TrEffeR
(Treatment Effects and Prediction)

Publication date: July 2017

GERMANY

TrEffeR addresses the need for a tool to measure the effectiveness of active labour market policies (ALMPs) according to different sub-groups and local areas. It provides intelligence about the effectiveness of ALMPs that can be used by PES case workers, local managers and central planners to improve the design and targeting of ALMPs. It is not possible to accurately identify whether labour market effects of ALMPs have been improved as a result of TrEffeR but given its low cost, it is likely to represent a good return on investment in terms of the reduction of duration of unemployment and claiming of unemployment benefit.

Name of the PES	German PES (Federal Employment Agency – *Bundesagentur für Arbeit – BA*)
Scope of measure	National
When was the practice implemented?	Since 2008 (Design started in 2005)
What was the driver for introducing the practice? Was it internal or external?	The Hartz reforms introduced in 2002 (dealing with the restructuring of the German labour market) led to the redesign and introduction of ALMPs. TrEffeR was developed as part of a set of impact analysis tools and approaches, which emerged from a need to measure the effectiveness of the new ALMPs.
Which organisation was involved in its implementation?	Between 2005 and 2007, the German PES and the PES-affiliated Institute of Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung – IAB*) developed a comprehensive ALMPs impact analysis system, called TrEffeR. Experts at the German PES, IAB and Harvard University specifically designed TrEffeR.
Which groups were targeted by the practice?	TrEffeR measures the labour market impact of ALMPs on all unemployed people, although it does not measure specific programmes for youth and disabled because not enough administrative data exist to create statistical control groups for these target groups.
What were the practice's main objectives?	The role of TrEffeR is to employ micro-analysis on an ongoing basis to ascertain the labour market effects of ALMPs. The method was distinctive because it determined effects on an individual basis and according to different sub-groups and local areas.
What activities were carried out?	TrEffeR analyses labour market outcomes of ALMP participants in comparison to estimated outcomes without participation. A control group is used, which is composed of similar persons as the group of participants but who did not participate in a programme during a defined entry period ('statistical twin'). Biographical data from the German PES is used to construct ex-post a control group of statistical twins for programme participants. The statistical twins must match participants exactly in the following criteria: local labour market district, legal sphere of unemployment status, age group, gender and benefit status. Further socio-demographic, employment history and labour-market related characteristics are also taken into consideration. In addition, they must have become unemployed at a similar point of time and must not have taken part in a programme until three months after their subsidised counterpart has entered a programme. The individual causal effect for the participant results from the difference between observed outcomes and the estimated counterfactual outcomes in cases of non-participation. In addition to comparing the employment status of twins, the group of participants and the comparison groups are further divided into sub-classes whose members resemble one another. Within each sub-class, outcome variables of the participant and control groups are modelled against each other using regression analysis. This means that counterfactual results for different sub-classes can be estimated.

What resources and other relevant organisational aspects were involved?	TrEffeR was implemented with minimal investment. This is because the data system it uses and the IT capacity it requires were already in place and did not represent additional costs. Also, BA and IAB already had the necessary experts in econometrics and ALMP provision so there were no extra staffing costs. The operation of TrEffeR involves around 4-5 staff members. External academics were commissioned as temporary consultants to help with the initial design of TrEffeR, and they have no intellectual property rights.
What were the source(s) of funding?	German PES budget
What were the outputs of the practice: people reached and products?	TrEffeR provides intelligence about the effectiveness of ALMPs, which can be used to improve the design and targeting of ALMPs. Core data is extracted twice a year. Intelligence includes the following:

TrEffeR provides intelligence about the effectiveness of ALMPs, which can be used to improve the design and targeting of ALMPs. Core data is extracted twice a year. Intelligence includes the following:

▶ Standardised reports are disseminated to PES case workers so they can assess the value of different ALMPs for different target groups.
▶ Local PES managers use the TrEffeR online dashboard facility to assess performance of ALMPs and plan the allocation of resources. The dashboard is accessible only to PES staff and offers bespoke reporting based on participant characteristics, local area, and different ALMP providers. Different providers are not openly compared, but each provider may be given their own performance data and PES managers may use data to inform discussions with providers about performance. TrEffeR is not used to decide on the purchasing of ALMPs. Calculations are updated on a semi-annually basis to take account of changing outcomes.
▶ Central PES managers use TrEffeR to develop and redesign ALMPs (e.g. the length of programmes and target groups) and decide which ALMPs will be run each year.

The online education provider platform, KURSNET, will be introduced in 2017 and will enable a star-rating of training providers, based on participant feedback and TrEffeR data.

What outcomes have been identified?

TrEffeR has so far shown that the following types of ALMPs are effective:
▶ In-firm programmes, like wage subsidies, start-up subsidies and short training courses with a practical focus (internships);
▶ Vocational training / retraining and short classroom training courses.

It also shows that job creation schemes do not improve employment prospects. There is mixed evidence for private placement and counselling services, and programme effects depend on the individual characteristics (age, gender, qualification etc.) of participants.

However, it is not possible to accurately identify whether labour market effects of ALMPs have been improved as a result of TrEffeR. In particular, there is a lack of understanding about the deadweight effect i.e. outcomes that would have occurred without the intervention.

Also, TrEffeR is limited in not being able to assess the full net additional benefit of ALMPs. In particular, there is no consideration of the reduced impact due to substitution effects i.e. where organisations substitute one activity for a similar one (such as recruiting a jobless person while another employee loses a job) to take advantage of public sector assistance. There is also no assessment of the positive impact due to windfall effects (increased personal and firm income) and the multiplier effect from money (e.g. wages and revenue) being re-spent in the economy. Moreover, the wider social benefits of PES-related employment outcomes are difficult to measure and could include public spending savings due to less welfare expenditure, less crime, better health, etc.

Given the low cost of TrEffeR, the tool is likely to represent a good return on investment in terms of a reduction in the duration of unemployment and claiming of unemployment benefit.

What are the lessons learnt and success factors?	Even quite subtle findings from TrEffeR can be used to adjust ALMPs and potentially have very significant effects on labour market outcomes.
	TrEffeR is well utilised by local PES staff and it is now an important part of their decision-making architecture.
	TrEffeR relies upon comprehensive data on unemployed people, which is automatically collated and stored on an ongoing and systematic basis.
	TrEffeR also requires a good IT infrastructure and computational power.
	TrEffeR does not require a large investment, only staffing capacity which includes personnel with an econometric capability. The German PES at the national level provided manuals to local offices and delivered workshops when TrEffeR was first implemented.
	For a full assessment of the effectiveness of ALMPs, the consideration of the mid-to-long term effects and unintended effects, like deadweight, substitution etc., is generally advisable. But this issue is not TrEffeR-specific.

Contact details for further information

Name: SCHEWE, Torben

Email: torben.schewe@arbeitsagentur.de

Telephone: +49 911 179 1068