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Task 1: Job creation as an indicator of outcomes in ERDF programmes

Germany

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List of abbreviations

- AIR Annual Implementation Report
- EC European Commission
- FTE Full-time Equivalent
- MA Managing Authority
- OP Operational Programme

Executive summary

"Jobs created" is frequently used as an indicator in German ERDF programmes. It is the most common in the policy areas "Enterprise environment – other investment in firms" and "Enterprise environment – innovation support to firms". Complementary use is made in fields like integrated urban development, human resources, or risk prevention. In terms of the funding from the ERDF, the share is only significant for measures using the indicator in the first two policy areas.

Beyond the Joint Task, which is offering some *de facto* coordination for the use of the indicator in relation to grant schemes for investment in enterprises, there is hardly any coordination of indicator definition and use across Länder Operational Programmes (OPs). The approach to using the indicators is different among the OPs: some make a very broad use, applying the indicator not only to investment in enterprises- and R&D schemes, but equally to infrastructure and other interventions. Other programmes limit the use to investment in enterprises and R&D.

The indicator is typically expressed in Full-time Equivalent (FTE) terms and covering permanent jobs only. Temporary jobs, e.g. during the construction of infrastructure, have been relevant in the 1990s but are not counted any more. But single programmes try to "grasp" by the indicator also indirect effects of certain infrastructures (jobs created in enterprises hosted by start-up incubators or on ERDF-funded industrial sites). There is not much effort to measure the quality of jobs – only R&D jobs are separated for some types of schemes.

On national level, the data is not aggregated systematically. The use of aggregate data is limited to the reporting requirements (national strategic reports). A lack of coordination between Länder hinders easy aggregation of data and both the definition and the way to measure it are uncoordinated so far.

For several reasons, the calculation of costs per job is of limited value: we can only analyse the eligible costs, not the total cost; a number of administrative and political decisions tend to "distort" results; we have no control on the quality of jobs we compare; and it is questionable in how far "cost per gross job created" is a meaningful information for programme management or tells us anything about effects of the interventions. The variation in unit costs is huge: on project level, costs per job created vary between EUR 4,472 and EUR 3,301,579 in terms of total eligible costs. On programme level, the variation is less but still vast: one job "costs" between EUR 92,568 and EUR 493,801 in terms of eligible costs.

Evaluations try to grasp net employment effects in different ways: at programme level, macroeconomic models estimate the total effects of the intervention; at measure or instrument level, evaluations either refer to other studies or undertake in some single cases efforts to apply counterfactual methods. The reliability of the data on jobs created is quite good for grant schemes to support investment in enterprises and R&D schemes.

A better coordination between Länder – both on indicator definition and quality management of ongoing monitoring – could improve the data quality. But still the indicator should be used with caution: while "jobs created" is valuable for monitoring of certain types of interventions (i.e. investment in enterprises), it can even be misleading, when it shifts attention too much to short-term job effects instead of medium- to long-term employment effects.

1. The use of the indicator to assess outcomes in policy areas

The number of jobs created is used as an indicator in German ERDF programmes in only a few of policy areas (see Annex Tables). The ERDF allocation at national level to measures using the indicator is determined by two factors: first the number of OPs using the indicator in the respective policy areas and second the amount of resources allocated to these areas in the relevant programmes. As the number of programmes using the indicator is small for most policy areas, the ERDF funding covered by the indicator is modest (5% or less). Only two policy areas have a share of 10% or more of the overall ERDF allocation. In these cases, the indicator is used in most or all programmes:

- Enterprise Environment other investment in firms: six out of seven Convergence and ten out of eleven Competitiveness programmes use the indicator¹. In other words, all programmes allocating ERDF funds to the policy area use the indicator and cover 100% of the allocation to this policy area. Compared to the overall ERDF allocation, this is a share of 12% (Competitiveness) and 11% (Convergence) respectively.
- Enterprise Environment Innovation support to firms: five out of seven Convergence and eight out of eleven Competitiveness programmes use the indicator². The Convergence programmes using the indicator cover 90% of the allocation to the policy area, the Competitiveness programmes 62%. The programmes using the indicator amount to 21% of the overall ERDF allocation in Convergence regions and 11% in Competitiveness regions.

The remaining policy areas where jobs created is used as an indicator have significantly lower financial weight and the number of programmes using the indicator is smaller. This is also the case because the relevant interventions are not used in all programmes:

- Territorial development other: one Convergence programme and five Competitiveness programmes use the indicator. In these cases, the indicator is applied to integrated approaches for local/urban development. The programmes using the indicator cover 30% of the allocation to the policy area in Convergence regions, and 60% in Competitiveness regions. The budget covered represents 1.5% of the overall ERDF allocation in Convergence regions and 5% in Competitiveness regions.
- Human Resources Labour market policy: one Convergence and four Competitiveness programmes use the indicator. They represent the total allocation to the policy area in Convergence regions and 23% in Competitiveness regions. But the programmes have only very small share of the overall ERDF allocation: 1% for the Competitiveness regions, and less than 0.5% (EUR 5.5 million of EUR 11,361 million) in Convergence regions.
- In single Competitiveness programmes, the indicator is used for other policy areas. One programme applies the indicator to the policy area of "transport rail" and two

¹ In this policy area, the indicator is often used for investment grant schemes under the Joint Task, which is the only common instrument of regional policy across Länder.

² Here the indicator is related to grant or credit schemes to support R&D in enterprises or joint research projects.

programmes to "Environment and Energy – Environment and risk prevention". The ERDF allocation covered is less than 0.5%.

So there are only two policy areas, where jobs created plays an important role as an indicator: other investment in firms and innovation support in firms. To a certain extent the indicator is equally used to assess outcomes form interventions to support territorial development, mainly integrated urban development projects. In other policy fields, the indicator is used in a rather complementary way. The indicator is not essential for a majority of programmes - neither for official reporting, nor for actual programme monitoring and management.

A special case is the use of the indicator at the OP level as suggested by the European Commission's (EC) working paper No. 2³. There are seven out of eleven Convergence and five out of seven Competitiveness programmes using the indicator in this way. There are different approaches how the indicator at programme level relates to the rest of the indicator system: there are some programmes adding up the figures of "jobs created" at sub-programme level and reporting the aggregate number at programme level (e.g. Baden-Württemberg, Hessen, Niedersachsen, Rheinland-Pfalz, Sachsen-Anhalt). In these cases, the basis for the figure varies from programme to programme depending on how extensive the indicator is used in each programme (e.g. whether jobs created by revolving funds or jobs created on new industrial sites are covered or not). Other programme level. (e.g. Bremen, Mecklenburg-Vorpommern). One programme (Nordrhein-Westfalen) is reporting jobs created only at programme level, without using the indicator anywhere else⁴.

As policy areas are relatively broad and because the "jobs creation" indicator is often not covering the whole set of interventions within a policy area, it would be to go into a more detailed but the breakdown of allocation and commitment figures at a more detailed level than policy areas has proven to be very difficult for several reasons:

- The broad policy areas are based on the categorisation system and the codes defined there. There are inconsistencies between allocation and commitment figures, especially for those categories which are not clearly "separated" by the definitions (e.g. the categories "04 Assistance in R&TD, particularly in SMEs" and "07 Investment in firms, directly linked to research and innovation" can lead to a certain fuzziness of data, as projects might well comprise elements from both categories, but must be assigned to one).
- It is not guaranteed that the financial allocation during programme development is assigned to the codes in the same way as to the single projects later in implementation. For instance, an indicator may be used for projects from different categories and policy areas. The share different policy areas in the outcome reported by the indicator cannot be identified with the available data afterwards. As the analysis here cannot be undertaken on the level of projects, the resulting inconsistencies cannot be solved.

³ Europäische Kommission, Generaldirektion Regionalpolitik 2006.

⁴ For the analysis by policy area above, the data reported on programme level was excluded. For the majority of programmes, the figure on programme level has been summed up from the disaggregate figures. Those are included in the analysis.

• Measures or single instruments might still be a too broad level of analysis, as the instrument might include projects not contributing to job creation.

Given these difficulties mentioned above, the data on the coverage of "jobs created" by policy area (Table 1) need to be interpreted carefully and rather be understood as a rough orientation.

Programme	Policy Area	Allocation (ERDF)			Commitment (ERDF - end 2011)			
		Policy Area (EUR million)	Actual Coverage of the instrument/ measure using the indicator (EUR million)	Coverage /Policy Area in %	Policy Area (EUR million)	Actual Coverage of the instrument/ measure using the indicator (EUR million)	Coverage /Policy Area in %	
eness)	RTDI and linked activities Innovation	301.6	121.1*	33.1*	304.2	122.0*	37.8*	
oetitive	Support for SMEs	36.3			18.3			
Berlin (Competitiveness)	Other Investment in Firms	163.6	70.0	42.9	120.0	76.0	63.3	
Berl	Territorial Development - Other	176.2	151.0	85.7	129.9	116.0 (15.0)**	89.2 (11.5)**	
veness)	RTDI and linked activities	34.3	22.1	64.5	31.7	10.6	33.5	
Bremen (Competitiveness)	Other Investment in Firms	15.0	15.0	100.0	13.4	11.0	82.4	
Bremen	Territorial Development - Other	27.0	20.0	74.1	18.5	9.2	49.8	
nburg- nmern gence)	RTDI and linked activities	163.9	107.3	65.5	114.0	54.3	47.7	
Mecklenburg- Vorpommern (Convergence)	Other Investment in Firms	343.2	300.9	87.7	126.3	-	-	
NB: for a number of programmes data were not available at this stage.								

Table 1 - Coverage of "jobs created"

NB: for a number of programmes data were not available at this stage.

Source: Data from the Managing Authorities (MAs), own calculation. Notes:

* The underlying instrument covers codes from two policy areas. "Content wise" the numbers are likely to relate mainly to "Innovation support for SMEs".

** These are the figures for the projects actually reporting figures for jobs created. Only a small share of the projects for integrated urban development does so.

The share of funding for instruments which use the job creation indicator to measure outcome is between 33.1% and 100% of the funding allocated to the policy areas. For the commitment these shares are between 33.5% and 89.2%.

For some instruments, the indicator is not relevant for every single project. This is the case for integrated urban development for example (which implies a further reduction of the financial

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coverage). We can illustrate this only for a single case. The projects actually using "jobs created" in the integrated urban development strategy of Berlin represent only 11.5% of the ERDF commitment to the policy area – compared to a share of 89.2% on instrument level.

Compared to the overall targets and outcomes of jobs created, the policy area "Other investment in Firms" dominates the overall picture: 82% of the targets set for jobs created and 90% of the outcomes so far achieved were in this policy area. Innovation support for SMEs has a share of 14% of the targets set and 6% of the output achieved so far. The remaining policy areas contribute less than 3% each to the targets set and only some 2% maximum to the output.

2. Definition, methodology, data reporting and wider use of the indicator

Definition and methodology

First of all, as regional policy in general, the definition of indicators and of the methodology for measuring, reporting and aggregating the data is the responsibility of the Länder. There is no real coordination at national level and no common understanding has been developed. There is a certain exchange organised at national level in form of a working group on indicator definitions, but the discussion and work in this forum was mainly focused in collecting the opinion of the Länder on EC's proposals (e.g. the Working Paper on indicators). An exchange on details of indicator definition and/or measurement and aggregation methodologies has not been organised so far.

There is a certain *de facto* coordination for grant schemes for investment in enterprises because funding from the ERDF is in many programmes used together with funds from the national "Joint Task". Job creation is not only one of the most important indicators for the monitoring of the Joint Task's interventions, it is also formally required as a precondition for funding. The definition of the indicator used under the Joint Task covers a number of aspects (e.g. for the numbers expressed in FTE terms and the counts of employees) and there are specific rules for different types of job and work organisation (shift work). There are equally specific rules on what counts as an additional job and how the data are to be measured. Furthermore, the Joint Task foresees a follow-up five years after the investment project has ended. The framework of the Joint Task provides a valid and reliable background for the indicators applied in the most important ERDF policy area "enterprise support". Most interventions in the policy are "other investment in firms" and the ERDF contributes in these to the Joint Task.

"Jobs created" is used as an indicator to measure outcome from different types of funding. The most common distinction is between "normal" jobs (e.g. created by firms supported by investment grants) and R&D jobs (e.g. created by firms receiving R&D grants). The definition of the indicator often varies within one and the same programme because of the different objectives pursued by the initiatives (e.g. R&D jobs are often temporary and project related whilst "normal" jobs are permanent ones). There are additional distinctions in some programmes between jobs created by grant schemes vs. equity schemes, jobs in start-ups or technology oriented start-ups, etc. Furthermore the indicator is sometimes used for infrastructure programmes (e.g. number of jobs created in firms established on industrial sites

funded by the programme). In a nutshell, the meaning of the data under the indicator "jobs created" varies not only because of the differences in the definition but equally because of the use of the indicator for different forms of intervention.

Besides this, the way indicators are defined and documented varies between the Länder. What is common is a very basic definition of the indicators, actually not much more than the title of the respective indicator. The majority of MAs leaves it at that. This reflects the general implementation structure. In most Länder, responsibilities for running the instruments and for monitoring, collecting and reporting the data are delegated. A side effect of this approach is that in some cases even the MAs do not have a detailed knowledge of indicator definitions and the measurement rules. Only in some cases (e.g. Sachsen-Anhalt, Berlin) there are more detailed handbooks or guidance documents in this regard.

The overall approach to using the indicator in the programme varies as much as the definition of the single indicators does. Generally speaking, there is an "extensive" and a "focused" way of using the indicator. In the "extensive" way, the indicator "jobs created" is applied wherever it is possible: grant schemes for investment in enterprises, equity and venture capital schemes, grant or credit schemes for R&D projects (including joint research projects), grant or credits for business start-ups, but also employment effects of infrastructural schemes (e.g. number of jobs created in firms established on industrial sites or in business incubators). In other words, the indicator is not only applied to grant or credit schemes, but also to instruments offering consulting services. The more "focused" approach limits the use of the indicator to investment in enterprises and R&D, mainly covering grant and credit schemes.

Content of data

As said above the definition of the indicator and the quality of the data varies between programmes. Below, we try to give the overall overview by highlighting the most common case and indicating the different approaches of the Länder:

- Jobs created is usually defined and understood as FTE. There is only one programme explicitly counting employees rather than FTEs (Sachsen). But also in this case, the wider definition only applies outside the Joint Task⁵. So the indicator is used in two different meanings in this programme.
- Jobs created are usually permanent jobs. There are serious reasons why a job could not be maintained although it was meant to (e.g. insolvency, cyclical developments). The general understanding is based on the Joint Task, where "permanent" is understood as "intention to maintain the job without a time limit". Many schemes like the Joint Task define a certain period of commitment (often three to five years), so that there is a certain control if the jobs are actually permanent. As the Joint Task accounts for most of the jobs created in ERDF programmes, this definition is quite relevant for the figures reported here.
- In the 1990s, it was common to count jobs created during the construction phase as temporary jobs. This type of employment effect is strictly a demand side effect without

⁵ As the Joint Task is an instrument developed and managed by Federal and Länder level together, there are some common rules applied in all Länder. This also concerns the way the data on "jobs created" are collected and interpreted. To put it the other way round: the only data that is directly comparable between Länder is data generated under the rules of the Joint Task.

any structural impact. In the current period not a single programme reports this type of temporary effect linked to infrastructure investment. Pure demand side effect of temporary jobs of construction projects is not used any more. There are a few cases where job creation is reported for infrastructure investment (e.g. jobs created in start-up centres or on reused industrial wasteland). But these cases try to "grasp" the indirect employment effects of the infrastructural investment – which is not the same as employment effects during construction.

- The reporting and presentation of the data is in most cases not sufficiently documented. A clear indication on whether the data refers to actual outcome or planned outcome is often missing. In practice, the data is most often on actual outcome but there are still a few programmes which do not collect any information on outcome data. In these cases there are data on planned outcome included in the reporting.
- For investment grants or R&D support for enterprises, the indicator usually counts those jobs that can directly be attributed to the project. For R&D projects, it's usually mainly the R&D jobs that are covered. Indirect jobs, e.g. those created after a prototype has been developed, production has been started and the product has been marketed and sold successfully, are not counted in relation to enterprises supported. In the case of infrastructure investment, it is the other way round: if employment effects are covered by indicators at all, it is often the indirect job creation that is counted (e.g. as a consequence of transport projects, reuse of industrial wasteland or creation of start-up centres). Despite the significant variation of how the intervention is linked to the employment effects measured by the "jobs created" indicator, some programmes aggregate the figures across different types of intervention⁶.
- Based on the definition of the Joint Task, there is a clear distinction between the jobs created and jobs safeguarded in most programmes. Although it is quite difficult to grasp and interpret figures on safeguarded jobs, the indicator is used quite often. There are a few cases not distinguishing clearly between jobs created and jobs safeguarded for single indicators⁷ ("jobs created or safeguarded" e.g. Bremen, Hessen).
- There are equally different ways of dealing with double-counting: in the Joint Task double counting is avoided by linking the jobs created directly to the intervention as far as this is possible. On the level of single instruments, double counting can occur if one and the same beneficiary (enterprise) receives support for different projects. It is not easy to delimit the effects of one project from effects of other projects. Although there are often rules in this regard for the reporting of the data, a certain overlapping might occur. What is hardly ever dealt with is cross-instrument relations: we know that one and the same enterprise can use support from different instruments may it be simultaneously or consecutively (Prognos AG 2011). For instance a successful innovation and development supported by R&D programmes might be exploited by using investment grant schemes. In these cases, double counting might occur, as normally the monitoring systems do not check for this aspect.

⁶ See also the point below on different qualities of jobs covered.

⁷ These indicators refer to comparatively new or complex instruments (equity capital funds, integrated urban development).

- Only some basic features regarding the quality of jobs are covered by the data: firstly the Joint Task and most of the other instruments try to count permanent jobs, meaning normally that they are open-ended. A certain quality aspect is the specific focus on R&D jobs that can usually be found in R&D support schemes. But other aspects like working hours, wage level etc. do not play any role in the monitoring system so far.
- In nearly all cases, there is a clear distinction between instruments funded by ERDF and those funded by ESF. As a consequence, the monitoring is done separately. Normally there are arrangements to isolate ERDF and ESF effects in monitoring. Nonetheless, those effects might occur (e.g. if an ERDF funded R&D project is combined with ESF funded innovation assistant scheme). But the monitoring systems do not control for interrelated effects.

As a very general and rather unspecific performance figure, the number of 76,836 gross jobs created by end of 2011 seems to be rather reliable. Compared to the reported data, for the three most important job-related indicators, the official data in the AIRs shows smaller figures than the corrected data we use here⁸. The reason behind this is not so much data quality, but the different approaches to assigning the available data to the core indicators.

Apart from that, gross job creation across different types of intervention is of limited use insofar as the figures tell nothing about the actual net effects of the intervention. In the long run, structural characteristics (education level, productivity, capacity to innovate) determine employment development. A strong focus on short term employment effects could even be misleading, as it might shift attention to the wrong factors and not to those with underlying structural issues. The distinction between "jobs created" as monitoring indicator and "jobs created" as final objective of regional policy interventions should be kept in mind.

Wider use of indicator

There is no continuous and systematic aggregation of data at national level. The use of monitoring data is normally limited to OP-related needs of reporting. Aggregation at national level is only done when it is required for ERDF reporting purposes (e.g. strategic reports 2009 and 2012) but there is no other use of monitoring data on national level. Publication on national level so far mainly refers to project examples⁹.

As indicator definitions and data collection methods have not been coordinated, it is no wonder that data on national level are difficult to handle and to interpret. Both national Strategic Reports (2009 and 2012) faced serious problems with inconsistencies of indicator definitions

⁸ For core indicator 1 "jobs created" the "official" figure is 43,462, our figure is 46,039. For R&D jobs created, the "official" figure is 614, our figure is 674. And for jobs created by direct investment in enterprises, the AIRs report 28,068, our figure is 29,053. All "official" figures relate to the core indicators, our figures were corrected for variations in how Länder assign their indicators to core indicators: 1) A number of Länder do not highlight the core indicators – but we included the relevant figures in our calculations. This is the main factor why the figures here are higher than those "officially" reported. 2) A second point is that we did some careful adjustments of the core indicators, but was not assigned to – or excluding it in the opposite case). 3) On the other hand, we also corrected for double counting, which can occur when a) totals <u>and</u> gender specific figures or b) totals <u>and</u> priority specific figures are reported. ⁹ <u>http://www.bmwi.de/DE/Mediathek/publikationen.did=268226.html</u>

and data quality when trying to establish a coherent picture of ERDF outcomes and results at national level.

For the domestic Joint Task, the monitoring and evaluation of the indicator "jobs created" is centralised. The Joint Task offers a broad range of instruments to support regional development processes: investment in enterprises, support for research organisations, consulting, research and market integration. A broad range of infrastructure, regional management, cluster, and other approaches can be supported. ERDF is mainly spent together with the support for investment in enterprises and infrastructure branches of the Joint Task. Mainly for the investment in enterprises, creating jobs is an important issue, in cases where:

- Job creation is precondition for funding.
- "Jobs created" is an important indicator in monitoring the Joint Task. For instance the most recent Coordination Framework says that from 1991 to 2007, the Joint Task created 943,034 jobs (p. 31)¹⁰. The Länder are also reporting their specific results in terms of jobs created (p. 57-109). Since 2007, the monitoring also covers the jobs created measured five years after the end of the project.
- Jobs created are also an important aspect in the evaluation of the Joint Task¹¹.

Besides the lack of coordination in indicator definition and measurement methodology, in many Länder there is no continuous management of data quality. This is especially true in areas outside the Joint Task, where "jobs created" is not yet a standard indicator and has not been established already years ago. The understanding of what exactly the indicator means and how it is to be measured needs continuous management and quality control.

3. Cost per job created

Calculating the cost per job created is a demanding task. The figures presented here are of limited validity for several reasons:

- The data is calculated for finished projects. But in all relevant instruments, most projects are still underway. Equity and venture capital funds cannot be included as they normally stay invested for several years in one enterprise there are no finished projects so far. So the figures might well be different for a different data basis.
- The calculation is based on total eligible cost. Information on total cost is not available. But the definition of eligible cost is a political and administrative decision. So, we only see a more or less artificially defined detail of the actual total cost. The most valid figure for cost per jobs would be the total costs.
- Administrative decisions "deform" results: it is usual to select rather big projects to be co-financed by the ERDF if such a selection is of course possible. The reason is that the administrative burden linked with EU Funds is better "beard" by larger enterprises or organisations in larger projects.

¹⁰ <u>http://dipbt.bundestag.de/dip21/btd/16/139/1613950.pdf</u>

¹¹ Evaluation of the Joint Task is combining different approaches, including counterfactuals (Matching). The recent report also proposes a more advance monitoring: http://dipbt.bundestag.de/dip21/btd/16/139/1613950.pdf

- The link between the concrete activities supported and jobs created varies between types of projects, but also within one programme between projects. Investment in different branches or different types of research projects lead to different costs per job. These differentiations are neglected here.
- The separate analysis for ERDF and other public funding gives no meaningful information: on project level, the contribution from different sources can vary. The most important reason is simply availability of funds. In addition the contribution of national public funds is strongly determined by the choice of calculating the ERDF contribution based on public or total cost. Differing share of ERDF vs. national public funds on project level is rather a question of budget and not of project characteristics.
- It makes not much sense to compare costs per job without more detailed knowledge about the quality of jobs. It is natural that certain jobs in certain branches require much more investment than others. But these differences tell us nothing about the effectiveness in terms of outcomes.
- In general it is questionable in how far it makes sense to calculate cost per jobs for figures on gross job creation as this is not the final objective. To deduce management decisions from these figures might even be heavily misleading: Especially expensive jobs requiring huge investment can proof to increase competitiveness. On the other hand, jobs requiring only little investment can often be found in simple services with low wages and hardly any structural effect as they are only addressing local demand.

The following tables shows the results for several indicators on jobs created. In addition to the average values, the minimum and maximum values are indicated for the total eligible costs per job.

Type of effect		То	ERDF	National Public	
	Average	Minimum	Maximum	Average	Average
Grant for investment in Enterprises (Jobs)	289,009	19,375	3,301,579	19,112	19,112
Credit scheme for development projects in enterprises (Jobs)	120,492	41,249	329,650	42,699	42,699
Credit scheme for development projects in enterprises (R&D Jobs)	166,498	71,313	329,650	59,003	59,003
Grant scheme for research in enterprises (Jobs)	336,539	14,909	2,190,344	116,448	114,642
Grant scheme for research in enterprises (R&D Jobs)	493,801	18,637	2,346,171	170,864	168,214
Grant scheme urban development (Jobs)	92,568	4,472	1,009,301	40,919	35,977

Table 2 – Total eligible costs per job (EUR)

The lowest average figure for total eligible costs per job is EUR 92,568 and the highest average is EUR 493,801. On single project level, the lowest value for jobs created is EUR 4,472 in an urban development scheme, the highest is EUR 3,301,579 in a grant scheme for investment in enterprises.

4. The indicator of job creation in evaluations and AIRs

There are different sources of information on **net employment effects**. It needs to be kept in mind that the German ERDF programmes are regional programmes normally combining a larger number of different instruments ranging from grants for investment in enterprises to R&D projects and infrastructural instruments. Different efforts to grasp net employment effects can be distinguished:

- At programme level and thus covering the whole range of different instruments, the only approach to come up with information on net effects are model based calculations. For instance, the HERMIN model has been used for an assessing the employment effects in East Germany.
- Evaluation studies relating to the Joint Task have repeatedly and with different methods analysed employment effects¹². Single studies explicitly also cover the financial contribution of ERDF to the Joint Task (Bade u. a. 2010).
- ERDF evaluation studies usually did not try to cover net effects of the funding. Recently there have been some efforts to cover net employment effects for selected schemes. On the one hand, there are some studies trying to estimate the effects of a specific instrument referring to results of other evaluations and studies (PriceWaterhouseCoopers u. a. 2010; PriceWaterhouseCoopers u. a. 2011). Similarly, the evaluation study for ERDF in Schleswig-Holstein refers to the results of the above mentioned evaluation of Joint Task/ERDF (Prognos AG 2011). One evaluation study also tries to grasp effects of the ERDF intervention in R&D by using a comparison group approach (ÖIR Österreichisches Institut für Raumplanung & Fraunhofer ISI 2012).

A more in depth analysis of employment effects is strongly focused on those instruments directly targeting enterprises: investment grants and support of R&D. Other elements from the broader range of ERDF supported interventions have not been analysed for their net employment effects so far. The AIRs normally do not go into more detail when presenting employment effects. For instance, only one report refers to the relevant evaluation of the Joint Task (Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung 2012, S.17).

As to the **reliability** of the information on jobs created in the annual reports, one should distinguish between different types of intervention. The data related to the Joint Task can be taken as quite reliable: it stems from a well-established system where common definitions and rules for measurement are applied due to the long lasting tradition of the domestic Joint Task in monitoring and evaluation. For all other types of instruments, data on job creation is difficult to interpret: 1) normally there is no clear indication to which type of intervention the data refer; 2) even if the types of intervention are roughly comparable – as may be the case for grants for R&D projects - there is no information on how the conditions of the different Länder instruments vary (in terms of eligible costs, public contribution, definition of target groups, etc.); 3) there is no information available on the concrete amount of funding allocated to a specific type of instrument.

The next aspect is that aggregating information on jobs created across types of interventions mixes different types of information: 1) the quality of the jobs depends on the intervention and

¹² The summary in the recent Koordinierungsrahmen (FN3) for an overview.

is not the same (e.g. R&D programmes often count the number of R&D jobs immediately created by the project, and not the jobs created in the long run after the project has finished. But R&D jobs are of a specific quality); 2) the contribution of public support to the creation of jobs varies: the range of different approaches includes consulting and advice as well as venture capital. In other words, even the theoretical link between intervention and effect is hardly comparable. For this reason, we do not present an estimate on the overall jobs created in Germany by ERDF interventions. The German Strategic Report 2012 on the basis of the available but adjusted monitoring data gives the figure of 46,149 permanent jobs created by ERDF (p. 20). The report compares this figure to the overall number of jobs created in Germany since end of 2006 (2,082,881): ERDF-funded gross job creation amounts to some 2% of all new net jobs in Germany in this period. ERDF net job effects are significantly lower than the gross figures – so the actual ERDF contribution to net jobs development can be estimated to be significantly lower than 1% of the gross jobs created in the same period.

5. Looking forward to the 2014-2020 programming period

The issue of monitoring systems and indicator definition ranks higher on the agenda of the coordinating unit in the Federal Ministry of Economics than it did in preparation of the last funding period. A working group on indicators has been established and has been discussing the indicator proposals. Therefore, most of the MAs are familiar with the definitions and understand the concepts.

The crucial point for future data collection will be the way monitoring systems are being managed in the different Länder. A continuous quality control is required to make sure that data are collected properly and in accordance with the definitions. A second layer of coordination across Länder is inevitable. Details on measurement and application of indicators as well as questions on reporting and aggregation need to be better coordinated across Länder to allow for meaningful monitoring.

6. Further remarks

The issue of employment effects is one of the most complex aspects in monitoring and evaluation of Structural Funds programmes. It ranks high on the political agenda – which leads to a certain pressure to report results and effects of the intervention in terms of "jobs created". From an evaluative point of view there is a certain danger in focussing too much on this aspect:

- A good part of structural policy will inevitably first lead to a decrease of employment rather than an increase: Every intervention aiming at improving productivity leads to a decreased need of workforce. Only when the increase in productivity leads to higher market share or opens new markets, an increase in employment is the consequence. Focussing the intervention too strongly on immediate employment effects runs the risk of supporting less productive and competitive enterprises and sectors leading to an inefficient use of resources.
- A clear distinction should be made between "jobs created" as indicator to grasp the immediate effects of interventions on project level and "employment effects" of the programme as a whole or an intervention in the long run. The first is simply gross

information, the second should as far as possible try to grasp net effects on an aggregate level.

- As "jobs created" is normally a gross value, it needs to be used cautiously.
- Aggregation of gross information on "jobs created" across different types of instruments or different programmes does not make much sense in most cases. Usually different types of instruments lead to different types and qualities of jobs – and do this in different ways. Aggregating figures for jobs created ignores these differences and creates factious values.

References

Bade, F.-J., NIW - Niedersächsisches Institut für Wirtschaftsforschung & Prognos AG, 2010. Erfolgskontrolle der einzelbetrieblichen Förderung von Unternehmen aus der GRW und dem EFRE in den Jahren 1998 bis 2008: Wachstums - und Beschäftigungswirkungen für Niedersachsen.

Europäische Kommission, Generaldirektion Regionalpolitik hrsg., 2006. Indicative Guidelines on Evaluation Methods: Monitoring and Evaluation Indicators. Working Document No.2.

Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung, 2012. Jahresbericht 2011 zum operationellen Programm für die Förderung der regionalen Wettbewerbsfähigkeit und Beschäftigung in Hessen aus Mitteln des Europäischen Fonds für regionale Entwicklung (EFRE) 2007-2013.

ÖIR Österreichisches Institut für Raumplanung & Fraunhofer ISI, 2012. Halbzeitevaluierung des Operationellen Programms für den Europäischen Fonds für Regionale Entwicklung (EFRE) in Berlin.

PriceWaterhouseCoopers u. a., 2010. Bewertung der Prioritätsachse 3 "Steigerung der WEttbewerbsfähigkeit der gewerblichen Wirtschaft" - Bericht 2 der laufenden Bewertung.

PriceWaterhouseCoopers, LUB consulting & Infrastruktur und Umwelt, 2011. Bewertung der Prioritätsachse 1 "Stärkung von Innovation, Wissenschaft und Forschung" - Bericht 5 der laufenden Bewertung Sächsisches Staatsministerium für Wirtschaft und Arbeit, hrsg.

Prognos AG, 2011. Evaluierung des Operationellen Programms EFRE Schleswig-Holstein 2007-2013 bzw. des Zukunftsprogramms Wirtschaft (ZPW) - Endbericht.

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The following MAs have been consulted and provided specific data for this report: Berlin, Bremen, Hessen.

Annex

Tables

Annex Table A - Coverage of allocation and commitment by policy area

	Number of programmes	ERDF allocation in programmes using "job creation" as indicator		ERDF Commitment by end of 2011 in programmes using "job creation" as indicator	
	using "Jobs Created"	% of total ERDF allocation	% of allocation to policy area	% of total ERDF commitment	% of commitment to policy area
Competitiveness (total 11 programmes)					
Programme Level	7	56.6	56.6	53.7	53.7
Enterprise Environment - RTDI and linked activities	1	0.8	4.0	0.5	2.2
Enterprise Environment - Innovation Support for SMEs	8	10.8	61.9	9.3	46.6
Enterprise Environment - Other investment in firms	10	12.1	100.0	16.3	100.0
Human Resources - Labour Market policies	4	1.3	23.0	0.7	15.8
Transport - Rail	1	0.1	14.7	0.0	0.0
Environment and Energy - Environment and risk prevention	2	0.5	6.5	0.5	9.4
Territorial Development - Other	5	5.1	60.4	1.6	23.2
Convergence (total 7 programmes)					
Programme Level	5	73.6	73.6	74.7	74.7
Enterprise Environment - Innovation Support for SMEs	5	11.3	90.0	9.6	87.8
Enterprise Environment - Other investment in firms	6	20.6	100.0	23.3	100.0
Human Resources - Labour Market policies	1	0.0	100.0	0.0	100.0
Territorial Development - Other	1	1.5	29.8	1.8	34.3

The following two tables present the figures on jobs created for the German Competitiveness and Convergence programmes. The available data has been adjusted:

- Double counting was avoided. In some programmes, the data reports both the total and the breakdown by gender. In other cases specific characteristics of subgroups are reported separately ("... thereof: jobs created branches with specific potential").
- Indicators with unclear definition have been excluded ("Number of jobs ... created and safeguarded).
- Not suitable indicators have been excluded ("consultancy for enterprises number of jobs affected")

Policy Area	Target Value	Target Value in % of Total	Result	Result in % of Total
RTDI and linked activities	150	0.6	39	0.1
Innovation Support in SMEs	6,136	22.4	2,723	7.0
Other Investment in Firms	18,322	64.0	34,123	87.8
Labour Market Policies	760	2.8	1,350	3.5
Transport – Rail	15	0.1	0	0.0
Environment and Risk prevention	120	0.4	147	0.4
Territorial Development - Other	1,850	6.8	473	1.2
TOTAL	27,353	100.0	38,855	100.0

Annex Table B - Jobs created in German Competitiveness regions – overview (end 2011)

Annex Table C - Jobs created in German Convergence regions - overview (end 2011)

Policy Area	Target Value	Target Value in % of Total	Result	Result in % of Total
Innovation Support in SMEs	4,520	9.4	1,865	4.7
Other Investment in Firms	43,141	90.1	36,793	92.5
Territorial Development - Other	200	0.4	1,134	2.9
Total	47,861	100.0	39,793	100.0