere erscheinen seit September 2001. Die vollständige Liste der IAW-Diskussionspapiere von 2001 bis 2013 (Nr. 1-110) finden Sie auf der IAW-Internetseite http://www.iaw.edu/index.php/IAW-Diskussions-papiere.

**IAW-Diskussionspapiere ab 2013:**

# IAW-Diskussionspapiere