

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Holzner, Christian; Munz, Sonja

## Working Paper Should local public employment services be merged with the local social benefit administrations?

CESifo Working Paper, No. 3472

**Provided in Cooperation with:** Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

*Suggested Citation:* Holzner, Christian; Munz, Sonja (2011) : Should local public employment services be merged with the local social benefit administrations?, CESifo Working Paper, No. 3472, Center for Economic Studies and ifo Institute (CESifo), Munich

This Version is available at: https://hdl.handle.net/10419/46426

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# WWW.ECONSTOR.EU



Should Local Public Employment Services be Merged with the Local Social Benefit Administrations?

> Christian Holzner Sonja Munz

## CESIFO WORKING PAPER NO. 3472 CATEGORY 4: LABOUR MARKETS MAY 2011

An electronic version of the paper may be downloaded • from the SSRN website: www.SSRN.com • from the RePEc website: www.RePEc.org • from the CESifo website: www.CESifo-group.org/wp

# Should Local Public Employment Services be Merged with the Local Social Benefit Administrations?

## Abstract

The German Federal government has allowed some regions (Approved Local Providers) to be solely responsible for the care of long-term unemployed. The remaining regions had to form Joint Local Agencies, where the local social benefit administrations work together with the local public employment services. We find that despite positive self-selection Approved Local Providers do not perform better than Joint Local Agencies. Even more interestingly, using a unique data set on organisational characteristics we are able to show that the organisational features implemented primarily by Approved Local Providers are positively correlated with the job finding probability of the long-term unemployed. Thus, regions that self-selected into Approved Local Providers seem to have implemented a better organisational structure. However, their relatively poor performance overall compared to Joint Local Agencies suggests that they underestimated the benefits of having the local public employment service merged with the local social benefit administration.

JEL-Code: I380, J640, C310.

Keywords: organisation, labour market integration, evaluation.

Christian Holzner Ifo Institute for Economic Research at the University of Munich Poschingerstrasse 5 81679 Munich Germany holzner@ifo.de Sonja Munz Munich University of Applied Science Schachenmeierstrasse 35 80636 Munich Germany sonja.munz@hm.edu

The authors wish to thank Stefan Bauernschuster, Thiess Büttner, Michael Fertig and Martin Werding for their useful comments and Rolf Kleimann for invaluable assistance with the data. The usual disclaimer applies.

#### **1. Introduction**

Getting the long-term unemployed back to work has been top on the agenda of many European governments over the last two decades. More recently European governments expressed their desire to additionally maintain a solid balance between social and economic goals. The aim to simultaneously enhance both flexibility and security in the labour market has led the European Commission together with the Member States to develop a set of common principles for flexicurity. The principle to provide the long-term unemployed and the inactive with the means necessary to find a job and to achieve an acceptable living standard requires a higher degree of cooperation between local public employment services and social benefit administrations. Different countries have adopted different strategies to encourage the integration between local public employment services and social benefit administrations. While some European countries have decentralised their public employment services to increase the cooperation with social benefit administrations at the regional level, others have merged public employment services and social benefit administrations (European Commission, 2006). In 2002 the United Kingdom merged public employment services and social benefit administrations (Jobcentre Plus). Finland started to integrate the labour and the social affairs administrations into joint services (Duuri) in 2002 (Genova, 2008). In Denmark the 2007 reorganisation of local and regional governments included the integration of public employment services and county-led social benefit administrations into 91 one-stop-shop jobcentres (Lindsay and McQuaid, 2008). Public employment services and social benefit administrations were also merged in the Netherlands (Location for Work and Income) and in France (France emploi) in 2009 (European Commission, 2009).

We use a policy experiment in Germany to evaluate whether merging public employment services and social benefit administrations improves the job finding probability of the long-term unemployed. The Hartz IV reform that came into effect in 2005 has created new institutions for the long-term unemployed. Before the reform, Germany had two separate institutions; the local social benefit administrations, which cared for social assistance recipients, and the local public employment services, which cared for unemployment assistance recipients. Within the Hartz IV reform the German federal government allowed 69 out of 442 regions to be solely responsible for all long-term unemployed (Approved Local Providers), while the remaining regions had to form Joint Local Agencies by merging their local public employment services with their social benefit administrations.

Since the Hartz IV reform created new institutions and defined new eligibility criteria for long-term unemployment benefits, we are only able to compare the performance of Joint Local Agencies with the performance of Approved Local Providers after the Hartz IV reform. We can, however, compare some labour market variables before the Hartz IV reform in order to investigate whether regions with better performing social benefit administrations applied for being Approved Local Providers. The descriptive statistics show that the regions which later became Approved Local Providers had significantly lower social assistance see above recipient rates. To account for the positive self-selection, we use an instrumental variable approach. As an instrument we use information about the involvement of local political representatives in the German County Association ("Deutscher Landkreistag"), a political lobbying institution that promoted the introduction of Approved Local Providers in all German regions and that therefore had a large influence on which regions applied for becoming an Approved Local Provider.

Being able to consistently estimate the effect of the institution "Approved Local Provider" compared to the institution "Joint Local Agency" on the job finding rate of the long-term unemployed will provide us with an idea which institution is overall better suited to integrate the long-term unemployed into the labour market. To gain further insight into the organisational features that determine the success of an institution, we are able to use a unique dataset on the major organisational characteristics of all job centres. Many organisational features are not unique to one of the two institutions, but can be found in either Approved Local Providers or Joint Local Agencies. Thus, our dataset allows us to not only to shed some light on the factors that determine a successful institution, but also to control for those organisational characteristics that both institutions have in common. This brings us closer to the pure effect of having the local public employment service and the local social benefit administration merged, but our dataset allows us to get closer to the pure effect.

The OLS-estimate and the IV-estimate for the overall effect of being an Approved Local Provider (without controlling for organisational characteristics) are insignificant, but they indicate that long-term unemployed in regions with Approved Local Providers have lower unemployment to employment transition rates than long-term unemployed in regions with Joint Local Agencies. We also find that regions that later became Approved Local Providers had better labour market conditions before the Hartz IV reform. Thus, despite the evidence that regions with better labour market conditions prior to the Hartz IV reform selected into being Approved Local Providers, regions with Approved Local Providers seem not to perform better than Joint Local Agencies.

Comparing the overall effect of being an Approved Local Provider (without controlling for organisational characteristics) with the effect after controlling for organisational characteristics allows us to investigate to which degree the differences in the estimates of the overall effect are driven by differences in the organisational characteristics of the job centres. We find that the long-term unemployed in regions where job centres use a generalised case management approach have a higher job finding probability compared to the long-term unemployed in regions where job centres use a specialised case management approach. In a specialised case management approach the long-term unemployed are profiled according to their chances on the labour market and only those with multiple obstacles to integration are referred to special case managers. In a generalised case management approach the long-term unemployed have fewer contact persons and all long-term unemployed are counselled equally. Approved Local Providers predominantly use the more successful generalised case management approach while Joint Local Agencies more often use a specialised case management approach. In addition, Joint Local Agencies put more emphasis on fast activation, while Approved Local Providers take more time to counsel the long-term unemployed. Moreover, Approved Local Providers mostly have their own vacancy recruitment service while Joint Local Agencies frequently use the vacancy recruitment service of the local public employment service that is responsible for short-term unemployed. In addition, Approved Local Providers more often use an integrated matching approach, where the vacancy recruitment service generally communicates new vacancies to case managers and does not primarily match long-term unemployed and job vacancies on its own. Both measures that are primarily used by Approved Local Providers are positively correlated with higher job finding rates.

The fact that Approved Local Providers predominantly implemented an organisational structure that is positively correlated with the job finding probability of long-term unemployed indicates that regions that self-selected into Approved Local Providers seem to have implemented an organisational structure that is better suited to integrate long-term unemployed into the labour market. However, the relatively poor performance of Approved Local Providers compared to Joint Local Agencies – as suggested by the statistically significant IV estimate of being an Approved Local Provider after controlling for organisational characteristics – indicates that Approved Local Providers wrongly believed that the positive effect of having a better organisational structure would over-compensate the lost benefits of having the local public employment service and local social benefit administration integrated.

The paper by Broockmann et al. (2010) is probably most closely related to our analysis. They also find a positive effect of Joint Local Agencies. However, our paper differs from Broockmann et al. (2010) in several aspects. While they rely on a propensity score matching approach to correct for positive self-selection of regions into Approved Local Providers using regional labour market characteristics before the Hartz IV reform, we use an instrumental variable approach. Furthermore, since they are worried that the composition of long-term unemployed in Approved Local Providers differs from the composition of the long-term unemployed in Joint Local Agencies, they focus on correcting for differences in individual characteristics across regions.<sup>1</sup> Given their focus, however, they are only able to use data of 154 regions, while our dataset includes 409 out of 442 regions. The third difference is that Broockmann et al. (2010) do not explain the rationale behind the self-selection of Approved Local Providers and therefore do not attempt to reconcile with what the finding that despite of positive self-selection of regions into Approved Local Providers these did not perform better than Joint Local Agencies.

By estimating a matching function in order to determine which factors are positively correlated with unemployment to employment transitions our paper also contributes to the empirical literature estimating matching functions for Germany (Gross, 1997; Entorf, 1998; Fahr and Sunde, 2005). Similar to Fahr and Sunde (2005), we use regional data to estimate the matching function for the long-term unemployed taking spatial lags into account. Fahr and Sunde (2005) emphasise the differences in the performance of local job centres without being able to explain the differences in matching efficiency. Our dataset on organisational characteristics allows us to shed some light into this black box.

The paper is organized as follows. Section 2 describes the changes in labour market institutions and the policy experiment resulting from the Hartz IV reform. In section 3 we provide evidence for positive self-selection of regions into being Approved Local Providers by comparing the labour market conditions in regions with Approved Local Providers and Joint Local Agencies before the Hartz IV reform. Section 4 describes the data used. In section 5 we first present some basic descriptive evidence and OLS estimates for the correlation between the job finding probability of the long-term unemployed and being cared for by an Approved Local Provider. We then discuss the instrument we use to account for positive self-selection of regions into being Approved Local Provider. In section 6 we account for the differences in the organisational structure implemented by job centres and investigate the role of these organisational characteristics for the job finding rate of the long-term unemployed followed by the conclusion in section 7.

<sup>&</sup>lt;sup>1</sup> Broockmann et al. (2010) and WZB et al. (2008) provide evidence that neither of the two institutions had an advantage by having an easier to integrate group of long-term unemployed.

#### 2. Labour market institutions resulting from the Hartz Reform

Like in other European countries (e.g. United Kingdom, Finland, Denmark, Netherlands, France), the local public employment services and the local social benefit administrations in Germany were merged in the course of a labour market reform in order to ensure a single contact point for long-term unemployed job seekers. The so-called Hartz reforms (Hartz I, II, III, IV) implied a substantial change for the German welfare state in many respect. These reforms were implemented step by step between 2003 and 2005 (see Jacobi and Kluve (2007) for a more detailed description of all four Hartz reforms). While the Hartz IV reform constitutes a comprehensive modification of the unemployment benefit and social assistance schemes, the other Hartz reforms focused on relaxing regulations for temporary employment and labour leasing, on modifying already existing active labour market policy instruments, and on the reorganisation of the Federal Employment Service.

Before the Hartz IV reform the municipalities and the counties were responsible for social assistance recipients and the local public employment services of the Federal Employment Agency were responsible for unemployment assistance recipients. The integration of the two systems under Hartz IV opened up the question of responsibility for the long-term unemployed.

Municipalities and counties in charge of the local social benefit administration feared to lose political influence if they gave up such an important task. Especially the German County Association ("Deutscher Landkreistag"), supported by the majority of German States, campaigned for giving municipalities and counties the sole responsibility for the long-term unemployed, i.e. they campaigned for having the Approved Local Provider institution implemented nationwide. The German County Association is the federal Association of German Counties and its main tasks are to promote local government selfadministration (which is guaranteed by the German Constitution) and to foster common interests between all local government bodies vis-à-vis the Federal State and the single States. As a lobbying institution, it tries to influence Federal and State level legislation that affects municipalities and counties.

However, the Federal Government, which predominantly finances the social security system, favoured the Joint Local Agency model, where a local public employment service and one or more counties (more precisely their local social benefit administrations) are merged and carry out their responsibilities in mutual cooperation. Due to the federal system in Germany, where the States have a veto right if the majority of the States oppose a law passed by the Federal Parliament, the Federal Government was forced to agree to a policy experiment, where 69 out of 442 regions were allowed to design the organisation and activation process for the long-term unemployed in their job centres (Approved Local

Providers) independent of the guidelines of the Federal Employment Agency. The remaining regions formed Joint Local Agencies, where the local authority and the Federal Employment Agency had to agree on the organisation of the local job centre.<sup>2</sup> Within a Joint Local Agency the local authority has less scope to shape the organisation according to its own agenda. Within a Joint Local Agency it is hard to bypass the controlling standards and the guidelines for the use of active labour market policies of the Federal Employment Agency and impossible to implement another computer software. Still there was scope for implementing different organisational structures. The descriptive statistics in section 6 show the considerable diversity of the organisational characteristics implemented by Joint Local Agencies.

The number of 69 Approved Local Providers was chosen because the Federal Council of Germany (*Bundesrat*), which opposed the Federal Government's initial plan, is composed of 69 delegates of State Governments. Each of the States was allowed to nominate as many regions for an Approved Local Provider model as it has seats in the Federal Council of Germany. In order to be nominated by a State Government the regions had to apply. In total 70 regions applied for becoming Approved Local Providers. In some States the number of applicants was lower than the number of available slots. The unutilized slots were then allocated to those States that had excess applications.

All other components of the public welfare system and the Hartz reforms – such as benefit entitlements, the tax-benefit system in general, and labour market institutions such as minimum wages and employment protection – apply equally to all regions irrespective of the job centre organisation.

#### 3. Labour market conditions before the Hartz IV Reform

Since regions had to apply to become Approved Local Providers, regions with advantages in activating long-term unemployed might have self-selected to become Approved Local Providers. Labour market variables in the years 2000 until 2003, i.e. prior to the Hartz IV reform, are presented in Table 1. The weighted averages shown suggest that regions that went on to become Approved Local Providers had lower unemployment rates, lower long-term unemployment rates, lower unemployment assistance recipient rates and a lower social assistance recipient rates. While the differences for unemployment rates, long-

<sup>&</sup>lt;sup>2</sup> In 20 regions the Federal Employment Agency and the local authority could not agree on the organisation. In these cases, the local employment agency and the local social benefit administration remained separate organisational bodies.

term unemployment rates and unemployment assistance recipient rates are not statistically significant, the differences in social assistance benefits recipient rates are highly significant.

Prior to the Hartz IV reform short- and long-term unemployed as well as unemployment assistance recipients were cared for by local public employment services, which are controlled by the Federal Employment Agency. Social assistance recipients, however, were cared for by local social benefit administrations, which are under the control of the local authorities. One would therefore expect that regions primarily looked at the social assistance recipient rates in order to evaluate whether they are better able to care for the long-term unemployed on their own.

	2000	2001	2002	2003		
Unemployment rate						
ALP	9.22 [8.05; 10.39]	8.97 [7.76; 10.19]	9.21 [8.04; 10.39]	9.89 [8.71; 11.06]		
JLA	9.84 [9.34; 10.34]	9.61 [9.10; 10.13]	10.08 [9.57; 10.59]	10.81 [10.3; 11.32]		
Long-term un	employment rate					
ALP	3.44 [3.01; 3.86]	3.17 [2.68; 3.66]	3.11 [2.57; 3.64]	3.41 [2.82; 3.99]		
JLA	3.68 [3.48; 3.88]	3.41 [3.16; 3.58]	3.41 [3.18; 3.64]	3.80 [3.54; 4.06]		
Unemployme	nt assistance recipient rate	2 <sup>a</sup>				
ALP	2.64 [2.14; 3.14]	2.67 [2.12; 3.22]	3.03 [2.41; 3.65]	3.61 [2.90; 4.31]		
JLA	2.84 [2.63; 3.05]	2.87 [2.64; 3.09]	3.29 [3.03; 3.54]	3.91 [3.62; 4.21]		
Social assistance recipient rate <sup>a</sup>						
ALP	4.18 [3.82; 4.55]**	4.16 [3.80; 4.52]**	4.30 [3.92; 4.68]**	4.36 [3.99; 4.73]**		
JLA	5.28 [4.96; 5.60]**	5.35 [5.03; 5.66]**	5.47 [5.16; 5.79]**	5.61 [5.30; 5.93]**		

Table 1: Labour market conditions in 2000 – 2003 (weighted averages)

a) In percent of working age population (18 to 64 year olds).

Confidence intervals with \* and \*\* indicate significance at a 5 % and 1 % level, respectively.

Source: Own calculations based on data from the Federal Employment Office.

The significantly different social assistance recipient rates suggest some degree of positive self-selection of regions into Approved Local Providers. The positive self-selection of regions with advantages in activating long-term unemployed is likely to lead to higher job finding rates in regions with Approved Local Providers and an upward biased estimate of the Approved Local Provider indicator variable in the absence of a good instrument.

#### 4. Description of the data

The Hartz IV reform implemented completely new organisations to care for and to activate the long-term unemployed and changed the eligibility criteria for long-term unemployment benefits. We are therefore only able to compare the performance of Joint Local Agencies with the performance of Approved Local Providers after the Hartz IV reform, but we cannot compare the organisations before and after the reform.

Given the completely new organisations and the enlarged group of long-term unemployed (due to the new criteria), it was not surprising that the newly created job centres needed some time to get started. Within the first half year all job centres had filed the applications of previous social and unemployment assistance recipients and of recent longterm unemployed. In the first half of 2006 the workload of all job centres converged to the new steady state level and in the second half of 2006 all job centres managed to report the required statistics to the Federal Employment Agency.

The monthly unemployment to employment transition data used for the evaluation was retrieved from unemployment and employment stock datasets for the period July 2006 until May 2007. Individuals that were registered in month t as long-term unemployed without a job and in month t+1 as employed with or without in-work benefits are counted as transitions from unemployment into employment. In order to obtain the correct number of transitions into employment, we had to subtract transitions of long-term unemployed into public employment schemes and other active labour market policy instruments whose participants are counted as employed workers in the official statistics. Unfortunately, only the transitions for the official unemployment to employment transitions are available for later periods, but not the data for transitions into public employment schemes and other active labour market policy instruments.<sup>3</sup> In order to avoid any bias resulting from missing data for some Approved Local Providers we have restricted our sample to the first half of 2007.<sup>4</sup>

We combine the monthly transition data obtained from the Federal Employment Agency with administrative unemployment and vacancy data on the job centre level and with the organisation data from a survey conducted among the executive managers of job centres. This unique dataset (IAW-SGB-II-Organisationserhebung<sup>5</sup>) includes variables that characterise each job centre's organisational structure, e.g. the type of case management, the intensity and speed of activation, the counselling concept, the vacancy recruitment and the

<sup>&</sup>lt;sup>3</sup> http://statistik.arbeitsagentur.de/Navigation/Statistik/Statistische-Analysen/SGB-II-Kennzahlen/Uebergangsanalysen/Zu-den-Daten-Nav.html

<sup>&</sup>lt;sup>4</sup> Broockmann et al. (2010) use the same time period for the identical reason.

<sup>&</sup>lt;sup>5</sup> For more details (in German) see: http://www.bmas.de/portal/18638/property=pdf

distribution process. Further regional background variables like the degree of urbanisation and the population size of a region are obtained from the Federal Statistical Office. Table A1 in the Appendix provides some summary statistics of the dataset used for the subsequent analysis.

Since the status of being an Approved Local Provider and the organisational characteristics do not change over time under investigation, we do not gain anything by using the panel structure of the dependent variable. We therefore take the averages of the monthly data for our OLS and IV regressions.

### 5. The overall effect of being an Approved Local Provider

The overall effect of being an Approved Local Provider is obtained by comparing the performance of Approved Local Providers with the performance of Joint Local Agencies without controlling for organisational characteristics.

Comparing the weighted averages of the job finding rates of long-term unemployed (weighted by the number of long-term unemployed in the region) shows that the job finding rate in regions with Approved Local Providers is higher than in regions with Joint Local Agencies. On average 3.50 % of all long-term unemployed in regions with Joint Local Agencies and 3.69 % in regions with Approved Local Providers found a job each month. However, this difference can be driven by heterogeneity across regions. 62 out of 69 Approved Local Providers operate in rural regions, which generally have better labour market conditions. If we restrict our sample to rural regions only, Joint Local Agencies with a job finding rate of 3.89 % outperform Approved Local Providers with a rate of 3.70 %.

We further examine this relationship by controlling for observable regional characteristics that influence the job finding probability of long-term unemployed by estimating a standard regional matching function. The baseline estimation equation is given by,

$$\ln y_{i} = \beta_{0} + \beta_{1}I_{i} + \beta_{2}\ln u_{i,t-1} + \beta_{3}\ln v_{i,t-1} + \beta_{4}\ln u_{n,t-1} + \beta_{5}\ln v_{n,t-1} + X_{i}'\gamma + \varepsilon_{i}, \qquad (1)$$

where  $\ln y_i$  is the natural log of the average number of long-term unemployed finding a job each month. The indicator variable  $I_i$  takes a value of one if long-term unemployed are cared for by an Approved Local Provider in region *i* and a value of zero otherwise. According to the standard matching function approach we also include the stocks of short- and long-term unemployed workers searching for a job and the number of newly available vacancies. Since

labour markets exceed administrative boundaries of counties we include not only the stock of short- and long-term unemployed workers and the number of newly available vacancies in region *i* but also in the respective neighbouring regions *ni*.  $X_i$  is a vector of variables controlling for regional characteristics like urbanisation, a dummy variable for East Germany and the natural log of the population size in region *i*.

The OLS estimate of the indicator variable  $I_i$  in the first column of Table 3 shows a negative correlation between regions with Approved Local Providers and the unemployment to employment transition rate of long-term unemployed. Although the OLS estimates for the indicator variable  $I_i$  indicate a negative relationship between Approved Local Providers and the job finding rate, it remains unclear whether being cared for by an Approved Local Provider has a causal negative impact on the job finding rate. In fact, OLS estimation is only able to identify the effect of being an Approved Local Provider on the job finding rate if the error term  $\varepsilon_i$  has a zero mean conditional on all covariates. In other words, only if the indicator variable  $I_i$  for being an Approved Local Provider is not correlated with any unobserved characteristic that influences the job finding probability, then the OLS estimates are unbiased. However, given the evidence of positive self-selection in section 3 it is unlikely that the OLS estimate is unbiased. Since regions that later chose to become Approved Local Providers performed better, i.e., had significantly lower social assistance recipient rates prior to the Hartz IV reform than regions that later became Joint Local Agencies, we expect the OLS estimate to be upward biased. Thus, the negative coefficient of the OLS estimate in the presence of positive self-selection indicates that being an Approved Local Provider has no positive influence on the job finding rate of long-term unemployed.

To overcome the potential bias of the indicator variable  $I_i$  on  $\ln y_i$  we use an instrumental variable approach. As an instrument we use a variable that indicates whether the mayor of a region was a board member or a State president of the German County Association ("Deutscher Landkreistag") in 2004, the year when regions had to apply to become an Approved Local Provider. The German County Association<sup>6</sup> is the federal association of German counties and its main tasks are to promote local government self-administration (which is guaranteed by the German Constitution) and to foster common interests between all local government bodies vis-à-vis the Federal State and the single States. It is financed through contributions made by all counties.

As a lobbying institution, it tries to influence Federal and State level legislation that affects municipalities and counties in the interest of all counties. The German County Association exerts its main influence on regions by providing information on municipality or county relevant issues through its journal "Der Landkreis" or by providing counties a

<sup>&</sup>lt;sup>6</sup> For more information (in German) see: http://www.kreise.de/\_\_cms1/dlt-portrait.html

platform to exchange their experience on certain issues. For the validity of our instrument it is important to note that the platforms where counties could discuss their experience in caring for long-term unemployed were open to all counties. Furthermore, it is worth noting that the German County Association has no financial means to influence local public policy directly via subsidies or alike. Thus, the German County Association could only influence the local labour market policy indirectly through the provision of information. For the validity of our instrument it is important that this information was made available to all regions irrespective of whether they cared for long-term unemployed in an Approved Local Provider or a Joint Local Agency institution.

The German County Association feared that the municipalities and counties in charge of the local social benefit administration would lose political influence if they gave up the important task of caring for the long-term unemployed by merging with the local public employment services that are accountable to the Federal Employment Agency. It therefore campaigned for giving municipalities and counties the sole responsibility for the care of the long-term unemployed, i.e. they campaigned for having the Approved Local Provider institutions implemented nationwide. Given the enormous task of caring for all long-term unemployed and the political responsibilities associated with such a challenge, not all local authorities shared the view of the German County Association that it is preferable to be solely responsible for long-term unemployed. Especially the mayors on the board of the German County Association and those who were State presidents of the German County Association pushed their regions to apply. Eight out of nineteen regions where a mayor was a board member or a federal state president of the German County Association applied to become an Approved Local Provider. As shown by the first stage regression in Table A4 in the Appendix, the information whether the mayor of a region was a board member of the German County Association or a State president in 2004 is a good predictor to explain which regions chose to apply to become Approved Local Providers. The coefficient of German County Association variable is positive and highly significant in the first stage regression suggesting that a region whose mayor was a board member or a federal state president of the German County Association was more likely to become an Approved Local Provider than others. The F-statistics for the significance of the German County Association indicator variable in the first-stage regression are between 24.00 and 29.74 for the different specification used throughout this paper (see Table A3 in the Appendix). The F-statistics, therefore, support the hypothesis that the mayors on the board of the German County Association had a huge influence on whether a region applied for becoming an Approved Local Provider.

	2001	2002	2003
Unemployment rate			
German County Association	8.98 [6.48; 11.49]	9.31 [6.88; 11.75]	10.09 [7.55; 12.63]
Other rural regions	8.70 [8.11; 9.39]	9.07 [8.49; 9.65]	9.71 [9.13; 10.30]
Long-term unemployment rate			
German County Association	3.05 [2.10; 4.01]	3.05 [2.03; 4.06]	3.44 [2.26; 4.63]
Other rural regions	2.93 [2.70; 3.16]	2.96 [2.71; 3.22]	3.29 [3.00; 3.58]
Unemployment assistance recipient	rate <sup>a</sup>		
German County Association	2.60 [1.49; 3.72]	2.98 [1.72; 4.24]	3.56 [2.10; 5.02]
Other rural regions	2.52 [2.25; 2.79]	2.90 [2.60; 3.21]	3.46 [3.12; 3.81]
Social assistance recipient rate <sup>a</sup>			
German County Association	3.46 [2.87; 4.06]	3.73 [3.10; 4.37]	3.78 [3.14; 4.42]
Other rural regions	3.66 [3.48; 3.83]	3.78 [3.60; 3.96]	3.91 [3.72; 4.10]

Table 2: Labour market conditions in rural regions in 2001 – 2003 (weighted averages)

a) In percent of working age population (18 to 64 year olds).

Confidence intervals with \* and \*\* indicate significance at a 5 % and 1 % level, respectively.

Source: Own calculations based on data from the Federal Employment Office.

The German County Association indicator variable would not be a valid instrument to control for positive self-selection if the mayors on the board of the German County Association or the mayors that were federal state presidents of the German County Association were elected based on their labour market performance. The board of the German County Association is elected every two years and the federal state presidents of the German County Association every two to three years<sup>7</sup>. Using data for the years 2001 until 2003 we can investigate whether labour market variables are positively correlated with being a board member or a federal state president of the German County Association. Since only rural regions are members of the German County Association the sample for the descriptive statistics in Table 2 is restricted to rural regions only. The fact that the weighted averages are not statistically significant suggests that rural regions with a mayor that is a board member or a federal state president of the German County Association have similar unemployment rates, similar long-term unemployment rates and similar unemployment assistance and social assistance recipient rates compared to other rural regions. This suggests that regions with a

<sup>&</sup>lt;sup>7</sup> See Paragraph 7 of the articles of the German County Association, i.e. http://www.kreise.de/landkreistag/dltsatzung-2005.pdf, and the articles of the State Associations of German Counties.

mayor that is a board member or a federal state president of the German County Association are not associated with better labour market conditions.

Dependent variable:	Log long-term unemployed finding a job each month			
	OLS estimates	IV estimates		
Approved Local Providers	- 0.033 [0.020]	-0.167 [0.092]		
Observations	409	409		
F-Statistic		25.87		
Durbin-Wu-Hausman Test (p-value)		0.174		
R-squared	0.98	0.98		

Table 3: Relationship between Approved Local Providers and the job finding rate

Standard errors are given in parentheses. Coefficients with \* and \*\* indicate significance at a 5 % and 1 % level, respectively. Observations are clustered at the level of the 16 German states and weighted accordingly.

The IV estimate and the OLS estimate of the overall effect of being an Approved Local Provider are shown in Table 3. The coefficients of all estimates are shown in Table A2 and Table A3 in the Appendix. The IV estimate for the overall effect of being an Approved Local Provider is not significantly different from zero (it is statistically significant at a 10% level). But the IV estimate in Table 3 for the overall effect of being an Approved Local Provider indicates a larger negative correlation between being an Approved Local Providers and the job finding rate of long-term unemployed than the OLS estimates. Although the Durbin-Wu Hausman Test reported in Table 3 suggests that the OLS estimate and the IV estimate shows a larger negative correlation than the OLS estimate is biased upward because of positive self-selection of regions into Approved Local Providers.

#### 6. The role of organisational characteristics

The OLS-estimates and the IV-estimates for the overall effect of being an Approved Local Provider are insignificant, but they indicate that despite the evidence of positive selfselection provided in section 3, regions with Approved Local Providers are not better than Joint Local Agencies in integrating long-term unemployed into the labour market. This raises the question why these regions self-selected into being solely responsible for the longterm unemployed in the first place. Clearly, they must have thought that they are better able to care for the long-term unemployed if they do not merge with the local public employment service. One reason might have been that the institution "Approved Local Provider" allowed local authorities to design the organisation and activation process for the long-term unemployed according to their own agenda, while the institution "Joint Local Agency" limited local authorities' scope to shape the organisational structure, because local authorities and the Federal Employment Agency had to agree on the organisational characteristics of the local job centre. This restriction might have induced regions that believed that they could better organise the activation process of the long-term unemployed on their own to apply to become Approved Local Providers. The unique dataset on organisational characteristics allows us to investigate this hypothesis and to shed some light on the factors that determine a successful institution.

Table 4 allows us to gain further insight into the organisational characteristics used by job centres. Many organisational characteristics are not unique to one of the two institutions, but can be found in either Approved Local Providers or Joint Local Agencies. Even though the Federal Employment Agency had to agree with the organisation implemented by Joint Local Agencies, Joint Local Agencies were able to implement different organisational features as the considerable diversity of the organisational characteristics in Joint Local Agencies in Table 4 shows.

	Approved Local Providers	Joint Local Agencies
Specialized case management	75.8 %	24.6 %
Generalized case management	24.2 %	75.4 %
Own vacancy recruitment service	89.9 %	16.6 %
Integrated matching approach	14.5 %	6.7 %
Length of first interview (in minutes)	52 min	48 min
First interview within 2 weeks	71.1 %	45.4 %
Agreement signed	72.9 %	74.1 %

Source: Own calculations based on the survey IAW-SGBII-Organisationserhebung.

We examine the role of these organisational characteristics by including sets of organisational variables step by step into our IV regression. Table 5 presents the estimates of

the organisational variables based on the standard matching function estimated according to equation (1). The OLS regression results, which are very similar to the IV regression results, are given in Table A2 in the Appendix.

First, we include in column 2 a dummy variable for regions that use a specialised case management approach. An organisation is characterised as having a specialised case management approach if long-term unemployed are profiled according to their labour market chances and those in need for support are counselled by special case managers. As shown in Table 4, 75.8 % of Joint Local Agencies and 24.6 % of Approved Local Providers use a specialised case management approach. The remaining 24.2 % of Joint Local Agencies and 75.4 % of Approved Local Providers use a generalized case management, where all longterm unemployed are coached equally and independently of their profiling outcome. The coefficient for the specialised case management approach in column 2 shows a negative and significant correlation between the specialised case management approach and the job finding rate. The magnitude of the coefficient suggests that long-term unemployed that are cared for by job centres with a specialised case management approach have on average an 8 % lower job finding rate. In addition, the coefficient for the indicator variable for regions with Approved Local Providers becomes statistically significant and even more negative. This pattern suggests that Approved Local Providers have primarily chosen the more successful generalised case management approach.

In column 3 we include two dummy variables that characterise how vacancies are recruited and how well the matching process of long-term unemployed to job vacancies is integrated into the case management approach. The first dummy variable indicates whether or not a job centre has its own vacancy recruitment service. As shown in Table 4, 16.6% of Joint Local Agencies have their own vacancy recruitment service. This is substantially lower than the 89.9% of Approved Local Providers that have their own vacancy recruitment service. Job centres without their own vacancy recruitment service use the vacancy recruitment service of the local public employment service that is still responsible for shortterm unemployed. Although the positive correlation between the existence of an own vacancy recruitment service and the job finding rate of long-term unemployed is not statistically significant, it still suggests that long-term unemployed that use the vacancy recruitment service of the local public employment service face in-house competition of short-term unemployed and therefore have on average a 10 % lower job finding rate. Again, the fact that Approved Local Providers have primarily chosen the better performing institutional setting can explain why they did not want to be merged with the local public employment service, where they had less influence in shaping the job centre organisation according to their agenda.

The second dummy variable characterises how well the matching of long-term unemployed to job vacancies is integrated into the case management approach. It is one if the vacancy recruitment services generally communicate new vacancies to case managers responsible for the long-term unemployed, and zero if the vacancy recruitment service primarily matches long-term unemployed and job vacancies on its own without consulting the case managers. The integrated approach seems to be positively correlated (although not statistically significant) with the job finding rate and is adopted by 14.5 % of regions with Approved Local Providers and by 6.7 % of regions with Joint Local Agencies. The estimates – although not significantly different from zero – suggest that an integrated matching approach increases the job finding rate of long-term unemployed by around 2 %.

The fact that organisational characteristics chosen by the Approved Local Providers are positively correlated with the job finding rate of long-term unemployed and the fact that the indicator variable for Approved Local Providers gets more negative indicates again that Approved Local Providers have chosen the better organisational structure.

	(1)	(2)	(3)	(4)
IV Estimates	-	variable is finding a job	log number each month	of long-term
Approved Local Provider	-0.167	- 0.204*	-0.277*	- 0.297*
	[0.092]	[0.090]	[0.121]	[0.129]
Specialized case management		- 0.078*	-0.077**	- 0.080**
		[0.027]	[0.026]	[0.026]
Own vacancy recruitment service			0.093	0.100
			[0.049]	[0.055]
Integrated matching approach			0.021	0.024
			[0.036]	[0.036]
Length of first interview (Log)				0.018
				[0.024]
First interview within 2 weeks				0.004
				[0.034]
Agreement signed				0.043
				[0.057]
Durbin-Wu-Hausman Test (p-value)	0.174	0.149	0.130	0.095
F-Statistic	25.87	24.00	26.47	29.74
Observations	409	399	399	387

Table 5: Estimates of the relationship of Approved Local Providers and the job finding rate

Standard errors are given in parentheses. Coefficients with \* and \*\* indicate significance at a 5 % and 1 % level, respectively. Observations are clustered at the level of the 16 German states and weighted accordingly.

In column 4 we include three variables that characterise the intensity and speed with which long-term unemployed are activated; the length of the first interview, the fraction of new entrants into long-term unemployment that have had their first interview within two weeks after filing their application, and the fraction of long-term unemployed that signed an agreement (*Eingliederungsvereinbarung*) with the job centre. These agreements define the search requirements and training obligations of long-term unemployed. If long-term unemployed do not comply with these obligations, they can be sanctioned. The fraction of long-term unemployed that signed an agreement ranges from 72.9 % in regions with Approved Local Providers to 74.1 % in regions with Joint Local Agencies. In regions with Joint Local Agencies, 71.1 % of new entrants into long-term unemployment had their first interview within two weeks, in regions with Approved Local Providers only 45.4 %. While Joint Local Agencies seem to activate faster, Approved Local Providers take more time to talk to the long-term unemployed. In job centres in regions with Approved Local Providers the first interview lasted on average 52 minutes, while in job centres in regions with Joint Local Agencies it lasted only 48 minutes. All three variables are not significantly different from zero.

In summary the IV regression results suggest that Approved Local Providers have in most cases chosen an organisational setup that is positively correlated with the job finding rate. However, being cared for by an Approved Local Provider after controlling for organisational characteristics is associated with a lower job finding rate for long-term unemployed workers. The fact that the coefficient for the indicator variable for regions with Approved Local Providers becomes statistically significant and even more negative as we add organisational characteristics supports the hypothesis that although the regions that chose to become Approved Local Providers were better in designing a good organisational structure to increase the job finding probability of long-term unemployed workers, they underestimated the positive effect that a merger of the local public employment service with the local social benefit administration has on the labour market integration process of the long-term unemployed.

From a policy perspective our analysis suggests two things. Firstly, local public employment services and local social benefit administrations should be merged in order to ensure a better one-stop-shop organisation for long-term unemployed and to increase the transition rates from long-term unemployment to employment. Secondly, the job centres should implement a generalised case management approach that compared to a specialised case management approach treats all long-term unemployed with equal intensity and does not leave some long-term unemployed uncounselled or unmonitored. Furthermore, job centres should not rely on the vacancy recruitment service of the local public employment service but should instead build up their own vacancy recruitment service in order to avoid that the long-term unemployed have to compete with the short-term unemployed. In addition, the recruited vacancies should be passed on to the contact persons of the long-term unemployed in order to improve the matching of unemployed workers to vacant jobs.

### 7. Conclusions

Using a policy experiment in Germany we find that merging local public employment services and social benefit administrations has the potential to improve the job finding probability of the long-term unemployed. Furthermore, the fact that the organisational features implemented primarily by Approved Local Providers are positively correlated with the job finding probability of the long-term unemployed indicates that regions that selfselected into Approved Local Providers seem to have implemented a better organisational structure. However, the relatively poor performance of Approved Local Providers compared to Joint Local Agencies suggests that Approved Local Providers did underestimate the positive effect that a merger between the local public employment service and the local social benefit administration has on the job finding rate of the long-term unemployed.

### References

- Boockmann, B., S.L. Thomsen, T. Walter, C. Göbel and M. Huber (2010), "Should welfare Administration be centralized or decentralized? Evidence from a policy experiment", *IAW Discussion Papers* Nr. 69.
- Entorf, H. (1998), Mismatch Explanations of European Unemployment: A Critical Evaluation, Springer Verlag, Berlin.
- European Commission, (2006), *Approaches of Public Employment Services (PES) to Longterm unemployment*, Draft report from seminar in Budapest, 22-24 March 2006, DG Employment, Social Affairs and Equal Opportunities.
- European Commission, (2009), The role of the Public Employment Services related to 'Flexicurity' in the European Labour Markets, Policy and Business Analysis, DG Employment, Social Affairs and Equal Opportunities.
- Fahr, R. and U. Sunde (2005), "Regional dependencies in job creation: An efficiency analysis for Western Germany", *Applied Economics* 38, 1193-1206.
- Genova, A., (2008), "Integrated Services in Activation Policies in Finland and Italy: A Critical Appraisal", *Social Policy and Society* 7 (3), 379-392.
- Gross, D. (1997), Aggregate Job Matching and Returns to Scale in Germany, *Economics Letters* 56, 243-248.
- Jacobi, L., J. Kluve (2006),"Before and After the Hartz Reforms: The Performance of Active Labour Market Policy in Germany", *Zeitschrift für Arbeitsmarktforschung* 1, 45-64.
- Lindsay, C. and R.W. McQuaid, (2008), "Inter-agency Cooperation in Activation: Comparing Experiences in Three Vanguard Active Welfare States", *Social Policy and Society* 7 (3), 353-365.
- WZB, infas and FHS Frankfurt/M. (2008). Evaluation der Experimentierklausel nach § 6c SGB II – Vergleichende Evaluation des arbeitsmarktpolitischen Erfolgs der Modelle der Aufgabenwahrnehmung "Zugelassener kommunaler Träger" und "Arbeitsgemeinschaft". Untersuchungsfeld 2: Implementations- und Governanceanalyse. Abschlussbericht. Berlin, Bonn, Frankfurt/M.

## Appendix

Table A1: Descriptive statistics

	Approved Local Providers	Joint Local Agencies	All job centres
Job centres (= number of regions)	69	353	442
Sample (= number of regions)	56	353	409
Job finding rate	3.69 %	3.50 %	3.52 %
Job finding rate in rural regions	3.70 %	3.89%	3.85 %
Specialized case management	75.8 %	24.6 %	67.2 %
Generalized case management	24.2 %	75.4 %	32.8 %
Own vacancy recruitment service	89.9 %	16.6 %	28.9 %
Integrated matching approach	14.5 %	6.7 %	8.01 %
Length of first interview (in minutes)	52 min	48 min	49 min
First interview within 2 weeks	71.1 %	45.4 %	66.6 %
Agreement signed	72.9 %	74.1 %	73.9 %
Long-term unemployed	6,544	8,539	8,257
Long-term unemployed in neighbouring regions	46,569	41,279	42,144
Short-term unemployed	3,484	3,593	3,575
Short-term unemployed in neighbouring regions	22,026	19,461	19,880
New vacancies	357	575	539
New vacancies in neighbouring regions	3,292	2,812	2,891
Rural regions	91,3 %	68.3 %	72.0 %
Metropolitan regions	1.4 %	10.8 %	9.2 %
East Germany	27.5 %	28.9 %	28.7 %
Population	183,909	187,636	187,026

### Table A2: OLS-Estimates

Dependent variable:	Log number of long-term unemployed finding a job each month			
	(1)	(2)	(3)	(4)
Approved Local Provider	-0.033	-0.052*	-0.061*	-0.046
	[0.020]	[0.021]	[0.025]	[0.029]
Specialized case management		-0.042*	-0.041*	-0.038*
		[0.015]	[0.015]	[0.015]
Own vacancy recruitment service			0.009	0.003
			[0.020]	[0.020]
Integrated matching approach			0.023	0.035
			[0.022]	[0.023]
Length of first interview (Log)				0.022
				[0.021]
First interview within 2 weeks				0.000
				[0.000]
Agreement signed				0.000
				[0.000]
Long-term unemployed (Log)	0.687**	0.677**	0.677**	0.682**
	[0.044]	[0.044]	[0.043]	[0.042]
Long-term unemployed in neighbouring regions (Log)	-0.013	0.002	0.003	-0.001
	[0.057]	[0.059]	[0.057]	[0.056]
Short-term unemployed (Log)	0.236*	0.250*	0.247*	0.246*
	[0.106]	[0.107]	[0.107]	[0.106]
Short-term unemployed in neighbouring regions (Log)	-0.190	-0.200	-0.203	-0.197
	[0.103]	[0.106]	[0.104]	[0.101]
New vacancies (Log)	0.032	0.041	0.042	0.039
	[0.022]	[0.022]	[0.023]	[0.023]
New vacancies in neighbouring regions (Log)	0.109*	0.100*	0.101*	0.102*
	[0.037]	[0.037]	[0.037]	[0.037]
Rural regions	0.021	0.026	0.028	0.024
	[0.031]	[0.032]	[0.031]	[0.031]
Metropolitan regions	-0.104*	-0.101*	-0.099*	-0.107*
	[0.043]	[0.038]	[0.039]	[0.039]
East Germany	-0.027	-0.022	-0.020	-0.023
	[0.043]	[0.041]	[0.041]	[0.041]
Population (Log)	0.101	0.092	0.091	0.087
	[0.069]	[0.068]	[0.068]	[0.073]
Constant	-2.696**	-2.627**	-2.605**	-2.744**
	[0.483]	[0.490]	[0.488]	[0.452]
Observations	409	399	399	387
R-squared	0.98	0.98	0.98	0.98

Standard errors are given in parentheses. Coefficients with \* and \*\* indicate significance at a 5 % and 1 % level, respectively. Observations are clustered at the level of the 16 German states and weighted accordingly.

Dependent variable:	Log number of long-term unemployed finding a job each month			
	(1)	(2)	(3)	(4)
Approved Local Provider	-0.167	-0.204*	-0.277*	-0.297*
	[0.092]	[0.090]	[0.121]	[0.129]
Specialized case management		-0.078*	-0.077**	-0.080**
		[0.027]	[0.026]	[0.026]
Own vacancy recruitment service			0.093	0.100
			[0.049]	[0.055]
Integrated matching approach			0.021	0.024
			[0.036]	[0.036]
Length of first interview (Log)				0.018
				[0.024]
First interview within 2 weeks				0.004
				[0.034]
Agreement signed				0.043
				[0.057]
Long-term unemployed (Log)	0.703**	0.685**	0.681**	0.681**
	[0.047]	[0.044]	[0.035]	[0.034]
Long-term unemployed in neighbouring regions (Log)	-0.022	0.005	0.021	0.023
	[0.061]	[0.060]	[0.053]	[0.053]
Short-term unemployed (Log)	0.227	0.258*	0.239*	0.246*
	[0.111]	[0.106]	[0.106]	[0.104]
Short-term unemployed in neighbouring regions (Log)	-0.194	-0.214	-0.245*	-0.250*
	[0.103]	[0.102]	[0.093]	[0.092]
New vacancies (Log)	-0.024	-0.012	-0.005	-0.011
	[0.047]	[0.039]	[0.037]	[0.037]
New vacancies in neighbouring regions (Log)	0.115*	0.101*	0.110*	0.112*
	[0.040]	[0.039]	[0.039]	[0.040]
Rural regions	0.019	0.023	0.042	0.039
	[0.036]	[0.036]	[0.038]	[0.040]
Metropolitan regions	-0.120*	-0.116*	-0.103*	-0.107*
	[0.048]	[0.040]	[0.039]	[0.042]
East Germany	-0.014	-0.007	0.013	0.007
	[0.049]	[0.045]	[0.045]	[0.045]
Population (Log)	0.156	0.137	0.134	0.131
	[0.094]	[0.084]	[0.082]	[0.085]
Constant	-2.977**	-2.844**	-2.630**	-2.708**
	[0.637]	[0.597]	[0.528]	[0.504]
Observations	409	399	399	387
F-Statistic	25.87	24.00	26.47	29.74
Durbin-Wu-Hausman Test (p-value)	0.174	0.149	0.130	0.095
R-squared	0.98	0.98	0.98	0.98

## Table A3: IV-Estimates (Second stage)

Standard errors are given in parentheses. Coefficients with \* and \*\* indicate significance at a 5 % and 1 % level, respectively. Observations are clustered at the level of the 16 German states and weighted accordingly.

Dependent variable:	Log number of long-term unemployed finding a job each month			
	(1)	(2)	(3)	(4)
German County Association	0.297**	0.258**	0.195**	0.190**
	[0.058]	[0.053]	[0.038]	[0.035]
Specialized case management		-0.233**	-0.164**	-0.163**
		[0.056]	[0.043]	[0.039]
Own vacancy recruitment service			0.379**	0.378**
			[0.037]	[0.038]
Integrated matching approach			-0.025	-0.055
			[0.117]	[0.112]
Length of first interview (Log)				-0.020
				[0.039]
First interview within 2 weeks				-0.165**
				[0.041]
Agreement signed				0.034
				[0.080]
Long-term unemployed (Log)	0.119	0.059	0.019	0.001
	[0.087]	[0.085]	[0.074]	[0.070]
Long-term unemployed in neighbouring regions (Log)	-0.070	0.012	0.073	0.083
	[0.088]	[0.094]	[0.065]	[0.062]
Short-term unemployed (Log)	-0.084	0.028	-0.047	-0.022
	[0.074]	[0.063]	[0.052]	[0.056]
Short-term unemployed in neighbouring regions (Log)	-0.000	-0.059	-0.172**	-0.181**
	[0.114]	[0.092]	[0.056]	[0.058]
New vacancies (Log)	-0.395**	-0.327**	-0.207**	-0.190*
	[0.101]	[0.085]	[0.067]	[0.068]
New vacancies in neighbouring regions (Log)	0.032	-0.005	0.037	0.032
	[0.077]	[0.079]	[0.055]	[0.051]
Rural regions	-0.033	-0.034	0.049	0.044
	[0.062]	[0.055]	[0.053]	[0.058]
Metropolitan regions	-0.152	-0.130	-0.044	-0.031
	[0.072]	[0.078]	[0.067]	[0.068]
East Germany	0.113*	0.111**	0.160**	0.132*
	[0.048]	[0.035]	[0.040]	[0.046]
Population (Log)	0.411**	0.304**	0.204*	0.191
	[0.120]	[0.100]	[0.089]	[0.095]
Constant	-2.264*	-1.611*	-0.285	-0.079
	[0.810]	[0.660]	[0.494]	[0.558]
Observations	409	399	399	387
R-squared	0.30	0.38	0.57	0.59

## Table A4: First stage of the IV regression

Standard errors are given in parentheses. Coefficients with \* and \*\* indicate significance at a 5 % and 1 % level, respectively. Observations are clustered at the level of the 16 German states and weighted accordingly.