The role of Structural Funds in Developing Learning Regions

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Abstract. The key processes of learning region can be divided into three categories. The first element in the concept of learning region is producing and enhancing human capital on individual, organisational and regional level. The formation of new human capital plays an important role in innovation process, and it is also closely linked to the learning process, which can be realised through new technological and scientific innovations. The second element is the co-operation of regional actors and the diffusion of human capital and know-how in and between organisations. This can be regarded as an opportunity to gain agglomeration benefits. The third – and perhaps the most important – issue in the framework of learning region is transferring human capital and new know-how into practise. From a regional point of view this means a growing GDP, employment, better quality of services and welfare. The purpose of this paper is to form a practical description of the concept of learning region as a doctrine of regional development in the context of Structural Funds. The empirical part of the study is based on the dissection of ESF-projects of the ongoing programme period 2000-2006. The purpose of the dissection is to find out how ESF interventions and their measures are integrated into different processes of learning region and, in addition to this, to conceptualise the problems of the prevailing monitoring and evaluation indicators in reference to the concept of learning region.

Key words: Structural Funds, evaluation, learning region, regional development

INTRODUCTION

The general goals of developing learning regions are improving regional competitiveness and welfare by improving the competence level of different regional organisations and creating their co-operative patterns. As a result, the creative activity of regions is transformed into collective action towards regional competitiveness. The concept of learning region can be considered a doctrine of regional development, in which the most important measures are connected to developing human capital and promoting networking in and between regions. This way, the challenges of developing learning regions are linked to developing human resources that arise from the needs of the operational environment, and improving regional competitiveness by developing interactive learning between different regional actors.

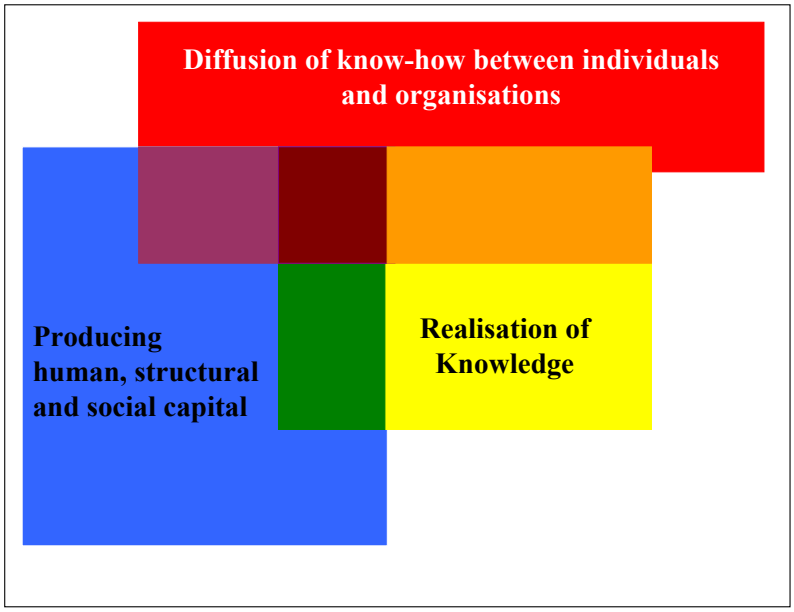
The purpose of this study is to form a practical description of the concept of learning region as a doctrine of regional development, and discuss the role of Structural Funds in developing learning regions. In the empirical part of the study we examine how the measures of the European Social Fund (ESF) are integrated into the different processes of the concept of learning region. In addition, we shall point out challenges for prevailing monitoring and evaluation indicators. The content of this paper is derived from an undergoing research project that aims to evaluate the Structural Fund interventions in developing regional know-how and competitiveness

THE CONCEPT OF LEARNING REGION AS A DOCTRINE OF REGIONAL DEVELOPMENT

Recent studies suggest that knowledge is the central element of production and crucial input to competitive economic activity and the generating of economic growth (OECD, 2001; Malmberg et al, 1999). It also seems that even the most specialised forms of knowledge are becoming resources with a short life span. Thus, the capacity to learn continuously and adapt to rapidly changing conditions determine the performance of firms, regions and countries (Lundvall & Borras, 1998). The competitive success depends mainly on the ability to produce knowledge, the diffusion of knowledge and utilising it in the production of goods and services (OECD, 2001; Wolfe, 2002; Morgan, 1997). These factors also form the three central processes of the learning region and the strategic objects of regional development policy utilising its framework.

The key processes of learning region can be divided into three categories (figure 1). The first element in the concept of learning region is producing and enhancing know-how on individual, organisational and regional level. It can be divided into producing human capital (individual know-how), structural capital (organisational know-how) and social capital (communal know-how) (OECD, 2001). The creation of new know-how plays an important role and it is also closely linked to learning process, which can be realised through new technological and scientific innovations or through application, distribution and adoption of existing know-how (Maskell et al, 1998). Important passages in developing regional competence capital are e.g. promoting regional R&D activity, education and learning on the job.

Figure 1. The key processes of learning regions



The second element is co-operation between regional actors and the diffusion of human capital and know-how in and between organisations. The diffusion of know-how between organisations can be formal or tacit knowledge (Boekema et al, 2000). The diffusion of know-how between organisations is, in theory, often linked to an opportunity to gain agglomeration benefits (Fritsch, 2001; Maskell et al, 1998; Steiner, 1997). By doing things together different actors can obtain better results than by doing them alone. In the concept of learning region, agglomeration benefits are a motivation for learning together – target oriented learning of the organisations makes it possible to obtain benefits which can not be achieved without co-operation. The central channels of diffusion of know-how are etc. horizontal and vertical networking, process linking, formal and informal co-operation agreements, communications, developing methods of interaction and integrating the research-, education and enterprise sectors together. Promoting the aforementioned channels of diffusion can be seen as a set of goals in regional development strategies.

The third – and perhaps the most important and the most difficult – issue in the framework of learning region is transferring human capital and new know-how into practise. This simply means a process in which they are integrated as a part of producing goods and services. Know-how can be realised, for example, through the work contributions of labour force or by combining new information with the firms' existing technologies (Maskell et al, 1998). This way, information becomes an input into the production process. From a regional point of view, this means eventually a growing GDP, employment, better quality of services and welfare. The central ways of realisation of know-how are e.g. developing organisations and developing production processes.

The different processes of learning region – producing and enhancing human capital, the diffusion of know-how and realisation of new information – overlap. The producing of human capital usually contains transferring know-how and the realisation of knowledge. Organisational networks, for example, produce new know-how and are also linked to realisation of knowledge. Correspondingly, realisation of knowledge requires producing human capital and diffusion of know-how. On the other hand, the key processes form a developing process, in which one

process is necessary for another. An adequate level of know-how, often referred to as critical mass (e.g. Maskell et al, 1998), is needed to obtain benefits from regional networking. Innovation mechanisms and obtaining agglomeration benefits requires competitive know-how, which can be used to produce competitive products. Furthermore, efficient realisation of know-how requires co-operation, networks and joint goals. Competitive production and structure of services enable a continuous developing of know-how. This way, the nature of learning and different processes contain the idea of cumulative causation (Ritsilä, 2001; Maskell et al, 1998). For example, concentration of many small business of similar character in particular localities can facilitate the exchange of information and diffusion of knowledge between education institutes, research centres and firms. This intensifies production and regional competitiveness, and gives more opportunities to develop the competence capital of the region.

Although learning region as a regional development doctrine may imply that societal problems are left for competitive pressures to solve, it has also been argued that information society will result in new forms of social exclusion and does not necessarily take care of the distribution of economic welfare or even producing it (Lovering, 2001; Shienstock, 1999). If regional development strategies are not able to guarantee jobs and a secure income, they will not be sustainable in the long run and they also weaken their conditions for their implementation. For example, regional high level of unemployment and income disparities can threat the continued accumulation of social capital (OECD, 2001) and utilisation of human capital. Because of this, measures aiming at social inclusion are needed as a basis for developing the key processes of learning region, and it should be taken into consideration in different regional strategies.

THE ROLE OF STRUCTURAL FUNDS IN DEVELOPING LEARNING REGIONS

Learning region as a doctrine of regional development applies to the comprehensive developing of operational environment and continual adaptation to changing operational environment. This leads to the assumption that the major function of the public sector is to increase the ability of the economy to change, learn and unlearn as well as to create and maintain a combination of policies which can develop generic knowledge for the economy (Asheim, 2001; Maskell et al, 1998). For example, the problems of the less favoured regions are derived from the different structure of the regional economy: there might be several regional actors and developers, but efficient interaction between them is lacking (Landabaso et al, 1999). Enhancing the basis of learning regions requires action from a set of regional actors – firms, local authorities, support institutions, local coalitions etc. – engaged in collective action and learning to develop it (e.g. Morgan et al, 1999; Diez, 2001).

The general principles of structural funds are attached to contributing to the sustainable development of economic activities and development of employment and human resources. The three priority objectives of the Structural Fund interventions are aimed at promoting the development and structural adjustment (objective 1), supporting economic and social conversion of regions facing structural difficulties (objective 2) and supporting the adaptation and modernisation of policies and systems of education, training and employment (objective 3) (EC, 1999a). This clearly leads to a development-oriented viewpoint, in which emphasis is put on supporting and promoting structural changes of regions. In addition, the Structural Fund interventions are based on different kind of targets aiming at improving economic competitiveness and social equality (EC 1999b; EC, 1999c). These targets boil down to a conventional trade-off situation between efficiency and equality in regional policies (Ritsilä,

2001): in the implementation of the Structural Fund projects one is emphasised at the cost of another.

In the ongoing programme period, the commission has decided to focus, more than in the past, on a policy of access to the information society. This is due to the fact that innovations are considered important factors in determining the competitiveness of a modern economy (Gueresent, 2001; Morgan, 1997). This clearly implies that the EU regional policy is built on knowledge based economy through improving the innovative capability of regions.

Since the Structural Fund interventions aim at promoting structural changes in regions, the idea of project work can be summed up in one thought: starting and developing the key operations. This means the creation of a variety of competence in private and public institutions, promoting integration of knowledge from different bodies into commercial activities, and leads eventually to the processes of learning region – developing human capital, transferring know-how and realisation of knowledge. From the point of view of Structural Funds strategies, it is also important that social and economical prospects are balanced, since social inclusion, in fact, creates an opportunity to enhance sustainable economic competitiveness in different regions.

Even though the Structural Fund strategies are connected to developing learning regions by promoting the key processes, on the operational level policy makers should recognise also the factors that prevent the development of learning region. Removing the obstacles of learning regions is one the most important tasks of the Structural fund interventions, especially in improving interaction between different actors. On the strategic level, the demand of partnership is one of the major channels of tackling the different obstacles of learning regions.

THE EMPIRICAL EVIDENCE OF THE ESF IN FINLAND

The foundation pillars of the European Social Fund are education, employment and know-how. The eligible activities of the ESF are closely connected to measures aiming at developing human resources or the increasing effectiveness of these activities (EC, 1999c). Presumably, the ESF interventions on regional level have a catalytic influence on the key processes of learning region. On the other hand, social inclusion is an important part of the ESF measures, and thus interventions should aim at promoting the sustainable development of learning regions.

In this section we empirically map out how different measures of the ESF are connected to the processes of learning region. The empirical part is based on the dissection of the register based sample of 500 ESF-projects of ongoing programme period 2000-2006 in Finland. The sample was created using stratified sampling based on the managing authorities and different objective programmes. The dissection of projects is premised on the undergoing research project evaluating the Structural Fund interventions in developing regional know-how and competitiveness. Herein, only the results of the three main indicators from actual 12 are presented (Ritsilä & Haukka, 2003).

Developing human capital

According to the register based sample, the ESF projects were strongly connected to the regional development. Majority of the projects aimed directly at regional impacts (70,6%) or at least had indirect regional effects (27,4%). The connection to the regional development was predictably strongest in the regional objective 1 and 2 -programmes, but, in addition to this, almost half of the projects in the horizontal objective 3 -programme set clear regional goals. Orientation towards regional development also implies that the starting points of the projects are strongly based on regional needs and demand for implemented projects. This also creates a good foundation for developing regional human capital and know-how.

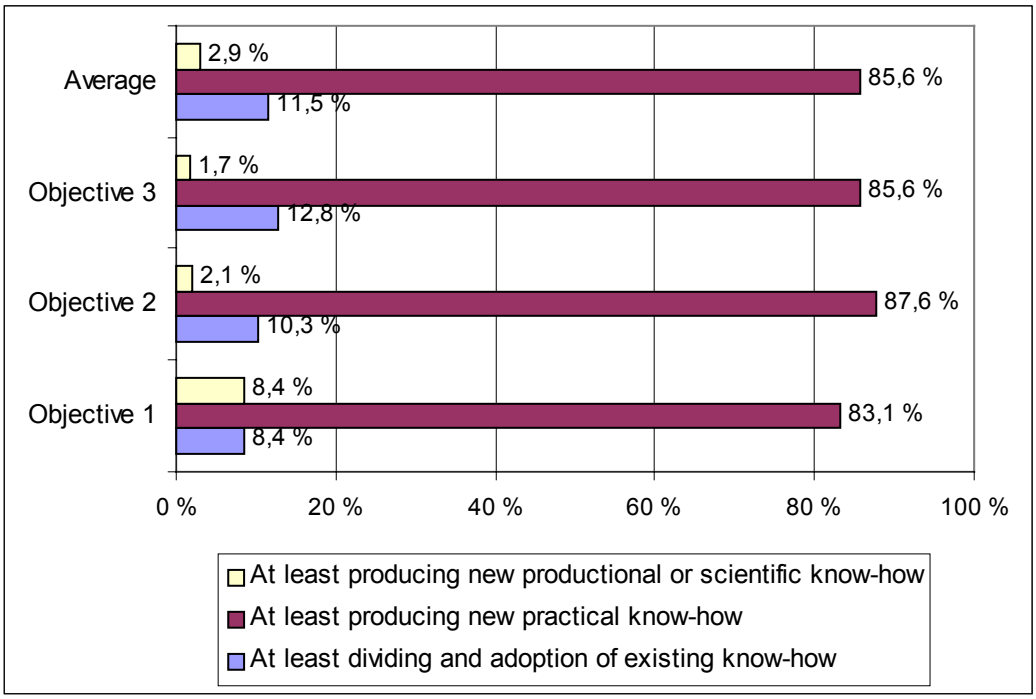
The project types of the sample can be categorised into seven groups, which show the main channels of developing human resources and know-how. The distribution of project types of the sample was as follows:

- Social inclusion (workshops, training the unemployed): 21,1 %
- Developing learning on the job: 14,4 %
- Developing quality of education: 24,7 %
- Developing firms: 28,2 %
- Promoting R&D operations: 2,7 %
- Cultural projects: 2,9 %
- Developing the public sector (education excluded): 5,9 %

According to the analysis, producing and enhancing human capital and the competence of organisations have a central role in the projects. The most considerable project groups were aiming at developing enterprises or educational institutes. The developing enterprises contained both promoting the establishment of new firms and the already existing firms. The projects aiming at developing educational institutes contained most often development of educational organisations, educational methods and contents and starting up new training programmes. One fifth of the projects aimed at improving social inclusion. These interventions were connected to workshop operations and training of the unemployed.

As mentioned above, the ESF interventions were strongly connected to enhancing human capital and know-how. The role of development-oriented interventions becomes an important channel of producing and enhancing know-how in the targets of the projects (figure 2).

Figure 2. The development-orientedness of the projects

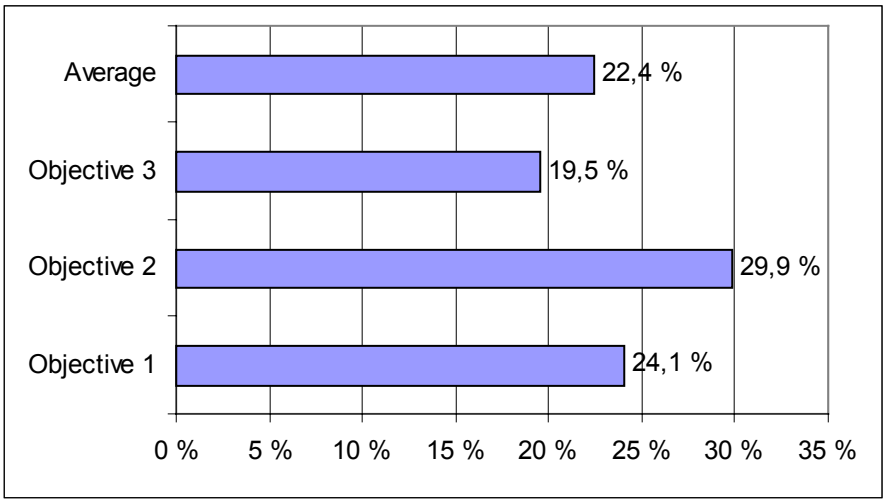


In the observed ESF projects, at least dividing and adoption of existing know-how without veritable development actions was a channel of developing competence capital in 8,4 % of the projects. The developing and enhancing of human capital and know-how concentrates predominantly on at least producing new practical know-how by developing new regimes, materials and working methods (85,6%). These projects usually contained also dividing and adoption of knowledge as a form of training. Producing new productional or scientific know-how was emphasised rarely, and only 3 % of the projects clearly aimed at these.

The diffusion of know-how

Internal and external networking of different regional actors is important for the development of learning regions. The register based analysis of projects showed that networking as a measure was emphasised in over 22 % of the projects. Networking as a measure was emphasised in regional objective 1 and 2 -programmes more often than horizontal 3 -programme. This is also linked to the result that regional programmes are more strongly based on the regional needs than the objective 3 -programme.

Figure 3. Networking as a measure in different objective programmes



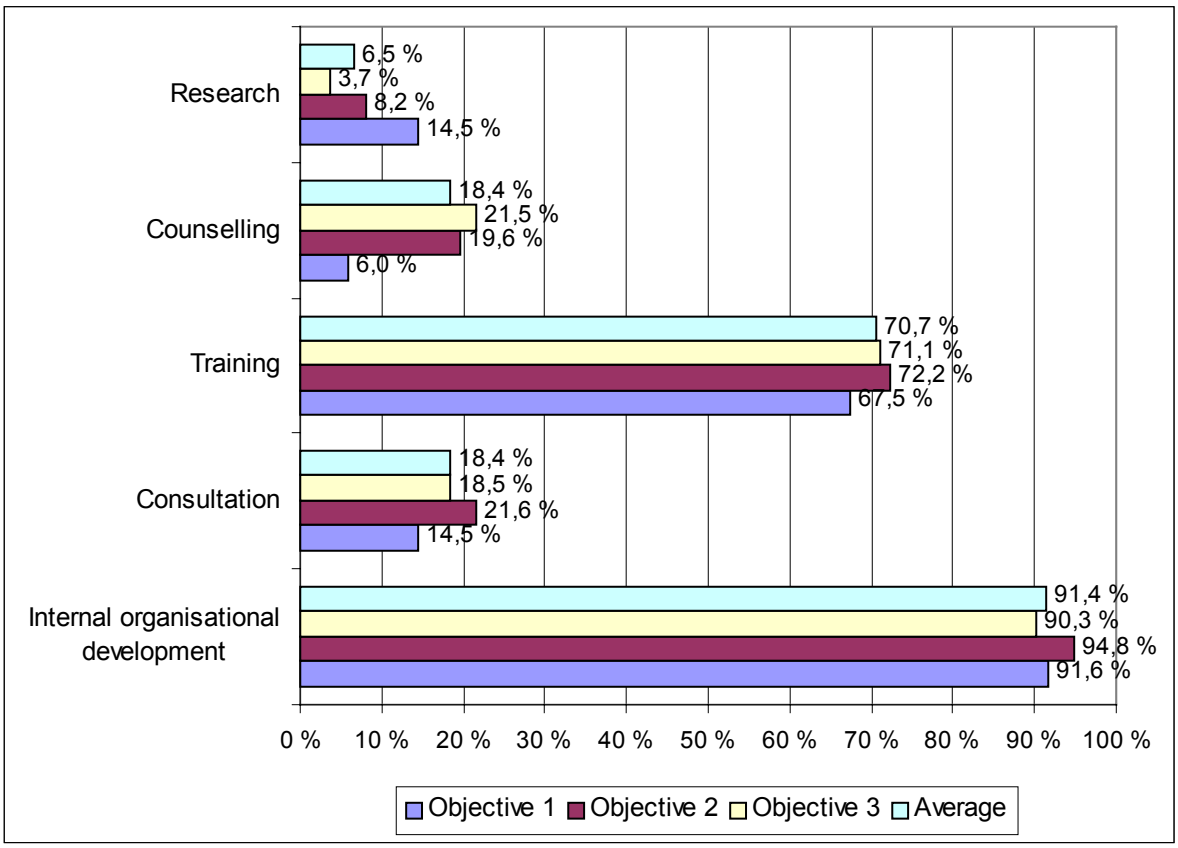
The most important flows of know-how, according to the project analysis, were found in educational institutions to individuals and private corporations. The educational institutions form the most important transmitter of know-how in the projects in the sample. The flow of know-how from educational institutes to individuals encompasses mainly education of individuals outside the labour market and, respectively, the flow of know-how from educational institutes to enterprises is composed of training the staff and management, and developing the consulting-, developing- and counselling services. The development of consulting services in different regions also supports firms in accessing new knowledge through adoption and adaptation. In addition, the role of the public sector as a transmitter was notable. These measures aimed at promoting co-operation between public and private sectors and usually contained projects that aimed at developing methods for promoting employment.

The realisation of knowledge

The process realising knowledge to the production and services is the most challenging element of the concept of learning region. Herein, the realisation of knowledge in the production processes is considered roughly through different measures of the projects. This is done by clarifying the magnitude of consultation and internal organisational development measures in implemented projects. These are direct efforts for promoting the realisation of knowledge. On the other hand, training, counselling and research have important roles in the realisation of knowledge, but the process connected to this is often indirect. For example, training staff in the firms does not necessarily guarantee that the learned know-how is transferred into practise. It is important to bear in mind that promoting the realisation of know-how in this context is charted by classifying different measures of the implemented projects. Important thematic issues, such as developing learning on the job, exist on the strategic level aiming in the entireties at indirectly promoting the realisation of human capital by developing the educational infrastructure of the regions.

The majority of the projects (91,4 %) aimed at internal organisational development by developing materials, working methods and administrational and operative systems (figure 3). This can be seen as an effort to develop the structural capital of organisations, and thus producing know-how that is retained by organisations independently of the presence of particular employees. The emphasis on developing structural capital can be seen as a good result in the implementation of the projects due to fact that it is indeed one of the main channels for realising new knowledge. In addition to this, consultation was emphasised almost in one fifth of the projects, and this also implies that projects are strongly integrated to the realisation process of the new knowledge.

Figure 3. The measures of the implemented projects



CHALLENGES IN MONITORING AND EVALUATION

The policy solutions for learning based economic growth are usually time-consuming endeavours without immediate gains in terms of new employment (Boekema et al, 2000). Regional development initiatives based on the concept of learning region usually contain a development-oriented perspective, which is closely connected to the capacity building phase in creating e.g. social capital and building up the individual and institutional capacity of regions to overcome the problems they face (Armstrong et al, 2002). Furthermore, the results of the measures aiming at developing knowledge-based economy are often intangible in short term. This also gives birth to a new deal between straight actions (such as education, training of the unemployed) and development-oriented interventions (internal organisational development, developing the operational environment).

The empirical dissection of the ESF projects showed that internal organisational development was emphasised in the majority of the projects in addition to straight measures. Usually projects aimed at developing new working methods (e.g. developing educational methods, educational contents and materials) and measures to test them (e.g. pilot training groups). The emphasis on developing the structural capital of organisations and development-oriented viewpoint creates certain challenges for monitoring and evaluating ESF interventions. This is due to the fact that the results of development work are hard to verify (Diez, 2001; Georghiou, 1998). The existing monitoring indicators emphasise the quantitative performance of ESF funded projects (jobs, education places etc.), which are closely related, for example, to education and direct training of the unemployed (Diez, 2001). From the point of view of development-oriented interventions and the concept of learning region, it is important that qualitative indicators are used in addition to quantitative indicators. These indicators should be used to create a clear picture of content, scale and sustainability of the implemented projects.

The interpretation of monitoring and evaluation indicators are often used to make comparisons between the different interventions and projects (EC, 1999d). These comparisons mainly concern efficiency indicators, for example, the cost of a trainee's training, the cost of a job created etc. The monitoring and evaluation based on quantitative indicators leads easily to results, in which straight measures gain a better grade than projects aiming at developing organisations and operational environment. On the other hand, if the monitoring emphasises certain indicators which are irrelevant from the intervention's point of view, it may increase the risk of manipulating the results of the projects to suit them better. This may be regarded as adverse effects of indicators (MEANS vol. II, 1999). Furthermore, measuring development-oriented interventions with quantitative indicators is more likely to lead to distorted results, in which the cost of a new job is astronomical.

The adverse selection of indicators may in fact lead to drastic results on the strategic level of the implementation of programmes. This is due to fact that the performance of each operational programme is evaluated in the middle of the programme period on the basis of a limited number of monitoring indicators "reflecting effectiveness, management and financial implementation and measuring the mid-term results in relation to their specific initial targets" (EC, 1999a). It is required of these indicators that they are based on an indicative list of indicators proposed by the Commission and, above all, that they are quantitative. According to the results of mid-term evaluation, the allocation of performance reserve is made between the operational programmes which are "considered to be successful". This procedure completely neglects many problems that are founded in attempts to develop the Structural Funds' evaluation, such as capacity building, and, moreover, the development oriented projects and their measures are put at a disadvantage compared to straight interventions.

Based on clearly existing problems, two different kinds of prospects can be done as first aid for proper monitoring and evaluation of the Structural Fund interventions. Firstly, it is essential that resources within single project are clearly divided and the main objectives are stated out. According to analysis ESF projects and former studies (see, for example, Armstrong et al, 2002), the Structural Fund projects usually contain multiple objectives, but usually these are not explicitly stated out. From the point of view of development-oriented interventions this is a problem for monitoring and evaluation, since progress towards the final objectives cannot be properly assessed.

Secondly, the distinction between development oriented interventions and straight actions should be made already at the strategic level (in different objectives, priorities and measures). This way the distinction between development oriented interventions and straight actions could be taken into account in addition to current performance reserve indicators and, consequently, the monitoring system should be able to differentiate between development oriented measures and straight actions. Furthermore, quantitative and qualitative indicators should be developed to obtain results of development-oriented interventions, which aim to enhance the structural capital of organisations. The key element of measuring organisational development is obtaining the starting level of organisations. This means that the prevailing competence level of organisations should be charted at the starting point of each project and, based on this, a set of goals should be established.

CONCLUDING REMARKS

The thematic framework of learning region can be seen as a fertile base in the European Structural fund interventions aiming to improve economic competitiveness and social equality. The measures funded by the Structural Funds are linked to an attempt to affect the key processes of learning regions by triggering and developing the key operations and, in addition to this, by removing obstacles from collective learning. Furthermore, social inclusion also prepares the way for a repertoire of acts which affords parity of esteem to economic renewal and social justice and thus also sustainable regional development.

The analysis of the ESF-projects clearly showed that the measures of implemented interventions were integrated into the key processes of learning region by developing and enhancing human capital, promoting diffusion of know-how and fostering the realisation of knowledge. The measures were also strongly development-oriented due to an orientation towards improving operational environment and internal organisational structural capital.

Since the interventions were clearly connected to internal organisational development and developing operational environment, the improvement of prevailing monitoring and evaluating indicators should be considered. This will result in two major leaps forward: firstly, in the implementation of the projects the main objectives should be stated clearly. This is the first step in making a distinction between straight measures, such as employment aids, and development-oriented interventions. Secondly, projects should be monitored and evaluated by using a combination of quantitative and qualitative methods.

Although the concept of learning region as a doctrine of regional development can be seen as a fertile starting point in the Structural Fund interventions, one should bear in mind that the main goal of measures should be in starting up and developing the key processes: the role of the Structural Funds is to be a plug rather than fuel in regional development.

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