Comparative analysis of employment dynamics in leading and lagging rural regions of the EU, 1980-1997

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(eds.)

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In this study a comparative analysis of factors hampering and encouraging the development of employment in 9 leading and 9 lagging regions in the EU during the 1980s and the first half of the 1990s is made. Derived from this comparative analysis, some lessons, which leading and lagging rural regions can learn from each other with regard to employment creation, are given.

During the period 1980-1995 leading rural regions tend to have both growth in industrial employment and in services employment. Besides, in this period leading rural regions showed also a population growth, whereas that in lagging rural regions stagnated. Leading rural regions are characterized by a rather well developed road infrastructure relatively to lagging regions. So in leading regions infrastructure is no serious economic constraint for entrepreneurs, whereas the poorer condition of infrastructure in lagging regions hampers economic development. On the whole actors in leading regions show a better developed capacity than actors in lagging regions. This is for example reflected in the way in which they co-operate with other actors inside and outside the region, in which they face challenges, in which they innovate and in which they launch projects in line with the strengths and needs of the region. Due to the higher capacity of actors in leading regions, both internal and external networks are rather strong.

Lessons, which may be helpful in the creation of employment in rural regions, are: design projects according to the strengths of the region, integrate infrastructure into a broader development concept, follow a multisectoral approach in employment creation, tourism is not the only solution, involve a wide range of local actors in the development process and strengthen both internal and external networks.

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Preface

RUREMPLO is the acronym of the FAIR project 'Agriculture and employment in the rural regions of the EU'. In this project an analysis is made of the development of employment in the rural regions of the EU against the background of a downward trend in the agricultural labour force. For this purpose a quantitative analysis of socio-economic characteristics in all EU regions and 18 case studies in 'leading' and 'lagging' rural regions in 9 EU Member States have been carried out in order to reveal forces behind employment dynamics. The project has been carried out in 1997 and 1998.

In this report a comparative analysis is made of the 18 case studies. All members of the RUREMPLO team have made contributions to this report. The editorship of the report was with Ida J. Terluin, Jaap H. Post and Åsa Sjöström. The RUREMPLO team members are:

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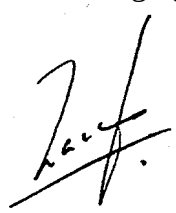
The Managing director



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The Hague March 1999

Summary

Objective of this study

In this study a comparative analysis of factors hampering and encouraging the development of employment in 9 leading and 9 lagging regions in the EU during the 1980s and the first half of the 1990s is made. Derived from this comparative analysis, some lessons, which leading and lagging rural regions can learn from each other with regard to employment creation, are given.

Methodological framework

In our study rural regions are viewed from a territorial approach. In order to analyse forces behind employment growth in rural regions we applied the mixed exogenous/endogenous development approach. This approach relates rural development to the process of increasing globalisation. Actors in rural regions are involved in both local networks and external networks, but the size, direction and intensity of networks vary among regions. Hence rural development is considered as a complex mesh of networks in which resources are mobilised and in which the control of the process consists of an interplay between local and external forces. In order to visualise forces, which affect the employment development in rural regions, we have designed a field of force with three main components: local resources, economic activities and actors. For facilitating the analysis of the field of force, we have made a list with 12 key issues, referring to each of the three main components. Besides, the various forces in the field have been assessed at the beginning and end year of the period under study by making a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

Case studies in leading and lagging rural regions

The labels 'leading' and 'lagging' have been derived from the growth rate of non-agricultural employment in the region during a recent period of about 10 years. The group of 18 compared rural regions consists of the leading regions of Luxembourg (B), Niederbayern (GER), Korinthia (GR), Albacete (SP), Alpes de Haute Provence (FR), Pesaro (IT), Drenthe (NL), Osttirol (AU) and Keski-Suomen Lääni (FIN) and the lagging regions of Lüneburg (GER), Fthiotis (GR), Zamora (SP), Ardennes (FR), Nièvre (FR), Macerata (IT), Groningen (NL), Liezen (AU) and Mikkelin Lääni (FIN).

Some socio-economic characteristics of the case study regions

The selected regions reflect a wide range of characteristics: the area size varies from 2,000 km^2 to 16,000 km^2 and the population size from 50,000 to 500,000 inhabitants. The

population density in the case study regions varies from 13 inhabitants/km^2 to 188 inhabitants/km^2 ,reflecting the fact that the case study regions cover both 'most rural regions' and 'intermediate rural regions'. In about half of the case study regions the population is concentrated in one part of the region or in a few main centres in the region. The sectoral structure of employment is divers: there are regions with a low and a high share of employment in agriculture. Leading regions showed an increase in population during the last decade, whereas in the lagging regions population declined or showed only a moderate increase.

Key issues

Are local resources (including infrastructure) important for the creation of employment?

Almost all case study regions had some sort of valuable rural amenities. Thus, it is difficult to draw any firm conclusion concerning their weight in explaining differential performance in rural employment creation. The comparisons show that it is not primarily the existence of amenities that matters, but the degree to which these assets are effectively valorised.

Road infrastructure is in all leading case study regions rather well developed, except for the mountainous parts in some regions, whereas in the most lagging regions road infrastructure is rather well developed in the central part, but insufficiently in the more remote parts. So on the whole in the leading regions road infrastructure is no serious economic constraint for local entrepreneurs. It contributes to an efficient trade of services and goods, and it forms an attractive location for firms to settle. On the other hand, the poor situation of infrastructure hampers the economic development in lagging regions.

In which branches does employment increase (decrease)? What are the properties of these branches?

Both in leading and lagging case study regions there was an increase in employment in the sectors of community services and of wholesale and retail trade, restaurants and hotels during the period 1980-1995, along with a decline of agricultural employment. Besides, some leading and lagging case study regions showed also a rise in employment in the sector of financial services. The most striking difference between leading and lagging case study regions was the increase in employment in the manufacturing sector in the leading regions, whereas employment in this sector in the lagging regions tends to decline.

The different branches can be classified according to their exposure to global markets, whether the markets are fluctuating or stable and whether they are labour intensive or labour saving. Employment growth in leading regions is not dependent on certain properties: it increases both in branches exposed and less exposed to global markets, in fluctuating and stable markets and in labour intensive and labour saving branches. However, in lagging regions employment mainly increases in branches characterised by less exposure to global markets, stable markets and labour intensive production. So in leading regions employment development is more vulnerable relatively to lagging regions.

Does the sectoral mix explain the dynamics in employment growth (stagnation)?

Do leading regions have an underrepresentation of employment in shrinking sectors like agriculture and industries and an overrepresentation in expanding sectors like services? If sectoral employment structures do not differ among regions, the residual explaining divergence in employment development can be labelled as 'territorial dynamics'. This is supposed to reflect specific regional characteristics. In the largest number of the leading and lagging case study regions the sectoral shares of agriculture and industries in employment exceed those of the national economy. Based on such a sectoral mix, a below average growth should be expected. This indeed occurred in the lagging regions. However, it did not happen in the leading regions, which implies that territorial dynamics is an explaining factor of employment growth rather than the sectoral mix.

Is employment created in small or large enterprises?

Both in leading and lagging case study regions employment growth takes place in small enterprises. In some regions employment growth in medium sized and large enterprises is reported. However, growth in medium and large enterprises occurs more often in leading regions than in lagging regions.

Is employment created in new or existing enterprises?

Whether employment is created in new or existing enterprises seems to be affected by country specific factors, rather than by being a leading or a lagging region. So for most countries it was found that employment in leading and lagging regions is created mainly in new companies, while for a few countries the analysis showed that employment was created in both existing and new companies.

Does the education level of the labour force matter in the creation (stagnation) of employment?

On the whole it can be stated that in leading case study regions the education level of the labour force is relatively low. However, the employment structure is such, that this type of labour is demanded and the abundance of low skilled labour is a pull factor for industrial firms to settle in these regions. In the lagging case study regions it was often reported that both low and high educated labour was available. So from the labour supply side education was no constraint on employment growth in lagging regions. In some lagging regions the lack of employment opportunities for highly educated people resulted in outmigration.

Is employment hampered by the institutional structure of the labour market?

A first impression is that the institutional setting of the labour market in leading and lagging case study regions does not differ from other regions in the country, since it is determined at the national level. Hence, minimum wage levels apply for the whole country, and are no specific constraint or incentive for employment growth in the case study re-

gions. The picture of the role of employment services/agencies in matching supply and demand of labour varies: in some regions they show a good performance and in others they are insufficient. However, the performance of employment services/agencies is not related to the status of being a leading or lagging region. In some regions matching of supply and demand often takes place in an informal way, which reduces the role of employment services.

Does the capacity of actors matter in the creation (stagnation) of employment?

Capacity can generally be defined as the ability of actors to co-operate and interact in the market and usually refers to the three aspects of knowledge, skills and attitude. In most of the leading case study regions the capacity of policy makers is rather well developed, whereas in most of the lagging case study regions the capacity of policy makers is rather weak. Positive aspects in the capacity of policy makers in leading regions are the way in which they implement policies according to the priorities and needs of the region, in which they are able to attract public funds and private investments and in which they create preconditions for firm settlement. Weak points in the capacity of policy makers in lagging regions refer to a lack to formulate strategies, lack of political consensus, lack of good contacts with upper level authorities and lack to identify the needs and priorities of the region.

In a number of leading and lagging case study regions the capacity of entrepreneurs is well developed. This is often the result of a restructuring process in traditional industries. The new and small companies are competitive at national and international markets. However, their capacity to innovate is often limited. In other leading and lagging case study regions the capacity of entrepreneurs is weak, due to a cautious and risk averting attitude or to lack of industrial tradition.

The capacity of labourers seems to be roughly the same in leading and in lagging case study regions: their attitude to work is good and they are prepared to work hard.

Specify the role of internal and external networks in the creation (stagnation) of employment

On the whole leading case study regions were characterised by rather strong internal networks, whereas those in the lagging case study regions were usually rather weak. The internal networks in the leading regions were for example enhanced by an active attitude of local actors, solidarity, easy communication and strong local leaders. Problems faced in the internal networks in the lagging regions are a low density of actors, little interaction among internal actors, a lack of co-operation among sectors, internal conflicts, lack of active actors, lack of capacity of local actors and lack of formal networks, which are able to guide the development process.

External networks are considered here to be the interactions of actors inside and actors outside the region. It appears that the most frequent use of external networks is to get financial support from regional/national/EU level (policy relations), to export products (market relations) and to be in contact with (multinational) firms, either because the presence of subsidiary business in the region or to attract firms into the region (firms relations).

In the leading case study regions external networks functioned better than in the lagging case study regions. Difficulties in the external networks of lagging case study regions are due to the marginal/remote position of the region within a larger administrative unit, lack of unified strategies, lack of capacities of the local actors and an inward looking attitude of the local actors.

The engine of employment growth consists of a mix of endogenous and exogenous forces in all case study regions, except for Pesaro and Macerata. In these regions, which belong to the so-called 'third Italy', industrial districts consist and endogenous forces are the engine of employment growth. It is striking that in leading regions endogenous forces tend to initiate the process of employment growth, which were subsequently enhanced by exogenous forces. In lagging regions it was often found that exogenous forces tend to initiate the process of employment growth, and that endogenous forces react on them.

Give an identification of the most effective policies and strategies towards maintaining or augmenting employment

In both leading and lagging regions strategies of policy makers were directed towards the improvement of infrastructure, financial support to firms, setting up of public services, improving the education level of the labour force and supporting economic activities in thinly populated areas. A main difference in the strategies of policy makers in leading and lagging case study regions was that policy makers in leading regions were more often involved in setting up industrial sites with appropriate equipment, relatively to policy makers in lagging regions. The advantage of such industrial sites is that these can create synergy effects. In some lagging regions strategies of policy makers were weak due to the failure to include these in a broader development perspective.

Although companies are a direct source of employment, usually the purpose of a firm is not to create employment but to make profits. A common strategy for firms in both leading and lagging case study is to improve their competitiveness in the market by higher quality products, technological innovation and flexibility. In some leading and lagging case study regions a tendency to self employment can be perceived.

How do farm households adapt to the situation of decreasing employment in the agricultural sector?

One of the results of the decline of the agricultural labour force is that land becomes available for farmers, who continue their farm. So in all case study regions, except for the Austrian ones, the main adaptation strategy of farm households is farm enlargement in the sense of increasing the land area per farm. In some leading and lagging regions this strategy was combined with an intensification of production, due to the use of new techniques like irrigation or large-scale machinery. Another main element in adaptation strategies is the shift from bulk production to niches (products of regional origin), high quality products and organic farming.

The level of pluriactivity is dependent on the availability of jobs in the regional economy, the demand for products processed at farms, the demand for services like agrotourism and nature conservation provided by farmers and country specific factors. The

three most common forms of on-farm pluriactivity are agrotourism, processing and selling of farm products and forestry. Off-farm pluriactivity refers to a great variety of jobs in the industries and services sector. It is remarkable that in the case study regions in Greece, Italy and Spain farm households are hardly involved in on-farm pluriactivity.

Due to the presence of landscapes of outstanding scenic beauty or high natural value and other rural amenities in the case study regions, farm tourism offers promising perspectives as a source of income. In leading case study regions farm tourism is more common than in lagging case study regions, Osttirol and Liezen being the exceptions. Problems faced in developing farm tourism in lagging regions are the lack of a regional strategy towards tourism and the lack of knowledge about agrotourist opportunities by farmers. In some regions like Drenthe and Liezen a saturation level has been reached and hence perspectives for agrotourism are in particular in a shift towards high quality accommodations. The current participation in agri-environmental programs in countries like Austria and Germany is quite high, while it is hardly non-existent in Greece, Spain and Italy. The future uptake of these programs depends mainly on the size of the premiums.

General guideline for employment creation

Since the socio-economic, physical and geographic situation of rural regions widely varies, there is not one unique development path towards more jobs. So the lessons formulated below have not to be considered being the 'success formula', which always results in more jobs. The lessons have to be seen as building stones, which may contribute to shaping preconditions for employment creation under certain circumstances. Despite the multiple development trajectories, we give a general guideline for employment creation in rural regions, based on the experience in the case study regions:

- make a comprehensive territorial development plan, based on the strengths, weaknesses, opportunities and threats of the region, and integrate all measures and projects within the scope of this plan;
- improve the capacity (knowledge, skills and attitude) of local actors;
- strengthen the co-operation of local actors and the co-operation of actors inside and outside the region.

It is in the scope of this guideline, in which lessons given below can be selected.

Lessons with regard to local resources

- Integrate infrastructure investment in a broader development process;
- Pay attention to distinct modes and technologies of infrastructure in rural regions;
- Valorise rural amenities;
- Improve the perception of amenities by rural actors.

Lessons with regard to economic activities

- Follow a multisectoral approach;
- Support the integration of agriculture in the rural economy;
- Both specialisation and diversification can be successful strategies;
- Enhance facilities for new and small enterprises;
- Focus on the local productive system;
- Strengthen zoning of economic activities by spatial planning.

Lessons with regard to actors

- Enhance capacity building of local actors;
- Strengthen internal and external networks;
- Attract newcomers;
- Define the right labour market area;
- Aim at the appropriate regional mix of skills;
- Be aware of changes in labour demand by industrial firms;
- Encourage part time labour and self-employment.

1. Introduction

The creation of jobs and the fight against unemployment are political priorities in the EU. Traditionally the agricultural sector has been an important source of employment in rural regions. However, agricultural employment has declined rapidly during the last decades and there is evidence that the number of jobs in agriculture in the EU is about to halve in the next 20 years to come. The reduction of agricultural employment may have large consequences for the employment situation of rural regions - especially when the share of agriculture in total employment is high - unless sufficient alternative jobs can be provided. That implies that industries and services are becoming increasingly important as sources of employment in rural regions.

By which means can employment in industries and/or services in rural regions be encouraged? An analysis of forces behind employment growth in rural regions during the last one or two decades may contribute to insight in promising preconditions and policies. A recent analysis showed that rather large variations in employment growth exist in rural regions (OECD, 1996). On the one hand there were dynamic rural regions, which showed an employment performance above the national average during the 1980s and on the other hand there were also rural regions, whose employment growth lagged behind. This observation directly results in the question why do some rural regions perform better than others do? Can the sectoral mix of employment explain these differences? Or are these differences the result of factors like local resources, natural and cultural amenities, entrepreneurial tradition, work ethics, public or private networks, a set of factors which can be referred to as 'territorial dynamics'? The occurrence of 'leading' and 'lagging' regions seems a useful starting point for examining which factors encourage and hamper employment growth in rural regions and for providing lessons towards stimulating employment creation in rural regions. At the request of the European Commission we have carried out such a study.

Lessons towards stimulating employment creation in rural regions are helpful for all policy makers who are involved in employment affairs: at local level, at regional level, at national level and at EU level. At all these levels several measures are implemented towards the encouraging of employment and often policy makers of different levels are together involved in the implementation of policies, like in the EU structural policies. The more these policies are effectively targeted and efficiently implemented, the more the people living in rural regions can enjoy being employed. This will strengthen the viability of rural regions and contribute to the socio-economic cohesion among regions in the EU.

Case studies

In order to reveal the forces which hamper or encourage employment development in rural regions, 18 case studies in leading and lagging rural regions in 9 Member States of the EU have been carried out in the scope of our research project. The selection of these case

studies is based on a statistical analysis of 465 regions in the EU (Esposti et al., 1999). The case studies provide insights in trends in employment patterns in rural regions in the 1980s and the first half of the 1990s and in the networks, strategies and policies of local actors. These case studies have been carried out by 9 national teams according to a common methodology, and are based on statistics, literature study and interviews. The reports of the case studies have been published by the national teams.

Objective and plan of this study

In this study a comparative analysis is made of factors hampering and encouraging the development of employment in 9 leading and 9 lagging case study regions in the EU during the 1980s and the first half of the 1990s. The comparative analysis of the case study regions is carried out along the various components in the field of force of a rural region, which we have designed in the scope of this study. Derived from this comparative analysis, some lessons, which leading and lagging rural regions can learn from each other with regard to employment creation, are given.

The plan of this report is as follows. In the next chapter we explain the territorial approach of rural, the methodological framework and the selection of regions for case studies. In chapter 3 we discuss the socio-economic situation in the 18 case study regions. The field of force of a rural region is a main guideline for analysing the employment development and for presenting our results. Within this field of force three main components can be distinguished: local resources, economic activities and actors. In chapter 4 the focus is on local resources and in chapter 5 economic activities are discussed. In chapters 6-11 various aspects of the component of actors are analysed: successively labour supply, labour market, capacity of actors, networks, and policies and strategies of actors. Each of the chapters 3-11 consists of three parts: a comparative analysis of the leading and lagging regions, a comparative analysis of the leading regions and a comparative analysis of the lagging regions. The first part reflects the main findings, while more detailed information on the case study regions is given in the second and third part. Although this way of presentation is quite extensive, it gives a general background of the developments in the case study regions and it has the advantage that readers, who are interested in developments in some of the 18 case study regions, have the chance to get this information. In chapter 12 lessons for employment creation in rural regions, emerging from the key findings from the analysis, are given. In the last chapter concluding remarks are made.

2. Methodological framework

2.1 Territorial approach of rural

In our study rural regions are viewed from a territorial approach, which means that rural regions are expressed as a territorial unit with one or more towns, with a local economy and a relatively low population density. Hence, a rural region is considered as an economic unit with an internal socio-economic structure and a system of local agents (Blanc, 1997). This territorial approach differs from other approaches of rural, for example those in which rural is more or less synonymous to agriculture, to non-urban, to a specific set of social values etc..

2.2 Theoretical approach of economic development of rural regions

What are the forces behind development of employment in rural regions and what are the origins of these forces? The development of employment is closely related to the development of the production structure of the regional economy, so to economic development. Therefore by determining forces behind employment growth, we firstly examine factors affecting economic development. In literature, 3 main concepts of economic development of rural regions can be distinguished:

(a) the exogenous development approach;
(b) the endogenous development approach;
(c) a mix of the exogenous and the endogenous development approach.

These approaches reflect more or less a chronological sequence of conceptualising rural development. The concepts have different implications for the strategies of local actors and for rural development policies to be implemented. The three concepts are discussed below.

(a) the exogenous development approach

Main elements of exogenous models are that rural development is considered as being transplanted into particular regions and externally determined, that benefits of development tend to be exported from the region and that local values tend to be trampled (Slee, 1994:184). Exogenous models are based upon a view that modernization results in a division of economic activities between urban and rural: urban areas become the domain of industries and services and rural areas that of agriculture. The agricultural sector covers several functions in this system: it provides food for the urban areas, it is a source of purchasing power for commodities of the industrial sector, a source of capital and labour for the industrial sector and a source of foreign earnings to support the development process of

the urban areas. Since these functions reflect a dependency of agriculture on the urban sector, the process of agricultural development and hence rural development is seen as dependent on and exogenously determined by the urban sector.

Till the 1970s this was the dominant model for explaining rural development. In the European countries it was reflected in a rural development policy directed towards modernization of the agricultural sector; when this proved insufficient to stabilize the rural economy, a policy of branch plant was also adopted, in which manufacturing firms from urban areas were encouraged to move into rural areas in order to create employment opportunities for the rural population. By the late 1970s these policies fell into disrepute, since they did not result in sustainable economic development of rural regions (Lowe et al., 1995:89-91).

(b) the endogenous development approach

Endogenous development is to be understood as local development, produced mainly by local impulses and grounded largely on local resources (Picchi, 1994:195). In contrast to the exogenous model, the benefits of development tend to be retained in the local economy and local values are respected (Slee, 1994:184). Within rural policies the emphasis shifted towards rural diversification, bottom-up approach, support for indigenous business, encouragement of local initiatives and local enterprises and provision of suitable training (Lowe et al., 1995:91).

This approach is closely related to the industrial district model, in which the institutional context of the economic activities plays an important role. An industrial district can be seen as 'a local thickness of inter-industrial relations which is durable in time and forms an inextricable network of positive and negative externalities (and) historical-cultural inheritances' (Becattini (1987), quoted in Iacoponi et al., 1995:34-5). In this system an agglomeration of small and medium sized firms exchanges semi-finished products, which can be described as a collective production process. In this process transaction costs are very low. Technology employed in each firm is very similar and well-known to everyone due to a local technological atmosphere. Hence information costs are also very low. Relations between firms and persons in the local system are not only established by national regulations, but to a large extent by local regulations, rules and customs which have their roots in local historical culture (Iacoponi et al., 1995:34).

The endogenous development model supposes the existence of a local growth potential in each region, that is waiting to be unlocked. However, the model does not define the core of that local growth potential. Slee (1994:191) considers endogenous development not so much as 'a concept with clearly defined theoretical roots but more a perspective on rural development, strongly underpinned by value judgements about desirable forms of development'. Slee (1994:193-4) denies the existence of an endogenous development model; he just views it as an exogenous model, in which external forces are the principal determinants of development, but where endogenous forces may colour the nature of the process. In the endogenous model the emphasis has shifted from a branch-plant strategy towards support for local entrepreneurs, from a single agency activity towards an integrated approach and from a traditional bureaucratic support structure towards a creation of animators with networking functions, but this does not alter the fundamental nature of the

development process. With this criticism we arrive almost as a matter of course at the next model.

(c) mix of the exogenous and the endogenous development approach

This approach relates rural development to the process of increasing globalization, due to rapid technological changes in the communications and information sectors. In this changing global context, actors in rural regions are involved in both local networks and external networks, but the size, direction and intensity of networks vary among regions. Hence rural development is considered as a complex mesh of networks in which resources are mobilized and in which the control of the process consists of an interplay between local and external forces (Lowe et al., 1995).

This view relies on the network paradigm, which is a current interpretative model for explaining both the industrial as well as the spatial patterns of development (see for example Capello, 1996). According to this paradigm innovation is the driving force of economic growth and 'quasi-vertical integration' is the most efficient organization form of production. Quasi-vertical integration is a network of firms, in which the central guideline is 'make together'. The economic efficiency of the system of network firms are the network externalities: advantages related to being part of the network and which belong exclusively to the partners of the network. The paradigm explains local development by adding the role of innovation to the development from below approach. This can be referred to as the 'theory of the innovative milieu', in which dynamic efficiency elements drive the success of a region. Dynamic efficiency is reflected in innovative processes, which include imitation and technological creation, capacity for fast reactions, reallocation of sources from declining sectors and products to new ones using the same basic know-how and capacity for regeneration and restructuring of the local productive fabric following a crisis from the outside. The way innovative milieus are able to achieve this dynamic efficiency is in their capacity to reduce the uncertainty of markets and decision processes and to create the know-how necessary to innovate. This capacity arises both from the development of local networks, which result in a density of relations, informality and openness and by the development of trans-territorial networks, which can be seen as long-distance co-operation and which can provide complementary know-how to cope with intensive technological development (Camagni (1995), quoted in Capello, 1996:492-3).

Local and external networks can be seen as a set of power relations of local and external actors. From the perspective of the exogenous/endogenous approach of rural development the analysis focuses upon questions like: 'which actors come to exercise power over others within and through networks?', 'how are local actors drawn into sets of relations and on what terms?', 'what links local actors to external actors?' and 'how do external actors effect change and control from a distance?' (Lowe et al., 1995:100).

In our project we embrace the mixed endogenous/exogenous approach for several reasons:

- although the exogenous approach allows for a local colour of external forces in the development process, it goes beyond endogenous potentials such as regional identity, entrepreneurial climate and attractiveness of the cultural and natural environment;

- in the changing global situation, in which rural regions are involved in various external relationships, the endogenous approach seems to be out of date, as these external relationships will affect local development;
- the mixed endogenous/exogenous approach, which sees rural development as a mesh of networks, fits well to the current situation of diverse internal and external relationships of rural regions. The emphasise on the interplay of internal and external forces in the development process offers more perspectives for diverse development trajectories of diversified rural regions than the a priori presuppositions of the exogenous or endogenous approach.

2.3 Field of force of rural regions

Starting from the mixed exogenous/endogenous approach, the analysis of employment development of rural regions should take the following elements into account:
(a) identification of the role of the actors in the local networks;
(b) identification of the role of the actors in the external networks;
(c) local resources mobilised in the networks;
(d) external resources transmitted through networks into the rural region.

The analysis of employment development of rural regions can be facilitated by a design of a field of force of rural regions, in which elements (a)-(d) are included (figure 2.1). In this design the current global restructuring process, due to rapid technological changes in the communications and information sectors and due to political changes, is taken into account. The changing global situation results in an intensification of external integration of rural regions. By using the territorial approach, the rural region is presented as a regional economy, which has all kind of exchanges with the external world. Within the rural region we distinguish three closely related components: local resources, economic activities and actors. The component of local resources refers to physical infrastructure (roads, railways, ports etc.), natural resources (like wood and hydropower) and rural amenities. Economic activities refer to all kind of activities in the agricultural, industrial and service sector. Actors are embodied with capacity (knowledge, skills and attitude) and interact with each other in networks. Moreover, actors can be involved in all kinds of relations with the outside world, like the exchange of products, services and know how and contacts with policy makers outside the region. Besides, actors are moving in and out of the region. These actors generally refer to economic active people, to entrepreneurs and retirees. This field of force offers a framework for RUREMPLO in which factors encouraging and hampering the maintenance or increase of employment opportunities can be revealed.

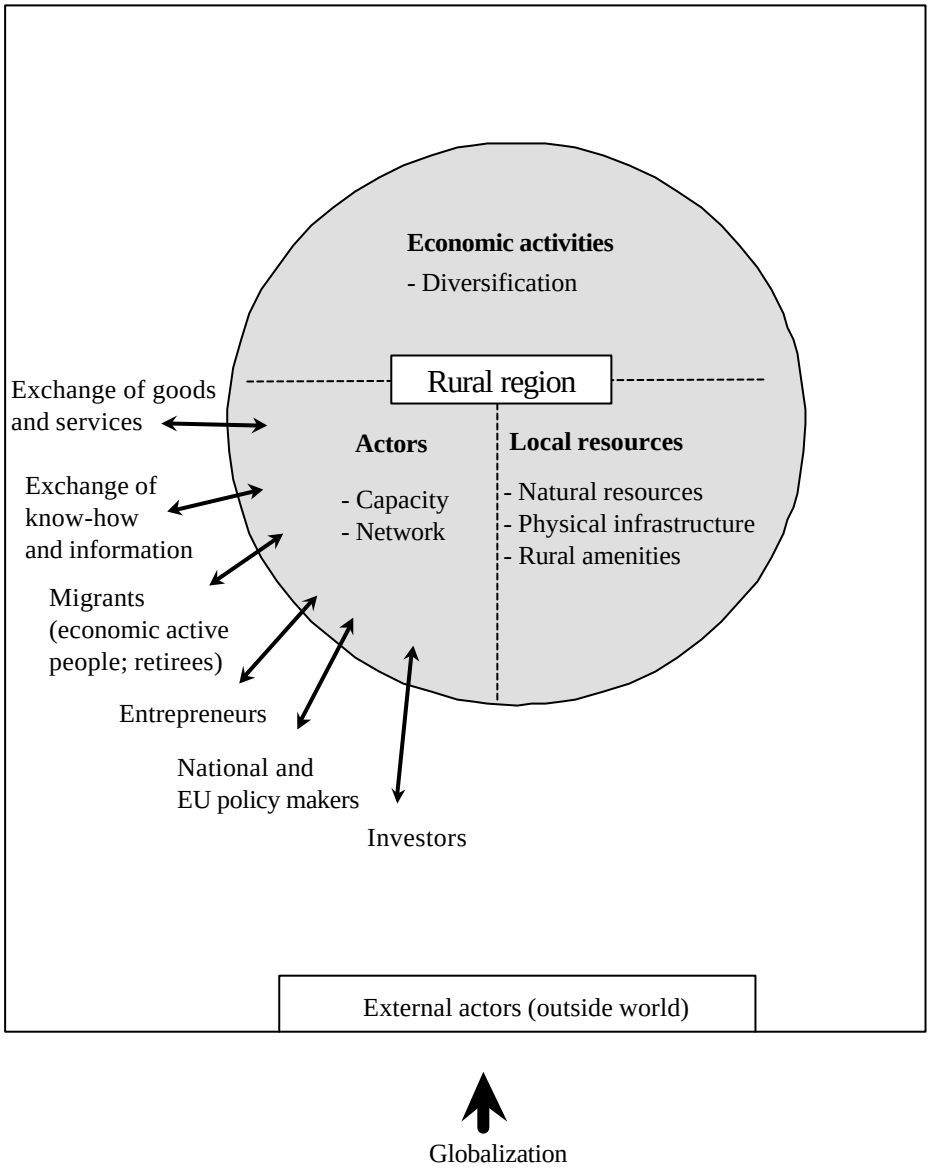

Figure 2.1 Field of force of a rural region

Key issues

In order to facilitate the analysis of the field of force, we have made a list with 12 key issues, referring to each of the three main components. These key issues are:

LOCAL RESOURCES

(1) Do local resources matter in the creation of employment?

(2) Identification of those local resources (including infrastructure) which are important for the creation of employment.

ECONOMIC ACTIVITIES

(3) In which branches does employment increase (decrease)? What are the properties of these branches?

(4) Does the sectoral mix explain the dynamics in employment growth (stagnation)?

(5) Is employment created in small or large enterprises?

(6) Is employment created in new or existing enterprises?

ACTORS: ANALYSIS OF LABOUR SUPPLY

(7) Does the education level of the labour force matter in the creation (stagnation) of employment?

ACTORS: LABOUR MARKET

(8) Is employment hampered by the institutional structure of the labour market?

ACTORS: ANALYSIS OF STRATEGIES

(9) Does the capacity of actors matter in the creation (stagnation) of employment?

(10) Specify the role of internal and external networks in the creation (stagnation) of employment and give an analysis of which actors come to exercise power over others within and through networks.

(11) Give an identification of the most effective policies and strategies towards maintaining or augmenting employment and indicate their local implementation (indicate why policies and strategies failed in maintaining or augmenting employment).

(12) How do farm households adapt to the situation of decreasing employment in the agricultural sector? What are the perspectives for tourism on the farm, landscape conservation and pluriactivity for farm households?

Figure 2.2 Key issues

SWOT analysis

In order to asses the strengths of the various factors in the field of force, a further step in our study was to make a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of these elements. We have carried out a SWOT analysis for 1980 (beginning of the period under study) and 1997 (ending year of the period under study). Usually firms carry out a SWOT analysis in order to assess the prospects of products. However, it has also been used in designing integrated rural development programs (Moseley, 1996). Insight in the strong and weak points, opportunities and threats of a region provides a better understanding of the problems and perspectives of a rural region. The items in the SWOT analysis refer among others to:

STRENGTHS AND WEAKNESSES
- location of the region (proximity to a large economic centre)
- local resources which favour employment
- education level of the labour force
- low cost labour
- well-developed physical infrastructure
- favourable industry structures
- favourable climate
- favourable amenities
- presence of universities and other major research centres
- specialisation of the regional economy
- diversification of the regional economy
- vertical co-ordination within sectors
- horizontal co-ordination across sectors
- capacity (knowledge, skills and attitude) of local actors
- capacity of local actors to innovate
- entrepreneurial climate
- internal networks
- external networks
- market 'niches'
- tourism

OPPORTUNITIES AND THREATS can refer for example to:
- market opportunities (often expressed in relation to a certain sector)
- development of market 'niches'
- development of tourism
- European integration and extension
- political events like GATT/WTO and the transformation process in Central and Eastern European Countries
- improvements in infrastructure (not only in the region itself, but also in other regions like the construction of a highway, which connects the region with a main economic centre)
- improvement of the access to markets

Figure 2.3 Items of the SWOT analysis

2.4 Selection of regions for case studies

In the selection procedure of regions leading and lagging rural regions for case studies we had to address three questions:
- what is an appropriate size for regions?
- what are the criteria for defining leading and lagging regions?
- what are appropriate leading and lagging regions for case studies?

Regional level

In the analysis of employment development in rural regions of the EU in RUREMPLO we have used a regional level, which reflects more or less the size of a functional labour market. For Belgium, Germany, Luxembourg and the Netherlands this implies that we work at NUTS2 level; for the other EU 12 Member States we work at NUTS3 level. For Austria the NUTS classification was inconvenient for analytical purposes, due to specific commuting patterns in mountainous areas. So for this country we delineated 32 regions, which are more or less homogeneous in natural conditions, economic development and political background. For lack of data at NUTS 3 level, also for Finland a classification has been designed into 12 regions for the purpose of this study. By doing so the total number of regions in the EU 15 is 465.

Within this group of regions we made a further distinction into three types of regions, based on population density: most rural regions, intermediate regions and most urbanised regions (Esposti et al., 1999 and OECD, 1994). By doing so 42% of the EU 15 regions were classified as most rural regions and 35% as intermediate regions.

Leading and lagging regions

Within the groups of most rural and intermediate regions we made a further distinction into leading, average and lagging regions, based on the performance of non-agricultural employment growth in the 1980s and early 1990s. A region is considered to be leading when the growth rate of non-agricultural employment was 0.5 percent points above the national growth rate; on the other hand, a region is considered to be lagging when the growth rate of non-agricultural employment was 0.25 percent points below the national growth rate (Esposti et al., 1999). By doing so, about one third of the most rural and intermediate regions is classified as leading and one quarter as lagging.

It has to be emphasised that the labels leading and lagging are only derived from employment performance, and that leading regions may be less successful with regard to other indicators like GDP per capita and unemployment rates. Moreover, it appears that the growth rate of employment can change considerably when using another period. This implies that when a region is labelled as lagging, this is not necessary a permanent situation, but that it can change.

Selection of regions for case studies

In each of the nine participating countries in this project, we selected a leading and a lagging region. We have selected rural regions which were not unique in their development pattern or location, but from which we expected that they could provide insight in the factors behind the process of employment growth/stagnation and lessons for other rural regions. Nevertheless, the selected regions reflect a wide range of characteristics with regard to their location, industrial tradition and physical structure. Since Belgium has few rural regions, we have not selected a lagging rural region in this country. Instead, a French lagging region close to the Belgian border has been selected for a case study.

The selected leading regions are Luxembourg (B), Niederbayern (GER), Korinthia (GR), Albacete (SP), Alpes de Haute Provence (FR), Pesaro (IT), Drenthe (NL), Osttirol (AU) and Keski-Suomen Lääni (FIN) and the selected lagging regions are Lüneburg (GER), Fthiotis (GR), Zamora (SP), Ardennes (FR), Nièvre (FR), Macerata (IT), Groningen (NL), Liezen (AU) and Mikkelin Lääni (FIN) (figure 2.4). This selection contains 4 intermediate regions (the Italian and Dutch regions) and 14 most rural regions.

In two cases the selected regions did not satisfy the criteria on the deviation of 0.5% points above or 0.25% points below the national average growth of non-agricultural employment. This concerns Keski-Suomen Lääni and Fthiotis (GR). For Keski-Suomen Lääni we deviated from the criterion due to the severe economic crisis in Finland in the early 1990s. Fthiotis has been selected, since there was only one rural Greek region (Dytiki Makedonia), which satisfied our criterion. However, as this region is very remote, it is not a representative case of a lagging Greek region. Hence we decided to select a Greek region which was not able to absorb the large exodus of agricultural labour for the case study in a lagging region.

Table 2.1 Employment growth (place of work) in case study regions compared to national growth rates (in % per annum)

	Period	Regional total employm.	Regional non-agric. employm.	National non-agric. employm.	Difference non-agric. employm. nat./reg.
Leading regions					
Luxembourg (B)	'80-'92	0.9	1.2	0.2	1.0
Niederbayern (GER)	'80-'93	0.9	1.7	0.6	1.1
Korinthia (GR)	'81-'91	0.8	3.1	1.8	1.3
Albacete (SP)	'80-'95	0.2	2.1	1.2	0.9
Alpes de Haute Prov. (FR)	'81-'92	0.5	1.1	0.4	0.7
Pesaro (IT)	'82-'95	-0.5	0.1	-0.4	0.5
Drenthe (NL)	'80-'91	3.6	4.2	2.9	1.3
Osttirol (AU)	'81-'91	0.6	1.2	0.7	0.5
Keski Suomen L. (FIN) a)	'80-'93	-1.2	-0.3	-0.6	0.2
Lagging regions					
Lüneburg (GER)	'80-'90	0.2	0.3	0.6	-0.3
Fthiotis (GR)	'81-'91	-0.6	1.9	1.8	+0.1
Zamora (SP)	'80-'95	-2.2	0.1	1.2	-1.1
Ardennes (FR)	'81-'92	-0.6	-0.4	0.4	-0.7
Nièvre (FR)	'81-'92	-0.6	-0.3	0.4	-0.6
Macerata (IT)	'82-'95	-1.5	-1.0	-0.4	-0.6
Groningen (NL)	'80-'91	0.4	2.6	2.9	-0.3
Liezen (AU)	'81-'91	-0.4	-0.0	0.7	-0.8
Mikkelin Lääni (FIN) a)	'80-'93	-1.8	-0.8	-0.6	-0.2

a) Measured at the place of residence.
Source: Eurostat Regio, adaptation LEI.

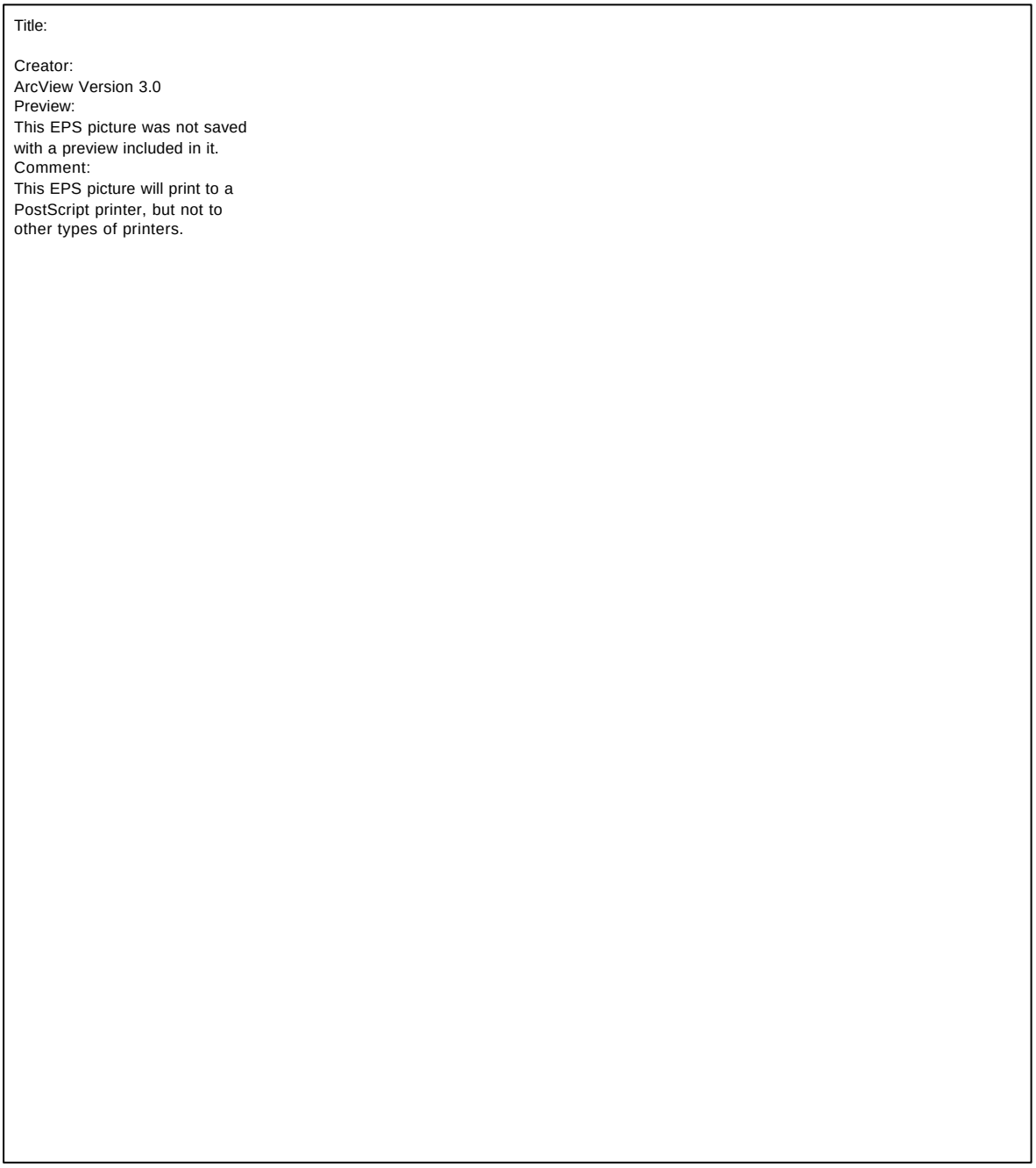

Figure 2.4 Selected case study regions in RUREMPLO
Source: LEI; RUREMPLO project

3. General remarks on the socio-economic situation in the case study regions

In this chapter the 18 case studies are introduced by presenting some socio-economic characteristics. Successively the focus is on the socio-economic development process of the regions till 1980, the development of employment during the 1980s and first half of the 1990s, the development of regional GDP/capita, the size and location of the population and the topography.

3.1 Comparison of leading and lagging regions

Socio-economic development process of the case study regions until 1980

In almost all case study regions the transformation process from an agrarian economy to an industrial economy has been completed before the 1980s. Exceptions are the leading regions of Korinthia and Albacete and the lagging regions of Fthiotis and Zamora, in which dependence on agriculture is still important. These four regions are all located in Spain and Greece.

Development of employment

From the distribution of employment over sectors, it appears that both within the group of leading and the group of lagging regions the sectoral structure is divers: in both groups there are regions with a low or a high share of employment in agriculture. On the whole it looks like whether lagging regions tend to have a somewhat larger share of employment in agriculture, whereas leading regions tend to have a larger share of employment in industries and services.

Both leading and lagging case study regions were faced with a decline in agricultural employment and an increase in service employment since the 1980s. The most striking difference in employment development was the increase in industrial employment in a number of leading regions, which was absent in lagging regions (except for Zamora). Besides, employment in services increased in most of the leading regions at a higher rate than in the lagging regions. So most of the lagging case study regions follow the general trend in modern societies that employment in agriculture and industries decreases and that employment in services increases, whereas leading regions tend to deviate from this pattern.

Development of GDP

Both leading and lagging case study regions tend to have a GDP/capita, which is below the national average. So a good or a bad employment performance does not imply a high or low level of GDP/capita. The relatively lower GDP/capita seems to be more related to the fact that urban regions tend to have a higher GDP/capita than the rural ones. Within countries no pattern can be found that GDP/capita in lagging regions lags behind that in leading regions.

Population and topography

The area size and population size in the case study regions reflect a wide range: the area size varies from 2,000 km^2 to 16,000 km^2 and the population size from 50,000 to 500,000 inhabitants. These differences in size are due to some country specific differences in the size of the labour market area and due to pragmatic reasons in the selection of regions for case studies. The population density in the case study regions varies from 13 inhabitants/km^2 to 188 inhabitants/km^2, reflecting the fact that the case study regions cover both 'most rural regions' and 'intermediate rural regions'. Leading regions showed an increase in population during the last decade, whereas in the lagging regions population declined or showed only a moderate increase. This pattern reveals that employment growth tend to be accompanied by population growth as well.

In about half of the case study regions the population is concentrated in one part of the region or in a few main centres (valleys) in the region. With the exception of Keski-Suomen Lääni this is due to the mountainous state of the region. In the other case study regions the population is dispersed across the region. It is striking that leading regions show more often a concentration of population relatively to lagging regions. This can indicate that there is a relation between a concentration of actors and activities on the one hand and employment growth on the other hand.

3.2 Comparison of leading regions

3.2.1 Socio-economic development process of the leading case study regions until 1980

In all leading case study regions, except for Korinthia and to a lesser extent Albacete and Osttirol, the transformation process from an agrarian economy to an industrial economy has been completed before the 1980s (figure 3.1). In Korinthia and Albacete dependence on agriculture is still important.

Leading case study region	Socio-economic development process of the region until 1980
Luxembourg (B)	Continuous decline of the agricultural sector and in the end of the 1970s closure of iron and steel site. In the 1970s there was a strong increase in the service sector. Also the number of commuters showed a sharp rise in the 1970s.
Niederbayern	Niederbayern (GER) has long been one of the German regions

(GER)	with the lowest GDP per capita, an above average share of agricultural employment with mostly part-time, pluriactive farm households, high unemployment rates and a high share of long distance commuters. It was particularly handicapped by its peripheral location at the iron curtain. It has always been strongly supported by regional policy and profited from a Bavarian infrastructure policy (e.g. in transport and education) which was explicitly territorially targeted.
Korinthia (GR)	In the 1960s there was a predominantly agricultural economy; industrial activities consisted of processing agricultural products and basic consumer goods (clothing, shoes, furniture etc.) for local markets. Turning point: late 1960s/early 1970s: - industrial decentralisation and regional policies; - spill over effects of Athens industrial development; - industrial activities mainly concentrated in level areas; - simultaneously development of tourism along the coast. These new employment opportunities allowed exodus from agriculture.
Albacete (SP)	Until the mid 1970s Albacete was a predominantly agrarian economy with some traditional industries and emigration to other regions. Turning point came after the fall of Franco (1975) and the economic crisis of the late 1970s/early 1980s. This crisis reduced the possibilities for emigrating. Then a period started of: - modernisation of the agricultural sector; - change in the traditional industrial sector due to new enterprises; - creating of an industrial zone; - 1979: State of the Autonomies of the Spanish Constitution, which implied an increase in public expenditure, the emergence of autonomous communities and an almost complete renewal of policy makers at all levels.
Alpes de Haute Provence (FR)	Development was directly from an agrarian economy towards a service oriented economy, dominated by tourism and connected services. The region can be divided into two parts; the Durance valley, which has had industrial sites since the first World War, and the mountain area. In the high mountains tourism (skiing resorts) and other services developed from the 1970's, while the areas of medium high mountains and plateaus have remained significantly agricultural. The service sector has always dominated in the cities of the south, and the region is therefore not heavily marked by industry. The level of employment in services is today very high (73%), which is quite remarkable in a region that has a low popu-

	lation density and lacks big cities.
Pesaro (IT)	In the late 1950s a period of intense industrialisation began. The industrialisation process was characterised by high specialisation in a few branches, high territorial concentration, SME and external economies (industrial district). 1980 is the time at which the industrial take-off came to an end and in which a phase of consolidation and reorganisation gradually began.
Drenthe (NL)	About in 1970 it can be said that the transformation process from an agrarian economy to an industrial economy was completed, and that a next phase started of a gradual decline of the share of agriculture and industries in employment and a further increase in employment in the services sector.
Osttirol (AU)	The transformation process from an agrarian economy to an industrial economy was not yet completed at the beginning of the 1980s, and the increase in both industries and services employment continued. In 1981 about 16% of employment was in agriculture.
Keski- Suomen Lääni (FIN)	The transformation process from an agrarian economy to an industrial economy has been completed, and before the 1980s a phase started of a gradual decline of the share of agriculture and industries in employment and an increase in employment in the services sector.

Figure 3.1 Socio-economic development process of the leading case study regions until 1980

3.2.2 Development of employment in the leading case study regions

From the distribution of employment over sectors (table 3.1), it appears that in the 1990s the share of agriculture in employment is about 10% or less, except for Korinthia. Three regions are characterised by a relatively high share of industries in employment: Niederbayern, Pesaro and Osttirol and two other regions by a relatively high share of services: Luxembourg and Alpes de Haute Provence.

Table 3.1 Distribution of employment over sectors in the leading case study regions (%)

	Year 1	Year 2	Agriculture		Industries		Services	
			Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Luxembourg (B)	1980	1994	11	8	21	20	68	71
Niederbayern (GER)	1982	1992	21	10	43	44	36	46
Korinthia (GR)	1981	1991	47	33	24	22	29	45
Albacete (SP)	1980	1995	33	12	29	30	39	58
Alpes de H. P. (FR)	1981	1996	13	6	27	21	60	73
Pesaro (IT)	1985	1995	9	5	30	43	61	52
Drenthe (NL)	1983	1995	10	7	33	27	56	63

Osttirol (AU)	1981	1991	16	10	34	35	50	55
Keskis L. (FIN)	1980	1995	20	8	34	30	47	62

During the 1990s the number of employed persons varies from 16,000 in Osttirol to about 141,000 in Drenthe (table 3.2). Niederbayern shows an extreme size of about half a million employed persons. Employment growth in the period under study (which varies among regions) was in the range of 7 to 20%, except for Pesaro and Keski-Suomen Lääni, which faced a decline in employment.

Table 3.2 Development of employed persons in the leading case study regions

	First year	Total	Last year	Total	Annual increase (%)	Abs.
Luxembourg (B)	1980	68,000	1995	82,000	1.3	14,000
Niederbayern (GER)	1980	441,000	1993	495,000	0.9	54,000
Korinthia (GR)	1981	46,200	1991	50,100	0.8	3,900
Albacete (SP)	1983	88,700	1993	101,900	1.4	13,200
Alpes de Haute Prov. (FR)	1981	42,300	1996	47,100	0.7	4,800
Pesaro (IT)	1982	141,000	1995	132,000	-0.5	-9,000
Drenthe (NL)	1984	116,400	1996	140,800	1.6	24,400
Osttirol (AU)	1981	16,600	1991	17,600	0.6	1,000
Keski Suomen L. (FIN)	1980	108,300	1994	87,900	-1.5	-20,400

One of the most striking factors is the increase in industrial employment in five regions (figure 3.2). This does not follow the general trend in modern societies that employment in agriculture and industries decreases and that employment in services increases. The regions with an increase in industrial employment are characterised by a relative high share of employment in industries. This could be due to a different stage in the economic development process, i.e. a stage before employment growth in services becomes dominant or to a new distribution of industrial activities between urban and rural regions. With the decrease in transportation costs in developed rural regions and the increase in congestion and environmental costs in urban regions, it becomes more attractive to settle new manufacturing plants in rural regions.

Leading case study region	Period	Total employment	Agriculture	Industry	Services
Luxembourg (B)	‘80-‘95	+	-	0	++
Niederbayern (GER)	‘80-‘93	+	--	+	+
Korinthia (GR)	‘81-‘91	+	--	0	++
Albacete (SP)	‘83-‘93	+	--	+	+
Alpes de H. Provence (FR)	‘81-‘92	+	-	-	+
Pesaro (IT)	‘82-‘95	-	--	+	-
Drenthe (NL)	‘84-‘96	+	-	+	++
Osttirol (AU)	‘81-‘91	+	-	+	+
Keski- Suomen Lääni (FIN)	‘80-‘95	-	--	-	+

Figure 3.2 *Employment growth by sector in the leading case study regions* (++: annual growth rate >5%, +: annual growth rate 0-5%, 0: annual growth rate close to zero, -: annual growth rate -5-0% and --: annual growth rate <- 5%).

3.2.3 Development of GDP and agriculture in the leading case study regions

From the varying GDP growth rates in the case study regions, it appears that a relative high increase in employment is not always accompanied by a considerable increase in GDP as well (table 3.3). According to the different levels of GDP/capita in the case study regions, it can be seen that in an EU context employment growth occurs both in relatively poor and relatively wealthy regions. However, GDP/capita in each case study region is below the national average, except for Korinthia. This relatively low GDP/capita can for example be the result of a low participation rate, a high number of young or elder people or a low labour productivity. In some case study regions the gap in GDP/capita relatively to the national level decreases, in other regions it increases during the period under study.

Table 3.3 *GDP growth and GDP/capita in the leading case study regions*

	GDP growth % p.a.			GDP/cap 1980 (EU=100)		GDP/cap 1994 (a) (EU=100)	
	Period	Region	Country	Region	Country	Region	Country
Luxembourg (B)	'80-'90	2.6	1.9	96	122	101	115
Niederbayern (GER)	'80-'90	3.2	2.8	105	134	113	127
Korinthia (GR)	'81-'91	2.2	1.9	66	51	57	48
Albacete (SP)	'80-'93	2.1	2.5	45	57	46	62
Alpes de H. P. (FR)	'80-'90	-	2.9	-	125	94	116
Pesaro (IT)	'80-'90	1.5	2.0	81	80	105	107
Drenthe (NL)	'80-'93	0.9	1.8	116	124	95	111
Osttirol (AU)	'81-'91	3.8	3.5	86	124	87	122
Keski S. L. (FIN) b)	'80-'95	6.3	6.2	89	101	86	97

(a) Pesaro: 1990; b) GVA for 1980.
Source: GDP/capita from Eurostat, New Cronos, except for Niederbayern, Korinthia, Pesaro and Osttirol.

Niederbayern, Korinthia, Albacete and Keski Suomen Lääni, which had in 1980 a share of agriculture in total employment of 20% or more, experienced a very rapid decline of agricultural employment in the 1980s (table 3.4). The other regions, which had in 1980 about 10-15% of all workers in agriculture, showed also a rather sharp decrease in agricultural employment, except for Luxembourg and Drenthe. The percentage of part time farm holders varies considerably among case study regions, which reflects a country specific pattern.

Table 3.4 Some agricultural indicators in the leading case study regions

	Share agr. in employment (%)		Share agr. in reg. income (%)	% Part time farm holders
	1980(a)	1990(b)	1990(b)	1989/90
Luxembourg (B)	11	9	8	41
Niederbayern (GER)	21	10	4	47
Korinthia (GR)	47	33	38	55
Albacete (SP)	33	16	13	37
Alpes de H. P. (FR)	13	8	-	60
Pesaro (IT)	9	5	4	90
Drenthe (NL)	10	7	6	28
Osttirol (AU)	16	10	4	-
Keski S. L. (FIN)	20	8	9	38

(a) For Korinthia and Osttirol: 1981; for Niederbayern: 1982; for Drenthe: 1983 and for Pesaro: 1985;
(b) For Korinthia and Osttirol: 1991; for Niederbayern: 1992; for Drenthe, Pesaro and Keski S.L: 1995.

3.2.4 Population and topography in the leading case study regions

From table 3.5 it appears:

(a) the area size of the regions varies from 2000 km^2 in Osttirol to over 16,000 km^2 in Keski-Suomen Lääni, although 4 regions are in the size class of 2000-3000 km^2;
(b) disregarding Niederbayern, the population size varies from 48,000 in Osttirol to 460,000 in Drenthe. Korinthia and Alpes de Haute Provence have also a rather moderate population (about 140,000), whereas Albacete and Pesaro have also a relatively sizeable population (about 350,000). Niederbayern has over one million inhabitants;
(c) all regions had an increase in population during the last decade;
(d) population density varies from 16 inhabitants per km^2 in Keski- Suomen Lääni to 171 in Drenthe. From all selected regions Pesaro and Drenthe are classified as 'intermediate rural'; the other regions as 'most rural'.

Table 3.5 Size and population in the leading case study regions

	Size (km^2)	Population 1996 (*1000)		Population growth (% p.a.)	Population density (inh/km^2)
Luxembourg (B)	4,440	241	'81-'91	0.5	54
Niederbayern (GER)	10,325	1,100	'82-'92	0.9	107
Korinthia (GR)	2,289	142('91)	'81-'91	1.4	62
Albacete (SP)	14,924	361	'80-'95	0.6	24
Alpes de Haute Prov. (FR)	6,925	140	'82-'96	1.2	20
Pesaro (IT)	2,892	337	'80-'93	0.1	120
Drenthe (NL)	2,680	460	'80-'96	0.6	171
Osttirol (AU)	2,006	48('91)	'81-'91	0.2	24
Keski Suomen L. (FIN)	16,249	258('95)	'80-'95	0.4	16

In six of the case study regions the population is concentrated in one part of the region or in a few main centres (valleys) in the region (figure 3.3). With the exception of Keski-Suomen Lääni this is due to the mountainous state of the region. In Drenthe, Niederbayern and Luxembourg the population is dispersed across the region.

Leading case study region	Topography of the region
Luxembourg (B)	The north-western part is flat with both agriculture and small size industries. The south-eastern part, close to Luxembourg city is also flat with both agriculture and larger size industries; population density is relatively high. The large central part is characterised by low rather smooth mountains with both forests and extensive grasslands with tourism sites; population density is relatively low. The region is well connected to the European motorway and railway network.
Niederbayern (GER)	Niederbayern is a rather big region but as an administrative and functional region, that is perceived as an entity, it would analytically be inappropriate to split it. The region consists of a less favoured, mountainous eastern part and the more fertile and hilly areas west of the Danoube valley. The population is dispersed across the region. Remoteness has been a major handicap, but transportation infrastructure has been significantly improved (motorways, canal, IC train station).
Korinthia (GR)	The region consists of a mountainous part in the southwest and a hilly/level part in the northeast. The level area covers about 12% of the total area; 59% of the population lives there. The region is connected with the rest of Greece by the Thessaloniki-Athens-Patras highway. Based on national standards, the region has a well developed road system in level areas; however road infrastructure in the mountainous areas presents inadequacies.
Albacete (SP)	The northern part of the region is flat (altitude of about 600 m.), the southwestern part is mountainous and in the south there is a flat area: Hellin Fields. About 40% of the population lives in the city of Albacete. Well-developed highway connections with Madrid and the coast.
Alpes de Haute Provence (FR)	Mountainous region, with high mountains in the east and lower mountains and plateaus in the rest of the region. The most important valley is that of the river Durance in the west. Population and economic activities are concentrated in the valleys. There is a motorway going from Aix to Marseille along the Durance valley; there is a conventional railway among the main cities of AHP; infrastructure in high mountain areas is insufficiently developed.
Pesaro (IT)	The region consists of a rather flat coastal area along the Adriatic, a hilly part and a mountainous part in the Apennines. Three rivers cross the region.

	Population and economic activities are concentrated in the coastal areas. Road infrastructure in the coastal area is rather well-developed, while it is scarce in the inner areas.
Drenthe (NL)	Drenthe is a flat region. Population is well distributed over the region; about two thirds of employment is concentrated in Assen, Emmen, Roden, Hoogeveen and Meppel. These municipalities are well distributed over the region. There is a well-developed high way running north-south; the east-west connection is less-developed.
Osttirol (AU)	Alpine region with 3 main centres: Lienz, Sillian Heinfels and Matrei. 60% of the population and 80% of employment are located in these centres. The most important road connections are the B100, which connects the region with Carinthia and Bolzano, and the B108 (Felbertauern road) which connects Osttirol to the North since 1968 (both roads have one lane in each direction). Osttirol is connected to the railway net: the railway follows the B100.
Keski- Suomen Lääni (FIN)	Flat region with many lakes and rivers. Jyväskylä is the capital of the region, with about 30% of population (74,000 inhabitants) and a high share of economic activities. There are five other main towns (10,000-15,000 inhabitants). Road connections (both north-south and east-west) with the rest of Finland are relatively well-developed.

Figure 3.3 Topography of the leading case study regions

Overview largest cities in the leading case study regions

The size of the main cities in the case study regions shows large differences. In Luxembourg, Korinthia, Alpes de Haute Province and Osttirol cities are moderate (less than 30,000 inhabitants); Albacete and Keski-Suomen Lääni are characterised by one larger city (respectively of 130,000 and 74,000 inhabitants) surrounded by a number of smaller cities, whereas Pesaro, Niederbayern and Drenthe have some medium sized cities of about 40,000-90,000 inhabitants (figure 3.4).

Leading case study region	Overview largest cities in the region	Inhabitants	As % of regional population
Luxembourg (B)	Arlon	23,300	9
	Marche-en-Famenne	15,300	6
	Aubange	14,200	6
Niederbayern (GER)	Landshut	59,100	5
	Passau	50,300	4
	Straubing	41,700	4

Korinthia (GR)	Korinth Loutraki Kiato	27,400 9,400 9,100	19 7 6
Albacete (SP)	Albacete Hellin Almansa Villarrobledo	130,000 24,200 22,600 20,700	36 7 6 6
Alpes de Haute Provence (FR)	Manosque Digne-les-Bains	19,100 16,100	14 12
Pesaro (IT)	Pesaro Fano	80,500 48,700	24 14
Drenthe (NL)	Emmen Assen Hoogeveen	94,000 53,000 47,000	20 12 10
Osttirol (AU)	Lienz Matrei Sillian Heinfels	11,900 4,500 2,900	25 9 6
Keski- Suomen Lääni (FIN)	Jyväskylä Aanekoski Jamsa Keuruu	74,000 13,800 13,100 12,400	29 5 5 5

Figure 3.4 Overview of largest cities in the leading case study region.

3.3 Comparison of lagging regions

3.3.1 Socio-economic development process of the lagging case study regions until 1980

In all regions, except for Fthiotis and Zamora, the transformation process from an agrarian economy to an industrial economy has been completed before the 1980s (figure 3.5). In Fthiotis and Zamora dependence on agriculture is still important.

Lagging case study region	Socio-economic development process of the region until 1980
Lüneburg (GER)	Until 1989 the region was characterised by a 'relative' peripherality at the closed 'iron curtain'. This location prevented major new investments in the eastern part, both public and private. Light industrialisation, food processing etc. was concentrated mainly in the small centres, none of which reached a critical mass for a major take-off.
Fthiotis (GR)	Until the early 1970s there was a predominantly agricultural economy with significant levels of disguised unemployment; industrial activities consisted of processing agricultural products and basic consumer

	goods for local markets; relatively high outmigration. Turning point: economic restructuring from the early 1970s: - industrial decentralisation and regional development policies; - spill over effects of Athens industrial development; - modernisation in the agricultural sector; - expansion of industrial activities (food processing, textiles, mineral resources and metal industries) - industrial activities mainly concentrated along the main highway axis that connects Athens and Thessaloniki - increase in services, a.o. development of tourism along the coast. These new employment opportunities allowed exodus of labour from the agricultural sector.
Zamora (SP)	Until the 1980s Zamora was a predominantly agrarian economy with some traditional industries (mainly processing of agricultural products and hydro electricity production). Emigration to other regions was relatively high.
Ardennes (FR)	The transformation process from an agrarian economy to an industrial economy has been completed. The crisis in the textile sector in the 1960s and the crisis in the iron and steel sector in the 1970s started a decline in the share of industries in employment and a further increase in employment in the service sector.
Nièvre (FR)	The transformation process from an agrarian economy to an industrial economy has been completed. In the 1950s and 1960s the industrialisation of the region was based on the transformation of mining raw products in iron and steel production. The crisis of these activities in the 1970s started a period of firm restructuring (which continued in the 1980s). In the same period, the agricultural sector reinforced gradually its export specialisation of young cattle and grains.
Macerata (IT)	In the late 1950s a period of intense industrialisation began. The industrialisation process was characterised by high specialisation in a few branches, high territorial concentration, SME and external economies (industrial district). 1980 is the time at which the industrial take-off came to an end and in which a phase of consolidation and reorganisation gradually began.
Groningen (NL)	About in 1970 it can be said that the transformation process from an agrarian economy to an industrial economy was completed, and that a next phase started of a gradual decline of the share of agriculture and industries in employment and a further increase in employment in the services sector.
Liezen (AU)	In Liezen industry has a very long tradition, and so in 1981 39% of employment was concentrated there, compared to 13% in agriculture and 47% in services. Since the western parts of the region were traditionally specialised in tourism, the share of industries was even much higher in the central and eastern parts of the region. In the decades before 1980 the industrial sector was based on very large enterprises,

	which partly came into crises since the mid of the 1970s.
Mikkelin Lääni (FIN)	The transformation process from an agrarian economy to an industrial economy has been completed, and before the 1980s a phase started of a gradual decline of the share of agriculture and industries in employment and an increase in employment in the services sector.

Figure 3.5 Socio-economic development process of the lagging case study regions until 1980

3.3.2 Development of employment in the lagging case study regions

From the distribution of employment over sectors (table 3.6), it appears that in the 1990s the share of agriculture in employment is about 10% or less, except for Fthiotis (34%), Zamora (25%) and Mikkelin (16%). Three regions are characterised by a relatively high share of industries in employment: Macerata, Ardennes and Liezen and one region by a relatively high share of services: Groningen.

Table 3.6 Distribution of employment over sectors in the lagging case study regions (%)

	Year 1	Year 2	Agriculture		Industries		Services	
			Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Lüneburg (GER)	1980	1995	14	7	33	32	53	61
Fthiotis (GR)	1981	1991	48	34	22	20	30	46
Zamora (SP)	1980	1993	49	25	18	25	33	50
Ardennes (FR)	1981	1990	10	8	40	37	50	55
Nièvre (FR)	1989	1996	10	8	30	27	60	64
Macerata (IT)	1985	1995	14	10	41	39	45	51
Groningen (NL)	1980	1995	7	3	33	25	59	71
Liezen (AU)	1981	1991	13	10	40	34	47	56
Mikkelin L. (FIN)	1980	1995	27	16	32	26	41	58

During the 1980s the number of employed persons varies from 32,000 in Liezen to about 160,000 in Lüneburg (table 3.7). Employment decline in the period under study (which varies among regions) was in the range of 4 to 25%, except for Groningen and Lüneburg, which faced an increase in employment. In Groningen a substantial part of employment growth consisted of part time jobs.

Table 3.7 Development of employed persons in the lagging case study regions

	First year	Total	Last year	Total	Annual in-/ decrease (%)	Abs.
Lüneburg (GER)	1980	158,300	1990	162,200	+0.2	+3,900
Fthiotis (GR)	1981	60,300	1991	57,000	-0.5	-3,300
Zamora (SP)	1983	69,800	1993	60,300	-1.5	-9,500
Ardennes (FR)	1981	105,200	1993	95,200	-0.8	-10,000
Nièvre (FR)	1981	88,400	1995	82,600	-1.3	-5,800
Macerata (IT)	1982	140,000	1995	115,00	-1.5	-25,000
Groningen (NL)	1985	144,600	1996	187,10	2.4	42,000
Liezen (AU)	1981	32.300	1991	31,100	-0.4	-1,200
Mikkelin L. (FIN)	1980	94,000	1994	70,300	-2.1	-23,700

When looking at the development of employment in the different sectors, it can be seen that employment in the agricultural and industrial sector decreases and that employment in the service sector increases (figure 3.6). Zamora and Macerata deviate from this pattern: Zamora shows an increase in both industrial and services employment and in Macerata employment in the services sector does not increase. So most of the regions in the case studies follow the general trend in modern societies that employment in agriculture and industries decreases and that employment in services increases. However, in most regions the increase in employment in services is not sufficient to compensate the loss of jobs in the agricultural and industrial sector.

Lagging case study region	Period	Total employment	Agriculture	Industry	Services
Lüneburg (GER)	‘80-‘90	+	-	-	+
Fthiotis (GR)	‘81-‘91	-	-	-	+
Zamora (SP)	‘80-‘93	-	--	+	+
Ardennes (FR)	‘81-‘93	-	-	-	+
Nièvre (FR)	‘82-‘90	-	-	-	+
Macerata (IT)	‘82-‘95	-	-	-	0
Groningen (NL)	‘80-‘91	+	-	0	+
Liezen (AU)	‘81-‘91	-	-	-	+
Mikkelin Lääni (FIN)	‘80-‘94	-	-	-	+

(++: annual growth rate >5%, +: annual growth rate 0-5%, 0: annual growth rate close to zero, -: annual growth rate -5-0% and --: annual growth rate <- 5%)

Figure 3.6 Employment growth by sector in the lagging case study regions

3.3.3 Development of GDP and agriculture in the lagging case study regions

Some lagging regions have a GDP/capita above the national average, which shows that regions lagging behind in employment growth do not automatically have a low income per capita as well (table 3.8). In the course of the 1980s, for several regions the gap with the national GDP/capita increases, but there are also regions in which the gap narrows. In most regions GDP/capita is close to the EU average. Three exceptions occur: Fthiotis and Zamora have a GDP/capita, which is only half of the EU average, whereas Groningen has a rather high GDP/capita. However, the high level in this last region is due to the inclusion of the gas revenues in the figure.

Table 3.8 GDP growth and GDP/capita in the lagging case study regions

		GDP growth % p.a.		GDP/cap 1980 (EU=100)		GDP/cap 1994 (a) (EU=100)	
	Period	Region	Country	Region	Country	Region	Country
Lüneburg (GER)	'80-' 90	2.3	2.8	103	134	95	127
Fthiotis (GR)	'81-'91	1.0	1.9	54	51	42	48
Zamora (SP)	'80-'93	1.7	2.5	47	57	51	62
Ardennes (FR)	'80-'93	0.7		112	125	98	116
Nièvre (FR)	'80-'90	-	2.9	95	125	87	116
Macerata (IT)	'80-'93	1.4	2.0	87	80	89a)	88a)
Groningen (NL)	'80-'93	-1.9	1.8	239b)	124	135b)	111
Liezen (AU)	'81-'91	1.7	3.5	103	124	-	112
Mikkelin L. (FIN) c)	'80-'95	5.4	6.2	81	101	72	97

a) 1990; b) Including gas revenues; c) GVA for 1980.
Source: GDP/capita from Eurostat, New Cronos, except for Lüneburg, Fthiotis, Macerata and Liezen.

In the beginning of the 1980s about half of employment in Zamora and Fthiotis was in agriculture (table 3.9). During the 1980s these regions experienced a very rapid decline of agricultural labour. As a consequence, in the beginning of the 1990s only one third of the total labour force in these regions was employed in agriculture. Mikkelin Lääni was also faced with a high decline of the share of agriculture in the total labour force: from 27% in 1980 to 17% in 1990. The other regions had a lower share of employment in agriculture and had a smaller decline of agricultural employment in the 1980s. Despite the high share of labour in the agricultural sector in Zamora, the agricultural sector had only a small contribution to regional income, reflecting a less productive agricultural sector. The percentage of part time farm holders varies considerably among case study regions, which reflects a country specific pattern.

Table 3.9 Some agricultural indicators in the lagging case study regions

	Share agr. in employment (%)		Share agr. in reg. income(%)	% part time farm holders
	1980 (a)	1990 (b)	1990 (b)	1989/90
Lüneburg (GER)	15	7	4	33
Fthiotis (GR)	48	34	29	63
Zamora (SP)	49	32	13	18
Ardennes (FR)	10	8	5('94)	32
Nièvre (FR)	13	10	6('94)	30('88)
Macerata (IT)	14	10	8	83
Groningen (NL)	7	4	4	33
Liezen (AU)	13	10	5	-
Mikkelin L. (FIN)	27	17	17	38

(a) Ardennes: 1981; Nièvre: 1982; Macerata: 1985; (b) Ardennes: 1992; Macerata: 1995.

3.3.4 Population and topography in the lagging case study regions

From table 3.10 it appears:

(a) the area size of the regions varies from about 3000 km^2 in Groningen, Macerata and Liezen to over 16,000 km^2 in Mikkelin Lääni, although only 3 regions are in the size class of over 10,000 km^2;

(b) the population size varies from 81,000 in Liezen to about 570,000 in Lüneburg and Groningen. In the other regions the population varies within a range of 170,000 to 300,000 inhabitants;

(c) Zamora, Ardennes, Nièvre and Mikkelin Lääni had a small decrease in population during the last decade; in the other regions there was a moderate increase;

(d) population density varies from 13 inhabitants per km^2 in Mikkelin Lääni to 188 in Groningen. From all selected regions Macerata and Groningen are classified as 'intermediate rural regions'; the other regions as 'most rural regions'.

Table 3.10 Size and population in the lagging case study regions

	Size (km^2)	Population 1996 (*1000)		Population growth (% p.a.)	Population density (inh/km^2)
Lüneburg (GER)	7,150	576 ('90)	'80-'90	0.1	80
Fthiotis (GR)	4,440	171 ('91)	'81-'91	0.6	39
Zamora (SP)	10,560	205 ('95)	'80-'95	-0.2	19
Ardennes(FR)	5,525	294 ('93)	'82-'90	-0.3	56
Nièvre (FR)	6,820	233 ('90)	'82-'90	-0.3	34
Macerata (IT)	2,770	297 ('93)	'80-'93	0.2	107
Groningen (NL)	2,970	560 ('96)	'80-'96	0.05	188
Liezen (AU)	3,250	81 ('91)	'81-'91	0.1	25
Mikkelin L. (FIN)	16,330	206 ('95)	'80-'95	-0.1	13

In Fthiotis, Ardennes and Nièvre the population is concentrated in one part or in a few main centres (valleys) in the region (figure 3.7), due to the mountainous state of the region.

In the other regions, which include both flat and mountainous regions, the population is dispersed across the region.

Lagging case study region	Topography of the region
Lüneburg (GER)	The region is flat or hilly, with generally poor, sandy soils (historically overgrazed forests). It is characterised by the Lüneburg Heath (nature reserve) and major forest areas. It is located south of the river Elbe. Until 1989 it was handicapped by its location at the 'iron curtain'. Still today many parts of the region have no access to major infrastructure networks. Settlement is very dispersed.
Fthiotis (GR)	Fthiotis is a hilly and mountainous region. There is a central valley along the Sperhis river extending from west to east, which becomes broader as it approaches the sea. The level area covers 20% of the total area and 53% of the population lives there. The region is connected with the rest of Greece by the Thessaloniki-Athens highway. Based on national standards, the region has an average road system in level areas; however road infrastructure in the mountainous areas presents inadequacies.
Zamora (SP)	Zamora is located at the north western corner of the Iberian subplateau at an altitude ranging from 700-900 metres. The north western part is mountainous (about 10% of the total area). The Duero river crosses the region from east to west. The (agricultural) population is well distributed over the region in small towns, except for the medium sized urban centres of Zamora, Benavente and Toro. The Madrid-Galicia highway crosses the north eastern part of the region; other road infrastructure consists of secondary roads, which has been improved in recent years. The connection with Portugal is still in bad condition.
Ardennes (FR)	The region consists of a mountainous part covered with forests in the north, a hilly part in the centre and a flat part in the south. The Meuse river flows from east to north in the region. Population and economic activities are concentrated along the Meuse river. About 60% of the population is concentrated in less than 15% of the whole area of the region, in the urban municipalities settled along this river. Within the region the internal secondary road infrastructure is well developed; however, there are no highway connections with outside. In the past the Meuse river and the canal along the Aisne river played a role in transportation.
Nièvre (FR)	The region consist of the Loire valley with industries and vineyards, a central agricultural part with mainly cattle breeding and grains production and a mountainous part (the Morvan) covered with forest and meadows. Most of the economic activities and population are concentrated in the

	Loire valley with good road and railway infrastructure. On the contrary, transport and communications are more difficult in the Morvan and with the administrative capital of the region (Dijon).
Macerata (IT)	The region consists of a small flat coastal area along the Adriatic, a hilly part and a mountainous part in the Apennines. Two main rivers cross the region, which creates fertile valleys. Population and economic activities are relatively homogeneously distributed over the region. Road infrastructure is insufficiently developed, especially in the inner areas.
Groningen (NL)	Groningen is a flat region. Population is well distributed over the region; about 70% of employment is concentrated in an east-west corridor, running from Delfzijl, via Veendam to the city of Groningen. Infrastructure is rather well-developed.
Liezen (AU)	Liezen is an alpine region. Settlement is confined to the valleys. The western part of the region is dominated by tourism, the centre is characterised by industries and trade and the eastern part is rather remote. 84% of population and 87% of employment is concentrated in the western and the central part. Road infrastructure is rather well developed and has been improved during the 1980s. Main road connections are the motorway A9 (to North and South-East), and the Ennstal-Bundesstraße to the West. The railway net is very good for a rural region like Liezen.
Mikkelin Lääni (FIN)	Flat region with many lakes and rivers. Mikkeli is the capital of the region, with about 16% of population (33,000 inhabitants) and a high share of economic activities. There are three other main towns (13,000-29,000 inhabitants). Road connections (both north-south and east-west) with the rest of Finland are relatively well-developed. Traffic within the region is hampered by the many lakes.

Figure 3.7 Topography of the lagging case study regions

Overview largest cities in the lagging case study regions

Fthiotis, Zamora, Ardennes and Nièvre are characterised by one main city of about 45-70,000 inhabitants, surrounded by a few smaller cities of about 10,000 inhabitants (figure 3.8). Groningen shows the same pattern, but in this region the size of the main cities is larger. In Lüneburg, Macerata and Mikkelin Lääni there are two main urban centres of about the same size. In Liezen cities are rather moderate (less than 7,000 inhabitants).

Lagging case study region	Overview largest cities in the region	Inhabitants	As % of regional population
Lüneburg (GER)	Celle	73,500	13
	Lüneburg	65,100	11
	Uelzen	37,200	6
Fthiotis (GR)	Lamia	44,000	26
	Atalandi	6,200	4
	Stylida	5,000	3
Zamora (SP)	Zamora	66,000	32
	Benavente	16,000	8
	Toro	9,700	5
Ardennes (FR)	Charleville-Mézière	67,200	23
	Sedan	29,000	10
	Rethel	10,500	4
Nièvre (FR)	Nevers	58,900	25
	Cosne sur Loire	13,200	6
	Decize	9,100	4
Macerata (IT)	Macerata	43,040	14
	Civitanova	37,260	13
Groningen (NL)	Groningen	171,000	31
	Hoogezand-Sappemeer	34,000	6
	Delfzijl	33,000	6
Liezen (AU)	Liezen	7,100	9
	Rottenmann	5,400	7
	Bad Aussee	5,100	6
Mikkelin Lääni (FIN)	Mikkeli	32,800	16
	Savonlinna	28,900	14
	Heinola	13,500	7

Figure 3.8 Overview of largest cities in the lagging case study regions

4. Local resources

In this chapter it is analysed whether local resources and related items, like the location of the region (proximity to a regional and global economic centre), a favourable climate and the presence of universities and other major research centres are important for the creation of employment.

4.1 Comparison leading and lagging regions

Rural amenities

Almost all case study regions had some sort of valuable rural amenities: settlements with a rich history and architectural remains, cultural landscapes of outstanding scenic beauty or high nature value, protected areas like regional or national parks. Thus, it is difficult to draw any firm conclusion concerning their weight in explaining differential performance in rural employment creation. The comparisons show that it is not primarily the existence of amenities that matters, but the degree to which these assets are effectively valorised in an economic process generating added value.

Infrastructure

Road infrastructure is in all leading case study regions rather well developed, except for the mountainous parts in some regions, whereas in the most lagging regions road infrastructure is rather well developed in the central part, but insufficiently in the more remote parts. So on the whole in the leading regions road infrastructure is no serious economic constraint for local entrepreneurs. It contributes to an efficient trade of services and goods, and it forms an attractive location for firms to settle. Hence a well developed infrastructure can boost employment. On the other side, the poor situation of infrastructure hampers the economic development in lagging regions.

Location

With some exceptions, both leading and lagging case study regions are peripherally located. So leading regions show that proximity to regional or global economic centres is not a necessary condition for employment growth.

Climate

There is no difference in climate between leading and lagging case study regions: in both groups there are regions with a more favourable climate, regions with a less favourable climate and regions with a comparable climate relatively to that of the surrounding regions. When regions have a more favourable climate, this especially contributes to employment creation in the tourist sector. So in most cases climate is not the explaining factor for differences in employment growth.

Universities

Universities may have a rather large impact on employment and R&D in the region and can act as a pull factor for firms, in particular firms which employ high skilled workers. All leading case study regions, except for Osttirol, have a university or can benefit from a university in a neighbouring region. On the other hand, there are only three lagging case study regions with a university: Lüneburg, Macerata and Groningen. However, the universities of Lüneburg and Macerata have hardly any impact on employment dynamics in those regions, since these are not integrated with the local economy and industrial activities.

4.2 Local resources in leading regions

Local resources matter in the creation of employment

Local resources which affect employment consist in many cases of an attractive landscape and other rural amenities (figure 4.1). It has to be noted that the attractive landscape does often not cover the whole region, but only a part. Except for tourists, also other actors are attracted by the beautiful landscape, like commuting labourers, entrepreneurs, retirees and actors with a second residence. In a few cases local resources serve as raw material for economic activities, for example wood, dolomites and aquifers. Road infrastructure is in all regions rather well developed, either before or during the last decade, except for the mountainous parts in Pesaro, Korinthia and Alpes de Haute Provence and for the east-west connection in Drenthe. This means that on the whole road infrastructure is no serious economic constraint for local entrepreneurs, but that it contributes to an efficient trade of services and goods, and that it forms an attractive location for firms to settle. Hence a well-developed infrastructure can boost employment.

Leading case study region	Do local resources matter	Identification of local resources
Luxembourg (B)	yes	- beautiful landscape with forests, rivers, landscape with grasslands and hedges, monuments and old houses. This region is the only 'real rural region' in the country, and hence its rural character is considered to be a local resource by the Belgians;

		- well developed highway network.
Niederbayern (GER)	yes	- rich cultural landscape and one of the few German National Parks;- strong cultural identity and sense of community, trust and work ethic; - improved transportation infrastructure.
Korinthia (GR)	yes	- sandy coasts, mountain areas covered with forests and natural bio-diversity, villages with traditional architecture, archaeological sites and mineral water springs; - well developed highways in level areas, the Korinth canal, small ports and proximity to Athens.
Albacete (SP)	yes	- landscapes, springs, lakes and mountains in a part of the region; - aquifers (groundwater), mineral water, dolomites, special clay; - well- developed highway network.
Alpes de Haute Provence (FR)	yes	- natural landscape and mountains, which attracts both in summer and winter tourists; - important water resources and dams, used for the production of electricity, mineral water and irrigation; - 'Provence image' (landscape, climate, social climate and way of life); - road infrastructure not in all parts of the region sufficiently developed.
Pesaro (IT)	no	- rural amenities may play a role in future development of touristic employment; - transportation infrastructure is insufficient developed in mountainous parts.
Drenthe (NL)	yes	- beautiful landscape with forests, peats, moors, brooks, 'esdorp' landscape and giant graves; - well developed north-south highway A28 and the less-developed east-west connection N37.
Osttirol (AU)	yes	- beautiful landscape, extensive forests and alpine pastures are important assets; - during the last decade the availability of wood and the Felbertauern Road were the most important local resources.
Keski- Suomen Lääni (FIN)	yes	- forests (input for wood industry), lakes and landscape; - relatively well-developed highway network.

Figure 4.1 Identification of local resources which affect employment in leading case study regions

Location of the leading case study regions

With the exception of the province of Luxembourg, which is close to G.D. Luxembourg, all case study regions have a peripheral location relatively to main European economic centres. Korinthia, Albacete, Alpes de Haute Provence and Drenthe are located close to a regional economic centre; the other regions are also peripheral in this sense. So the location of a region near a regional economic centre can affect employment opportunities, but peripheral regions can show a favourable development of employment as well.

Climate in the leading case study regions

In Korinthia, Alpes de Haute Provence and Osttirol the climate is relatively favourable for tourists compared to other regions in the surrounding, which may contribute to the explanation in employment dynamics in the tourist sector in Korinthia and Alpes de Haute Provence. However, employment in tourism in Osttirol performed relatively worse. In Luxembourg, Albacete and Keski- Suomen Lääni the climate is less favourable than surrounding regions, whereas in Drenthe and Pesaro the climate does not differ from that in surrounding regions. So climate only matters in two regions to some extent.

Universities in the leading case study regions

There are three case study regions with an important university: Niederbayern, Albacete and Keski-Suomen Lääni. These have a rather large impact on employment and R&D in the region and act as a pull factor for firms. The universities in Luxembourg and Pesaro have hardly any impact on employment dynamics in those regions. In Korinthia, Drenthe and Alpes de Haute Provence the lack of a university is not experienced as a severe problem, since these regions benefit from the presence of universities in the neighbouring regions. In Korinthia and Osttirol there appears to be a need for technical colleges to promote innovation, specialisation in agriculture, tourism, administration, etc. and to provide skilled labour to the region. So it appears that in all case study regions there is either a university or there is a university in a neighbouring region, except for Osttirol.

4.3 Local resources in lagging regions

Local resources often matter in the creation of employment

All regions, except for Groningen, are characterised by a beautiful landscape or other rural amenities, which are attractive for tourists (figure 4.2). It has to be noted that the attractive landscape does often not cover the whole region, but only a part. In Ardennes, Nièvre, Liezen and Mikkelin Lääni this attractive landscape results in employment in the tourist sector, whereas in Zamora and Macerata the tourist infrastructure has still to be developed. In several regions mineral resources, the availability of wood and hydropower matter in the creation of employment. In Groningen and Liezen road infrastructure is rather well developed, whereas in Macerata the situation of roads is bad. In the other regions road infrastructure is rather well developed in the central part, but insufficiently in the more remote parts. Ardennes suffers from a lack of connection with outside highways. This

implies that in quite a number of regions the poor situation of infrastructure hampers the economic development.

Lagging case study region	Do local resources matter	Identification of local resources
Lüneburg (GER)	no	- The region is known for its nature reserve, which is an important asset also for tourism development. Some of the cities like Lüneburg and Celle have a rich history and cultural heritage; - On the other hand, the region has suffered from an image of being a dumpsite (nuclear recycling and storage). Also major military training areas are located in the region; - Infrastructure endowment is not optimal. The location close to Hamburg is not necessarily an advantage.
Fthiotis (GR)	yes	- Beautiful landscape, seashores, mountainous areas, cultural and historical heritage, hot springs; however, these are insufficiently exploited in the tourist sector; - Besides the region is endowed with mineral resources (ferronickel, bauxite and chromium); - The highway axis Athens-Thessaloniki attracts new industrial enterprises.
Zamora (SP)	no	- Hydroelectrical production and exploitation of local resources of granite, slate, clay and limestone does not result in much employment; - Historical and cultural heritage (castles etc.) as well as a number of natural parks, but tourist infrastructure is insufficiently developed; - Only Benavente profits from the highway Madrid-Galicia.
Ardennes (FR)	yes	- Beautiful landscape (mountainous forests in the north and open field landscape in the Champagne) and historical monuments (castles from the Middle Ages, fortified churches and abbeys); - Although the region is well-endowed with water ways and secondary roads, it remains outside main highway and railway networks.
Nièvre (FR)	yes	- The most important resources today are landscape (mountainous forest in the Morvan, open fields and meadow landscapes in the central region, rivers and lakes); - Cultural resources (historical, archaeological, and religious) are the base of the development of tourist activities; - Wood has been the main resource during the last centuries (the department has supplied Paris with firewood).

		It is still a resource, but not so important. The mines are run out; - The roads and railways are well developed, but principally along the Loire valley. The secondary road networks are weak and difficult to access in winter.
Macerata (IT)	no	- landscape in coastal area and the national park of Sibillini offer employment perspectives in the future, but until now it had no big impact on employment; - transportation infrastructure is insufficiently developed.
Groningen (NL)	yes	- mineral resources: gas, salt and magnesium chloride; - the system of highways is rather well-developed.
Liezen (AU)	yes	- beautiful landscape, extensive forests and alpine pastures are important assets; - plaster of Paris, salt, talcum, marble, wood and hydropower; - rather well developed road infrastructure .
Mikkelin Lääni (FIN)	yes	- forests (input for wood industry), lakes and landscape; - the numerous lakes imply scattered and in remote parts insufficient infrastructure, but the main towns are rather well connected to the other parts of the country.

Figure 4.2 Identification of local resources which affect employment in the lagging case study regions

Location of the lagging case study regions

With the exception of Ardennes and Nièvre, which are respectively close to G.D. Luxembourg and Paris all case study regions have a peripheral location relatively to main European economic centres. However, the proximity of Nièvre to Paris affects its employment in a negative way. Most case study regions are also peripherally located to a regional economic centre, Groningen and Fthiotis being the exceptions. Groningen is in itself a regional centre for the northern part of the Netherlands and Fthiotis is in between Athens and Thessaloniki.

Climate of the lagging case study regions

In Fthiotis the climate is relatively favourable for tourists, which may contribute to the explanation in employment dynamics in its tourist sector. In Liezen the climate is favourable for skiing during wintertime, but summers are too rainy. In Nièvre, Zamora and Mikkelin Lääni the climate is less favourable than in surrounding regions, especially during wintertime, whereas in Groningen and Macerata the climate does not differ from that in surrounding regions.

Universities in the lagging case study regions

There are three case study regions with a university: Lüneburg, Macerata and Groningen. However, the universities of Lüneburg and Macerata have hardly any impact on employment dynamics in those regions, since these are not integrated with the local economy and industrial activities. The University of Groningen is one of the largest employers in the city of Groningen and encourages a knowledge infrastructure, which attracts many high tech activities and employment. The other case study regions have no university of their own. Liezen reported a need for technical colleges to provide skilled labour to the region.

5. Economic activities

In this chapter we will discuss the properties of the branches which have had an increase in employment and compare these with the branches where employment decreased. For this purpose we have made an intuitive classification of branches according to their exposure to global markets, whether the markets are fluctuating or stable and whether they are labour intensive or labour saving. Such a classification can be useful by examining whether employment growth occurs in branches with specific properties, or that it takes place independently on the properties of branches. It has to be noted that we have made this classification by using 9 branches of the economy, which is quite a high aggregation level. Hence the analysis is rather rough. As next step we turn to the question whether the sectoral mix can explain employment dynamics. Then we focus in more detail on enterprises: is employment created in small or large enterprises and in new or existing enterprises? Finally we elaborate on the industrial structure, specialisation, diversification and coordination in the case study regions.

5.1 Comparison of leading and lagging regions

Employment growth in leading regions not dependent on properties of branches

Rural employment creation results from complex processes of economic growth and decline, structural change, adjustment and innovation. Both in leading and lagging case study regions there was an increase in employment in the sectors of community services and of wholesale and retail trade, restaurants and hotels during the period 1980-1995, along with a decline of agricultural employment. Besides, some leading and lagging case study regions showed also a rise in employment in the sector of financial services. The most striking difference between leading and lagging case study regions was the increase in employment in the manufacturing sector in the leading regions, whereas employment in this sector in the lagging regions tends to decline.

The different branches can be classified according to their exposure to global markets, whether the markets are fluctuating or stable and whether they are labour intensive or labour saving (figure 5.1). A closer look to the properties of the sectors in which employment increases, shows that employment growth in leading regions is not dependent on certain properties: employment increases both in branches exposed and less exposed to global markets, in fluctuating and stable markets and in labour intensive and labour saving branches. However, in lagging regions employment mainly increases in branches characterised by less exposure to global markets, stable markets and labour intensive production. So in leading regions employment development is more vulnerable relatively to lagging regions.

Branch		Globality of markets	Volatility of markets	Nature of employment use
1.	Agriculture, hunting forestry and fishing	GlobM	StabM	LabS
2.	Mining and quarrying	GlobM	FlucM	LabS
3.	Manufacturing	GlobM	FlucM	LabS
4.	Electricity, gas and water	LglobM	StabM	LabS
5.	Construction	LglobM	StabM	LabI
6.	Wholesale and retail trade, restaurants and hotels	LglobM	StabM	LabI
7.	Transport, storage and communication	GlobM	StabM	LabI
8.	Finance, insurance, real estate and business services	GlobM	FlucM	LabI
9.	Community, social and personal services	LGlobM	StabM	LabI

GlobM = branch exposed to global markets; LGlobM = branch less exposed to global markets; FlucM = markets with fluctuating prices; StabM = markets with stable prices; LabI = branches with a relatively slow growth in labour productivity; LabS = branches with a relatively rapid growth in labour productivity.

Figure 5.1 Intuitive classification of branches

Sectoral mix and employment growth

Is employment growth due to a special mix of economic activities, i.e. do the leading regions have higher employment shares in fast growing economic activities than the national average or the national average of rural regions? Or in order words: do these regions have an underrepresentation of employment in shrinking sectors like agriculture and industries and an overrepresentation in expanding sectors like services? If sectoral employment structures do not differ among regions, the residual explaining divergence in employment development can be labelled as 'territorial dynamics'. This is supposed to reflect specific regional characteristics (Von Meyer, 1997:20). In the largest number of the leading and lagging case study regions the sectoral shares of agriculture and industries in employment exceed those of the national economy. Based on such a sectoral mix, a below average growth should be expected. This indeed occurred in the lagging regions. However, it did not happen in the leading regions, which implies that territorial dynamics is an explaining factor of employment growth rather than the sectoral mix.

Employment growth often in small firms

In which firms does employment increase: in small firms (less than 10 employees), in medium sized firms (10-100 employees) or in large firms (>100 employees)? Both in leading and lagging case study regions employment growth takes place in small enterprises. In some regions employment growth in medium sized and large enterprises is reported. However, growth in medium and large enterprises occurs more often in leading regions than in lagging regions. The analysis whether employment is created in new or existing enterprises indicates that this seems to be affected by country specific factors, rather than by being a leading or lagging region. So for most countries it was found that employment in leading and lagging regions is created mainly in new companies, while for a few countries the analysis showed that employment was created in both existing and new companies.

5.2 Economic activities in leading regions

Employment growth not dependent on properties of branches

The different branches can be classified according to their exposure to global markets, whether the markets are fluctuating or stable and whether they are labour intensive or labour saving (figure 5.1). In figure 5.2 it is indicated which branches had a considerable contribution to total employment growth. It appears that the largest part of employment growth occurs in the branch of community services, the branch of trade, restaurants and hotels and the branch of manufacturing and to a lesser extent also in the branch of finance services. This distribution shows that employment growth is not dependent on certain properties: employment increases both in branches exposed and less exposed to global markets, in fluctuating and stable markets and in labour intensive and labour saving branches. The larger share of employment is created in sectors with a labour intensive way of production. In Albacete, Pesaro and Osttirol the increase in branches exposed to global markets, fluctuating prices and a labour saving production process is relatively large compared to other rural regions. In all regions employment in the agricultural sector declines; in Luxembourg (B) and Alpes de Haute Province there was also a rather large decline in construction employment.

Employment growth resulted in a change in the sectoral mix, which consisted in each case study region of a decline in the share of agriculture, a considerable increase in the share of community services and a moderate rise of the share of finance services in regional employment. In Albacete, Pesaro and Osttirol there was also a considerable increase in the share of manufacturing in total employment; on the other hand, this share decreased in Korinthia, Drenthe and Keski-Suomen Lääni. The share of trade, restaurants and hotels increased in Luxembourg, Niederbayern, Korinthia, Albacete, Pesaro and Drenthe, but declined in Osttirol and Keski-Suomen Lääni.

Sectoral mix and employment growth in leading case study regions

Is employment growth due to a special mix of economic activities, i.e. do the leading regions have higher employment shares in fast growing economic activities than the national average or the national average of rural regions? Or in other words: do these regions have an underrepresentation of employment in shrinking sectors like agriculture and industries and an overrepresentation in expanding sectors like services? In six case study regions (except for Luxembourg, Korinthia and Alpes de Haute Provence) the sectoral shares of agriculture and industries in employment exceed those of the national economy. Based on such a sectoral mix, a below average growth should be expected. However the opposite applies in those six regions, which implies that territorial dynamics is an explaining factor of employment growth rather than the sectoral mix.

Leading case study region	1 Agri-culture	2 Mining	3 Manu-facturing	4 Electr./ gas	5 Construc-tion	6 Trade/rest./ hotels	7 Trans-port	8 Finance services	9 Commu-nity services
Luxembourg (B) 1980/82-1994/5	-34		+8		-66	+20	+9	+19	+44
Niederbayern (GER) 1980-1990	-39	-1	+37		-60	+12	+3	+28	+20
Korinthia (GR) 1981-1991	-88	+1	-12	+1	+2	+50	+1	+10	+36
Alpes de Haute Provence (FR) 1981-1992	-14		+1	+1	-86	+23	+3	+36	+44
Albacete (SP) 1983-1993	-93	-6	+18		+11	+20	+5	+2	+36
Pesaro (IT) 1981-1991	-89		+29	+2	-11	+10	+6	+15	+39
Drenthe (NL) 1984-1996	-100		+11		+12	+23	+6	+12	+35
Osttirol (AU) 1981-1991	-73	+3	+43	-10	+18	+1	-17	+11	+25
Keski- Suomen Lääni (FIN) 1980-1994	-34	+1	-31		-15	-9	-9	-2	+99

Figure 5.2 Overview of the share of employment increase/decrease by branch in the total increase/decrease in leading case study regions (%)

Firm size and employment growth in leading case study regions

In which firms does employment increase: in small firms (less than 10 employees), in medium sized firms (10-100 employees) or in large firms (>100 employees)? The picture varies among regions: in Korinthia and Keski- Suomen Lääni employment growth occurs in small enterprises, in Pesaro in small enterprises till 20 employees, in Albacete and Alpes de Haute Provence in small and medium sized firms, in Osttirol in medium sized and large firms and in Luxembourg, Niederbayern and Drenthe in all size classes. Large enterprises with employment growth are usually involved in manufacturing (subsidiary business) and public activities (like hospitals and education institutes).

Employment is created both in new and existing firms

On the whole there is a high dynamic in closing companies and new establishments, which is for a part due to changes in the juridical base. New firms are both established by local and external actors. External actors, like multinational firms, tend to establish rather large business units. In Luxembourg, Korinthia and Albacete employment is mainly created in new firms. In Pesaro employment in industries is also created in new firms, but these firms came often into being by vertical disintegration, so they employed labourers from the en-

terprise before disintegration. Employment in services is created in new firms in Pesaro, which is related to the reorganisation of the service sector. In Alpes de Haute Provence and Osttirol employment growth in industries and private services was mainly in new firms, whereas in public services employment growth was in existing firms. In Drenthe two thirds of gross employment growth took place in existing firms. Also in Niederbayern, the majority of new jobs was created by existing firms. So in some regions employment is mainly created in new firms, whereas in others it is also created for a large part in existing firms.

Situation of the industry structure in leading case study regions

In three case study regions it has been reported that the industry structure was rather favourable: in Keski- Suomen Lääni industry is quite modern and well managed; in Albacete there is a traditional industrial base, flexible, diversified and supplying niches. In Niederbayern industries grew in the 1980s even in those branches that experienced significant decreases at the national level. In Alpes de Haute Provence, Drenthe and Osttirol there are on the one hand large international companies, whose head office is located outside the region and, on the other, hand small to very small companies whose activities concern the local market. Some parts of Luxembourg, Pesaro and Drenthe were selected as objective 2 area in 1989, reflecting a situation of a traditional industry undergoing restructuring. In Luxembourg the industrial structure is characterised by a dualism of very large firms and many small firms. Whether this is a hampering factor cannot easily be analysed, as the dual structure is a common one in Belgium. In all regions there is a restructuring/modernisation process of the industrial structure, which results in some cases in an improvement, like in Osttirol (related to the availability of rather high skilled labour force). From this overview it appears that some regions with a relative high share of employment in the industrial sector are characterised by a rather favourable industrial structure, while in others the industrial structure is in a worse condition.

Specialisation/diversification

The economies of the case study regions - except for Pesaro, Alpes de Haute Provence and Osttirol - are characterised by diversification in the sense that the regional distribution of the different branches in total employment converges towards the national distribution. In Pesaro there is a specialisation towards furniture, textile-clothing and metal manufacturing, in Osttirol towards wood and metal products and in Alpes de Haute Provence towards tourist activities.

Vertical and horizontal co-operation across sectors

In all but two regions vertical integration within sectors does not deviate from that in other regions within the country. In Pesaro there is a strong vertical integration in the furniture sector and in Korinthia a strong external integration in agriculture. On the whole there is no horizontal co-operation across sectors, in most cases due to the low density of firms. Again Pesaro is an exception: in this region horizontal co-ordination was enhanced by the traditional enlarged family structure with flexible allocation of labour, but this horizontal co-

ordination is declining, resulting in a high rigidity in the mobility of resources between sectors.

5.3 Economic activities in lagging regions

Employment mainly created in protected branches

The different branches can be classified according to their exposure to global markets, whether the markets are fluctuating or stable and whether they are labour intensive or labour saving (figure 5.1). In figure 5.3 it is indicated which branches had a considerable contribution to total employment growth. It is mainly community, social and personal services which are responsible for the increase, along with wholesale and retail trade, restaurants and hotels in most regions, except in Mikkelin Lääni. Employment is also increasing in finance, insurance, real estate and business services as well as the transport sector in some regions. Zamora and Groningen are different from the other regions as employment in construction and manufacturing sectors increase here, to be compared to the general decrease in this sector. This pattern reveals that employment in the lagging regions essentially increases in branches, which are protected from the global market, which have stable prices and which are labour intensive.

	1	2	3	4	5	6	7	8	9
Lagging case study region	Agri-culture	Mining	Manu-facturing	Electr./ gas	Construc-tion	Trade/rest./ hotels	Trans-port	Finance services	Community services
Lüneburg (GER) 1980-1990	-14	-2	-13		-64	-2	-5	+54	+46
Fthiotis (GR) 1981-1991	-82	-4	-11		-4	+25		+10	+31
Zamora (SP) 1983-1993	-97		+6		+29	+26			+36
Ardennes (FR) 1982-1990	-33		-59	+9	-4	+63	-4	+8	+21
Nièvre (FR) 1982-1990	-30		-60		-9	+58	+16		+24
Macerata (I) 1981-1991	-76		-15		-8	+21	+4	+9	+66
Groningen (NL) 1984-1995	-65		+12	-35	+4	+12	+7	+29	+37
Liezen (AU) 1981-1991	-40	-3	-48	-6	-3	+5	+21	+33	+41
Mikkelin Lääni (FIN) 1980-1994	-40		-28		-13	-8	-9		+99

Note: For Ardennes and Nièvre, branch 6 contains all market services which are not included in branch 7 and 8.

Figure 5.3 Overview of the share of employment increase/decrease by branch in the total increase/decrease in lagging case study regions (%)

Decrease in employment takes mainly place in the branches of agriculture, manufacturing and construction. Agriculture played an especially big role in the decrease in Fthiotis, Zamora and Macerata, whereas a rather large decreases in employment in manufacturing took place in Nièvre, Ardennes and Liezen. These branches are globally exposed and labour saving.

The development of employment resulted in a change in the sectoral mix, which consisted in each case study region of a decline in the share of agriculture and of industries and an increase in the services sector, in particular in the branch of community services.

Sectoral mix explains in most regions the dynamics in employment

The distribution of employment over sectors might partially explain the decrease in employment. If there is a large share of employment in sectors that generally lose employment (the primary and secondary sectors), it can be expected that employment decreases more than if this is not the case. For Lüneburg, Fthiotis, Macerata and Groningen, the sectoral mix is not believed to have an effect on employment development as it is similar to that of the country as a whole, or to that of the leading region. In the other regions the sectoral mix is thought to contribute to the decline in employment, as there is an overrepresentation of employment in declining sectors, either in agriculture or in manufacturing.

Employment mainly created in small enterprises

The type of companies which creates/loses employment gives a picture of the entrepreneurial climate and situation. In all regions except Liezen employment growth took place in small enterprises. In Ardennes, Nièvre and Liezen medium sized enterprises also showed an increase in employment, whereas in Groningen employment grew in all size classes of enterprises. The increase in employment in small companies shows the importance of these small units for the regional economy.

Employment created in both new and existing enterprises

In Fthiotis, Zamora, Ardennes and Mikkelin Lääni, employment is mainly created in new enterprises, in Macerata, Groningen and Liezen this occurs in both new and existing enterprises and in Nièvre only in existing ones.

Industrial structure, specialisation/diversification and co-operation

The industrial structure is quite weak and disadvantageous, as it is often built on traditional activities which have been forced to go through heavy rationalisation and restructuring in order to face increased global competition. Co-ordination within and between sectors seems to be very limited; the exceptions being Nièvre and Liezen, where there is a certain vertical co-ordination, and Macerata where both types of co-ordination have been and still are important. Due to restructuring and a larger role for small and medium sized enter-

prises, the industrial structure has improved between 1980 and the middle of the 1990s. Nevertheless, this restructuring did not result in the creation of jobs.

6. Actors: analysis of labour supply

In this chapter the key issue 'Does the education level of the labour force matter in the creation of employment?' is addressed. Also attention is paid to participation and unemployment rates.

6.1 Comparison of leading and lagging regions

On the whole it can be stated that in leading case study regions the education level of the labour force is relatively low. However, the employment structure is such, that this type of labour is demanded and the abundance of low skilled labour is a pull factor for industrial firms to settle in these regions. In the lagging case study regions it was often reported that both low and high educated labour was available. So from the labour supply side education was no constraint on employment growth in lagging regions, although a relation between educational attainment and employment growth could not be found. In some lagging regions there is a lack of employment opportunities for highly educated people, resulting in outmigration.

Among participation rates (working population (i.e. employed plus unemployed persons) as percentage of working age population) rather large differences among regions exist, which for a large part can be explained by country specific patterns. Participation rates in the case study regions are in most cases below the national average. Within most countries the participation rates in the leading case study region exceeded those in the lagging case study region, indicating that employment growth has a positive impact on participation rates. Participation rates tended to increase in the leading case study regions in the period analysed, whereas those in the lagging case study regions showed sometimes an increase and sometimes a decrease. With some exceptions there is a tendency in both leading and lagging case studies that female participation rates increase and those of men decrease. A relationship of employment growth and unemployment rates could not be perceived: in some countries lagging regions tend to have higher unemployment rates; in other countries leading regions show higher unemployment rates. Besides, both in leading or lagging regions unemployment rates can be below or above the national unemployment rates.

6.2 Labour supply in leading regions

On the whole it can be stated that the education level of the labour force is relatively low (figure 6.1). However, the employment structure is such, that this type of labour is demanded and the abundance of low skilled labour is a pull factor for industrial firms to settle

in these regions. When other skills are needed, this problem is solved by training at the job/in-company training or by migrants. In Drenthe there was a clear sign that the shortage of high-educated labour discourages the settlement of high tech firms in the region.

Leading case study region	Education level and employment growth
Luxembourg (B)	Local skills shortage is partially balanced by commuting of foreign (French) labourers and by in-company training. There is quite a large labour demand for low educated people; hence the unemployment rate among low educated people is the lowest one from all Belgian regions,
Niederbayern (GER)	The educational attainment level is low in formal terms, but the workforce is generally properly skilled for the work tasks. The skill match is very good and where needed improved by targeted training on the job etc..
Korinthia (GR)	Although the education level is low, firms are satisfied with the level of education of the local labour force (with the exception of tourism, where there appears to be a shortage of skilled labour supply).
Albacete (SP)	The predominantly low-educated workforce is mainly employed by firms, which are competitive due to low labour costs. Skills are improved by training inside and outside the company.
Alpes de Haute Provence (FR)	The region does not suffer from a shortage of skills: immigrants embody any skills needed.
Pesaro (IT)	The labour force is low educated, but close to the national average. The regional industry based its competitiveness on low labour costs and a low-tech process, and hence demands low educated labour. There is hardly any demand for highly educated labour in the region.
Drenthe (NL)	The overrepresentation of low skilled labour was for many (mainly industrial) firms a reason to settle in the region. The relative shortage of high educated labour discourages the settlement of firms who need this type of labourers.
Osttirol (AU)	The skills level is above the rural average in Austria, and this skills and educational level is considered to be one of the main strengths. Firms need to be flexible, service-intensive and customer-oriented in order to be competitive with cheap firms in low-wage countries. For such a kind of production firms prefer medium skilled labourers rather to unskilled labourers.
Keski- Suomen Lääni (FIN)	The education level is relatively low, but this is the type of labour demanded in agriculture and industries.

Figure 6.1 Education level and employment growth in leading case study regions

Increase in participation rates in leading regions

Among participation rates (employed and unemployed persons as percentage of working age population) rather large differences among regions exist, which for a large part can be explained by country specific patterns (table 6.1). Participation rates are in all cases, except for Pesaro, below the national average and can be expected to rise in case of further employment growth. In the period under study this happened already in all case study regions, except for Korinthia. In all regions the participation rates of women are below those of men, but participation rates of women tended to increase (table 6.2). On the other hand, in several case study regions participation rates of men decreased, whereas those increased as well in other case study regions. Unemployment rates in the 1990s were for some case study regions below, and for other regions above the national level. Here again, the differences in the level of unemployment rates are due to country specific patterns.

Table 6.1 Participation rates and unemployment in leading case study regions (%)

	Participation rate						Unemployment rate		
	Year 1	Region	Country	Year 2	Region	Country	Year	Region	Country
Luxembourg	1980	56	60	1995	64	63	1995	9	12
Niederbayern	1980	46	55	1990	58	59	1990	7	6
Korinthia	1981	58	59	1991	56	57	1991	7	8
Albacete	1980	44	49	1995	49	49	1995	25	22
Alpes de H.P.	-	-	-	1990	51	55	1996	12	12
Pesaro	1985	62	60	1994	63	60	1995	5	12
Drenthe	1983	55	58	1995	68	70	1995	8	7
Osttirol	1981	66	69	1991	66	70	1991	3	4
Keski-S. L. a)	1980	63	67	1995	63	65	1995	21	17

a) Refers to population of 15-74 years.

Table 6.2 Female and male participation rates in leading case study regions (%)

	Year 1	Total	Female	Male	Year 2	Total	Female	Male
Luxembourg	1980	56	35	76	1991	64	52	76
Niederbayern	1980	46	37	56	1990	58	42	72
Korinthia	1981	58	29	85	1991	56	32	79
Albacete	1980	44	21	72	1995	49	37	61
Alpes de H.P.	-	-	-	-	1990	51	41	61
Pesaro	1985	62	-	-	1994	63	-	-
Drenthe	1983	55	35	75	1995	68	56	80
Osttirol	1981	66	48	85	1991	66	82	49
Keski-S. L. a)	1980	70	64	76	1995	71	68	74

a) Refers to population of 15-74 years.

6.3 Labour supply in lagging regions

Education level on supply side usually no constraint in lagging regions

In most case study regions the education level of the labour supply is according to the needs of the employers, except for Ardennes and Nièvre (figure 6.2). In these regions traditional industries collapsed and the labour supply is yet insufficiently adapted to the requirements of modern industries. Nevertheless, in a number of regions there is outmigration of high educated people, as demand for high educated labour is too low.

Lagging case study region	Education level and employment growth
Lüneburg (GER)	Employment still grew, although below average. Education seems not to be a limiting factor. What is missing is an entrereneurial climate.
Fthiotis (GR)	The education level is low, but it cannot be considered as a factor resulting in stagnation or decline in employment. With regard to labour skills, they meet in general the needs of the enterprises. Nevertheless, there is ground for improvement, since most enterprises reported training on the job of their labourers.
Zamora (SP)	Both low and high educated labour is available, so from the labour supply side education is no constraint on employment growth.
Ardennes (FR)	Like in Zamora, both low and high educated labour is available, so from the labour supply side education is no constraint on employment growth. However, after the collapse of the main traditional textile and iron and steel industries, the strategy of the remaining enterprises has been modernisation by investing in specialised and high technologies. Hence low educated people are faced with few job opportunities in the region. Because of the population decline and the relatively low economic growth, the service sector could not provide many new jobs for this former industrial manpower.
Nièvre (FR)	Employment growth is on the one hand hampered by a lack of people with a high level of educational attainment (these have to be searched outside the region) and on the other hand by inadequate competencies of a large part of lower educated people (issued by restructured branches).
Macerata (IT)	Both low and high educated labour is available, so from the labour supply side education is no constraint on employment growth. Due to a stagnation of employment in the public sector, in recent years the demand for high educated labour did not increase at a sufficient rate to cover the increase in supply.

Groningen (NL)	The relatively high education level of workers attracts firms, especially in the neighbourhood of the city of Groningen, because of the proximity of the university, the academic hospital and activities in biotechnics and information technology. On the other hand, the supply of low skilled workers attracted industrial firms.
Liezen (AU)	The education level in Liezen is slightly above the rural average in Austria. The education level was not the reason for the decrease in employment.
Mikkelin Lääni (FIN)	The supply of people with a low education level is relatively high due to a high share of agriculture in employment; however demand for this type of labour in industries and other business requiring low and medium skills levels stagnates.

Figure 6.2 Education level and employment growth in lagging case study regions

Male participation rates decline in most lagging regions

Among participation rates (working population as percentage of working age population) rather large differences among regions exist, which for a large part can be explained by country specific patterns (table 6.3). Participation rates are in most regions below the national average. In the course of the 1980s participation rates in Lüneburg, Ardennes, Groningen and Mikkelin increased, those in Nièvre and Liezen remained stable, whereas those in Fthiotis, Zamora and Macerata decreased. In all regions the participation rates of women are below those of men, but participation rates of women tended to increase during the 1980s, except for Fthiotis and Zamora (table 6.4). On the other hand, male participation rates declined in all regions, except for Groningen and Mikkelin. Unemployment rates in the 1990s were for some case study regions below, and for other regions above the national level.

Table 6.3 Participation rates and unemployment in lagging case study regions (%)

	Participation rate						Unemployment rate		
	Year 1	Region	Country	Year 2	Region	Country	Year	Region	Country
Lüneburg	1980	53	55	1990	58	59	1990	9	6
Fthiotis	1981	57	59	1991	53	57	1991	9	8
Zamora	1980	49	49	1995	39	49	1995	18	22
Ardennes a)	1982	73	77	1990	76	79	1994	15	13
Nièvre b)	1990	41	42	1995	41	43	1992	10	11
Macerata	1985	72	60	1994	69	60	1995	5	12
Groningen	1983	55	58	1995	65	70	1996	12	7
Liezen	1981	67	70	1991	67	70	1991	4	4
Mikkelin L. c)	1980	59	67	1995	61	65	1995	19	17

a) Participation rate for the population aged 20-59 years; b) Participation rate is not available; therefore the ratio of the working population and the total population has been used; c) Refers to population of 15-74 years.

Table 6.4 Male and female participation rates in lagging case study regions (%)

	Year 1	Total	Female	Male	Year 2	Total	Female	Male
Lüneburg	1980	53	39	66	1990	58	43	73
Fthiotis	1981	57	31	83	1991	53	30	76
Zamora	1980	49	28	68	1995	39	26	52
Ardennes a)	1982	73	55	90	1990	76	63	88
Nièvre b)	1990	41	34	49	1995	41	38	44
Macerata	1985	72	-	-	1994	69	-	-
Groningen	1983	55	37	72	1995	65	55	75
Liezen	1981	67	49	86	1991	67	53	81
Mikkelin L.	1980	64	61	66	1995	71	66	76

a) Participation rate for the population aged 20-59 years; b) Participation rate is not available; therefore the ratio of the working population and the total population has been used.

Labour market

In this chapter the focus is on the key issue 'Is employment hampered by the institutional structure of the labour market?'. The analysis is divided into two parts:

- Do (minimum) wage policies hamper employment growth?
- Is employment hampered by the way of matching of supply and demand of labour by local agencies/employment services?

7.1 Comparison of leading and lagging regions

A first impression is that the institutional setting of the labour market in leading and lagging case study regions does not differ from other regions in the country, since it is determined at the national level. Hence, minimum wage levels apply for the whole country, and are no specific constraint or incentive for employment growth in the case study regions. The picture of the role of employment services/agencies in matching supply and demand of labour varies: in some regions they show a good performance and in others they are insufficient. However, the performance of employment services/agencies is not related to the status of being a leading or lagging region. In some regions matching of supply and demand often takes place in an informal way, which reduces the role of employment services.

7.2 Labour market in leading regions

Wage policies in the case study regions do not differ from other regions in the country, since these are determined at the national level. Hence, minimum wage levels apply for the whole country, and are no specific constraint for employment growth in the case study regions (figure 7.1). Due to a high rate of self-employment, wage policies in Korinthia only concern a part of all labourers.

Leading case study region	Is employment hampered by wage policy and minimum wages?
Luxembourg (B)	No, the minimum wage policy is the same all over the country.
Niederbayern (GER)	No, wage levels are generally lower in the region, but still higher than in many other EU regions.
Korinthia (GR)	No, due to the high rate of self-employment (about two thirds of the labour force) employment is not hampered by wage policy and mini-

	mum wages.
Albacete (SP)	No, frictions due to (minimum) wage policies are not relevant.
Alpes de Haute Provence (FR)	No, these issues are decided at national level and do not differ between regions.
Pesaro (IT)	No, wages are no constraint for low-skilled workers. However, higher educated people consider minimum wages as too low and look for better job opportunities elsewhere.
Drenthe (NL)	No, the minimum wage policy is the same all over the country. However, the relatively high minimum wage level is too high for some jobs.
Osttirol (AU)	No, in Austria minimum wages are negotiated at national level. In Osttirol the wage level, and especially labour unit costs, is below average. There is no necessity for wage reductions, and so wage policy did generally not hamper employment development. A special problem is the situation of older people, who are frequently fired due to the rigid wage system, which regulates that wage increases with age.
Keski- Suomen Lääni (FIN)	No, the minimum wage policy is the same all over the country.

Figure 7.1 Wage policies as hampering factors for employment growth in leading case study regions

Leading case study region	Is employment hampered by the way of matching of supply and demand of labour by local agencies/employment services?
Luxembourg (B)	No, employment agencies seem to be more efficient in Luxembourg because they are connected to foreign labour markets (France, GD of Luxembourg, Germany).
Niederbayern (GER)	No, the good matching of supply and demand is a key reason of success. Labour offices, chambers of commerce etc. have been particularly active to ensure such a match.
Korinthia (GR)	Yes, the Public Employment Office is not quite effective in matching supply and demand, due to administrative weaknesses of the Office.
Albacete (SP)	No, such frictions are not relevant.
Alpes de Haute Provence (FR)	Yes, although the system is similar all over France. The state employment service is more efficient for giving advise about obtaining different types of aid, than for co-ordinating the needs of employers and job seekers.
Pesaro (IT)	No, since the labour market functions in a prevalent informal way. However, employment services are not able to solve the structural mismatch between the supply of high skilled labour and the lack of demand for high skilled labour.
Drenthe (NL)	No, because these are quite flexible.
Osttirol (AU)	No, such frictions are not of special relevance.
Keski-Suomen Lääni (FIN)	No, the basic structure of job mediation is similar in all regions and available open jobs will normally become occupied.

Figure 7.2 Matching of supply and demand of labour by local agencies/employment services in leading case study regions

Matching supply and demand of labour

The picture of the role of employment services/agencies in matching supply and demand of labour varies among regions. In Luxembourg, Niederbayern, Drenthe and Keski-Suomen Lääni employment services show a good performance in matching supply and demand of labour (figure 7.2). On the other hand, in Korinthia and Osttirol the matching by employment services is insufficient. In Albacete and Pesaro matching of demand and supply often takes place in an informal way, which reduces the role of employment services.

Labour market in lagging regions

Minimum wage levels usually no constraint

Wage policies in the case study regions do not differ from other regions in the country, since these are determined at the national level. Hence, minimum wage levels apply for the whole country, and are no specific constraint for employment growth in the case study regions, except for Liezen (figure 7.3). In Liezen one of the problems during the 1980s was the historically high wage level in large industrial firms. Due to a high rate of self-employment, wage policies in Fthiotis and Zamora only concern a part of all labourers.

Lagging case study region	Is employment hampered by wage policy and minimum wages?
Lüneburg (GER)	No, wages are generally high in all German rural regions. Thus the wage level does not represent a particular handicap.
Fthiotis (GR)	No, due to the high rate of self-employment and small family enterprises employment is not hampered by wage policy and minimum wages.
Zamora (SP)	No, frictions due to (minimum) wage policies are not relevant, also due to the importance of self employment and public employment.
Ardennes (FR)	No, the minimum wage policy is the same all over the country.
Nièvre (FR)	No, because most industry and services sectors (especially the public sector) pay higher wages than the minimum wage.
Macerata (IT)	No, frictions due to (minimum) wage policies are not relevant.
Groningen (NL)	No, the minimum wage policy is the same all over the country. However, the relatively high minimum wage level is too high for some jobs.
Liezen (AU)	Yes, there is a very complicated system of minimum wage contracts (about 600 different contracts), which are negotiated at the national level. A minimum wage increase is negotiated each year, which implies that wages cannot be reduced. Moreover, minimum wages are ranked according to age. Firing workers is costly due to obligation to compensate workers. One of the problems large industrial firms faced in the 1980s was the high wage level. Hence they came into trouble and had to

	reduce employment.
Mikkelin Lääni (FIN)	No, the minimum wage policy is the same all over the country.

Figure 7.3 Wage policies as hampering factors for employment growth in lagging case study regions

Matching supply and demand of labour

The picture of the role of employment services/agencies in matching supply and demand of labour varies among regions. In Liezen and Mikkelin employment services show a good performance in matching supply and demand of labour (figure 7.4). On the other hand, in Lüneburg and Fthiotis, due to administrative weakness and in Groningen, due to lack of instruments, the matching by employment services is insufficient. In Zamora, Macerata, Ardennes and Nièvre supply often takes place in an informal way, which reduces the role of employment services.

Lagging case study region	Is employment hampered by the way of matching of supply and demand of labour by local agencies/employment services?
Lüneburg (GER)	Yes, since the regional labour market is only weak and lacks a clear centre. The surrounding major cities, like Hamburg and Hanover pull in particular highly qualified workforce. The territorial cut of the institutional bodies relevant for matching labour supply and demand (labour offices, chambers etc.) does not always match with the regional boundaries.
Fthiotis (GR)	Yes, the Public Employment Office is not quite effective in matching supply and demand, due to administrative weaknesses of the Office. Matching of labour demand and supply is an informal process in the region.
Zamora (SP)	No, such frictions are not relevant.
Ardennes (FR)	No, because the public institutions (ANPE, the national agency for the compensation of unemployed workers) have not the most important role in the search for a job. Workers and employers use their own networks, the professional training institutions, the interim agencies and the classified advertisement system.
Nièvre (FR)	No, because the public institutions (ANPE) have not the most important role in the search for a job. Workers and employers use their own networks, the interim agencies and the classified advertisement system.
Macerata (IT)	No, since the labour market functions in a prevalent informal way. Institutional frictions in the creation of new employment in public services causes unemployment among higher educated people.
Groningen (NL)	Yes, there is a lack of instruments to promote the employment of unemployed low skilled elder people.
Liezen (AU)	No, such frictions are not of special relevance.
Mikkelin Lääni (FIN)	No, the basic structure of job mediation is similar in all regions and available open jobs will normally become occupied.

Figure 7.4 Matching of supply and demand of labour by local agencies/employment services in lagging case study regions

7. Capacity of the actors

In this chapter it is investigated whether the capacity of actors matters in the creation (stagnation) of employment. Capacity can generally be defined as the ability of actors to co-operate and interact in the market and usually refers to the three aspects of knowledge, skills and attitude. Capacity of actors can be reinforced by the existence of a strong regional identity. The capacity of the next three groups of actors is dealt with in this chapter:

- *policy makers*, who's most important capacity is the ability to act effectively in delivering policies, supporting local initiatives and projects and formulating policies to attract investments;
- *entrepreneurs*, who's most important capacity is their ability to perceive changes and adjust to them, and their willingness to respond to market changes;
- *labourers*, who's capacity lies in their ability to adapt to changes and to adjust their skills to training needs.

8.1 Comparison leading and lagging regions

Capacity of policymakers

In most of the leading case study regions the capacity of policy makers is rather well developed, whereas in most of the lagging case study regions the capacity of policy makers is rather weak. Positive aspects in the capacity of policy makers in leading regions are the way in which they implement policies according to the priorities and needs of the region, in which they are able to attract public funds and private investments and in which they create preconditions for firm settlement. By doing so policy makers contribute to employment creation. Weak points in the capacity of policy makers in lagging regions refer to a lack to formulate strategies, lack of political consensus, lack of good contacts with upper level authorities and lack to identify the needs and priorities of the region.

Capacity of the entrepreneurs

In a number of leading and lagging case study regions the capacity of entrepreneurs is well developed. This is often the result of a restructuring process in traditional industries. The new and small companies are competitive at national and international markets. However, their capacity to innovate is often limited. In other leading and lagging case study regions the capacity of entrepreneurs is weak, due to a cautious and risk averting attitude or to lack of industrial tradition.

Capacity of labourers

The capacity of labourers seems to be roughly the same in leading and in lagging case study regions: their attitude to work is good and they are prepared to work hard.

8.2 Capacity of actors in leading regions

Capacity of policy makers

In most case study regions, except for Korinthia and Pesaro, the capacity of local policy makers is considered to have a positive influence on the creation of employment. The capacity is reflected among others in the way in which policy makers implement policies according the priorities and needs of the region, in which they are able to attract public funds and private investments and in which they create preconditions for firm settlement (figure 8.1). The lack of capacity of local policy makers in Korinthia and Pesaro resulted in inadequate formulating and implementing of policies and in weak administrative management.

Capacity of entrepreneurs

Entrepreneurs in Niederbayern, Korinthia, Albacete, Alpes de Haute Provence, Pesaro and Keski-Suomen Lääni are embodied with high capacities. This is reflected in the creation of new, mainly small enterprises, often as a response to a crisis in traditional industries. These new enterprises are well fitted to competition at regional and global markets. In Luxembourg, Drenthe and Osttirol it was reported that local entrepreneurs are cautious and risk averting and have a low capacity of innovation. New coming people often act as innovators in those regions.

Capacity of labourers

In all regions the capacity of labourers is considered to be good. Their attitude is often described as a 'rural attitude', indicating that labourers are prepared to work hard.

Leading case study region	Does the capacity of actors matter in the creation/stagnation of employment?
Luxembourg (B)	The region is characterised by a strong regional identity, which induced the creation of a strong political and social consensus. Local policy makers were able to restore the image of the province, to attract many public funds and private investments by creating and reviving external political and economic networks. Local entrepreneurs are cautious and risk averting and have a low

	capacity of innovation, which is partly caused by fears for paying higher corporate taxes. New coming people often act as innovators. The labourer's attitude to work is good without class struggle tradition. This attitude is often referred to as a rural attitude.
Niederbayern (GER)	The region has a strong regional identity, based on a distinct culture and history. A common perception of the initial natural, location and developmental disadvantages fostered co-operation and helped turning handicaps into development assets: national park, tourism potential, reliable work force stemming from small part-time farms etc. Without external (policy) support, however, it would have been difficult, if not impossible, to launch a similar economic process. The very active regional policy support has been a major strength, but this is now losing importance. Entrepreneurs showed strong commitment and innovation capacity. The properties of the labour force are seen as a strong point.
Korinthia (GR)	The mechanisms of policy makers for planning, formulating, implementing and monitoring of programmes are not adequately developed. Due to the region's proximity to Athens, local actors have traditionally been more open and responsive to changes. This dynamism is reflected in the establishment of a large number of small enterprises in the service sector by local actors (services is the employment generating sector in the region). Despite the new firms, there is hardly technological innovation. Labourers attitude is very flexible due to the prevailing small business size and a flexible labour market. A weakness is the non-adequate co-operation among local actors.
Albacete (SP)	The new political–administrative organisation and the decentralisation of the policy making process resulted in a renovation of policy makers. The new policy makers were young and well-trained, and they were able to implement policies enforcing the socio-economic development of the region. The restructuring of the traditional industries (textile, clothing and footwear) resulted in new small enterprises, which are able to compete at the local and global market. Entrepreneurs are able to find market niches (like sport knifes and quality shoes). Labourers have a good attitude to work, and are prepared to work hard.
Alpes de Haute Provence (FR)	Policy makers are able to identify needs in the regions and to deliver policies according these needs. They have also good contacts with the upper level authorities. Entrepreneurs (both local and in particular newcomers) are innovative in searching for new initiatives and products as well as new ways of marketing of products. The technical and managerial knowledge of entrepreneurs is less developed. There are two kinds of labourers. Those who work in the services and particularly in the tourism are seasonal workers and usually work hard.

	They sometimes come from outside of the region. Those who work in the industrial sector have no social struggle tradition. They can be easily trained, if the technological level of the industrial sector requires it.
Pesaro (I)	The role of policy makers in the development was marginal. They lack capacities to implement appropriate policies and they suffer from weak administrative management of policies. In recent years the capacity of policy makers showed an improvement. The recent industrial growth is greatly based on the local entrepreneurial attitude. The sharecropping tradition, the enlarged and pluriactive family structure, the attitude towards risk, creativity, local informal diffusion of knowledge and skills represented the main resources for the development. During the last decade entrepreneurs were able to reorganise their industrial activities in order to face the changing market conditions and global competition. Industrial labourers are flexible, creative and highly motivated.
Drenthe (NL)	Policy makers are able to implement policies according the needs and priorities of the region within a broader development perspective. Recently they have improved the co-operation with the neighbouring regions. Entrepreneurs are often risk averting and cautious, which hampers employment creation, while the labourers generally have a good attitude towards work, which favours employment creation. Due to the waiting attitude of Drench people, their capacity to innovate is rather low. New coming people often act as innovators.
Osttirol (AU)	Local policy makers were able to create good preconditions for industrial development (industrial zones with appropriate infrastructure), showed co-operate behaviour towards firms and stimulated the creation of education facilities. Entrepreneurship is less developed then elsewhere in Austria, partly due to the risk averting and conservative attitude, partly due to the long period of isolation. The innovation capacity is low. Labourers generally have a positive attitude to education and permanent education and are working hard, which is perceived as a strength by firms.
Keski-Suomen lääni (FIN)	The capacity of the actors and their capacity to innovate is not significantly different compared to the general situation in the country.

Figure 8.1 Capacity of actors in leading case study regions

8.3 Capacity of actors in lagging regions

Capacity of policy makers

The capacity of policy makers is rather weak, except for Groningen. Shortcomings in the capacity are a lack to formulate strategies, lack of political consensus, lack of good contacts with upper level authorities and lack to identify the needs and priorities of the region (figure 8.2). In Groningen the capacity of policy makers has improved since the beginning of the 1990s, amongst others by pressure from firms and by a gradual replacement of old policy makers by a new generation.

Capacity of entrepreneurs

In Ardennes, Nièvre, Macerata and Liezen a restructuring process in industries took place in the 1970s/1980s. As a result, the remaining or new firms were competitive in national or international markets. As many of the new firms are rather small, their capacity to innovate is often limited. Entrepreneurial capacity in Fthiotis and Zamora is low, due to the absence of an industrial tradition. In Lüneburg an inspiring entrepreneurial climate is lacking. On the other hand, the capacity of entrepreneurs in Groningen is well developed, since a rather long industrial tradition exists in this region.

Lagging case study region	Does the capacity of actors matter in the creation (stagnation) of employment?
Lüneburg (GER)	The relevant government body, the Berzirksregierung Lüneburg, has to cover an area that is much bigger and more heterogeneous than the case study region. The lack of a coherent vision on the region is considered to be a major handicap. The main deficiency is not primarily the capacity of entrepreneurs, but the lack of an inspiring entrepreneurial climate, based on a regional identity and vision. The 'comparatively' peripheral location led to a rather pessimistic attitude. The fact that the next major economic centre, Hamburg, belongs to a different Bundesland, limits positive impulses.
Fthiotis (GR)	Policy makers' capacity to formulate strategies and effective policies is rather weak. This capacity is further constrained by the centralised administrative system and decision making in the country, which however changes progressively. Besides, the region does not have a tradition in entrepreneurship, and this constrains initiatives from entrepreneurs. Most large manufacturing companies originate from outside the region. Labourers have satisfying skills, but there is space for improvement. In conclusion, the lagging level of development of the area reflects not so much the lack of natural resources or infrastructure, but a lower ability of the local actors to perceive and adapt to changing conditions.
Zamora (SP)	During the transition to a democracy in the 1980s, the renovation of the political class was practically non-existent. Often policy makers are old conservative farmers, who tend to personalise their political activities and show dictatorial properties. Policy makers have a local vision on events.

	Due to lack of industrial tradition, the group of entrepreneurs is small. Entrepreneurs have a limited horizon, which coincides with the pessimistic economic climate in the region, and are mainly oriented at the local market. They have a waiting attitude, expecting that everything will be done by the public administration and there is insufficient co-operation among entrepreneurs, although there are some exceptions. Labourers: migration continues amongst the more skilled section of the labour force. Those who remain expect high salaries despite relatively low skill levels There is no tradition of social conflict within the workforce.
Ardennes (FR)	The region has a strong identity, which does not result in a particular dynamism compared to other regions. The main feeling of people is to be far from the national centre (Paris), rather than close to the centre of Europe. This feeling of abandonment also exists towards Reims, the capital of the NUTS2 region. There is no political consensus inside the region between the regional council and the municipalities in the field of regional development, due to the economic heterogeneity of the different parts of the region. This resulted in an underutilisation of the EU Structural Funds. The entrepreneurs of the family enterprises in the iron and steel industry were well known as being conservative, risk averting and unable to adopt the technological change. Since 1980, the weight of these very conservative entrepreneurs in the local economy has decreased a lot. The managers of the surviving enterprises had to adapt to global market competition by diversifying or specialising in market niches, introduced new ways of management and modernised production processes. However, most manufacturing enterprises are too small to have sufficient research and development activities and to scan the up to date information on the new technologies like the new metal materials. The marketing activity of these small enterprises is usually very poor. The attitude of workers and employees towards work is very good. However, the education level and the skills of old and young people is not adequate to the labour demand. The labour force has been adjusted in a slower way than entrepreneurs to market and technological changes.
Nièvre (FR)	In the 1980 Nièvre had several powerful politicians, who went to national politics. These favoured the public sector. Today, the policy makers are less powerful, and priority is given to development of employment in the private sector in the regional context. Local policy makers do not have good access to the regional policy makers in Dijon. Entrepreneurship is less developed than in some other regions and entrepreneurs are risk averse. The innovating capacity is quite weak, except in the automotive sector. Education and skills of the labour force is on average at a good level. A problem is that after the industrial restructuring, some groups of work-

	ers have no more the qualifications for the new jobs.
Macerata (I)	Policies and strategies of policy makers on regional employment dynamics are generally considered not very relevant. The regional economy is traditionally based upon spontaneity and individualism; all these activities are continuously created and destroyed and are driven basically by market opportunities and changes; the capacity of policy makers to affect these processes is quite small. Recently, a role played by policy makers has been the creation of incentives to invest in inner and rural areas not involved, or no more involved, in intense industrial growth. These rural policies were greatly promoted by EU policies. In the 1980s many inefficient firms were forced to close when faced with international competition. The reduction of industrial firms is a consequence of the selection process that increased the capacity of entrepreneurs to be competitive on international markets. During the 1980s and the first 1990s a typical strategy of labourers has been to create new small firms related to the former bigger firm in which they were employed as workers. The need of more flexibility and competitiveness of the local system required a hierarchical reorganisation implying the creation of new small activities specialised in specific phases of the production process. The increase in self-employment and the reduction of the number of workers is a typical effect of this tendency. On this line, still important is the house-working, especially in shoes production, that mainly involves female labour force allowing it to be integrated with other sectors (for instance agriculture) and with other house activities.
Groningen (NL)	The insufficient co-operation with the provinces of Drenthe and Friesland, and the rather strict attitude of policy makers towards entrepreneurs were weak points in the early 1980s. However, since the end of the 1980s the attitude of policy makers towards entrepreneurs has been changed and in recent years the co-operation between policy makers of the three northern provinces has been improved as well. Policy makers are rather dynamic and dare to launch innovative plans. Groningen has a long tradition of industrial entrepreneurship. Entrepreneurs are conscious of making their business sites attractive for other firms in order to increase the density of actors in the network, increase opportunities for complex building and for sharing service units. Due to the dependent attitude of Groningen people, their capacity to innovate is rather low. However, when they are convinced by other people of an innovation, they put their doubts aside and embrace the new ideas. Innovating local actors are mainly originating from the groups of young people, policy makers and entrepreneurs. The attitude of labourers to work is general referred to as good and loyal. There is a tradition of class struggle in the southeastern part of the region.
Liezen (AU)	The capacity of policy makers is seen as a weakness. Policy makers

	were more or less confined to help the old large firms in crisis while active settlement policies were rare. Successful initiatives in tourism and trade came rather from private initiatives than from policy makers. Traditional metal and non-metallic minerals industries collapsed, as these could not compete at a global level. New competitive firms emerged, both in industries and services. The attitude of labourers to work is good, but skills are not always at a high level.
Mikkelin Lääni (FIN)	No significant differences in the capacity of policy makers, entrepreneurs and labourers can be indicated as compared to the general situation in the country. Regional identity is important, for example, for firms to engage in development projects.

Figure 8.2 Capacity of actors in lagging case study regions

8. Networks

A network is considered here to be a group of actors, who interact with each other in order to achieve some aim. The network can be formal or informal, its actors can interact frequently or infrequently, it can consist of a large or small number of actors, it can be homogeneous or heterogeneous qua composition of actors, and its aim can be clear or rather vague. In our study we focus on those networks, which affect employment opportunities.

The mixed exogenous/endogenous development approach relates rural development to the process of increasing globalisation, due to rapid technological changes in the communications and information sectors. In this changing global context, actors in rural regions are involved in both local networks and external networks, but the size, direction and intensity of networks vary among regions. Hence rural development can be considered as a complex mesh of networks in which resources are mobilised and in which the control of the process consists of an interplay between local and external forces (see section 2.2). In this chapter the focus is on the key issue 'Specify the role of internal and external networks in the creation of employment and give an analysis of which actors come to exercise power over others within and through networks'. In the analysis this key issue has been divided into four subissues:

(a) Give an assessment of the internal networks;
(b) Give an assessment of the external networks;
(c) Identify the contribution of internal networks and external networks to employment growth;
(d) Does the engine behind employment growth come from endogenous or exogenous forces?

9.1 Comparison of leading and lagging regions

Internal networks

On the whole leading case study regions were characterised by rather strong internal networks, whereas those in the lagging case study regions were usually rather weak. The internal networks in the leading regions were for example enhanced by an active attitude of local actors, solidarity, easy communication and strong local leaders. Problems faced in the internal networks in the lagging regions are a low density of actors, little interaction among internal actors, a lack of co-operation among sectors, internal conflicts, lack of active actors, lack of capacity of local actors and lack of formal networks, which are able to guide the development process.

External networks

External networks are considered here to be the interactions of actors inside and actors outside the region. It appears that the most frequent use of external networks is to get financial support from regional/national/EU level (policy relations), to export products (market relations) and to be in contact with (multinational) firms, either because the presence of subsidiary business in the region or to attract firms into the region (firms relations). In the leading case study regions external networks functioned better than in the lagging case study regions. Difficulties in the external networks of lagging case study regions are due to the marginal/remote position of the region within a larger administrative unit, lack of unified strategies, lack of capacities of the local actors and an inward looking attitude of the local actors.

Contribution networks to employment growth

As a result of the better functioning of the networks in the leading case study regions, networks in leading regions had a positive impact on employment dynamics. On the other hand, in most of the lagging case study regions networks did not play an important role in employment creation.

Engine behind employment growth

The engine of employment growth consists of a mix of endogenous and exogenous forces in all case study regions, except for Pesaro and Macerata. In these regions, which belong to the so-called 'third Italy', industrial districts exist and endogenous forces are the engine of employment growth. It is striking that in leading regions endogenous forces tend to initiate the process of employment growth, which were subsequently enhanced by exogenous forces. In lagging regions it was often found that exogenous forces tend to initiate the process of employment growth, and that endogenous forces react on them.

9.2 Networks in leading regions

Internal networks

Except for Korinthia, all case study regions are characterised by rather strong internal networks, although differences in emphasise exist among regions (figure 9.1). In Luxembourg and Niederbayern the internal networks are based on an active consciousness of regional identity. Policy makers in these two regions are very successful in promoting their region at higher policy levels. The informal internal networks in Pesaro and Albacete are typical examples of networks in an industrial district. Since some of our case study regions are quite small, it was reported in Luxembourg, Drenthe and Osttirol that most internal actors know each other, which facilitates communications.

Leading case study region	Assessment internal networks
Luxembourg (B)	Traditionally, actors have an active attitude. Networks are characterised by a high degree of solidarity and easy communication. Politicians, union leaders, managers of public and private enterprises know each other very well and solidarity is close to unity. Institutional networks of the province are strong and efficient. The province counts some dynamic and motivated national, regional and local leaders at the political, administrative and organisational levels.
Niederbayern (GER)	Internal networks are very strong and an essential reason for the success of Niederbayern. These networks are both formal and informal and have several underlying bases and ties. Some of them are a common socio-cultural regional identity based on history, religion, political affiliation etc.. An important network is obviously provided by the Bavarian Christian Social Union (CSU) that has always been in power since World War II. At the same time, strong local and regional leaders have always been supported by the population.
Korinthia (GR)	Networks of internal actors exist and are institutionally established (Chambers, Co-operatives, Unions, Labour Union, Hotel Enterprises' Associations, etc.). Internal networks are functioning mostly on an individual base and are not effectively linked. So, there is little interaction among internal actors and its effect on the employment process is relatively marginal. Hence networks should be enriched in the region, the existing ones should be developed and their functioning should be improved.
Albacete (SP)	In Albacete there are strong formal and informal internal networks. The cases of informal networks are the industrial districts (shoes in Almansa, knifes in Albacete-city and chairs in La Guineta). The formal networks refer to co-operatives and entrepreneurial organisations. Several Leader I and II groups are active, promoting interaction among local actors. Both within the circle of policy makers and entrepreneurs there were local leaders, which were born in Albacete. Some of them had been studying and/or working out of the region (in the industrial areas of Spain) and returned back to the region.
Alpes de Haute Provence (FR)	Internal networks function well, such as winter sports associations. However, a certain amount of competition remains between towns, subregions and tourism resorts. Local administrative layers are able to identify the needs of the region (among other the stagnation in the quality of the tourist accommodations) and try to relieve these problems.

Pesaro (IT)	Informal internal networks are determinant for the diffusion of knowledge within and between the firms, commercial relations within the industrial district, heterogeneity and division of role and labour within the traditional family. Formal and institutionalised networks are not so relevant.
Drenthe (NL)	The networks in Drenthe are characterised by a high degree of solidarity and easy communication. The functioning of the internal networks is assessed to be reasonable or good; however, due to the relatively low density of actors and infrequent contacts, the incentive to innovate is rather small. Local leaders in the network are often from non-Drench origin.
Osttirol (AU)	Due to low population density people generally know each other, and know what happens in the close neighbourhood, and so many things happen on the basis of personal relations. This concerns relations of local entrepreneurs, politicians and interest groups. The most important networks are the interest groups like the chambers of commerce, labour and agriculture and the Labour Market Service. At the local level the chambers are primarily engaged in lobbying, providing information and education programs, and have a mediating role between politicians, entrepreneurs and labourers. Official private networks among enterprises do only exist in tourism (marketing) and agriculture (machinery ring). Co-operation works well among policy makers, entrepreneurs and interest groups.
Keski-Suomen Lääni (FIN)	Internal networks are well developed within sectors, especially in the central part of the region around the capital of Jyväskylä; intersectoral networks are less developed. Internal networks are strongly affected by external networks.

Figure 9.1 Assessment of the internal networks in leading case study regions

External networks in leading case study regions

External networks are considered here to be the interactions of actors inside and actors outside the region. It appears that the most frequent use of external networks is to get financial support from regional/national/EU level (policy relations), to export products (market relations) and to be in contact with (multinational) firms, either because the presence of subsidiary business in the region or to attract firms into the region (firms relations) (figure 9.2). In Pesaro the emphasise in the external networks is on market relations; in the other case study regions external networks perform all three functions. It seems that external networks show an excellent performance in Luxembourg and Niederbayern, that these are rather weak in Korinthia and work rather well in the other case study regions.

Leading case study region	Assessment external networks
Luxembourg (B)	External networks are well-developed in both the public and in the private sphere, and at both regional, federal and European levels. The strength of the local authorities (municipalities and province) in external networks is that they negotiate with upper authorities on the basis of their political consensus. Thus they could impose a territorial approach rather than the Belgian prevailing 'political parties' approach. The European Development Pole and the relatively high importance of subsidiary businesses link the region with economic opportunities outside the region and abroad. Political and economic actors from the region usually work hand in hand in external networks. The specificity of the region is also the high number of commuters working in the GD of Luxembourg. Recruitment depends on strong informal external networks, but it is supported by a formal co-operation between labour administrations of both the Province of Luxembourg and the GDL.
Niederbayern (GER)	Local MPs from all parties representing the region in the Bavarian Parliament in Munich, as well as in the Federal Bundestag in Bonn, created a kind of lobbying association working co-operatively in favour of the region. All together they have been successful in ensuring strong (regional) policy support for the region and in attracting private investments, tourists etc..
Korinthia (GR)	External actors, interacting with internal ones refer mainly to national authorities, importers of agricultural and industrial products produced in the region, external enterprises investing in the region and tour operators. In general, the interaction of internal and external actors is not optimal, so there is ground for further development and strengthening of this interaction.
Albacete (SP)	External networks consist of market relations (mainly exports of footwear and wine), of relations of policy makers and in tourism. Besides, the Albacete Pact (1989-1995) operated as a mixed external network of policy makers at all levels, entrepreneurs, labour unions, export organisations and the university.
Alpes de Haute Provence (FR)	Firstly, external networks are used for getting financial support from the national and EU funds for regional development. Secondly, external networks are used for lobbying for the interests of the tourist sector in the mountainous areas, for example a national association of the mayors of municipalities located in the mountains and the skiing resorts, who co-operate with those in other Alpine regions. Thirdly, there are external relations with multinational firms, in order to protect employment in the subsidiary business in the region.

Pesaro (IT)	Prevalent external networks are market relations between local firms and national or international firms and relations between local firms and international markets.
Drenthe (NL)	External actors in the network are often from the neighbouring provinces; with other external actors contacts are less frequent. There are some (multi) national firms in the region.
Osttirol (AU)	The chambers of commerce are linked together in the provincial and the national chambers, and so are the affiliates of the labour market services. Other formal networks of local enterprises with external enterprises exist in tourism and among the affiliates of companies. The local representatives in the national and provincial parliaments are an important connection with the provincial and national authorities. They usually form the bridge of local politicians to provincial and national ones. External contacts of enterprises and policy makers exist, but due to the remoteness of the region it is sure not a strength.
Keski-Suomen Lääni (FIN)	External networks of policy makers are important, as many preconditions for operation in the region are of a national origin (e.g. labour market regulation, finance of the public activities, agricultural and forestry policies). Due to the export orientation of the region, external networks are also relatively important in enterprise related connections.

Figure 9.2 Assessment of the external networks in leading case study regions

Contribution networks to employment growth

In general it seems that internal networks are used for the mobilisation and organisation of the local actors and the stimulation of the internal development potential (figure 9.3). In an interplay with (the results of) the internal networks, external networks are directed towards the exchange of information, products, services and investments inside and outside the region. The interplay of the internal and external networks is a continuing process.

Leading case study region	Contribution internal networks and external networks to employment growth
Luxembourg (B)	Internal networks define development priorities and practically organise economic activities settlements, worker's recruitment and training and social facilities. External networks are used to get public funding or facilities for the province. For the local labour market, external networks provide both private and public investments and a part of the high skilled workers. For commuters, external networks provide jobs, overall in the GDL. Governor Planchard acted as a local leader in the 1980s; due to his contacts at national and EU policy level, he was able to attract many multinational firms and EU and national funds.

	The role of policy makers seems to be decisive in the successful performance: they both attract funds and firms.
Niederbayern (GER)	Without mobilisation and organisation of the regional actors and proper stimulation of the internal development potentials it would not have been possible to attract external investments, which were important for the development of Niederbayern.
Korinthia (GR)	In general, there is internal - external actors' interaction in the region, but there is ground for further development and strengthening of this interaction. The external actors' processes, which are mainly market dependence ones, lead to internal actors' interaction (labourers, farmers and local population) and stimulate development growth and employment creation.
Albacete (SP)	Internal networks are important in the industrial development of Albacete (setting up of co-operatives, industrial districts and creation of an industrial area in the capital of Albacete). External networks were important to attract enterprises, investments and public funds from other countries and other regions of Spain.
Alpes de Haute Provence (FR)	Networks have a positive impact on economic activities and therefore also on employment, mainly in the tourist sector. Companies from abroad have moved into the region thanks to successful promotion.
Pesaro (IT)	Internal networks are the main reason of industrial employment growth. The industrial district is by definition a complex system of market and non-market relations between firms, entrepreneurs and labourers. External networks are a consequence of internal ones; hence they are not so relevant from employment point of view.
Drenthe (NL)	One of the striking results of internal networks of policy makers is the clustering of economic activities in well-defined zones. This stimulates the clustering of firms. The most important result from co-operation of policy makers and entrepreneurs - both internal and external - is the doubling of the N37.
Osttirol (AU)	Internal and external relations of policy makers, interest groups and entrepreneurs were important for the successful settlement of new firms and tourism projects. The individual stories of how companies came to the region are typical for Austria: the largest company came due to a political deal with the Head of the province (the permission for the creation of a big hotel was tied to the obligation to create an affiliate in Lienz). Others came because the proprietors were hunting in the region, and came into talks with the mayor because they needed the permission for hunting and settled in the region in exchange for such permission.
Keski- Suomen Lääni (FIN)	Internal networks of the regional university and main industries were important for upkeeping the national and international competitive position of the region. External networks were important for exporting of products and for providing national funds to the region.

Figure 9.3 Contribution of internal networks and external networks to employment growth in leading case study regions

Engine behind employment growth in leading case study regions

The engine of employment growth consists of a mix of endogenous and exogenous forces in all case study regions, except for Pesaro (figure 9.4). In this region endogenous forces are the engine of employment growth. In Luxembourg, Niederbayern, Korinthia and Alpes de Haute Provence endogenous forces seem to initiate the process of employment growth, which is subsequently enhanced by exogenous forces. The opposite applies in Albacete. In Drenthe, Osttirol and Keski-Suomen Lääni a clear initiating role for either endogenous or exogenous forces is not evident; these seem more or less balanced.

Leading case study region	Endogenous or exogenous forces as engine behind employment growth?
Luxembourg (B)	Both endogenous and exogenous forces play a role, but the initiating role is with the endogenous forces. Facing the situation of their under developed region the local policy makers are clearly the initiators of employment growth by building and using strong external networks to claim territorial parity, and even a sort of positive discrimination in public investments and public staff means from the upper levels and to attract outside private investments. Through internal networks they shaped and realised an ambitious policy of economic and territorial development by ensuring political and social consensus and building a renewed image of the region. This good image is used by tourism and food industries, even when they do not have any connections with the local primary production. Exogenous forces at work are settlement of foreign enterprises or subsidiary businesses with managers, private and public investment coming from outside (multinational enterprises, regional, federal and European aids) and improvement of the telecommunication, road and highway networks, which open the region to space consuming activities like transportation, certain industries and services (i.e. large plants, military settlements, short stay tourism and 'green' recreation activities).
Niederbayern (GER)	The engine is endogenous, but without fuel from outside it would not run, or at least less well.
Korinthia (GR)	Employment growth is a mix both of endogenous and exogenous forces in the region. Exogenous forces have played a considerable role during the 1960s and the 1970s, but during the 1980s and the 1990s it seems that endogenous forces are having the leading role. However, both types of forces are evident in the region and contribute to employment creation.
Albacete (SP)	Exogenous forces played a decisive role in the process of employment growth. The emergence of the autonomous communities, the entrance into the EU in 1986, the significant increase in the public administration's resources permitted a considerable improvement in infrastructure and services (highway connections, hospital and univer-

	sity). Endogenous forces like the attractive settlement policies were also an important factor to develop new enterprises and to attract exogenous investments. So, employment growth is a mix of both endogenous and exogenous forces, in which exogenous forces played the initiating role.
Alpes de Haute Provence (FR)	Employment growth is a mix of both endogenous and exogenous forces, in which endogenous forces usually played the initiating role. Especially local administrative layers play an important role in identifying the needs of the region, and to put them forward at upper level authorities and asking for funds. In the tourist sector there is co-operation among actors and these actors have the capacity to improve their situation. The two biggest companies in the region, Elf-Aquitaine and Sanofi, belong to multinational firms.
Pesaro (IT)	Without doubts, endogenous forces are predominant for the explanation of the employment dynamics within the region.
Drenthe (NL)	Employment growth is a mix of both endogenous and exogenous forces in the region. Exogenous forces are mainly establishments of multinationals and changes in national policies; endogenous forces refer to attractive settlement policies and the attractive landscape.
Osttirol (AU)	Employment growth is a mix of both endogenous and exogenous forces in the region. Exogenous forces are mainly establishments of multinationals and the realisation of many public projects (hospital expansion, expansion of the home for aged, many enlargements of public buildings, canalisation and road improvements). These resulted in both temporary jobs (construction branch) as permanent jobs. Endogenous forces are the co-operative behaviour of local policy makers towards firm settlement.
Keski-Suomen Lääni (FIN)	Engine behind employment growth comes both from internal demographic changes (migration and declining of agricultural employment) and from the R&D climate around the regional university and external networks setting the frame for economic development (national economy, public finance, national and EU policies).

Figure 9.4 Engine behind employment growth in leading case study regions: endogenous or exogenous forces?

9.3 Networks in lagging regions

Internal networks

On the whole internal networks are rather weak, except for Groningen and some parts of Liezen (figure 9.5). Problems faced in the internal networks are a low density of actors, little interaction among internal actors, a lack of co-operation among sectors, internal

conflicts, lack of active actors, lack of capacity of local actors and lack of formal networks, which are able to guide the development process.

Lagging case study region	Assessment internal networks
Lüneburg (GER)	Networks exist, but they are too weak, too small scale. There is no tradition of co-operation among the actors. Partnerships tend to be sectoral, rather than territorial.
Fthiotis (GR)	Networks of internal actors exist and are institutionally established (Chambers, Co-operatives, Unions, Labour Union, Hotel Enterprises' Associations, etc.). Internal networks are functioning mostly on individual base and are not effectively linked. So, there is little interaction among internal actors and its effect on the employment process is relatively marginal. This is due to the low capacity of actors. There is need for more effective co-operation and for building mechanisms and channels that will expand networks and make them more effective. Decentralisation and strengthening of the role of local government will contribute to capacity building, to local partnership creation and to bottom up rural development.
Zamora (SP)	Internal networks are characterised by a low degree of co-operation and difficult communications. Constraints in developing dynamic networks are a.o. the attitude of policy makers (caciquism) and the low density of actors.
Ardennes (FR)	Internal networks are weak since they are scattered over the region and suffer from conflicts and competition. For the administrations and the subsidiary businesses, the external networks are prevailing. For example, the conversion of the iron and steel industry was mainly under the responsibility of the State.
Nièvre (FR)	Internal networks exist (like the Chamber of Trade and Industry, Chamber of Agriculture, Worker Unions, Farmers Syndicates, Enterprises Associations etc.), but the intervention of these networks on employment is relatively weak, except for the Workers Unions (for which employment defence is a priority). So, it is traditionally the role of the State to manage the conflicts and competition between the actors, and to define a long term strategy of development of employment.
Macerata (IT)	Informal internal networks are determinant for the diffusion of knowledge within and between the firms, commercial relations within the industrial district, heterogeneity and division of role and labour within the traditional family. However, these informal networks were useful for the internal functioning of the system, but were not sufficient for participation in the interaction of internal and external actors. An important weakness was the lacking of formal and institutional networks, which are able to guide the industrial adaptation to changing market conditions and to formulate a long term strategy for regional develop-

	ment.

Groningen (NL)	Networks are small, surveyable and characterised by easy communication. Groningen is a small region and local actors know each other. On the whole the functioning of the networks is assessed to be reasonable or good. However, the weaknesses of the small networks are that actors are not very critical to each other, in fear to loose the unity among actors, that the actors are too much inward looking and that the density among actors is too low. Entrepreneurs themselves are active in increasing the density of actors in their business sites. As Groningen has quite a long tradition of industrial entrepreneurship, local leaders in the networks of entrepreneurs consist both of native Groningen entrepreneurs and entrepreneurs of non-Groningen origin.
Liezen (AU)	Due to low population density people generally know each other, and know what happens in the close neighbourhood, and so many things happen on the basis of personal relations. This concerns relations of local entrepreneurs, politicians and interest groups. The most important networks are the interest groups like the chambers of commerce, labour and agriculture and the Labour Market Service. At the local level the chambers are primarily engaged in lobbying, providing information and education programs, and have a mediating role between politicians, entrepreneurs and labourers. Official private networks among enterprises do only exist in tourism (marketing) and agriculture (machinery ring). The co-operation between entrepreneurs and policy makers works rather well in the western and eastern parts of the region, and is badly developed in the central part, due to lack of active actors.
Mikkelin Lääni (FIN)	Internal networks are rather well-developed within sectors; intersectoral networks are less developed. Internal networks are strongly affected by external networks. Internal networks are hampered by a low population density and long distances.

Figure 9.5 Assessment of the internal networks in lagging case study regions

External networks in the lagging case study regions

External networks are considered here to be the interactions of actors inside and actors outside the region. It appears that the most frequent use of external networks is to get financial support from regional/national/EU level (policy relations), to export products (market relations) and to be in contact with (multinational) firms because the presence of subsidiary business in the region (figure 9.6). In Macerata the emphasise in the external networks is on market relations; in the other case study regions external networks perform all three functions. On the whole external networks are poorly developed, due to the marginal/remote position of the region within a larger administrative unit, lack of unified strategies, lack of capacities of the local actors and an inward looking attitude of the local actors.

Lagging case study region	Assessment external networks
Lüneburg (GER)	Although some firms export, there is no orientation towards outside partners. Hamburg, as being a Bundesland on its own, is restricting decentralisation tendencies that could benefit the region. The administrative body, the Bezirksregierung, is too big and heterogeneous to develop a coherent strategy for the entire region. Links with Japan have led to several investments from Japan.
Fthiotis (GR)	External networks refer mainly to national and regional authorities and exporting-importing networks (cotton, tobacco, olives, textiles, minerals and processed food). They exert significant power on the regional evolution (the first through the implementation of horizontal policies and funding of development plans, the second through the integration of Fthiotis' economy into international markets). In general, the interaction of internal and external actors is not very efficient, so there is ground for further development and strengthening of this interaction.
Zamora (SP)	External networks are not important due to the limited number of export oriented activities. Only in Benavente there is an external network related to logistic activities (connection point between Galicia and Madrid). The external networks of policymakers are poorly developed due to the marginal position of the region in the regional (Castilla y Leon) and the national context and due to the lack of leaders from Zamora.
Ardennes (FR)	In the market sphere, the manufacturing sector is endowed with the most efficient external networks. These particular networks are led by the automotive industry that induced the investments in high technology of the local upstream industries and in new industries like plastics. This modernisation process took place with the help of National and European programmes for the conversion of the iron and steel industry. In the administrative and political sphere, the external networks are weak due to lack of leadership and a unified strategy. The recurrent delays in the completion of the highway network and the underuse of the European structural funds resulted of this lack of strategy towards outside authorities. In any case, top-down approaches seem to have prevailed over bottom-up approaches.
Nièvre (FR)	External networks take two main forms: multinational or big national networks and political networks. Nièvre has some networks of the first type with SNCF (National Company of railways, which has important infrastructure for repairing of trains in Nevers) and the private group Peugeot. In political networks, the Socialist Party has the most important influence. The relations with the regional authorities are weak, except for some regional infrastructure building.

Macerata (IT)	Prevalent external networks are market relations between local firms and national or international firms and relations between local firms and international markets.
Groningen (NL)	Local actors are too much inward looking and insufficiently directed towards actors outside Groningen. In recent years the co-operation with policy makers in the neighbouring provinces Drenthe and Friesland has been strengthened.
Liezen (AU)	The chambers of commerce are linked together in the provincial and the national chambers, and so are the affiliates of the labour market services. Other formal networks of local enterprises with external enterprises exist in tourism and among the affiliates of companies. The local representatives in the national and provincial parliaments are an important connection with the provincial and national authorities. They usually form the bridge of local politicians to provincial and national ones. External contacts of enterprises and policy makers exist, but due to the remoteness of the region it is not a strength.
Mikkelin Lääni (FIN)	External networks exist among policy makers and among firms for exporting their products. External networks of policy makers are important, as many preconditions for operation in the region are of a national origin (e.g. labour market regulation, finance of the public activities, agricultural and forestry policies).

Figure 9.6 Assessment of the external networks in lagging case study regions

Contribution networks to employment growth

In Groningen and in a part of Liezen, networks have been used to communicate the attractiveness of the settlement climate for firms (figure 9.7). In Nièvre and Mikkelin Lääni mainly external networks had a positive impact on employment. In the other regions networks did not play an important role with regard to employment dynamics.

Lagging case study region	Contribution internal networks and external networks to employment growth/decline
Lüneburg (GER)	Since networks were rather weak, employment creation was not significant.
Fthiotis (GR)	In general, there is some internal-external actors' interaction in the region with weak contribution to employment growth. There is still need for further strengthening of their relations. The external networks, which are to a large extent market dependent ones, interact with internal networks by providing economic incentives in the local labour market, which are utilised by local actors and lead to their interaction (labourers, farmers, local population).

Zamora (SP)	Employment decreases in agriculture and mining and increases in the public sector and construction. These activities have only an indirect relation with the important economic networks.
Ardennes (FR)	In the farm sector, the local professional associations hardly managed to slow down the concentration process of farms. There is a gap between the speech of the leaders of these associations and the private interest of the largest farmers who are often the same people. In the industry, the external networks managed to modernise and restore the competitiveness of the region. This ensured the economic sustainability of the remaining jobs but was done by sharply decreasing employment. In the tourist sector, it seems that internal networks promoted a policy of low supply in order to ensure the profitability of the existing enterprises. This Malthusianism probably put a brake on the employment growth of the sector.
Nièvre (FR)	External networks had an influence on maintaining employment (some industries, especially automotive and work of rubber and plastic) or on increasing employment (especially in the tourist and public sectors, health, education and social services).
Macerata (IT)	The informal internal networks reacted spontaneously to the reorganisation process in the industry sector, which resulted in heavy losses of employment. Probably, if there had been an institutional network, some of the negative effects on employment could have been avoided.
Groningen (NL)	The networks contributed to an attractive settlement climate at three locations: a knowledge cluster around the city of Groningen, a distribution/transport cluster in Veendam and a chemical cluster in Delfzijl. Further, networks contributed to the doubling of the A7 in the early 1980s.
Liezen (AU)	For the few new or increasing industrial firms, networks did not play a special role. Usually new firms came for reasons of local resources and cheap opportunities discovered during recreational visits like hunting. In the eastern part of the region the co-operative behaviour of some communities towards new industrial firms was an important argument, and similarly this was the case for new trade firms in the capital Liezen.
Mikkelin Lääni (FIN)	External policy networks are important, since many preconditions for operation (like policies and labour market regulations), the provision of national funds and the bulk of economic activities originate from outside the region.

Figure 9.7 Contribution of internal networks and external networks to employment growth/decline in lagging case study regions

Engine behind employment growth

The engine of employment growth consists of a mix of endogenous and exogenous forces in all case study regions, except for Macerata (figure 9.8). In this mix exogenous forces seem to initiate the process of employment growth, which is subsequently enhanced by endogenous forces. However, in Groningen a clear initiating role for either endogenous or exogenous forces is not evident; these seem more or less balanced. In Macerata endogenous forces are the engine of employment growth.

Lagging case study region	Endogenous or exogenous forces as engine behind employment growth?
Lüneburg (GER)	The fact that employment is declining except for services is due to both exogenous and endogenous factors. The weakness of endogenous development initiatives, however, appears to be the main distinctive feature.
Fthiotis (GR)	Employment evolution in the region is the result of both exogenous and endogenous forces. Exogenous forces had the leading role during the restructuring period (in the late 1970s- investment incentives, regional policies) and seem to continue to play a key role in industrial activities, most of which continue to be exogenously generated. However, employment growth occurs in services, which are generated by endogenous forces.
Zamora (SP)	The decrease in employment is due to endogenous forces (like decline and ageing of population, migration) and the increase in employment is principally due to exogenous forces (public spending on infrastructure programmes and social welfare) and less due to endogenous forces (like entrepreneurial initiatives in food industry, construction an private services).
Ardennes (FR)	Without doubts, exogenous forces are predominant for the explanation of the employment dynamics within the region. Global market forces are responsible for the decrease in employment in agriculture (due to farm enlargement) and industry (due to the iron and steel crisis) and the resulting decline of the population (due to emigration of young educated workers). There are local initiatives to take advantage of the local resources and amenities but their impact on employment is not noticeable yet.
Nièvre (FR)	Employment growth is a mix of both endogenous and exogenous forces in the region, but due to the ageing of population, the lack of entrepreneurship, education and innovative capacity of local actors, the initiating role is with exogenous forces. Nevertheless, the department has some strengths: good economic structure, some good road and railways infrastructure and some natural and cultural resources. External firms could use all these favourable factors. All local institutions are waiting for that.

Macerata (IT)	Without doubts, endogenous forces are predominant for the explanation of the employment dynamics within the region.
Groningen (NL)	The dynamics of the region comes both from local actors and external actors. An endogenous force for development is the strategy to create zones, in which economic activities are clustered, both by policy makers and entrepreneurs. The abundant space can also be referred to as an endogenous force for development. External forces are the congestion in the Randstad and the relocation of government services. As a consequence firms are pushed to other regions of the Netherlands.
Liezen (AU)	Both endogenous and exogenous forces play a role, but the initiating role is with the exogenous forces and endogenous forces react on these. In industries, new and growing firms came predominantly from outside, but partly (in the eastern part of the region) communities played a role in attracting those firms. The growing transport sector was partly exogenous (railways), partly endogenous (road transport). Those services, which were growing according to a general trend, were both dominated by exogenous (like trade and finance) and endogenous (like business services) forces.
Mikkelin Lääni (FIN)	Both endogenous and exogenous forces play a role, but the initiating role is with the exogenous forces and endogenous forces react on these. Endogenous forces are demographic changes (internal migration and decline of agricultural employment) and exogenous forces are the national economy, public finance, national and EU policies, setting the frame for economic development in a (Nordic) welfare state affecting all Finnish regions.

Figure 9.8 Engine behind employment growth in lagging case study regions: endogenous or exogenous forces

9. Effective policies and strategies towards maintaining or augmenting employment

In this chapter it is identified which implemented policies and applied strategies in the study regions were effective in maintaining or augmenting employment. It is also indicated why some policies and strategies failed in enforcing employment creation. We make a distinction into policies/strategies of three groups of actors: policy makers, entrepreneurs and labourers.

10.1 Comparison of leading and lagging regions

Policies and strategies of policy makers

In both leading and lagging regions strategies of policy makers towards maintaining or augmenting employment were directed towards the improvement of infrastructure, financial support to firms, setting up of public services, improving the education level of the labour force and supporting economic activities in thinly populated areas. A main difference in the strategies of policy makers in leading and lagging case study regions was that policy makers in leading regions were more often involved in setting up industrial sites with appropriate equipment, relatively to policy makers in lagging regions. The advantage of such industrial sites is that these can reinforce the effects from other measures. Besides, a concentration of firms may create synergy effects, since a high density of firms facilitates networking and the exchange of services and information. In some lagging regions strategies of policy makers were weak due to the failure to include these in a broader development perspective.

Strategies of entrepreneurs

Although companies are a direct source of employment, usually the purpose of a firm is not to create employment but to make profits. In order to achieve this goal a firm needs labour and a location of settlement. In order to survive firms have to be flexible and to respond to market changes. A common strategy for firms in both leading and lagging case study is to improve their competitiveness in the market by higher quality products, technological innovation and flexibility. Firms in leading regions more often produce market niches than firms in lagging regions. In some leading and lagging case study regions a tendency to self employment can be perceived.

Strategies of labourers

All leading case study regions, except for Osttirol showed in the 1980s and early 1990s a positive immigration balance, reflecting the attractiveness of the region as a place to work and to live, both for economic active people and retirees. However, in some of these regions there is an outflow of high educated people due to a lack of high qualified jobs. On the other hand, six out of the nine lagging case study regions faced during the same period a negative immigration balance, mainly made up of an outflow of students and economic active people and a smaller inflow of retirees. The outflow of economic people reflects a pessimistic atmosphere of the economic climate and erodes the human resource base.
Labour unions in both leading and lagging region stress usually the importance of training of labourers.

10.2 Policies and strategies in leading regions

Policies and strategies of policy makers

In almost all regions the most common strategy of policy makers to maintain or augment employment is the improvement of infrastructure along with the creation of industrial sites, equipped with water treatment plants and other facilities. By doing so preconditions for firm settlement are created. As a side effect, the building of infrastructure creates temporary jobs in the construction sector. Many regions offer cheap land and other advantages for firms, which settle in the industrial sites. The concentration of firms may create synergy effects, since a high density of firms facilitates networking and the exchange of services and information. In many regions the setting up of public services (like hospitals and schools) also boosted employment. Regions like Pesaro, Alpes de Haute Provence and Keski-Suomen Lääni, which are characterised by a concentration of population and economic activities, have implemented policies to support economic activities in the thinly populated parts of their regions and thereby safeguarding the viability of these areas. Finally, in various regions policies are directed towards strengthening the education level and skills of the labour force.

Strategies of entrepreneurs

Although companies are a direct source of employment, usually the purpose of a firm is not to create employment but to make profits. In order to survive, firms have to be flexible and to respond to market changes. In regions like Pesaro and Albacete there is some specialisation in industrial activities like furniture and shoes. This specialisation is related to the production of market niches, like design furniture and brand shoes. In most other regions there is a tendency towards diversification. In Osttirol firms face competition with low wage countries by the provision of high quality products and a high level of service. For such a production firms need a higher educated labour force than in traditional industries. Entrepreneurs in Niederbayern have been successful through a very active Chamber

of Commerce to lobby for their common interest. This has for example also resulted in a regional system of education and training that is well targeted to the needs of the regional economy. In some regions, like Luxembourg, Albacete and Korinthia, there is a relatively high number of self-employed, who's main strategy is to maintain their own job.

Strategies of labourers

All regions, except for Osttirol showed in the 1980s and early 1990s a positive immigration balance, reflecting the attractiveness of the region as a place to work and to live, both for economic active people and retirees. However, in a more detailed view at the inflow and outflow of persons, it appears that in Luxembourg, Pesaro and Drenthe there is an outflow of young, highly educated people due to lack of high qualified jobs. In Keski-Suomen Lääni on the other hand, the positive immigration balance is affected by the inflow of many students, despite an outflow of elder economic active people. Flexibility towards changes in demand at the labour market, be it part time jobs or commuting jobs like in Luxembourg or adapting to market changes like in Pesaro or improving one's skills as in Osttirol, or creating your own job by means of self employment as in several regions, seem the most promising strategies for labourers.

Leading case study region	Most effective policies and strategies towards maintaining/augmenting employment opportunities
Luxembourg (B)	The main strategies of policy makers were based on two types of speech: in the direction of the upper level authorities the speech was that the region was less developed and needed financial support. Is the direction of private investors the speech consists in emphasising that the regions is green, well connected to international networks and characterised by hard workers and social peace. Policies consisted of improving the infrastructure (road network, water, energy and sanitation), consolidation and co-ordination of the new municipalities in the development agency of IDELUX, and the implementation of the European Development Pole (a.o. investment aid for firms and improvement of infrastructure). To encourage new enterprise settlements, subsidy packages were individually promoted and negotiated. Entrepreneurs did not have a specific strategy towards maintaining or augmenting employment. For maintaining a good social climate they preferred internal flexibility like part time work and temporary lay-off to firing. The region is characterised by a positive immigration balance. Most of the immigrants are economic active people, commuting every day to the GD of Luxembourg, but there are also retired migrants. Many young people leave the region for study and do not return. Labourers show the ability to accept part time and 'commuting ' jobs, which are the two types of jobs explaining most of the employment growth. Self employment represents about 25% of total employment, reflecting a cultural

	attitude towards creating your own job.
Niederbayern (GER)	Policy makers: the economic development strategy followed a territorial, regional and not a sectoral approach. It is comprehensive and long term and goes beyond classical regional policy. Indicative regional (development) plans give a basis for co-ordination and co-operation. In the 1970s strategic infrastructure decisions were realised (highways, national park, university, spas). Regional policy did not concentrate investments in regional centres only. It put early emphasis on SMEs and technology transfer, but provided also massive support to large scale projects (BMW). Agricultural support discriminated less against part-time farms than elsewhere.
	Entrepreneurs: although conservative in many respects the region is also known for dynamic, innovative entrepreneurs, that were able not only to mobilise local resources, but also to conquer foreign markets and to ensure external support. Migration balance: the region has many rural amenities, natural and cultural, and has thus attracted newcomers that want to live, work and invest in the region. Labourers: the labour force is characterised by a work ethic that is a particular asset for regional development. The long tradition of small scale farming has shaped attitudes that are today highly appreciated by local entrepreneurs and outside investors.
Korinthia (GR)	The overall strategy of policy makers is to raise standards of living of the population in the region and to maintain population in the rural parts. Policies were directed at the improvement of infrastructure, facilities for marketing and processing of agricultural products, incentives for tourism, industrial activities and young farmers. Labour market policies were directed at subsidising new jobs and aid for self employed, who start their own business. Due to the large number of small enterprises in the region, there is a strong trend towards diversification. Enterprises cover their labour needs from the local labour force. The region has a positive immigration balance of economic active people, attracted by job opportunities in industries, tourism and other services. Illegal immigrants provide a tough part of seasonal labour.
Albacete (SP)	Policy makers: improvement of infrastructure, creation of industrial sites, education and training, improvement of entrepreneurial competitiveness (aid by exports, promotion of certificates and R&D), development of public services (hospital and university) and development of public administration. The entrepreneurial strategy can be summarised as 'self employment' (main purpose a large number of enterprises), 'survival' (to ensure the continuity of employment) and 'consolidation' (for the medium sized companies). Many entrepreneurs produce niches for the export market. The region has a positive immigration balance of economic active peo-

	ple (from other regions and return migration of natives). Strategy of labourers: family networks are an integral part of the labour force, which is well disposed to pluriactivity, working all hours and prepared to accept work at home and lowly paid jobs.
Alpes de Haute Provence (FR)	Policy makers: a policy favouring the concentration of industry in the Durance Valley, which involved the construction of a highway and other infrastructural equipment destined to companies. Further financial support was given to ski resorts, in order to relief the difficulties with the accommodation capacity, the accessibility and attractiveness of the sites. In order to maintain a minimum level of economic activities in the
	thinly populated rural areas, economic assistance has been given to agriculture and services in order to prevent 'desertification'. Multinationals do not take local considerations into account and their employment policies are based on decisions taken outside the region. The strategies of the small and medium sized enterprises are individual, although they often share know-how. The region has a positive immigration balance, essentially made up of highly educated people, setting up enterprises, unemployed people, looking for a cheap place to live and retired people. There are many seasonal labourers working in tourism and agriculture (fruit harvesting).
Pesaro (I)	The role of policy makers was considered to be marginal for the industrial growth. Lacking of appropriate policies has become particularly relevant in terms of scarce provision of advanced services to firms. However, town planning has been an important instrument to allow industrial concentration of industrial activities in highly specialised areas. Lately, EU structural policies have become important for setting up partnerships of local and EU policy makers and for establishing local networks of firms and institutions in the thinly populated inner areas. Entrepreneurs: strategy to achieve higher flexibility at local level to answer to market changes. The region has a positive immigration balance. Immigration mainly concerns male workers from North Africa in low tech and low wage industrial activities. On the other hand, there is outmigration of young high educated people. The main strategy of labourers is adapting to market changes.
Drenthe (NL)	Policy makers: the clustering of economic activities in well-defined zones with a well-developed infrastructure and the allocation of activities in certain centres, like an industrial centre in Emmen, a services centre in Assen and a transport and distribution centre in Meppel/Hoogeveen can be considered as an effective policy. The efforts towards the doubling of the N37, as a joint coalition of policy makers and entrepreneurs, will improve the infrastructure in South-Drenthe and its opening up and will stimulate economic activities along the N37. Besides, the co-operation in regional policy of the three northern provinces with the aim of creating a larger economic area with more critical mass

	is promising. Entrepreneurs apply a diversification strategy, although within municipalities there is some specialisation of economic activities. The immigration balance is positive for people older than 40 years (mainly retired people) and negative for younger (mainly high educated) people. The labour unions stress the importance of permanent training.
Osttirol (AU)	The most effective policies of policy makers were the co-operative behaviour of communities towards new firms (cheap land, cheap connection to water, canalisation and energy support). Secondly, financial support for investment combined with the obligation to create jobs and thirdly the creation of a technical school. For some subsidy programs, firms in less favoured regions like Osttirol can get higher subsidies. Finally, the realisation of public projects resulted in many jobs in the construction branch. For the entrepreneurs, the most effective strategy was modest wages, provision of high-quality products, flexibility and more service than low-wage competitors. The region has a negative immigration balance, due to the bad opportunities for daily commuting and lack of job opportunities for high educated people. Effective strategies for labourers were qualification and openness to training and education, good attitude towards work and not too high wage claims.
Keski-Suomen Lääni (FIN)	The great regional policy (state redistribution of financial means and upkeep of public services in all municipalities), the regional policies (numerous development projects, including EU programmes) and the regional agricultural policy (levelling down of regional differences in production costs and improvement of agricultural structures) are important for the employment. Entrepreneurial activities tend to concentrate in the non-rural parts of the region, which has the most diversified economic activities. This tendency is related to the depopulation trend in the rural parts. The region has a positive immigration balance: young people (students) move into the region, whereas there is an outmigration of elder economic active people. Most labourers live in or commute to the central parts of the region.

Figure 10.1 Policies and strategies in leading case study regions

10.3 Policies and strategies in lagging regions

Policies and strategies of policy makers

In most lagging case study regions policy makers applied strategies towards the improvement of infrastructure, financial support to firms, the improvement of the education level

of employed and unemployed persons and the provision of public services. Although it is often remarked that these policies could not stop or turn the decreasing trend in employment, it can be assumed that these policies had some effect in slowing down the decline in employment. Defensive policies during the restructuring of industries or in order to maintain economic activities in thinly populated areas are in particular applied in Ardennes, Nièvre, Liezen and Mikkelin Lääni. In some cases there is a clear reason why strategies of policy makers in creating/augmenting employment were not effective: in Ardennes policy makers were not able to formulate a unified strategy towards a multisectoral approach of regional development, and hence scattered their efforts and followed a sectoral (mainly manufacturing) approach. Another example of an ineffective strategy is the construction of the harbour area in Groningen, which was not integrated in the regional economy.

Strategies of entrepreneurs

In all regions, except for Zamora, firms try to be competitive in the market by supplying higher quality products, technological innovation and flexibility. In several regions entrepreneurs made use of strengths: in Groningen entrepreneurs co-operated with the Academic Hospital and the University and in Mikkelin Lääni entrepreneurs prefer to settle near concentrations of firms. A weakness of entrepreneurs in Nièvre is that they are only involved in the first steps of the transformation process, which reduces the chances for generating value added. In Fthiotis employment in the tourist sector declined due to a lack of strategy.

Strategies of labourers

Except for Fthiotis, Macerata and Groningen the lagging case study regions had a negative immigration balance, usually made up of an outflow of students and economic active people and an inflow of retirees. The outflow is related to a general lack of employment and in particular to a lack of jobs for high educated people. The outflow of economic people reflects a pessimistic atmosphere of the economic climate and erodes the human resource base. On the other hand, the inflow of retirees reflects the attractiveness of the amenities in the region for some groups of actors and acts a source of employment. The improvement of training is a common strategy of the labour unions in all regions.

Lagging case study region	Most effective policies and strategies
Lüneburg (GER)	The Lüneburg region always formed part of the German regional policy schemes. Its peripheral location at the 'iron curtain' created a major handicap. In addition the region appeared to become a 'dump site' with military training areas and nuclear waste disposal facilities. Although the region has in fact many amenities such as national parks, attractive small towns etc. to offer it did not succeed to create a positive image that would not only attract external investors but also stimulate endogenous initiatives. Where those exist they tend to be small scale and

	scattered. Even now, after German unification and with the opening of the border, there is a risk that the region is forgotten. Neighbouring East German regions now receive much higher support. The lack of a clear regional centre is another handicap that was not overcome by an effective division of tasks and co-operation among the three main towns. Recently, however, the region shows some signs of improvement. Some co-operative initiatives in particular in tourism seem to support the creation of a new regional image.
Fthiotis (GR)	The most important policies with direct effects on new job creation are: the Investment Incentives Law, which provides investment grants and seems to have created 270-300 jobs per year in the last 7 years; the job subsidy programme at company level which created 200 jobs/year; the subsidisation of unemployed to undertake entrepreneurial initiatives with around 150 jobs/year and the apprenticeship programme with 350 school graduates who usually stay on the place of training. The construction of infrastructure resulted in a number of temporary jobs. However, the implemented policies have not been able to reverse the employment decline in the region. CAP had a negative influence on employment, as farming population was pushed out of agriculture at faster rates than in Korinthia due to restrictive supply and price policies. The region does not have an industrial tradition and this constrains entrepreneurial initiatives. Some large firms (from exogenous origin) are exporting at international markets. However, most industrial and services activities refer to small and medium sized enterprises. These are in a process of transformation towards more competitive conditions. Due to lack of strategies in the tourist sector, employment declined. The region has a moderate positive immigration balance, which is deriving from the return of retired people and the inmovement of younger urban population mainly to the region's urban centre Lamia. Labour unions stress the importance of training.
Zamora (SP)	Policies mainly referred to the development of infrastructure and public services and to investment subsidies. The financial means of the EU structural funds were substantial in these policies, compared to the national means. However, these policies have improved the quality of life (education, health, and recreation activities) and communication, but did not have a substantial impact on the creation of new activities and employment. Entrepreneurs are oriented at the local market and apply a strategy of survival. They have a low capacity to create jobs. Only a few firms create jobs by diversifying their activities or by enlarging their markets. The region has a negative immigration balance consisting of an outflow of economic active people to other Spanish regions and a smaller inflow of retired (mainly return) migrants. Labour unions are not important in the region. Their common strategy is based on the defence of employment and the improvement of labour conditions and salaries.

Ardennes (FR)	The region clearly suffers from a lack of leadership and unified strategy, due to the economic heterogeneity of the region and lack of solidarity between the different parts of the region and between the different sectors Most of the problems are handled in a too small scale inside the branches or in limited areas. So after the decline of the iron and steel industries, policy makers applied only for EU support in the objective 2 area, and did not apply for support in the objective 5 area. A result of the lack of strategy is that the highway connecting the region to the European road network (under discussion since 30 years) is still not completed. A priority in the policies was the recovering of the industrial competitiveness, rather than employment. Nevertheless, with the help of national and European aid, many manufacturing enterprises were modernised while the creation of research and training centres succeeded in providing new technologies and developing new qualifications in the labour force. The development of employment in the other sectors like retail trade, tourism or rural food industry did not benefit from any particular policy despite the potential opportunities existing in these sectors. Entrepreneurs showed a tendency to specialisation in industry. In general, they had no specific strategies towards maintaining or augmenting employment and preferred flexible labour contracts. The region has a negative immigration balance as result of the outmigration of young educated people. The trade unions try to negotiate work time reduction within the private companies in the national framework that provides subsidies to decrease work time under 35 hours per week. Up to now few agreements were signed under this new scheme and only a few dozens of jobs have been created. The local trade unions are associated with unions of the neighbouring provinces of Namur and Charleroi. The association applied for INTERREG funds to finance a project on tourism, because tourism is labour intensive and underdeveloped given the local amenities. This new project has not received yet the full support of local authorities, who show a lagging attitude compared to the trade unions with respect to the promotion of employment growth.
Nièvre (F)	Strategies of policy makers were directed at the improvement of infrastructure and the education level and to distribute subsidies. In rural areas, national and European employment policies are more defensive than forward looking. In order to prevent the loss of economic functions in small towns (shops, public services), regional and local authorities have a major function in maintaining basic rural activities and services (a.o. by support for ambulant trade and public services, green tourism and other new economic activities). Entrepreneurs usually exploit the first steps of the production process, which limits the value added on site and the different skills necessary in

	more complex processes of transformation. The region has a negative immigration balance, made up of outmigration of young people till 30 years and an immigration of retirees. Since a long time workers have used outmigration as a strategy: alternate migration during the year of agricultural and forestry labourers or long term outmigration in the Parisian region of civil servants working in public sectors (postal services, electricity, railway transport) and coming back in the region after retirement.
Macerata (I)	Most of the relevant strategies and policies have been determined by market changing conditions. The spontaneity of regional development has marginalised the role of policy makers. However, important strategies of policy makers have been town planning for industrial settlement and EU rural policies in the inner areas. Two relevant strategies of entrepreneurs have been the reorienting of the production towards higher quality standards and the investment in technological innovation to be more competitive on international markets. These strategies can be considered successful in maintaining competitiveness of local firms, but not from the point of view of employment. The region has a positive immigration balance: immigrants are economic active people from Southern Italy, Africa and Central Europe. Labourers reacted by creating new activities, becoming self-employed and increasing the flexibility and competitiveness of the local system. However, this did not increase job opportunities.
Groningen (NL)	Effective strategies of policy makers refer to the relocation of government services to peripheral parts of the country: for Groningen this concerns mainly the relocation of a part of the PTT, the national public post and phone company, from The Hague to the city of Groningen and the Dienst voor het Wegverkeer (Service for Road Traffic) to Veendam. An unsuccessful strategy was the harbour area 'Eemshaven', which was delivered during the economic stagnation in the beginning of the 1980s. However, no additional policies were implemented to exploit the harbour area, and it was not integrated in the regional economy. Due to these reasons this harbour failed. Strategies of entrepreneurs are co-operation with the University of Groningen and the Academic Hospital, extension of activities based on available raw materials and the construction of the Rail Service Centre Groningen in Veendam. In the 1980s the region has a small negative immigration balance and in the first half of the 1990s a small positive balance. Migration refers mainly to an inflow of students and an outflow of economic active people in the age of 25-29 years. Trade unions stress the importance of training.
Liezen (AU)	The emphasise in policies was towards infrastructure provision (i.e. north-south motorway), active labour market problems (education programmes for unemployed) and financial support to enterprises. On the

	one hand financial support was granted to innovative firms of all size classes, but in particular to young, small and medium sized companies. On the other hand large industrial companies were supported in order to prevent the worst. Active settlement policy only played a major role in the eastern parts of the region, attracted by the co-operative behaviour of municipalities. For entrepreneurs, the most successful strategy was competition by quality, service, flexibility and the capacity to solve problems. The strategy of low price competition was less successful. The region has a negative immigration balance, due to bad opportunities for daily commuting and bad job opportunities for higher educated people. Labourers tried to improve their skills/knowledge by participating in training programmes.
Mikkelin Lääni (FIN)	The great regional policy (state redistribution of financial means and upkeep of public services in all municipalities), the regional policies (numerous development projects, including EU programmes) and the regional agricultural policy (levelling down of regional differences in production costs and improvement of agricultural structures) are important for the employment. Entrepreneurial activities tend to concentrate in the non-rural parts of the region, which has the most diversified economic activities. This tendency is however weaker than in the leading region. There is some specialisation in agriculture and timber and a tendency to self-employment. The region has a negative immigration balance: students and economic active people leave the region, whereas some retirees are entering the region. Most labourers live in or commute to the central parts of the region.

Figure 10.2 Policies and strategies in lagging case study regions

10. Strategies of farm households

In all case study regions employment in agriculture declined during the last decade, whereas employment in services experienced an increase and in most of the leading case study regions employment in industries expanded as well. In this chapter it is discussed how farm households adapt to these changing circumstances. We focus only on those farm households, who continue to be involved in agriculture, be it full time or part time. By farm households we refer to the farm family, living together on the farm. On the one hand we will deal with the strategy which farm household apply towards agricultural production, on the other hand attention will be paid to other gainful activities of farm households. These gainful activities may refer to on-farm pluriactivity (para-agricultural activities like cheese making, wine production, production and sale of regional products and non-agricultural activities on the farm like tourism on the farm and landscape or nature production) and to off-farm pluriactivity (activities outside the farm). Two forms of on-farm pluriactivity i.e. farm tourism and nature conservation will especially be assessed.

11.1 Comparison of leading and lagging regions.

Adaptation strategies

One of the results of the decline of the agricultural labour force is that land becomes available for farmers, who continue their farm. So in all case study regions, except for the Austrian ones, the main adaptation strategy of farm households is farm enlargement in the sense of increasing the land area per farm. However, in Osttirol and Liezen this is no alternative, since increasing the farmland is limited by natural conditions. In some leading and lagging regions this strategy was combined with an intensification of production, due to the use of new techniques like irrigation or large-scale machinery. An other main element in adaptation strategies is the shift from bulk production to niches (products of regional origin), high quality products and organic farming.

Pluriactivity of farm households

The level of pluriactivity is dependent on the availability of jobs in the regional economy, the demand for products processed at farms, the demand for services like agrotourism and nature conservation provided by farmers and country specific factors (compare the low levels in the Netherlands with the higher levels in Austria, Germany and Greece). The rate of pluriactivity of farm holders varies from 15% in Drenthe to 53% in Osttirol. It is striking that in 5 countries (Germany, France, Spain, Finland and Austria) the rate of pluriactivity

in leading case study regions is higher than in lagging regions. This can partly be explained by more employment opportunities in the regional economy.

The three most common forms of on-farm pluriactivity are agrotourism, processing and selling of farm products and forestry. Off-farm pluriactivity refers to a great variety of jobs in the industries and services sector. It is remarkable that in the case study regions in Greece, Italy and Spain farm households are hardly involved in on-farm pluriactivity.

Perspectives for agrotourism and nature conservation

Due to the presence of landscapes of outstanding scenic beauty or high natural value and other rural amenities in the case study regions, farm tourism offers promising perspectives as a source of income. In leading case study regions farm tourism is more common than in lagging case study regions, Osttirol and Liezen being the exceptions. Problems faced in developing farm tourism in lagging regions are the lack of a regional strategy towards tourism and the lack of knowledge about agrotourist opportunities by farmers. In some regions like Drenthe and Liezen a saturation level has been reached and hence perspectives for agrotourism are in particular in a shift towards high quality accommodations.

The current participation in agri-environmental programs in countries like Austria and Germany is quite high, while it is hardly non-existent in Greece, Spain and Italy. So country specific factors seem to influence the participation. The future uptake of these programs depends mainly on the size of the premiums. When these are attractive and compensate to a sufficient extent to eventually income losses or when these payments contribute to the continuity of the farm, farmers are more willing to participate in agri-environmental programs.

11.2 Strategies of farm households in leading regions

Adaptation strategies

Due to farm business termination, land becomes available for farmers who continue their business. So in most regions the main adaptation strategy is farm enlargement in the sense of increasing the land area per farm. However, for Osttirol this is no alternative, since increasing the farmland is limited by natural conditions. In Pesaro this strategy has resulted in large farms with high scale economies, aimed at maximising land return, often managed in co-operation with co-operatives, third party machinery services or industries. In Albacete the increase in the land area per farm is related to the introduction of irrigation, which has caused problems of water shortage in aquifers. An other main element in adaptation strategies is the shift from bulk production to niches (products of regional origin), high quality products and organic farming. In several regions, like Niederbayern, Albacete and Pesaro, adaptation strategies have resulted in an intensification of agricultural production, with negative implications for the environment.

Pluriactivity of farm households

The rate of pluriactivity varies among regions from 15% in Drenthe to about 50% in Niederbayern, Korinthia and Osttirol. The rate of pluriactivity is on the one hand determined by tradition and national policies, like in Drenthe, were the main emphasise is on viable farms, and on the other hand by employment opportunities in the regional economy. So in Korinthia the rate of pluriactivity is rather high as the industry and service sector provide many jobs, whereas in Alpes de Haute Provence and Keski-Suomen Lääni the rate is rather low, since jobs outside the agricultural sector are scarce, especially in the thinly populated areas. A third factor influencing the rate of pluriactivity is the demand for products processed and sold at the farm and the demand for services like farm tourism.

The three most common forms of on-farm pluriactivity are agrotourism, processing and selling of farm products and forestry. It is striking that in Korinthia, Albacete and Pesaro farm households are hardly involved in on-farm pluriactivity. In Korinthia this is explained by the fact that farm households prefer a stable income from a job outside to the undertaking of the risk of on-farm activities. In Luxembourg, Niederbayern, Drenthe and Osttirol agrotourism is a main source of on-farm pluriactivity; in the other regions only a limited number of farm households are involved in agrotourism. In Alpes de Haute Provence agrotourism is hampered as farmers face financial difficulties in doing investments and due to lack of training and labour time.

Perspectives for agrotourism and nature conservation

In almost all regions perspectives for agrotourism are promising, either to maintain the supply at the same level, as for example in Drenthe or to extend the supply of tourist accommodations like in Luxembourg, Korinthia and Keski-Suomen Lääni. The current participation in agri-environmental programs in Osttirol, Niederbayern and Luxembourg is quite high, while it is hardly non-existent in Korinthia, Albacete and Pesaro, probably due to some administrative delay in the implementation of such programs. The future uptake of these programs depends mainly on the size of the premiums. When these are attractive and compensate to a sufficient extent to eventually income losses or when these payments contribute to the continuity of the farm, farmers are more willing to participate in agri-environmental programs.

Leading case study region	Adaptation strategies of farm households, pluriactivity and perspectives for farm tourism and landscape conservation.
Luxembourg (B)	Adaptation strategies: The most important strategy has been farm enlargement and specialisation in cattle breeding (lean Blanc Bleu Belge). This trend may stop in the future due to the current beef crisis (BSE) and the Agenda 2000 reform. There is some diversification towards large game and Christmas tree production and organic milk production seems to be a good strategy for the future. Pluriactivity: 38% of farm holders in 1989/90. On-farm pluriactivity mainly concerns forestry and green tourism. Off-farm pluriactivity has been decreased with the decline of the iron and

	steel industry and the quarries. Perspectives for farm tourism and landscape conservation: Participation in agri-environmental programs (mainly hedge maintenance and late meadow cutting) is higher than elsewhere in Belgium. This is related to the LFA status of the region, where farmers find the environmental contracts more profitable than their colleagues in more fertile areas. Due to the ongoing reshaping of the agri-environmental measures (e.g. the increase in premium) and the growing demand for green tourism, perspectives for these activities are promising.
Niederbayern (GER)	Adaptation strategies: Within the region there is a tendency of polarisation between the fertile Gäu areas and the less favoured mountain areas. Intensification on the one hand, marginalisation on the other, both risk to undermine the quality of the environment, bio-diversity and the amenity of the cultural landscapes. Pluriactivity: 47% of farm holders in 1989/90. The region, in particular the less favoured eastern parts, has always had a high share of part-time pluriactive farm households. Here rural tourism is an important source of additional income. Perspectives for farm tourism and landscape conservation: Farming has an important role to play in maintaining the regions cultural landscape as a development resource. However, extensive farming systems are under serious economic pressure. Increasingly the provision of public interest goods is rewarded through direct payment schemes. About 50% of farms participate in a cultural landscape program.

Korinthia (GR)	Adaptation strategies: About 54% of the farmers are dynamically involved in farming, engage more resources to farming and have a positive attitude to it (professionalisation strategy). Only 12% of the farmers show a declining interest in farming and have an exit prospect (disengagement strategy), while the remaining 34% of the farmers tend to reproduce a stable situation in farming with lack of response to market changes (stable reproduction strategy). Professionalising farmers tend to have larger farm sizes. Pluriactivity: 48% of farm households in 1986/91. Pluriactivity in Korinthia is related to off-farm activities, mainly in services, agricultural processing units, in tourism and other industries. So on-farm pluriactivity (like processing of products and agrotourism) is not observed. An explanation for this is that farm households prefer stable income employment rather than undertaking the risk of on-farm activities. Besides, jobs outside the agricultural sector are available in the region. Perspectives for farm tourism and landscape conservation: Landscape conservation is not practised. Farmers response to agrotourism measures has been low, but there is potential.

Albacete (SP)	Adaptation strategies: Large farms have introduced irrigation to be able to cultivate new varieties of crops. Small farms applied a strategy towards an intensification of activities (rabbit breeding, mushrooms) and pluriactivity. There is a tendency to go from bulk production towards high quality production. Pluriactivity: 37% of farm holders in 1989/90. There is no on-farm pluriactivity (neither tourism nor landscape conservation), but off-farm pluriactivity in low wage manual jobs in industries and services is important, especially in small and medium sized towns. Perspectives for farm tourism and landscape conservation: the main prospects for farm tourism are limited to hunting. The economic impact of hunting is however limited. Agri-environmental programmes are relatively recently introduced. In 1993 a programme towards income compensation for the reduction of irrigated areas was implemented in order to prevent the overuse of some aquifers. In 1995 a programme towards bird protection in non-irrigated areas was introduced. On the whole big farmers tend to participate in these programmes.
Alpes de Haute Provence (FR)	Adaptation strategies: The main strategy is to increase the size of the farm by taking over land from retiring farmers. Regional quality labels have been developed for products like lavender, lamb meat and cheese. Pluriactivity: 23% of farm holders in 1989/90. In thinly populated areas with few non-agricultural jobs, pluriactivity is not common. In the Durance valley, pluriactive farmers are employed in industries. Farmers face difficulties in entering in farm tourism: they need capital, training and labour time for these activities. Due to these difficulties is estimated that about 5% of farm holders are involved in tourist activities. Perspectives for farm tourism and landscape conservation: There is a strong demand for rural tourism, so from the demand side perspectives for farm tourism are promising. However, farmers face difficulties in the supply of tourist accommodations. Landscape conservation is essential for rural tourism. Without political support for less favoured areas, landscapes would deteriorate quickly and farmers would disappear.
Pesaro (I)	Adaptation strategies: To be competitive with other sectors, the declining agricultural sector is forced towards industrial features: low use of labour, high mechanisation, standardisation, high rates of return for capital and land. Two opposite strategies emerged: rent seeking and professional-farming. The main objective of the rent seeking strategy is to reduce the use of

	labour and to maximise the return of land. So land possession is crucial. Often forms of horizontal integration, third party machinery services or vertical integration with industry are applied. This results in the concentration of the agricultural production process in the hands of a few large farms, co-operatives and industries with high scale economies. The alternative strategy of professional farming is based on maximising labour productivity rather than land return. These farms rely on a high mechanisation and have the farm area as main constraint. Some of these farmers also aim at high-quality production and organic farming About 10-15% of total farmers are professional farmers. Pluriactivity: 27 % of farm holders in 1989/90. Pluriactive farmers usually integrate farm activities with activities in services (especially commerce and public services) while integration with industry is becoming less relevant. Farm tourist activities are marginal and often not profitable. Perspectives for farm tourism and landscape conservation: Agrotourism suffers from competition of the so-called 'rural tourism' often supplied by non-farmers. Landscape conservation is becoming a big problem in coastal areas where environmental and landscape friendly farm activities are not well developed. In the inner areas of the province more attention is paid to environmental and landscape friendly farm activities. The participation of farmers in agri-environmental programmes is becoming relevant in the inner areas of the region, but its impact on employment can not be indicated.
Drenthe (NL)	Adaptation strategies: The most important strategy of farm households has been to adapt by farm enlargement, mainly by an increase in the agricultural area. Pluriactivity: 15% of farm holders in 1989/90. On-farm activities mainly refer to campsites, processing and selling of farm products and nature conservation. Pluriactivity off-farm is less common than in other EU countries, due to the national emphasise on viable farms, which provide sufficient income for the farm family. The participation of farm women in off-farm activities is higher than for men and increasing. Perspectives for farm tourism and landscape conservation: The room for extension of campsites on-farm is limited (in order to prevent oversupply). There is a small tendency towards nature conservation.
Osttirol (AU)	Adaptation strategies: Farm expansion is limited by natural conditions; the trend is from cheap bulk production to niches, high quality products and organic farming. The Austrian farm structure meets optimum yield conditions for organic farming and it is massively subsidised. Forestry and agriculture are closely related in Austria; so most farmers get a substantial

	share of their income by wood production. Pluriactivity: 53% of farm holders in 1990. On-farm pluriactivity mainly refers to agrotourism (renting beds) and to processing/selling farm products. Usually men are involved in off-farm activities, mainly in industries, services and seasonal work in tourism. Perspectives for farm tourism and landscape conservation: 80% of the farmers participate in the Austrian environmental program (non-use of chemicals and fertilisers, low livestock density and mowing steep inclinations). Nature conservation combined with ecological farming is supposed to be one of the main chances for the future in alpine agriculture. The expansion of tourist activities on-farm depends on the general development of tourism and on the preferences of tourists.
Keski-Suomen lääni (FIN)	Adaptation strategies: According to a survey, 25% of farms planned to leave commercial agriculture at the end of the 1990s, 25% will go on with existing production, 25% are planning some other change (growth, diversification, change in production etc.) and 25% plan a generation shift or can not specify a future plan. Pluriactivity: 27% of farm holders in 1989/90. The dominating form is pluriactivity off-farm. Forestry is the main form of on-farm pluriactivity. Due to the regional structure (remote farm locations and long distance, limited demand), the high unemployment and the limited possibilities for growth in the public sector (prior an important source of off-farm employment), the perspectives for pluriactivity are not very promising in the near future Perspectives for farm tourism and landscape conservation: Farm tourism is still a very small branch with 1.4% of farms engaged. Due to new water routes it is expected to increase. A new agro-environmental program has been implemented in 1995. The small number of users of these public goods limits the regional possibilities for landscape conservation.

Figure 11.1 Strategies of farm households in leading case study regions

11.3 Strategies of farm households in lagging regions

Adaptation strategies

In all regions, except for Liezen, farm enlargement by increasing the land size is a common strategy, enabled by business termination of other farmers. In Liezen the increase in farm land is limited by natural conditions; hence the main strategy is therefore to specialise in high quality production. In particular in Zamora and Macerata there is a clear tendency to-

wards intensification of agricultural production, due to the use of irrigation in Zamora and due to the strive to maximise land or labour productivity in Macerata. Diversification of production is an adaptation strategy of a minority of farmers; in Nièvre and Ardennes this refers for example to crop production for the pharmaceutical industry.

Pluriactivity of farm households

The rate of pluriactivity varies from 16-19% in Nièvre, Zamora, Groningen and Ardennes to 59% in Fthiotis. It is striking that in 5 countries (Germany, France, Spain, Finland and Austria) the rate of pluriactivity in lagging case study regions is lower than in leading regions. This can partly be explained by less employment opportunities in the regional economy. However, tradition and physical conditions in the region play also a role in the rate of pluriactivity.

The three most common forms of on-farm pluriactivity are agrotourism, processing and selling of farm products and forestry. It is striking that in Fthiotis, Zamora, Ardennes and Macerata farm households are hardly involved in on-farm pluriactivity.

Perspectives for agrotourism and landscape conservation

Liezen and Nièvre are the only two regions in which agrotourism plays an important role, although all case study regions include rural amenities, which offer potentialities for agrotourism. Main problems faced in developing agrotourism are the lack of a regional strategy towards tourism (Zamora, Macerata and Groningen) and the lack of knowledge about agrotourist opportunities by farmers (Ardennes). In Fthiotis a LEADER II group recently promoted the potentials of farm tourism in mountain areas. In Liezen, the rather high extent of farm tourism is under pressure due to competitiveness of other suppliers of tourist accommodations. This induces a shift of farm tourism towards higher quality accommodations.

The uptake of nature conservation measures in regions like Lüneburg and Liezen is quite high. Perspectives for future participation in agri-environmental programmes mainly depend on the size of the premium.

Lagging case study region	Adaptation strategies of farm households, pluriactivity and perspectives for farm tourism and landscape conservation.
Lüneburg (GER)	Adaptation strategies: Farms are comparatively big for West German standards, but most soils are rather poor. Farming is viable under present CAP conditions but not particularly competitive. A large part of the region is covered by forests. Pluriactivity: 34% of farm holders in 1989/90. Pluriactivity is less important than in many other German regions. Perspectives for farm tourism and landscape conservation: Agro-tourism, in particular linked with horse riding has great potential in some parts. Here potentials are not yet fully exploited. Agri-

	environment policy is, at least in terms of financial resources, much less important in Lower Saxony than in Bavaria.
Fthiotis (GR)	Adaptation strategies: About 31% of the farmers are dynamically involved in farming, engage more resources to farming and have a positive attitude to it (professionalisation strategy), 32% of the farmers show a declining interest in farming and have an exit prospect (disengagement strategy), while the remaining 37% of the farmers tend to reproduce a stable situation in farming with lack of response to market changes (stable reproduction strategy). Pluriactivity: 59% of farm households in 1986/91. Pluriactivity is mainly off-farm pluriactivity (seasonal employment in tourism, agricultural processing industries and other permanent jobs). On-farm pluriactivity concerns processing and retail of farm products or subcontracting of farm machinery. Perspectives for farm tourism and landscape conservation: Only recently a LEADER II group has introduced potentials for the development of agrotourism in the mountain areas. Landscape conservation is not practised.
Zamora (SP)	Adaptation strategies: The most important strategies during the last 30 years have been farm abandonment, farm enlargement, increase in irrigated area and introduction of cattle and pig production. Since the accession to the EU the process of farm abandonment has been accelerated. Pluriactivity: 17% of farm holders in 1989/90. Pluriactivity mainly consists of off-farm activities. Perspectives for farm tourism and landscape conservation: There are important potentialities for the development of tourist activities, but it seems difficult to develop on-farm tourism, because farmers are rather old and due to the low education level. Due to the natural characteristics of Zamora, there is scope for important programmes of conservation of landscape and biotopes in the future. In 1994 a programme towards bird protection in non-irrigated areas was introduced. On the whole big farmers tend to participate.
Ardennes (FR)	Adaptation strategies: The most important adaptation strategy of farm households was farm enlargement, along with specialisation in cattle breeding, cereals or industrial crops (all CAP products). There is not much interest for diversification, but scattered experiences exist in poultry and special crops for the pharmaceutical industry, especially in the south. Pluriactivity: 19% of farm holders in 1989/90. On-farm pluriactivity is rare, although the few experiences with agrotourism and sale of regional products are promising. Perspectives for farm tourism and landscape conservation: Agrotourism is not very developed given the importance of rural

	amenities. The existing facilities have a very high filling rate. The local authorities presently focus on this opportunity, which is still badly known by farmers themselves. The uptake of agri-environmental measures (2078/92) by 115 farms is lower than the average uptake per département in France. The measures mainly refer to bio-diversity protection along the Aisne, Meuse and Chiers rivers, to threatened breeds protection and to organic farming.
Nièvre (FR)	Adaptation strategies: The cereal and cattle breeding (lean Charolais) farmers adapt by increasing the farm size. The wine producers of Pouilly have experimented a good strategy of high quality product development with positives results in terms of employment. Some farmers have taken up diversification like medicinal plants, dried flowers, Christmas trees, etc. Pluriactivity: 16% of farm holders in 1989/90. On-farm pluriactivity concerns forestry (Christmas trees) and green tourism (rural lodges, inn on farm). Off-farm opportunities are weak, because of the small number of industries located in rural areas. Perspectives for farm tourism and landscape conservation: Some cities work on environment maintenance: either with the help of farmers, or by their own means and by employing new workers. This activity will increase as regional authorities wish to use the natural resources in tourism. The breeding sector is in a better situation than the grain sector, because the meadows are extensively used with a low level of pollution. Cereal producers have reduced the use of pesticides during the last years. Nièvre has a lot of natural resources for attracting tourism, especially the green tourism. Promoting the transformation of products on farm, reinforcing the network of agrotourism farms and linking with the other big tourist networks are some ways of development.
Macerata (I)	Adaptation strategies: A main strategy is to reduce the use of labour and to increase the return of land. This rent seeking strategy often results in large scale farms, but it is less relevant than in Pesaro. Traditional family farms, aiming at maximising labour productivity play also an important role, enhanced by the rich fertility of the soil. Pluriactivity: 29% of farm holders in 1989/90. In particular members from family farms are engaged in off-farm pluriactivity. The presence of local industries in the inner areas offers many opportunities for pluriactivity. Perspectives for farm tourism and landscape conservation: Farm tourism and landscape conservation are not widely developed. Especially in the inner part of the region there are good opportunities for both agrotourism and nature conservation, but due to lack of an appropriate tourist strategy of the province, these potentialities are not yet exploited.

Groningen (NL)	Adaptation strategies: So far the most important strategy of farm households has been to adapt by farm enlargement, mainly by an increase in the agricultural area and predominantly in arable and dairy production. Besides, there is a slight tendency towards diversification. Pluriactivity: 18 % of farm holders in 1989/90. Compared to other EU countries, in the Netherlands pluriactivity on and off-farm is less important. Coherent with the competitiveness of land use, cultural values, conditions to get a loan for investments, agricultural policies and municipal and national policies, that support only to take over a *viable* farm which is able to provide a main source of income, there is more often a separation. On-farm activities mainly consist of processing and sale of farm products, forestry and nature conservation. On the whole farm women are better qualified for a job outside the farm than men. It is expected that the percentage of farm women involved in off-farm activities will increase, as they tend to continue their own labour perspective for which they have been qualified. Perspectives for farm tourism and landscape conservation: Agri-environmental measures (including afforestation) have good potentials, especially for arable farmers, whose income is under pressure due to CAP reforms. Agrotourism has perspectives, but an overall strategy to open the region for tourists is lacking.
Liezen (AU)	Adaptation strategies: The possibility of extension of the farm is usually limited by natural conditions, and the more promising strategy is therefore to specialise in high quality production. About one third of the regional farmers are biological farmers. Pluriactivity: 44% of farm holders in 1989/90. Pluriactivity has steeply increased since 1980. On-farm pluriactivity consists of renting beds (24% of farmers), processing and sale of farm products and sale on agricultural markets. Since 1980 the number of farms with agrotourism has been declined, due to the increase in professional private supply. Most agrotourist farmers are linked to the regional tourist associations. Off-farm pluriactivity is concentrated in tourism, but also in other services and industry. Perspectives for farm tourism and landscape conservation: The future of agrotourism is not supposed to give a massive increase in the number of overnight stays, but rather an increase in high quality supply with professional marketing. About 80-90% of the farmers participate in the Austrian environmental program (non-use of chemicals and fertilisers, low livestock density and mowing steep inclinations).

Mikkelin Lääni (FIN)	Adaptation strategies: The region has experienced one of the biggest cuts in farm numbers and cultivated area in Finland. According to a survey, 25% of farmers plan to quit commercial agriculture by the end of the 1990s, 50% intend to go on as before and 25% have other solutions (growth, diversification, and generation shift). Compared to the leading region, farmers have more stable perspectives for development, more pessimistic views on generation shifts and less impetus for expanding existing agricultural production. They are also more orientated towards diversification and change of production. Pluriactivity: 24% of farm holders in 1989/90. On-farm pluriactivity is more common than in the country as a whole, but off-farm pluriactivity is more rare. Forestry is very important - its share of total farm income is 20%, significantly higher than the national average. Perspectives for farm tourism and landscape conservation: Due to long distances, high unemployment and limited growth in the public sector, the perspectives for pluriactivity are not promising. Farm tourism is relatively common, it is included in many development projects and develops with time, but it is still small. The landscape and the high share of uncultivated land emphasise landscape conservation, but the few users of these public goods limit the possibilities for this option.

Figure 11.2 Strategies of farm households in lagging case study regions

11. Lessons for employment creation in rural regions

In the previous chapters we have analysed factors encouraging and hampering employment creation in rural regions of the EU. Based on that analysis, we formulate some lessons for stimulating employment in rural regions in this chapter, again by using the three main components of the field of force: local resources, economic activities and actors. As the three components are strongly interrelated, lessons often concern aspects of the other components as well. Since the socio-economic, physical and geographic situation of rural regions widely varies, there is not one unique development path towards more jobs. So the lessons formulated below have not to be considered being the 'success formula', which always results in more jobs. The lessons have to be seen as building stones, which may contribute to shaping preconditions for employment creation under certain circumstances.

Despite the multiple development trajectories, we give a general guideline for employment creation in rural regions, based on the experience in the case study regions:

- make a comprehensive territorial development plan, based on the strengths, weaknesses, opportunities and threats of the region, and integrate all measures and projects within the scope of this plan;
- improve the capacity (knowledge, skills and attitude) of local actors;
- strengthen the co-operation of local actors and the co-operation of actors inside and outside the region.

Regional administrative layers and entrepreneurs are the main actors in implementing the three elements of the guideline. In many cases encouragement from upper administrative levels will be required. It is in the scope of this guideline, in which lessons given below can be selected. In the lessons no attention is paid to the way in which these lessons have to be implemented, since that is beyond the aim of the project.

12.1 Local resources

Integrate infrastructure investment in a broader development process

Physical infrastructure is an important factor for rural development. The case studies show that investment in infrastructure alone is not sufficient to trigger positive rural development. It will not in itself create employment opportunities, except during the (short) construction period. Comparison of the case studies provides evidence, that in the longer run infrastructure investment management makes a significant difference. In several case study regions improved connections to major transportation networks inside and outside the region have been essential for making transport of products and services more efficient. In most regions efforts have also been made to create new industrial sites, equipped with water treatment plants and other infrastructure facilities. This suggests that infrastructure investments should be integrated into a broader comprehensive development concept, and

be accompanied by a set of complementary incentives. Such a comprehensive development concept should be based on a systematic assessment of regional strengths and weaknesses, as well as future opportunities and threats.

Pay attention to distinct modes and technologies of infrastructure in rural regions

In improving infrastructure and providing public services, it must also be recognised, that in order to be efficient, rural regions often require modes and technologies distinct from those in agglomerated regions. Explicit consideration of rural characteristics and needs is demanded e.g. in providing public transport, health care, education, or sewage treatment.

Valorise rural amenities

Almost all case study regions have some sort of valuable rural amenities, which contribute to their 'local identity'. However, the existence of these amenities are not able to explain employment dynamics, but the degree to which these assets are managed and valorised by actors to generate added value and employment. Rural amenities have to be managed in such a way, that the sustainability is not endangered.

Improve the perception of amenities by rural actors

There is often a gap in the perception of rural amenities by rural people and that by people outside rural regions. An important precondition for valorising rural amenities is that rural actors are conscious of the values of rural amenities, i.e. that they understand that unspoiled nature, attractive landscapes, historic villages etc. are scarce resources and unique development assets, that should be kept in good shape. This is not only a service for tourists and leisure seeking urban populations. The consciousness of living in a unique village may have spin off effects for the rural population as well, as it can break a negative circle and result in new energy and activities. Rural renewal schemes can help to initiate such processes.

12.2 Economic activities

Follow a multisectoral approach

Rural employment creation results from complex processes of economic growth and decline, structural change, adjustment and innovation. The case study regions showed an increase in employment in the branches of community services, wholesale and retail trade, restaurants and hotels and financial services during the period 1980-1995, along with a decline of agricultural employment. Besides, several case study regions showed also a rise in employment in the sectors of manufacturing and construction. Policies aiming at encouraging rural employment creation should follow a multisectoral approach, mainly by shaping preconditions for local agents.

Support the integration of agriculture in the rural economy

In the more thinly populated parts of rural regions the decline of the agricultural labour force may endanger its viability. In order to maintain agricultural workers in those areas, additional employment opportunities have to be created outside the farm or employment opportunities on the farm have to be stimulated, like the production of public goods (nature conservation) or agrotourism. A main obstacle for developing agrotourism is the lack of a regional tourist strategy.

Both specialisation and diversification can be successful strategies

The leading case study regions provide evidence that both specialisation and diversification can be successful strategies. There are, however, no typical rural specialisations, which could be predefined a priori. Some of the leading case study regions are typical examples of so called 'industrial districts' (e.g. Pesaro, Albacete, Luxembourg) which, due to an exceptional specialisation of their economic system, manage even to compete on an international, global scale. So despite the above lesson on a multisectoral approach, a certain degree of specialisation can be useful. Of course, regional specialisation is not without risk. Market conditions, tastes and fashions change. Under such circumstances rural employment policies should help to anticipate change and adapt to new conditions. It can not be said, however, if further specialisation or diversification are generally the right choice. This is underlined by the fact that other leading rural regions have been successful by diversifying their economic base. Often they show above average growth across all major branches. Although diversified regions appear to be less exposed to risks, they may, however, find themselves more exposed to competition from other rural or urban regions if they lack proper market niches, a clear regional profile and image that can be easily communicated.

Enhance facilities for new and small enterprises

The case studies show that a substantial part of employment is created in new and in small enterprises. This implies that policies should not focus only on existing and large enterprises, but rather enhance facilities for new and small enterprises.

Focus on the local productive system

The case studies show that success and failure does usually not depend on the location and investment decisions of individual firms. What matters is the functioning of the entire local productive system, which results from the interaction of a multitude of firms as well as other institutions and actors. So rural employment policies should avoid targeting exclusively at individual firms. Economic development and employment growth can benefit when chambers of commerce, local banks or other institutions manage to offer managerial training, transfer of technological and organisational know-how, advise on investment and financing, in a way that is adapted to the needs of small rural enterprises.

Strengthen zoning of economic activities by spatial planning

It appears that firms and actors tend to move to towns and agglomerated parts, which reflects the attractiveness of concentrations of actors. Such concentrations often result in synergy effects. Spatial planning can be used as a policy instrument to enhance this concentration of activities by providing well equipped business sites in certain zones. Natural locations for such concentrations of activities are towns, waterways or motorways. In a number of regions larger towns are lacking, which often hampers economic development. In order to create a structure with some larger towns, spatial planing can be used by a focus of the creation of business sites in one or two villages/towns of the region. A concentration of economic activities in some parts provides also the advantage that it contributes to the safeguarding of the attractiveness of rural amenities and living conditions in other parts of the region.

12.3 Actors

Enhance capacity building of local actors

In our field of force we distinguish three components: local resources, economic activities and actors. The overall finding is that actors are the essential and decisive factor in rural development. The key question with regard to the actors is whether they have the capacity (knowledge, skills and attitude) to take the right steps towards encouraging employment. This capacity depends on the degree in which actors face their situation and prospects in the broader national and international context. So policy makers have a high capacity when they have the ability to act effectively in delivering policies, to support promising local initiatives and projects and to formulate policies to attract investments. Entrepreneurs have a high capacity when they have the ability to perceive changes and adjust to them, and when they show the willingness to respond to market changes. Labourers have a high capacity when they have the ability to adapt to changes and to adjust their skills to training needs.

From the case studies it appeared that in most of the leading case study regions the capacity of policy makers is rather well developed, whereas in most of the lagging case study regions the capacity of policy makers is rather weak. Key issues in the capacity of policy makers are:

- political consensus;
- the ability to make a diagnosis of the regional situation, to identify needs and priorities, and to plan and design appropriate projects within a comprehensive territorial development perspective;
- the way in which policy makers are able to have good contacts with upper level authorities;
- the way in which policy makers are able to have good contacts with entrepreneurs;
- the way in which policy makers are able to attract public funds and private investments;
- the way in which policy makers create preconditions for firm settlement.

Entrepreneurs operate in the market. When they do not have the capacity to adapt to changing market conditions, they will not survive in the long run, unless they are supported by public assistance. In a number of both leading and lagging case study regions weak points in the capacity of entrepreneurs were a limited capacity to innovate and a cautious and risk averting attitude.

The capacity of labourers seems to be roughly the same in leading and in lagging case study regions: their attitude to work is good and they are prepared to work hard. In situations of restructuring of traditional industries groups of fired labourers, who lack the capacity to adjust their skills in order to be employed in higher skilled jobs, became permanently unemployed. So training of labourers is a main target point.

Strengthen internal and external networks

A network is considered here to be a group of actors, who interact with each other in order to achieve some aim. On the whole leading case study regions were characterised by rather strong internal and external networks of policy makers and entrepreneurs, whereas those in the lagging case study regions were usually rather weak. Target points for actions towards strengthening networks are enhancing the solidarity and interaction among local actors, improving the co-operation among sectors, solving of internal conflicts, stimulating an active attitude of actors, preventing an inward looking attitude of the local actors and encouraging the interaction of internal and external actors. It is clear that these target points are closely interrelated with empowerment of the capacity of actors.

Attract newcomers

The case studies show that newcomers to rural regions, immigrant populations, entrepreneurs and policy makers from outside the region, or even tourists can play an important role in establishing external links. Local actors, who have stayed for a long time outside the region, and return back to the region, can also be counted to the group of newcomers. Due to the fact that newcoming people have a different attitude from the local actors, they are able to mobilise the local actors. They can feed experiences into internal networks, help mobilising local actors and act as local leaders. They can provide access to external know-how and markets. They can transport a positive regional image, which supports advertisement and marketing of local products.

Define the right labour market area

Rural employment policies depend on a proper functioning of regional labour markets. Rural employment policies have to facilitate the matching of regional labour supply and demand. In order to design targeted regional measures it is essential to have a clear understanding of what represents the actual labour market area. This is not selfevident because of changing commuting patterns, increasing travel to work distances and changes. Besides, the labour market area may differ for different professions. Often, administrative boundaries no longer reflect actual functional relationships. Thus, a precondition for any targeted rural labour market policy is to get a clear picture of what represents the relevant labour

market area. This implies also understanding the role of regional centres, small and medium size towns in providing job opportunities for populations living in the countryside. Exchange of vacancies between employment services of neighbouring regions can facilitate the matching and supply of labour.

Aim at the appropriate regional mix of skills

Education and training play of course an important role in matching labour supply to demand and thereby in encouraging employment creation. The role of education is however highly complex. It is not the attainment level as such, but rather an appropriate regional mix of skills that matters for successful rural employment growth. Proper targeting of education and training is required to ensure a better regional balance. For example, in those regions where employment growth was particularly high in manufacturing industries, greatest demand was expressed for workers with medium level technical skills. Establishing technical schools and promoting professional training both within and outside enterprises are priorities. Employers themselves were interested to provide professional qualifications to manual workers by on-the-job training. In those regions where strong regional networks and partnerships existed, the matching of skills seemed to work particularly well.

Be aware of changes in labour demand by industrial firms

During the period we have analysed, the availability of low skilled labour often acted as a pull factor for industrial firms to settle in rural regions. However, due to competition with cheap firms in low wage countries, it can be wondered whether footloose industrial firms will stay in rural regions in the near future. It is likely to expect that industrial firms in rural regions will change their production in such a way that they become more flexible, service intensive and customer oriented. Such a shift can imply that industrial firms prefer medium skilled labourers to low skilled workers.

Encourage part time labour and self-employment

In many rural regions young and female populations are particularly affected by unemployment. Regional labour market policies should thus pay particular attention to their specific needs. This implies that it seems urgent to think not only in terms of full-time hired employment, but also to consider alternative options such as job-sharing, flexible part-time arrangements or self-employment. Part time labour, pluriactivity and self-employment have a long tradition in many rural labour markets. The majority of farm families in Europe are used to such work and income patterns. For the development of many rural labour markets these traditions can be a positive advantage. It is probably not by accident that some of the most dynamic rural labour markets, showing the greatest relative employment increases are those with high shares of pluriactive, part-time farms. In many industrial districts the work ethic and attitudes of workers, who have strong ties to traditional pluriactive farming systems, are important for explaining their success. Many rural regions have a long tradition of independent self-employment. This should be en-

couraged again. Risk taking is not new to many rural people. As a result, new forms of organising economic activities can actually find rather positive preconditions in rural regions.

13. Concluding remarks

In this study a comparative analysis has been made of the factors, which affected the development of employment during the 1980s and the first half of the 1990s in nine leading rural regions and nine lagging rural regions in the EU. In order to visualise forces, which affect the employment development in rural regions, we have designed a field of force with three main components: local resources, economic activities and actors. In this field the current global restructuring process, due to rapid technological changes in the communications and information sectors and due to political changes, is taken into account. The various forces in the field have been assessed at the beginning and end year of the period under study by making a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

The labels 'leading' and 'lagging' have been derived from the growth rate of non-agricultural employment in the region during a recent period of about 10 years. So regions are only leading or lagging with regard to their non-agricultural employment performance; in other indicators like GDP per capita, GDP growth and unemployment rates they may be less or more successful. Regions also show rather large differences with regard to their location, physical structure and industrial tradition. Besides, employment growth is dependent on the period considered, so being leading or lagging is not necessarily a permanent situation. This implies that the groups of lagging and leading regions cannot be presented by black versus white, but rather by grey with a black star versus grey with a white star.

The population density of the analysed case study regions varies from 13 to 188 inhabitants per km^2, reflecting the fact that our selection of case studies refers to 14 most rural regions and 4 intermediate rural regions. Based on this small number of regions and based on the results of our analysis, no concluding remarks can be made whether employment dynamics is affected by differences in the degree of rurality. However, the dispersion of population and economic activities across the region makes sense. The existence of one or more urban centres, with a critical mass of economic activities, often attracts firms and enhances further employment growth.

13.1 Forces affecting employment growth in leading and lagging regions

Valorising rural amenities

Almost all case study regions had some sort of valuable rural amenities: settlements with a rich history and architectural remains, cultural landscapes of outstanding scenic beauty or high nature value, protected areas like regional or national parks. Thus, it is difficult to

draw any firm conclusion concerning their weight in explaining differential performance in rural employment creation. The case studies show that it is not primarily the existence of amenities that matters, but the degree to which these assets are effectively managed and valorised by actors in an economic process generating added value.

Leading regions tend to have better road infrastructure

Road infrastructure is in all leading case study regions rather well developed, except for the mountainous parts in some regions, whereas in the most lagging regions road infrastructure is rather well developed in the central part, but insufficiently in the more remote parts. So on the whole in the leading regions road infrastructure is no serious economic constraint for local entrepreneurs. It contributes to an efficient trade of services and goods, and it forms an attractive location for firms to settle. On the other side, the poor situation of infrastructure hampers the economic development in lagging regions.

Remoteness does not always prevent employment growth

With some exceptions, both leading and lagging case study regions are peripherally located. So leading regions show that proximity to regional or global economic centres is not a necessary condition for employment growth.

Leading regions show employment growth in services and industries

Both leading and lagging case study regions were faced with a decline in agricultural employment and an increase in services employment since the 1980s. The most striking difference between leading and lagging case study regions was the increase in employment in the manufacturing and construction sectors in the leading regions, whereas employment in those sectors in the lagging regions tends to decline. Besides, employment in services increased in most of the leading regions at a higher rate than in the lagging regions. The leading case study regions provide evidence that both specialisation and diversification can be successful strategies. There are, however, no typical rural specialisations, which could be predefined a priori.

Tourism is not the only solution

The pattern of employment growth shows that tourism is not the only potential source of rural employment growth, but it is only one amongst many other branches. Stagnation in the flow of tourists in some rural regions was caused by the fact that accommodations and attractions did not satisfy the demands of tourists anymore. So it is important to keep up with demands of tourists and continuously adjust accommodations.

Capacity of actors in leading regions better developed

In most of the leading case study regions the capacity (knowledge, skills and attitude) of local actors was better developed than in the lagging case study regions. The capacity of

local actors is reflected amongst others in the way in which they co-operate with other actors inside and outside the region, in which they face challenges, in which they innovate, in which they launch projects in line with the strengths and needs of the region, in which they take risks, and in which they market regional products or the region to external actors.

Leading regions tend to have strong networks

On the whole leading case study regions were characterised by rather strong internal and external networks, whereas those in the lagging case study regions were usually rather weak. Examples of well-functioning networks are public-private partnerships, networks linking different hierarchical layers of administration, networks of different branches of public administration, networks of entrepreneurs, and multistakeholder co-operations taking care of broader agendas. Internal networks of administrative layers are the more successful, the more they are able to make a diagnosis of the regional situation, to identify needs and priorities, and to plan and design appropriate projects within a comprehensive territorial development perspective. External networks of different hierarchical layers of administration perform well if local layers have good contacts with upper level authorities and if they are able to design and prepare specific projects, which are presented to the upper level authorities responsible for decision.

Newcomers help to mobilise local actors

The analysis shows that newcomers to rural regions, immigrant populations, entrepreneurs and policy makers from outside the region, or even tourists can play an important role in establishing external links. They can feed experiences into internal networks, help mobilising local actors and act as local leaders. They can provide access to external know-how and markets. They can transport a positive regional image, which supports advertisement and marketing of local products.

Strategies of policy makers

In both leading and lagging regions strategies of policy makers towards maintaining or augmenting employment were directed towards the improvement of infrastructure, financial support to firms, setting up of public services, improving the education level of the labour force and supporting economic activities in thinly populated areas. EU structural policies have been integrated in these strategies. A main difference in the strategies of policy makers in leading and lagging case study regions was that policy makers in leading regions were more often involved in setting up industrial sites with appropriate equipment, relatively to policy makers in lagging regions. The advantage of such industrial sites is that these can reinforce the effects from other measures. Besides, a concentration of firms may create synergy effects, since a high density of firms facilitates networking and the exchange of services and information. In some lagging regions strategies of policy makers were weak due to the failure to include these in a broader development perspective.

Immigration balance

Almost all leading case study regions showed in the 1980s and early 1990s a positive immigration balance, reflecting the attractiveness of the region as a place to work and to live, both for economic active people and retirees. However, in some of these regions there is an outflow of high educated people due to a lack of high qualified jobs. On the other hand, six out of the nine lagging case study regions faced during the same period a negative immigration balance, mainly made up of an outflow of students and economic active people and a smaller inflow of retirees. The outflow of economic people reflects a pessimistic atmosphere of the economic climate and erodes the human resource base.

Adaptation strategies of farm households

One of the results of the decline of the agricultural labour force is that land becomes available for farmers, who continue their farm. So in all case study regions, except for the Austrian ones, the main adaptation strategy of farm households is farm enlargement in the sense of increasing the land area per farm. In some leading and lagging regions this strategy was combined with an intensification of production, due to the use of new techniques like irrigation or large-scale machinery. An other main element in adaptation strategies is the shift from bulk production to niches (products of regional origin), high quality products and organic farming. The possibilities for pluriactivity are dependent on the availability of jobs in the regional economy, the demand for products processed at farms, the demand for services like agrotourism and nature conservation provided by farmers. The three most common forms of on-farm pluriactivity are agrotourism, processing and selling of farm products and forestry. It is remarkable that in the case study regions in Greece, Italy and Spain farm households are hardly involved in on-farm pluriactivity. Due to the presence of landscapes of outstanding scenic beauty or high natural value and other rural amenities in the case study regions, farm tourism offers promising perspectives as a source of income. In leading case study regions farm tourism is more common than in lagging case study regions, Osttirol and Liezen being the exceptions. Problems faced in developing farm tourism in lagging regions are the lack of a regional strategy towards tourism and the lack of knowledge about agrotourist opportunities by farmers. In some regions a saturation level has been reached and hence perspectives for agrotourism are in particular in a shift towards high quality accommodations. The current participation in agri-environmental programs in countries like Austria and Germany is quite high, while it is hardly non-existent in Greece, Spain and Italy. So country specific factors seem to influence the participation. The future uptake of these programs depends mainly on the size of the premiums.

Engine behind employment growth

The engine of employment growth consists of a mix of endogenous and exogenous forces in all case study regions, except for Pesaro and Macerata. It is striking that in leading regions endogenous forces tend to initiate the process of employment growth, which were subsequently enhanced by exogenous forces. In lagging regions we often found that ex-

ogenous forces tend to initiate the process of employment growth, and that endogenous forces react on them.

13.2 Main lessons

Since the socio-economic, physical and geographic situation of rural regions widely varies, there is not one unique development path towards more jobs. So the lessons formulated below have not to be considered being the 'success formula', which always results in more jobs. The lessons have to be seen as building stones, which may contribute to shaping pre-conditions for employment creation under certain circumstances. Despite the multiple development trajectories, we give a general guideline for employment creation in rural regions, based on the experience in the case study regions:

- make a comprehensive territorial development plan, based on the strengths, weaknesses, opportunities and threats of the region, and integrate all measures and projects within the scope of this plan;
- improve the capacity (knowledge, skills and attitude) of local actors;
- strengthen the co-operation of local actors and the co-operation of actors inside and outside the region.

Regional administrative layers and entrepreneurs are the main actors in implementing the three elements of the guideline. In many cases encouragement from upper administrative levels will be required. It is in the scope of this guideline, in which lessons given below can be selected.

Lessons with regard to local resources

- Integrate infrastructure investment in a broader development process;
- Pay attention to distinct modes and technologies of infrastructure in rural regions;
- Valorise rural amenities;
- Improve the perception of amenities by rural actors.

Lessons with regard to economic activities

- Follow a multisectoral approach;
- Support the integration of agriculture in the rural economy;
- Both specialisation and diversification can be successful strategies;
- Enhance facilities for new and small enterprises;
- Focus on the local productive system;
- Strengthen zoning of economic activities by spatial planning.

Lessons with regard to actors

- Enhance capacity building of local actors;
- Strengthen internal and external networks;
- Attract newcomers;
- Define the right labour market area;
- Aim at the appropriate regional mix of skills;
- Be aware of changes in labour demand by industrial firms;
- Encourage part time labour and self-employment.

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