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Did Customers Benefit from the Reorganisation of Customer Management in German Employment Agencies?

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Christoph Ehlert¹

Did Customers Benefit from the Reorganisation of Customer Management in German Employment Agencies?

Abstract

As a response to an overall high and persistent unemployment rate during the 1990s and the beginning of the new millennium, the German Federal Employment Agency underwent several reforms. One of the most important reforms, the reform of the organisational structure of the Federal Employment Agency, comprised an adjustment of the business model and a reorganisation of placement processes. From 2004 onwards, customer service centres (CSC) and standardised action programmes for different groups of customers were implemented in all German employment agencies, aiming at an improvement of quality and speed in the placement process. By handling customers faster (customer service centres) and activating/supporting them better (action programmes), a higher number of placements into employment should be observed, thus leading to a reduction of unemployment. By taking advantage of the staggered implementation of the customer service centres and action programmes by region, the effects on employment rates are estimated. The dynamic differencein-differences approach employed takes into account the time under treatment. The results suggest that the introduction of the customer service centres led to an increase in both, employment inflows and overall employment, while most of the action programmes had a negative impact on both.

JEL Classification: J68

Keywords: Difference-in-differences; program evaluation; customer service centre; action programmes

December 2013

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1. Introduction

By the turn of the new millennium, the customer management of the German Federal Employment Agency was supposed to be inefficient and unable to cope with the ever growing number of customers. These inefficiencies were most salient in the core business area of the FEA – the placement of unemployed and job seekers into jobs. The problems became obvious in 2002, when the so called placement scandal ("Vermittlungsskandal") became public. Only one third of the monthly declared job placements were placements according to the legal definition, while for another third of the declared placements there was room for interpretation. One third of the claimed placements, however, were not reproducible at all and partly faked by the German FEA (Schmidt 2003). As a reaction to this scandal, starting from 2003 and ending in 2006, the Federal Employment Agency underwent a major reform to improve its efficiency.

A major component of the reorganisation of the FEA was the implementation of a new customer management system in all employment agencies. The goal of this effort was a more pronounced orientation of the placement process towards employers and job seekers and to speed up and improve the quality of the placement process. Important parts of the new customer management approach were the customer service centres (CSC) and the action programmes (AP) (Bender et al. 2006). The CSCs and APs aimed at removing some major inefficiencies of customer handling that had been constraining the placement process before. Among these were the so called "pressure of the floors", exerted by customers waiting on the agency floors for counselling without appointment, but also the frequent interruption of the case managers' work flow by customers directly calling their caseworkers (Bender et al. 2006). As a reaction to the frequent interruptions by phone calls, the caseworkers did not response to a large number of calls (around 35 million phone calls were not answered before the telephone service centre as part of the CSC was set up (Mosley et al. 2006)). Additionally, the process of counselling and its structure were highly dependent on the caseworker's ability to structure the process and the procedures for programme assignment varied not only between agencies but also within agencies (Mosley et al. 2005, Schütz and Ochs 2005).

As a response to this situation, the new CSC was designed to filter customers and guide them through the services of the FEA. Filtering and guidance are essentially provided

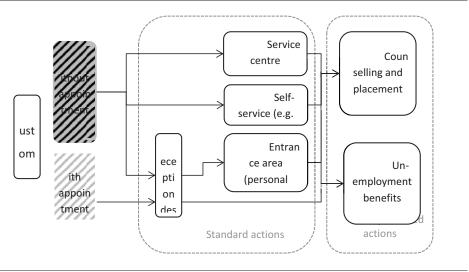
by the classification of customer groups (as part of the APs) and a sophisticated customer flow management, consisting of reception desks, entrance areas and call centres. At the same time, the APs aimed at improving the efficiency of counselling and programme assignment to improve and standardise customer service.

2. Customer management

The role of the CSCs and the APs in the new customer management is twofold: The former provide the organisational framework for customer channelling and filtering, while the latter provide the procedures and rules for the placement process. Therefore, this section starts with a description of the framework set by the CSC, followed by a detailed elaboration on the APs.

The structure of the new CSC is shown in Figure 1. Customers of the FEA, that is unemployed and jobseekers as well as individuals that receive benefits, follow different routes through the CSC, depending on whether they have an appointment or not. Without an appointment, there are three channels to contact the employment agency. The first is to contact the telephone service centres to get instant information or appointments, this channel is supposed to have a high availability (this availability is secured by the requirement that at least 80 per cent of all incoming calls have to be answered within 20 seconds (Mosley et al. 2006)). The second channel is the self-service, mostly represented by an internet platform. The third channel is personal advice directly at the reception desk and the entrance area of an employment agency. While the reception desk is optimised to complete inquiries that require only small action in a very limited amount of time (scheduling appointments, accepting documents, clarifying and channelling customers to the entrance area), the entrance area has capacity for more complex requests. Around 50 to 70 per cent of all customer requests are targeted to be solved by the agents in the entrance area (Bender et al. 2006). Only in cases where the request is more demanding, i.e. in cases of job placements, career counselling, or requests concerning unemployment benefits, an appointment is made with more specialised departments. These appointments are either made by the reception desk, the entrance area agents or by the telephone service centre. The "pressure of the floors" has thus been eliminated and replaced by a customer management system that works on the basis of appointments for specialised requests, but also allows flexible services without the need of appointments for standard requests.

Figure 1: Customer service centre concept



Source: Adapted from Bender et al. (2006).

When the customer has an appointment for counselling or placement, the APs come into action as they define the rules for the procedures of job placement and counselling within the CSC.

The APs target at the demand and supply side of the labour market. Two of the eight APs target at employers (the labour demand side) and six APs target at the unemployed and job-seekers (the labour supply side). The latter build on a profiling of clients' into four customer groups according to clients' employability, which is assessed by considering motivation, qualification, obstacles and the specific labour market situation. The customer group determines from which set of APs the caseworker can select when dealing with a client. The group that is closest to the labour market are market customers (I), comprising a group of clients that are potentially able to find a job without assistance. The second group are customers needing counselling and activation (II). These individuals can be placed by working on their motivation or by reducing smaller obstacles to placement. The third group, clients needing counselling and qualification (III), comprises persons that are motivated but need some additional qualification for being placed. The fourth group, care customers (IV), are clients that cannot be placed in the medium-term or that would require too many resources to be placed (Mosley et al. 2006).

Table 1: Action programmes

No.	Programme	Custo	omer group	Target
Supp	oly side			
1.	Job placement	(1)	Market customers	Fast and sustainable placement into general employment
2.	Changing perspectives	(11)	Customers that need counselling and activation	Development of engagement, motivation, and expectations to achieve a fast and sustainable placement
3.	Reduction of employment barriers	(II) + (III)		Identification and removal of employment barriers for a successful placement
4.	Qualification	(III)	Customers needing counselling and qualification	Adjustment of skills and qualification to labour market needs for a successful placement
5.	Maintaining labour market competences	(IV)	Care customers	Avoidance of passiveness through the provision of an employment-like environment by providing employment on the second labour market
6.	Activating counselling	(IV)	Care customers	Work on severe personal and or social barriers to employment and counselling in cases of a lack of labour market chances
Dem	and side			
7.	Standard programme		All firms	Standard and quality assured provision of labour to firms
8.	Development			Development of an intensive cooperation
	programme	2001	offers	in supplying labour to a firm

Source: Mosley et al. (2006) and Schütz and Oschmiansky (2006).

As described in Table 1, six out of eight APs are targeted at the four client groups, representing the labour supply side (unemployed, job seekers, persons seeking for advice, etc.). Another two APs are targeted at the labour demand side of the market, i.e. potential employers. The APs targeting the supply side comprise "job placement" (AP 1) as a programme for clients with good labour market prospects that are easy to place as well as "changing perspectives" (AP 2) for individuals lacking motivation or realistic assessment of their strengths. APs 3 and 4 are essentially for motivated customers whose chances to (re-)enter the first labour market are expected to be highly improved by additional qualification or counselling. Customers lacking perspective and integration chances in the medium-term (e.g. because of very low qualification or skill levels), are assigned to APs 5 and 6 (Mosley et al. 2006). While AP 5 deals with the provision of an employment-like environment by providing employment on the second labour market, AP 6 is designed to remove personal hurdles into the labour market.

The demand side APs have two target groups that are differentiated by the potential of open positions. AP 7 is targeted at employers whose potential to offer open positions is rather low. Employers that have a high potential to hire are targeted by AP 8. These

employers are more likely to be larger and have higher staff fluctuation. The idea behind this classification is that around 20 per cent of the firms offer around 80 per cent of the open positions (Bieber et al. 2005).

The hopes connected with the introduction of the APs on the supply side were to treat customers only with those measures that benefits them most. At the same time, the resource allocation was planned to improve, as the upstream profiling into customer groups would allow certain action programmes and therefore certain active labour market policy measures only for certain groups of customers. The APs on the demand side aimed at an increase of open jobs available to the clients of an agency (Mosley et al. 2006).

3. Review of the first CSC and AP evaluation

The empirical knowledge on the effectiveness of the CSCs and the APs is limited. The introduction of the CSC has been empirically evaluated only for a limited set of agencies, while the APs have been evaluated qualitatively only.

Mauer (2006) summarises the results of the CSC evaluation that was performed during the evaluation of the Hartz reforms with respect to the effects of the CSC implementation on employment. At the time of the evaluation (2004), the CSC had been introduced in some non-randomly selected pilot agencies only, making it difficult to find an appropriate control group. Furthermore, some agencies of the potential control group had been scheduled to introduce the CSC in a – back then – nearer future, making it impossible to employ them as a control group. Therefore, the author chose agencies as a control group that introduced the CSC in one of the later implementation waves. Only agencies with similar macro regional and similar customer characteristics were selected. The author demonstrates the success of this control group identification strategy by comparing outflows from unemployment and unemployment rates over time across the treatment and control agencies.

The estimations of the difference-in-differences analysis are stratified by region and gender. The results suggest that the introduction of the CSC in the pilot agencies had a positive and significant effect on employment only for men in East Germany. The other groups, men in West Germany and women in both parts of the country, did not profit. The author concludes that the resource investment in the placement process did not pay back in terms of reduced unemployment. However, it is very likely that the true effects of the CSC

introduction did not come into effect right after implementation, as such a far-reaching change in the placement process of the unemployed may go hand in hand with time intensive learning processes.

When it comes to the qualitative evaluation of the effectiveness of APs, there is evidence that the APs led to a more transparent placement process and to a clearer structure of the placement process itself. Three thirds of the case managers surveyed during a qualitative evaluation of the APs stated that the APs had a positive effect on the quality of the placement process for new customers and led to a more honest assessment of the clients' situation (Mosley et al. 2006). At the same time, the APs are seen more negatively for existing customers, especially for those with rather frequent unemployment experience and need for intense support (client group IV). The reason is that the activating and – in terms of labour market integration – promising APs are not available for this group of customers (see Table 1). Only AP 5 and 6 are available for these clients, leading to the situation of rather little assistance for these clients until they enter long-term unemployment, which allows more assistance under a different legal framework (Mosley et al. 2006).

In summary, the findings on CSCs are generally insignificant with some positive exceptions for unemployed men in East Germany. However, this finding was only based on the first waves of CSC implementation, covering a limited amount of post-treatment time. The qualitative evidence for the APs points at a better structured placement process, which could possibly lead to a positive effect on employment.

4. Methodology and data

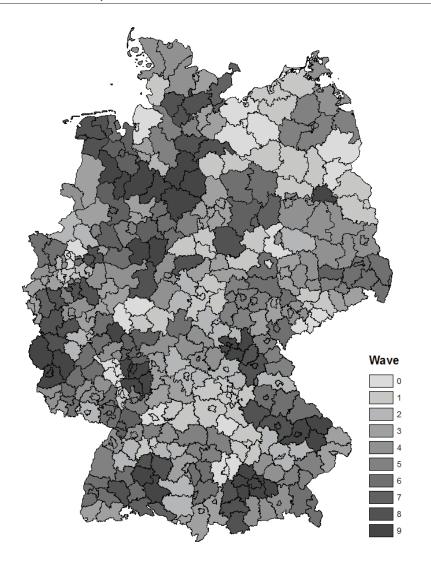
The challenge of evaluating the introduction of the new customer management is finding a valid control group. Perfectly, the control group differs from the treatment group only with respect to the treatment status, hence allowing to give an answer to the counterfactual question: What would have happened if the CSCs and APs had not been implemented? One way to get an answer to this question is having a random assignment of employment agencies to control and treatment group. Such a randomness is vital, as it implies that there is no selection of better performing agencies into one of the two groups. Furthermore, a causal evaluation in a traditional difference-in-differences framework needs

to observe both, control and treatment group in two points in time: before and after an intervention.

In the case of the implementation of the CSCs and APs, the implementation took place in several waves with all agencies having implemented the new customer management at the end. Having in mind the considerations above, a random assignment of the agencies to the treatment waves would be preferable. Non-random selection would impede to use agencies in waves that introduced CSCs and APs later as a control group for those agencies that introduced them earlier. The implementation process of the CSC took place between 2003 and 2005 and was realised in ten waves, of which the first wave (wave 0) served piloting purposes only. It comprises one agency that introduced the CSC in April 2003 and nine agencies with an implementation date in February and March 2004. The remaining eight waves were implemented monthly from February to October 2005.

The wave planning of these remaining eight waves depended on two factors. First, the availability of one of the several implementation teams that provided training and guidance to the employees of an agency and second the local constructional situation with respect to the floor plans of the agency buildings. Having the set-up of the CSC in mind (in Figure 1), it becomes salient that floor plans had to be changed in order to accommodate the reception desk and the entrance area in buildings that were often designed as cellular office buildings. Furthermore, caseworkers had to move offices as new teams with new areas of responsibility were set up for the CSC implementation. Hence, the selection process into the implementation waves was mainly driven by the availability of the implementation teams and by reconstruction needs to accommodate the new CSCs. The identification strategy for the APs also rests on this wave planning, as the APs could only be implemented after the CSC implementation was completed. However, there is variation in the time span between CSC and AP implementation that originates in the availability of the implementation teams that provided guidance and training to the caseworkers. Therefore, a similar selection mechanism that also drove the CSC implementation holds for the APs (the information on the driving factors of the wave planning is based on interviews of the author with the employees of the FEA that were in charge of the CSC and AP implementation process).

Figure 2: Location and implementation waves of CSC



Source: FEA, author's elaboration.

Hence, one of the main requirements for the evaluation of the CSC and AP implementation seems to be fulfilled: labour market characteristics should not have influenced the decision in which wave to implement the CSC and AP in a given agency. The random nature of the wave planning with respect to labour markets becomes most apparent in Figure 2. Taking two agencies as an example, the agency in the structurally weak city of Stralsund on the coast of the Baltic Sea with a high unemployment rate is in the same implementation wave as Wiesbaden, characterised by low unemployment rates and amongst the wealthiest cities in Germany.

The different timing of the implementation waves allows the use of a difference-indifferences approach that takes into account the duration in treatment. The chosen difference-in-differences strategy with group fixed effects on agency level is similar to the strategy employed by Rocha and Soares (2010). Employment serves as an outcome (empl) and is coded as a binary variable (0/1). In the regressions, employment is differentiated into employment subject to social security contributions (in the following referred to as "regular employment"), subsidised employment and transitions from underemployment to regular employment. Subsidised employment is defined as employment with parallel spells of benefit payments receipt, hence covering employment within active labour market policy measures, also employment with reduced social security Underemployment comprises unemployment, participation in active labour market policy measures and subsidised work (Hartmann 2009).

$$\begin{split} \text{empl}_{i,t} &= \alpha + \sum_{j \in \{0,4,8,\dots,104\}} \beta_j \cdot \text{CSC}_{j,i,t} + \ \gamma \ \cdot \left[\sum_{j \in \{j>104\}} \text{CSC}_{j,i,t} = 1 \right] \\ &+ \sum_{j \in \{0,4,8,\dots,104\}} \delta_j \cdot \text{AP}_{j,i,t} + \zeta \cdot \left[\sum_{j \in \{j>104\}} \text{AP}_{j,i,t} = 1 \right] + X_{i,t} \cdot \vartheta + \epsilon_{i,t} \quad \text{Eq. 1} \end{split}$$

The specification of the model is shown in Equation 1. It is estimated with ordinary least squares regression. The core of the identification strategy is a set of dummy variables (CSC $_{j,i,t}$ and AP $_{j,i,t}$) representing interactions of the treatment (CSC and AP, respectively) with the number of weeks j that the employment agency of individual i has implemented the CSC and AP at time t. To accommodate observations with more than two years of treatment, a separate dummy is added (for this purpose, the indicator functions $\sum_{j \in \{j>104\}} CSC_{j,i,t} = 1$ and $\sum_{j \in \{j>104\}} AP_{j,i,t} = 1$ evaluate to one for observations with more than 104 weeks in treatment). Additionally, a set of control variables is added ($X_{i,t}$), comprising calendar month, employment agency, sex, age, education, duration of unemployment and

employment, as well as the willingness to relocate for a new job. The error term is $\epsilon_{i,t}$. To accommodate for multiple observations at the individual level (a person is observed 230 weeks on average), standard errors are clustered at the individual level. Additionally, standard errors are also calculated at agency level to allow for possible correlations at the agency level.

The analysis is based on the Sample of the Integrated Labour Market Biographies (SIAB), which is a two per cent random sample drawn from the Integrated Employment Biographies (IEB) of the Institute for Employment Research (IAB). Approximately 1.7 million individuals are sampled from the IEB. The sampled population comprises employees in the social security system (in the period from 1975 to 2008), job searchers (2000 to 2009) using the service of the FEA and benefit recipients (1990 to 2009). Based on the different sources of administrative data, the SIAB also has information on socio-demographic characteristics (Dorner et al. 2010). As the SIAB is a representative random sample of the population covered, the analysis allows inference for the whole population. To allow for an analysis of the CSC and AP implementation, the dates of their implementation that were provided by the FEA were merged into the data set.

To have only potential employment agency customers in the sample, all individuals between 18 and 60 that have a transition from regular employment into any other labour market state between 2003 and 2008 are chosen, leading to a sample of 258,383 individuals and 49,380,738 observations (Table 2). The high number of observations compared to the lower number of individuals is a result of the structure of the data set, which is prepared on a weekly reference date basis.

Table 2 summarises the sample characteristics. While roughly a half of the sample is female, more than two thirds are in regular employment. With respect to schooling, only one per cent has no schooling degree, while roughly 40 per cent have the lowest possible schooling degree. Additionally, a third of the sample has no vocational training degree. The rather high share of lower educated individuals is due to the sampling strategy, taking only potential customers of the employment agencies into account.

Table 2: Overall sample characteristics

Variable	Mean	Std. Dev.	Min.	Max.
Demographics				
Female	0.472	0.499	0	1
Age	36.90	11.69	18	60
Married	0.360	0.480	0	1
Single parent	0.039	0.193	0	1
No children	0.721	0.448	0	1
One child	0.144	0.351	0	1
Two children	0.100	0.300	0	1
Three or more children	0.035	0.184	0	1
(Un-)employment characteristics				
Employed	0.649	0.477	0	1
Duration of past unemployment*	17.29	23.70	0	284
Duration of overall employment*	121.94	91.53	0	536
Duration of last employment*	46.59	60.85	0	469
Mobile in job search	0.614	0.487	0	1
Education and training				
No schooling degree	0.097	0.296	0	1
Hauptschule (9 yrs. of schooling)	0.389	0.488	0	1
Realschule (10 yrs. of schooling)	0.343	0.475	0	1
Fachhochschule (technical college)	0.062	0.242	0	1
Abitur (high school)	0.109	0.311	0	1
No vocational training (VT)	0.301	0.459	0	1
VT in firm	0.549	0.498	0	1
VT in school	0.031	0.174	0	1
Technical school	0.049	0.217	0	1
Advanced technical school	0.020	0.140	0	1
University	0.049	0.215	0	1
Desired qualification level in job search				
Top-management level	0.002	0.042	0	1
University level	0.035	0.184	0	1
Advanced technical college level	0.022	0.146	0	1
Vocational school and skilled worker level	0.530	0.499	0	1
With and without technical knowledge level	0.411	0.492	0	1
Number of observations	49,380,738			
Number of individuals	258,383			

Source: SIAB, own calculations. Note: *in months.

The descriptive evidence presented in Figure 2, suggesting that agencies have been selected into waves randomly according to labour market characteristics, is underlined by Table 3 presenting statistics at the time of CSC implementation. Albeit there are many

significant differences at the five per cent level across variables and waves, these differences are rather small.¹ Furthermore, the distribution of these differences shows no consistent pattern that would allow the conclusion that one wave is different from the others in all characteristics. Employment, for example, differs significantly between waves 0 and 3 (at the five per cent level), but the mean values of the duration of past unemployment do not differ significantly. Some variables, such as the share of females, the share of single parents or the share of individuals with technical college degree are not significantly different across most waves at the one per cent level.

Table 3: Descriptives at time of CSC implementation

					wa	ve				
	0	1	2	3	4	5	6	7	8	9
Employed	0.65	0.57	0.61	0.58	0.61	0.59	0.59	0.62	0.61	0.62
Female	0.47	0.47	0.47	0.47	0.46	0.47	0.46	0.47	0.48	0.48
Married	0.33	0.36	0.36	0.36	0.37	0.34	0.38	0.36	0.37	0.34
Single parent	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.04
Age	36.77	37.18	36.35	36.59	36.82	36.37	36.65	36.55	36.28	36.07
Dur. of past unempl.*	15.9	16.6	13.7	16.2	16.9	15.9	17.4	15.5	15.6	14.3
Dur. of overall empl.*	114.7	116.5	128.0	119.6	117.7	115.2	118.4	119.1	126.8	122.5
Dur. of last empl.*	52.1	51.0	53.9	49.8	49.6	46.9	49.1	48.1	51.1	46.7
No schooling degree	0.11	0.10	0.10	0.09	0.08	0.11	0.09	0.10	0.10	0.11
9 yrs. of schooling	0.35	0.37	0.45	0.42	0.38	0.36	0.40	0.37	0.44	0.42
10 yrs. of schooling	0.36	0.38	0.31	0.33	0.38	0.33	0.36	0.34	0.28	0.28
Technical college	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06
High school	0.12	0.11	0.08	0.10	0.09	0.13	0.09	0.11	0.10	0.13
No VT	0.30	0.28	0.29	0.30	0.27	0.32	0.29	0.32	0.33	0.35
No children	0.73	0.72	0.72	0.72	0.71	0.74	0.71	0.73	0.71	0.73
Mobile in job search	0.60	0.62	0.63	0.62	0.59	0.60	0.60	0.65	0.61	0.61
No. of observations	14,822	10,788	10,788	11,059	11,059	11,059	11,059	11,059	12,109	15,134

Source: FEA, SIAB, own calculation. Note: *in months.

The similarity in characteristics at the time of implementation does not prevent the possibility of diverging trends in the outcome before the implementation. This would pose a problem, as these existing trends may be picked up by the programme treatment dummies. The difference-in-differences estimator allows causal inference only, when the differences between treated and non-treated would have stayed constant over time without the reform. Figure 3 shows the shares of employed individuals in the data-set for each implementation wave on basis of an unrestricted sample. The nine vertical lines represent the nine

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¹ Due to the high number of t-tests necessary to evaluate differences in means for each wave separately, the results of these t-tests are not depicted in the table.

implementation waves of the CSCs in the agencies. The trends across the waves have been largely parallel in the two years prior to the first intervention (wave 0). If at all, trends begin to diverge only after the intervention phase ended (for instance, employment in wave 7 starts to diverge from the other waves after CSC implementation in week 34 in 2005).

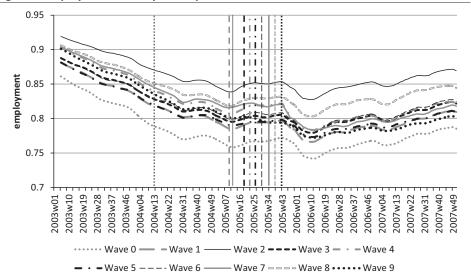


Figure 3: Employment share by CSC implementation wave

Source: FEA, SIAB, own compilation. Note: Vertical lines represent the time of implementation of the CSC in a given wave. Curves have been smoothed by a moving average with a sample window of five weeks. The decrease in employment after the implementation of the CSCs at the end of 2005 is related to an unusual high winter unemployment (e.g. in construction and in processing trade, see Bundesagentur für Arbeit 2006a). Additionally, a large number of older workers entered unemployment to take advantage of a generous benefit granting period that was phasing-out at the end of January 2006 (see Bundesagentur für Arbeit 2006b). As there is some variation in timing within each wave, the points in time are shown, where most of the agencies implemented the CSC within a given wave.

5. Results

The intention of the CSC introduction was to improve the performance of the placement process. As a graphical representation of the estimated programme dummies in Figure 4 shows (the corresponding Table A1 can be found in the appendix), this aim was only partly met. Within the first year of introduction, the CSCs led rather to a reduction in employment. Only one year after the CSC implementation, the effect recovers and turns positive, albeit statistically insignificant. Two years after introduction, the effect is positive and significant different from zero when clustering standard errors at the person level. As there are also good reasons for a clustering of the standard errors at the agency level

(mainly because individuals visiting the same agency experience similar service, making it possible that the labour market outcomes are correlated across individuals at the same agency), Figure 4 depicts also the agency level clustered errors (grey dashed lines). Taking the resulting confidence intervals into account, the introduction of the CSCs does not have a significant impact on employment.

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Figure 4: Effect of CSC introduction on regular employment

Source: FEA, SIAB, own calculations.

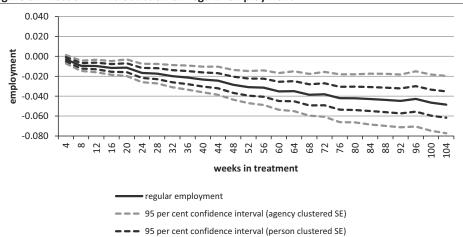


Figure 5: Effect of AP introduction on regular employment

The corresponding estimates for the effect of the APs on employment are presented in Figure 5. It appears that the introduction of the APs led to a significant reduction in employment when clustering standard errors at the person or agency level. As discussed in chapter 0, the regressions also include controls for demographic and labour market characteristics. The results for these additional controls (Table A1 in the appendix) do not deviate from the expectations – higher age and longer unemployment lead to lower chances to escape unemployment. The same is true for not being willing to relocate for a new job.

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Figure 6: Effect of CSC introduction on transitions into regular employment

Source: FEA, SIAB, own calculations.

As the effect on transitions into employment may deviate from the effect on overall employment (for instance, when employment is unstable), the effect on transitions into employment is also estimated. The effect of the CSC introduction on transitions from underemployment into regular employment is positive but very small over the whole observation period (see Figure 6). Each week of treatment with CSC increases the chance to experience a transition into employment. Similarly, the APs exert a positive but very small effect on the chance to have a transition into regular employment (see Figure 7). There is evidence that the more structured and formal placement process due to the APs led to a less cooperative situation between the caseworkers and the clients (Mosley et al. 2006), which in turn might lead to more job placements as recent research by Behncke et al. (2010) suggests. However, the APs have been abolished in 2009 and have been replaced by a

different strategy following four phases in the placement process, allowing more flexibility in the allocation of measures (Rübner and Sprengard 2011).

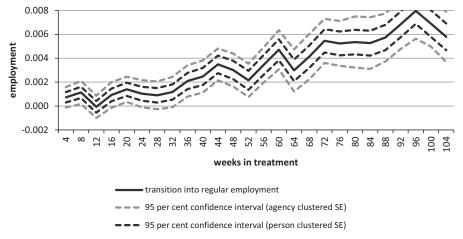


Figure 7: Effect of AP introduction on transitions into regular employment

Source: FEA, SIAB, own calculations.

Besides the results depicted in the figures, Table A1 in the appendix shows the corresponding control variables. As one could expect, younger individuals have a higher chance to find employment compared to the older reference group and individuals with children have lower chances to be placed compared to individuals without. The other control variables also show the expected signs except the dummy for university education, which is significantly negative in both regressions. The group of university graduates that uses the help of the employment agency is probably a negative selection, although it is remarkable that they have a significantly (albeit small) lower chance to find employment compared to individuals without a training degree. Having received a vocational training degree in school is also negatively related to finding a job. In Germany, vocational training provided by firms is more popular than training provided by vocational training schools. This leads to a situation, where rather less able individuals that did not find an apprenticeship enter the courses provided by vocational training schools.

A better quality of the placement process may lead not only to more placements into regular employment, but also to fewer placements into subsidised employment. The effects of the introduction of the CSC and APs on subsidised employment are shown in Figure 8 and Figure 9 (the corresponding numbers are presented in Table A2 in the appendix). The

introduction of the CSC had largely insignificant effects on placements into subsidised employment (there is a minor effect at the five per cent level in the first twelve weeks of treatment, when clustering standard errors at the person level). More interesting is the effect of the introduction of the APs because they lead to a significant increase in placements into subsidised work (Figure 9). From four months after implementation onwards, each additional week in treatment adds to this positive effect up to eight months in treatment. However, this finding is only significant (at the ten per cent level), when clustering standard errors at the person level.

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Figure 8: Effect of CSC introduction on subsidised employment

Source: FEA, SIAB, own calculations.

It is important to understand the mechanics behind this process. The APs relied on measure assignment to groups of unemployed that were known to profit most. It is possible that the rise in subsidised employment is due to this focus on measures that proved to be beneficial in the past, among which subsidised employment is one of the most prominent ones.

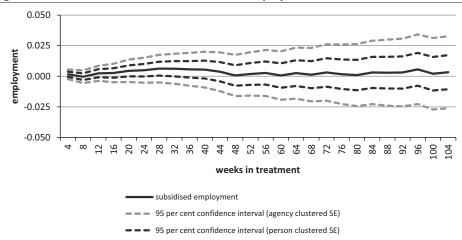


Figure 9: Effect of AP introduction on subsidised employment

As a robustness check, the regressions were re-estimated excluding the agencies that implemented the CSC and AP during the pilot phase. The results suggest that the estimates presented in this paper are slightly downwards biased, probably due to early implementation problems that were faced in the pilot agencies. Additionally, the presented standard errors were re-estimated performing a block bootstrap with clustering at agency level and 200 repetitions (see Bertrand et al. 2004). The reason is that the standard errors may be affected by serial correlation between observations of the same observation unit within the panel. The re-estimated standard errors are similar to those reported. Therefore, serial panel correlation does not seem to bias the reported standard errors. As an additional robustness check, the inflow-sampling strategy was altered in two ways: the sampling window for the inflow sample was changed to the first two quarters of 2003 and we performed a stock sampling of unemployed within the same period. The findings are robust against these changes. However, the standard errors increase due to the smaller sample sizes.

The current analysis does not account for the heterogeneity across customer groups. In fact, the customer group assignment, which is based on the clients' characteristics, is closely connected to the set of APs that the client may be treated with. However, information on client group was available only after the APs were implemented. Therefore, this missing information is imputed for the time before the implementation by means of a multinomial logit that was estimated to predict the probability that a given individual is

assigned to one of the four customer groups. After assessing the stability of this prediction over time and deleting unstable predictions, the effect of the CSC and AP implementation on employment was re-estimated separately by customer group. As there are only little heterogeneous effects on regular employment by customer group for the CSC implementation, the following discussion will focus on the APs.

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Figure 10: Effect of AP introduction on regular employment, customer group I and II

Source: FEA, SIAB, own calculations.

The results of the separate regressions are shown in Figure 10 for customer groups I and II and Figure 11 for the groups III and IV (for more details, see Table A3 and Table A4 in the appendix). Interestingly, the market clients (group I) do not profit from this classification. Their employment probabilities decrease over time with treatment with the APs (significant at the one per cent level in all but the first four weeks). Even worse, individuals in the group of counselling and activation customers (group II) experience a decrease in their chance of finding a job with every week the treatment with the APs lasts.

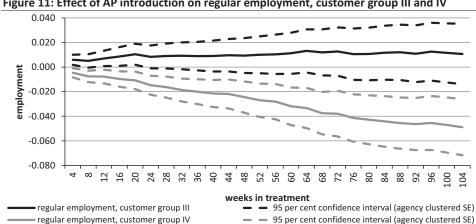


Figure 11: Effect of AP introduction on regular employment, customer group III and IV

Source: FEA, SIAB, own calculations.

The only group that seems to profit from the introduction of the APs are clients in need of counselling and qualification (group III). Within the first seven months, every week of treatment increases employment in this group. As this client group is the only one that receives APs with an emphasis on qualification, it seems that the corresponding APs indeed had a positive effect. The opposite is true for care customers (group IV) whose employment chance decrease with every additional week in treatment. This fits well into the qualitative findings presented in chapter 0, stating that there was virtually no effective support for these clients.

When investigating into the effects on subsidised employment, there are virtually no heterogeneous effects for the CSC implementation (see Table A5 and Table A6 in the appendix) but interesting results for the APs. Although there was no evidence for a positive effect on regular employment for customer group I, there is evidence for a significant increase of placement into subsidised employment (Figure 12, the coefficient for client group I is largely significantly different from zero at the five per cent level as shown in the corresponding Table A5 in the appendix). This finding is striking as market customers (clients that are potentially able to find a job without assistance) were by definition not the target group for subsidised employment in the AP framework. One could have expected that the likelihood of entering subsidised forms of employment increased for the customer groups with a weaker labour market attachment, but not for the group that was supposed to have the strongest labour market attachment and hence would find regular jobs more easily.

0.160 0.120 0.080 employment 0.040 0.000 -0.040 -0.080 68 72 76 80 88 88 88 92 96 24 48 52 56 9 64 weeks in treatment subsidised employment, customer group I upper confidence interval (agency clustered SE) subsidised employment, customer group II upper confidence interval (agency clustered SE)

Figure 12: Effect of AP introduction on subsidised employment, customer group I and II

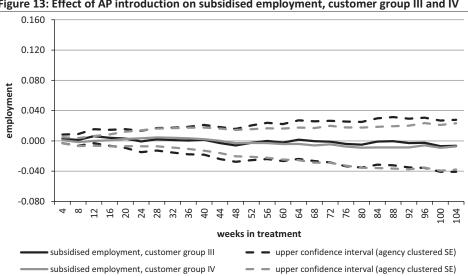


Figure 13: Effect of AP introduction on subsidised employment, customer group III and IV

Source: FEA, SIAB, own calculations.

Individuals in the other client groups, however, are not significantly more often placed into subsidised employment after the introduction of the APs (see Figure 12 and Figure 13 and the corresponding Table A6 and Table A5 in the appendix). This is particularly puzzling for client group IV, comprising individuals for which the corresponding AP aimed at providing employment on the second labour marked.

In summary, the introduction of the CSCs did not lead to a significant improvement in the number of job placements directly after introduction. However, there is evidence that it contributed to an increase in regular employment two years after introduction. At the same time, the introduction led to an increase in transitions into employment over the whole observation period. In comparison to the earlier research (see chapter 0), this positive finding is most likely due to the better data availability and the longer time horizon that is taken into account in this paper. The APs in contrast had a pronounced negative effect on placement into regular employment, while there is evidence that it led to more placements into subsidised employment. When investigating into the driving factors of the negative employment effect of APs, the customer group assignment plays a major role. While the implementation of APs exerts negative employment effects for most of the customer groups, there are two groups that profit: customers that get treatment with qualification measures (client group III) more often find regular employment and market clients (client group I) are more often placed in subsidised employment.

6. Conclusion

This article investigates the causal effect of the implementation of customer service centres and action programmes in German employment agencies on employment. The introduction of the CSCs was associated with expectations of an improvement in both the quality and performance of the placement process in employment agencies. The means to achieve this improvement were a scheduled and hierarchical customer flow management, reducing the often cited "pressure of the floors" that was present prior to the CSC implementation and a reduction of intervening events the case managers had to handle during the placement process. The APs were perceived as an ideal complement to the CSCs as they imposed a rigid structure on the placement process and the work of the case managers and led to a higher standardisation of the placement procedure.

The CSCs and thereafter the APs were implemented in several waves. While the first implementation waves had a piloting character, involving agencies that were selected according to geographical and labour market characteristics, later assignment solely depended on the availability of one of the several implementation teams, but also on

construction requirements that the agencies had to fulfil in order to implement the CSC. The implementation of the APs started in each agency after the CSC implementation process was finished and is thus object to the same selection process as the CSC implementation. As this process was random with respect to labour market characteristics, it is possible to estimate the causal effect of the implementation of both measures on regular, subsidised and inflows into regular employment.

Employing a dynamic difference-in-differences approach, this paper shows that the introduction of the CSCs did not lead to a significant improvement in regular employment in the short, but in the long run. At the same time, the APs did not contribute to an improvement in regular employment at all. On the contrary, there is evidence that they led to an increase in placements into subsidised employment. However, there are small but positive effects on inflows into regular employment. As the set of APs introduced targeted different customer groups, heterogeneous effects by customer group may be expected. Indeed, only two groups benefit from the treatment in terms of employment. Customers treated with qualification APs more often find regular employment and market clients end up significantly more often in subsidised employment due to the treatment.

The policy implications of these findings are twofold. First, large investments into new customer management systems may not necessarily pay off in terms of employment. In case of the CSC, it could be argued that the positive effect on employment at the end of our observation period justifies the implementation. Second, interventions changing the rules for the procedures of the placement and counselling process may even worsen the situation for unemployed and job-seekers. Therefore, these rules should be piloted and evaluated carefully before applying them in a larger scale. Given the negative effects of most of the APs on employment, it seems that the abolishment of the APs in 2009 was a step into the right direction. It is open to further research to analyse its successor, the four phase placement process model that allows more flexibility in the allocation of ALMP programmes.

Appendix

Table A1: Difference-in-differences estimation of the CSC and AP treatment effect on employment (OLS)

	Er	mployment		Employment inflow		
		Clustered	Std. Err.		Clustered	Std. Err.
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
No. of weeks with CSC (dummies)						
1-4 weeks	-0.0048	0.0011	0.0026	0.0014	0.0002	0.0005
5-8 weeks	-0.0017	0.0013	0.0031	0.0019	0.0002	0.0004
9-12 weeks	-0.0082	0.0015	0.0035	0.0024	0.0002	0.0005
13-16 weeks	-0.0063	0.0017	0.0039	0.0018	0.0002	0.0006
17-20 weeks	-0.0066	0.0019	0.0043	0.0027	0.0003	0.0006
21-24 weeks	-0.0061	0.0021	0.0047	0.0021	0.0003	0.0006
25-28 weeks	-0.0099	0.0022	0.0050	0.0022	0.0003	0.0007
29-32 weeks	-0.0091	0.0024	0.0052	0.0028	0.0003	0.0006
33-36 weeks	-0.0108	0.0025	0.0055	0.0018	0.0003	0.0006
37-40 weeks	-0.0107	0.0027	0.0056	0.0022	0.0003	0.0007
41-44 weeks	-0.0089	0.0028	0.0058	0.0033	0.0003	0.0007
45-48 weeks	-0.0114	0.0030	0.0058	0.0029	0.0003	0.0007
49-52 weeks	-0.0076	0.0032	0.0062	0.0034	0.0003	0.0007
53-56 weeks	-0.0065	0.0033	0.0063	0.0037	0.0003	0.0008
57-60 weeks	-0.0049	0.0035	0.0066	0.0042	0.0003	0.0008
61-64 weeks	-0.0046	0.0036	0.0070	0.0053	0.0003	0.0009
65-68 weeks	-0.0018	0.0038	0.0071	0.0045	0.0004	0.0010
67-72 weeks	-0.0007	0.0039	0.0074	0.0046	0.0004	0.0010
73-76 weeks	0.0006	0.0041	0.0078	0.0042	0.0004	0.0010
77-80 weeks	0.0018	0.0042	0.0080	0.0035	0.0004 0.0004	0.0010
81-84 weeks 85-88 weeks	0.0039 0.0044	0.0044 0.0045	0.0082 0.0083	0.0041 0.0032	0.0004	0.0011 0.0010
89-92 weeks	0.0044	0.0043	0.0083	0.0032	0.0004	0.0010
93-96 weeks	0.0037	0.0047	0.0087	0.0040	0.0004	0.0011
97-100 weeks	0.0068	0.0048	0.0093	0.0047	0.0004	0.0011
101-104 weeks	0.0099	0.0051	0.0099	0.0042	0.0004	0.0012
More than 104 weeks	0.0152	0.0055	0.0110	0.0041	0.0004	0.0012
	0.0102	0.0000	0.0110	0.00.7	0.000	0.0010
No. of weeks with AP (dummies)	0.0020	0.0011	0.0022	0.0007	0.0002	0.0004
1-4 weeks	-0.0030	0.0011	0.0022	0.0007	0.0002	0.0004
5-8 weeks	-0.0095	0.0014	0.0026	0.0011	0.0002	0.0005
9-12 weeks	-0.0097	0.0017	0.0032	-0.0001	0.0003	0.0005
13-16 weeks 15-20 weeks	-0.0117	0.0020 0.0023	0.0035	0.0009	0.0003 0.0003	0.0005
21-24 weeks	-0.0114 -0.0167	0.0025	0.0042 0.0047	0.0014 0.0010	0.0003	0.0005 0.0006
25-28 weeks	-0.0107	0.0023	0.0047	0.0010	0.0003	0.0006
29-32 weeks	-0.0174	0.0028	0.0057	0.0003	0.0003	0.0006
33-36 weeks	-0.0133	0.0031	0.0057	0.0012	0.0003	0.0007
37-40 weeks	-0.0213	0.0034	0.0065	0.0021	0.0003	0.0007
41-44 weeks	-0.0245	0.0039	0.0072	0.0025	0.0004	0.0007
45-48 weeks	-0.0286	0.0033	0.0072	0.0033	0.0004	0.0007
49-52 weeks	-0.0309	0.0044	0.0082	0.0021	0.0004	0.0007
53-56 weeks	-0.0315	0.0047	0.0088	0.0034	0.0004	0.0007
57-60 weeks	-0.0352	0.0049	0.0094	0.0047	0.0004	0.0008
61-64 weeks	-0.0350	0.0051	0.0101	0.0030	0.0005	0.0009
65-68 weeks	-0.0386	0.0054	0.0106	0.0041	0.0005	0.0010
67-72 weeks	-0.0381	0.0056	0.0114	0.0055	0.0005	0.0009
73-76 weeks	-0.0420	0.0059	0.0122	0.0052	0.0005	0.0010
77-80 weeks	-0.0422	0.0060	0.0122	0.0054	0.0005	0.0011
81-84 weeks	-0.0429	0.0062	0.0129	0.0053	0.0005	0.0011
85-88 weeks	-0.0437	0.0063	0.0133	0.0033	0.0002	0.0004
continued on the next page						

	Er	nploymen Clustered		Empl	oyment in	
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
continued from the previous page						
89-92 weeks	-0.0448	0.0064	0.0134	0.0068	0.0006	0.0010
93-96 weeks	-0.0427	0.0065	0.0141	0.0080	0.0006	0.0012
97-100 weeks	-0.0465	0.0066	0.0143	0.0069	0.0006	0.0010
101-104 weeks	-0.0485	0.0068	0.0146	0.0058	0.0006	0.0011
More than 104 weeks	-0.0495	0.0073	0.0166	0.0082	0.0006	0.0012
Demographics						
Female	-0.0032	0.0013	0.0021	-0.0018	0.0001	0.0002
Age 18-24	0.3178	0.0024	0.0032	0.0182	0.0002	0.0004
Age 25-29	0.2719	0.0022	0.0028	0.0108	0.0001	0.0003
Age 30-44	0.1613	0.0017	0.0026	0.0057	0.0001	0.0002
Age 45-60	Refe	erence gro	ир	Ref	erence gro	ир
Married	0.0397	0.0017	0.0028	0.0030	0.0001	0.0002
Single parent	-0.0215	0.0035	0.0049	0.0017	0.0002	0.0002
Single	Refe	erence gro	ир	Ref	erence gro	ир
No children	Ref	erence gro	ир	Ref	erence gro	ир
One child	-0.0094	0.0021	0.0022	-0.0014	0.0001	0.0001
Two children	0.0003	0.0024	0.0030	-0.0007	0.0001	0.0002
Three or more children	-0.0562	0.0037	0.0048	-0.0026	0.0002	0.0002
(Un-)employment characteristics	Dof			Dof		
No past unemployment	-0.0602	erence gro	•		erence gro 0.0001	•
1 - 4 weeks of past unemployment		0.0021	0.0024	0.0041	0.0001	0.0002
1 - 3 months of past unemployment	-0.0781 -0.1098	0.0022	0.0024	0.0032		0.0002
3 - 6 months of past unemployment More than 6 months of past UE	-0.1098	0.0029 0.0027	0.0046 0.0051	0.0017 -0.0011	0.0002 0.0001	0.0002
Duration of overall employment*	0.0014	0.0027	0.0001	0.0001	0.0001	0.0002
Duration of last employment*	-0.0014	0.0000	0.0000	-0.0001	0.0000	0.0000
Not mobile in job search	-0.0056	0.0000	0.0000	0.0001	0.0001	0.0001
Education and training	-0.0030	0.0013	0.0017	0.0002	0.0001	0.0001
No schooling degree	Refi	erence gro	un	Ref	erence gro	un
Hauptschule (9 yrs. of schooling)	0.0432	0.0024	0.0028	0.0007	0.0001	0.0001
Realschule (10 yrs. of schooling)	0.1284	0.0026	0.0032	0.0040	0.0001	0.0002
Fachhochschule (technical college)	0.1705	0.0035	0.0046	0.0068	0.0002	0.0003
Abitur (high school)	0.2173	0.0032	0.0051	0.0084	0.0002	0.0003
No VT degree		erence gro			erence gro	
VT in firm	0.0264	0.0020	0.0026	0.0024	0.0001	0.0001
VT in school	-0.0345	0.0039	0.0063	-0.0021	0.0002	0.0003
Technical school	0.0385	0.0033	0.0037	0.0014	0.0002	0.0002
Advanced technical school	0.0121	0.0060	0.0070	-0.0001	0.0004	0.0004
University	-0.0346	0.0047	0.0090	-0.0010	0.0003	0.0004
Desired qualification level in job search						
Top-management level	0.1109	0.0134	0.0134	0.0015	0.0010	0.0007
University level	0.1433	0.0052	0.0080	0.0057	0.0004	0.0005
Advanced technical college level	0.0864	0.0057	0.0063	0.0038	0.0004	0.0005
Vocational school and skilled worker level	0.0421	0.0018	0.0017	0.0028	0.0001	0.0001
Unskilled worker level Constant	<i>Ref</i> e 0.3813	erence gro 0.0053	up 0.0049	<i>Ref</i> -0.0068	erence gro 0.0004	<i>up</i> 0.0005
Calendar month and year fixed effects	2.3023	X		0000	X	5000
Employment agency fixed effects		X			X	
N	Δ	9,978,332		2	1,957,629	
R ²	7	0.1900		2	0.0069	

Source: FEA, SIAB, own calculations. Note: *in months.

Table A2: Difference-in-differences estimation of the CSC and AP treatment effect on subsidised employment (OLS)

		Subsidised employme	nt
		Clustere	d Std. Err.
	Coef.	Person level	Agency level
No. of weeks with CSC (dummies)			
1-4 weeks	-0.0023	0.0010	0.0022
5-8 weeks	-0.0019	0.0013	0.0028
9-12 weeks	-0.0032	0.0015	0.0033
13-16 weeks	0.0004	0.0015	0.0033
17-20 weeks	-0.0013	0.0018	0.0037
21-24 weeks		0.0018	
21-24 weeks 25-28 weeks	0.0005		0.0046
	0.0013	0.0022	0.0052
29-32 weeks	0.0012	0.0023	0.0053
33-36 weeks	0.0006	0.0025	0.0057
37-40 weeks	0.0007	0.0026	0.0060
41-44 weeks	0.0028	0.0028	0.0065
45-48 weeks	0.0013	0.0030	0.0071
49-52 weeks	0.0016	0.0032	0.0076
53-56 weeks	0.0030	0.0034	0.0081
57-60 weeks	0.0032	0.0036	0.0086
61-64 weeks	0.0023	0.0037	0.0089
65-68 weeks	0.0035	0.0039	0.0095
67-72 weeks	0.0030	0.0041	0.0099
73-76 weeks	0.0042	0.0043	0.0102
77-80 weeks	0.0047	0.0045	0.0106
81-84 weeks	0.0048	0.0047	0.0108
85-88 weeks	0.0053	0.0049	0.0108
89-92 weeks	0.0063	0.0051	0.0109
93-96 weeks	0.0066	0.0053	0.0111
97-100 weeks	0.0055	0.0055	0.0107
101-104 weeks	0.0077	0.0057	0.0110
More than 104 weeks	0.0115	0.0061	0.0112
No. of weeks with AP (dummies)			
1-4 weeks	0.0016	0.0011	0.0020
5-8 weeks	-0.0004	0.0014	0.0027
9-12 weeks	0.0024	0.0017	0.0031
13-16 weeks	0.0027	0.0020	0.0038
15-20 weeks	0.0044	0.0023	0.0046
21-24 weeks	0.0049	0.0026	0.0052
25-28 weeks	0.0062	0.0029	0.0057
29-32 weeks	0.0061	0.0023	0.0062
33-36 weeks	0.0056	0.0035	0.0068
37-40 weeks	0.0054	0.0037	0.0074
41-44 weeks	0.0037	0.0040	0.0080
45-48 weeks	0.0006	0.0043	0.0085
49-52 weeks	0.0019	0.0046	0.0090
53-56 weeks	0.0026	0.0048	0.0095
55-56 weeks	0.0026	0.0051	0.0100
61-64 weeks	0.0025	0.0051	0.0106
65-68 weeks	0.0023	0.0057	0.0100
67-72 weeks			
73-76 weeks	0.0031	0.0059	0.0117
	0.0016	0.0062	0.0123
77-80 weeks	0.0010	0.0063	0.0129
81-84 weeks	0.0031	0.0065	0.0131
85-88 weeks	0.0029	0.0066	0.0137
89-92 weeks	0.0031	0.0067 0.0069	0.0140 0.0144
93-96 weeks	0.0057		

_		Subsidised employme	ent					
continued from the previous page 97-100 weeks 101-104 weeks More than 104 weeks Constant Other controls: Demographics (Un-)employment characteristics Education and training Desired qualification level in job search Calendar month and year fixed effects Employment agency fixed effects N P P ²	Clustered Std. Err.							
	Coef.	Person level	Agency leve					
continued from the previous page								
97-100 weeks	0.0020	0.0070	0.0148					
101-104 weeks	0.0033	0.0071	0.0149					
More than 104 weeks	0.0067	0.0075	0.0165					
Constant	0.0789	0.0053	0.0043					
Other controls:								
Demographics		Χ						
(Un-)employment characteristics		Χ						
Education and training		Χ						
Desired qualification level in job search		Χ						
Calendar month and year fixed effects		Χ						
Employment agency fixed effects		X						
N		21,689,348						
R^2		0.1032						

Table A3: Difference-in-differences estimation of the CSC and AP treatment effect on employment (OLS), customer group I+II

		nployment omer grou			nployment omer grou	
	Cust	Clustered		Cust	Clustered	-
		Person			Person	
	Coef.	level	Agency level	Coef.	level	Agency level
No. of weeks with CSC (dummies)						
1-4 weeks	-0.0011	0.0012	0.0018	-0.0039	0.0014	0.0019
5-8 weeks	-0.0006	0.0015	0.0023	-0.0021	0.0017	0.0021
9-12 weeks	-0.0040	0.0017	0.0027	-0.0052	0.0019	0.0023
13-16 weeks	-0.0022	0.0019	0.0032	-0.0055	0.0022	0.0025
17-20 weeks	-0.0019	0.0021	0.0036	-0.0059	0.0024	0.0029
21-24 weeks	-0.0010	0.0022	0.0037	-0.0055	0.0027	0.0033
25-28 weeks	-0.0019	0.0024	0.0038	-0.0076	0.0029	0.0036
29-32 weeks	-0.0014	0.0026	0.0038	-0.0083	0.0031	0.0038
33-36 weeks	-0.0016	0.0027	0.0039	-0.0084	0.0033	0.0041
37-40 weeks	-0.0013	0.0029	0.0039	-0.0077	0.0035	0.0042
41-44 weeks	-0.0005	0.0031	0.0039	-0.0064	0.0037	0.0046
45-48 weeks	-0.0001	0.0031	0.0033	-0.0075	0.0037	0.0048
49-52 weeks	0.0017	0.0032	0.0040	-0.0075	0.0033	0.0048
53-56 weeks	0.0017	0.0034	0.0042	-0.0053	0.0042	0.0051
57-60 weeks	0.0042	0.0033	0.0046	-0.0032	0.0044	0.0053
61-64 weeks	0.0043	0.0037	0.0049	-0.0030	0.0048	0.0057
65-68 weeks	0.0053	0.0033	0.0050	-0.0007	0.0051	0.0057
67-72 weeks	0.0055	0.0040	0.0050	0.0007	0.0051	0.0053
73-76 weeks	0.0033	0.0042	0.0052	0.0008	0.0055	0.0061
77-80 weeks	0.0073	0.0045	0.0053	0.0014	0.0057	0.0068
81-84 weeks	0.0082	0.0043	0.0054	0.0023	0.0057	0.0008
85-88 weeks	0.0098	0.0048		0.0059	0.0060	
89-92 weeks	0.0100	0.0048	0.0057 0.0059	0.0032	0.0062	0.0075 0.0080
93-96 weeks	0.0100	0.0051	0.0053	0.0070	0.0065	
97-100 weeks	0.0102	0.0051	0.0061	0.0083	0.0063	0.0086
101-104 weeks					0.0067	0.0091
More than 104 weeks	0.0115	0.0054	0.0064	0.0098		0.0097
	0.0132	0.0057	0.0068	0.0129	0.0075	0.0110
No. of weeks with AP (dummies)	0.0015	0.0040	0.0047			
1-4 weeks	-0.0015	0.0013	0.0017	-0.0044	0.0014	0.0018
5-8 weeks	-0.0053	0.0017	0.0022	-0.0087	0.0019	0.0024
9-12 weeks	-0.0059	0.0020	0.0027	-0.0112	0.0023	0.0029
13-16 weeks	-0.0078	0.0023	0.0031	-0.0136	0.0027	0.0034
15-20 weeks	-0.0078	0.0025	0.0034	-0.0142	0.0030	0.0039
21-24 weeks	-0.0089	0.0028	0.0038	-0.0170	0.0034	0.0045
25-28 weeks	-0.0086	0.0031	0.0041	-0.0175	0.0038	0.0048
29-32 weeks	-0.0092	0.0033	0.0045	-0.0208	0.0042	0.0054
33-36 weeks	-0.0094	0.0036	0.0049	-0.0231	0.0046	0.0060
37-40 weeks	-0.0104	0.0038	0.0052	-0.0236	0.0049	0.0066
41-44 weeks	-0.0116	0.0041	0.0056	-0.0238	0.0052	0.0072
45-48 weeks	-0.0126	0.0043	0.0060	-0.0269	0.0056	0.0075
49-52 weeks	-0.0128	0.0045	0.0063	-0.0291	0.0059	0.0081
53-56 weeks	-0.0126	0.0048	0.0067	-0.0304	0.0062	0.0087
57-60 weeks	-0.0141	0.0050	0.0069	-0.0332	0.0065	0.0092
61-64 weeks	-0.0143	0.0052	0.0071	-0.0347	0.0068	0.0099
65-68 weeks	-0.0157	0.0054	0.0074	-0.0355	0.0072	0.0105
67-72 weeks	-0.0160	0.0055	0.0077	-0.0360	0.0075	0.0110
73-76 weeks	-0.0173	0.0057	0.0079	-0.0375	0.0078	0.0115
77-80 weeks	-0.0176	0.0058	0.0080	-0.0384	0.0080	0.0119
81-84 weeks	-0.0179	0.0059	0.0082	-0.0392	0.0082	0.0123
85-88 weeks	-0.0180	0.0060	0.0084	-0.0392	0.0084	0.0126
continued on the next page						

		nployment comer grou	-	Employment, customer group II		
		Clustered	d Std. Err.		Clustered	Std. Err.
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
continued from the previous page						
89-92 weeks	-0.0189	0.0061	0.0085	-0.0402	0.0085	0.0129
93-96 weeks	-0.0184	0.0062	0.0087	-0.0395	0.0087	0.0134
97-100 weeks	-0.0193	0.0063	0.0088	-0.0408	0.0088	0.0136
101-104 weeks	-0.0195	0.0063	0.0090	-0.0419	0.0089	0.0140
More than 104 weeks	-0.0215	0.0067	0.0096	-0.0430	0.0095	0.0151
Constant	1.4200	0.0063	0.0092	2.2895	0.0069	0.0082
Other controls:						
Demographics		Χ			Χ	
(Un-)employment characteristics		Χ			Χ	
Education and training		Χ			Χ	
Desired qualification level in job search		Χ			Χ	
Calendar month and year fixed effects		Χ			Χ	
Employment agency fixed effects		Χ			Χ	
N	1	.4,377,109		1	1,393,038	
R^2		0.1042			0.6400	

Table A4: Difference-in-differences estimation of the CSC and AP treatment effect on employment (OLS), customer group III+IV

		nploymen			nployment	
	custo	omer grou	p III	cust	omer grou	
		Clustered			Clustered	Std. Err.
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
No. of weeks with CSC (dummies)						
1-4 weeks	-0.0021	0.0018	0.0025	-0.0029	0.0015	0.0027
5-8 weeks	-0.0007	0.0021	0.0031	-0.0015	0.0018	0.0031
9-12 weeks	-0.0025	0.0025	0.0036	-0.0046	0.0021	0.0036
13-16 weeks	-0.0002	0.0028	0.0041	-0.0043	0.0024	0.0040
17-20 weeks	0.0002	0.0031	0.0045	-0.0038	0.0027	0.0045
21-24 weeks	0.0003	0.0034	0.0048	-0.0032	0.0030	0.0049
25-28 weeks	-0.0003	0.0037	0.0051	-0.0057	0.0032	0.0054
29-32 weeks	0.0015	0.0039	0.0055	-0.0058	0.0035	0.0058
33-36 weeks	-0.0012	0.0041	0.0058	-0.0057	0.0037	0.0061
37-40 weeks	-0.0027	0.0043	0.0060	-0.0049	0.0039	0.0066
41-44 weeks	-0.0034	0.0046	0.0065	-0.0036	0.0041	0.0071
45-48 weeks	-0.0049	0.0048	0.0067	-0.0037	0.0043	0.0073
49-52 weeks	-0.0043	0.0050	0.0071	-0.0010	0.0045	0.0077
53-56 weeks	-0.0046	0.0053	0.0073	0.0005	0.0047	0.0079
57-60 weeks	-0.0060	0.0055	0.0076	0.0023	0.0050	0.0081
61-64 weeks	-0.0068	0.0058	0.0079	0.0041	0.0052	0.0084
65-68 weeks	-0.0054	0.0060	0.0082	0.0055	0.0055	0.0087
67-72 weeks	-0.0051	0.0063	0.0086	0.0059	0.0057	0.0091
73-76 weeks	-0.0058	0.0065	0.0089	0.0072	0.0059	0.0095
77-80 weeks	-0.0057	0.0068	0.0093	0.0082	0.0061	0.0098
81-84 weeks	-0.0042	0.0070	0.0097	0.0099	0.0064	0.0100
85-88 weeks	-0.0041	0.0073	0.0100	0.0107	0.0066	0.0102
89-92 weeks	-0.0047	0.0075	0.0104	0.0118	0.0068	0.0104
93-96 weeks	-0.0037	0.0077	0.0108	0.0133	0.0070	0.0105
97-100 weeks	-0.0036	0.0080	0.0112	0.0140	0.0072	0.0105
101-104 weeks	-0.0020	0.0082	0.0115	0.0166	0.0074	0.0107
More than 104 weeks	-0.0004	0.0088	0.0125	0.0218	0.0080	0.0111
No. of weeks with AP (dummies)						
1-4 weeks	0.0059	0.0017	0.0021	-0.0047	0.0014	0.0019
5-8 weeks	0.0050	0.0023	0.0028	-0.0076	0.0018	0.0023
9-12 weeks	0.0070	0.0027	0.0032	-0.0077	0.0023	0.0028
13-16 weeks	0.0086	0.0032	0.0032	-0.0097	0.0027	0.0032
15-20 weeks	0.0104	0.0037	0.0043	-0.0108	0.0031	0.0036
21-24 weeks	0.0082	0.0037	0.0043	-0.0148	0.0031	0.0030
25-28 weeks	0.0090	0.0042	0.0051	-0.0163	0.0039	0.0033
29-32 weeks	0.0092	0.0051	0.0051	-0.0187	0.0033	0.0043
33-36 weeks	0.0032	0.0051	0.0059	-0.0107	0.0043	0.0051
37-40 weeks	0.0089	0.0060	0.0053	-0.0200	0.0051	0.0051
41-44 weeks	0.0089	0.0065	0.0067	-0.0214	0.0051	0.0050
45-48 weeks	0.0093	0.0069	0.0007	-0.0219	0.0055	0.0064
49-52 weeks		0.0003	0.0072	-0.0244	0.0053	
53-56 weeks	0.0100 0.0104	0.0073	0.0076	-0.0270	0.0063	0.0069 0.0073
57-60 weeks 61-64 weeks	0.0112	0.0081	0.0085	-0.0319 -0.0333	0.0071 0.0074	0.0077
65-68 weeks	0.0131	0.0085	0.0089 0.0095	-0.0333		0.0083 0.0087
	0.0119			-0.0375	0.0078	
67-72 weeks	0.0126	0.0094	0.0100	-0.0379	0.0082	0.0094
73-76 weeks	0.0105	0.0098	0.0106	-0.0414	0.0086	0.0098
77-80 weeks	0.0106	0.0101	0.0108	-0.0429	0.0089	0.0101
81-84 weeks	0.0117	0.0103	0.0111	-0.0442	0.0091	0.0104
85-88 weeks	0.0120	0.0105	0.0114	-0.0456	0.0093	0.0106
continued on the next page						

		nployment omer grou	-	Employment, customer group IV		
	-	Clustered	Std. Err.	-	Clustered	Std. Err.
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
continued from the previous page						
89-92 weeks	0.0108	0.0107	0.0117	-0.0463	0.0095	0.0107
93-96 weeks	0.0125	0.0109	0.0119	-0.0454	0.0098	0.0111
97-100 weeks	0.0115	0.0111	0.0122	-0.0471	0.0100	0.0114
101-104 weeks	0.0106	0.0113	0.0125	-0.0489	0.0101	0.0116
More than 104 weeks	0.0164	0.0121	0.0136	-0.0525	0.0110	0.0129
Constant	1.7919	0.0085	0.0101	0.5436	0.0082	0.0070
Other controls:						
Demographics		Χ			Χ	
(Un-)employment characteristics		Χ			Χ	
Education and training		Χ			Χ	
Desired qualification level in job search		Χ			Χ	
Calendar month and year fixed effects		Χ			Χ	
Employment agency fixed effects		Χ			Χ	
N	:	8,075,519		1	16,132,666	
R^2		0.5838			0.1443	

Table A5: Difference-in-differences estimation of the CSC and AP treatment effect on subsidised employment (OLS), customer group I+II

	Subsidis	ed employ	/ment,	Subsidised employment,			
	cust	omer grou	ıp l	customer group II			
		Clustered	Std. Err.		Clustered	Std. Err.	
		Person	Agency		Person	Agency	
	Coef.	level	level	Coef.	level	level	
No. of weeks with CSC (dummies)							
1-4 weeks	0.0002	0.0038	0.0040	-0.0023	0.0024	0.0041	
5-8 weeks	-0.0014	0.0044	0.0048	-0.0018	0.0029	0.0051	
9-12 weeks	0.0004	0.0052	0.0057	-0.0010	0.0034	0.0060	
13-16 weeks	0.0018	0.0059	0.0066	0.0015	0.0039	0.0067	
17-20 weeks	0.0022	0.0066	0.0074	-0.0002	0.0043	0.0077	
21-24 weeks	0.0054	0.0073	0.0084	0.0020	0.0047	0.0086	
25-28 weeks	0.0036	0.0081	0.0093	0.0038	0.0052	0.0095	
29-32 weeks	0.0018	0.0087	0.0098	0.0023	0.0055	0.0098	
33-36 weeks	-0.0014	0.0094	0.0107	0.0002	0.0059	0.0106	
37-40 weeks	-0.0011	0.0102	0.0113	-0.0004	0.0063	0.0113	
41-44 weeks	-0.0019	0.0111	0.0121	0.0037	0.0068	0.0122	
45-48 weeks	-0.0064	0.0120	0.0124	0.0011	0.0072	0.0128	
49-52 weeks	-0.0067	0.0129	0.0127	0.0017	0.0077	0.0137	
53-56 weeks	-0.0075	0.0137	0.0130	0.0007	0.0082	0.0145	
57-60 weeks	-0.0035	0.0147	0.0135	-0.0022	0.0087	0.0153	
61-64 weeks	-0.0019	0.0158	0.0146	-0.0035	0.0093	0.0163	
65-68 weeks	-0.0042	0.0168	0.0158	-0.0020	0.0098	0.0174	
67-72 weeks	-0.0105	0.0178	0.0164	-0.0019	0.0103	0.0183	
73-76 weeks	-0.0106	0.0187	0.0171	-0.0017	0.0108	0.0189	
77-80 weeks	-0.0092	0.0199	0.0182	-0.0043	0.0113	0.0192	
81-84 weeks	-0.0096	0.0209	0.0195	-0.0019	0.0119	0.019	
85-88 weeks	-0.0138	0.0218	0.0205	-0.0008	0.0124	0.0200	
89-92 weeks	-0.0130	0.0227	0.0210	0.0007	0.0129	0.0203	
93-96 weeks	-0.0191	0.0235	0.0209	0.0012	0.0134	0.0202	
97-100 weeks	-0.0238	0.0245	0.0220	-0.0058	0.0140	0.020	
101-104 weeks	-0.0229	0.0257	0.0226	-0.0069	0.0145	0.0218	
More than 104 weeks	-0.0340	0.0280	0.0249	-0.0117	0.0158	0.0222	
No. of weeks with AP (dummies)							
1-4 weeks	0.0081	0.0040	0.0043	0.0003	0.0026	0.0038	
5-8 weeks	0.0091	0.0050	0.0053	-0.0020	0.0033	0.0046	
9-12 weeks	0.0131	0.0061	0.0060	0.0012	0.0040	0.0054	
13-16 weeks	0.0131	0.0072	0.0070	0.0029	0.0048	0.0064	
15-20 weeks	0.0174	0.0083	0.0079	0.0070	0.0056	0.007	
21-24 weeks	0.0183	0.0096	0.0092	0.0121	0.0063	0.008	
25-28 weeks	0.0182	0.0109	0.0106	0.0114	0.0070	0.009	
29-32 weeks	0.0209	0.0121	0.0117	0.0133	0.0078	0.010	
33-36 weeks	0.0189	0.0133	0.0129	0.0134	0.0085	0.011	
37-40 weeks	0.0230	0.0144	0.0136	0.0131	0.0092	0.012	
41-44 weeks	0.0298	0.0155	0.0148	0.0147	0.0100	0.013	
45-48 weeks	0.0308	0.0166	0.0162	0.0110	0.0107	0.014	
49-52 weeks	0.0366	0.0178	0.0171	0.0115	0.0114	0.014	
53-56 weeks	0.0388	0.0189	0.0182	0.0112	0.0122	0.015	
57-60 weeks	0.0347	0.0201	0.0196	0.0060	0.0129	0.016	
61-64 weeks	0.0386	0.0214	0.0212	0.0105	0.0137	0.017	
65-68 weeks	0.0484	0.0233	0.0235	0.0111	0.0145	0.019	
67-72 weeks	0.0545	0.0248	0.0256	0.0176	0.0153	0.020	
73-76 weeks	0.0628	0.0261	0.0273	0.0238	0.0160	0.021	
77-80 weeks	0.0640	0.0271	0.0292	0.0269	0.0165	0.022	
81-84 weeks	0.0703	0.0279	0.0304	0.0317	0.0169	0.022	
85-88 weeks	0.0673	0.0286	0.0315	0.0290	0.0172	0.023	
continued on the next page							

	Subsidised employment, customer group I Clustered Std. Err.			Subsidised employment, customer group II Clustered Std. Err.		
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
continued from the previous page						
89-92 weeks	0.0630	0.0291	0.0314	0.0359	0.0176	0.0244
93-96 weeks	0.0662	0.0296	0.0319	0.0416	0.0179	0.0249
97-100 weeks	0.0713	0.0303	0.0337	0.0363	0.0183	0.0254
101-104 weeks	0.0684	0.0308	0.0344	0.0368	0.0186	0.0254
More than 104 weeks	0.0814	0.0331	0.0387	0.0491	0.0196	0.0281
Constant	0.1688	0.0441	0.0447	0.0652	0.0221	0.0230
Other controls:						
Demographics		Χ			Χ	
(Un-)employment characteristics	X			X		
Education and training	X			X		
Desired qualification level in job search	Χ			X		
Calendar month and year fixed effects	X			X		
Employment agency fixed effects	X			X		
N	844,263			3,463,989		
R^2	0.0905			0.1071		

Table A6: Difference-in-differences estimation of the CSC and AP treatment effect on subsidised employment (OLS), customer group III+IV

	Subsidis	Subsidised employment,			Subsidised employment,		
	custo	omer grou		cust	omer grou		
		Clustered Std. Err.			Clustered	Std. Err.	
		Person	Agency		Person	Agency	
	Coef.	level	level	Coef.	level	level	
No. of weeks with CSC (dummies)							
1-4 weeks	-0.0001	0.0023	0.0032	-0.0037	0.0014	0.002	
5-8 weeks	0.0015	0.0028	0.0041	-0.0038	0.0017	0.002	
9-12 weeks	-0.0013	0.0032	0.0048	-0.0054	0.0020	0.003	
13-16 weeks	0.0026	0.0036	0.0054	-0.0016	0.0022	0.003	
17-20 weeks	0.0001	0.0040	0.0059	-0.0030	0.0025	0.004	
21-24 weeks	0.0027	0.0044	0.0063	-0.0021	0.0027	0.004	
25-28 weeks	0.0030	0.0048	0.0070	-0.0015	0.0029	0.005	
29-32 weeks	0.0016	0.0051	0.0073	-0.0006	0.0031	0.005	
33-36 weeks	0.0021	0.0054	0.0077	-0.0012	0.0033	0.005	
37-40 weeks	0.0035	0.0057	0.0081	-0.0017	0.0035	0.005	
41-44 weeks	0.0043	0.0061	0.0091	0.0006	0.0038	0.006	
45-48 weeks	0.0013	0.0065	0.0099	0.0001	0.0040	0.006	
49-52 weeks	0.0016	0.0069	0.0106	0.0005	0.0043	0.007	
53-56 weeks	0.0058	0.0073	0.0111	0.0013	0.0045	0.007	
57-60 weeks	0.0044	0.0077	0.0116	0.0028	0.0048	0.008	
61-64 weeks	0.0052	0.0081	0.0118	0.0011	0.0050	0.009	
65-68 weeks	0.0060	0.0085	0.0123	0.0027	0.0053	0.009	
67-72 weeks	0.0050	0.0089	0.0129	0.0025	0.0055	0.010	
73-76 weeks	0.0058	0.0093	0.0134	0.0040	0.0058	0.010	
77-80 weeks	0.0054	0.0097	0.0142	0.0056	0.0060	0.010	
81-84 weeks	0.0039	0.0101	0.0146	0.0057	0.0063	0.010	
85-88 weeks	0.0057	0.0105	0.0147	0.0056	0.0065	0.011	
89-92 weeks	0.0075	0.0110	0.0150	0.0062	0.0067	0.011	
93-96 weeks	0.0096	0.0114	0.0153	0.0060	0.0070	0.011	
97-100 weeks	0.0089	0.0118	0.0133	0.0063	0.0073	0.011	
101-104 weeks	0.0135	0.0113	0.0149	0.0083	0.0075	0.011	
More than 104 weeks	0.0193	0.0122	0.0145	0.0033	0.0073	0.011	
No. of weeks with AP (dummies)	0.0026	0.0025	0.0020	0.0000	0.0014	0.000	
1-4 weeks	0.0026	0.0025	0.0029	0.0009	0.0014	0.002	
5-8 weeks	0.0013	0.0032	0.0039	-0.0015	0.0018	0.002	
9-12 weeks	0.0062	0.0039	0.0047	0.0000	0.0022	0.003	
13-16 weeks	0.0041	0.0046	0.0054	0.0008	0.0026	0.004	
15-20 weeks	0.0031	0.0053	0.0063	0.0026	0.0030	0.004	
21-24 weeks	-0.0008	0.0060	0.0071	0.0034	0.0034	0.005	
25-28 weeks	0.0020	0.0066	0.0075	0.0045	0.0038	0.006	
29-32 weeks	0.0011	0.0072	0.0083	0.0040	0.0042	0.006	
33-36 weeks	0.0004	0.0079	0.0092	0.0034	0.0045	0.007	
37-40 weeks	0.0014	0.0085	0.0099	0.0023	0.0049	0.007	
41-44 weeks	-0.0028	0.0091	0.0107	0.0001	0.0053	0.008	
45-48 weeks	-0.0060	0.0097	0.0110	-0.0030	0.0056	0.008	
49-52 weeks	-0.0026	0.0103	0.0116	-0.0028	0.0059	0.009	
53-56 weeks	0.0000	0.0108	0.0121	-0.0029	0.0063	0.009	
57-60 weeks	-0.0022	0.0114	0.0124	-0.0043	0.0066	0.010	
61-64 weeks	0.0017	0.0120	0.0129	-0.0040	0.0069	0.010	
65-68 weeks	-0.0004	0.0126	0.0133	-0.0060	0.0073	0.011	
67-72 weeks	-0.0010	0.0132	0.0139	-0.0045	0.0077	0.012	
73-76 weeks	-0.0040	0.0136	0.0150	-0.0076	0.0080	0.012	
77-80 weeks	-0.0050	0.0140	0.0153	-0.0090	0.0082	0.013	
81-84 weeks	-0.0009	0.0143	0.0155	-0.0087	0.0084	0.013	
85-88 weeks	-0.0003	0.0145	0.0162	-0.0086	0.0085	0.014	
continued on the next page							

	Subsidised employment, customer group III Clustered Std. Err.			Subsidised employment, customer group IV Clustered Std. Err.		
		Person	Agency		Person	Agency
	Coef.	level	level	Coef.	level	level
continued from the previous page						
89-92 weeks	-0.0029	0.0148	0.0163	-0.0087	0.0087	0.0146
93-96 weeks	-0.0026	0.0150	0.0168	-0.0059	0.0088	0.0149
97-100 weeks	-0.0070	0.0153	0.0171	-0.0091	0.0090	0.0153
101-104 weeks	-0.0065	0.0155	0.0174	-0.0073	0.0091	0.0155
More than 104 weeks	-0.0047	0.0161	0.0183	-0.0060	0.0096	0.0171
Constant	-0.0427	0.0243	0.0213	0.0858	0.0072	0.0041
Other controls:						
Demographics	Χ			X		
(Un-)employment characteristics	Χ			X		
Education and training	X			X		
Desired qualification level in job search	X			X		
Calendar month and year fixed effects	X			X		
Employment agency fixed effects	X			X		
N	5,233,413			12,147,683		
R^2	0.1009			0.1087		

References

- Behncke, S., M. Frölich and M. Lechner (2010): Unemployed and their caseworkers: should they be friends or foes? *Journal of the Royal Statistical Society* 173 (1), pp. 67-92.
- Bender, G., D. Bieber, V. Hielscher, J. Marschall, P. Ochs and S. Vaut (2006):

 Organisatorischer Umbau der Bundesagentur für Arbeit, Evaluationsbericht 2006,
 Saarbrücken.
- Bertrand, M., E. Duflo and S. Mullainathan (2004): How Much Should We Trust Differences-in-Differences Estimates? *The Quarterly Journal of Economics* 119 (1), pp. 249-275.
- Bieber, D., V. Hielscher, P. Ochs, C. Schwarz and S. Vaut (2005): Organisatorischer Umbau der Bundesagentur für Arbeit, Bericht 2005, Saarbrücken.
- Bundesagentur für Arbeit (2006a): Der Arbeitsmarkt in Deutschland Monatsbericht Januar 2006. Bundesagentur für Arbeit 01/2006, Nürnberg.
- Bundesagentur für Arbeit (2006b): Der Arbeitsmarkt in Deutschland Monatsbericht Februar 2006. Bundesagentur für Arbeit 02/2006, Nürnberg.
- Dorner, M., J. Heining, P. Jacobebbinghaus, and S. Seth (2010): Stichprobe der Integrierten Arbeitsmarktbiographien (SIAB) 1975 2008. *FDZ Datenreport* 01/2010, IAB, Nürnberg.
- Hartmann, M. (2009): Umfassende Arbeitsmarktstatistik: Arbeitslosigkeit und Unterbeschäftigung. *Methodenbericht der Statistik der BA*, Bundesagentur für Arbeit, Nürnberg.
- Mauer, A. (2006): Wirkungsanalyse der Neuausrichtung der Arbeitsvermittlung im neuen Kundenzentrum. Zeitschrift für ArbeitsmarktForschung 3 and 4 (2006), pp. 557-574.
- Mosley, H., S. Gülker, P. Kaps, A. Mauer, K. Müller, F. Oschmiansky, H. Schütz, S. Speckesser, R. Cramer, R. Gilberg, D. Hess, K. Marwinski, A. Prussog-Wagner, H. Schröder, M. Smid and A. Steinwede (2005): Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission Modul 1a Neuausrichtung der Vermittlungsprozesse. Berlin, Bonn.
- Mosley, H., S. Gülker, P. Kaps, A. Mauer, K. Müller, F. Oschmiansky, H. Schütz, S. Speckesser, R. Cramer, R. Gilberg, D. Hess, K. Marwinski, A. Prussog-Wagner, H. Schröder, M. Smid and A. Steinwede (2006): Evaluation der Maßnahmen zur Umsetzung der

- Vorschläge der Hartz-Kommission Modul 1a Neuausrichtung der Vermittlungsprozesse. Berlin, Bonn.
- Oberschachtsiek, D., P. Scioch, C. Seysen and J. Heining (2009): Stichprobe der Integrierten Erwerbsbiografien IEBS. *FDZ Datenreport* 03 (2009), Bundesagentur für Arbeit, Nürnberg.
- Rocha, R. and R. R. Soares (2010): Evaluating the impact of community-based health interventions: evidence from Brazil's Family Health Program. *Health Economics* 19, pp. 126–158.
- Rübner, M. and B. Sprengard (2011): Beratungskonzeption der Bundesagentur für Arbeit Grundlagen. Bundesagentur für Arbeit, Nürnberg.
- Schmidt, G. (2003): Wege zu einer effizienteren Arbeitsvermittlung. WSI Mitteilungen 5 (2003), pp. 291-299.
- Schütz, H. and P. Ochs (2005): Das Neue im Alten und das Alte im Neuen Das Kundenzentrum der Bundesagentur für Arbeit: Die öffentliche Arbeitsvermittlung zwischen inkrementellen und strukturellen Reformen. Wissenschaftszentrum Berlin für Sozialforschung SP I 2005-106.
- Schütz, H. and F. Oschmiansky (2006): Arbeitsamt war gestern Neuausrichtung der Vermittlungsprozesse in der Bundesagentur für Arbeit nach den Hartz-Gesetzen. Zeitschrift für Sozialreform 52, pp. 5-28.