

## Rural regions in the EU

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# **Rural Regions in the EU: Exploring Differences in Economic Development**

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## PREFACE

1995 was a special year for me. I bought an old house with a big garden in the Druivenstraat. This was the start of a new phase in my life, in which I have derived much pleasure from working and relaxing in the garden and doing all kinds of odd jobs in my home. This manual work is a welcome distraction to my scientific work at LEI. The second big event in 1995 was the Coaticook Conference in October, jointly organized by the Canadian Rural Restructuring Foundation and the OECD. Here I became acquainted with the members of the OECD Steering Group on Rural Indicators, a group of researchers in whose meetings I have participated since then. From the early 1990s, the Steering Group had worked on the design of a typology of rural regions in the OECD, which allowed for a comparative analysis of socio-economic indicators in rural regions across the OECD. They had also collected data on employment growth in rural regions in the OECD. The Coaticook Conference was one of the first occasions on which the research results of the Steering Group were presented to a wider audience. Their main message was that - in contrast to the widely held perception that rural regions are losers of jobs and population - there were quite a number of dynamic rural regions in the 1980s whose employment growth even outperformed that of urban regions. At the Coaticook Conference this finding provoked a lot of discussion on factors behind the differences in economic performance between 'leading' (high growing) and 'lagging' (stagnating) rural regions. The overall conclusion of these discussions was that comparisons between leading and lagging regions were needed for further insight into the differential economic performance of rural regions. During these discussions I got the exciting feeling of 'yes, these comparisons of leading and lagging rural regions are the research topic to which I really want to contribute'.

When I returned to LEI after the conference, I immediately started - together with Jaap Post, who also participated in the Coaticook Conference - on a research proposal about a comparison of leading and lagging rural regions in the EU. The European Commission was prepared to fund this proposal under the FAIR program and so the RUREMPLO project was born. During the years 1997-1999 over 20 researchers from 9 EU countries worked on this project coordinated by Jaap Post and me. The RUREMPLO project faced numerous challenges: delineation of regions; collection of regional data; statistical analysis of the gathered regional data; definition of sound criteria for leading and lagging regions; selection of regions for case studies; protocol design for conducting the case studies; collation of empirical evidence from 18 case studies into one comparative analysis; and deriving lessons for employment creation in rural regions. Spirited enthusiasm and cooperation among the members of the RUREMPLO team ensured that all these problems were resolved, and from our comparative analysis of leading and lagging rural regions we managed to formulate a number of key messages on how to stimulate employment growth in rural regions in the EU.

In the second half of the 1990s, LEI adopted a strategy to encourage its researchers to write a Ph.D. thesis. For a long time I had wished to spend some time to undertake Ph.D. research, and LEI's new policy offered me the opportunity to fulfil this wish. Already at the start of the RUREMPLO project I found that nobody could answer my question

‘which theory (or theories) can we use to explain economic development in rural regions?’ Quite naturally, this question formed an interesting starting point for a Ph.D. thesis. As the RUREMPLO project yielded a rich source of empirical evidence on economic development in rural regions, I was also able to analyze whether the theories - identified through literature research - were supported by empirical evidence. In this way, the present thesis came into being. With the aid of the insights gained in this thesis, I hope to contribute to the debate on leading and lagging rural regions.

Acquiring a Ph.D. degree is something you do together. So in the first place I would like to thank my friends, colleagues and family for the interest they showed during the process of writing this Ph.D. thesis. Although I am the one who is conferred a Ph.D. degree, in my view they all share in my success. I would like to express my gratitude to a small number of persons in particular. First, I am indebted to Paulus Huigen and Jouke van Dijk, supervisors of this thesis. I benefited greatly from the lengthy and stimulating discussions we had in Groningen. Second, I want to thank Jaap Post for his valuable support throughout all stages of this thesis. Third, without the case studies in rural regions conducted by the members of the RUREMPLO team, empirical testing of the theories would have been much more difficult. Fourth, I gratefully acknowledge the financial support of LEI director Vinus Zachariasse, which enabled me to spend considerable time in 1999-2001 on my thesis. Fifth, Huib Silvis provided much help in writing the research proposal of this thesis and Hans Hillebrand gave useful comments on the first complete draft. Sixth, I would like to thank Frans Godeschalk for processing much data and Cindy van Rijswick for her useful M.A. thesis on regional economic theories written while she was a trainee. Seventh, I also benefited from the company in the same department of the Ph.D. students Siemen van Berkum, Jos Bijman and Petra Hellegers during the various stages of writing this thesis. Eighth, I appreciate the kind hospitality of Jacqueline Hesseling and Sjouke van der Veen on the numerous occasions I had to stay in Groningen. Last but not least, I thank Gina Rozario for editing my English and Urmila Koelfat for the layout of this book.

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Ida Terluin

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## PREFACE

1995 was a special year for me. I bought an old house with a big garden in the Druivenstraat. This was the start of a new phase in my life, in which I have derived much pleasure from working and relaxing in the garden and doing all kinds of odd jobs in my home. This manual work is a welcome distraction to my scientific work at LEI. The second big event in 1995 was the Coaticook Conference in October, jointly organized by the Canadian Rural Restructuring Foundation and the OECD. Here I became acquainted with the members of the OECD Steering Group on Rural Indicators, a group of researchers in whose meetings I have participated since then. From the early 1990s, the Steering Group had worked on the design of a typology of rural regions in the OECD, which allowed for a comparative analysis of socio-economic indicators in rural regions across the OECD. They had also collected data on employment growth in rural regions in the OECD. The Coaticook Conference was one of the first occasions on which the research results of the Steering Group were presented to a wider audience. Their main message was that - in contrast to the widely held perception that rural regions are losers of jobs and population - there were quite a number of dynamic rural regions in the 1980s whose employment growth even outperformed that of urban regions. At the Coaticook Conference this finding provoked a lot of discussion on factors behind the differences in economic performance between 'leading' (high growing) and 'lagging' (stagnating) rural regions. The overall conclusion of these discussions was that comparisons between leading and lagging regions were needed for further insight into the differential economic performance of rural regions. During these discussions I got the exciting feeling of 'yes, these comparisons of leading and lagging rural regions are the research topic to which I really want to contribute'.

When I returned to LEI after the conference, I immediately started - together with Jaap Post, who also participated in the Coaticook Conference - on a research proposal about a comparison of leading and lagging rural regions in the EU. The European Commission was prepared to fund this proposal under the FAIR program and so the RUREMPLO project was born. During the years 1997-1999 over 20 researchers from 9 EU countries worked on this project coordinated by Jaap Post and me. The RUREMPLO project faced numerous challenges: delineation of regions; collection of regional data; statistical analysis of the gathered regional data; definition of sound criteria for leading and lagging regions; selection of regions for case studies; protocol design for conducting the case studies; collation of empirical evidence from 18 case studies into one comparative analysis; and deriving lessons for employment creation in rural regions. Spirited enthusiasm and cooperation among the members of the RUREMPLO team ensured that all these problems were resolved, and from our comparative analysis of leading and lagging rural regions we managed to formulate a number of key messages on how to stimulate employment growth in rural regions in the EU.

In the second half of the 1990s, LEI adopted a strategy to encourage its researchers to write a Ph.D. thesis. For a long time I had wished to spend some time to undertake Ph.D. research, and LEI's new policy offered me the opportunity to fulfil this wish. Already at the start of the RUREMPLO project I found that nobody could answer my question

'which theory (or theories) can we use to explain economic development in rural regions?' Quite naturally, this question formed an interesting starting point for a Ph.D. thesis. As the RUREMPLO project yielded a rich source of empirical evidence on economic development in rural regions, I was also able to analyze whether the theories - identified through literature research - were supported by empirical evidence. In this way, the present thesis came into being. With the aid of the insights gained in this thesis, I hope to contribute to the debate on leading and lagging rural regions.

Acquiring a Ph.D. degree is something you do together. So in the first place I would like to thank my friends, colleagues and family for the interest they showed during the process of writing this Ph.D. thesis. Although I am the one who is conferred a Ph.D. degree, in my view they all share in my success. I would like to express my gratitude to a small number of persons in particular. First, I am indebted to Paulus Huigen and Jouke van Dijk, supervisors of this thesis. I benefited greatly from the lengthy and stimulating discussions we had in Groningen. Second, I want to thank Jaap Post for his valuable support throughout all stages of this thesis. Third, without the case studies in rural regions conducted by the members of the RUREMPLO team, empirical testing of the theories would have been much more difficult. Fourth, I gratefully acknowledge the financial support of LEI director Vinus Zachariasse, which enabled me to spend considerable time in 1999-2001 on my thesis. Fifth, Huib Silvis provided much help in writing the research proposal of this thesis and Hans Hillebrand gave useful comments on the first complete draft. Sixth, I would like to thank Frans Godeschalk for processing much data and Cindy van Rijswick for her useful M.A. thesis on regional economic theories written while she was a trainee. Seventh, I also benefited from the company in the same department of the Ph.D. students Siemen van Berkum, Jos Bijman and Petra Hellegers during the various stages of writing this thesis. Eighth, I appreciate the kind hospitality of Jacqueline Hesseling and Sjouke van der Veen on the numerous occasions I had to stay in Groningen. Last but not least, I thank Gina Rozario for editing my English and Urmila Koelfat for the layout of this book.

The Hague, October 2001  
Ida Terluin

# 1 INTRODUCTION

## 1.1 Background: setting the rural scene

Nearly everybody has some relationship with rural areas, be it as a place to work, to live or to visit for holidays. These relationships affect the performance of the rural economy in various ways: through direct contributions to economic activities, through demand for housing and consumer services or through demand for recreation facilities. The extent, however, to which the rural economy in individual areas benefits from these activities, largely varies. From a recent analysis, it appears that there were dynamic rural regions which showed an employment performance above the national average during the 1980s, and that there were also rural regions whose employment growth lagged behind (OECD, 1996a). This observation directly prompts the following question: why do some rural regions show a higher employment performance than others? Can the sectoral mix of employment explain these differences? Or are these differences mainly the result of factors like local resources, natural and cultural amenities, entrepreneurial tradition, work ethics, public or private networks? This study aims to provide answers to this question by giving a thorough analysis of how economic development theories conceptualize the driving forces behind economic development in rural regions.

In traditional economic development theories, used to explicate industrialization processes over the last few centuries, economies tend to be modelled in terms of a dual system with a stagnating agricultural sector in rural areas and a modern, industrial sector in urban areas. These theories usually assume that the function of the agricultural sector in the process of economic development is to provide labour for the urban industries and for the construction of infrastructure, resulting in an outmigration from rural to urban areas. Another role prescribed to the agricultural sector by these theories is that it provides savings for investments in the industrial sector, foreign exchange earnings from agricultural exports, food for the urban labour force and a market for the sale of industrial products. Although the agricultural sector may profit from this development process by modernization and productivity increases, it may be clear that according to these theories, agricultural and rural development tend to be externally determined by the urban industrial sector (Slee, 1994: 186; Szirmai, 1994: 243-73).

### *Sectoral dichotomy of rural and urban areas no longer adequate*

However, most rural areas in EU member states no longer reflect this image of dominance of the agricultural sector and outmigration of labour. The same applies for rural areas in other advanced economies in the OECD. It appears that economies in rural areas are characterized by a wide range of economic activities and that in 1990 even in the most rural regions of the EU, the agricultural sector accounted for less than 20% of the regional labour force (see Section 2.3; OECD, 1996a). Besides, since the 1970s the outflow of labour from many rural areas has been outweighed by an immigration of economically active people and retirees from urban areas. This so-called 'counterurbanization' largely varies among regions and countries, but it seems to be a general feature in the OECD (Dahms and McComb, 1999: 129-132). Another interesting phenomenon is the already mentioned differentiation in economic performance among

rural areas. These developments illustrate that the sectoral dichotomy of rural and urban areas, as assumed in traditional economic development theories, is no longer adequate to describe economic developments that rural areas in advanced countries have experienced during the last decades, and suggest that there are other factors at work which affect the economic performance of rural areas in different ways.

#### *Rural and urban areas expressed as territorial units*

Moreover, a closer look at the sectoral dichotomy of rural and urban areas reveals a paradox: as soon as non-agricultural activities become dominant in rural areas, these areas become labelled as semi-rural or peri-urban. This means that it is impossible for rural areas to diversify their economy without simultaneously losing the label of 'rural' (Saraceno, 1994:467-70). As an alternative for the rural-urban division, Saraceno proposes a local economy approach, in which spatial differentiation is based on compact territorial entities like labour market areas. In this approach, each territorial entity includes agricultural, industrial and service activities and consists of one or more centres and open space. Based on the density of economic activities and population, some of these entities can be labelled as '(more) rural' and others as '(more) urban'. Such an approach is attractive in socio-economic analyses, as these territorial entities can be expressed in terms of distinct socio-economic structures. This approach has been applied by the OECD in analyses of economic performance of rural regions (OECD, 1994, 1996a). The present study also follows this approach.

Within this constellation of rural and urban regions, it can be questioned whether factors affecting economic growth in rural regions differ from those in urban regions. Saraceno has put forward another interesting view which postulates that the competitiveness of rural and urban regions is based on different forms of economic organization. The attributes of rural regions, like low population density, a structure of small and medium sized enterprises, mixed forms of integration with external markets, quality and niche products, seem better suited to economies of scope (diversification), while urban regions with high population density, large firms, mass markets and well-established international connections tend to be associated with economies of scale (Saraceno, 1996:5). Several objections can be raised against this idea. It ignores, for example, the existence of large industrial firms - often affiliates of multinationals - in rural areas. Such firms are in fact exponents of economies of scale. In addition, urban areas include a high number of small and medium sized enterprises. Despite these objections, the suggestion that the economic organization in rural and urban areas may differ deserves further attention, as this may have consequences for the conceptualization of economic development in rural regions.

#### *Valorization of rural amenities*

Due to the increasing levels of welfare, people are in search of a wide range of recreational possibilities. Rural areas meet this demand by offering all kinds of rural amenities like cultural landscapes of outstanding scenic beauty or high natural value, settlements with a rich history and architectural remains, and protected areas like regional or national parks. The valorization of these rural amenities and the related employment opportunities affect the economy of rural areas, but there is insufficient knowledge about how tourist activities can be exploited in the rural economy in a sustainable way.

### *Different approaches to rural development policy*

Disparities in economic development among regions have not only attracted the attention of academics, but that of policy makers as well. In order to reduce regional disparities, a wide spectrum of policy makers from the local to the EU level are involved in the process of designing and implementing rural development policy. In the debate on rural development policy, at least two major dialectic pairs of rural development strategies can be distinguished: exogenous versus endogenous development and top-down versus bottom-up direction (Von Meyer *et al.*, 1999: 18-20). Each of these pairs addresses a particular aspect of development. In the exogenous-endogenous dialectic the focus is on the origin of employment growth: according to the exogenous development approach, employment growth is considered to be transplanted into a region and mainly externally determined, while the endogenous development approach assumes that employment growth is produced by local impulses and largely based on local resources. The top-down versus bottom-up debate deals with the competences of administrative tiers: in a top-down approach, national (or EU) administrative layers take the lead in the development process, and they are in charge of decision making on policy objectives and policy implementation, whereas in a bottom-up approach local actors are the initiators of the development process and are responsible for decision making and implementation of policies. After World War II, the exogenous and top-down approaches dominated rural development policy in Western European countries. This resulted in a direction of rural development policy towards modernization of the agricultural sector, and as this proved insufficient to stabilize the rural economy, towards branch plants as well, 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). Considering the success of industrial districts at that time, the emphasis in rural development policy began to shift towards the endogenous and bottom-up approaches, paying attention to support for local business, encouragement of local initiatives and provision of suitable training. The EU has strongly encouraged this shift: the reform of the EU Structural Funds (1988) resulted in the inclusion of the principles of partnership, programming and additionality into EU structural policies (CEC, 1990:12). These principles were immediately spread to the member states, as they had to adopt these principles in their structural (including rural) policies in order to be eligible for EU co-financing.

This emerging shift in rural development policy from an exogenous, top-down towards an endogenous, bottom-up approach is a complicated process, as it requires changes in the institutional structure, changes in competences between different administrative layers, and sufficient capacity of local actors to initiate and sustain economic growth in the local economy. Many bottlenecks exist and have to be dealt with before an endogenous, bottom-up approach in rural development policy can work. Despite these difficulties, the EU still intends to continue with this approach. In the design of the EU structural policies for the period 2000-2006 in Agenda 2000, this approach figures prominently in the plans for LEADER+ (*Liaison Entre Actions de Développement de l'Economie Rurale*), which is referred to as an integrated rural development policy. The word 'integrated' emphasizes the interaction between actors, sectors and projects. LEADER+ policies should be implemented by means of strategic development

programmes designed in mutual consultation with local actors, entrepreneurs and administrative layers. However, due to lack of knowledge on the working of decisive factors in the rural development process and main features governing the interaction of local and external actors, it is difficult to achieve the aim of such rural development programmes.

## **1.2 Aim, position and research design of this study**

The various aspects of the rural scene in the EU - as outlined in the previous section - give rise to two broad questions: first, which factors can be considered to be the main driving forces behind economic development in rural areas in the EU during the last decades, and second, how can policy makers more successfully implement measures to encourage economic development in rural areas? This study does not pretend to answer these questions fully, but it attempts to contribute to the answer on the first question by giving a systematic overview and critical analysis of some relevant theories on economic development in rural regions of the EU that especially pay attention to factors like networks, capacity of local actors and power relations. As a next step, the insights achieved in this examination can be used in the design of development strategies for rural areas, which may be helpful for policy makers. In order to achieve this aim, the focus of this study will be on the following four objectives:

- a Analysis of regional economic growth theories, which can be used for the explanation of economic development in rural regions in the EU;
- b Analysis of development trajectories in selected rural regions in the EU, and examination of applied development strategies in those regions;
- c Pattern-matching in order to analyze whether development trajectories identified under (b) accord with one or more of the theories discussed under (a);
- d Design of a guideline for economic development strategies for rural regions in the EU.

Before we continue with an explanation of these objectives, we first focus on the impetus behind this study and its positioning within scientific disciplines. This provides a scientific context, from which the objectives can more easily be understood.

### *OECD territorial scheme impetus behind new research questions*

A main impetus for carrying out the present study on factors behind current economic developments in rural regions was given by two OECD studies (1994, 1996a), in which a territorial scheme of rural regions was launched and territorial indicators for these regions were analyzed. These studies showed that there were quite large variations in economic performance among rural regions across the OECD during the 1980s. These economic differentials had hitherto not been noted. Hence, the OECD approach stimulates a new range of research questions on comparative analyses of socio-economic performance among rural regions, in which, in particular, comparisons of so-called leading and lagging rural regions are appealing. Such comparative studies have been carried out, for example, in the EU in the RUREMPLO project (Terluin and Post, 2000) and in Canada through the New Rural Economy project (Reimer, 2000). In the RUREMPLO project, in which research teams from nine EU countries participated, employment dynamics in nine pairs of leading and lagging rural regions in nine EU



countries for the period 1980-1997 were analyzed. The RUREMPLO project provides a rich source of empirical evidence on socio-economic dynamics in rural regions, which offers interesting opportunities for further research. Moreover, it also revealed some gaps in rural research, one of which is the lack of a systematic overview of theories on economic development in rural regions in advanced countries (Terluin and Post, 1999:42).

As one of the two scientific coordinators of the RUREMPLO project, it was challenging for this author to contribute to such an overview of theories on economic development in rural regions in advanced countries, and as a next step, to use the case studies of the RUREMPLO project in order to analyze whether the identified theories are supported by empirical evidence. This close relationship between the present study and the RUREMPLO project made it sometimes unavoidable to recall some findings of the RUREMPLO project like, for example, at the end of Section 2.2, in Section 2.3, Chapter 5, Section 7.2 and Section 7.4. In all these cases, this author was a major contributor in the generation of the results (see Esposti *et al.*, 1999; Terluin and Post, 1999, 2000; Terluin *et al.*, 1999a). Moreover, in all instances, the RUREMPLO results required extensive reconfiguration in order to fit into the specific purpose of the present study.

#### *Positioning of this study*

In order to achieve more insight into factors behind current economic developments in rural regions, we have mainly used literature put forward in the multidisciplinary field of rural studies and in the discipline of regional economics. By doing so, we tried to link the 'rural aspect' with the 'regional economic aspect'. Rural studies seek to understand the interaction between spatial structures and socio-spatial processes in rural areas. It addresses a wide range of subjects in rural areas like people, settlements, landscape, environment, agriculture, economy, policy, minorities, gender and cultural issues. Contributions to the multidisciplinary field of rural studies mainly originate from rural geography, rural sociology, agricultural economy, demography, ecology, rural planning and administrative sciences (Cloke, 1985 and 1997; Huigen, 1996). In order to get in touch with ideas from the more 'hard core' economics, a rich body of literature from the discipline of regional economics was consulted. The said literature attempts to explain the economic behaviour of regions (Armstrong and Taylor, 2000:1) or more specifically, to describe and explain the distribution of economic activities over regions (Heijman, 2001:2). This literature covers abstract spatial-economic analyses based on neoclassical assumptions as well as institutional perspectives on regional economic development, in which regions are embedded in a complex of social, cultural, political and historical factors (Boekema *et al.*, 2000:461). Apart from economists, economic geographers also contribute to the debate in regional economics.

#### *Research design of this study*

Having discussed the impetus of the study and its position within scientific disciplines, we now turn to the research design of this study, in which a brief explanation about the four stated objectives is given. In the preceding, the term 'rural region' has already been used several times. For the purpose of this study, we can describe a rural region as a territorial unit with one or more small or medium sized cities surrounded by large areas of open space, with a regional economy and a relatively low population density. Usually,

the size of a rural region reflects that of a labour market area. These rural regions are our basic research units. By examining the debates in rural studies and regional economics, we will compose an overview of theories on economic development in rural regions. From this overview we will select a number of theories for further analysis. We use the method of ‘pattern-matching’ (Yin, 1993, 1994) to test whether these theories predict the development trajectories in 18 case studies in rural regions in the EU. The method of pattern-matching consists of three steps: first, the construction of theory patterns, second, the construction of case study patterns, and third, the matching of the theory patterns and the case study patterns. A development trajectory is interpreted here in terms of a development path or the course that a region follows over time. As case studies we used those which were carried out in the scope of the RUREMPLO project (Terluin and Post, 2000). Based on the findings of the pattern-matching and the experiences in the case study regions, we formulate recommendations for economic development strategies for rural regions in the EU.

Finally, this study is restricted to economic developments since the beginning of the 1980s. We presume that most rural regions have completed their transition from an agrarian economy to a modern industrial or service economy before the 1980s, a step which can be testified by the already drastically reduced size of the agricultural sector in 1980 (maximum 20% in the most rural regions; see Annex Table A2.1). So it can be said that we analyze developments in a post-agricultural economy. Of course, demarcations of time periods always embody a certain extent of arbitrariness, unless an event with enormous repercussions occurs. In a sense, the oil crisis of the 1970s can be considered to be such an event. As such, 1980 as a starting point in this study is justifiable. A more pragmatic reason is that we intend to use empirical data from the RUREMPLO project, which is available from 1980. It is rather difficult to extend these data to earlier years.

### **1.3 Plan of this study**

The plan of this study is as follows. In the next chapter we focus on main issues and trends in rural regions in the EU. We start with a discussion of the various approaches to rurality after which we indicate the point of view used in this study. Then we turn to socio-economic developments in rural regions in the EU since the beginning of the 1980s. Finally, we pay attention to rural development policy and identify several shifts in this policy. In Chapter 3 we review a number of theories on economic development in rural regions. We have divided this review in theories put forward in the debate in regional economics and theories developed in the debate in the multidisciplinary field of rural studies. From these debates a number of theories are selected for further research. In Chapter 4 we introduce the method of pattern-matching, in which three stages can be distinguished: the construction of a theory pattern, the construction of a case study pattern and the matching of both patterns. In Chapter 4 we also construct theory patterns for the selected theories. In Chapter 5 we deal with the second step of the method of pattern-matching: the construction of case study patterns. From these case study patterns, we derive development trajectories in the 18 case study regions during 1980-1997. In Chapter 6 we focus on the third step of the method of pattern-matching: the matching of the theory patterns and the case study patterns. The findings of this matching show which

theories are widely supported by empirical evidence from the case studies and which theories are not. In the last chapter we make some concluding remarks on theory and practice of economic development in rural regions in the EU, with recommendations for economic development strategies for rural regions in the EU and some suggestions for further research.

## 2 MAIN TRENDS AND ISSUES IN RURAL REGIONS

### 2.1 Introduction

Chapter 1 highlighted a number of important issues concerning rural regions in the EU such as the differential economic performance of rural regions, doubts about the urban-rural dichotomy, questions on factors affecting economic development and shifts in the rural policy debate. The aim of this chapter is to analyze these issues in depth by reviewing main socio-economic trends and policy issues in rural regions of the EU. This chapter serves as a general introduction to the opportunities and threats faced by rural regions, and lays the ground for the discussion of theories on economic development in the following chapters.

We start this chapter with a discussion of rurality, which has a multiplicity of associations such as non-urban, agriculture, beautiful landscape, quietness, old-fashioned way of life and countryside idyll. In Section 2.2 we elaborate on three approaches which encapsulate the different meanings of rurality: the spatial approach, the territorial approach and the constructivist approach. We pay also attention to the various concepts of rurality applied by the different EU member states which - given the differences in physical, demographic, socio-economic, political and cultural circumstances - vary. As final steps in Section 2.2, we review the concepts of rurality used by the European Commission and the OECD, and we explain why we use the territorial approach to rurality in this study. Our choice implies that we distinguish a large number of rural economies in Europe which, in the context of this study, are labelled as rural regions.

In Section 2.3 the focus is on main socio-economic changes in rural regions in the EU since the beginning of the 1980s. First, we focus on some economic disadvantages in rural regions such as labour-saving adjustments in the agricultural sector, lack of agglomeration and inadequacies in infrastructure, which are often associated with outmigration from rural regions. Then, we explore socio-economic developments by making a comparative analysis of some general socio-economic indicators like GDP/capita, unemployment rates, employment growth and population growth. This analysis yields a varied pattern of socio-economic development in rural regions, comprising leading and lagging regions. This differential regional economic performance will be analyzed further in the subsequent chapters.

In Section 2.4 we discuss how policy makers have tried to reduce socio-economic disparities among regions. Their policy mainly consisted of specific measures aimed at adjustments in the agricultural sector and more general measures to stimulate the rural economy. In both types of measures some shifts have taken place. These become clearer when we extend our review period to the decades before the 1980s. Where agricultural structural policy measures are concerned, there seems to be a gradual shift from measures directed at productivity growth towards measures emphasizing the multifunctional role of the agricultural sector. Within the measures aimed at the more general development of rural economies, a shift emerges from measures encouraging inward investments towards measures enhancing the local development potential, or more briefly: a shift from an

exogenous to an endogenous development model. In the next chapter, such a shift can also be detected in the theoretical debate. In addition, two other shifts are dealt with in Section 2.4: an emerging shift from sectoral to territorial policy and a shift in the governance framework from a top-down to a bottom-up approach. Finally, in Section 2.5 some concluding remarks are made.

## 2.2 Approaches to rurality

The debate about the conceptualization of rurality ‘strikes right at the heart of rural studies’ (Pratt, 1996:71). Among the multiplicity of meanings of rurality, two main approaches can be distinguished: concepts that denote the rural as a distinctive type of locality and concepts that describe the rural as a social representation. Or in other words: ‘the rural as space and the rural as representing space’ (Halfacree, 1993:34). In the first approach, spatial classifications are based on a variety of land use and/or socio-economic variables, resulting in locations with boundaries on a map (Errington, 1994:367; Du Plessis *et al.*, 2001). Following Blanc’s (1997) proposed division of spatial classifications into spatial and territorial categories, three approaches can be distinguished: spatial approach, territorial approach and social constructivist approach. These approaches are briefly discussed below.

### *1a Spatial approach*

This approach is based on the idea that rural space - due to its extensive land use - has some characteristics which are different from other (usually urban) spaces. It has its roots in models of spatial economics like Von Thünen’s model on agricultural land use, in which various types of agricultural production are - according to the intensity of their land use - organized in concentric circles around a city, and the central place theory of Christaller and Lösch in which space is regarded as a set of points in which economic agents (producers, labourers and consumers) seek the optimal location (Blanc, 1997:1-3). Such models are often characterized by a hierarchical vision of space, a ranking of goods and services and the presence of agglomeration and dispersion forces. The starting point in the structuring of space in such models is a concentration of economic activities in the centre, due to economies of scale and transport costs. This concentration of firms and labourers attracts retail business and personal services, which results in a diverse supply of products, skills and information. The resultant diversification can be seen as a positive externality of the centre and is an incentive for a new round of establishment of firms and labourers in the centre. This agglomeration tends to be a cumulative process. However, dispersion forces are also at work. Competition for land use and negative externalities like pollution and congestion will push activities and agents out of the centre. Activities with a less intensive land use, like agriculture, and people who do not appreciate the benefits of the centre, move out. The complex interplay of agglomeration and dispersion forces results in a structuring of space where centres and peripheries differ not only in the density of jobs and people, but also in the structure of economic activities and characteristics of households. In this way, a functional specialization of spaces emerges. The further away from the centre, the more likely one finds less intensive land use activities, basic services (which are frequently consumed and which need not to be produced on a large scale to become profitable), and a composition of the population

which consists of a relatively high proportion of non-active people. The periphery is often associated with traditional economic and social structures and expressed in terms of a dependent relationship with the urban centre. In the spatial approach, rural coincides with periphery.

In the scope of this vision on a functional specialization of space, Cloke (1985:5) defined a rural area in his editorial in the first volume of the *Journal of Rural Studies* in terms of an area which:

- 1 is dominated (either currently or recently) by extensive land uses, notably agriculture and forestry;
- 2 contains small, lower order settlements which demonstrate a strong relationship between buildings and extensive landscape, and which are thought of as rural by most of their residents;
- 3 engenders a way of life which is characterised by a cohesive identity based on the respect for the environmental and behavioural qualities of living as part of an extensive landscape.

Although Cloke immediately admits that many other definitions can be given, his definition covers to a large extent all kinds of descriptions or indices of rurality found in the spatial approach. These descriptions usually characterize rural areas as those areas satisfying certain statistical thresholds in socio-spatial or socio-cultural dimensions (see for example Halfacree, 1993:23-5; Pratt, 1996:70; Borgstein *et al.*, 1997:14-8). These thresholds may refer among others to land use (like agriculture, forest and nature), share of agriculture in employment, population density, built-up area, frequency of contacts, density of societies and crime rates.

### *1b Territorial approach*

This approach abandons the strong interweave of rural with agriculture and the urban-rural dichotomy in the spatial approach and emphasizes the economic diversification of rural areas. According to the territorial approach (sometimes also referred to as local economy approach; see Saraceno, 1994:456), space is divided into territorial entities, which cover a local or regional economy. Each territorial unit includes both agricultural, industrial and services activities and consists of one or more centres and open space. The scale of these territorial units may vary: it usually refers to communities, labour market areas or regions. As a next step, a degree of rurality is assigned to each of these territorial units by using parameters such as population density and distance. For example, some territorial entities are densely populated, have a metropolitan centre and a small amount of open space, whereas other territorial entities are characterized by a low population density, one or more small or medium sized towns and a large amount of open space. When using the criterion of population density for determining the degree of rurality, the first territories can be labelled as 'urban territories' and the second as 'rural territories'. In between these two opposites, a wide range of different configurations exists. The relationship between the different territories should not be conceived in traditional terms of dependence of one territory on another, or core-periphery dynamics, but rather in terms of a set of non-hierarchical competing local economies in the world market (Saraceno, 1994:469).

### *2 Constructivist approach*

According to this approach, rural space is regarded as a social representation: a mental construct, which acts as a guide to deal with the complexity of the social world. Or in

other words: rural is an image in our mind, which helps us to prescribe and organize our behaviour and responses (Halfacree, 1993:29). The social representation of a specific actor is an amalgam of personal experiences and handed-down beliefs, propagated through literature, the media, the state, family, friends and institutions (Halfacree, 1993:33). Hence the mental constructs of rural vary among actors, depending on place, time and social group, and may include such concepts like countryside idyll, agriculture, quietness, non-urban, nature, recreation, open space, backwardness etc. In effect, the social representations of rural that are associated with different groups of people can be expressed in terms of micro-cultures (Hoggart *et al.*, 1995:26). In some of these social representations, rural is conceived as a production asset and in others as a consumption asset (Hoggart *et al.*, 1995:28).

Actors involved in the construction of representations of rural are diverse: they can, for instance, be permanent or temporary users of space, policy makers and academics. Conflicts and controversies about alternative uses of rural space indicate that social representations are related to the issue of power (Pratt, 1996:70). Such conflicts may arise, for instance, between farmers' interest groups, which want to exploit space and therefore adapt some landscape elements, and tourist or nature conservation interest groups which prefer to maintain cultural and natural values of rural space. In the scope of these conflicts of interest among different users, Haartsen *et al.* (2000) refer to social representations as 'rural identities'.

From this classification of approaches to rurality, we now turn to a discussion of the use of the concepts of rurality in the various EU member states, the European Commission and the OECD. We also indicate whether the concepts of rurality fit the spatial, territorial or constructivist approach.

#### *Concepts of rurality in the various EU member states*

Given the physical, demographic, socio-economic, political and cultural differences among EU countries, varying concepts of rurality can be expected. Official designations of rural space as distinct localities often refer to small administrative units that fall below the defined population thresholds for urban zones. These thresholds vary from 200 inhabitants in Sweden to 10,000 inhabitants in Italy. At the level of larger geographical units, often additional criteria are used to define a rural typology like the share of agriculture in employment or income, commuting distances and population density (OECD, 1994:17-8; Hoggart *et al.*, 1995:21-3). So in official designations of rural space, EU member states use the spatial approach to rural, and at least at the level of small administrative units, rural space is defined as a residual, non-urban category rather than specified by its own properties.

According to the constructivist approach, there are all kinds of social representations of rural in the EU member states. However, one may wonder whether some dominant social representations of rural exist and whether these differ among countries. Hoggart *et al.* (1995:90-109) distinguish four main rural traditions in Europe, which are not mutually exclusive nor all-embracing:

- 1 Agrarian tradition: rural areas are perceived as productive surfaces for agriculture. Family farms form a cornerstone in national stability and identity, and agricultural

- issues have a central place in national politics. This tradition prevails in France, Denmark, Ireland, the Netherlands, Belgium and Germany.
- 2 Naturalist tradition: rural areas are seen as consumption space of landscape and nature. This view is an urban-centred notion of rural and is usually accompanied by a belief that the traditional rural way of life is superior to contemporary urban and rural life. The formation of amenity groups, preservationist societies and natural history organizations are institutional expressions of this view. This tradition is dominant in Britain, and it can be explained by Britain's early industrialization: the notion of an idealized countryside, outside industrialized towns with its poor living conditions, functioned as a mainstay for urban dwellers. This tradition, together with the agrarian tradition, is also present in the Netherlands, Belgium, France and Germany.
  - 3 Mediterranean tradition: in this tradition, rural areas have little cultural or ideological value in terms of identity. Spatial organization is mainly dictated by cities, ports and major towns, due to physical conditions of small strips of land suitable for economic activities and residence amid large mountainous areas. Rural areas are regarded as hindrances to the establishment of a modern national economy, and are predominantly associated with a large and backward agricultural sector, comprised of both giant landholdings and smallholdings that are generally too small to support a household. This tradition is typical of Spain, Portugal, Italy and Greece.
  - 4 Marginalist tradition: the conception of rural is linked to a physical environment, which is highly valued for its wilderness and mountainous habitat, but which constrains human activities. The integration of environmental protection with agricultural, forestry and fishing practices is essential in this view. This tradition is found in Finland, Sweden, Norway, Austria and Switzerland.

Although these four rural traditions are only presented here in order to give a general overview of the main representations in the constructivist approach in the EU member states, it has to be emphasized that in each country many other social representations of rurality exist as well. Out of the four traditions, the Mediterranean tradition is the only one with a relatively negative valuation of rurality.

#### *Concepts of rurality of the European Commission*

We examine the concept of rurality of the European Commission by analyzing a number of its 'strategic' papers. These papers refer to main benchmarks in the formulation and implementation of EU<sup>1</sup> rural development policy: the reform of the Structural Funds (1988), the start of LEADER (1991) and preparations for Agenda 2000, which concerns EU rural development policy in the period 2000-2006. The various phases of EU rural development policy will be dealt with in Section 2.4; here the focus is on concepts of rurality.

In 'The future of rural society' (CEC, 1988:5, 16) - written in the scope of the reform of the Structural Funds - rural areas are described as territorial entities with a coherent economic and social structure of diversified economic activities. These territorial entities may include villages, small cities and regional centres. Based on this description, the Commission concludes that rural areas cover 80% of the total area in the EU12 and that half of its population lives there (CEC, 1988:16). However, no further specification is



given as to where these rural areas are located, nor reference to criteria used to classify 80% of the EU area as rural. The description of rural areas as territorial entities fits the territorial approach to rurality. In addition to terms like rural economies, rural regions and rural municipalities, rural areas are also often indicated as areas with a large share of agricultural employment or as non-urban. So it can be said that the Commission uses, in addition to the territorial approach, the spatial approach as well. This mix is also apparent in the Commission's classification of rural areas according to three standard problems with which they are confronted:

- 1 rural areas under pressure from the developments of modern society;
- 2 stagnation of rural regions due to structural backwardness;
- 3 stagnation of remote rural regions with structural and natural handicaps.

The first standard problem, which refers to green areas outside urban centres, in which the environment is threatened, can be labelled as a spatial approach of rural. In the other two standard problems a territorial approach is used. The second standard problem deals with regions, which experience outmigration due to a lack of jobs and insufficient diversification of the economy. The third standard problem is an intensification of the second one: these remote regions face a larger depopulation and possibilities for diversification are small.

In the Community Initiative LEADER (*Liaison Entre Actions de Développement de l'Economie Rurale*), launched by the Commission in 1991, rural refers to (groups of) local communities with 5,000 to 100,000 inhabitants (CEC, 1991). In the Agricultural Strategy Paper, dealing with future orientations of the Common Agricultural Policy (CAP) in the scope of the enlargement of the EU to include Central European countries, the same view on rural is put forward (EC, 1995:32-3). In the Cork Declaration - issued at the European Conference on Rural Development (1996) - rural areas are described as (Plumb, 1996:2):

areas - which are the home of a quarter of the population and account for more than 80% of the territory of the European Union - [and which] are characterised by a unique cultural, economic and social fabric, an extraordinary patchwork of activities, and a great variety of landscapes (forests and farmland, unspoiled natural sites, villages and small towns, regional centers, small industries).

Here again no indication of the location of rural areas in the EU is given, but the difference with 'The future of rural society' is striking: population in rural areas has shrunk from half the EU population in 1988 to a quarter in 1996. The enlargement of the EU to include Finland, Sweden and Austria in 1995 - countries which possess large areas with a low population density - may contribute to this reduction, but the reduction can also be due to a redrawing of what 80% of EU territory entails. Although the Cork Declaration is juridically speaking not an official statement of the European Commission, it was immediately embraced by Mr. Fischler, the EU Commissioner for Agriculture. The concepts of rurality put forward by LEADER, the Agricultural Strategy Paper and the Cork Declaration fit the territorial approach

In the proposals for 'Agenda 2000' the Commission adopted the description of rural areas given in the Cork Declaration (EC, 1997a:6-9). For the first time, they gave a clear explanation of rural areas: local communities with less than 100 inhabitants per square kilometre. Using this criterion, about 17.5% of the EU population lives in rural areas

which cover over 80% of EU territory. However, the Commission also uses another classification of rural areas based on the degree of integration into the national economy:

- 1 integrated rural areas: areas with an employment base in the secondary and tertiary sectors, a growing population and potential threats to their environmental, social and cultural heritage;
- 2 intermediate rural areas: areas relatively distant from urban centres with a varying mix of primary and secondary sectors;
- 3 remote rural areas: areas with low population densities, heavily dependent on agriculture, isolated by topographic characteristics and providing only the least adequate basic services.

With regard to the above classification, it is unclear whether the Commission refers in this classification to territorial entities, with a local or regional economy or to areas with characteristics different from urban spaces.

Reviewing the concepts of rurality of the European Commission, it appears that rurality is often viewed according to a territorial approach although a spatial approach is sometimes used. This twofold approach is also apparent in EU rural development policy (see Section 2.4).

#### *Concepts of rurality of the OECD*

Within the Organization for Economic Cooperation and Development (OECD), two main typologies of rurality can be found: degree of integration into both the national and global economies and population density (OECD, 1996b:4). Both typologies match the territorial approach.

In the first typology, integration in the national/global economy is expressed in terms of distance of a local economy to a major urban centre. Distance does not only refer to physical distance *per se*, but to constraints due to inadequate transportation and telecommunications structure or cultural barriers such as language as well (OECD, 1993:33 a.f.). In this typology three kinds of local economies are distinguished:

- 1 remote areas: these are peripheral, sparsely populated zones; transportation to major urban centres is inconvenient and time-consuming, which limits commuting or even relatively casual business travel;
- 2 intermediate areas: local economies that are still heavily dependent on employment in the agricultural sector, due to insufficient economic diversification;
- 3 economically integrated areas: local economies, often located at the edge of urban centres, with a diversified economic structure. Usually the population in these areas is on the increase due to attractive rural assets.

This typology closely follows the EU classification of rural areas according to their integration into the national economy.

The second typology is based on population density at local and regional level (see Annex 2.1 for methodology) and also distinguishes three groups of regions (OECD, 1994):

- 1 predominantly rural regions;
- 2 significantly rural (or intermediate) regions;
- 3 predominantly urban regions.

This typology has been used - with some adjustments - by the European Commission in its proposals for 'Agenda 2000' (EC, 1997a).

*The use of rurality in this study*

From the discussion of the different concepts of rurality used by the EU member states, the European Commission and the OECD, we have shown that the picture is far from uniform. On the whole, it could be argued that the choice of a definition of rurality depends on the issue to be addressed (Du Plessis *et al.*, 2001). Selecting a definition of rurality in a study focused on economic development in rural areas implies that rural is explicitly linked with a distinctive type of locality. Within this classification, it can be said that the territorial approach is appropriate, as it enables us to consider rural space as a territorial entity with a local or regional economy comprising agricultural, industrial and services activities. By using the territorial approach to rurality we can take all relevant economic relationships into account.

Our choice implies that a large number of rural regional economies in Europe can be distinguished. These are labelled here as 'rural regions'. Hoggart *et al.* (1995:29-31) recommend this term for indicating regions with a relatively low population density, an open countryside with towns and a diversified economic base. Usually, the size of a rural region reflects a functional labour market area. We have delineated rural regions in the EU15 by using a set of 465 regions at NUTS2 and NUTS3 level<sup>2</sup> (Esposti *et al.*, 1999:21). By using the OECD methodology of classifying regions according to their population density, we have categorized our set of regions into most rural regions, intermediate rural regions and most urban regions (Annex 2.1). The distribution of regions over the three classes of rurality is given in Table 2.1 and graphically presented in Fig. 2.1.

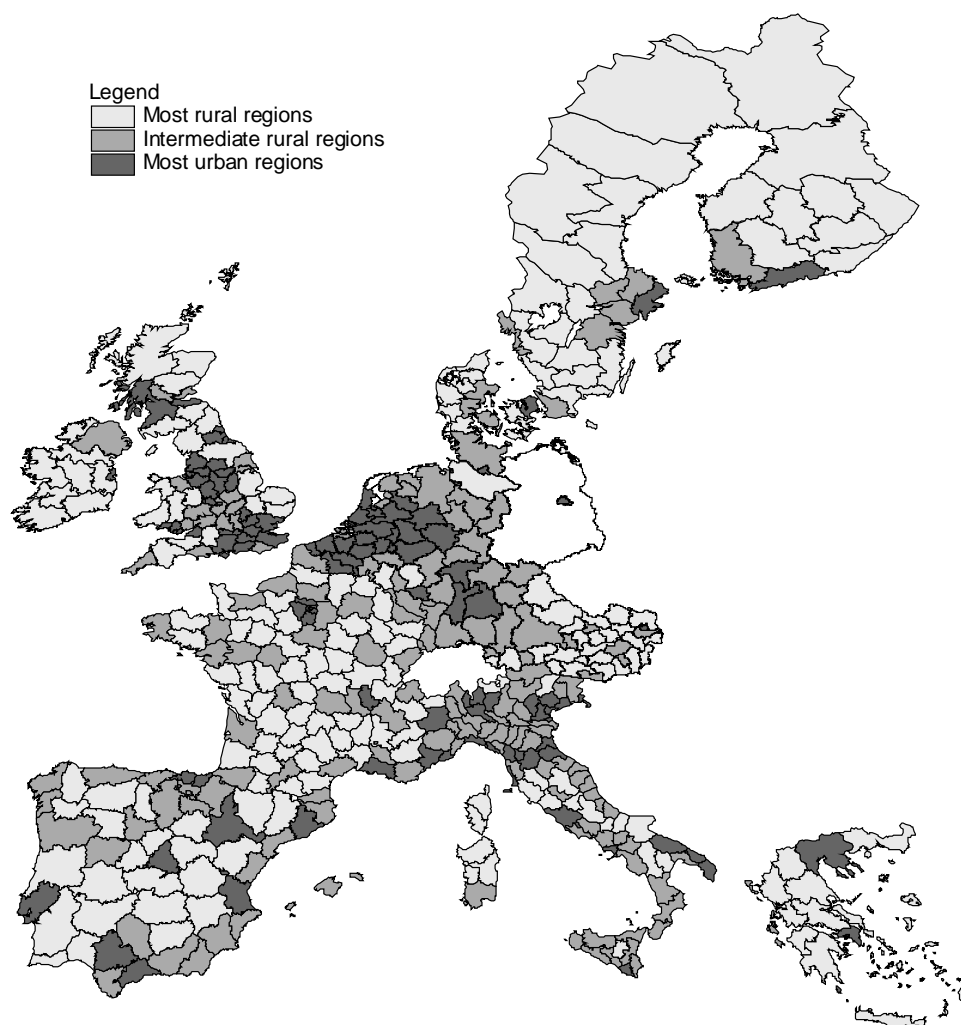
*Table 2.1* Classification of EU15 regions by degree of rurality, 1998<sup>a)</sup> and share of population and land area in the three rurality groups, 1993 (%)

Degree of rurality	Number of regions		% population	% land area
	Total	%		
Most rural regions	195	42	18	60
Intermediate rural regions	164	35	34	28
Most urban regions	106	23	48	12
Total	465	100	100	100

a) Excluding regions in the former DDR.

Source: Esposti *et al.*, 1999:22; RUREMPLO project.

Figure 2.1 Degree of rurality of the EU15 regions, 1998<sup>a)</sup>



a) Excluding regions in the former DDR.  
Source: RUREMPLO project.

### *Half of EU population lives in rural regions*

According to our classification of regions, about one-fifth of the EU population resides in the most rural regions and one-third in the intermediate rural regions (Table 2.2). Together they occupy nearly 90% of the land area of the EU, leaving just over 10% of the land area for the population in the most urban regions. This pattern varies among the member states. In Denmark, France, Ireland, Austria, Portugal, Finland and Sweden over two-thirds of the population lives in rural regions<sup>3</sup>, whereas Belgium, the Netherlands and to a lesser extent the UK are rather urbanized in view of the fact that over two-thirds the population resides in the most urban regions.

Table 2.2 Share of population and land area in the EU regions, 1993 (as % of national total)

	Most rural		Intermediate rural		Most urban	
	Population	Land area	Population	Land area	Population	Land area
Belgium	2	15	14	25	83	61
Denmark	39	68	27	26	33	7
Germany	6	16	45	61	49	23
Greece	48	81	2	2	51	17
Spain	17	52	39	34	44	14
France	30	61	41	34	29	4
Ireland	71	99	-	-	29	1
Italy	9	27	45	53	47	20
Luxembourg	-	-	100	100	-	-
Netherlands	-	-	15	40	85	60
Austria	49	82	32	18	20	0
Portugal	28	63	37	24	35	13
Finland	61	90	14	7	25	3
Sweden	49	89	32	10	19	2
United Kingdom	15	53	18	21	67	26
EU	18	60	34	28	48	12

'-' denotes that the group does not exist.

Source: RUREMPLO project.

### 2.3 Socio-economic trends in rural regions

Taking the rural region - as defined above - as a basic research unit, we continue with a discussion of main socio-economic trends in rural regions in the EU since the beginning of the 1980s. There is a wide belief that rural regions are synonymous with decline, although recent literature presents some evidence that the image of rural regions as losers of population and jobs needs some re-adjustment (OECD, 1996a; Bollman and Bryden, 1997; EC, 1997a). Counterurbanization and the emergence of dynamic rural regions have been identified as the main factors which invalidate the stereotyped image. In this section, we will explore these suggested shifts in socio-economic trends in rural regions. First, we focus on some economic disadvantages in rural regions, which are often associated with the rural exodus. Then, we explore the development pattern by making a comparative analysis of some socio-economic indicators in most rural, intermediate rural and most urban regions in the EU since the beginning of the 1980s. Finally, as our findings support the above suggestion of a fairly varied pattern of socio-economic development in rural regions, we discuss some factors that are related to this reversal.

#### *Some often mentioned economic disadvantages of rural regions*

The wide belief that rural regions are synonymous with decline is often associated with a number of characteristics and features that are thought to place rural regions at a disadvantage in the rapidly changing global economy such as (OECD, 1993):

- Rural regions have a relatively large agricultural sector compared with urban regions (Table A2.1). The labour-saving structural adjustments in the agricultural

sector exert continuous pressure on the labour market in rural regions. The creation of jobs in the industrial and services sector is crucial for absorbing the abundant agricultural labour force. If this job creation is insufficient, two harmful effects may arise. First, labour tends to stay in the agricultural sector, thereby preventing its modernization and leading to underemployment. Second, workers leave to look for a job elsewhere, resulting in erosion of the human resource base in rural regions. Nowadays the manufacturing sector, to which rural people turned for jobs, also suffers from overall employment contraction, leaving the services sector as most promising source of new rural employment.

- Rural regions lack advantages of agglomeration and economies of scale that characterize metropolitan areas, advantages which are attractive for many firms. A consequence of this lack is, for example, that rural regions have not shared proportionately in producer services employment, which is a major engine of national economic growth. Other consequences refer to the higher unit costs for many public, consumer and business services in rural regions and to the more difficult access for local governments and rural business to increasingly important expert services. Finally, the wider geographic dispersion of consumers and producers compared with urban regions generally gives rise to higher transportation and transaction costs.
- Many rural regions are not well connected to the transport and communication networks linking major urban nodes, which are critical sources of information, innovation, technology and finance. Such sources facilitate development.

These disadvantages may result in a scarcity of economic opportunities, especially well-paying jobs, and thus, relatively low per capita incomes; declining levels of public services and other facilities; and outmigration of economically active people - in particular high-educated young workers - resulting in declining and ageing rural populations and threats to the rural fabric. However, as it is rather difficult and time-consuming to find comparable data at the regional level for all the socio-economic items above, no systematic research across the EU or OECD rural regions has been carried out in order to check whether these supposed disadvantages negatively affect economic performance in rural regions or whether they are counterbalanced by other factors.

Although it is tempting to pay attention to these items above in our analysis of socio-economic developments in rural regions since the beginning of the 1980s, we do not have the data to do so. Therefore, we restrict ourselves to some general but often used indicators for describing socio-economic trends in rural regions of the EU (OECD, 1996a; EC, 1999a). These are GDP/capita, unemployment rates, the sectoral structure of employment, employment growth and population growth. We discuss these indicators by means of a comparative analysis of developments in most rural regions, intermediate rural regions and most urban regions.

#### *GDP per capita in rural regions usually lower than in urban regions*

Within the EU the level of GDP per capita largely varies among member states: it is relatively low in Greece, Spain, Portugal and Ireland and relatively high in Denmark, Germany and Luxembourg (Table 2.3). With the exception of Greece, the Netherlands, Portugal and the UK, the highest income per capita is found in the most urban regions and the lowest in the most rural regions, with the intermediate rural regions sandwiched

Table 2.3 GDP per capita in the EU regions, '1980-1993' (ECU, index EU = 100)

	Period Y1-Y2	Year 1				Year 2			
		Most rural	Interm. rural	Most urban	National average	Most rural	Interm. rural	Most urban	National average
Belgium	1980-93	95	111	124	121	89	98	115	112
Denmark	1980-93	118	121	164	131	128	133	156	139
Germany	1980-93	98	125	146	133	107	134	148	139
Greece	1980-93	47	40	55	51	43	40	50	46
Spain	1980-93	49	57	61	57	55	62	72	65
France	1986-93	99	112	159	122	94	104	154	115
Ireland	1980-91	.	-	.	58	61	-	88	69
Italy	1980-93	.	.	.	81	.	.	.	93
Luxembourg	1980-93	-	126	-	126	-	168	-	168
Netherlands	1986-93	-	125	111	113	-	103	109	108
Austria	1981-92	73	112	133	97	82	125	160	111
Portugal	1985-93	28	24	41	31	33	41	64	47
Finland	1980-93	93	98	122	101	70	76	101	79
Sweden	1980-93	.	.	.	.	105	111	137	113
United Kingdom	1981-93	99	92	110	105	84	79	89	86
EU	1980-93	79	96	110	100	80	97	109	100

'-' denotes that the group does not exist; '.' denotes that data is not available.

Source: RUREMPLO project.

in between<sup>4</sup>. For the EU as a whole, GDP per capita in most rural regions is about 20% below the EU average, in intermediate rural regions it is less than 5% below, and in most urban regions it is about 10% above the EU average.

#### *Unemployment rates in rural regions not always higher than those in urban regions*

In the EU, about 10% of the working population is unemployed. However, due to the large differences in the level of unemployment rates among member states, it does not make much sense to look at EU averages in the three groups of regions. For example, Spain, and to a lesser extent Ireland and Finland, have high unemployment rates, whereas Luxembourg and Austria have modest unemployment levels (Table 2.4). In some countries like Belgium, Denmark, Italy, the Netherlands, Finland and Sweden, unemployment rates tend to be higher in rural regions, whereas in other countries urban regions have the highest unemployment rates.

#### *Convergence sectoral structure of employment*

Differences in the sectoral structure<sup>5</sup> of employment between rural and urban regions tended to decrease during the study period (Table A2.1). This convergence was mainly the result of a decline in the share of agricultural and industrial employment and an increase in services employment (Table A2.2). In the early 1990s, about 60% of the EU labour force was employed in the services sector and about 30% in the industrial sector. The average share of employment in agriculture in the most rural regions declined from 20% in the early 1980s to 13% in the early 1990s. Only in the most rural regions of Greece, Spain and Portugal did the agricultural sector employ 20% or more of the labour

Table 2.4 Unemployment rates in the EU regions, 1985-1995 (%)

	Period Y1-Y2	Year 1				Year 2			
		Most rural	Interm. rural	Most urban	National average	Most rural	Interm. rural	Most urban	National average
Belgium	1985-95	10	13	11	11	7	13	9	9
Denmark	1985-95	9	9	7	8	7	7	7	7
Germany	1985-95	7	7	8	7	6	6	8	7
Greece	1981-91	4	3	5	4	8	7	8	8
Spain	1985-95	17	21	25	22	21	22	24	23
France	1985-95	10	10	9	10	11	11	12	11
Ireland	1985-94	16	-	19	17	15	-	16	16
Italy	1985-95	11	10	9	9	14	12	11	12
Luxembourg	1985-95	-	3	-	3	-	3	-	3
Netherlands	1987-95	-	11	10	10	-	8	7	7
Austria	1990-95	3	3	5	3	5	5	7	5
Portugal	1990-95	4	3	6	4	6	6	9	7
Finland	1985-95	6	4	2	5	19	17	13	17
Sweden	1985-95	3	3	2	3	8	8	6	8
United Kingdom	1985-95	10	11	12	12	7	8	9	9
EU	1985-95	10	11	11	10	11	14	10	11

Source: RUREMPLO project.

force in the beginning of the 1990s. In the intermediate rural regions, the agricultural sector employed on average 7% of the labour force in the beginning of the 1990s against 3% in the most urban regions.

#### *Rural regions tend to have higher population growth than urban regions*

During the 1980s and early 1990s, all three groups of regions in the EU showed a population increase, which was highest in the intermediate rural regions (Table 2.5). In most member states, rural regions experienced a population growth that was above the rate in urban regions. The exceptions are Germany, Portugal, Finland and Sweden with a faster population increase in urban regions. Population growth in the most rural regions in Spain and France was also below that in urban regions. In some countries, population in the most rural regions increased at a higher rate compared to the intermediate rural regions; in other countries population growth was highest in intermediate rural regions. It has to be noted that population growth does not only result from natural increase, but also from immigration. We do not have migration data for the whole set of EU regions; however, data for the case study regions show that migration is an important factor in population growth in rural regions (Section 5.4).

#### *Leading and lagging rural regions*

So far, we discussed socio-economic trends in the most rural, intermediate rural and most urban regions within countries. We now turn back to the whole set of EU regions in order to examine differences in employment and population growth within the groups of most rural and intermediate rural regions. For this purpose, a distinction of the groups into



Table 2.5 Population growth in the EU regions, 1980-1993 (% p.a.)

	Period Y1-Y2	Most rural	Intermediate rural	Most urban	National average
Belgium	1980-93	0.5	0.2	0.2	0.2
Denmark	1980-93	0.1	0.3	-0.1	0.1
Germany	1980-93	0.6	0.5	0.7	0.6
Greece	1980-93	0.6	0.5	0.5	0.6
Spain	1980-93	0.0	0.5	0.3	0.3
France	1980-93	0.3	0.7	0.5	0.5
Ireland	1985-93	0.1	-	0.1	0.1
Italy	1980-93	0.1	0.1	0.0	0.1
Luxembourg	1980-93	-	0.7	-	0.7
Netherlands	1980-93	-	0.9	0.6	0.6
Austria	1981-94	0.4	0.6	0.2	0.4
Portugal	1985-93	-0.4	-0.1	-0.1	-0.2
Finland	1980-93	0.3	0.0	1.1	0.5
Sweden	1980-93	0.2	0.4	0.7	0.4
United Kingdom	1980-93	0.6	0.5	0.1	0.3
EU	1980-93	0.3	0.5	0.3	0.4

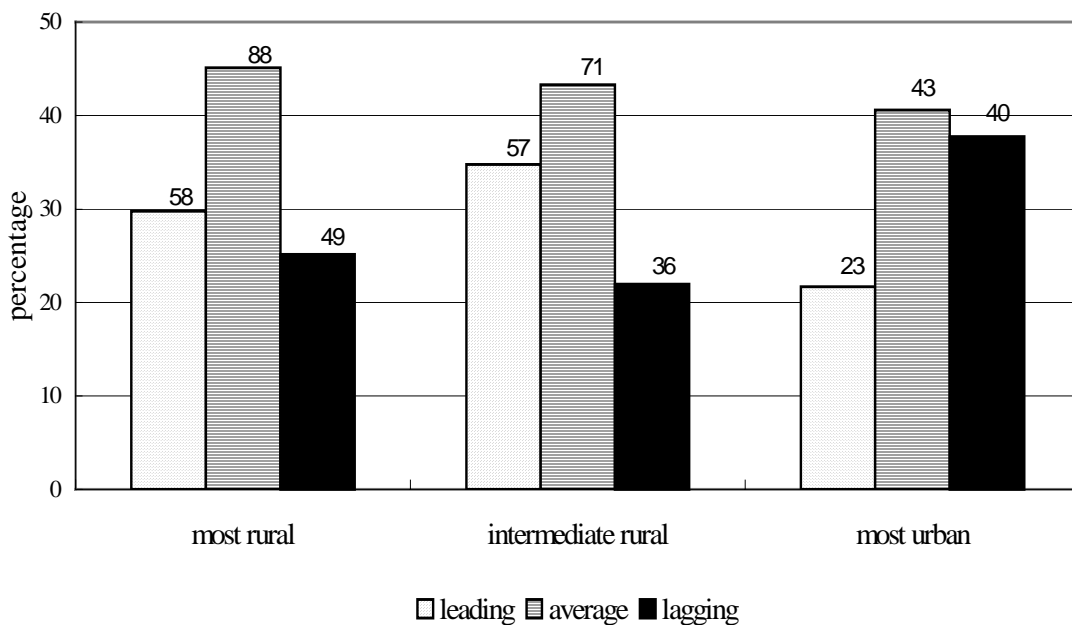
Source: RUREMPLO project.

leading and lagging regions is a useful tool of analysis. To determine whether a region is leading or lagging, many yardsticks can be considered such as employment growth, GDP per capita, GDP growth, population growth and unemployment rates. Depending on the aim of the study, one yardstick or a combination of yardsticks can be used. As creation of jobs is an important issue in rural development policy (see next section), employment growth was used as yardstick. This yardstick was also used in the RUREMPLO project, which distinguished leading, average and lagging regions based on the performance of non-agricultural employment growth during the 1980s and early 1990s. In the RUREMPLO project, a region is considered to be leading if the growth rate of non-agricultural employment was 0.5 percentage points above the national growth rate; on the other hand, a region is considered to be lagging if the growth rate of non-agricultural employment was 0.25 percentage points below the national growth rate (Esposti *et al.*, 1999). These thresholds are rather subjective and chosen as the result of ‘trial and error’: by using these thresholds, the groups of leading, average and lagging regions covered about one-quarter to one-third of all regions. By relating the regional growth rate to the national growth, regional growth rates are corrected for differences among the absolute level of national growth rates. This correction makes sense as the national average employment growth widely varies among EU countries. Clearly, in the studied period macro-economic conditions for employment growth were more favourable in countries like the Netherlands, Ireland, Greece and Portugal relative to countries like Finland and Italy. Due to our correction we try to explain that part of regional growth which is assumed not to be affected by macro-economic factors but brought about by regional factors (see Section 5.3 for a further discussion of this issue). It has to be emphasized that here 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, GDP growth and unemployment rates. Moreover, it appears that the growth rate of employment can change when using another period. This implies that if a region is labelled as lagging, this is not necessarily a permanent situation, but it can change (Reimer, 2000).

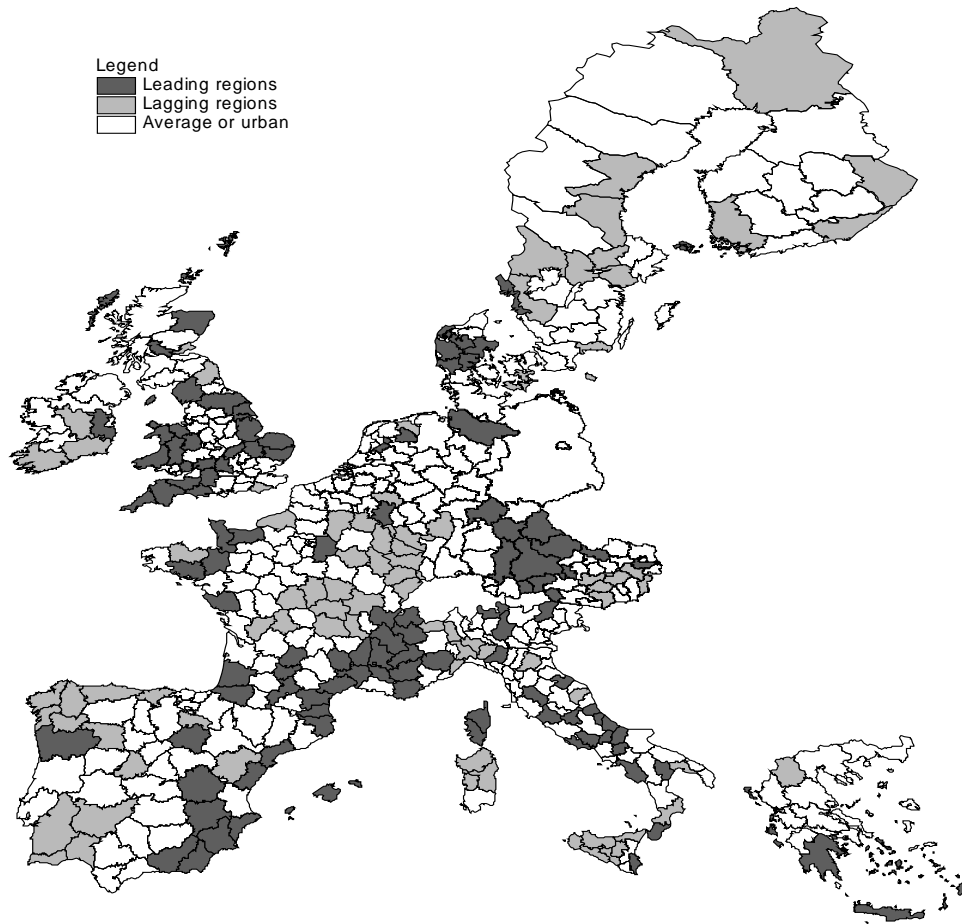
By using the RUREMPLO method of calculation, 30% of the most rural regions and 35% of the intermediate rural regions are classified as leading and 25% of the most rural regions and 22% of the intermediate rural regions as lagging (Fig. 2.2). One of the most striking differences between the group of most rural and intermediate rural regions on the one hand, and the group of most urban regions on the other hand is that the latter has relatively fewer leading regions and more lagging regions. In contrast, the group of intermediate rural regions shows the largest share of leading regions. Looking at the map of leading and lagging most rural and intermediate rural regions (Fig. 2.3), it can be seen that both leading and lagging regions are often clustered in groups. However, the expectation, that leading regions tend to have a more favourable location along coastlines that gives access to waterways/ports and that is attractive for tourists, is not supported by our evidence, as quite a large number of lagging regions are located along coastlines as well. On the other hand, although inner parts of countries may be less favourable locations, it appears that both lagging and leading regions are located in these parts.

Figure 2.2 Distribution of leading and lagging regions in the three rurality groups<sup>a)</sup>



a) Figures above the bars denote the number of regions in the group.  
Source: Esposti *et al.*, 1999:11.

Figure 2.3 Leading and lagging most rural and intermediate rural regions in the EU



Source: RUREMPLO project.

#### *Employment pattern*

Employment development in the 1980s in all categories of regions reflects a common pattern found in advanced countries: a decrease in agricultural employment and an increase in service employment (Table 2.6). Lagging rural regions experienced a larger loss of agricultural jobs and a smaller increase in services employment than the leading rural regions. The surprising element is, however, the increase in industrial employment in the leading most rural and intermediate rural regions, as it is usually taken for granted that industrial employment declined in EU countries in this period (EC, 1997b). This can be interpreted as an indication that the ruralization of industry, which is often thought to have peaked in the 1960s and early 1970s (Healey and Ilbery, 1985:8), continued to take place in a number of rural regions in the EU. A second striking point in regional employment growth is that employment in the leading most rural and intermediate rural regions increased at a higher rate than that in the most urban regions. This seems to be related to two developments: a decrease in employment in industries in the most urban regions on the one hand, and a higher rise in employment in services in the most rural and intermediate rural regions on the other hand.

Table 2.6 The annual rate of change in employment and population by types of regions in '1980-93' a) (%)

Regions	Employment growth					Population growth
	Total	Agriculture	Industry	Services	Non-agriculture	
Leading most rural	0.8	-3.7	0.2	2.1	1.4	0.51
Leading intermediate	1.0	-3.6	0.3	2.4	1.6	1.09
Lagging most rural	-0.7	-4.6	-1.8	1.3	0.1	-0.06
Lagging intermediate	-0.7	-4.8	-2.0	1.0	-0.2	0.06
Most rural regions	0.0	-4.1	-0.8	1.7	0.8	0.26
Intermediate regions	0.4	-3.9	-0.6	1.7	0.8	0.52
Most urban regions	0.5	-3.3	-1.1	1.5	0.6	0.32
All regions	0.4	-3.9	-0.9	1.6	0.7	0.37

a) '1980-1993' is an approximation of the period; the beginning and end of the period vary somewhat among countries.

Source: RUREMPLO project.

#### *Employment dynamics related to population growth*

The leading most rural and intermediate rural regions also showed a population growth in the 1980s and early 1990s, whereas population growth in the lagging rural regions stagnated (Table 2.6), indicating that employment growth and population growth tend to go hand in hand. The population in the leading intermediate rural regions increased at a higher rate than that in the leading most rural regions, but population growth in both groups of leading regions was above that in urban regions.

#### *Socio-economic patterns in rural regions: a mosaic*

The comparative analysis of socio-economic indicators in rural regions in the 1980s and early 1990s in the preceding paragraphs largely supports the view that rural regions are no longer exclusively the scene of decrease in jobs and population. Although the decline in agriculture, both in economic terms and in relation to numbers employed in the sector, has been identified as a major trend, it is paralleled by a growing diversity of employment in the industry and services sector, which in quite a number of cases compensates for the employment loss in agriculture. In addition, most rural regions experienced some population growth. So the picture of rural regions that seems to emerge should be seen rather in terms of 'a new mosaic of rural regions' (Persson and Westholm, 1994) with winners, in-betweens and losers.

This mosaic of rural regions directly raises questions about factors behind this pattern. From the literature, there is a suggestion that these factors are related to an interplay of local and global forces. Territorial dynamics, changes in the social composition of rural population through immigration, and the current globalization process are thought to be main determinants in this interplay, as is discussed below.

First, the concept of territorial dynamics has been put forward in a shift share analysis, in which the OECD (1996a:57-61) has tested the hypothesis whether the differences in employment performance in OECD rural regions during the 1980s could be explained by the sectoral mix. It appeared that the sectoral mix could explain only a part of the divergence in employment performance and that a large residual part was remaining. The OECD (1996a:57) labelled this residual factor as 'territorial dynamics' and suggested that this depends on specific regional and local factors, structures and tendencies such as entrepreneurial traditions, public and private networks, work ethics, regional identity, participation and attractiveness of the cultural and natural environment.

Second, population growth does not only result from natural increase, but also often from immigration. Migrants are a diverse group: they can be made up of economically active people, retirees and return migrants. When migrants originate from urban areas, this immigration is often referred to as counterurbanization. In addition, rural regions experience temporary immigration like seasonal movements for vacation and recreation purposes. These newcomers affect the social composition of the rural population, resulting in new social configurations which vary among regions. Van den Bor *et al.* (1997:17-24) propose in this context the concept of 'arena society', which is an amalgam of old and new conditions. The old conditions refer to the experience of rurality by farmers and industrial workers; the new conditions to lifestyle values like rural idyll, environmental quality, return to the land and cheaper standard of living, which newcomers attach to rurality. The aspirations and expectations of the newcomers pose an unprecedented challenge to the prevailing culture. In this arena, development in rural regions depends on complex economic, social and political processes, in which the various groups of actors are attempting to achieve outcomes commensurate with their aims (Lowe *et al.*, 1993:218; Flyn and Marsden, 1995:1182). The outcome of these processes largely varies among regions, depending on the power relations between the various groups of actors.

Third, the external environment of rural regions is affected by the current globalization process, comprising economic, social, political and environmental changes like the increasing mobility of capital; a delinking of the different stages of production, which has consequences for the organization of firms; shrinking distances as a result of developments in the communications technology sector; geopolitical changes such as the end of the Cold War; and trade liberalization negotiations.

*Rural restructuring emerges from global/local interaction, but ...*

Combining these three notions of dynamics - territorial dynamics, population dynamics and global dynamics - we arrive at the view of 'rural restructuring' (Van den Bor *et al.*, 1997:11-7). According to this view, rural development emerges from an interaction of effects produced by global forces and local responses. The global forces originate from the current globalization process, while the local responses refer to the diversification of economic activities and the adjustment to new conditions by local actors. Van den Bor *et al.* suggest that these local responses depend to a large extent on the structural and institutional make-up of the community, its history, the local leadership, and how the effects of restructuring are interpreted: as a threat or as an opportunity. As local responses largely vary among regions, the rural restructuring process is complex and

differs among regions. This view of rural restructuring suggests that factors behind the different performance of rural regions are related to this global/local interaction. The perception that development in rural regions is a matter of global/local interaction is reflected in several rural development policy measures and theories, which will be discussed later.

*... is coloured by national conditions*

However, it should be noted that the above suggestion of global/local interaction does not imply that territorial units like rural regions are significant causal factors in the global process of socio-economic change. As the primary dimensions of behaviour are structured at a higher level than the community or regional level, local and regional socio-economic processes should be positioned with regard to national and transnational causal forces (Hoggart *et al.*, 1995:9-10). The importance of the national level can, for example, be illustrated by the fact that central governments are the most important distributors of resources for public infrastructure, social security, education etc. (Keating, 1999). In addition, macro-economic policy for ensuring economic stability is also implemented at national level. Another important aspect of the passing over of the national level as a major causal imprint is that we should not assume that global processes are generalizable across space, but that global forces might be heavily conditioned by national structures as well (Hoggart *et al.*, 1995:10). Hence the view of rural restructuring should rather be seen in terms of a global/local interaction, coloured by national conditions. We return to the national impact on socio-economic development in rural regions in Section 5.3.

## **2.4 Rural development policy**

Socio-economic disparities among regions, as discussed in the previous section, constitute a main rationale for implementing rural development policy in order to improve the socio-economic situation in rural regions. In this section we will focus on several aspects of rural development policy. First, we deal with the reasons why such a rural development policy is implemented and provide an overview of main shifts in rural development policy (Section 2.4.1). Then, we examine the contents of the policy (Section 2.4.2-3), followed by some comments on the governance framework (Section 2.4.4-5). We conclude this section by a brief discussion of dissident views on several shifts in rural development policy (Section 2.4.6).

### **2.4.1 Policy aimed at reducing regional disparities**

Disparities in socio-economic trends among regions, as discussed in the previous section, may give rise to differences in the socio-economic outlook among urban and rural regions on the one hand, and within the group of rural regions on the other hand. It is widely recognized that regional disparities in GDP/capita and unemployment rates, which persist for long periods, may have a number of harmful effects (Armstrong and Taylor, 2000:206-7):

1 The existence of a large number of unemployed is economically inefficient, as the

unemployed do not produce output. The whole nation would be better off if unemployment could be permanently reduced in high unemployment regions without leading to a loss of jobs in regions with low unemployment.

- 2 Labour shortages during booms in low unemployment regions may result very quickly in inflationary pressures, because firms tend to raise wages in the intense competition for scarce labour. This wage inflation is transmitted to other regions through inter-plant bargaining within firms and through national wage agreements. Moreover, inflationary pressures in the labour market may spill over to other markets. Reducing regional disparities in the excess demand for labour would reap benefits for the whole economy by reducing inflationary pressures.
- 3 Rapidly growing regions inflict severe economic costs through the congestion of social capital like buildings, roads, railway networks and airports. The classic response to relieve this congestion is further investments to enlarge the existing facilities. On the other hand, these facilities are often under-utilized in stagnating regions. A more equal distribution of economic activities over regions relieves the congestion in rapidly growing regions and slows down the demand for social capital.
- 4 The existence of regional disparities in living standards causes dissatisfaction and resentment, especially among those whose job prospects and living standards are poor.

The rationale behind the implementation of regional policy is to reduce disparities in economic opportunities and social conditions among regions. Regional policy includes all forms of public intervention intended to ameliorate the geographical distribution of economic activities. It aims at the achievement of two interrelated objectives: economic growth and improved social distribution. In doing so, regional policy tries to correct certain spatial consequences of the free market economy (Vanhove, 1999:57). Intervention in the market mechanism in favour of equity has costs in terms of economic efficiency: variation in global welfare in a situation with and without intervention (Leon, 1999:17-8). Regional policy covers a wide range of measures directed at economic diversification, improvements in transport and communications networks, human resource management, access to basic services, provision of business sites etc. The strive to reduce regional disparities is not only an important issue at the national level, but at EU level as well.

#### *Economic and social cohesion among EU regions*

EU intervention in regional disparities can already be found in the Treaty of Rome (1957) (Vanhove, 1999:415-7), whereas the intention to implement regional policy is explicitly expressed in article 130A of the Single European Act (1987):

In order to promote its overall harmonious development, the Community shall develop and pursue its actions leading to the strengthening of its economic and social cohesion.  
In particular, the Community shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions.

Especially, the successive enlargements of the EU to include the relatively poor member states of Greece, Spain and Portugal in the 1980s made the issue of regional disparities urgent. In the Maastricht Treaty (1992), the words '*including rural areas*' were added at the end of article 130A. Since this treaty, the concept of economic and social cohesion constitutes one of the three pillars of the EU, alongside the single market and the economic and monetary union (EMU).

### *Rural development policy*

In this study, we indicate regional policy directed at rural regions briefly as ‘rural development policy’. However, it should be noted that this is a rather restricted view of rural development policy. Often, in addition to the goal of reducing socio-economic disparities among regions, safeguarding rural amenities is also an important concern of rural development policy. This concern reflects the fact that rural regions possess a wide variety of rural amenities such as cultural landscapes of outstanding scenic beauty or high natural value, settlements with a rich history and architectural remains, traditional villages etc. These amenities can be considered as public goods to which high value seems to be attached (OECD, 1998:25). Rural amenities may be threatened by deterioration as a result of changes in economic and land use patterns. These threats may arise, for example, from poorly planned residential or commercial development, uncontrolled tourism, overly intensive agricultural production practices or land abandonment. Hence, a second, more societal goal of rural development policy is to strive at developing and/or protecting key elements of the built and natural environment in rural regions, especially where it cannot reasonably be expected that private market transactions alone will secure the future of this rural heritage (OECD, 1993:16). Of course, there is a strong relationship between both goals of rural development policy as economic activities may have consequences for the development of rural amenities. In this study on economic development in rural regions, we will restrict ourselves to the economic aspects of rural development policy. However, when rural amenities are directly linked to economic activities, we will take them into account.

### *Four shifts in rural development policy*

Within our approach of rural development policy, two main strands can be distinguished. The first one concerns measures aimed at the agricultural sector; the second strand covers measures aimed at the more general development of the rural economy (Van den Bor *et al.*, 1997:41; EC, 1997a:36). As a consequence of the common agricultural market, agricultural measures are closely related to EU policies. With regard to the contents and implementation of rural development policy, four main emerging shifts can be identified (Fig. 2.4). With regard to the measures aimed at the more general development of rural economies, one sees a shift from measures encouraging inward investments towards measures enhancing the local development potential. This shift seems to be strongly induced by the changing global context that poses new demands on the organization of firms. Where agricultural measures are concerned, there has been a gradual shift from measures directed at productivity growth towards measures emphasizing the

Figure 2.4 Four emerging shifts in rural development policy

<i>Field</i>	<i>Shift from</i>	<i>Towards</i>
General development measures	Encouragement of inward investments (exogenous development model)	Enhancing local development potential (endogenous development model)
Agricultural structural policy	Productivity growth (productivism)	Multifunctionality (postproductivism)
Coverage of policy	Sectoral	Territorial
Governance	Top-down	Bottom-up



multifunctional role of the agricultural sector. This shift is also often referred to as a shift from productivism to postproductivism (see for example Clark *et al.*, 2000; Lowe *et al.*, 1993), or as a transformation from the modernization paradigm to the rural development paradigm, in which highly mono-functional farms are being replaced by new multifunctional agricultural enterprises, supplying new products and services like landscape conservation, new nature values, agrotourism, organic farming, and high quality and region-specific products, associated with the development of new markets (Broekhuizen *et al.*, 1997; Ploeg *et al.*, 2000). In rural development policy, the trend entails a movement from sectoral to territorial policy. Finally, in governance an emerging shift from top-down to bottom-up can be perceived. We discuss these shifts in the following subsections. In order to understand the nature of the shifts, the period under review extends beyond that covered in the rest of this study and starts in the 1950s.

## 2.4.2 General development measures

General development measures are concerned with the overall socio-economic development in rural regions. The development of these measures has to be considered in the context of major changes in the global economic scene: the economic recession of the 1970s, with closures of many large firms and the emergence of small and medium sized successful firms, and the global restructuring process due to rapid changes in the information and communications technology in the 1980s and 1990s, in which network firms become the prototype. As we will see in the next chapter, there is a close interaction between applied development measures and the sequence of theories put forward in the debate on economic development in rural studies (Section 3.3).

### *Exogenous development model*

In the first decades after World War II, most EU countries applied a policy aimed at encouraging inward investments in rural regions (i.e. investments from other regions or abroad). These investments were mainly used for branch plants, relocation of firms, the creation of growth poles and improvements in infrastructure. In addition, several government services were relocated from urban regions to rural regions. Services, and in particular producer services, are less likely to decentralize from cities than manufacturing plants. They are not only less pressured by space considerations, but they need the proximity of business they support (Hoggart *et al.*, 1995:176-7). The impact of this so-called 'exogenous development model' - that aims at transplanting development into particular regions from outside, that is externally determined and that tends to trample on local values (Slee, 1994:184) - on the rural economy was not always successful. On the one hand, the new firms provided jobs for the rural labour force, generated work for local suppliers, and produced demonstration effects for local firms by exposing them to new technology and management techniques (Armstrong and Taylor, 1993:247). On the other hand, the expected multipliers of the new firms in terms of linkages with local firms, benefits of skill formation, technology transfer and reinvestment of profits in the rural economy did not always occur, resulting in leakage effects to other (usually urban) regions and turning the new firms into 'cathedrals in the desert'. Moreover, the recession of the 1970s resulted in the closure of many branch plants and a growing sense that inward investments made rural economies highly vulnerable to fluctuations in the global market and distant boardroom decisions (Lowe *et al.*, 1995:90-1; Malecki, 1991:106).

### *Shift towards an endogenous development model*

By the late 1970s/early 1980s, the exogenous development model fell into disrepute as it did not result in sustainable economic development of rural regions. Moreover, in a period of economic crisis and high unemployment levels, mobile investment projects tend to be scarce and competition for public funds and transfer payments for regional development high. Furthermore - driven by the globalization of the economy - new countries entered into the competition for mobile investments (Armstrong and Taylor, 1993:201; Vanhove, 1999:327). At about the same time, the successful economic performance in areas like Tuscany and Emilia Romagna with a concentration of highly specialized small and medium sized enterprises (SMEs) became a focus of interest, since these areas were largely unaffected by the industrial crisis of the 1970s. Through their flexibility in terms of quantity and quality of supply, SMEs were more suitable in dealing with dynamic and unstable markets than large firms exploiting economies of scale through mass production (Capello, 1996:486-8). As a consequence of these experiences, the emphasis in regional policy shifted towards the encouragement of local enterprises, local capacity building, local initiatives, community development, economic diversification and provision of suitable training. This approach relies on the so-called endogenous development model that assumes that local development is produced mainly by local impulses and grounded largely on local resources (Picchi, 1994:195; see Section 3.3). 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). The endogenous approach is closely related to the industrial district model, in which the institutional context of the economic activities plays an important role. Prerequisites for the success of the endogenous model mainly pertain to intensive interaction, information exchange and cooperation between local actors. In addition to this regional policy focus on the local development potential, measures to improve the infrastructure were implemented.

### *Globalization, innovation and network firms*

In the course of the 1980s and 1990s, regional policy also focused on the adoption of innovation by local firms, largely due to rapid changes in the communication and information technologies which fuelled the global restructuring process. Simultaneously, the opening of the European markets in the scope of the single European market encouraged competition among regions for investments, technology and markets (Keating, 1999). This changing global context necessitated that regional policy had to take account of new conditions related to the organization of the firm. After the large, vertically integrated firm of the 1960s/1970s and the small autonomous, single-phase firm of the 1970s/1980s, the 'network firm' was introduced as the most efficient organization form (Capello, 1996:489-96). The network firm is either a new type of a large firm, with highly centralized strategic functions extending in several directions, or a new type of small enterprise integrated in a multi-company local network. The production of network firms is quasi-vertically integrated: a form that is in between the two opposites of 'make or buy' from Williamson's transaction costs theory, and that can be described as 'make together'. Their economic efficiency is based on 'network externalities', i.e. those advantages related to being partners in the network and which exclusively belong (as club goods) to the partners. These externalities originate from the fact that marginal benefits exceed marginal costs: each new partner in the network generates more advantages than costs to the existing partners. Innovation, the driving

force behind development in the network firm, may originate from internal (local) or external (global) factors, and is transmitted through networks.

The preceding discussion briefly summarized main trends in general development policy measures directed at the improvement of the socio-economic situation in rural regions. These trends reveal a rather close interaction with changes in the global context and the organization of firms.

### *EU structural policy*

We now move from the more general measures implemented by EU countries towards measures of the EU to encourage economic and social cohesion among regions. The European Regional Development Fund (ERDF) was established in 1975 to co-finance measures aimed at the development and structural adjustment of underdeveloped regions and the conversion of declining industrial regions. The latter regions suffered, for example, from a restructuring in the steel, shipbuilding and textile industries. The ERDF operated along a number of strategic guidelines (Vanhove, 1999: 443-5; 483-7):

- identification of priority regions;
- concentration of ERDF assistance;
- regional development programmes to orientate the ERDF interventions;

and from the 1980s also via:

- programme financing;
- emphasis on harnessing local resources and the internally generated developmental potential, by providing SMEs with facilities to export their activities, to obtain access to new technology, and to facilitate their access to the capital market;
- integrated development operations which comprise measures from the various EU Structural Funds, such as the Integrated Mediterranean Programmes;
- additionality, i.e. ERDF assistance has to be supplemented by national funds.

The financial means of the ERDF covered about 4% of the EU budget in the late 1970s, increasing to about 7% in 1988 (EC, 1997c:344).

### *Reform of the Structural Funds*

The signing of the Single European Act (1987) on the establishment of the internal market, which emphasized the strengthening of the economic and social cohesion of the EU regions, and also specified that all Community's policy should include a component of environmental protection (article 130R), heralded a new approach in EU rural development policy. In its paper 'The future of rural society', the Commission emphasized the integration and coordination of all policy measures which affect rural areas (CEC, 1988). The subsequent reform of the Structural Funds (ERDF, European Social Fund (ESF) and the Guidance Section of the European Agriculture Guidance and Guarantee Fund (EAGGF)) in 1988 intended an integrated approach to coordinate various measures of the Funds, which were directed at five priority objectives; a doubling of the annual spending of the Structural Funds from 7 billion ECU in 1989 to 14 billion ECU in 1993; and new procedures for assistance. This reform already demonstrates the shift from a sectoral to a territorial policy and the shift in governance (see Sections 2.4.4-5). The five priority objectives, which partly overlap with those of the ERDF before the reform, are as follows:

- Objective 1: Development and structural adjustment of regions whose development is lagging behind. These regions were defined as those in which GDP/capita was less than 75% of the Community average in the previous three years. They cover the whole of Ireland, Greece and Portugal and large parts of Spain and southern Italy.
- Objective 2: Regions that are suffering from industrial decline.
- Objective 3: Combating long term unemployment.
- Objective 4: Integration of young people in the labour market.
- Objective 5a: Speeding up the adjustment of agricultural structures, with a view in particular to the reform of the CAP.
- Objective 5b: Promoting the development of rural areas. These areas were defined according to criteria like a high share of agricultural employment, a low level of agricultural income and a low GDP/capita.

In the objective 1 and 5b regions, agricultural structural policies were integrated with measures from the ESF and ERDF. Objective 5a is a horizontal measure, applying to the whole Community, and concerns the agricultural structural policy measures existing before the reform of the Structural Funds. The procedures for assistance share the following features (CEC, 1990:12):

- Programming: national authorities prepare development plans in cooperation with regional and local authorities for a period of several years, which are negotiated with the Commission. These negotiations lead to the Community Support Framework (CSF), which sets out the priorities, funding and forms of assistance. Then the operational stage follows, in which projects can be carried out.
- Additionality: assistance of the Structural Funds is additional to national funds. This principle already existed before the reform.
- Partnership and subsidiarity: there is a close collaboration between the Commission and all relevant authorities at national, regional and local level, at all stages of the programming. Subsidiarity reflects the principle that the funds are managed at the most appropriate level (regional, national or EU).

However, for assistance for the horizontal agricultural structural policy measures of objective 5a only the principle of additionality applies.

The assistance of the Structural Funds covered fields like investments in the creation or maintenance of jobs, investments in infrastructure, investments in health and education, support for SMEs, investments in R&D, environmental protection, integration of unemployed and young people in the labour market, promotion of equal opportunities in the labour market, strengthening of education and training systems and agricultural structural measures (see Section 2.4.3) (Vanhove, 1999:499).

The reform of the Structural Funds also enabled the launching of so-called Community Initiatives. One of these was LEADER I (1991-1994), coordinated by Directorate General (DG) VI (Agriculture), and financed by the three Structural Funds. LEADER I supported joint development initiatives launched by local communities in objective 1 and 5b regions, involving 217 local action groups. The types of support provided - apart from agricultural measures - assistance for SMEs and craft enterprises, development and marketing of local products, rural tourism, training for the non-agricultural population, environmental protection, enhancing the quality of life etc. As a pilot project, LEADER I

aimed to promote a new approach to rural development from the bottom up, to differentiate interventions according to local needs and to encourage the exchange of experience and know-how among local action groups at the European level.

#### *Programming period 1994-1999*

In 1993 a new programming period for the Structural Funds for the years 1994-1999 was agreed, largely according to the lines initiated by the reform of the Structural Funds. The main differences with the previous programming period (1989-1993) are an expansion of the objective 1 and 5b regions, the introduction of objective 6 for sparsely populated regions, the extension of partnerships to economic and social partners and bodies which are identified by member states, and an increase in the financial means, from 20 billion ECU in 1994 to over 27 billion ECU in 1999. LEADER I was followed by LEADER II (1994-1999). In addition, the Cohesion Fund was established, which aimed to finance transport and environmental infrastructure in member states whose GDP/capita was less than 90% of the EU average (Greece, Ireland, Spain and Portugal).

#### *Agenda 2000*

Agenda 2000, the reference framework for the Union's policies in the period from 2000 to 2006, aims for greater concentration of support from the Structural Funds in the programming period 2000-2006 for regions which need assistance the most. The priority objectives are reduced to the following three (EC, 2000):

- objective 1 will promote structural development and adjustment in regions lagging in development;
- objective 2 will support economic and social adjustment in areas with structural difficulties, covering no more than 18% of the EU population;
- objective 3 will assist the adjustment and modernization of policies and systems of education, training and employment, applying across the EU except for objective 1 regions.

The financial means for the Structural Funds will be maintained at the same level as in the programming period 1994-1999. LEADER II was succeeded by LEADER+ (2000-2006). New features of LEADER+ are that it can be applied across the EU and that it is funded from the Guidance Section.

### **2.4.3 Agricultural structural policy<sup>6</sup>**

From the discussion of the general development measures, we now turn to the second strand of rural development policy: measures aimed at the enhancement of the agricultural sector. In the first decades after World War II, agricultural structural policies mainly focused on the issue of structural adjustment of the relatively large agricultural sector. It aimed at productivity growth of both labour and capital, largely to be achieved in a process in which small firms disappear and larger, viable farms are created, accompanied by a reduction of the agricultural labour force. A common measure implemented by several EU countries involved land consolidation schemes in order to face the problem of fragmentation of plots per farm holding. Other, less common measures consisted of compensation for farmers who gave up their farms, water management, reallocation of farmland and retraining facilities. Rather than embark on a

litany of specific national agricultural structural policy measures carried out in EU member states, we focus below on the agricultural structural policy of the EU. This is because the common agricultural market entailed that respective national agricultural structural policies largely follow the prescriptions of EU policy.

#### *Start of EU agricultural structural policy*

It was not until 1972 - after long discussions about the Mansholt plan - that an EU agricultural structural policy was launched. It consisted of three directives:

- directive 72/159 on farm modernization provided aid for investments on farms considered 'suitable for development' and able to generate an income comparable with other occupations for 'one or two' labour units;
- directive 72/160 on farmer retirement offered payments to outgoers in the form of annuities or lump sums to elderly farmers, or premiums to younger ones;
- directive 72/161 on socio-economic guidance and training intended to restructure the extension system and to give training and education to the agricultural labour force, both for those who wanted to stay in the agricultural sector and for those who wanted to leave.

The uptake of these directives was rather disappointing. The number of outgoers was small, as the directives were put into effect during the economic recession from 1973 onward. The directive on farm modernization excluded the majority of small farms, whereas modernization on larger farms often resulted in intensification of production on the existing area as few farmers could benefit from land expansion. Directive 72/161 was also rather ineffective as it failed to restructure the extension system and suffered from competition from other national and EU programmes. On the other hand, regulation 355/77 on processing and marketing of agricultural, forestry and fishery products - launched in 1977 - was more successful, particularly in encouraging the setting up of farmers' processing and marketing cooperatives.

#### *LFA Directive*

In addition to the horizontal measures discussed above - which apply to the whole Community - a number of regional measures were launched in favour of specific regions from 1975 onward. The most important one is the Less Favoured Areas (LFA) Directive (75/268), which aimed at the continuation of farming in LFAs and thereby maintaining a minimum level of population or conserving the countryside. LFAs are areas where agriculture is hampered by permanent natural handicaps like altitude, slopes, infertile land, or by unfavourable farm results. Since 1975, the areas classified as LFAs have increased from one-third of the Community area to about 55% in 1997. Member states are allowed to give farmers in LFAs direct income support in order to raise farm income. This income support, which is financed by the member states and partly reimbursed by the EU, consists of compensatory allowances per animal or per hectare. In 1997, about 1.2 million farmers (16% of EU farmers) benefited from the LFA directive. Other major regional measures were specific programmes to accelerate agricultural development in the Mediterranean regions from 1978 onwards and a number of 'integrated programmes' which included sectors other than agriculture from the beginning of the 1980s.

#### *Gradual shift towards multifunctional agriculture*

The development of EU agricultural structural policy is closely related to developments

in the market and price policy of the CAP. Both are financed from the EAGGF, in which the Guarantee Section is devoted to market and price policy and the Guidance Section to agricultural structural policy. Under increasing pressure from structural food surpluses, growing tensions in international trade relations, rising budgetary burdens of the CAP, and public concerns on the environment, the Commission published the so-called Green Paper on a reorientation of the CAP in 1985. Combined with the small uptake of the 1972 directives, this Green Paper resulted in the replacement of these directives by regulation 797/85 on improving the efficiency of agricultural structures. Under this regulation, investment aids could be provided to almost any low-income farmer. Other measures of this regulation refer to special aid for young farmers, support for conversion and extensification of production methods as well as set-aside, protection of the environment and landscape, and encouragement of forestry on agricultural holdings. The LFA directive was also included in this regulation. The regulation hoped to contribute to an improved balance of supply and demand for agricultural products by reducing agricultural production, the protection of the environment, and the encouragement of agricultural development in lagging regions. This regulation can be seen as an important first sign of the shift of the common agricultural structural policy away from productivism.

In 1991 the Commission published again a major reflection paper, entitled 'The development and future of the CAP', which resulted in the Mac Sharry reform of the CAP (1992). This reform partly decoupled support for farm income from production and emphasized the role of the environment and nature through two of its three so-called accompanying measures:

- agri-environmental measures, including long-term set-aside (regulation 2078/92);
- afforestation on farms (regulation 2080/92).

The third accompanying measure concerns early retirement for farmers (regulation 2079/92). Although these accompanying measures concern agricultural structural policy, they are not - unlike all other agricultural structural measures - financed by the Guidance Section of the EAGGF, but by its Guarantee Section.

#### *Cork Conference and the Rural Development Regulation*

By about the mid-1990s, discussions started about the next reform of the CAP under pressure of the future enlargement of the EU to include Central European countries, WTO trade negotiations and consumer-led quality requirements. In these discussions, it seemed whether agricultural structural policy would be extended to other sectors in the rural economy, and thereby becoming a rural development policy. For example, in the Agricultural Strategy Paper, agricultural Commissioner Fischler proposed an integrated rural policy, in which policies directed at rural areas form together a mutually consistent body of measures which allow the mobilization of a maximum of synergies (EC, 1995:23). Such a policy should seek a sustainable balance between agricultural activity, other forms of rural development and the conservation of natural resources, and emphasizes the multifunctional role of farmers: producers of food, feed and non-food, and stewards of the countryside. During the Cork Conference in November 1996 - organized by the European Commission - the concept of integrated rural development was extensively discussed. This conference was concluded by the Cork Declaration (Plumb, 1996), which proposed that rural development policy has to be multi-

disciplinary and multi-sectoral with a clear territorial dimension. It should be based on an integrated approach to agricultural adjustment and development, economic diversification, management of natural resources, enhancement of environmental functions and the promotion of culture, tourism and recreation. However, this declaration was not approved by the EU Council of Ministers. Hence in Agenda 2000, these ideas about integrated rural development are heavily watered down. In Agenda 2000, a 'new' policy for rural development is announced as the 'second pillar' of the CAP, which anchors it firmly in the agricultural domain. The objectives of this new rural policy are to contribute to the multifunctionality of agriculture, the improvement of the competitiveness of rural areas and the safeguarding of the maintenance and creation of employment. Rural development measures are laid down in the Rural Development Regulation (1257/99) and cover the existing agricultural structural policy measures, the accompanying measures of the Mac Sharry reform, and a series of measures aimed at promoting integrated rural development (the so-called article 33 measures). Only these last mentioned measures focus on activities outside the agricultural sector. Some provisional calculations on the budgetary outlay for the article 33 measures, as proposed in several draft Rural Development Plans by member states, indicate that less than 10% of the financial means is allocated to these measures (Bryden, 2000:10).

The fact that the Rural Development Regulation mainly covers agricultural measures and hardly any measures directed at the other sectors in the rural economy may be attributed to two issues. First, an extension from agricultural measures to measures covering the whole rural economy implies an extension of the competence of Directorate General (DG) of Agriculture (DG VI) at the expense of DG Regio (DG XVI). The Commissioner of DG Regio has successfully blocked such an extension. Second, the farmers' lobby was heavily opposed to spending money from the EAGGF, which they consider as 'money for farmers', on other groups in the rural economy.

#### *Some final remarks on EU agricultural structural policy*

Given the overview of EU agricultural structural policy above, some final remarks are in order. First, EU expenditure on these measures are moderate compared to its expenditure on market and price policy. Until the beginning of the 1990s, only about 5% of the CAP budget was spent on agricultural structural policy. This share gradually increased to about 10% at the end of the 1990s. Second, the expenditure of the EU consists of co-financing, which implies that member states also have to contribute to the financing of the policy. So the total expenditure on the common agricultural structural policy is higher than that reflected in the CAP budget. Finally, national agricultural structural policy measures continued alongside the EU measures. By the end of the 1990s, three main strategies dominated the implementation of agricultural structural policies in the EU countries, depending on the comparative advantages of the agricultural sector (OECD, 1999:19):

- 1 attempts to restructure agriculture through intensification, modernization and increasing value added in the productive regions;
- 2 extensification of agricultural production with increasing interest being shown in landscape and nature conservation in less productive regions;
- 3 maintenance of agricultural activities by promoting local agro-food, niche products and quality labels in areas of 'traditional' agriculture.



These three current strategies form a useful illustration of the shift in agricultural structural policy discussed in this subsection: policy has moved away from enhancing only productivity growth towards stimulating multifunctional agriculture, in which farmers are seen as producers of food and landscape.

#### **2.4.4 Shift from sectoral to territorial policy**

The third emerging shift in rural development policy refers to a shift from sectoral policy to territorial policy. Territorial policy can be expressed in terms of an integration of policy measures (often referred to as ‘integrated rural development policy’) directed at a specific territorial entity. Ideally it includes all sectors of the economy (agriculture, industry, services); it tends to be based on the local potential and on partnerships between private organizations and government institutions at all policy levels; and it is tailored to the specific needs and requirements of a region (Urf, 1996:4; Day, 1998:99). On the one hand, this shift is related to the move of the economic base in rural regions away from agriculture (Pezzini, 2000:5). On the other hand, the shift arises from the attempts to integrate the various sectoral policies into a development plan, covering all sectors. Such a multi-sectoral approach is strived for in the programming of the EU Structural Funds, such as the Community Support Frameworks and to a lesser extent the Rural Development Plans. In addition, the adoption of sustainable development, in economic, social, environmental and cultural terms, as an overarching policy goal, enhances the need for such an integrated approach. Although the extent to which the shift towards a territorial approach has taken place should not be exaggerated, it represents a common understanding of a general trend (OECD, 1999:3).

#### **2.4.5 Shift in governance framework**

The gradual shift in the approach of rural development policy from an exogenous development model towards an endogenous development model has several implications for modes and institutions of government, as shown in the discussion in the previous subsections. In the exogenous model, the national government formulates, implements and co-ordinates rural development policy, which can be labelled as a ‘top-down approach’. The emphasis on local development potential, programming, partnership and subsidiarity in the endogenous model implies that local actors are given an active role in the planning and implementing of rural development policy. When this role evolves to such an extent that local actors become empowered to define their own needs and prioritize development schemes and projects, the term ‘bottom-up approach’ becomes appropriate.

The changing role of the national government in rural regions has attracted a lot of attention. In the debate, two main conceptual frameworks have been put forward: real regulation and governance. Real regulation concerns the administrative manner, style and logic by which the state regulates society in general, and the economic landscape in particular (Clark, 1992:616). The mode of state regulation consists of a set of institutions, collective norms, values, rules, laws, habits and customs, that varies over time in an

interactive process with changing economic and social practices (Marden, 1992:752). So the changes in the rural economy, induced by globalization and rapid technological progress, and in the social composition of rural population, which challenge the established way of doing things, suggest that a new role for the state/national government is needed compared with its role under the exogenous development model. More recently, the closely related concept of governance has been introduced. This refers to the development of government styles in which the boundaries between and within public and private sectors have become blurred. It focuses on the ways in which governmental and non-governmental organizations work together and on the ways in which political power is distributed, both internal and external to the state (Goodwin, 1998:5-6). The shifting governmental structures may coalesce with the shifting social and economic forces in rural regions to delineate a new topography of political relations (Marsden and Murdoch, 1998:1). The concept of governance offers a useful perspective for analyzing which agencies and institutions are involved in the governance mechanisms and whose interests they serve (Goodwin, 1998:10).

With respect to rural governance, key elements in the shift from a top-down to bottom-up approach refer among others to (Pezzini, 2000:15):

- Efforts to create new institutional arrangements at local and regional levels to define and implement policy. Usually partnerships between public, private and voluntary sectors are used to further this aim. The programming approach of the EU Structural Funds is a clear example.
- Efforts to build local capacities through community development programmes and empowerment of local actors. The support for the bottom-up initiative of LEADER is an example of such efforts.
- Attempts to create more flexible arrangements of central support for rural development such that the diverse needs and circumstances of rural regions can be better met. Examples of such 'tailor-made policies' are the identification of different types of objective regions in the approach of the EU Structural Funds and the 'menu approach' in the EU Rural Development Regulation (1257/99), which allows member states and regions to pick and choose measures appropriate to their circumstances.
- Efforts at national level to improve the coordination of a wide range of policies affecting rural regions through institutional arrangements for interdepartmental and interministerial working groups and tuning.

Although the items above reflect some new ways of formulating and implementing rural policy, in which the role of local agencies has been redefined, it may be clear that national governments still have a main initiating role in the governance mechanism.

#### **2.4.6 Dissident views**

From the preceding discussion, one might get the impression that rural development policy is subject to four main shifts. However, several doubts have been raised on the reality and desirability of the shift towards an endogenous approach and that towards an increasing role for local actors in the decision making process. In this subsection we will reflect on some of these doubts.

Slee (1994:193-4) rejects the existence of an endogenous development model: although development agencies have recognized that long-run development gains are more likely to be secured by encouraging local entrepreneurship than by inducing footloose branch plants, they use the same packages of infrastructure development, grant aid, loan finance, and support services as in the exogenous development model. In his view, the shift from a branch-plant strategy towards support for local entrepreneurs does not alter the fundamental nature of the development process: external forces remain the principal determinants whereas endogenous forces may colour the nature of the process. Vanhove (1999:330) argues that an endogenous development strategy does not have to be perceived in terms of a substitute but rather as a complementary strategy to the exogenous development strategy. Efforts to attract projects from other regions and continents cannot be neglected and therefore, much attention should be given to region-marketing and inward investment. Finally, Armstrong and Taylor (1993:272) warn that many new local firms offer local consumer services such as hairdressing and car repair and contribute little to new rounds of wealth creation. Moreover, many small local firms show little desire or ability to expand further.

Due to the EU approach of the Structural Funds assistance, the notions of local participation and local empowerment are now widely known across EU regions. However, various analyses of LEADER groups and objective 1/5b programmes show that the emphasis on a bottom-up approach in rural development is more 'rhetoric than real' (Day, 1998; Ward and McNicolas, 1998; Storey, 1999; Clark *et al.*, 2000). Local groups are allowed to solve their own problems in their own way provided that they follow national and/or EU financial, administrative, monitoring and evaluation procedures and criteria. These bureaucratic requirements imply that the control of the money and how it is used is largely retained at the national level. However, this unchanged power balance is camouflaged behind a rhetoric of participation, empowerment and subsidiarity. So it may be more valid to view current developments in terms of a process of incorporating local activism in a top-down strategy than a move to a bottom-up approach. Another concern about the bottom-up approach is the democratic representation in the local community and partnerships. Given the heterogeneous social composition of the population in rural regions, it is likely that different groups of actors have different development objectives, and moreover, that in particular the marginalized and poor actors do not have the capacity to involve themselves in the development process. There is a danger of 'devolved patronage' when local development ends up in the hands of a small group of able people who have the skills and experience to carry out local initiatives with little or no reference to the members of the community they purport to represent (Mannion, 1996:8-9). Analysis of the representation in LEADER groups in Ireland shows that this danger is real: the groups tend to be skewed towards business sectors whereas community interests are less represented (Storey, 1999:312-3).

## **2.5 Concluding remarks**

This chapter shows that it is a highly complicated exercise to identify main issues and trends in rural regions, as rural developments are affected by a wide range of actors and factors. Our main findings are presented below.

The meanings of rurality vary. The classification of different meanings according to the spatial, territorial and constructivist approaches appears to be useful, as it enables us to identify the user's intention of rurality. We use the territorial approach to rurality in this study, in which rural is perceived in terms of a territorial entity, which covers a regional or a local economy, one or more centres surrounded by open space and a low population density. We have labelled these entities as rural regions, which in our study usually reflect the size of a labour market area. The OECD also uses this approach to rurality. On the other hand, the European Commission uses, apart from the territorial approach, the spatial approach to rurality as well, in which the Commission relates rurality to agriculture. This results in some tension in the objectives of the rural policy of the EU: should it be aimed at the agricultural sector or at all sectors in the rural economy? In the third approach of rurality - the constructivist approach - space appears as a social representation: a mental construct, which guides us in dealing with the complexity of the social world. In this approach, rurality is often related to rural amenities and lifestyle values. A wide range of actors is involved in the construction of representations of rurality: they can, for instance, be permanent or temporary users of space, policy makers and academics. Conflicts of interest about alternative uses of rural space indicate that social representations are related to the issue of power. With regard to these conflicts, the conceptualization of a rural region as an arena society, in which the various groups of actors are attempting to achieve outcomes commensurate with their aims, seems to be useful.

In the recent literature some doubts have been raised about the image of rural regions as being losers of jobs and population. Our comparative analysis of main social-economic changes in rural regions since the beginning of the 1980s largely supports that view. The picture of rural regions that arises looks rather like a mosaic of winners, in-betweens and losers. The winning regions experienced, for example, both employment and population growth. This mosaic of rural regions has been associated with the view of rural restructuring, in which rural development arises from the interplay of global forces and local responses, although this process is coloured by national conditions. The rural restructuring process is rather complex and varies among regions, in which some rural regions become 'leading' and others 'lagging' regions.

In order to reduce socio-economic disparities among regions, policy makers have implemented rural development policy, mainly consisting of measures aimed at the adjustment of the agricultural sector and measures aimed at the more general development of the rural economy. Since the 1950s, the emphasis in these policies has shifted under pressure of global restructuring: with regard to the agricultural measures, there has been a gradual shift from measures directed at productivity growth towards measures emphasizing the multifunctional role of the agricultural sector; whereas measures aimed at the more general development of rural economies have undergone a shift from encouraging inward investments towards enhancing the local development potential. These shifts have also often been referred to as a shift from productivism to postproductivism and a shift from the exogenous to the endogenous development model. There is a tendency to integrate both types of policy measures into territorial plans, which cover all sectors. For efficiency reasons such an integrated territorial policy can be welcomed; however, in practice it is often difficult to realize as many conflicts of interest

may arise. For example, the new EU rural policy announced in Agenda 2000 remains in essence a sectoral (agricultural) policy, mainly due to pressure of the farmers' lobby and DG Regio. The shift from an exogenous to an endogenous development model has been accompanied by a transformation of the role of national governments into a governance style in which the local and regional authorities have a greater role in defining and implementing policy, where the empowerment of local actors is emphasized, and in which partnerships between public, private and voluntary sectors are widely used. This shift can be described as a shift from a top-down to a bottom-up approach.

The extent of the shift from an exogenous to an endogenous development model should not to be exaggerated. In the current global restructuring process, rural regions are affected by all kind of global forces. This implies that the development process in rural regions is largely dependent on the interplay of local (endogenous) responses and global (exogenous) forces - both mediated through national structures - in which local actors should seek room for manoeuvre so as to determine the outcome of the process. The consequence of this finding for the analysis in the following chapters - in which we examine the theories which can be used to explain economic development in rural regions in the EU - is that theories, which include factors related to this global/local interplay and the power relations among local actors within the rural region (i.e. arena society), seem to be most promising.

## NOTES

- 1 Although the European Union (EU) came into being in 1993, and was preceded by the European Economic Community (EEC) from 1958 and the European Community (EC) from 1967, for convenience sake we use the abbreviation EU.
- 2 NUTS (*Nomenclature des Unités Territoriales Statistiques*) is a classification system of administrative regions. The NUTS2 level comprises 206 regions in the EU15 (like provinces in the Netherlands, *Regierungsbezirke* in Germany and *Comunidades Autonomas* in Spain) and the NUTS3 level 1031 regions (like COROP regions in the Netherlands, *Kreise* in Germany and counties in the UK). As the size of the NUTS regions varies considerably among countries, in some EU member states NUTS2 regions reflect the size of a functional labour market area, whereas in other member states it is more appropriate to use NUTS3 regions as an equivalent for a functional labour market area. See Annex 2.2 for an overview of the regional level used according to the member state.
- 3 The term 'rural regions' in this study refers to the whole set of intermediate rural and most rural regions.
- 4 The high income in intermediate rural regions in the Netherlands is due to the inclusion of gas revenues in the per capita incomes; in the UK high figures in most rural regions are due to the inclusion of oil revenues.
- 5 In this study sectors are defined as follows (OECD, 1996a:59, 159):
  - 1 *Agricultural sector:*  
ISIC 1 (Agriculture, hunting, forestry and fisheries)
  - 2 *Industry sector:*  
ISIC 2 (Mining and quarrying)  
ISIC 3 (Manufacturing)  
ISIC 4 (Electricity, gas and water)  
ISIC 5 (Construction)
  - 3 *Services sector:*  
ISIC 6 (Whole and retail, restaurants and hotels)  
ISIC 7 (Transport, storage and communication)  
ISIC 8 (Financing, real estate and business services)

ISIC 9 (Community, social and personal services)

ISIC 10 (Activities not adequately defined)

ISIC (International Standard Industrial Classification) codes are used to classify major groups of economic activities and were adopted in 1968 by the United Nations Organization.

- 6 This overview on agricultural structural policy is based on CEC, 1990:5-7, Terluin *et al.*, 1994, Tracy, 1996:33-43, Van den Bor *et al.*, 1997:37-40, Van der Stelt-Scheele and Berkhout, 1998:102-16, EC, 1999b:1-3 and Strijker, 1999, unless otherwise indicated.

### **3 THEORIES ON ECONOMIC DEVELOPMENT IN RURAL REGIONS IN DEVELOPED COUNTRIES**

#### **3.1 Introduction**

In the previous chapter we discussed main socio-economic trends and policy issues in rural regions of the EU. One finding which emerged was the mosaic-like pattern of socio-economic development expressed in leading and lagging regions since the beginning of the 1980s. In this chapter, we turn from 'practice' to 'theory' and give an overview of theories that can help to explain the economic development in rural regions in advanced countries. As indicated in the previous chapter, a rural region is described in terms of a territorial unit with one or more small or medium sized cities, whose regional economy comprises agricultural, industrial and services activities, with a relatively low population density. We restrict our study to economic developments in rural regions in advanced countries since the beginning of the 1980s. This implies that the focus is on a situation of rural restructuring, largely due to ongoing decline in agricultural employment, growing diversity of employment in the industrial and services sectors, changing commuting patterns and counterurbanization (see Section 2.3). This rural restructuring is often thought to be the outcome of the interplay of global forces and local responses, mediated through national structures. Within this context, the selection of theories on economic development in rural regions in advanced countries is based on the following criteria:

- the theories have to be comprehensive, that is, they have to focus on an economy which consists of agriculture, industries and services;
- regional economic change tends to be a dynamic process, which affects the pattern of regional economic inequalities (leading regions may become lagging regions); hence theories need to account for dynamism (Healy and Ilbery, 1990:301);
- the spatial dimension of production or the territory must be included in the premises of the theory (Bramanti and Ratti, 1997:3). In our study the spatial dimension must be applicable to a rural region;
- theories have to take account of the specific attributes of rural regions, in particular the low density of actors and economic activities, which hampers agglomeration economies.

To provide an overview of theories on economic development in rural regions would be an easy task if rural economics was an independent discipline. As such a discipline does not exist, we have to look at other disciplines that deal with economic development in rural regions. Regional economics and the multidisciplinary field of rural studies offer the best prospects as the former focuses on regional economic development and the latter concerns rural development. Within regional economics, we have to take into account whether theories apply to both rural and urban regions, or whether they are restricted to explaining development in either urban or rural regions. Within the field of rural studies, we tried to isolate studies on economic development. Such studies are often related to the question of the most suitable policy to implement in order to stimulate economic development in rural regions.

### *Organization of this chapter*

The remainder of this section discusses the notions of theory and economic development. Attention is also paid to the relation between economic development and employment growth. In the next section, we turn to the debate in regional economics, and elaborate on the main theories put forward. These are classified into four main groups comprising traditional models, pure agglomeration models, local milieu models and territorial innovation models. Section 3.3 further reflects on the debate on economic development in rural regions in the multidisciplinary field of rural studies. Here three main groups of theories are distinguished: the exogenous development approach, the endogenous development approach and the mixed exogenous/endogenous development approach. From the analysis of both debates, ten theories on economic development in rural regions are selected for further research in this study. These theories are discussed in more detail in Section 3.4. In the last section of this chapter, some concluding remarks are made.

### *The notion of theory*

Theories figure prominently in science. On the one hand, they are the result of research; on the other hand, they give direction and inspiration for further research (Swanborn, 1993:97). Our review of existing theories on economic development in rural regions can be seen as an example of the second case. The importance of theories justifies an explanation of the notion of theory. We begin with the hypothesis, which is commonly used for solving problems in a scientific way. A hypothesis is basically an answer to a problem and always expresses a relationship between events in a form like: if X then Y (Abler *et al.*, 1972:31-2). If a hypothesis has been tested and confirmed as being valid, Abler *et al.* (1972:40) label such a hypothesis as 'law'. They describe theories as 'structures composed of laws and the rules by which those laws are put together' or more concisely as 'systems of laws' (1972:42-3). Swanborn (1993:98) gives a rather similar description of a theory: a collection of coherent statements of different levels of generality, of which some can directly be tested. In science, models are also often used: these can be referred to as an abstraction of a theory, which is stripped of its empirical content but which maintains the same structure (Abler *et al.*, 1972:45). So a model is a simplification and abstraction of existing relationships between experiences. In social sciences normative models are important, i.e. models in which a standard or idealization of a particular relationship is used as a norm against which we measure our experiences. A famous normative model is that of *homo economicus* (Abler *et al.*, 1972:46).

Both Abler *et al.* (1972:47-8) and Swanborn (1993:43) admit that hypotheses, theories and models are often used as synonyms and that in reality the scientific process is messier than the abstract description given above. In this study, we will use the term 'theory' in the sense of 'a system of (confirmed) hypotheses'. However, we also follow common practice, e.g. when a certain theory is referred to as a model (like the creative destruction model) or as an approach (like the mixed exogenous/endogenous approach).

### *The notion of economic development*

A second notion which deserves explanation is economic development. In a narrow sense, the concept of economic development can be seen as a rise in per capita income, accompanied by a qualitative change in the production structure (Szirmai, 1994:7). This change usually refers to an increase in the share of the industrial and services sectors in



the gross domestic product (GDP) and a decrease in the share of the agricultural sector. In a broader concept of economic development, social indicators, like life expectancy, literacy, education level, income distribution, infant mortality, daily calorie intake, the number of hospital beds, doctors and telephones, rationality, planning, an efficient institutional structure, democracy etc. are added to the narrow concept (Szirmai, 1994:7-9). In fact, three principal dimensions can be identified in the broader concept: an economic dimension expressed as economic growth, a socio-cultural dimension reflecting cultural needs and community identity, and a political dimension referring to political decision-making and the involvement of groups of individuals in the policy process (Moulaert and Sekia, 1999:10). In the theories discussed in this chapter, both the broad and narrow concepts of development are referred to. It has to be noted that 'development' is often associated with a positive change or an increase. However, development can also be negative, i.e. a decline in income or a deterioration of a social indicator. In this study the concept of development encompasses both positive and negative changes.

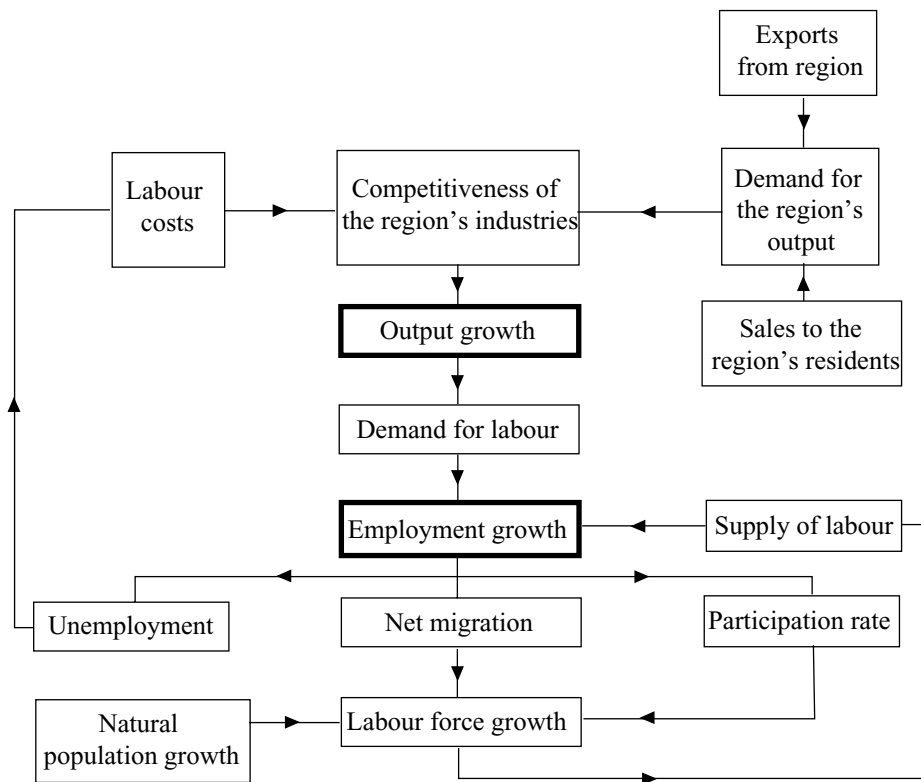
#### *Relation between economic and employment development*

Economic growth, be it expressed as a rise in output (GDP), a rise in GDP per capita or a rise in output per worker (Armstrong and Taylor, 2000:66), plays an important role in both concepts of economic development. However, as discussed in Section 2.4, rural development policy is not only concerned with an increase in GDP/capita but with providing employment opportunities as well. The relation between output growth and employment growth in a region can be explained by using a simple diagram of the interaction between a region's product market and its labour market (Fig. 3.1). The figure shows that employment growth depends on the growth of a region's output, which is itself determined by the competitiveness of its firms, i.e. the ability of firms to produce a certain share to meet the region's own demand and the demand from other regions. The figure also demonstrates how a number of other issues are related with the competitiveness of a region's firms. Changes in one or more of these issues affect employment growth, as indicated by the linkages depicted in the figure. Of course, it can be said that this model is too simple because the competitiveness of firms is only determined by labour costs, and factors like economies of scale, transaction costs and network relations are fully ignored. Nevertheless, the model clearly reveals the basic relationship between output growth and employment growth, and it can easily be expanded to include other factors.

### **3.2 Debate in regional economics**

In this section we will identify theories on economic development in rural regions by examining the debate on regional economics. The theories put forward in this debate cover both abstract spatial-economic models based on neoclassical assumptions and institutional perspectives on regional economic development, in which regions are embedded in a complex web of social, cultural, political and historical factors (Boekema *et al.*, 2000:461). Apart from economists, economic geographers are also involved in this debate. Since theories put forward in this debate all focus on explaining growth of a region's output, it is worthwhile to pay some more attention to Fig. 3.1, notwithstanding

Figure 3.1 Linkages between the product market and the labour market



Source: Adapted from Armstrong and Taylor, 1993:139.

its simplicity. By linking output growth with the competitiveness of a region's industries, the figure suggests that competitiveness is at the core of the economic development process. This competitiveness can be assumed to refer to regional firms and the 'production circumstances' under which they operate, i.e. all kinds of assumptions related to the behaviour of firms. From this interpretation, it appears that firms and their ability to adapt to changes are decisive for realizing economic growth (Lambooy *et al.*, 1997:73). Fig. 3.1 also illustrates that regions are embedded in interregional interdependencies through the linkage of demand for the region's export, suggesting that regional economic development depends on 'the ability of each region to produce with a comparative advantage the goods and services that are demanded by the national and international system of which they form a part' (Camagni, 1992:1). In the development process, some regions may experience a more favourable development than others, since competitive economic struggles 'cannot have winners without also having losers, although the absolute level of regional development may rise over a long historical period' (Healy and Ilbery, 1990:298).

Regional economic growth theories conceptualize the competitiveness of a region's industries in different ways. For example, in neoclassical theories competitiveness of firms is derived from the availability of labour and capital, whereas in Porter's theory on the competitive advantage of nations a wide range of additional factors play a role like trust, values, norms, networks and innovation. When we express the relation between the

Figure 3.2 Classification of theories on regional economic growth

	Production function <sup>a)</sup>	Theories
Traditional models	$Y = f(L, K)$	Neoclassical growth theory Keynesian approach: export base theory
Pure agglomeration models	$Y = f(AE, L, K)$	Cumulative causation theories Growth pole theories
Local milieu models	$Y = f(LM, L, K)$	Endogenous growth models Theories based on changes in the organization of labour
Territorial innovation models	$Y = f(I, LM, L, K)$	Incubator theories Product life cycles Theory of the innovative milieu Porter's theory on the competitive advantage of nations Storper's theory on the region as a nexus of untraded interdependencies

a) Y: income or output; L: labour; K: capital; AE: agglomeration effects, due to external effects or scale economies; LM: local milieu, which includes factors like space, human capital, technology, networks, trust, culture and policies; I: innovation.

competitiveness of firms and output in terms of a production function as  $Y = f(X, W, Z)$ , then we can divide regional economic growth theories into four main groups, depending on the factors in the production function: traditional models, pure agglomeration models, local milieu models and territorial innovation models (Fig. 3.2). The sequence of these models is such that the factors in the production function increase in complexity. Besides, the models reflect a certain degree of chronological sequence: the traditional models were prevalent in the 1950s, the pure agglomeration models in the 1960s, the local milieu models in the 1970s, and the territorial innovation models have dominated since the 1980s. Of course, other classifications of regional economic growth theories can be made, for example, according to traditional and modern theories, according to theories that stress the demand or supply side or according to different schools of economic thought. The four distinguished groups in this study are briefly discussed in Sections 3.2.1-3.2.4<sup>1</sup>, without considering their applicability to rural regions. That question is addressed in Section 3.2.5.

### 3.2.1 Traditional models

In the first group of regional economic growth theories - here labelled as traditional models - output is assumed to be a function of the input of labour and capital. Main exponents in this group are the neoclassical growth theory and the export base theory.

#### *Neoclassical growth theory*

In the neoclassical growth theory, the evolution of regional disparities depends on the availability and the interregional mobility of the production factors of capital and labour. Flexible prices and wages on regional markets guarantee the full utilization of regional resources. Given identical production functions, capital tends to move to regions where

labour is abundant and cheap while labour will move in the opposite direction. These flows continue until returns to capital and wages for labour are equal in each region. Ultimately, per capita incomes will converge.

Objections to the neoclassical growth theory are manifold. The mobility of both labour and capital is restricted by various factors. For example, labour mobility is not only determined by income gains, but it is also dependent on spatial frictions, mobility costs, non-economic resistance to migration, and family ties. Although capital mobility is much higher than that of labour, it is often restricted by the lumpy character of investments, which often are made in large units, and by industrial inertia, implying that once firms have settled in a location, the advantages of staying there are larger than those of moving. Other objections refer to the neglect of transport costs, trade barriers and differences in technological development among regional economies.

#### *Export base theory*

The export base theory divides economic activities into basic activities for export and non-basic activities for internal consumption. This theory is driven by demand factors in contrast to the supply driven theory in the previous paragraphs. According to the export base theory, regional economic change depends on the proportion of the economic activities in a region that produce goods or services for export. Growth in the basic activities enlarges the flows of money into the region, increases the demand for goods and services within it, and causes a corresponding increase in the volume of non-basic activities. The size of this multiplier effect depends on the amount of money that is spent in the region.

Shortcomings of this theory are, for example, the fact that the rise in purchasing power through exports is not necessarily a catalyst of growth: import substitution may also stimulate growth by increasing the regional purchasing power through the prevention of the outflow of currency. Furthermore, the size of the region matters: smaller regions have by nature more sizeable exports than larger regions, which makes the division of basic and non-basic activities rather arbitrary. Other objections pertain to ignorance about changes in the natural resource base caused by exhaustion or discovery of new resources and disregarding the fact that government expenditures such as social security may increase regional purchasing power.

### **3.2.2 Pure agglomeration models**

In the second distinguished group of regional economic growth theories - the pure agglomeration models - output depends on the availability of capital and labour and external effects or scale economies, which may arise due to a concentration of labour and capital in a specific location. We briefly introduce here two exponents of pure agglomeration models: growth pole theories and cumulative causation theories.

#### *Theories of growth poles*

In the 1950s, Perroux laid the foundations of these theories. The basic idea in the growth pole theories is the existence of a leading or propulsive firm, which acts as a growth pole

and stimulates other industries and businesses through multiplier effects. Leading industries are characterized by their newness, high technology and strong linkages with other sectors, while propulsive industries can be seen as relatively large firms, belonging to a growth sector and having a high ability to innovate and to generate growth. Growth pole theories are discussed in more detail in Section 3.4.1.

#### *Cumulative causation theories*

The main idea behind cumulative causation theories is that once regional disparities come into existence, a self-reinforcing process starts that, in the absence of catastrophic events, maintains the status of growing areas. Contrary to the convergence trend in the neoclassical theories, here divergence among regions is the expected result. An agglomeration of economic activities and people induces further rounds of expansion in the wealthy regions, whereas lagging regions are confronted with a negative spiral of declining economic activities and outmigration. The most well-known exponent of these theories is the Swedish Nobel prize winner Gunnar Myrdal. His theory is discussed in more detail in Section 3.4.3.

### **3.2.3 Local milieu models**

In the theories governing local milieu models, various factors in the local milieu, such as skills of the labour force, technical and organizational know-how, and social and institutional structures, affect the revenues from the input of capital and labour. A distinction can be made between endogenous growth models and theories based on changes in the organization of labour. The inclusion of technological progress in the production function constitutes one main difference from the neoclassical growth theories, where technological progress is supposed to be exogenous, falling like 'manna from heaven'. In the so-called endogenous growth theories, the rate of technical progress is embodied in production factors such as 'learning by doing' or regarded as a 'specific growth factor', which raises the total productivity of the other production factors (Boltho and Holtham, 1992:8-9). This specific growth factor may consist of human capital, a stock of knowledge from R&D or public infrastructure. In contrast to the convergence tendency among regions in the neoclassical growth theories, endogenous growth theories assume divergence as a result of differences in the level of technology.

#### *Endogenous growth models*

The endogenous growth models usually refer to agglomerated but non-metropolitan areas with small and medium sized firms. These local economies tend to be characterized by entrepreneurship, production flexibility, district economies, and some collective agents, which act as a catalyst in the development process. There are many applications, for example, industrial districts models. 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

because of the 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).

#### *Theories based on changes in the organization of labour*

The starting point in the theories based on changes in the organization of labour is that the composition of the labour force in terms of skills, costs, mobility, number etc. varies between regions. These differences in the labour force may affect the location decision of firms. Here the theory on the spatial division of labour and regulationist theories are discussed.

The theory on the spatial division of labour assumes that spatial inequality is both produced and used by firms in their search for favourable conditions for profitable production, and that there are rounds of investment and disinvestment. Investment is attracted to areas where there are profitable opportunities, and disinvestment occurs in areas where profitable opportunities are exhausted. The pattern of geographical differentiation is continuously transformed by new investment or disinvestment rounds. In these theories, the development of a particular region results from the interaction of external factors (the national and international context) and local actors (available material resources and factors of production, industrial structure and social composition of the area).

Regulationist theories suggest that capitalist economies develop through a series of regimes of accumulation: the way in which labour is organized and controlled in the production process like Fordism and post-Fordism. The transition periods from one regime to another are of critical importance as these are accompanied by a decline of the industrialized regions of the previous regime and the emergence of newly industrialized regions under the next regime. According to the proponents of this approach, capitalist economies have been in a transition phase between Fordism and post-Fordism since the mid-1970s.

The points of contention in regulationist theories tend to revolve around questions whether different regimes have replaced each other or whether they coexist, and whether different regimes are associated with different spatial economic patterns.

### **3.2.4 Territorial innovation models**

The theories governing territorial innovation models mainly differ from those of the local milieu models in the sense that the former assume that – apart from labour, capital and local milieu factors - the diffusion of innovations is also an important engine behind growth. Innovation has to be understood in a broad sense: it includes product, process and organizational innovation in the firm as well as social and institutional innovation at the level of an industry, region and nation (Morgan, 1997:492). The emphasis on innovation implies that technological ability to adapt to innovations is considered to be crucial for new types of production and entry into new markets. Consequently, ‘the

development of the local economy depends on its capacity to transfer its resources from old activities to new ones, notably by mastering new product technologies' (Molle and Cappelin, 1988:7). Various theories fall within this group, such as incubator theories, product life cycle theories, innovative milieux, Porter's theory on the competitive advantage of nations, and Storper's theory on the region as a nexus of untraded interdependencies.

#### *Incubator theories*

Incubator theories emphasize the tendency of R&D and innovation activities to move towards areas with a concentration of people and activities. Such areas can benefit from external economies, spin-off effects of a skilled labour force, and organizational and technological know-how, which create a fertile environment for R&D investments and innovations. In this context, Jane Jacobs has put forward the term 'urbanization economies' to denote the benefits which firms involved in different activities and sectors can derive from concentration. Together with the emphasis on innovation as a driving force behind economic growth, the implication of the incubator theories is that present economic core areas tend also to be the core areas of tomorrow. As such, core regions seem to be characterized by continuity.

The incubator theories focus on the origin of innovations, which may afterwards be diffused to other regions as well. One main difference between incubator theories and the cumulative causation theories is that growth does not necessarily result in a polarization between wealthy and lagging regions.

#### *Product life cycle theory*

The product life cycle theory builds upon the incubator theories. The product life cycle can be divided into three stages: innovation, growth and maturity. The central idea in the product life cycle theory is that locational shifts occur in the various stages of the cycle. The innovation phase takes place in areas with a concentration of technical and scientific labour, whereas the maturity phase of the product requires areas with large amounts of low-cost labour such as peripheral regions.

Comments on this theory refer to the shortening of the product life cycle of many products that has resulted in a reduction in the time for spatial diffusion of the maturity production stage. Furthermore, the initially separate activities of innovation, production and consumption become increasingly an interactive process, favouring the concentration of the various stages of innovation, upgrading and production into one unit in the core area.

#### *Theory of innovative milieu*

The innovative milieu can briefly be described in terms of a local milieu of small and medium sized enterprises with specific properties, which is fed with innovation through extraterritorial networks (see Section 3.4.7 for an extensive discussion). Collective learning processes in order to adapt to technological changes are essential in innovative milieux. Hence, such milieux are also referred to as 'learning regions' or as 'regional innovation systems' (Armstrong and Taylor, 2000:299). The innovative milieu can be positioned within the global-local paradox, in which globalization and regionalization

simultaneously occur. On the one hand, there are firms, which make the different parts of their product in different parts of the world and sell their products all over the world, and on the other hand, firms which concentrate in regional clusters. These different organization forms of the so-called 'network firms' are studied in the scope of the 'network approach' (Capello, 1996) by various schools in the social sciences and organization theory. Transaction costs (costs of using the market), complementarity and trust are main items in the network approach (see also Section 2.4.3). In the scope of our discussion of regional economic growth, it can be said that networks are an important local milieu factor.

*Porter's theory on the competitive advantage of nations*

In his theory on the competitive advantage of nations, Porter (1990) employs the 'diamond' to explain the determinants of national advantage. He distinguishes four main determinants, which individually and as a system, create the context in which a nation's firms are born and compete. These four determinants refer to factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry. In addition, the two determinants of chance and government complete the diamond (see Section 3.4.8 for an extensive discussion).

*Storper's theory on the region as a nexus of untraded interdependencies*

Storper's theory (1995) on the region as a nexus of untraded interdependencies deals with the question why some regions keep emerging as centres for new rounds of economic growth in a time of increasing ease in transportation and communication. In the theory, firms are supposed to be tied to other firms through formal exchanges (i.e. the input-output linkages) and through untraded interdependencies. These include labour markets, public institutions, and rules for action, customs, understanding and values. The untraded interdependencies can also be seen in terms of 'regional production culture' or 'civic culture', i.e. the set of virtuous connections of economic coordination, which mobilize capacities for efficient economic action. The untraded interdependencies form the public assets of the production system and they may differ among regions. All production systems are subject to uncertainty between producers, producers and labourers, and producers and consumers. These uncertainties are mainly solved through conventions, which are taken-for-granted rules and routines between the partners in different kinds of relations of uncertainties. There are different combinations of uncertainty and different conventions among regions, resulting in different 'frameworks of economic action' or different 'worlds of production'. Some of these worlds of production are more competitive than others, for example, Silicon Valley. The evolution of the production system is strongly dependent on its underlying conventions. These affect the labour market, the input-output system and the knowledge system, and tend to push the production system from generality into specificity. This evolution is path dependent in the sense that it involves interdependencies between the choices made over time and that it is irreversible.



### 3.2.5 Regional economic growth theories and rural regions

In the preceding discussion of the four categories of regional economic growth theories, no attention was paid to the question whether the premises of the theories are compatible with the specific features of rural regions. According to our definition, rural regions are regions with a low population density and one or more small and medium sized cities, whereas urban regions have a high population density and big cities (Section 2.2). These differences in density of actors and economic activities imply that firms in urban regions are in a more favourable position to benefit from agglomeration economies than those in rural regions. Agglomeration economies arise from the presence of a large pool of labour, buyers and sellers, interfirm linkages with customers, suppliers, subcontractors and other firms, a stock of scientific and technological knowledge and linkages among this knowledge and firms (Malecki, 1991:228-31). These linkages enable the flow of innovations and information. Rural regions lack agglomeration economies, except for the cities, in which some agglomeration economies may flourish. From this point of view, urban regions are in a more favourable position than rural regions to generate economic growth. However, mainly due to congestion in urban regions, dispersion forces are also at work that may push firms and labourers out of the cities. With regard to these differences between rural and urban regions, one may question whether the same theories can be applied to explain economic development in rural and urban regions. Below this question is examined in light of the theories in the four distinguished groups.

#### *Traditional models and rural regions*

The neoclassical growth theory does not pay attention to specific regions, firms, economic sectors, distribution of population and other regional characteristics. Thus, it appears that the theory can be applied to both urban and rural regions. In the export base theory, economic growth depends on the ratio of basic and non-basic activities. As no *a priori* relationship between this ratio and the urban or rural character of a region can be assumed, this theory can also be applied to both types of regions.

#### *Pure agglomeration models and rural regions*

With regard to the agglomeration in urban regions, it can be said that within the cumulative causation theories urban regions tend to have the role of wealthy regions and rural regions the role of lagging regions. Growth pole theories do not make a distinction between urban and rural regions, but the effect of applying the theories is likely to generate different outcomes in rural and urban regions as it is more difficult to induce technical multipliers in rural regions.

#### *Local milieu models and rural regions*

Endogenous growth models refer to clusters or concentrations of small and medium sized firms in both urban and rural regions. Theories based on changes in the organization of labour do also not refer to urban and rural regions: the dynamism in the system arises from the pull and push of firms caused by particular local conditions.

#### *Territorial innovation models and rural regions*

It seems to be rather clear that the incubator theory is only valid for urban regions, whereas in the product life cycle theory the innovation stage is likely to occur in urban

regions and the maturity stage in rural regions. The innovative milieu focuses on a small territorial unit with a concentration of interfirm linkages, which may be located both in urban and rural regions. On the whole, the innovative milieu is not able to be at the origin of major innovations, unlike urban regions in the incubator milieu, but it has external linkages which foster acquaintance with the innovation and it has the capability to adopt the innovation in the production process. From the three theories in this group, it follows that rural regions are usually not considered to be the origin of major innovations, but that they are supposed to adopt innovations through their linkages with urban regions. And rural regions have to do so in order to survive as Camagni (1992:15) argues:

if it is clear that they cannot catch up rapidly in the *production* of new technologies, it is nevertheless clear that they can and must catch up rapidly in the *utilisation* of these technologies. They sell their products in an international market, and this market requires more sophisticated characteristics both in products (quality, design, novelty and variety) and delivery conditions (time reliability, production elasticity for peak or unexpected demand) than may be achieved through traditional technologies. A strategy of 'blending' the best technologies with more traditional and local organisation practices seems the most effective.

Where Porter's and Storper's theories are concerned, both can be applied in urban and rural regions.

From this brief examination, we can conclude that all theories discussed in this section can be used to explain economic development in rural regions, except for the incubator theory. In a number of theories like the cumulative causation theories and the product life cycle theory the role of rural regions is prescribed to a certain position in the theory, i.e. lagging regions and maturity stage of production.

### **3.3 Debate on economic development in rural studies**

From the review of regional economic growth theories, we now move to the debate on economic development in rural regions, a debate which has generated much discussion in the multidisciplinary field of rural studies. This debate is on the one hand concerned with theories on economic growth in rural regions, and on the other hand with the question how rural development policy can stimulate economic growth in rural regions. The latter has resulted in a close interaction between ideas put forward in this debate and implemented rural development policy (see Section 2.4.3). Contributions to this debate mainly originate from rural geography, rural sociology, agricultural economy, demography, ecology, rural planning and administrative sciences (Cloke, 1985 and 1997; Huigen, 1996). In the debate, three main approaches can be distinguished:

- 1 the exogenous development approach;
- 2 the endogenous development approach;
- 3 the mixed exogenous/endogenous development approach.

These approaches reflect more or less a chronological sequence in the conceptualization of rural development. The concepts have different implications for the strategies of local actors and for rural development policy. The three concepts are briefly discussed below.

#### *1 The exogenous development approach*

The 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 on (Slee, 1994:184). Exogenous models are based upon the 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 performs several functions in this system: it provides food for the urban areas, it is a source of purchasing power for commodities from 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 largely considered to be dependent on and externally determined by the urban sector.

Till the 1970s the exogenous development approach tended to be the dominant model for explaining rural development. In the European countries, it was largely reflected in a rural development policy directed towards modernization of the agricultural sector; as this proved insufficient to stabilize the rural economy, a policy to set up branch plants - derived from the growth pole theory - 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).

## *2 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). This approach is closely related to the local milieu models such as the endogenous growth and industrial district models, in which the institutional context of economic activities plays an important role. Two specific 'rural' theories within this approach have been put forward: the community-led rural development theory and Bryden's theory on the potentials of immobile resources for creating competitive advantages in rural areas. These are more extensively discussed in Sections 3.4.4 and 3.4.5.

Where rural policies were concerned, the emphasis shifted towards rural diversification, bottom-up approach, support for local business, encouragement of local initiatives and local enterprises, and provision of suitable training (Lowe *et al.*, 1995:91). Intensive interaction, information exchange and cooperation between local actors can be considered to be prerequisites for the success of the endogenous development model. Where these do not exist, some form of a local development agency is needed to act as a catalyst for bringing about this cooperation (Stöhr, 1990:23).

## *3 The mixed exogenous/endogenous development approach*

This approach rejects the polarization of exogenous and endogenous development models and proposes 'an approach of the analysis of rural development that instead stresses the interplay between local and external forces in the control of development processes' (Lowe *et al.*, 1995:87). This approach relates rural development to the process

of increasing globalization, mainly due to rapid changes in the information and communication technology 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, in this approach 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 approach is discussed in more detail in Section 3.4.9.

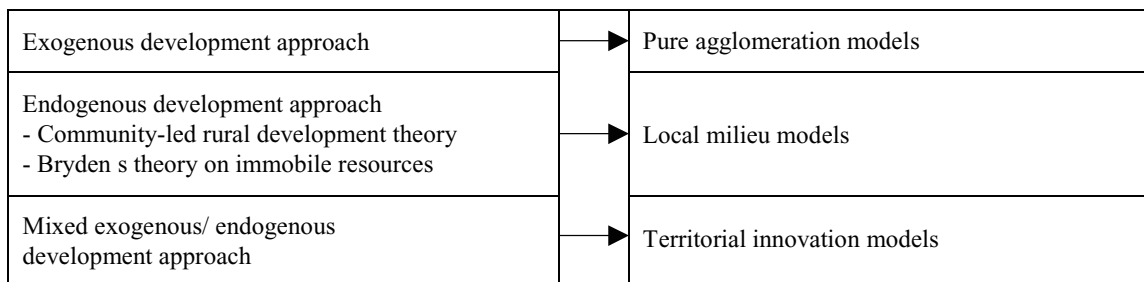
*Relation with the debate on regional economic growth theories*

When we compare the above debate on economic development in rural studies with that in regional economics in the previous section, our first impression is that the debate on economic development in rural studies is especially concerned with the more organizational aspects of the rural economy and that the focus in the debate in regional economics tends to be more on the interplay of the production factors of capital and labour, often affected by several other factors. However, when the availability of capital and labour is implicitly assumed in the debate on economic development in rural studies, then differences between both debates become smaller. It may even be said, notwithstanding different circles of scientists and differences in terminology, that there is a certain amount of overlap between both debates (Fig. 3.3). The growth pole theory links the exogenous development approach and the pure agglomeration models whereas regional location factors provide the link between the endogenous development approach and the local milieu models. Although the concept of innovation is not explicitly mentioned in the mixed exogenous/endogenous approach, it seems to be clear that economic dynamics is derived from the interplay of local and external forces, in which among others innovation is exchanged, and consequently this approach can be related to the territorial innovation models.

**3.4 Discussion of theories for further research**

From the discussion of regional economic growth theories and the debate on economic development in rural studies in Sections 3.2 and 3.3, it is apparent that quite a number of theories can be used to explain economic development in rural regions. In the interest of manageability and efficiency, we have selected ten theories for further research. Seven of these theories have already briefly been discussed in the previous sections. Three other theories were identified, which are less widely known in the mainstream debates, but

*Figure 3.3* Congruence in the respective debates on economic development in rural studies and regional economics



nevertheless useful for deepening our understanding of economic development in rural regions. Our selection is based on the following considerations. In the debate on economic development in rural studies, five theories were put forward and as this number is quite limited, we decided to examine them all. With regard to the selection of theories from the debate in regional economics, the choice was more complicated due to the bigger range of theories. In order to cover divergent viewpoints on economic development, it would be reasonable to cover one or two theories from each of the four distinguished groups of regional economic growth theories. However, as the theories concerning the traditional models have rather restrictive premises and as decisive production factors of labour and capital are also covered by the other three groups of theories, these were omitted. Next, regional economic growth theories were not selected from the group of the local milieu models as these theories seem to be overshadowed by the territorial innovation models, which share the same production factors, but which also consider the role of innovation, a factor that is currently viewed as one of the main engines behind economic development. From the two remaining groups of the pure agglomeration models and the territorial innovation models, we have selected five theories, which are rather distinctive in their conceptualization of economic development. The selected theories are presented in Fig. 3.4. Some of them are more firm-oriented, whereas others tend to focus on the community or the whole economy.

This section presents a detailed description of the premises and mechanisms of the ten selected theories. For this purpose, we have composed a list of questions and distinguishing characteristics, which will allow for a systematic description:

- positioning of the theory: to which discipline or school does the theory belong?
- problem orientation: which feature/question is explained by the theory?
- territorial level of analysis: to what geographical scale does the theory refer (region, community etc.)?
- notion of economic development in the theory;
- premises and mechanisms of the theory;

Figure 3.4 Classification of selected theories on economic development in rural regions

	Firm-oriented	Community-oriented
Pure agglomeration models	<ul style="list-style-type: none"> <li>- Growth pole theory</li> <li>- Kilkenny's relationship of transport costs and rural development</li> </ul>	<ul style="list-style-type: none"> <li>- Myrdal's cumulative causation theory</li> </ul>
Local milieu models		<ul style="list-style-type: none"> <li>- Community-led rural development theory</li> <li>- Bryden's theory on the potentials of immobile resources</li> <li>- Creative destruction model of community development</li> </ul>
Territorial innovation models	<ul style="list-style-type: none"> <li>- Theory of innovative milieu</li> <li>- Porter's theory on the competitive advantage of nations</li> </ul>	<ul style="list-style-type: none"> <li>- Mixed exogenous/endogenous approach</li> <li>- Illeris' inductive theory of regional development</li> </ul>

- development pattern postulated by the theory: identification of the stages in the development process of the regional economy;
- development strategy indicated by the theory: how can actors (firms, policy makers) play a role in the development process?
- is the theory empirically applied or tested?
- usefulness of the theory in the scope of this study and derivation of a hypothesis for further research in this study.

In the ten subsections below, the ten selected theories are discussed according to the points laid down in this framework. The theories all assume that given the availability of capital and labour, some additional factors are at work, which affect economic development. For a better understanding, we explicitly pay attention to these factors and implicitly assume the availability of capital and labour in the description of the theories.

### 3.4.1 Growth pole theories<sup>2</sup>

#### *Positioning of the theory*

The growth pole theory is usually credited to the French economist Perroux, who first used the concept in the 1950s. Since then, it has been elaborated by many economists and planners. In the 1960s and 1970s growth poles were popular among policy makers as a means to stimulate economic development in lagging regions. Growth pole theories have been the subject of debates in regional economics and rural studies.

#### *Problem orientation (given the availability of capital and labour)*

The basic idea in the growth pole theories is the existence of a leading or propulsive firm, which acts as a growth pole and which can stimulate other industries and businesses through multiplier effects.

#### *Level of analysis*

The territorial level refers to a growth pole, which can be said to cover the space of the production milieu of the leading or propulsive firm with its linked upstream and downstream firms. Apart from this rather strict delimitation, growth poles are often associated with regions.

#### *Notion of economic development*

Economic development refers to an increase in income and employment in the growth pole. Hence it can be said that economic development can be perceived in terms of a process of polarization: it favours particular places and industries, while other places and industries largely remain unaffected by the process of growth.

#### *Description of premises and mechanism*

In the growth pole theories, leading or propulsive firms are supposed to be like ‘spiders in the web’. Leading industries are characterized by their newness, high technology and strong linkages with other sectors, while propulsive industries can be seen as relatively large firms, belonging to a growth sector and having a high ability to innovate and to generate growth. Although these firms are often associated with basic industries such as automotive, steel and oil production, they may also refer to, for example, universities.

The multiplier or polarization effects of these leading or propulsive firms on the surrounding economy are threefold:

- technical multipliers may arise from linkages with upstream and downstream industries;
- income multipliers are expected as a result of increased employment, which induces the demand for consumer services;
- psychological effects can be at work as the establishment of a leading or propulsive firm may create an optimistic atmosphere.

These multipliers may induce a favourable regional economic environment around the leading or propulsive firm, which can be referred to as a 'growth pole'.

#### *Development pattern*

The establishment of a leading or propulsive firm in a certain region may stimulate the surrounding regional economy through multiplier effects.

#### *Development strategy*

To stimulate economic growth in lagging regions, growth pole theories advocate the establishment of leading or propulsive firms in such regions.

#### *Empirical application or testing*

The theory was widely applied by policy makers in the 1960s and 1970s in the setting up of so-called key villages. However, in practice numerous problems arose in the creation of growth poles in lagging and peripheral regions, as it was often difficult to induce technical multipliers. Hence, many leading or propulsive firms transformed into 'cathedrals in the desert'.

#### *Usefulness and hypothesis for further research*

Opponents of the growth pole theories point out that the leading or propulsive firm's location choice is ignored and that, in practice, it is often difficult to create growth poles in lagging and peripheral regions. Another objection against the growth pole theories is that it may contribute towards polarization within regions as the centre with the growth pole may drain all capital and labour from the other parts of the region (backwash effects). Despite these objections, it is still interesting to explore why and how multiplier effects around a leading or propulsive firms operate and to examine factors which prevent the occurrence of the multipliers. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'A growth pole and its multiplier effects stimulates employment'.

### **3.4.2 Kilkenny's relationship of transport costs and rural development**

#### *Positioning of the theory*

Kilkenny's theory (1998a, b) belongs to the so-called 'new economic geography' (NEG). This recent school studies spatial concentrations of population and/or economic activity under conditions of increasing returns to scale and monopolistic competition. Usually, NEG models assume a two-sector economy comprising agriculture and industry and

allow for changes in the spatial division of economic activities through changes in transport costs (Fujita *et al.*, 1999).

*Problem orientation (given the availability of capital and labour)*

The theory demonstrates that rural locations become attractive for industrial firms and workers when industrial transport costs are low relative to agricultural transport costs.

*Level of analysis*

Kilkenny refers to urban and rural regions, but she does not indicate the size of such regions.

*Notion of economic development*

Kilkenny uses the notion of rural rather than economic development. She characterizes rural development in terms of economic diversification and increases in population and welfare.

*Description of premises and mechanism*

The theory employs a general equilibrium model comprising two regions, the one 'urban' and the other 'rural'. The largest proportion of the farmland is in Rural. There are three groups of actors: the immobile farmers and the mobile workers and firms who can move across regions. Farmers produce a homogeneous agricultural product. Industrial firms operate in a non-competitive market structure: they produce differentiated goods and are subject to increasing returns to scale. This implies that average costs of produced output fall as the quantity produced increases and that local wages are equal to the marginal costs of production. Both farm and industrial products are costly to transport across regions, but not within regions. So agricultural products are more expensive in Urban compared to Rural: in Rural the price equals the farmgate price; in Urban it is the farmgate price plus transport costs. However, the same does not apply to industrial products, since these are delivered at uniform prices in Urban and Rural. So transport costs of industrial products to consumers in a region other than where the firm is located, are costs for the firm, and not an additional charge for the consumer. Workers spend part of their income on agricultural products. Since these are more expensive in Urban, nominal urban wages have to be higher than those in Rural in order to compensate for the transport costs of agricultural products.

According to the model, firms choose locations where profits are highest and workers migrate to locations where real wages (i.e. nominal wages divided by the cost of living) are highest. When overall transport costs are low, there are more urban firms and fewer rural firms. At high transport costs, relatively more firms are located in Rural. If one supposes an exogenous decrease in industrial transport costs, simulations with the model show that at relatively low agricultural transport costs, this favours a concentration of firms in Urban. However, at relatively high agricultural transport costs, decreasing industrial transport costs enhance rural locations. In this case the gap between urban and rural nominal wages is quite large, so the combined costs of supporting a (cheap) rural workforce and transporting industrial output are lower than the costs of supporting an (expensive) urban workforce. Simultaneously, workers migrate from Urban to Rural, pulled by relatively high real rural wages and the presence of firms.



### *Development pattern*

The theory distinguishes two types of economic activities: agriculture and a wide range of industrial activities. Given relatively low industrial transport costs and high agricultural transport costs, the rural region transforms from an economy based on agricultural activities to a diversified economy with agricultural and industrial activities.

### *Development strategy*

Kilkenny remarks that theories are abstractions, which invite a wide range of interpretations. In the formulation of a development strategy, Kilkenny identifies three main implications arising from her model:

#### a The role of transport costs

Firms have different transport costs: there are firms with high transport costs and firms that have low costs. The model shows that rural locations can be an attractive location for firms with low transport costs. In the model, a reduction of industrial transport costs is exogenously given. Such a reduction refers, for instance, to improvements in the electronic communication infrastructure. A development strategy which targets at the provision of infrastructure as a public good such as an internet backbone can be recommended.

#### b Increase in real rural wages

High real rural wages relative to real urban wages attract workers. The model assumes, however, that an increase in real rural wages through higher nominal rural wages or lower rural prices would expel firms from rural locations. On the other hand, real rural wages can also be raised by the provision of public goods such as space and rural amenities. Any development strategy should aim at making rural areas more attractive places to live in by increasing the quality of public goods of space and amenities.

#### c Product differentiation

In the model, monopolistically competitive firms each produce a unique variety, which they sell at average (rather than the lower marginal) costs. Applying this to rural regions means a strategy towards distinguishing themselves from other regions by developing uniquely attractive features. This may attract tourists, tourist services which need workers, and may make rural places more attractive to the rural population itself.

### *Empirical application or testing*

The model is not empirically tested.

### *Usefulness and hypothesis for further research*

Due to the restrictive premises of Kilkenny's model, some doubts can be raised about its usefulness for explaining economic development in rural regions. Nevertheless, the model provides some interesting insights in the role of transport costs, real wages and differentiation of rural regions, which might be considered in development strategies. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'Relatively low industrial transport costs stimulate the establishment of firms in rural regions.'

### 3.4.3 Myrdal's cumulative causation theory

#### *Positioning of the theory*

Myrdal's theory (1957) belongs to the discipline of development economics and can be put in the group of pure agglomeration models.

#### *Problem orientation (given the availability of capital and labour)*

Myrdal focuses on the large and steadily increasing inequalities between developed and under-developed countries/regions. He expects that as a result of a cumulative causation process, richer countries/regions get richer and poorer countries/regions become poorer.

#### *Level of analysis*

Myrdal's theory refers to both countries and regions.

#### *Notion of economic development*

Economic development in wealthy regions refers to an increase in employment and income, resulting from a cumulative process of ever-increasing internal and external economies, fortified and sustained at the expense of other regions where instead relative stagnation and regression become the pattern (Myrdal, 1957:27).

#### *Description of premises and mechanism*

Myrdal's starting point is the rejection of the assumption of a stable equilibrium in the neoclassical economic theory. He suggests that every disturbance in an economic system does not provoke a reaction towards restoring the state of equilibrium, but rather tends towards a further move from the equilibrium in the same direction as the first change. Because of such circular causation, the process tends to become cumulative and often gathers accelerating momentum. Myrdal also puts another reason forward as to why the state of equilibrium would not be attained: economic theories tend to be restricted to the interaction of the so-called 'economic factors' and hence disregard a large part of social reality, which can be referred to as 'non-economic factors'. Such non-economic factors should not be taken as given and static; when they react, they usually do so in a disequilibrating way. A realistic analysis of economic development should, therefore, take both economic and non-economic factors into account, thereby making a distinction between 'more relevant' and 'less relevant' factors (Myrdal, 1957:9-13).

Myrdal's theory distinguishes between developed and under-developed regions. The location of a firm in a particular region gives a spur to its general development. It provides employment opportunities and demand for products and services from existing local business. This expansion of production results in an immigration of (often high skilled) labour from lagging regions. One expansion in the region induces another expansion, as new firms are attracted by the already existing concentration of economic activities, a relatively large size of the market, which enables scale economies, and a diversified labour market. The production of consumer services will also expand with the rising population in the wealthy region. The increase in tax revenues enables the provision of infrastructure. This cumulative process of concentration and expansion of economic activities in the wealthy region has a number of harmful implications for the so-called lagging regions: these are deprived from labour and capital, the so-called

'backwash effects'. Furthermore, the non-expanding regions face increasing disadvantages since these regions cannot maintain a good infrastructure, a good school system, and other public utilities. This will again increase their competitive disadvantages. Moreover, the entire value system of people living in backward regions is likely to change and influence further development negatively.

#### *Development pattern*

In the course of time, the play of forces in the market normally tends to increase the inequalities between wealthy and lagging regions. According to Myrdal, this tendency is often stronger in underdeveloped countries than in developed countries. However, two factors may counteract the increasing inequalities. First, lagging regions can profit from the so-called 'spread effects': a deconcentration of economic activities out of the wealthy region largely due to high land prices, shortages in the labour market and traffic congestion. When these spread effects are strong enough to counter the backwash effects in the lagging regions, new centres of self-sustained economic expansion come into being. The higher the level of economic development that a country has already achieved, the stronger the spread effects, mainly due to well-developed systems of transportation and communication. Second, in welfare states, state policies have been initiated which aim at counteracting regional inequalities. Hence Myrdal suggests that state policy may diminish the impact of market forces in generating backwash effects, while reinforcing spread effects.

#### *Development strategy*

The process of cumulative causation can be stopped by an exogenous change such as earthquake or war, which brings the system to rest. Alternatively, policy inferences can be used to stop the cumulative causation process (Myrdal, 1957:13).

#### *Empirical application or testing*

Myrdal's theory is based on an extensive study of development processes in developed and developing countries. It formed a basis for many studies on regional patterns of economic activity within and among countries (Lambooy *et al.*, 1997:86-7).

#### *Usefulness and hypothesis for further research*

Myrdal's theory explains how cumulative processes result in the co-existence of wealthy and lagging regions. As there are both leading and lagging rural regions in the EU, it is interesting to examine whether Myrdal's theory can be used to describe this situation. However, circular causation and policy interference highly complicate such an examination. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'Leading regions cumulate wealth whereas lagging regions lose wealth'.

### **3.4.4 Community-led rural development theory**

#### *Positioning of the theory*

This development theory belongs to the endogenous development approach in the debate on economic development in rural studies. Due to its emphasis on capacity building and

institutional structures, it has also links with sociology and political sciences. Apart from the label 'community-led rural development theory' (Murray and Dunn, 1995), labels like 'community development' (Keane and Ó Cinnéide, 1986) and 'bottom-up partnership approach' (Mannion, 1996) are also used to describe this approach.

*Problem orientation (given the availability of capital and labour)*

The community-led rural development theory focuses on the strengthening of the self-help capacity of local actors, which is considered to be a major precondition for establishing and sustaining local economic development. Partnerships and adjustments of the institutional structures are seen as the main tools in the process of capacity building.

*Level of analysis*

The theory refers to communities and rural regions.

*Notion of economic development*

Economic development is defined by an increase in employment and income.

*Description of premises and mechanism*

The starting point for this theory is the observation that many rural regions and communities experience genuine difficulties in generating economic development, largely due to insufficient capacity to solve economic problems, an inadequate institutional milieu and lack of political responsibilities. The theory suggests that the building of self-help capacity of communities serves as a key to solve these bottlenecks. Self-help capacity refers, for example, to organizational expertise of rural communities with regard to group processes, conflict resolution, mediation, leadership, understanding the business of government, and achievement of a shared vision. The ultimate goal of the theory is to transform an attitude of apathy and dependency into one of spiritedness and self-reliance. Or putting it simply, it aims at teaching people how to catch a fish rather than presenting them one on a plate (Keane and Ó Cinnéide, 1986:287).

Capacity building tends to be a slow process and often involvement of outside animateurs is required. The process consists of two main elements: the creation of partnerships among actors and the adjustment of the institutional structure. Effective partnerships are those which (Mannion, 1996:5):

- represent and bring together all relevant groups and sectors and enable them to identify and bring forward development possibilities;
- link individual and community development proposals with sources of support and funding;
- consist of private sector representatives who are willing to share power, experience and responsibility as equals with community representatives;
- take into account regional or local requirements and initiatives.

Adjustment of the institutional structure is especially needed with respect to the linkages between the local, regional and national authorities, as the community-led development theory recommends an institutional structure that encourages and responds to bottom-up initiatives.

#### *Development pattern*

The first stage consists of building of the self-help capacity of communities, i.e. establishment of partnerships and adjustment of the institutional structure. If the first stage results in an attitude of spiritedness and self-reliance among local actors, the second stage of generating and sustaining economic development may start. However, the theory is restricted to the first stage.

#### *Development strategy*

The initiative for community-led rural development may lie in the hands of community leaders, but often assistance from outside is necessary, like partnerships with regional or national authorities, universities and development agencies.

#### *Empirical application or testing*

The approach has among others been applied in Colorado, USA (Murray and Dunn, 1995) and Ireland (Keane and Ó Cinnéide, 1986). Besides, it is widely advocated in the EU in the LEADER programme.

#### *Usefulness and hypothesis for further research*

The community-led rural development theory identifies a main precondition for generating and sustaining economic development in rural regions: the existence of community capacity to function effectively on a self-help basis. The theory reminds us that in our analysis of economic development in rural regions, the preconditions should be taken into account. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'A well-developed self-help capacity of communities stimulates employment growth'.

### **3.4.5 Bryden's theory on the potentials of immobile resources for creating competitive advantages in rural areas**

#### *Positioning of the concept*

Bryden's theory can be placed in the debate on economic development in rural regions, and can be considered to be a specific application of an endogenous growth model. The theory is rooted in sociology, regional economics, political science, institutional and management studies.

#### *Problem orientation (given the availability of capital and labour)*

A key feature of the current globalization process is the increased mobility of capital, skilled labour, information and other goods and services. Bryden (1998) argues that given this mobility, these resources are a rather unstable basis upon which to build a development strategy for rural areas. Besides, these mobile resources are scarce, implying that rural areas have to compete with each other for these resources, and that the success of the one can only be achieved at the cost of the other. Hence Bryden suggests that the competitive advantage of rural areas should be based on immobile resources, which are not open to competition.

### *Level of analysis*

The territorial level of Bryden's theory refers to regions with about the size of provinces in the Netherlands, départements in France and counties in the UK.

### *Notion of economic development*

Bryden uses the term local development rather than economic development; local development covers diversification of economic activities, the expansion of markets, capturing more value added and strengthening local capacities and improving the quality of life.

### *Description of premises and mechanism*

Bryden argues from the endogenous approach of rural development, thereby emphasizing the transfer of the responsibility and control of the local development process to the local actors, the empowerment of local actors, and the heterogeneity of rural regions. The key question put forward by Bryden (1998:3) is: 'Why do rural regions and localities in apparently similar economic, social and environmental circumstances have markedly different performance over relatively long periods of time?' As an answer to this question, he suggests the hypothesis that the differential development of rural regions can be explained by a combination of tangible and less tangible factors and the way these interact with each other in the local context. Tangible factors refer, for example, to resource availability, infrastructure endowment, employment/unemployment rates, education level, labour costs, exports and imports, and the degree of dependence on declining sectors such as agriculture. Less tangible factors may include items such as the existence of an innovative milieu, social capital and social competence, environmental capital, the nature of external linkages, new consumption demands on rural space and historical conditions. These factors by and large reveal the opportunities and constraints in local development and also reflect the effectiveness of the local and regional institutional system in handling these opportunities and constraints.

Bryden builds upon the results of a project on the success and failure of local development initiatives coordinated by Stöhr (1990), undertaken in about 50 case study areas in Europe in the late 1980s. This project concluded that successful local initiatives were mainly indigenously triggered and oriented towards the mobilization of local entrepreneurial resources, economic diversification, the introduction of new products, the upgrading of skills and the introduction of new organizational forms for economic, cultural and training initiatives. On the other hand, less successful local schemes tended to be characterized by heavy reliance on external (state) agencies, the concentration of efforts on intensifying - rather than diversifying - existing local activities and a lack of local entrepreneurial capacity. Another main building block for the theory of Bryden is the observation of the increased mobility of capital, skilled labour and information in the current globalization process. As mobile investments are rather scarce, local development strategies based on these mobile assets can only be achieved at the cost of other regions, what can be referred to as a 'beggar-their-neighbour strategy'. Based on these two building blocks - endogenous development and objections against mobile investments - Bryden derives his thesis that the competitive advantage of rural regions should be based on immobile resources.

Immobile resources are resources specific to the locality and which cannot be moved to another location. Some of them are tangible like property, physical infrastructure and natural resources, and others are intangible like knowledge, values and culture. Bryden distinguishes four types of immobile resources:

- 1 Social capital: the features of social organization such as trust, norms and networks, that can improve the efficiency of society by facilitating co-ordinated actions. Social capital is embedded in relationships among people; it tends to cumulate when it is used and to be depleted when it is not.
- 2 Cultural capital: this includes history, traditions, customs, language, music, art and stories, that may be territorially defined as belonging to an area.
- 3 Environmental capital: this refers to the actual physical conditions of an area. It includes both natural environmental capital (landscape, climate etc.) and built environmental capital (structures of historical significance, physical and tourist infrastructure).
- 4 Local knowledge capital: this is about the capacity of the area to generate, sustain and build on formal and informal stocks of knowledge and information.

#### *Development pattern*

Although Bryden does not give a development pattern in his theory, it is likely that a development pattern would entail growth in the endogenous sectors.

#### *Development strategy*

In order to reduce the vulnerability of local areas to global forces, rural areas should build their development strategies on the immobile resources. These include social capital, cultural capital, environmental capital and local knowledge capital, and are all endogenous. Nevertheless, when mobile investments from outside become available, these should be captured and related to the immobile resources.

#### *Empirical application or testing*

The potential of immobile resources has empirically been tested and confirmed in five case studies involving the activities of five LEADER groups which were analyzed (Bryden, 1998). In all the case studies the local development strategy was based on immobile resources. Together with three other European countries, the Arkleton Centre in Aberdeen is currently undertaking more studies on this topic in the scope of the so-called Dynamics of Rural Areas (DORA) project (Bryden *et al.*, 2000).

#### *Usefulness and hypothesis for further research*

Within the group of endogenous growth models, Bryden isolates one specific group of factors - the immobile resources - which he considers to be crucial for local development strategies. As such, he categorizes the immobile resources into four types of capital. Bryden's theory takes the opportunities and constraints of the current globalization process into account and it is explicitly directed at rural regions. This makes Bryden's theory attractive in the scope of our study. Some doubts on Bryden's theory concern the neglect of external linkages and the rather negative valuation of the competition for mobile resources. Both external linkages and mobile resources may help in the adaptation of innovations. A hypothesis for further research in this study - given the availability of

labour and capital - can be formulated as follows: 'The exploitation of immobile resources stimulates employment growth'.

### **3.4.6 Creative destruction model of community development**

#### *Positioning of the theory*

The creative destruction model of community development (Mitchell, 1998) has been included in the debate on economic development in rural studies and can be considered a specific application of the local milieu models. The idea of 'creative destruction' is derived from Schumpeter, hence the model can be said to have its roots in economics.

#### *Problem orientation (given the availability of capital and labour)*

The desire of urban residents to experience the countryside ideal has engendered the creation of heritage-shopping villages. The problem, then, is that overexploitation of the rural idyll in such villages ultimately leads to its destruction. The model distinguishes five phases in the development of heritage-shopping villages and indicates at which phase destruction of the rural idyll may be prevented.

#### *Level of analysis*

The model focuses on a rural town.

#### *Notion of economic development*

Here economic development refers to increasing income and employment in the heritage-shopping village. Besides, the heritage-shopping village will cast a positive favourable influence on the surrounding area and enhance its economic activities.

#### *Description of premises and mechanism*

The model addresses the commodification of the countryside ideal, which has resulted in 'heritage-shopping villages' like Nelson and St. Jacobs in Canada and Albarracin in Spain. Such villages share the following common characteristics:

- they are centres of consumption, which specialize in the provision of handcrafted products reflecting local or regional heritage;
- they are easily accessible to a large and relatively affluent population;
- they are replete with a favourable amenity environment;
- there are entrepreneurs who are willing to invest in the selling and marketing of rural values and traditions.

The investments of entrepreneurs in the restoration or reconstruction of vernacular buildings, shops, restaurants etc. boost economic activities and employment, but simultaneously imply tensions between visitors and local residents, especially when the number of visitors increases.

The model assumes that the development of the heritage-shopping village is based on the relationship among three variables: entrepreneurial investment, consumption of rural heritage and destruction of the rural idyll. The underlying premise is that entrepreneurial selling and marketing of the rural heritage entices the post-modern consumer in search of a nostalgic return to rural roots. The resulting consumption of rural heritage provides



entrepreneurs with profit for reinvestment in rural heritage. This may lead to a cumulative process of increasing consumption of rural heritage and new rounds of investments. Ultimately the overexploitation of rural heritage destroys the rural idyll.

#### *Development pattern*

The creative destruction model distinguishes five stages in the development of a heritage-shopping village. In the first two stages of early and advanced commodification, the rural idyll is exploited. In the third phase of pre-destruction, too many visitors come to the village resulting in a situation of overexploitation while simultaneously a growing number of residents perceive an erosion of their community. Tensions increase and in the next phase of advanced destruction, outmigration of local residents may occur, resulting in the disintegration of community life. Finally, the stage of post-destruction sets in.

#### *Development strategy*

In order to prevent the ultimate destruction of the heritage-shopping village, Mitchell (1998:284) advises a development strategy which remains in the phase of early commodification, when investment levels and surplus value are not excessive, economic gains are still realized by an influx of tourists and local residents' perception of their amenity environment is still positive. However, according to Mitchell it is rather illusory to believe that equilibrium can be achieved in this phase, as entrepreneurs must be satisfied with making sub-optimal economic gains.

#### *Empirical application or testing*

The model has been tested and confirmed in the community of St. Jacobs, Ontario, Canada.

#### *Usefulness and hypothesis for further research*

One main shortcoming of the model in the scope of our study is that it refers to a town with its immediate surrounding, and not to a region. Nevertheless, the model provides an interesting lesson: overexploitation of the rural heritage leads to its destruction, so measures have to be taken in order to prevent such an overexploitation. As rural regions are usually endowed with rural amenities, the development strategy of this model gives an interesting recommendation for safeguarding the sustainability of rural amenities. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'Overexploitation of rural amenities destroys employment in sectors related to these rural amenities'.

### **3.4.7 The theory of the innovative milieu**

#### *Positioning of the theory*

The theory of innovative milieu belongs to the mainstream regional economic growth theories, as already indicated in Section 3.2.4. The theory of innovative milieu has been put forward and worked upon by the *Groupe de Recherche Européen sur les Milieux Innovateurs* (GREMI) since the mid-1980s. GREMI is an international association of European and North American scholars engaged in theoretical and empirical research in the field of spatial development and local innovation processes. It was founded by

Philippe Aydalot (Université de Paris 1) in 1984 and later on chaired by Roberto Camagni (Milan). Some past and current members of this association are David Keeble, Roberta Capello, Richard Gordon, Denis Maillat, Michel Quevit and Roberta Rabelotti.

The theory of innovative milieu can be considered a dynamic counterpart of theories which have been developed within the framework of the local milieu models like 'industrial district', 'local context' and 'local production system' (Camagni, 1995a: 201). In these local milieu models attention is paid to areas where strong elements of local entrepreneurship, close interaction and cooperation among enterprises and externalities originating from specialized labour markets result in a high competitiveness of the local production fabric, which often consists of SMEs. The object analyzed by GREMI is a 'territorial system of production and innovation' (TSPI), in which space is not merely a container for economic activities, nor just a production factor. Space is also regarded as relational space, capable of implementing and breaking down stimuli, ways of diffusion, and dynamics of adjustment (Bramanti and Miglierina, 1995, cited in Bramanti and Ratti, 1997:5). Apart from the GREMI approach, there are four other schools focussing on the dynamics of TSPI, which partly complement and overlap GREMI: the Italian district school, the Californian school of new industrial geography, the French regulationist school and the evolutionist-industrialist school (Bramanti and Ratti, 1997:15).

*Problem orientation (given the availability of capital and labour)*

The innovative milieu approach is oriented towards showing the underlying common sources of the respective development patterns of each territory. These sources are supposed to consist of local synergies and local innovativeness, fed by external energy from trans-territorial network linkages.

*Level of analysis*

The territorial level of an innovative milieu can refer to a province, county or a single municipality (Camagni, 1995b:332).

*Notion of economic development*

The innovative milieu embodies a certain amount of income and employment. Within the GREMI approach, the focus is not so much on development in the sense of change in income or productivity, but more on the question of how to keep the innovative milieu viable. Since it is assumed that innovation processes are the driving forces behind the innovative milieu, development can be considered as the continuous reproduction of the innovative capacity of the milieu, in which the very origin of the innovative milieu appears as a major innovation (Camagni, 1995a:204-5).

*Description of premises and mechanism*

The GREMI approach conceptualizes industrial behaviour within a geographical area. It is assumed that industrial behaviour is driven by innovation. This brings us to the following two dimensions of the theory of the innovative milieu:

1 Local milieu (or environment)

This refers to areas, in which the competitiveness of the local production fabric of flexible SMEs is enhanced by strong elements of local entrepreneurship, close interaction

and cooperation among firms, and relevant externalities associated with specialized labour markets (Camagni, 1995b:318).

## 2 Innovation processes

Such processes are considered to have various aspects: it is a matter of creative destruction in the Schumpeterian sense; innovation is both a collective and interactive process; it stems from a creative combination of generic know-how and specific competences; and territorial organization is an essential component in the process (Bramanti and Ratti, 1997:5). Innovation processes provide dynamic efficiency to the local milieu and are reflected in a number of different types of capacities: the capacity to imitate and create technology; fast reaction capability; capacities for shifting resources from declining production sectors to new ones while utilizing the same fundamental know-how; and the capacity to regenerate and restructure a local economy hit by external turbulence (Camagni, 1995b:318).

By emphasizing the two dimensions of space and innovation, the innovative milieu can be defined in terms of 'a set of relationships bounded in a geographical area which unites a production system, different actors, an industrial culture and self-representation, and generates localised dynamic processes of collective learning' (Camagni and Rabelotti, 1997: 139). In this definition, space is linked to relational space and innovation to collective learning processes. In addition, the term 'production system' needs further explanation: it does not refer to all firms in the specific area, but only to those actors belonging to a 'filière', a chain of vertically integrated sectors, for instance, around shoes, silk or furniture. A silk filière may include firms involved in silk manufacturing, silk design, silk fashion creation, machines/tools and computer software for silk manufacturing, worldwide marketing of silk etc. (Camagni, 1995a:210).

The continuing reproduction of the innovation capability of the innovative milieu may by no means only be attributed to its internal functioning. External energy in the form of technological, organizational or market information is crucially needed (Camagni, 1995b:321). This information is obtained by means of trans-territorial networks. So two types of networks can be distinguished in the innovative milieu (Camagni, 1995a:197):

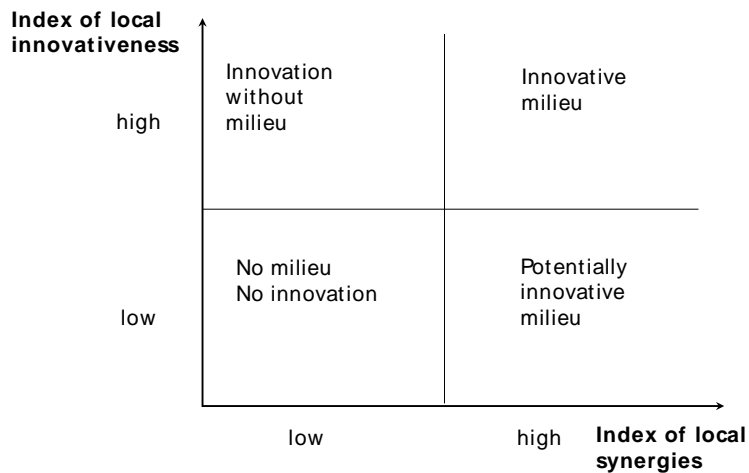
- 1 local networks, in which the element of proximity - spatial, culturally or psychological - generates three distinctive features: density of relations, informality and openness;
- 2 trans-territorial networks, which are systems of relations over a long distance, where the non-proximity of partners implies and requires relatively few links, greater formalization of relations, network selectivity and closure.

### *Development pattern*

We start the discussion on the development pattern with a presentation of the innovative milieu in a coordinate system, based on the following two indicators (Camagni, 1995b: 333-34):

- 1 index of local synergies: joint projects and joint ventures among local firms, turnover in skilled labour, the presence of public agencies to stimulate technological transfer, and the presence of vocational training and organizational consulting units;

Figure 3.5 Identification of an innovative milieu in a coordinate system



Source: Camagni, 1995b:333; reprinted with permission of the Regional Science Association International.

2 index of local innovativeness: the rate of formation of new firms and the rate of apprenticeship, patents and R&D expenditure.

The innovative milieu is positioned at high values of both indices in the coordinate system (Fig. 3.5). In quantitative terms, the index of local synergy can be proxied by the growth rate of employment in the indigenous activities, and the index of local innovativeness by the growth rate of productivity.

In the GREMI approach, development deals with the question of how to keep the innovative milieu viable, or how to keep it at its position in the coordinate system. The interaction of the next four interrelated mechanisms or conceptual blocks are supposed to drive the innovative milieu on its proper growth path (Bramanti and Ratti, 1997:35-9; Bramanti and Senn, 1997:69-72):

1 Industrial production system

This system refers to the specific context of exchange between firms, like the input-output relations, degree of specialization, the sectoral mix, subcontracting agreements and the presence or absence of a dominant firm.

2 Support space

The support space refers to the relations outside the market, which are enforced by appropriate local policies. It reinforces milieu connections and external links, encourages the opening of the local system without the dispersal of accumulated knowledge and creates links between local leaders and progressive actors.

3 Learning processes

These processes refer to the social and political ways in which a group of individuals react to change. The two extremes are represented by completely adaptive learning processes (all existing agents evolve together) and absolutely selective learning processes (survival of the fittest, those who adapt to change can survive). In the first case

progressive coalitions may arise, which generate and increase transformation of the skills and capabilities of individuals resulting in complementarity of actions among them. However, in the second case regressive coalitions may emerge, consisting of groups of individuals united by a common interest of opposing the negative selection process, and resisting innovation.

#### 4 Governance structure

The production system is not only governed by the price mechanism but by other mechanisms that regulate the power relations among actors as well. A core ring with a coordinating firm, which is the lead, systematic agent in the input-output system, but which is unable to function on its own, seems to be most suitable to ensure the balancing of the internal/external connections. In such a situation there is some power and some hierarchy.

There is no uniform development pattern of the innovative milieu, as these originate from different contexts and starting points, so history matters. To evolve positively, the innovative milieu should dynamically balance its internal strength (local synergy) and its opening to the world (external energy). An unbalanced mix of internal and external connections may result in the disintegration of the innovative milieu. According to Bramanti and Ratti (1997:33), structural changes may move the innovative milieu towards:

- increasing complexity/enrichment/diversification;
- hierarchization, distinguished in the growth process of certain actors;
- external reticulation, with either an internal or external centre of gravity.

#### *Development strategy*

In the description above of the development pattern, the assumption is that the innovative milieu already existed and that it evolved along its growth path. The development strategy discussed here is based on the intention of creating an innovative milieu in a certain region. In this respect, the theory of the innovative milieu can be perceived as a meta-model for local development, showing the underlying sources of the single development patterns of each territory. If development is to be effected, it must involve the following four meta-items (Camagni, 1995b: 321-25):

##### 1 The involvement of local resources

The involvement and utilization of local resources in the development process guarantees its genuine nature. If in the absence of local entrepreneurs, external investments are attracted, these have to be linked up with and involve other local sources than merely cheap labour and an unspoiled environment. In fact, external investments must be embedded in the local community in such a way that they initiate wider processes of local subcontracting, transfer of technological and organizational models, training of the higher educated towards self-employment and entrepreneurship, and utilization of education and training facilities.

##### 2 The creation of synergy among local actors and factors

Local synergy arises in formal and informal relationships like customer-supplier cooperation, cooperative sharing of revenues, horizontal subcontracting, wide circulation of information through skilled labour mobility, fast imitation of successful practices in technology, organization and marketing, local agencies which practise cooperative sharing of the costs of common infrastructure and service projects on vocational training,

fairs and technology transfer. An enlightened entrepreneur, a local bank or an association of local industrialists can act as a catalyst for the creation of such synergies.

### 3 The link-up with external energies

The capability and competitiveness of a small area is limited in the face of massive international evolutionary processes. Cooperation with external institutions, firms or public agencies and research centres is therefore crucial for the continuous recreation of local competitiveness and innovation capability.

### 4 A continued process of innovation

The innovation in the area is characterized by a wide range of factors, like intersectoral job shifts, fast diffusion of successful practices, application of advanced technologies in traditional spheres of production, incremental innovations applied to existing products and radical innovations.

### *Empirical application or testing*

The theory of innovative milieu is based on broad empirical evidence of the GREMI group. Innovative milieus have been found in successful newly developed areas in many differentiated regional contexts: in metropolitan areas around Milano, Paris, Barcelona and Tessalonica with specializations in the most advanced types of production, in non-metropolitan areas like Third Italy, Saint-Etienne, Poitiers and the Tessin area in Switzerland with specializations in more traditional sectors, poles of excellence like the Silicon Valley and Grenoble and also in areas within lagging regions like the Mezzogiorno, Crete and Southern Spain (Camagni, 1995b:320-21). These innovative milieus showed the following meta-characteristics:

- 1 some specialization in a filière or a technology;
- 2 strong interactions and synergies within the area;
- 3 broad imitation and collective learning processes;
- 4 a strong psychological sense of belonging to a local community.

### *Usefulness and hypothesis for further research*

The theory of innovative milieu can be considered to be useful for the analysis of economic development in rural regions for several reasons: it is comprehensive, it takes the current globalization process into account and it is based on ample empirical evidence. The theory of innovative milieu does not cover the whole territory of a rural region: it focuses on filières, or complexes of related economic activities located in a limited part of a region. In a sense, these innovative milieus can be considered as the triggers of the rural economy. Besides, firms are the central actors in the theory; the role of policy makers is limited to shaping preconditions for the creation of local synergy and the establishment of external links. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth'.

### 3.4.8 Porter's theory on the competitive advantage of nations

#### *Positioning of the theory*

The theory of Porter (1990) is based on different disciplines: industrial economics, international trade theory, management and organization science and theories of competitive strategy. However, at its core it is a theory of competitive strategy.

#### *Problem orientation*

The central question which Porter (1990:18) poses is why firms based in particular nations achieve international success in distinct segments and industries. In his theory, he searches, therefore, for the decisive characteristics of a nation that allow its firms to create and sustain competitive advantage in particular fields. Porter suggests that a nation's competitiveness mainly depends on six determinants, which form together a mutually reinforcing system: the so-called diamond.

#### *Level of analysis*

The analysis is carried out at a national level. Nevertheless, Porter's theory 'can be readily applied to political or geographic units smaller than a nation' since successful firms are frequently concentrated in particular regions within a nation. (Porter, 1990:29).

#### *Notion of economic development*

In Porter's theory, the competitiveness of a nation is determined by its productivity. Productivity is defined as the value of output produced by a unit of labour or capital with which a nation's resources are deployed. Economic development is achieved by an increase in productivity, resulting either from lower costs of production or from differentiated products that command premium prices. Economic development or economic prosperity primarily refers to success in the global market.

#### *Description of premises and mechanism*

Porter suggests that firms can and do choose strategies that differ. The home nation of a successful international firm is seen as that in which the essential competitive advantages of the enterprise are created and sustained. Porter distinguishes two basic types of competitive advantage for firms: lower costs and product differentiation. Firms can gain and sustain international competitive advantage through improvement, innovation and upgrading.

Porter uses a 'diamond' to portray the determinants of national advantage. He distinguishes four main determinants, which individually and as a system create the context in which a nation's firms are born and compete. These four determinants are:

#### 1 Factor conditions

These refer to production factors that form the inputs necessary to compete in any industry. They can be divided into basic factors and advanced factors. Basic factors include, for example, natural resources, climate, location, and unskilled and semiskilled labour, while advanced factors may refer to modern digital data communication infrastructure, highly educated personnel and university research institutes in sophisticated disciplines. Basic factors tend to be passively inherited. On the other hand, advanced factors have to be created in a process of large and often sustained investments

in human and physical capital. The advanced factors are considered to be highly significant for competitive advantage.

## 2 Demand conditions

These refer in particular to the composition of home demand, which shapes how firms perceive, interpret and respond to buyer needs. By doing so, the home demand contributes to the rate and character of improvement and innovation by a nation's firms. Nations gain competitive advantage in industries or industry segments when the home demand gives local firms a clearer or earlier picture of buyer needs ahead of foreign rivals.

## 3 Related and supporting industries

The presence of internationally competitive supplier industries in a nation creates advantages in downstream industries in several ways, for example, via efficient, early, rapid and sometimes preferential access to inputs, via ongoing coordination in the chain of firms and their suppliers, and via processes of innovation and upgrading emerging from close working relationships between suppliers and industry. The presence in a nation of related industries often leads to new competitive industries, since networks of firms provide many opportunities for information flows and technical interchange.

## 4 Firm strategy, structure and rivalry

This determinant refers to the context in which firms are created, organized and managed as well as the nature of domestic rivalry. Many aspects of a nation influence the ways in which firms are organized and managed such as attitudes towards authority, norms of interpersonal interaction, attitudes of workers toward management, social norms of individualistic or group behaviour and professional standards. Domestic rivalry creates pressures on firms to improve and innovate.

In addition to these four main determinants, Porter distinguishes two other important determinants:

## 5 Chance

Chance events are occurrences that have little to do with circumstances in a nation and are often largely outside the power of firms to influence. Chance events refer, for example, to major technological discontinuities, significant shifts in world financial markets or exchange rates, political decisions by foreign governments and wars. Chance events are important because they can create discontinuities that allow shifts in competitive position.

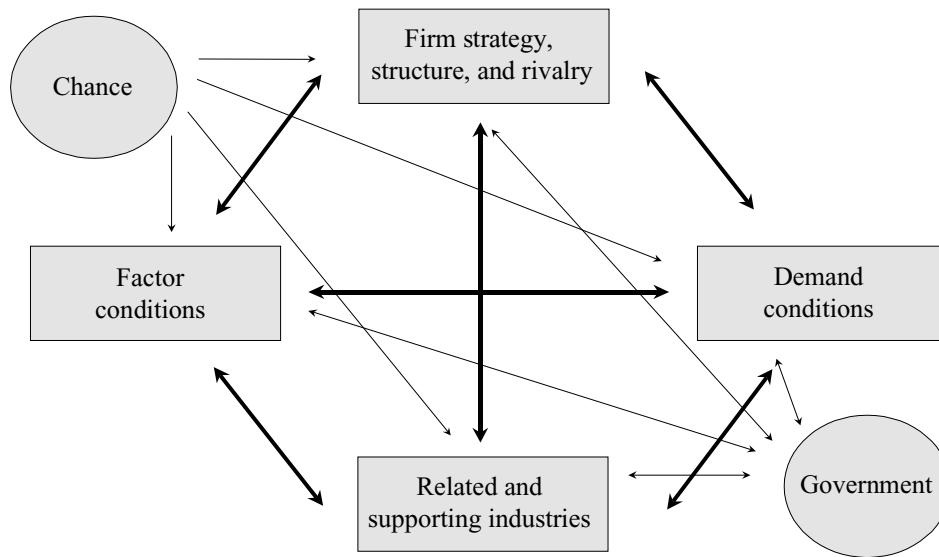
## 6 Government

Governments can influence any of the first four determinants either positively or negatively through, for example, subsidies, policies toward the capital markets, policies toward education and R&D, its role as buyer of many products of the nation, tax policy and antitrust laws.

These six determinants form together a mutually reinforcing system of national advantage, the so-called diamond (Fig. 3.6). This diamond can be seen as a dynamic system in which the determinants are interactive and reinforce each other. The determinants themselves are influenced by cultural, social and political factors. The diamond is transformed into a system by two elements: domestic rivalry and geographic concentration. Domestic rivalry stimulates the upgrading of the whole diamond while geographic concentration strengthens the interactions within the diamond.

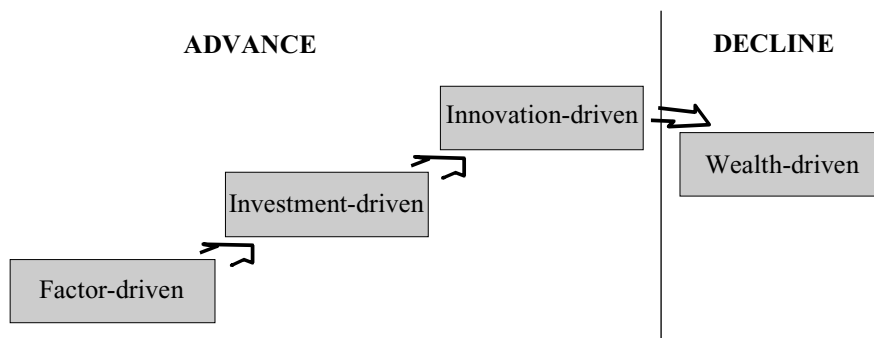


Figure 3.6 The complete system of determinants of national advantage



Source: Porter, 1990:127; reprinted with permission of MacMillan Press.

Figure 3.7 The four stages of national competitive development



Source: Porter, 1990:546; reprinted with permission of MacMillan Press.

*Development pattern*

Porter suggests that there are four stages in the development of national competitiveness (Fig. 3.7). In the first stage, development is driven by basic factors of production, such as favourable regional conditions, a high-skilled labour force etc. In the second stage, the investment stage, national advantage is based on the willingness and ability of a nation or region and its firms to invest aggressively. In the third stage, the innovation stage, the full diamond is in place in a wide range of industries, with a strong interaction between all determinants. In the fourth stage, the wealth-driven stage, there is a loss in competitive advantage because of losses in rivalry and motivation, the loss of a sophisticated home demand and the deterioration of factor conditions.

### *Development strategy*

Porter points out that companies and not nations are on the front line of international competition. Nevertheless the home nation plays a central role in the international success of a firm. The home base of a firm mainly shapes its capacity to innovate rapidly in technology and methods and to do so in proper directions. A global strategy supplements and solidifies the competitive advantage created at the home base. With respect to strategies, a distinction can be made between a strategy of companies, and a strategy of governments to sustain the strategies of companies. The strategy of governments should consist of providing the right infrastructure, education and training, (cheap) capital and information. In addition, the government can play a role in promoting and supporting technology and science.

### *Empirical application or testing*

In the 1970s and the first half of the 1980s, companies rather than nations were Porter's central subject of concern. In this period, he concentrated on the nature of competition in industries and the principles of competitive strategy. In this work, the nation and its government had only a limited role. This changed when Porter was appointed to the American President's Commission on Industrial Competitiveness. This appointment can be seen as the starting point for the development of his theory on the competitive advantage of nations. The theory begins with individual industries and competitors and builds up to the economy as a whole. A wide range of nations has been studied by Porter for the development of a comprehensive theory of the competitive advantage of nations and to demonstrate its relevance. Within each of the nations, details of competition in many industries have been investigated.

### *Usefulness and hypothesis for further research*

Although the theory of Porter focuses on nations, this theory can also be useful for explaining the competitive advantage of regions. Porter points out that industries are not evenly distributed over geographic space. Geographical concentration of successful firms often occurs because geographic proximity may strengthen the mutual reinforcement of the determinants in the diamond. According to Porter, efficiency and specialization tend to be stimulated if suppliers, customers and rivals are geographically concentrated. A possible disadvantage of using Porter's theory is that because of his holistic approach it may be difficult to find out which of the many possible factors are the most important or decisive for a region's progress or decline. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'A strong interaction and mutual reinforcement of the six determinants in the diamond enhances the competitiveness of firms'.

## **3.4.9 Mixed exogenous/endogenous development approach**

### *Positioning of the theory*

The mixed exogenous/endogenous development approach reflects the third phase in the debate on economic development in rural studies and is based on regional economic theory, institutional economics and rural sociology. It can be seen as a specific application of the territorial innovation models. The theory has been put forward by

Philip Lowe, Jonathan Murdoch and Neil Ward from the Centre for Rural Economy, University of Newcastle-upon-Tyne in the UK (Lowe *et al.*, 1995).

*Problem orientation (given the availability of capital and labour)*

The mixed exogenous/endogenous development approach rejects the polarization of exogenous and endogenous development models and proposes 'an approach of the analysis of rural development that instead stresses the interplay between local and external forces in the control of development processes' (Lowe *et al.*, 1995:87). In this approach, the analysis of economic development is considered as an analysis of networks.

*Level of analysis*

The territorial level concerns regions.

*Notion of economic development*

Rural development is perceived as a 'complex mesh of networks in which resources are mobilized, identities fixed and power relations consolidated' (Lowe *et al.*, 1995:103). These networks may include both local and external actors. So economic development is considered in terms of a social process, or more specifically as a set of power relations, which affects employment and income through networks.

*Description of premises and mechanism*

The mixed exogenous/endogenous approach comprises a synthesis of the exogenous models on rural development till the 1970s and the endogenous models of the 1980s. The mixed exogenous/endogenous approach relates rural development to the process of increasing globalization, mainly due to rapid technological changes in the communications and information sectors. In this changing global context, actors in rural regions tend to be involved in both local networks and external networks, but the size, direction and intensity of networks may vary among regions. This variety emerges since networks are embedded in particular sets of economic, social, cultural and natural conditions that exist in given rural areas (Murdoch, 2000:417). The nature of links in networks is multi-faceted, for example, intra-firm links, inter-firm links, links of firms with local and non-local institutions and links among institutions. Hence rural development is considered as a complex mesh of local and external networks, in which resources are mobilized, and constituted in ways which have consequences for local actors.

Lowe *et al.* give two examples of the different impact of networks on rural areas. One refers to a price-sensitive company, which locates unskilled tasks to peripheral regions. Such companies tend to have a traditional hierarchical division between the organization's core and the peripheral operations, and benefits are likely to go to the centre. The other example discusses a performance-oriented company, which derives its competitiveness from quality production and which seeks favoured locations for qualified personnel. Such companies tend to work on a cooperative rather than a hierarchical basis with other parts in the organization, and tend to be product-based rather than task-based. Performance companies are more likely to transfer skills,

entrepreneurship and technologies into an area and to develop complex local supplier linkages, which may foster further rounds of economic development.

In adopting the view that rural development is a complex mesh of networks, Lowe *et al.* propose to transform the analysis of economic development of rural regions into an analysis of networks. The focus on networks usefully integrates economic forms with social processes. From the perspective that networks are sets of power relations and that local and external networks form a geography of networks, the analysis of networks focuses upon questions like (Lowe *et al.*, 1995:100):

- 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?
- how do external actors effect change and control from a distance?

From the network analysis, insight can be obtained into which particular networks provide beneficial outcomes for rural regions. Some of these networks might be region specific, others might be complex internal/external relations. On the other hand, the network analysis may also provide insights into the inequalities and asymmetries within the networks which result in a weakening of the position of local actors.

#### *Development pattern*

The development pattern refers to the involvement of local actors in networks. The development pattern is diverse and region specific: some local actors are plugged into external networks while others are involved in local networks. The external networks are seen as main vehicles for transmitting benefits to the local area, but whether local actors manage to do this depends on the power relations in the network.

#### *Development strategy*

Two simultaneous activities for a development strategy are advised:

- 1 try to create linkages between internal networks and institutions, so that 'thick' ensembles arise, which are mutually reinforcing and able to put regions on viable growth trajectories;
- 2 try to affect the balance of power in local/external networks in such a direction that local actors are enabled to exert control and to retain a reasonable proportion of the value added.

Some regions will not manage to generate development. If regions are trapped in a situation of inequalities and asymmetries within the networks, a policy goal might be to reshape the networks by seeking equity between participants and equality of participation.

#### *Empirical application or testing*

The approach is not empirically tested by Lowe, Murdoch and Ward, but based on a literature review of industrial districts which revealed that economic, social and institutional relations and internal and external linkages largely vary among industrial districts. This approach has been applied in the RUREMPLO project (Terluin *et al.*, 1999a).

#### *Usefulness and hypothesis for further research*

The mixed endogenous/exogenous approach, which sees rural development as a mesh of internal and external networks, reflects the current situation whereby rural regions are involved in a wide range of internal and external relationships. Besides, in a world governed by networks, the recasting of the analysis of economic development into an analysis of networks makes the approach very attractive. Finally, the approach allows for both general and very detailed analyses of the networks. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'An active role of local actors in internal and external networks stimulates employment growth'.

### **3.4.10 Illeris' inductive theory of regional development**

#### *Positioning of the theory*

Illeris' theory (1993) has been put forward in the debate of regional economics, and belongs to the group of territorial innovation models. His theory also includes elements of political sciences and sociology. According to Illeris, his theory fits into broader notions on contemporary societal changes, that can be indicated in terms of service, information or knowledge society.

#### *Problem orientation (given the availability of capital and labour)*

Illeris' theory is inductively constructed by means of a thorough analysis of population growth from the 1970s in NUTS3 regions in 18 West European countries. He takes population growth as proxy for economic development as he supposes a parallel in geographical development between population and employment. His analysis shows a mosaic-like pattern of dynamic and declining regions in all parts of Europe, without a core/periphery polarization. Illeris seeks to answer the key question: how can the regional disparities in economic performance be explained?

#### *Level of analysis*

The geographical units in Illeris' theory are commuting areas, proxied by NUTS3 regions in the EU, with an average of 0.5 million inhabitants, such as English counties, French départements, and Italian and Spanish provinces (Illeris, 1993:114).

#### *Notion of economic development*

Economic development refers to employment growth, resulting from expanding sectors in the regional economy.

#### *Description of premises and mechanism*

In Illeris' theory, two elements contribute to the explanation of economic development of regions:

- 1 The structure of the local economy, i.e. its composition in terms of growing and declining sectors influences its total development. So regions with a high share of expanding sectors perform well and regions with a high share of declining sectors stagnate.

However, it appears that a declining sector in the one region is not necessarily a declining

sector in another region. For example, the textile industry is generally a sunset industry in Western Europe, but in some regions it still flourishes. So the question can be raised as to why firms in some regions are more competitive and develop better than firms in other regions. This brings us to the second and decisive element of the theory:

2 The good or poor performance of sectors in different regions is largely determined by the particular local conditions for the sectors. These local conditions mainly refer to political conditions, physical and soft infrastructure, physical planning, a pleasant and vibrant physical and social environment, availability of people with adequate skills, attributes like the innovation-mindedness and creativity of the labour force, population density and agglomeration. These local conditions do not only affect the performance of sectors inside the region, but may also contribute to attracting inward investments and building interregional networks.

#### *Development pattern*

The development pattern refers to the sectoral composition of regional employment. This consists of a dynamism of expanding and declining sectors. Illeris (1993:126) illustrates this as follows: 'From decade to decade, new sectors enter in a phase of expansion. In the 1950s, the car industry was a star performer, while in the 1970s it was public services. Both have been stagnating in the 1980s, when producer services showed the highest growth rate.'

#### *Development strategy*

The recommended development strategy concentrates on affecting the local conditions. As these are a complicated and unique whole in each region, local and regional governments are best suited to analyze the problems and opportunities in their region and to implement a development strategy based on this analysis.

#### *Empirical application or testing*

The first element of Illeris' theory is based on a quantitative analysis in a large number of EU regions; the second element on literature review.

#### *Usefulness and hypothesis for further research*

Illeris' theory links the sectoral economic structure to local conditions, and is based on regions. As such, it merits further analysis in our study. Due to the emphasis on competitiveness (growing and declining sectors) and local conditions, there is a close relationship with Porter's theory on the competitiveness of nations. A disadvantage is that due to the holistic approach, the impact of individual factors on employment growth cannot be determined. A hypothesis for further research in this study - given the availability of labour and capital - can be expressed as follows: 'A strong set of local conditions stimulates employment growth'.

### **3.5 Concluding remarks**

In this chapter the focus was on identifying theories that can be used to explain economic development in rural regions in advanced countries. For this purpose, we examined the debates in regional economics and the field of rural studies. Although the debates are

confined to rather closed circles of journals, there seems to be some overlap in theoretical conceptualization, which mainly tends to have a one-way direction: from the debate on regional economics to that on economic development in rural studies.

#### *Four groups of theories*

Our literature research yielded a large number of theories, which we classified into four groups, depending on the factors in the production function: traditional models, pure agglomeration models, local milieu models and territorial innovation models. The sequence of these groups is such that the factors in the production function increase in complexity. In the group of traditional models, output is assumed to be a function of labour and capital inputs. In the second distinguished group of pure agglomeration models, output depends on the availability of capital and labour and external effects or scale economies, which may arise due to a concentration of labour and capital in a specific location. In the theories in the group of local milieu models, various factors in the local milieu, such as skills of the labour force, technical and organizational know-how, and social and institutional structures, are supposed to affect the revenues from the input of capital and labour. Finally, the theories positioned within the group of territorial innovation models mainly distinguish themselves from the group of the local milieu models in the sense that the former assume that – apart from labour, capital and local milieu factors - the diffusion of innovations is also an important engine behind economic growth. To a certain degree, these four groups reflect a kind of chronological sequence: the traditional models were prevalent in the 1950s, the pure agglomeration models in the 1960s, the local milieu models in the 1970s, and the territorial innovation models have dominated since the 1980s.

#### *Selected theories for further research*

From the relatively large number of theories put forward in the debates in regional economics and rural studies, we have selected ten theories for further research (Fig. 3.8). In order to cover a wide range of viewpoints on economic development, we have selected three or four theories from each distinguished group, except for the traditional models which were excluded from further consideration due to their fairly restrictive premises and the fact that its decisive production factors of labour and capital are also covered by the other three groups of theories. From each of the selected theories, we have derived a hypothesis, which will be explored further in the next chapters. These hypotheses consist of a relationship between events in a form of: if X then Y. Essentially, they can also be considered as a kind of summary of a theory. It can be seen that the theories involve a wide range of factors to stimulate employment growth, given the availability of labour and capital. These issues include, for example, transport costs, cumulation of wealth, exploitation of immobile resources and self-help capacity. In this sense, the theories are rather comprehensive. It can also be seen from the hypotheses that some theories are closely related, for example, the community-led rural development theory with the mixed exogenous/endogenous approach and Porter's theory on the competitive advantage of nations with Illeris' inductive theory of regional development.

Figure 3.8 Overview of selected theories for further research and derived hypotheses

Theory	Derived from debate in <sup>a)</sup>	Factors in production function <sup>b)</sup>	Derived hypothesis for the purpose of this study (given the availability of labour and capital)
Growth pole theory	RE/RS	L,K, AE	A growth pole and its multiplier effects stimulates employment
Kilkenny's relationship of transport costs and rural development	RE	L,K, AE	Relatively low industrial transport costs stimulate the establishment of firms in rural regions
Myrdal's cumulative causation theory	RE	L,K, AE	Leading regions cumulate wealth whereas lagging regions lose wealth
Bryden's theory on the potentials of immobile resources for creating competitive advantages in rural areas	RS	L,K, LM	The exploitation of immobile resources stimulates employment growth
Creative destruction model of community development	RS	L,K, LM	Overexploitation of rural amenities destroys employment in sectors related to these rural amenities
Community-led rural development theory	RS	L,K, LM	A well-developed self-help capacity of communities stimulates employment growth
Mixed exogenous/endogenous approach	RS	L,K, LM, I	An active role of local actors in internal and external networks stimulates employment growth
Theory of the innovative milieu	RE	L,K, LM, I	Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth
Porter's theory on the competitive advantage of nations	RE	L,K, LM, I	A strong interaction and mutual reinforcement of the six determinants in the diamond enhances the competitiveness of firms
Illeris' inductive theory of regional development	RE	L,K, LM, I	A strong set of local conditions stimulates employment growth

a) RE: regional economics; RS: rural studies; b) L: labour; K: capital; AE: agglomeration effects, due to external effects or scale economies; LM: local milieu, which includes factors like space, human capital, technology, networks, trust, culture and policies; I: innovation.

## NOTES

- 1 Unless otherwise indicated, this discussion is based on Molle and Cappelin (1988), Healy and Ilbery (1990), Malecki (1991), Camagni (1992), Lambooy *et al.* (1997) and Rijswick (1997).
- 2 This section is based on Healy and Ilbery, 1990:305, Lambooy *et al.*, 1997:87-9 and Rijswick, 1997:71-4.



## **4 METHOD AND CONSTRUCTION OF THEORY PATTERNS**

### **4.1 Introduction**

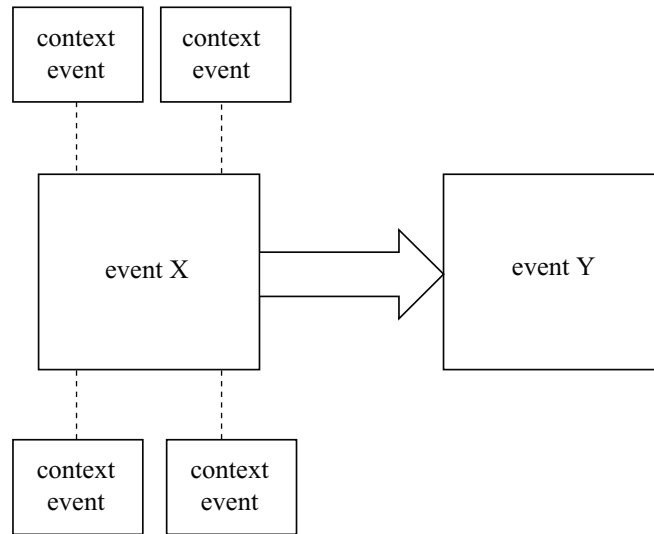
From the review of theories on economic development in the previous chapter, we now turn to the question: ‘Which method can be used to examine whether a theory predicts economic development in rural regions?’ In such cases, economists often construct an elegant model, with a limited number of variables in mathematical equations and with specific assumptions on economic behaviour and dynamics. However, it is not our wish to construct a mathematical model of a rural economy. In the previous chapters it is apparent that economic development in rural regions is rather complex and that theories usually include a number of factors in their production function such as networks and institutions. Such factors cannot easily be quantified without loss of information. Given this comprehensiveness, a qualitative method seems to be more appropriate. Another potential problem is related with finding suitable data on networks etc. Fortunately, a rich source of empirical data from 18 case studies in rural regions from the RUREMPLO project was available. Since our budget did not allow for further collection of empirical evidence, we had to restrict the empirical analysis to the data already available. Hence, an obvious choice for a method might be one in which theories are linked with case studies. In methodological literature on case studies, we found that in examining a theory to ascertain whether it is backed up by empirical evidence in case studies, often the method of pattern-matching is recommended (Yin, 1993:38-9; Creswell, 1994:156; Yin, 1994:106-10; Swanborn, 1996:114). As it appeared that this method was for the greatest part in line with our purpose, we decided to apply the method of pattern-matching in our study. In this method three stages can be distinguished: the construction of a theory pattern, the construction of a case study pattern and the matching of both patterns.

This chapter is organized as follows. In the next section we will discuss the method of pattern-matching. In Section 4.3 we carry out the first stage of the method of pattern-matching: the construction of theory patterns for the selected theories for further research as discussed in Section 3.4. As it appeared that the RUREMPLO case studies did not provide sufficient data to test the growth pole theory, Kilkenny’s relationship of transport costs and rural development, and Porter’s theory on the competitive advantage of nations, we have omitted these three theories for further research in this study. In the final section of this chapter, some concluding remarks about the first stage of the method of pattern-matching are made. The second and third phases of the method are dealt with in Chapters 5 and 6.

### **4.2 Method of pattern-matching**

In this section we discuss the method of pattern-matching (Yin, 1993:38-9; Yin, 1994:106-110), which will be used in order to examine whether a theory predicts economic development in a case study region. Basically, this method consists of three steps. First, a theory is specified as a predicted pattern of events. The events in this theory pattern act as a series of benchmarks against which actual data can be compared. Then, in

Figure 4.1 Theory presented as a pattern of predicted events



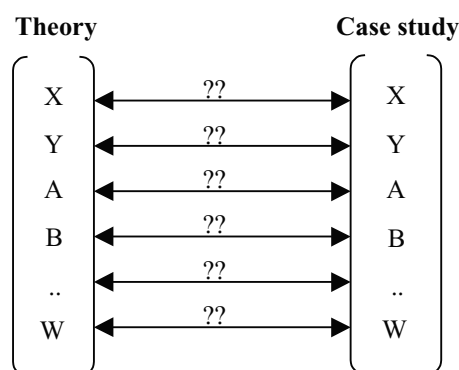
the case study, information on all events is collected and also stored in a pattern. As a final step, both patterns are matched by analyzing whether the events in the case study pattern are in line with the events in the theory pattern. The higher the number of similar events in the theory and the case study pattern, the better the theory predicts the situation in the case study.

This basic description of the method of pattern-matching needs some explanation. In fact, it can be said that pattern-matching resembles the comparison of DNA profiles in forensic research, in order to examine whether they have the same structure. At this juncture, an illustration of the method of pattern-matching seems appropriate. As explained in Section 3.1, a theory is composed of one or more hypotheses in a form such as 'if X then Y', held together by a set of rules. This implies that there are at least two central events in the theory pattern: the independent variable X (represented as event X) and the dependent variable Y (represented as event Y) (Fig. 4.1). The set of rules of the theory may include premises and other conditions affecting the independent variable. These premises and conditions are specified as context events in the theory pattern, which may contribute to our understanding of the deeper structures behind the theory. Suppose now that we rearrange the variables in the theory pattern in Fig. 4.1 into a vector (Fig. 4.2). When the variables of the case study pattern are also represented as a vector, the process of matching can be presented as successively comparing each pair of variables in the theory vector and case study vector.

#### *Application of the method of pattern-matching in this study*

Given the general introduction of pattern-matching above, we now move to its application in this study. We operationalize the three distinguished phases of the method as follows:

Figure 4.2 Pattern-matching of vectors with variables<sup>a)</sup>



a) X is an independent variable; Y is a dependent variable; A, B ... W refer to context events; ?? denotes the successive matching of each pair of variables in the vectors.

### 1 Construction of the theory pattern

The hypothesis of the theory provides the X and Y variables, which will be operationalized in measurable units. Among variables A...W, context events will be included. Specific attention will be given to the context event that refers to the strategy<sup>1</sup> which affects X. Although the context event 'strategy' is not explicitly mentioned in the method, a development strategy to affect X is often identified in the description of our selected theories as it may deepen our insight into the triggers behind economic development. In addition, it serves one of our purposes of giving recommendations to policy makers to stimulate economic development in rural regions.

### 2 Construction of the case study pattern

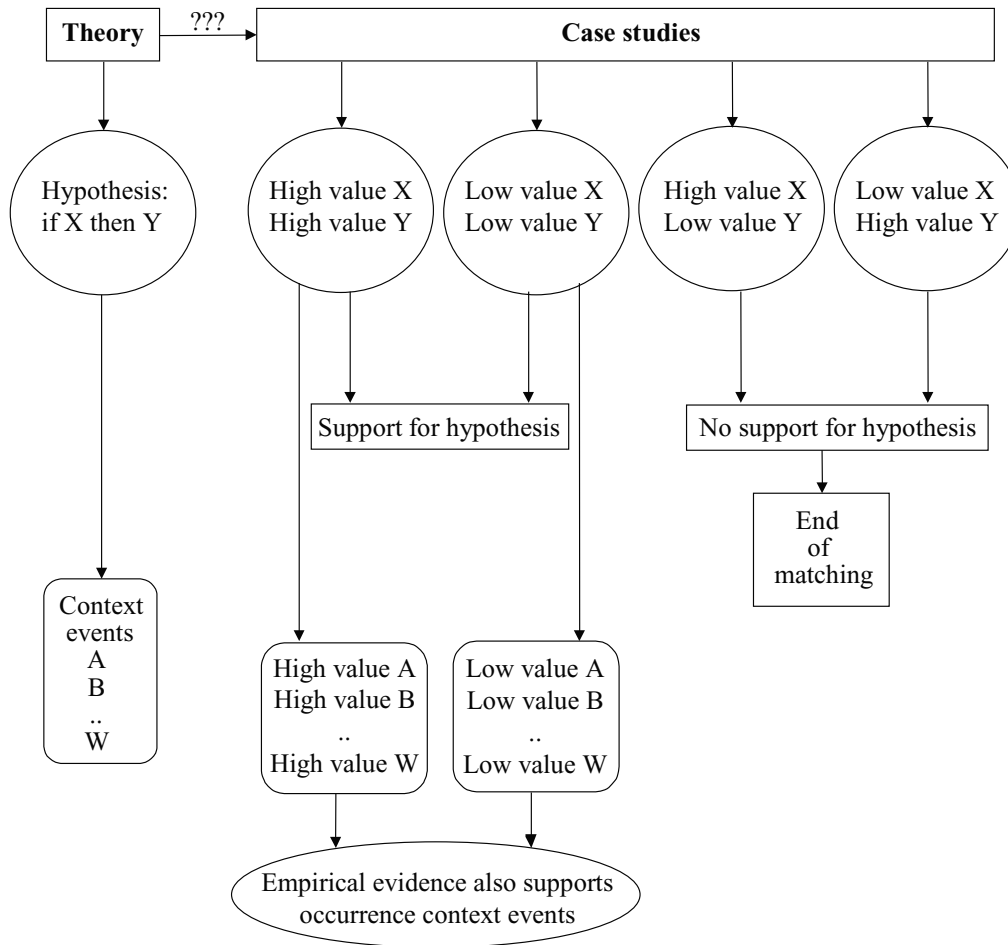
For each case study, information will be collected on the variables X, Y, A...W as given in the theory pattern. This information is stored in a case study pattern.

### 3 Matching

In the process of matching, we first focus on X and Y, which are the central variables in the hypothesis in the theory. If X and Y in the case study pattern have the same values as those predicted by the theory, we conclude that the hypothesis is supported by the case study. As a next step, we compare the values of the context events A...W in the theory pattern and the case study pattern. If these values are similar, we conclude that empirical evidence also supports the occurrence of context events. This process is illustrated in Fig. 4.3.

In the application of the method we faced a specific restriction: our empirical evidence in 18 case studies in rural regions had already been collected in the RUREMPLO project, and our budget did not allow for further collection of empirical evidence. This does not accord with the method, which recommends that researchers first construct a theory pattern and then collect empirical evidence in the case study. We have tried to simulate this ideal situation as follows: disregarding our empirical evidence, we first constructed a theory pattern for each of the selected theories and then turned to our empirical evidence in order to check whether we could find information on the variables as specified in the theory pattern. Sometimes we had to redefine the variables in the theory pattern a little after this consultation, and sometimes we found that no information on the variable was

Figure 4.3 Decision scheme in pattern-matching



available in our empirical evidence. The lack of empirical evidence resulted in the exclusion of three theories for further research. In Chapter 5, the RUREMPLO case studies are examined in more detail.

#### *Operationalization of variables*

One of the main difficulties to tackle in the method of pattern-matching is the right operationalization of the variables in the theory and the case study patterns. Usually, a theory cannot so easily be unravelled as a pattern of events as the method suggests, and often, a lot of interpretation by the researcher is needed to denote variables. To give an example, in the mixed exogenous/endogenous development approach, innovation is supposed to be an important engine behind economic growth. This premise on innovation can be included as a separate context event in the theory pattern. However, when the researcher finds that innovation is difficult to operationalize as a separate item in the theory pattern or difficult to measure in the case study, he or she might consider including the premise on innovation into another variable. In this way, the variable of an innovating actor can, for instance, be created, i.e. an actor that embodies the premise on innovation. Another problem with operationalization arises when proxies are used in the case study pattern, which are close to, but still differ from the variable in the theory

pattern. These proxies may be subject to other relationships, which are not assumed in the examined theory. For example, the variable ‘exploitation of local knowledge capital’ in Bryden’s theory has been proxied by the presence of filières in the case studies. However, filières are affected by a large number of factors, such as extra-territorial networks, which are not included in Bryden’s theory. These difficulties with operationalization of variables can be considered as shortcomings of the method of pattern-matching and should be taken into account in the interpretation of the results.

#### *Justification of the selected method*

In this final part of our discussion of the method of pattern-matching, we make some comments on the justification of the use of this method in our study. One of the objectives of our study is to examine whether development trajectories in selected rural regions are according to the predictions of one or more regional economic growth theories (see Section 1.2). In the method of pattern-matching, theories are matched with empirical evidence in case studies, which suits our purpose well. With regard to the use of case studies, it can be said that these are generally preferred as research tools for examining contemporary events, in which relevant behaviour cannot be simulated through controlled experiments by the investigator (Yin, 1994:8). Economic developments in rural regions can be considered as such events.

A common concern about case studies is that they provide little basis for scientific generalization. Here we should emphasize the difference between analytical (or theoretical) generalization and statistical generalization (Yin, 1994:9-48; Hutjes and Van Buuren, 1996:60-6). In pattern-matching, a theory is used as a template with which to compare the empirical results of the case study. If two or more cases replicate the theory, analytical generalization may be claimed: the theory applies to a larger number of cases with similar characteristics. This is exactly what we are looking for in this study. On the other hand, in statistical generalization an inference is made about a population (or universe) on the basis of empirical data collected about a sample. Any application of statistical generalization to case studies would be misplaced: first, case studies should not generally be used to assess the incidence of phenomena, and second, case studies cover a large number of variables, which would require an impossibly large number of cases to allow any statistical consideration of the relevant variables.

### **4.3 Construction of theory patterns**

In the previous section we introduced the method of pattern-matching. Now we start with the application of this method to the selected theories as outlined in Section 3.4. In this section the first step of the method will be carried out: the construction of theory patterns. We dedicate a subsection to the theory pattern of each of the selected theories, and start each subsection with the hypothesis that we have already formulated in Section 3.4. This hypothesis provides the X and Y variables from the theory. As the theories are concerned with employment growth, at least the Y variable tends to be a dynamic variable. In the construction of the theory patterns, we will also indicate how we will put the various variables into practice.

During the process of constructing theory patterns, we found that lack of data in the RUREMPLO case studies, made it impossible to undertake pattern-matching in the growth pole theory, Porter's theory on the competitive advantage of nations and Kilkenny's relationship of transport costs and rural development. For growth pole theories, detailed information is needed on input-output relations of the leading or propulsive firms. In the case of Porter's theory, data on export shares and on the determinants at the level of industry segments is needed (Porter, 1990:24). It has to be noted here, that Illeris' inductive theory of regional development - which is subjected to pattern-matching - shows some relationship with Porter's theory. Finally, for Kilkenny's relationship of transport costs and rural development, information on transport costs in the agricultural and industrial sector is needed. Moreover, the rather restrictive premises make the empirical testing of Kilkenny's very difficult. The exclusion of these three theories means that we continue our analysis with seven theories.

#### **4.3.1 Theory pattern of the mixed exogenous/endogenous development approach**

Viewing the mixed exogenous/endogenous development approach we test - given the availability of labour and capital - the following hypothesis: '*An active role of local actors in internal and external networks stimulates employment growth*' (Section 3.4.9). From this hypothesis, two independent variables and one dependent variable are identified, respectively:

- an active role of the local actors in the internal networks;
- an active role of the local actors in the external networks;
- non-agricultural employment growth.

The following definitions are used:

- *local actors*: actors who live in the region. We divide this group into policy makers, entrepreneurs and workers;
- *network*: 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;
- *internal networks*: networks of local actors;
- *external networks*: networks of local actors and actors from outside the region.

In order to operationalize 'an active role of local actors in internal and external networks', we use information on the capacity of local actors and on the strengths of networks, based on the next considerations:

- local actors are supposed to play an active role when they have the capacity to identify strengths, weaknesses, opportunities and threats and to cooperate with each other in order to address these issues. Capacity usually refers to the three aspects of knowledge, skills and attitude. For the three groups of local actors, we will focus on the following aspects of their capacity:

Figure 4.4 Theory pattern of the mixed exogenous/endogenous development approach

Theory	Mixed exogenous/endogenous approach
Hypothesis	An active role of local actors in internal and external networks stimulates employment growth
X	An active role of local actors in internal and external networks
Y	EA1 Non-agricultural employment growth
Operationalization X	A1 Assessment of capacity local actors: policy makers A2 Assessment of capacity local actors: entrepreneurs A3 Assessment of capacity local actors: workers A4 Assessment of internal networks DV1 (derived from A1- A4) Do local actors play an active role in the internal networks? A6 Assessment of external networks DV2 (derived from A1- A3 and A6) Do local actors play an active role in the external networks?
Context events	A5 Create linkages between internal networks and institutions A7 Affect the balance of power in networks in favour of local actors

- policy makers: the ability to act effectively in formulating and delivering policies, in supporting local initiatives and projects and in attracting public funds and investments;
- entrepreneurs: the ability to perceive (market) changes and to respond to them;
- workers: the ability to adapt to changes and to adjust skills to training needs.
- an active role of local actors tends to result in strong networks: networks which work well and achieve their aims.

So if the capacity of the local actors is high, and if the internal and the external networks are strong, we can state that the local actors have an active role in the networks<sup>2</sup> (Fig. 4.4).

Context events that can be identified for further testing are:

- to affect X, the theory suggests the two following strategies:
  - try to create linkages between internal networks and institutions, so that ‘thick’ ensembles arise, which are mutually reinforcing and able to put regions on viable growth trajectories;
  - try to affect the balance of power in local/external networks in such a direction, that local actors are enabled to exert control and to retain a reasonable proportion of the value added.
- The assessment of the first strategy will be based on the interaction of the local policy makers with entrepreneurs on the one hand, and with the policy makers at upper administrative levels at the other hand.
- The assessment of the second strategy will be based on the extent to which local actors manage to attract public funds, private investments, migrants and tourists.

### 4.3.2 Theory pattern of the theory of innovative milieu

Viewing the theory of innovative milieu we test - given the availability of labour and capital - the following hypothesis: '*Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth*' (Section 3.4.7). From this hypothesis, an independent and a dependent variable can be identified (Fig. 4.5):

- Filières, which are characterized by local synergy, local innovativeness and transterritorial networks;
- Employment growth in the filière.

The following definitions are used:

- *filière*: a complex of vertically integrated sectors around a certain product, which includes at least the design, production and (foreign) marketing/selling of the product, which is located in a limited part of a region, and which produces for an international consumer market. Within the bulk production, filières try to supply in the top segment. Filières are often active in a traditional industry, which indicates the presence of tacit knowledge. Finally, the filière tends to have a substantial share in regional employment;
- *local synergy*: this synergy arises, for example, from the interaction between local agents, private-public partnerships for infrastructure and service projects, interaction between research centres and adopters, and customer-supplier cooperation. It can be reflected in joint projects and joint ventures among local firms, turnover in skilled labour among firms, the presence of public agencies to promote technological transfer, and the presence of vocational training and organizational consulting units;
- *local innovativeness*: the capacity of filières to regenerate and restructure themselves in response to changes in the (global) market. This is largely reflected in the capacity to imitate and create technology, in a fast reaction capability and in the capacity to shift resources from declining production units to new ones while utilizing the same fundamental know-how. In quantitative terms, the local capacity to innovate can be measured as the rate of formation of new firms and the rate of apprenticeship, patents and R&D expenditure in the filière;
- *transterritorial networks*: networks with external actors, which provide the filière with technological, organizational and market information from outside the region, which is crucial for the continuous recreation of local competitiveness and innovation capability of the filière.

In order to operationalize '*filières, which are characterized by local synergy, local innovativeness and transterritorial networks*', we divide this variable into four subvariables:

- filières;
- local synergy of the filière;
- local innovativeness of the filière;
- transterritorial networks of the filière.



Figure 4.5 Theory pattern of the theory of the innovative milieu

Theory	
Hypothesis	Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth
X	Filières, which are characterized by local synergy, local innovativeness and transterritorial networks
Y	EA6 Employment growth in the filière
Operationalization X	EA5 Are there filières in the region?
	A10 Assessment of local synergy of the filières
	A11 Assessment of local innovativeness of the filières
	A12 Assessment of transterritorial networks
Context events	-

Context events that can be identified for further testing are:

- to affect X, the theory gives the following four meta-items to be included in any planning of a strategy (see Section 3.4.7):
  - the involvement of local resources;
  - the creation of synergy among local actors and factors;
  - the link-up with external energies;
  - a continued process of innovation.

These items are already addressed in the hypothesis and are, therefore, not assessed again.

### 4.3.3 Theory pattern of Bryden's theory

Viewing Bryden's theory on the potentials of immobile resources for creating competitive advantages in rural areas, we test - given the availability of labour and capital - the following hypothesis: '*The exploitation of immobile resources stimulates employment growth*' (Section 3.4.5). Immobile resources refer to social capital, cultural capital, environmental capital and local knowledge capital.

We use the following definitions (Bryden, 1998):

- *social capital*: the features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating co-ordinated actions. Social capital is embedded in relationships among people; it tends to cumulate when it is used and to be depleted when it is not;
- *cultural capital*: this includes history, traditions, customs, language, music, art and stories, that may be territorially defined as belonging to an area;
- *environmental capital*: this refers to the actual physical conditions of space of an area. It includes both natural environmental capital (landscape, land-based resources, climate, etc.) and built environmental capital (structures of historical significance, physical and tourist infrastructure). For the purpose of this study, we divide this type of capital into rural amenities (landscape, cultural heritage, etc.) and local raw materials (wood, minerals, etc.);
- *local knowledge capital*: this is about the capacity of the area to generate, sustain and build on formal and informal stocks of knowledge and information.

In order to test the hypothesis, we distinguish four subhypotheses:

- 1 The exploitation of social and cultural capital stimulates employment growth;
- 2 The exploitation of rural amenities and cultural capital stimulates employment growth in tourism;
- 3 The exploitation of local raw materials stimulates employment growth in the production related to these raw materials;
- 4 The exploitation of local knowledge capital stimulates employment growth in the production related to this local knowledge capital.

The position of cultural capital in two subhypotheses can be justified by the fact that its impact is not unambiguous: on the one hand, it can enhance the exploitation of social capital as cultural identity often gives rise to a strong regional consensus; on the other hand, it can be used in encouraging tourism. Four independent variables and four dependent variables can be identified from these subhypotheses (Fig. 4.6).

As our database does not include information on the independent variables, we approximate them as follows:

- the exploitation of social and cultural capital is assessed by the strength of the internal networks;
- the exploitation of rural amenities and cultural capital is assessed by means of the valorization of rural amenities, the availability of tourist infrastructure like facilities and accommodation, and the continuous upgrading of this infrastructure;
- the exploitation of local raw materials is assessed by the presence of economic activities that use these raw materials;
- the exploitation of local knowledge capital is assessed by the presence of economic activities that use this local knowledge.

By doing so, we can identify the exploitation of the first three types of capital from our database; however, no systematic information on the presence of economic activities that use the local knowledge has been collected. It is only when these activities are prominent, for example, in industrial districts, that information happens to be available. This also applies to the dependent variable on employment growth in the production related to local knowledge capital. Another shortcoming concerns employment growth in tourism. In our database, this is often derived from the branch of hotels and restaurants. In this branch, a part of the activities is not intended for tourists. However, we are unable to differentiate between tourist and non-tourist activities.

Context events that can be identified for further testing are:

- social capital and cultural capital: these forms of capital are available everywhere. As we have no information on these items in our database, we will not consider them as context events;
- rural amenities: we assess this by means of scenic landscape, mountains, architectural remains, etc.;
- local raw materials: we assess this by means of the presence of wood, minerals, gas etc.;
- local knowledge capital: we have no information collected on this type of capital. However, when individual information happens to be available and when it is exploited, we take it into account in the independent variable on the exploitation of local knowledge capital;

Figure 4.6 Theory pattern of Bryden's theory

Theory	Bryden's theory
Hypothesis	The exploitation of immobile resources stimulates employment growth
Subhypotheses	The exploitation of social and cultural capital stimulates employment growth The exploitation of rural amenities and cultural capital stimulates employment growth in tourism The exploitation of local raw materials stimulates employment growth in the production related to these raw materials The exploitation of local knowledge capital stimulates employment growth in the production related to this local knowledge capital
X variables	The exploitation of social and cultural capital The exploitation of rural amenities and cultural capital The exploitation of local raw materials The exploitation of local knowledge capital
Y variables	EA1 Non-agricultural employment growth EA4 Employment growth in tourism EA8 Employment growth in the production related to the local raw materials EA10 Employment growth in the production related to the local knowledge capital
Operationalization X	A4 Assessment of internal networks EA2 Assessment of valorization of rural amenities and tourist infrastructure EA7 Assessment of presence economic activities using raw materials EA9 Assessment of presence economic activities using local knowledge capital
Context events	LR1 Rural amenities LR2 Local raw materials

- to affect X, i.e. the exploitation of the different types of capital, the theory recommends the use of the immobile resources in planning a strategy. These are already addressed in the subhypotheses, and are, therefore, not assessed again.

#### 4.3.4 Theory pattern of the community-led rural development theory

Viewing the community-led rural development theory we test - given the availability of labour and capital - the hypothesis: '*A well-developed self-help capacity of communities stimulates employment growth*' (Section 3.4.4). The self-help capacity of communities is assumed to consist of the next three items: capacity of local actors, organizational expertise as reflected in partnerships, and appropriate institutional structures. From the hypothesis an independent variable and a dependent variable are derived:

- a well-developed self-help capacity of communities;
- non-agricultural employment growth.

We use the following definition:

- *community*: all residents who live in a territorial unit, and who are connected by formal and informal economic, social and political relations. These relations imply dynamism, heterogeneity of interests among members and power imbalances (Liepins, 2000).

Figure 4.7 Theory pattern of the community-led rural development theory

Theory	Community-led rural development theory
Hypothesis	A well-developed self-help capacity of communities stimulates employment growth
X	A well-developed self-help capacity of communities
Y	EA1 Non-agricultural employment growth
Operationalization X	A1 Assessment of capacity local actors: policy makers A2 Assessment of capacity local actors: entrepreneurs A3 Assessment of capacity local actors: workers A4 Assessment of internal networks A6 Assessment of external networks DV3 Assessment of administrative structures (derived from A5 and A7) DV4 Is the self-help capacity of communities well developed? (derived from A1-A6 and DV3)
Context event	A9 Mobilizing the self-help capacity

In order to operationalize ‘a well-developed self-help capacity of communities’, we use information on the following items:

- *capacity of local actors*, i.e. policy makers, entrepreneurs and workers (see Section 4.3.1);
- *internal networks* (see Section 4.3.1);
- *external networks* (see Section 4.3.1);
- *appropriate institutional structures* are assessed through the functioning of the linkages between local, regional, national and EU authorities<sup>3</sup>. When local policy makers have good contacts with upper-level policy makers and when they are able to attract public funds for local projects from upper-level policy makers, institutional structures are positively assessed. This assessment will be derived from the variables A5 and A7 (see Section 4.3.1).

If the assessment of all these items is positive, we conclude that the self-help capacity of communities is well developed.

Context events that can be identified for further testing are:

- to affect X, the theory gives the following strategy: mobilizing of the self-help capacity through initiatives of community leaders or through external assistance of partnerships with regional or national authorities, with universities and development agencies.

We have not collected information on such a strategy in our case studies. We will approximate the strategy in the following ways:

- the presence of local leaders, who mobilize other local actors;
- a strong regional identity, which brings about a common view;
- external assistance for capacity building;
- linkages with universities in which know-how is transferred;
- the presence of development agencies.

#### 4.3.5 Theory pattern of Illeris' theory

Viewing Illeris' inductive theory of regional development (1993) we test - given the availability of labour and capital - the following hypothesis: 'A *strong set of local conditions stimulates employment growth*' (Section 3.4.10). According to the theory, the set of local conditions refers to:

- 1 *political conditions*: the extent to which upper-level policy makers implement regional development policies (administrative structures) and the capacity of local policy makers to design and manage projects according to the needs of the region;
- 2 *internal networks*;
- 3 *capacity of workers*: in particular, the supply of adequate skilled labour and the willingness to be trained;
- 4 *capacity of entrepreneurs*: in particular, the degree of innovation-mindedness and entrepreneurial spirit;
- 5 *physical infrastructure*: the availability of both transport infrastructure and soft infrastructure like technical schools, training centres, universities and knowledge centres;
- 6 *agglomeration*: centres with a relatively high density of population and economic activities;
- 7 *rural amenities*: these attract people by providing an attractive environment.

From the hypothesis an independent variable and a dependent variable are derived:

- a strong set of local conditions;
- non-agricultural employment growth.

In order to operationalize 'a set of local conditions', we use information on the next items:

- *political conditions* will be assessed by means of the variable on the capacity of policy makers (see Section 4.3.1) and the variable on administrative structures (see Section 4.3.4);
- *internal networks* (see Section 4.3.1);
- *capacity of workers* (see Section 4.3.1);
- *capacity of entrepreneurs* (see Section 4.3.1);

The items above are similar to the subvariables which constitute the self-help capacity of communities (except for external networks; see Section 4.3.4). Therefore, instead of using the individual variables above, we will use the variable on self-help capacity.

In addition, we use data on:

- *physical infrastructure* which will be assessed according to transport infrastructure inside the region, transport connections with the rest of the country and soft infrastructure, i.e. the availability of technical schools, training centres, universities and knowledge centres;
- *agglomeration* which comprises cities or urbanized parts with a certain degree of concentration of economic activities and population, and which act as regional economic centres. Data on agglomeration have not been collected as such in the case studies. Exact minimum thresholds for population size or share of economic activities are difficult to determine, as these mainly depend on the kind of activities. Vanhove (1999:320) argues that an absolute minimum threshold for a

Figure 4.8 Theory pattern of Illeris' theory

Theory	Illeris' theory
Hypothesis	A strong set of local conditions stimulates employment growth
X	A strong set of local conditions
Y	EA1 Non-agricultural employment growth
Operationalization X	DV4 Is the self-help capacity of communities well developed? (derived from A1-A6 and DV3) LR3 Assessment of transport infrastructure inside the region LR4 Assessment of external transport connections LR5 Assessment of soft infrastructure LR6 Assessment of agglomeration LR1 Assessment of rural amenities
Context events	-

regional growth centre is around 30,000 inhabitants. This threshold is derived from infrastructure costs, the need for the provision of basic services to industry, the need for a reasonably large and diversified labour market and the need for a certain degree of labour reserve. We will use this threshold for the assessment of agglomeration;

- *rural amenities* (see Section 4.3.3).

If the assessment of all these items is positive, we conclude that the set of local conditions is strong.

Context events that can be identified for further testing are:

- to affect X, the theory recommends a strategy which affects the local conditions. Such a strategy should be based on an analysis of the problems and opportunities of the region and be implemented by local and regional authorities. This matches with the variable on the capacity of policy makers, which is already included in the independent variables.

#### 4.3.6 Theory pattern of Myrdal's theory

Due to the cumulative character of Myrdal's cumulative causation theory (Section 3.4.3), we cannot describe the theory in a static hypothesis like 'if X then Y' as in the previous subsections. In fact, we have to hypothesize the cumulative process in a dynamic form like 'if  $X \rightarrow Y \rightarrow X \rightarrow Y \rightarrow X$ ' etc. Such a way of testing is rather problematic, as the method of pattern-matching is not designed to deal with cumulative processes. Another problem arises with the rather tautological hypothesis: '*Leading regions cumulate wealth whereas lagging regions lose wealth*' of the theory. Despite these difficulties, we still include Myrdal's theory in our set of selected theories for pattern-matching in order to investigate whether Myrdal's theory provides additional insights into economic development in rural regions. In the interpretation of the results we have to take into account that pattern-matching of this theory is simplified.

The hypothesis above would be correct for underdeveloped regions; however, the EU countries, which we deal with are considered to be welfare states. In such cases, Myrdal's

theory assumes that policy inferences and spread effects will counteract the cumulative process of losing wealth in lagging regions. These counteracting effects may even result in a cumulation of wealth in the lagging regions. In the end, if the level of cumulated wealth passes a certain critical value, the lagging region can become a leading region: a new centre of self-sustained economic expansion. As long as a region is lagging, this critical level of wealth has not been reached.

Given the explanation above, the set of dynamic hypotheses that we test in the scope of Myrdal's theory is:

*1 Leading regions cumulate wealth;*

Considering the fact that lagging regions can either increase or lose wealth, it makes no sense to hypothesize on an increase or decrease in the amount of cumulated wealth. However, as the theory assumes a difference in the critical level of cumulated wealth between leading and lagging regions, we also test:

*2 The level of wealth in lagging regions is below that in leading regions.*

From the hypotheses we derive two independent variables and a dependent variable:

- a leading region;
- a lagging region;
- wealth.

We use the following definitions<sup>4</sup>:

- *leading region*: a region is considered to be leading if the growth rate of non-agricultural employment was 0.5 percentage points above the national growth rate during a period of about ten years in the 1980s and early 1990s (see Section 2.3);
- *lagging region*: a region is considered to be lagging if the growth rate of non-agricultural employment was 0.25 percentage points below the national growth rate during a period of about ten years in the 1980s and early 1990s (see Section 2.3).

In order to operationalize 'wealth', we use information on the following items:

- the level and the development of GDP/capita;
- migration;
- inflow of private and public investments;
- values and standards of local actors with regard to new activities;
- state and development of transport and soft infrastructure.

If these items have a high value for leading regions and if the values are increasing, we conclude that leading regions are cumulating wealth; in addition, if these items have a lower value in lagging regions than in leading regions, we conclude that our data support the hypotheses. In particular, we will assess these items by comparing each pair of leading/lagging case study regions within the same country according to:

- GDP/capita: leading regions are assumed to have a higher GDP/capita and also a higher increase in GDP/capita compared to lagging regions;
- migration: leading regions are assumed to experience immigration of workers while lagging regions are expected to have outmigration of workers or a lower immigration than leading regions. Migration will be derived from the migration balance;
- inflow of private and public investments: private and public investments are expected to flow into leading regions while lagging regions are assumed to lack

Figure 4.9 Theory pattern of Myrdal's theory

Theory	Myrdal's theory
Hypotheses	Leading regions cumulate wealth The level of wealth in lagging regions is below that in leading regions
X variables	Leading regions and lagging regions respectively
Y	Wealth
Operationalization Y	EA11 Assessment GDP/capita and its increase A8 Assessment of migration balance DV5 Assessment of inflow of private and public investments, (derived from assessment given in 'Benefits of external networks' in A7) DV4 Is the self-help capacity of communities well developed? (derived from A1-A6 and DV3) LR3 Assessment of transport infrastructure inside the region LR4 Assessment of external transport connections DV6 Assessment of improvement in transport infrastructure (derived from LR3 and LR4) LR5 Assessment of soft infrastructure
Context event	A13 Assessment of exogenous changes

an inflow of private and public investments or to experience a lower inflow than leading regions. Exact data on investments have not been collected in the case studies, but general information whether case study regions benefited from public funds and private investments is available. So we use this general information as proxy;

- values and standards of local actors with regard to new activities: these are assumed to be positive in leading regions and negative or less positive in lagging regions. As exact data have not been collected in the case studies, we approximate this item by the self-help capacity of communities (see Section 4.3.4). Leading regions are assumed to have a high self-help capacity and lagging regions a lower one;
- transport and soft infrastructure: this is assumed to be well developed and expanding in leading regions and less well developed and less expanding in lagging regions (see Section 4.3.5).

Context events that can be identified for further testing are:

- a strategy to affect X is not given in the theory: inequalities between leading and lagging regions are inherent in this self-reinforcing process. Only an exogenous change, spread effects or policy intervention can change the process.
  - Exogenous changes refer to changes with such a strong impact on the system that a cumulative process is being started, either in the direction of a positive or a negative spiral;
  - In the case of lagging regions, spread effects and policy interferences may counteract the loss of wealth. As EU member states are welfare states, we assume that general welfare and regional redistribution policy are among their responsibilities. However, we have not collected detailed data on the impact of spread effects and policy interferences on the loss of wealth, and hence, we can not take this context event into account.



### 4.3.7 Theory pattern of the creative destruction model of community development

Viewing the creative destruction model of community development (Mitchell, 1998) we test - given the availability of labour and capital - the following hypothesis: *'Overexploitation of rural amenities destroys employment in sectors related to these rural amenities'* (Section 3.4.6). From the hypothesis an independent variable and a dependent variable are identified respectively:

- overexploitation of rural amenities;
- employment in sectors related to these rural amenities.

In order to operationalize 'overexploitation of rural amenities', we first assess whether rural amenities are valorized and, then, whether this valorization is a matter of overexploitation, i.e. too many visitors and destruction of the attractiveness of the rural amenities.

Employment in sectors related to rural amenities is assessed by using information on employment growth in the tourist sector.

Context events that can be identified for further testing are:

- rural amenities: we assess this by means of scenic landscape, mountains, architectural remains, etc.;
- to affect X the theory recommends the strategy of remaining in the phase of early commodification. In fact, this implies a stop to the independent variable, which defies the logic of the events in the theory pattern. So this strategy is not included in the assessment of the context events.

## 4.4 Concluding remarks

In this chapter we introduced the method of pattern-matching, which we will use in order to examine whether a theory predicts economic development in a case study region. In this method three stages can be distinguished. The first stage involves the construction of theory patterns, which has also been carried out in this chapter. The second stage of the method deals with the construction of case study patterns, and will be discussed in Chapter 5, whereas the third stage on the matching of the theory and case study patterns is the topic of Chapter 6.

Figure 4.10 Theory pattern of the creative destruction model of community development

Theory	Creative destruction model of community development
Hypothesis	Overexploitation of rural amenities destroys employment in sectors related to these rural amenities
X	Overexploitation of rural amenities
Y	EA4 Employment growth in tourism
Operationalization X	EA2 Assessment of valorization of rural amenities and tourist infrastructure EA3 Assessment of overexploitation
Context event	LR1 Rural amenities

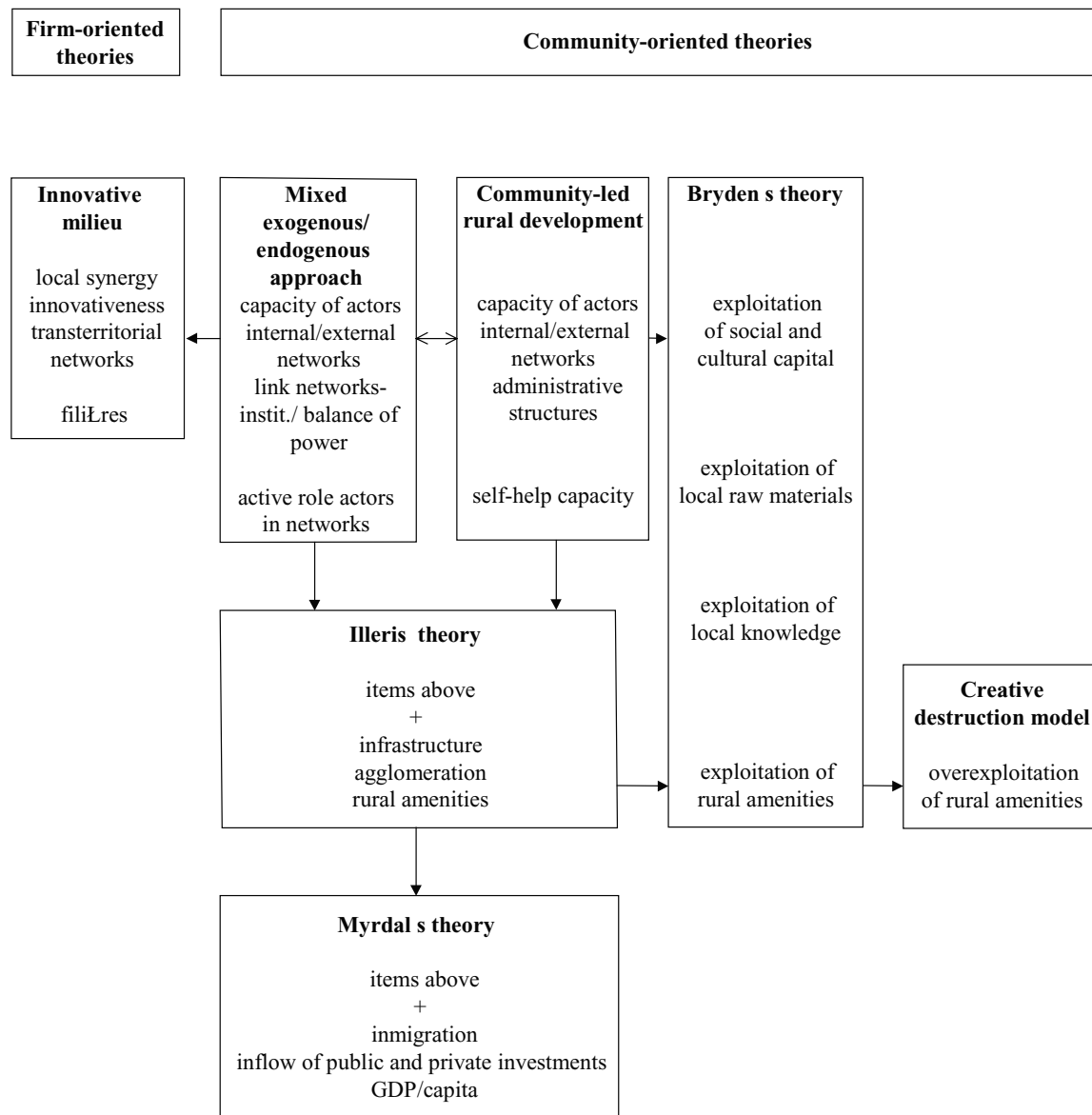
In the construction of theory patterns, it appeared that a theory cannot so easily be unravelled into a pattern of events (i.e. independent variables, dependent variables and context events) like the method of pattern-matching suggests, and often, a lot of interpretation by the researcher is needed to denote variables. In a number of theories, we have included, for example, some of the premises of the theory in the independent variable. So often the premise on innovation as a main engine behind economic growth was embodied into the capacity of actors. In other cases, things seemed to be just the other way round, as we had difficulties distinguishing context events since these were already included in the independent variable.

As theory patterns give a kind of basic summary of relationships among the main variables in the theory, they appear to be a handy tool for detecting similarities and differences among theories. A comparison of the independent variables and the context events in the theory patterns enable us to perceive - given the availability of labour and capital - the following relationships among the theories under review (Fig. 4.11):

- 1 There is a close relationship between the mixed exogenous/endogenous approach and the community-led rural development theory: the independent variable and the context events are more or less the same and consist of capacity of local actors, internal and external networks and appropriate administrative structures.
- 2 Illeris' theory adds the items of transport and soft infrastructure, agglomeration and rural amenities to the independent variables and context events of the mixed exogenous/endogenous approach and the community-led rural development theory.
- 3 Myrdal's theory adds the items of immigration, inflow of private and public funds, and GDP/capita to the independent variable of Illeris' theory.
- 4 Bryden's theory can be perceived as a partial branch of the mixed exogenous/endogenous approach and the community-led rural development theory with regard to its independent variable of the exploitation of social and cultural capital. In this sense, the prominent role of local actors and networks in this group of theories, as well as in Illeris' and Myrdal's theory, is striking. On the other hand, Bryden's theory is also related to Illeris' theory with regard to the independent variable on the exploitation of rural amenities. Finally, the creative destruction model can be linked to this chain of exploitation of rural amenities.
- 5 The theory of the innovative milieu is a firm-oriented theory and remains, therefore, outside the related group of community-oriented theories. Nevertheless, the operationalization of its independent variables reflects more or less the same properties for the filière as those in the mixed exogenous/endogenous approach for the community.

These relationships among theory patterns are quite different from those we have given in Fig. 3.4, in which we have classified theories according to their factors in the production function. It may be clear that these differences arise from the 'embodying' of premises in independent variables. This embodying should be taken into account when interpreting the results of the comparison of theory patterns. Notwithstanding the similarities in the independent variables and context events in the theory patterns, several differences among theories exist, mainly with regard to the degree of external orientation and the role of innovation. The community-led rural development theory and Bryden's theory are more internally oriented than the other theories, in which external factors play

Figure 4.11 Relationships among the independent variables and context events in the theory patterns of the examined theories (given the availability of labour and capital)



a more important role. Myrdal's theory - located in the group of agglomeration models - and the community-led rural development theory, Bryden's theory and the creative destruction model - located in the group of local milieu models - do not explicitly focus on the function of innovation as an engine behind economic growth, whereas innovation is a more central issue in the other theories.

## NOTES

- 1 A strategy can be expressed in terms of a 'long-term plan aimed at achieving a specific goal'. Here, the specific goal refers to affect X and thereby increasing Y via the relationship assumed in the hypothesis.
- 2 A variable which is constructed in this way, is called a derived variable (DV) in the theory patterns.
- 3 Although institutions can be interpreted in a much broader sense, the theory explicitly refers to administrative structures.
- 4 Our definitions of 'leading' and 'lagging' are only based on employment growth, whereas according to Myrdal leading (lagging) regions are not only characterized by employment growth (decline), but by high (low) GDP/capita, high (low) endowment of infrastructure etc. as well.

## 5 CONSTRUCTION OF CASE STUDY PATTERNS

### 5.1 Introduction

In the previous chapter we have introduced the method of pattern-matching, which we will use in order to examine whether a theory predicts economic development in a case study region. The first stage of the method - the construction of theory patterns - was also carried out in that chapter. In this chapter, the second step of the method of pattern-matching is dealt with: the construction of case study patterns. For this purpose, we use empirical evidence from the case studies that have been carried out in the scope of the RUREMPLO project, in which about 25 researchers from 9 EU countries participated (Terluin and Post, 1999). These case studies were conducted in 18 leading and lagging rural regions in the EU and have been used to derive lessons for employment creation in rural regions. Unless otherwise indicated, the RUREMPLO case studies reflect the socio-economic situation between 1980 and 1997.

It has to be noted that by using an existing database, we deviate from the guidelines of the method of pattern-matching, which assume that data collecting starts after the construction of theory patterns. However, as relevant data are scarce and expensive to collect, we made use of the data collected in the RUREMPLO case studies. Although these data cover a wide range of variables, our approach meant that there was insufficient data to construct case study patterns for the growth pole theory, Kilkenny's relationship of transport costs and rural development, and Porter's theory on the competitive advantage of nations. So we had to omit these theories from our set of selected theories for further research. Another point of concern about deviation from the sequence of steps spelt out in the method of pattern-matching is that one of the selected theories (i.e. the mixed exogenous/endogenous development approach) was used in the research design of the case studies. One may question whether this affects the results of the pattern-matching in the sense of: you put the theory into the testing process and the result is that the theory gets a high score. We have tried to eliminate this bias by approaching our database as if it was constructed without the variables engaged by a certain theory. On the other hand, the use of the mixed exogenous/endogenous development approach in the research design of the case studies had also an advantage: the wide range of variables employed in this theory resulted in a rich and varied data source, from which many variables in other theory patterns could easily be derived.

This chapter is organized as follows. The scientific process underpinning the conduct of the RUREMPLO case studies is discussed in Section 5.2. Some general remarks on socio-economic developments in the case study regions are given in Section 5.3. Then, in Section 5.4, we construct a pattern for each case study. As a consequence of the prominent role of local actors in the theory patterns, it goes without saying that in the case study patterns much attention is paid to local actors. In the last section some concluding remarks are made on main differences in the pairs of leading and lagging case study regions, and on the role of local actors in the development trajectories in the case study regions.

## 5.2 Research design of the RUREMPLO case studies

As already explained in the preceding, we will use empirical evidence from the 18 RUREMPLO case studies for the construction of case study patterns. In this section we give a preliminary introduction of the RUREMPLO case studies by focussing on their research design. Basically, the research design of a case study can be described in terms of the logical sequence of initial research questions, empirical data to be collected and conclusions (Yin, 1994:19). Within the research design, a theory (or a set of propositions) serves as an instrument for further specification of the research questions. In addition, the delineation of the unit of analysis (i.e. the case) is a main component of the research design of a case study. Such a delineation, either in social or spatial terms, should be related to the research questions (Yin, 1994:20-25). Finally, a protocol, or a guideline for conducting the research in the case study, is essential in a multiple-case analysis. Such a protocol should give an overview of the case study project, field procedures, case study questions and a guide for composing the case study report (Yin, 1994:63-74). In this section we will discuss which theory we have used as a guideline in the research design of the RUREMPLO case studies, how we have delineated the case study units, and how we have dealt with the protocol. We conclude this section by evaluating the quality of empirical research in the RUREMPLO case studies.

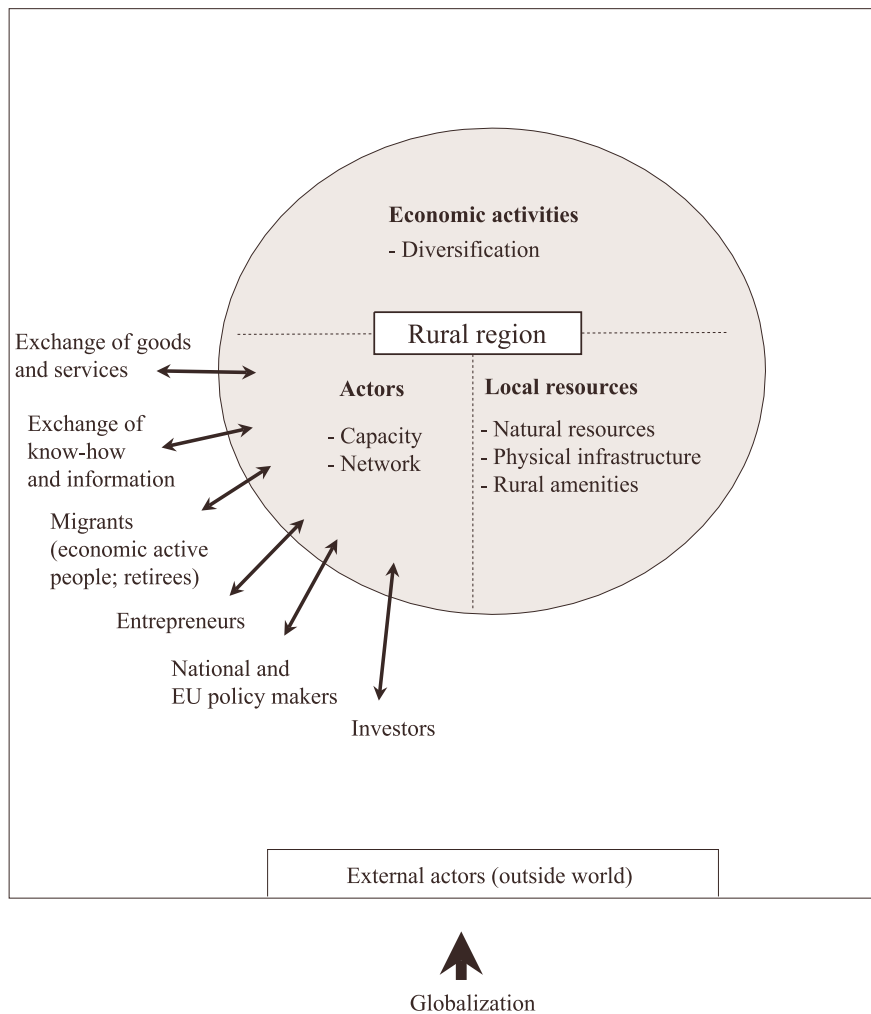
### *Conceptual model*

The first step in the research design deals with the specification of the research questions by a theory. The focus in the RUREMPLO case studies was on identifying factors which foster or hamper employment. In order to address this key question, the RUREMPLO team used the mixed exogenous/endogenous approach (see Section 3.4.9) as theory in the research design of the case studies. According to this theory, the analysis of employment 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 internal resources mobilized in the networks;
- d external resources transmitted through networks into the rural region.

To facilitate the analysis of employment in rural regions, the RUREMPLO team designed a conceptual model in which elements (a)-(d) are included: the field of force of a rural region (Fig. 5.1). In this conceptual model, the current global restructuring process, mainly due to rapid technological changes in the communications and information sectors, and political changes, is taken into account, as indicated by the arrow denoting globalization in the figure. The changing global situation usually results in an intensification of the external integration of rural regions. By using the territorial approach (see Section 2.2) in this conceptual model, the rural region can be presented as a regional economy, which engages in all kinds of exchanges with the external world. Within the rural region, the RUREMPLO team distinguished three closely related components: local resources, economic activities and actors. Local resources refer to physical infrastructure (roads, railways, ports etc.), natural resources (like wood and hydropower) and rural amenities. Economic activities include all kinds of activities in the agricultural, industrial and services sectors. Actors are supposed to be endowed with capacity (knowledge, skills and attitude) and to interact with each other in networks. Moreover, actors can be involved in all kinds of relations with the outside world

Figure 5.1 Conceptual model: the field of force of a rural region



Source: RUREMPLO project.

manifested by the exchange of products, services and know-how, and contacts with policy makers outside the region. In addition, actors move into and out of the region. Such migrating actors generally refer to the economically active, entrepreneurs and retirees. This conceptual model offers a framework to illustrate the factors which foster or hamper the maintenance or increase of employment opportunities.

#### *Unit of analysis*

The second step in the construction of a research design for case studies is to delineate the unit of analysis. To study employment, a functional labour market area, in which people live and work, seems to be an appropriate unit of analysis. The delineation of a labour market area is, however, not unambiguous as carrying out some professions tends to involve larger commuting distances than others. This can be dealt with by selecting an area in which the larger part of population lives and works. Besides, labour market areas can change due to, for example, changing commuting patterns and increasing travel-to-

work distances. Another difficulty refers to the fact that statistical data is commonly collected for administrative units, whose borders do not always coincide with the borders of labour market areas. Despite this possible deviation, we decided for pragmatic reasons to use administrative regions. So we have tried to select administrative regions, which reflect more or less the size of a functional labour market area, as the unit of analysis for the case studies. This means that the NUTS2 level is employed for the case studies in Belgium, Germany<sup>1</sup> and the Netherlands; for Austria and Finland we employed a regional level as delineated in the RUREMPLO project; and for the case studies in the other member states the NUTS3 level is used.

#### *Leading and lagging rural regions as case studies*

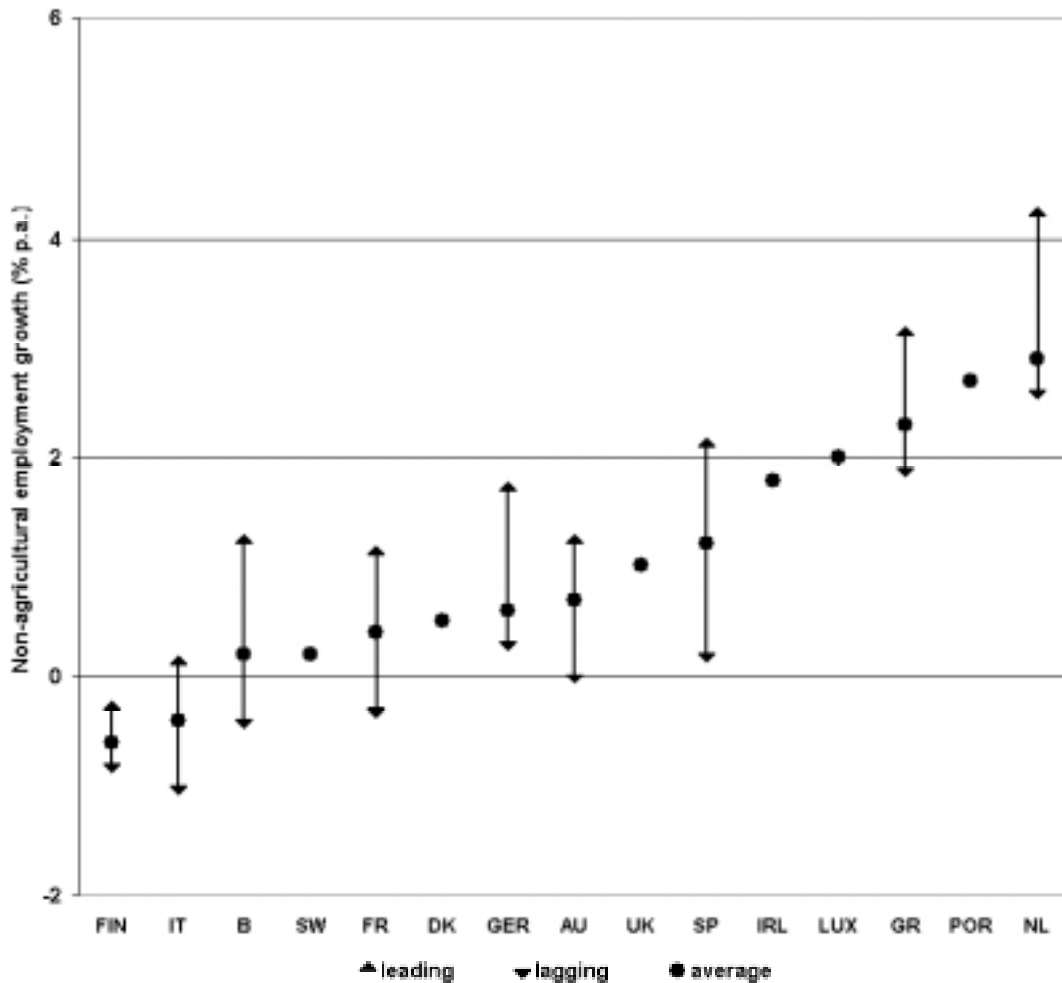
By using a labour market area as unit of analysis, we have selected pairs of leading and lagging rural regions as case studies from each of the nine participating countries in the RUREMPLO project<sup>2</sup>. These regions have been derived from the groups of leading and lagging regions defined in the RUREMPLO project (Section 2.3). The RUREMPLO team has selected rural regions which are not unique in their development pattern or location, but from which the underlying expectation was that they could provide insight into a broad range of factors affecting the process of employment growth/stagnation and lessons for other rural regions. The selection resulted in a set of case study regions, which reflect a wide range of characteristics with regard to their location, industrial tradition and physical structure. It is obvious that our sample of 18 case studies is not an aselect sample, representing a population, but a so-called 'reasoned' sample (Hutjes and Van Buuren, 1996:62). The inclusion of both leading and lagging case study regions in our sample can be said to be an appropriate composition as it reflects more or less the two ends of a wider spectrum. When we recall the decision scheme on the matching of the theory and case study patterns in Fig. 4.3, we could expect that if hypotheses are supported, this is due to high values for X and Y in the leading case study regions and low values for X and Y in the lagging case study regions.

#### *Relating 'leading' and 'lagging' to the national average*

Our criteria on defining leading and lagging regions require further explanation. In Section 2.3 we have already discussed the use of the labels 'leading' and 'lagging' in the RUREMPLO project: a region is considered to be leading if the growth rate of non-agricultural employment was 0.5 percentage points above the national growth rate during the 1980s and early 1990s; on the other hand, a region is considered to be lagging if the growth rate of non-agricultural employment was 0.25 percentage points below the national growth rate. One may pose the question why growth rates have been expressed relative to the national average and why absolute growth rates were not used. When we look at the absolute growth rates of non-agricultural employment in the case study regions this question becomes more pertinent, as it appears that the leading case study region in Finland showed an employment decline in the study period, whereas on the other hand, a number of lagging case study regions experienced an increase in employment (Table 5.3). To answer the question why relative growth rates were used, we ranked the leading and lagging case study regions according to the national averages of non-agricultural employment growth (Fig. 5.2). This figure gives rise to several remarks. First, the figure shows that there were fairly large differences in national averages of non-agricultural employment growth during the 1980s and early 1990s: Finland and Italy



Figure 5.2 Non-agricultural employment growth: the position of leading and lagging case study regions relative to national averages, 1980s-early 1990s (% p.a.)<sup>a, b)</sup>



a) We have positioned the pair of case studies of Luxembourg (B) and Ardennes (FR) relative to the national average of Belgium. It can easily be seen in the figure that the national averages of Belgium and France match each other closely and that the growth rate of Ardennes is also below the national average of France.

b) For Greece we have used the average of the most rural regions instead of the national average. Average non-agricultural employment growth in the group of most rural regions was rather high and that in Athens rather low. Due to Athens' large weighting, the national average growth is also rather low. It appeared that there was only one (rather unrepresentative) very remote rural region in Greece with an employment growth below the national average. Therefore, it seems more appropriate to assess employment performance of the leading and lagging case study regions in Greece relative to the average of most rural regions.

registered negative national averages, while for Ireland, Luxembourg, Greece, Portugal and the Netherlands national averages were about 2% p.a. or even higher. Finland's poor performance can be related to the deep economic recession at the beginning of the 1990s, while for example, employment growth in the Netherlands benefited to a large extent from the so-called 'polder model'. Second, Figure 5.2 illustrates that while the

performance of the Finnish leading case study region was above the national average, its absolute growth figure is negative; on the other hand, it can also be seen that the lagging case study region in the Netherlands with a relatively high employment growth rate still lags behind the national average. These two remarks suggest that the national context is relevant in the assessment of socio-economic development in regions, a hypothesis already put forward at the end of Section 2.3. From this, it follows that defining 'leading' and 'lagging' in terms of deviations from the national average rather than from absolute figures seems to be a reasonable step. Nevertheless, in our group of case study regions no drastic changes occur when we related leading and lagging to absolute growth figures. For example, when the case study regions were ranked according to absolute growth rates in two equal groups of highest and lowest growth rates, it can be seen from Fig. 5.2 that four regions changed their positions: the Greek and the Dutch lagging case study regions have moved to the high-growth group, whereas the Finnish and Italian leading case study regions moved to the low-growth group. In the interpretation of the matching results in the next chapter, we will take the specific position of these four regions into account.

### *Protocol*

The final step in a research design for case studies is to make a protocol, that will guide the investigator in carrying out the case study. The RUREMPLO team has drawn up such a protocol, consisting of a theoretical background of the research project, a contents of the case study report and an overview of detailed questions to be answered, tables to be completed and definitions/descriptions of variables in each chapter of the case study report (RUREMPLO team, 1997). It goes without saying that the chapters address the various forces identified in the conceptual model of a rural region (Fig. 5.1). In the last chapter of each case study report a SWOT analysis is carried out. The items to be addressed in this SWOT analysis are also given in the protocol. Since the protocol did not specify a summary of the case study reports, in the course of the RUREMPLO project the team formulated an additional guideline for the summary of the case study report, consisting of 11 'key issues' (i.e. key questions). The contents of the protocol, the list with key issues and the items of the SWOT analysis are given in Annex 5.1. The case studies have been based on evidence from the literature, statistics and interviews with key actors. Each national research group used the protocol as a guide to conduct two case studies in their own country in 1997 and 1998. Differences in the interpretation of the various items of the protocol have been discussed and resolved during the study meetings of the RUREMPLO team in the course of the project.

### *Tests for judging the quality of the case study research*

As last part of this section we will turn to four tests, which are commonly used to assess the quality of empirical social research: construct validity, internal validity, external validity and reliability (see Yin (1994) and Hutjes and Van Buuren (1996) among others). Below we explain how we have dealt with these tests.

#### *1 Construct validity*

This refers to establishing correct operational measures for the concepts being studied. This test is rather problematic in case studies and, therefore, a common criticism about case studies is that the investigator fails to develop a sufficient set of operational

measures and uses subjective measurements in data collection. Yin (1994:34-5) advises three approaches to improve construct validity:

- the use of multiple sources of evidence (often referred to as triangulation, see Swanborn, 1993:332 among others);
- to establish a chain of evidence, which allows the external observer to follow the derivation of any evidence from initial research questions to ultimate case study conclusions;
- to have a draft case study report reviewed by key informants (also referred to as 'member check' and 'respondent validation'; see Hoven-Iganski, 2000:70).

We have applied all these approaches in the analysis. First, the case studies rely on evidence from the literature, administrative documents, statistics and open-ended interviews with key actors. Second, the chain of evidence in the RUREMPLO case studies can be equated with the variables in the field of force of a rural region (Fig. 5.1). In the successive chapters of the case study reports, evidence of these variables was collected and analyzed and conclusions were drawn based on these findings. In addition, a summary of each case study report was made by using a guideline of 11 key questions, which pays attention to the main aspects in the field of force of a rural region. Third, 11 out of the 18 case study reports have been reviewed by key informants from the case study regions<sup>3</sup>. In addition, each draft case study report was reviewed by a member of the study team and by the coordinators of the team.

#### 2 *Internal validity*

This involves establishing a causal relationship: the inference that event Y is caused by event X instead of a third factor Z. Pattern-matching is recommended by Yin (1994:35) to establish internal validity, a method which is applied in our analysis. The use of a number of well-established theories, in which the causal relationship between the independent and dependent variables is valid, contributes to the internal validity.

#### 3 *External validity*

This concerns establishing the domain on which the study's findings can be generalized. As already indicated in Section 4.2, case studies are not intended to achieve statistical generalization, i.e. to make inferences about the whole population, but to achieve analytical generalization. In multiple case studies, analytical generalization may be claimed if two or more cases replicate the theory. In that situation, the theory applies to a domain of cases with similar characteristics. In this way, we carry out this test in this study.

#### 4 *Reliability*

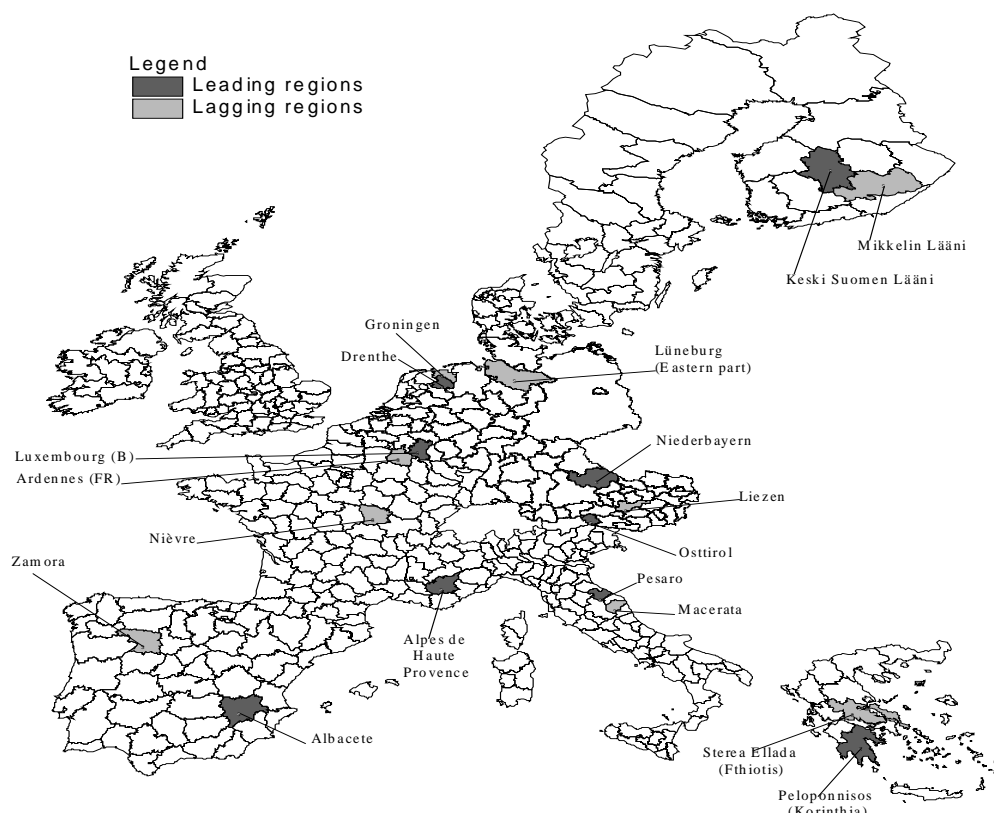
The objective of this test is to ensure that, if a subsequent investigator follows exactly the same procedures in conducting the same case study, he/she would arrive at the same findings and conclusions as the previous investigator. A prerequisite for repeating the research is the presence of a protocol. Such a protocol was used in the RUREMPLO case studies, as explained above. In order to minimize subjective interpretation of the protocol by individual team members, several tools were devised. First, in the process of conducting the case studies, several meetings with the whole RUREMPLO team were organized to discuss the preliminary results of the case studies. During those meetings, intensive discussions were held on the interpretation of concepts like networks and capacity. These meetings contributed to a fine-tuning of the research in the case studies. Second, a comparative analysis of all 18 case studies was carried out in an iterative way as follows: the authors (Terluin *et al.*, 1999a) made some conclusions on the variables in

the field of force of each case study, checked whether the conclusions were correct with the researchers of the respective case studies, fine-tuned the analysis based on the feedback received and, after several revisions, arrived at a final statement. Moreover, the draft report on the comparative analysis of all case studies was discussed during several meetings of the RUREMPLO team and the team approved the final report.

### 5.3 General remarks on socio-economic characteristics in the RUREMPLO case study regions<sup>4</sup>

The previous section addressed various methodological aspects of the research in the RUREMPLO case studies. This section presents some general characteristics of socio-economic developments in the RUREMPLO case study regions since the beginning of the 1980s, and serves as a background for the discussion of the case study patterns in the next section. The set of RUREMPLO case studies consists of 9 pairs of leading and lagging rural regions in 9 EU member states. These case study regions are well dispersed over the continental part of the EU and reflect a wide range of physical conditions (Fig. 5.3). The socio-economic developments in the case study regions, which we discuss here

Figure 5.3 RUREMPLO case study regions<sup>a)</sup>



a) Drenthe, Groningen, Pesaro and Macerata have been classified in the group of intermediate rural regions; the other case study regions have been classified as ‘most rural’.  
Source: LEI; RUREMPLO project.

Table 5.1 Area and population in the case study regions

	Area (km <sup>2</sup> )	Population density (inh./km <sup>2</sup> )	Population 1996 (*100)	Period	Population growth (% p.a.)
<i>Leading regions</i>					
Luxembourg (B)	4,440	54	241	1981-91	0.5
Niederbayern (GER)	10,325	107	1,100	1982-92	0.9
Korinthia (GR)	2,289	62	142 ('91)	1981-91	1.4
Albacete (SP)	14,924	24	361	1980-95	0.6
Alpes de H. Prov. (FR)	6,925	20	140	1982-96	1.2
Pesaro (IT)	2,892	120	337	1980-93	0.1
Drenthe (NL)	2,680	171	460	1980-96	0.6
Osttirol (AUS)	2,006	24	48 ('91)	1981-91	0.2
Keski Suomen L. (FIN)	16,249	16	258 ('95)	1980-95	0.4
<i>Lagging regions</i>					
Lüneburg (GER)	7,150	80	576 ('90)	1980-90	0.1
Fthiotis (GR)	4,440	39	171 ('91)	1981-91	0.6
Zamora (SP)	10,560	19	205 ('95)	1980-95	-0.2
Ardennes (FR)	5,525	56	294 ('93)	1982-90	-0.3
Nièvre (FR)	6,820	34	233 ('90)	1982-90	-0.3
Macerata (IT)	2,770	107	297 ('93)	1980-93	0.2
Groningen (NL)	2,970	188	560 ('96)	1980-96	0.05
Liezen (AUS)	3,250	25	81 ('91)	1981-91	0.1
Mikkelin L. (FIN)	16,330	13	206 ('95)	1980-95	-0.1

Source: Terluin *et al.*, 1999a.

refer to population size and growth, topography, employment dynamics, GDP/capita and unemployment rates. As general socio-economic trends in rural regions in the EU have already been discussed in Section 2.3, this section further illustrates some of these general trends in a number of individual regions.

#### *Population and topography*

The area and population size in the case study regions reflect a wide range: the area varies from 2,000 km<sup>2</sup> to 16,000 km<sup>2</sup> and the population size from 50,000 to 500,000 (Table 5.1). These differences in size are due to country-specific differences in the size of the labour market area as well as pragmatic reasons guiding the selection of regions as case studies. The population density in the case study regions varies from 13 to 188 inhabitants/km<sup>2</sup>, indicating that the case study regions include both 'most rural regions' and 'intermediate rural regions' (Annex 2.1). 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 tends 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 (Annex 5.2). With the exception of Keski Suomen Lääni, this is largely due to the mountainous terrain in the regions. In the other case study regions, the population is dispersed across the region.

Table 5.2 Distribution of employment over sectors in the case study regions, 1980s-1990s (%)

	Year 1	Year 2	Agriculture		Industries		Services	
			Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
<i>Leading regions</i>								
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. Prov. (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 (AUS)	1981	1991	16	10	34	35	50	55
Keski Suomen L. (FIN)	1980	1995	20	8	34	30	47	62
<i>Lagging regions</i>								
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 (AUS)	1981	1991	13	10	40	34	47	56
Mikkelin L. (FIN)	1980	1995	27	16	32	26	41	58

Source: Terluin *et al.*, 1999a: 32, 40.

#### *Employment dynamics in the case study regions*

Employment dynamics in the case study regions has been analyzed for the period between 1980 and 1997. At the beginning of the 1980s, the transformation process from an agrarian economy - in which the agricultural sector is dominant - to an industrial economy has been completed in almost all case study regions. Exceptions are the leading regions of Korinthia and Albacete and the lagging regions of Fthiotis and Zamora, whose high dependence on agriculture was still evident in 1980 (Table 5.2). These four regions are located in Spain and Greece. The fact that Korinthia and Albacete are labelled as leading regions already shows that a large agricultural sector can be accompanied by a considerable growth in the other economic sectors. In order to obtain an idea of employment dynamics in the case study regions, it is less fruitful to look at the development of agricultural employment, which is usually declining, but more rewarding to look at employment growth in the other sectors of the economy. These are usually the engine behind economic growth and have to absorb abundant agricultural labour. When we look at this so-called 'non-agricultural employment growth' in the case study regions, it appears that growth rates of non-agricultural employment in the leading case study regions in the 1980s and early 1990s varied between -0.3% to 4.2% p.a. and those in the lagging case study regions between -1.0% to 2.6% p.a. (Table 5.3). These ranges are a clear illustration of differential employment performance among regions. Leading and lagging case study regions appear to have both employment increases and decreases, a fact already illustrated in Fig. 5.2.

Table 5.3 Employment growth in the case study regions, 1980s-1990s (% p.a.)

	Period Y1-Y2	Agri- culture	Indus- try	Services	Non-agri- cultural employ- ment	Regional total employ- ment	National non-agri- cultural employ- ment	Difference employment growth region/ country <sup>a)</sup>
<i>Leading regions</i>								
Luxembourg (B)	1980-92	-1.9	-0.1	1.5	1.2	0.9	0.2	1.0
Niederbayern (GER)	1980-93	-3.9	0.9	2.5	1.7	0.9	0.6	1.1
Korinthia (GR)	1981-91	-2.5	0.0	5.1	3.1	0.8	1.8	1.3
Albacete (SP)	1980-95	-6.6	0.6	3.0	2.1	0.2	1.2	0.9
Alpes de H.P. (FR)	1981-92	-4.5	-1.3	2.0	1.1	0.5	0.4	0.7
Pesaro (IT)	1982-95	-7.7	0.5	-0.3	0.1	-0.5	-0.4	0.5
Drenthe (NL)	1980-91	-3.3	2.4	5.3	4.2	3.6	2.9	1.3
Osttirol (AUS)	1981-91	-3.9	0.9	1.4	1.2	0.6	0.7	0.5
Keski S.L. (FIN)	1980-93	-5.9	-2.3	0.7	-0.3	-1.2	-0.6	0.2 <sup>b)</sup>
<i>Lagging regions</i>								
Lüneburg (GER)	1980-90	-4.1 <sup>c)</sup>	-0.2 <sup>c)</sup>	1.7 <sup>c)</sup>	0.3	0.2	0.6	-0.3
Fthiotis (GR)	1981-91	-4.0	-1.5	4.0	1.9	-0.6	1.8	0.1 <sup>b)</sup>
Zamora (SP)	1980-95	-5.8	-1.4	0.8	0.2	-2.2	1.2	-1.0
Ardennes (FR)	1981-92	-3.1	-1.8	0.7	-0.4	-0.6	0.4	-0.7
Nièvre (FR)	1981-92	-3.8	-2.9	1.3	-0.3	-0.6	0.4	-0.6
Macerata (IT)	1982-95	-5.3	-2.2	0.1	-1.0	-1.5	-0.4	-0.6
Groningen (NL)	1980-91	-1.2	-0.2	3.9	2.6	2.4	2.9	-0.3
Liezen (AUS)	1981-91	-3.0	-2.0	1.4	0.0	-0.4	0.7	-0.8
Mikkelin L. (FIN)	1980-93	-5.8	-3.3	1.1	-0.8	-1.8	-0.6	-0.2

a) Difference in percentage points in non-agricultural employment growth in the region and non-agricultural growth in the country; b) These regions do not strictly satisfy the RUREMPLO criteria of a leading region (non-agricultural employment rate 0.5 percentage points above the national average) or lagging region (non-agricultural employment rate 0.25 percentage points below the national average; see Section 2.3). Country-specific reasons pertaining to these regions necessitated a deviation from the general selection criteria; c) Annual growth during 1980-1995.

Source: RUREMPLO project.

#### *Sectoral breakdown of employment development*

Both leading and lagging case study regions faced a decline in agricultural employment and an increase in services employment in the 1980s and early 1990s (Table 5.3). The most striking difference in employment trends refers to the increase in industrial employment in a number of leading regions, which was absent in lagging regions. 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 found 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.

A more detailed breakdown of employment into 9 ISIC branches yielded three main employment trends in the case study regions (Fig. 5.4):

Figure 5.4 Classification of case study regions based on employment growth per branch, 1980s-1990s <sup>a)</sup>

ISIC branch no.		1 Agriculture	2/4 Mining/ Electr./ Gas	3 Manu- fac- turing	5 Con- struc- tion	6 Trade/ Rest./ Hotels	7/8 Transport/ Financial services	9 Com- munity services
<i>Group 1 Employment growth in manufacturing and services</i>								
1a	Drenthe	-	n.r.	+	+	+	+	+
1b	Albacete Osttirol Zamora Groningen	-	-	+	+	+	+	+
1c	Luxembourg (B) Niederbayern AHP Pesaro	-	n.r.	+	-	+	+	+
<i>Group 2 Employment growth in all services</i>								
2a	Korinthia	-	n.r.	-	+	+	+	+
2b	Nièvre Macerata	-	n.r.	-	-	+	+	+
2c	Fthiotis Liezen	-	-	-	-	+	+	+
2d	Ardennes	-	+	-	-	+	+	+
<i>Group 3 Employment growth in some services</i>								
3a	Lüneburg	-	-	-	-	-	+	+
3b	Keski S.L. Mikkelin L.	-	n.r.	-	-	-	-	+

a) n.r. indicates negligible changes.

### *1 Employment growth in manufacturing and services*

This is the biggest group and consists mainly of leading regions. Variations in this group are due to developments in the mining/electricity and gas branches and in the construction branch.

### *2 Employment growth in all services*

This group consists mainly of lagging regions. Variations in this group are due to developments in the mining/electricity and gas branches and in the construction branch.

### *3 Employment growth in some services*

This pattern is mainly found in the Finnish case study regions and it is related to the severe recession in the beginning of the 1990s, in which many jobs were lost. Variations in this small group are due to developments in the mining/electricity and gas branches and in the financial services.

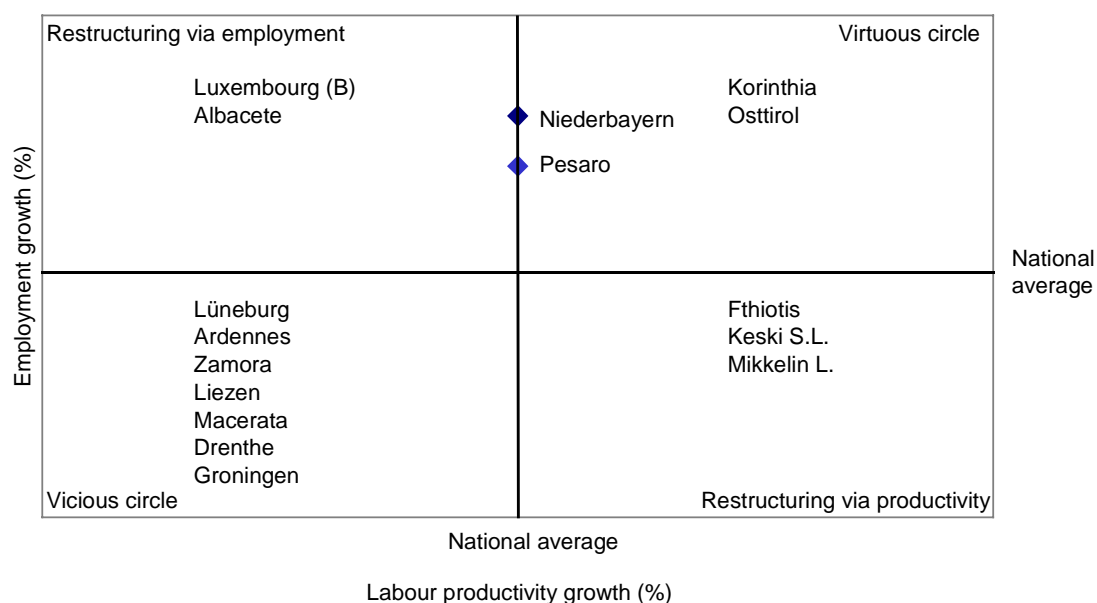
In most case study regions, the branch of community services showed the highest increase in employment, followed by the branch of trade, restaurants and hotels and the branch of financial services (see Annex 5.3).

### *Employment growth sometimes accompanied by productivity growth*

A coordinate system with total employment growth on the Y axis and labour productivity growth (measured as GVA per worker) on the X axis can demonstrate whether an



Figure 5.5 Relation of employment growth and labour productivity growth in the case study regions, 1980s-1990s<sup>a)</sup>



a) No data for Alpes de Haute Provence and Nièvre.

Source: The quadrant is an adaptation from Camagni, 1995b:334-5; data from RUREMPLO project.

increase in jobs is accompanied by a rise in labour productivity or not. Such an increase can be used to indicate the kind of jobs that have been created: high productivity jobs or low productivity jobs (assuming that the labour productivity in the already existing jobs remains unchanged). Most case studies appear to be located in the quadrant of the so-called vicious circle: low employment growth and low productivity growth (Fig. 5.5). This position is partly due to the fact that the figure is based on total employment growth, thus including the decline in agricultural employment. On the other hand, several case study regions are located in the quadrant of the virtuous circle, indicating that an above-average employment growth is accompanied by an above-average productivity growth. From the position of the case study regions in the figure, it can be derived that employment growth in some case study regions concerns low productivity jobs and high productivity jobs in other case study regions.

#### *GDP and unemployment*

GDP growth is the result of increases in labour productivity (GVA per worker) and/or more jobs<sup>5</sup>. When we look at GDP growth in the case study regions, it appears that some leading case study regions experienced a relatively high GDP growth in the 1980s, whereas others did not (Table 5.4), indicating that when employment growth mainly consists of low productivity jobs, GDP growth tends to be more moderate. On the other hand, GDP growth in the lagging case study regions fell behind the national average.

GDP/capita in both leading and lagging case study regions tends to be below the national average, Korinthia and Macerata being the exceptions (Table 5.4). The relatively low

Table 5.4 GDP growth and GDP per capita in the case study regions, 1980s-1990s

	Period Y1-Y2	GDP growth (% p.a.)		GDP per capita (EU=100)			
		Region	Country	Region 1980	Country 1980	Region 1994 <sup>a)</sup>	Country 1994 <sup>a)</sup>
<i>Leading regions</i>							
Luxembourg (B)	1980-90	2.6	1.9	96	122	101	115
Niederbayern (GER)	1980-90	3.2	2.8	101	133	113	127
Korinthia (GR)	1981-91	2.2	1.9	66	51	57	48
Albacete (SP)	1980-93	2.1	2.5	45	57	46	62
Alpes de H. Prov. (FR)	1980-90	-	2.9	-	125	94	116
Pesaro (IT)	1980-90	1.5	2.0	81	80	105	107
Drenthe (NL) <sup>b)</sup>	1980-93	0.9	1.8	97	124	87	111
Osttirol (AUS)	1981-91	3.8	3.5	68	97	80	111
Keski Suomen L. (FIN)	1980-95	6.3	6.2	90	103	86	97
<i>Lagging regions</i>							
Lüneburg (GER)	1980-90	2.3	2.8	93	133	95	127
Fthiotis (GR)	1981-91	1.0	1.9	54	51	42	48
Zamora (SP)	1980-93	1.7	2.5	47	57	51	62
Ardennes (FR)	1980-93	0.7	-	112	125	98	116
Nièvre (FR)	1980-90	-	2.9	95	125	87	116
Macerata (IT)	1980-93	1.4	2	87	80	109	107
Groningen (NL) <sup>b)</sup>	1980-93	-1.9	1.8	117	124	102	111
Liezen (AUS)	1981-91	1.7	3.5	81	97	82	111
Mikkelin L. (FIN)	1980-95	5.4	6.2	83	103	72	97

a) 1990 for Italian regions; 1991 for Greek regions; 1992 for Austrian regions; 1995 for Finnish regions; b) Dutch regions/country exclusive of gas revenues.

Source: RUREMPLO project; GDP/capita for Dutch regions: CBS, Regionaal Economische Jaarcijfers (Regional economic annual statistics), various issues.

GDP/capita reflects the already discussed fact that urban regions in the EU tend to have a higher GDP/capita than the rural ones (Table 2.3). Within countries no pattern can be found to show that GDP/capita in leading regions is higher than that in lagging regions. This observation illustrates the comment that the labels leading and lagging are only derived from employment performance, and that our leading regions may be less successful with regard to other indicators (Section 2.3).

Among the case study regions, unemployment levels vary largely (Table 5.5). These differences are mainly due to country specific patterns. With a few exceptions, unemployment rates in the leading case study regions were below the national level in 1985 and 1995. The pattern of unemployment rates in lagging case study regions is more varied: above or below the national unemployment rate. In some countries, leading case study regions had lower unemployment rates than the lagging case study regions, while in other countries the opposite applies. This pattern seems a bit remarkable; however, we have not analyzed reasons behind it in the RUREMPLO project. Differences in, for example, structural and temporal components in unemployment and participation rates may contribute to the explanation of this pattern.

Table 5.5 Unemployment rates in the case study regions, 1985 and 1995 (%)

	Period Y1-Y2	Year 1		Year 2	
		Region	Country	Region	Country
<i>Leading regions</i>					
Luxembourg (B)	1985-95	10	11	7	9
Niederbayern (GER)	1985-95	6	7	5	7
Korinthia (GR)	1981-91	3	4	7	8
Albacete (SP)	1985-95	18	22	26	23
Alpes de H. Prov. (FR)	1985-95	9	10	10	11
Pesaro (IT)	1985-95	7	9	5	12
Drenthe (NL)	1987-95	9	10	9	7
Osttirol (AUS)	1990-95	3	3	5	5
Keski Suomen L. (FIN)	1985-95	7	5	21	17
<i>Lagging regions</i>					
Lüneburg (GER)	1985-95	8	7	6	7
Fthiotis (GR)	1981-91	3	4	9	8
Zamora (SP)	1985-95	20	22	17	23
Ardennes (FR)	1985-95	14	10	14	11
Nièvre (FR)	1985-95	9	10	10	11
Macerata (IT)	1985-95	4	9	5	12
Groningen (NL)	1987-95	14	10	10	7
Liezen (AUS)	1990-95	4	3	8	5
Mikkelin L. (FIN)	1985-95	5	5	19	17

Source: RUREMPLO project.

### *Final remarks*

From the above discussion of socio-economic development (mainly based on statistical indicators) in the case study regions, it can be seen that the respective groups of leading and lagging case study regions are not homogeneous. They show a wide variation in socio-economic characteristics, except for their position relative to the national average of non-agricultural employment growth: leading case study regions showed an above-average employment performance and lagging case study regions a below-average performance. In the next section, where we focus on more qualitative indicators of the case study regions such as capacity of local actors and networks, it appears that these are more homogeneous in the groups of leading and lagging case study regions.

## **5.4 Case study patterns**

This section deals with the core of this chapter: the construction of case study patterns. This is the second step of the method of pattern-matching. In Chapter 4 we carried out the first step of the method by constructing theory patterns for seven selected theories. In each of these theory patterns, we have also specified how each variable will be operationalized and assessed. According to the method, we should now construct 18 case study patterns for each of the seven theories, resulting in a total of 126 case study patterns. As there appears to be considerable overlap between the variables of the various

theories, we decided to pool all variables from the seven theories together and construct one pattern per case study region. By using the three main components of the field of force of a rural region (Fig. 5.1), the variables have been clustered into local resources, economic activities and actors. As such, the nature of employment dynamics in each case study region becomes more evident. Unless otherwise indicated, the variables in the case study patterns reflect the period 1980-1997.

This section is organized as follows. We start with some reflections on the valuation of variables in the case study patterns in Section 5.4.1. Then, in Sections 5.4.2-5.4.19, we turn to the case study patterns of the 18 RUREMPLO case study regions. Each case study pattern is accompanied by some introductory remarks on main developments in the case study region as well as a map of the region.

### **5.4.1 Valuation of variables**

In this subsection, we discuss how we have handled the difficulty of valuating variables in the construction of case study patterns. The selected theories all make some assumptions about which variables result in employment growth, but they usually do not tell us whether we have to measure this employment growth in absolute terms or whether we have to relate it to the national average or to the average of rural regions, or to another point of reference. The same applies to the independent variables in the theories: for example, with regard to capacity of actors, the theory does not explain against which benchmark it should be compared. This difficulty implies that the researcher has to decide how to measure the various variables. To determine how variables should be measured, we were guided by the assumption that variables may be affected by different contexts. For example, in the discussion on leading and lagging regions in Section 5.2, we have illustrated that the national average is a reasonable yardstick for measuring non-agricultural employment growth. In other cases, when there is evidence that the variable is largely affected by a low density of actors and economic activities, it makes sense to relate the variable to the rural context. Such variables pertain, for example, to agglomeration and networks. Finally, we distinguish variables which are hardly dependent on the context in which they operate, and which can be measured in absolute terms: they exist or they do not. Such variables include among others the presence of rural amenities, raw materials and filières. Fig. 5.6 gives an overview of the point of reference used to measure the variables in the case study patterns. Of course, this is a subjective measurement - although based on our best knowledge of rural regions - and we readily admit that other references can be applied as well. One main implication of this subjectivity is that it affects our matching results: when changing the point of reference of a variable, its value may change in a direction which is expected or not by the theory.

Given these points of reference, we now turn to the way we have attached values to the variables. The majority of the variables had already been valued by the RUREMPLO team, in which the requirements of reliability have been taken into account (see Section 5.2). For the purpose of this study, the valuation of the variables was checked again, and in some cases, we have adjusted the valuation to be compatible with our points of

Figure 5.6 Overview of points of reference for the measurement of variables in the case study patterns

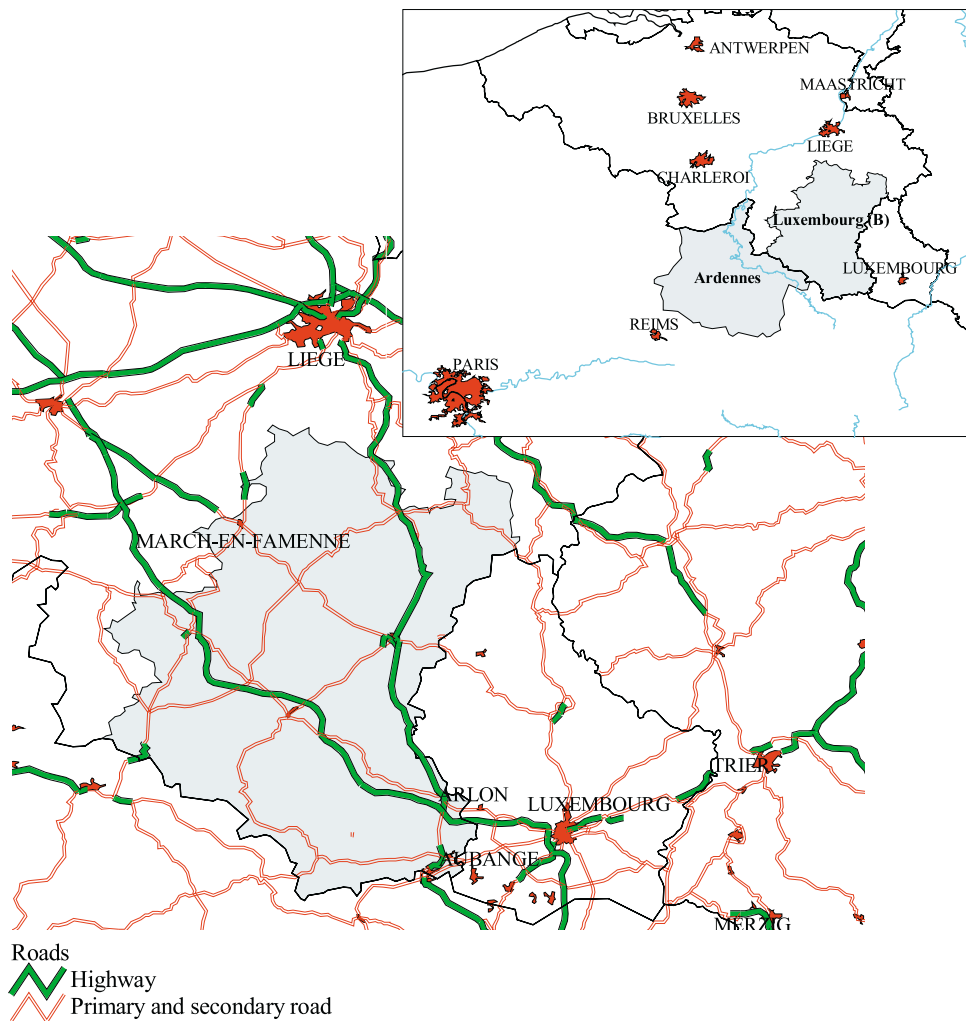
Point of reference for measurement	Variables	
National context (i.e. deviation from the national average)	EA1	Non-agricultural employment growth
Rural context (i.e. deviation from the average of rural regions in the EU)	LR3	Transport infrastructure in the region
	LR4	External transport connections
	LR5	Soft infrastructure
	LR6	Agglomeration
	A1	Capacity of local policy makers
	A2	Capacity of local entrepreneurs
	A3	Capacity of local workers
	A4	Internal networks
	A5	Linkages in networks/institutions
	A6	External networks
	A7	Benefits of external networks
	A9	Initiatives for mobilizing the self-help capacity
Absolute standard	LR1	Rural amenities
	LR2	Local raw materials
	EA2	Valorization of rural amenities and tourist infrastructure
	EA3	Overexploitation of rural amenities
	EA4	Employment growth in tourism
	EA5	Filières
	EA6	Employment growth in the filière
	EA7	Presence of economic activities using local raw materials
	EA8	Employment growth in the production related to the use of local raw materials
	EA9	Presence of economic activities using local knowledge capital
	EA10	Employment growth in the production related to the local knowledge capital
	EA11	Assessment of GDP/capita and its increase
	A8	Assessment of migration balance
	A10	Local synergy of the filières
	A11	Local innovativeness of the filières
A12	Transterritorial networks of the filières	
A13	Exogenous changes	

Figure 5.7 Valuation scheme of variables

++	very strong
+	strong
0	not strong/not weak
-	weak
--	very weak
n.r.	not relevant <sup>6</sup>

reference. On the whole, the RUREMPLO team valued the variables at two benchmarks: in a year in the beginning of the 1980s and in 1997. Although our theories more or less deal with dynamic processes, for convenience sake we have used one value for each variable, which is based on the average of both RUREMPLO values. The value of this variable is supposed to reflect the average situation in the years 1980-1997. For a minor part of the variables, no valuation had been made by the RUREMPLO team, e.g. agglomeration. Chapter 4 already indicated the criteria by which agglomeration is assessed, and by combining these with the points of reference given in Fig. 5.6, we carried out our own valuation. In the event of doubt, the researchers from the case study regions were contacted for final confirmation. Except for a qualitative valuation (i.e. description) of the variables, we have - like the RUREMPLO team - also used signs in our valuation (Fig. 5.7), which facilitate the comparison of the variables among case studies. The following subsections elaborate on the respective case study patterns by applying the above valuation of variables.

Figure 5.8 Case study region of Luxembourg (B)



## 5.4.2 Case study pattern of Luxembourg (B)

The region is located in the southeastern part of Belgium and borders GD Luxembourg. In the northwestern part, which is flat, both agriculture and small scale industries are found. The large central section is characterized by low, rounded mountains covered by forests and extensive grasslands and dotted by tourist sites. The southeastern part is also flat and both agriculture and larger scale industries are found there. This area was the location of the iron and steel industries until their collapse in 1977. During the study period, the provincial authorities successfully applied a territorially based strategy to foster economic and employment development in order to compensate for the lost jobs in the iron and steel industries. A large number of the residents commute to GD Luxembourg.

Figure 5.9 Case study pattern of Luxembourg (B)

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape with forests, rivers, grasslands and hedges, monuments and old houses.
LR3 ++	Transport infrastructure in the region: Well-developed internal road network, which has been improved during the study period. The length of highways has been increased from 7 km in 1980 to over 150 km in 1993, whereas secondary roads have been extended by 30%.
LR4 +	External transport connections: the region is well integrated in the European motorway and railway networks.
LR5 +	Soft infrastructure: There is a small university, which has some links with the regional economy. In addition, there are three upper-level technical and professional schools and a centre for applied research in agricultural and rural issues.
LR6 -	Agglomeration: Although population density in the southern districts is somewhat higher due to the former iron and steel industries, population is rather evenly spread over the region. Some small regional economic centers are Arlon (population 23,000 or 9% of total), Marche-en-Famenne and Aubange (both about 15,000 or 6% of total population).
<i>Economic activities</i>	
EA1 +	Employment growth: During the period 1980/82-1994/5, the region faced a decline in employment in agriculture and construction, and experienced an increase in employment in manufacturing, the branch of trade, hotels and restaurants, the branch of transport, financial services and community services.
EA2 ++	Valorization of rural amenities and tourist infrastructure refers to improvements in tourist accommodations, investments in the creation of entertainment centres and natural parks, and restoration of historical buildings.
EA4 +	Employment increases in tourism.
EA11 0	Assessment of GDP/capita and its increase: In 1980 GDP/capita was below the level in the lagging case study region (96 versus 112 in Ardennes; EU=100) but at the end of the study period GDP/capita was above that in the lagging case study region (101 versus 98). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.

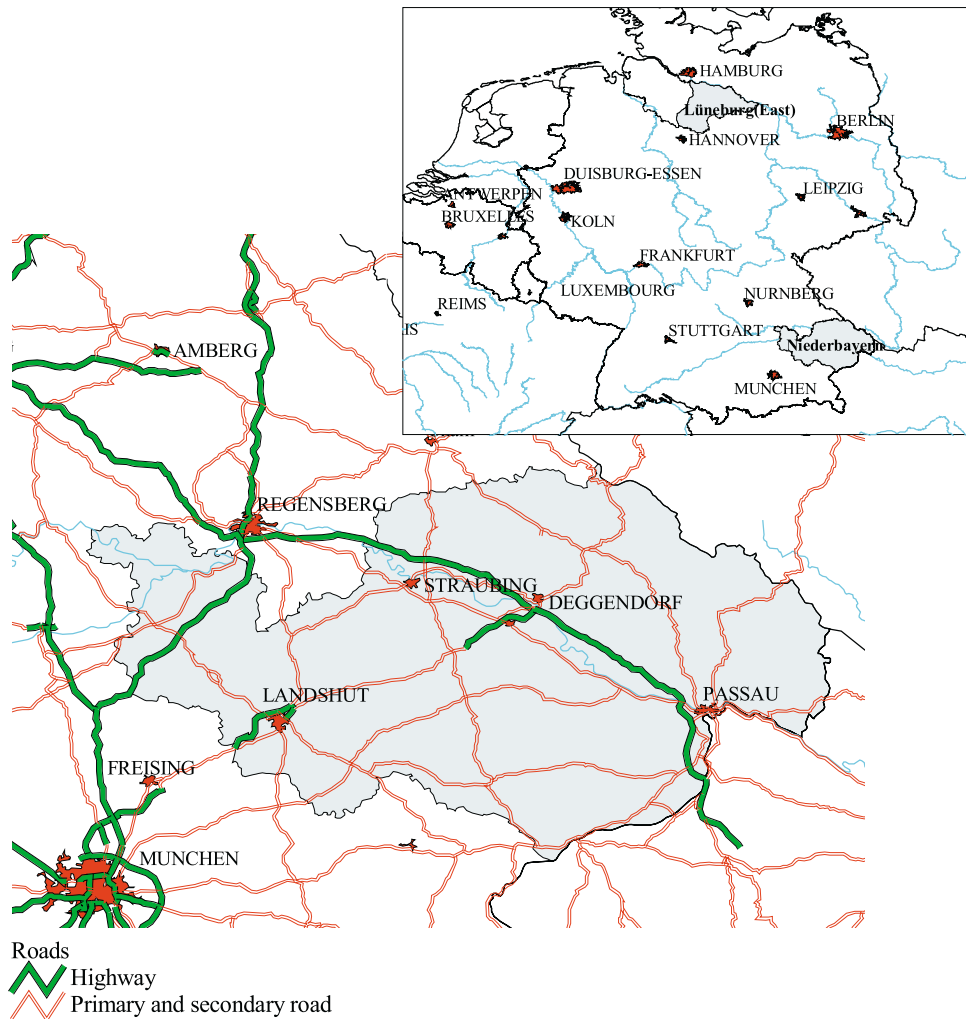
<i>Actors</i>	
A1 ++	Capacity of local policy makers: The region is characterized by strong political and social consensus. Policy makers were able to restore the image of the province and attract substantial public funds and private investments by creating and reviving external political and economic networks.
A2 +	Capacity of local entrepreneurs: They are relatively cautious and risk averting and have a low capacity of innovation. Newcomers often act as innovators.
A3 +	Capacity of local workers: On the whole, their work attitude is good and there is no class struggle tradition.
A4 ++	Internal networks: These are characterized by a high degree of solidarity and easy communication. Politicians, union leaders, managers of public and private enterprises know each other very well and there is much solidarity among them. Institutional networks of the province tend to be strong and efficient. The province has prominent local leaders.
A5 ++	Linkages in networks/institutions: The strong political and social consensus in the region enhances the strength and efficiency of the networks. Policy makers have very good contacts with upper-level authorities and follow a territorial approach. Within the region there is only one municipality syndicate ( <i>IDELUX</i> ), acting as a development agency for all the municipalities, and there is only one association for firms, the <i>Chambre de Commerce et de l'Industrie de Luxembourg Belgie (CCILB)</i> . Recruitment of commuting workers over the border is supported by a formal cooperation between the labour services in GD Luxembourg and the province of Luxembourg (B).
A6 ++	External networks: These are well developed in both the public and in the private sphere. The local authorities (municipalities and province) are able to manage their external networks very well as they negotiate with upper-level authorities on the basis of the already formulated political consensus and carry out a territorial approach.
A7 ++	Benefits of external networks: Local actors were able to attract considerable public funds, which included funds for improvements in the transport system, and private investments to the region. As part of the European Development Pole, they were beneficiary to industrial and commercial zones and investment aid for firms. The region has a positive migration balance.
A8 ++	Assessment of migration balance: The region attracted economically active from congested parts of Belgium. Many of these people commute to GD Luxembourg. The immigration rate in the region is above the Belgian average and has been increasing since the beginning of the 1980s. This positive migration balance contrasts with the emigration balance in the lagging case study region of Ardennes.
A9 ++	Initiatives for mobilizing the self-help capacity: The strong regional identity, social and political consensus, effective coordination and the presence of private and public local leaders contributed to the mobilizing of the self-help capacity. The development agency <i>IDELUX</i> assists firms in investment and matters concerning establishment.

### 5.4.3 Case study pattern of Niederbayern

The region is situated in the southeast of Germany, bordering Austria and the Czech Republic. It consists of a less favoured mountainous part in the east and a more fertile, hilly part west of the Danube Valley. Niederbayern has long been one of the German regions with the lowest GDP per capita, 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 the Bavarian infrastructure policy (e.g. significant improvements in



Figure 5.10 Case study region of Niederbayern



transport and education infrastructure) which was explicitly territorially targeted. The region has a strong regional identity, which finds its expression in the territorial organization of public administration as well as of non-governmental institutions. Regional actors were, thus, able to deliver a strong coherent message in lobbying for investment and support from outside.

Figure 5.11 Case study pattern of Niederbayern

Variable and assessment	Description
	<i>Local resources</i>
LR1 +	Rural amenities: Rich cultural landscape and it contains one of the few German National Parks.

LR3 ++	Transport infrastructure in the region: Remoteness has been a major handicap, in particular in the eastern, mountainous part of the region. However, since the 1970s, transportation infrastructure has been significantly improved (motorways, canal, Intercity train station).
LR4 +	External transport connections: The region is well integrated in the national highway and railway systems.
LR5 +	Soft infrastructure: The university and technical schools are important poles for fostering economic development and technology transfer. Adequate schemes for training on the job exist, set up by the regional chamber of commerce, the labour office and the trade unions.
LR6 +	Agglomeration: There are a number of cities with a population of 40-60,000, which act as regional centres.

#### *Economic activities*

EA1 +	Employment growth: During the period 1980-1990, the region faced a decline in employment in agriculture and construction, and experienced an increase in employment in manufacturing, trade, hotels and restaurants, transport, financial services and community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: Tourist accommodations have expanded.
EA4 +	Employment has increased in tourism.
EA11 ++	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the lagging case study region (1980: 101 versus 93 in Lüneburg and in 1994: 113 versus 95; EU=100). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.

#### *Actors*

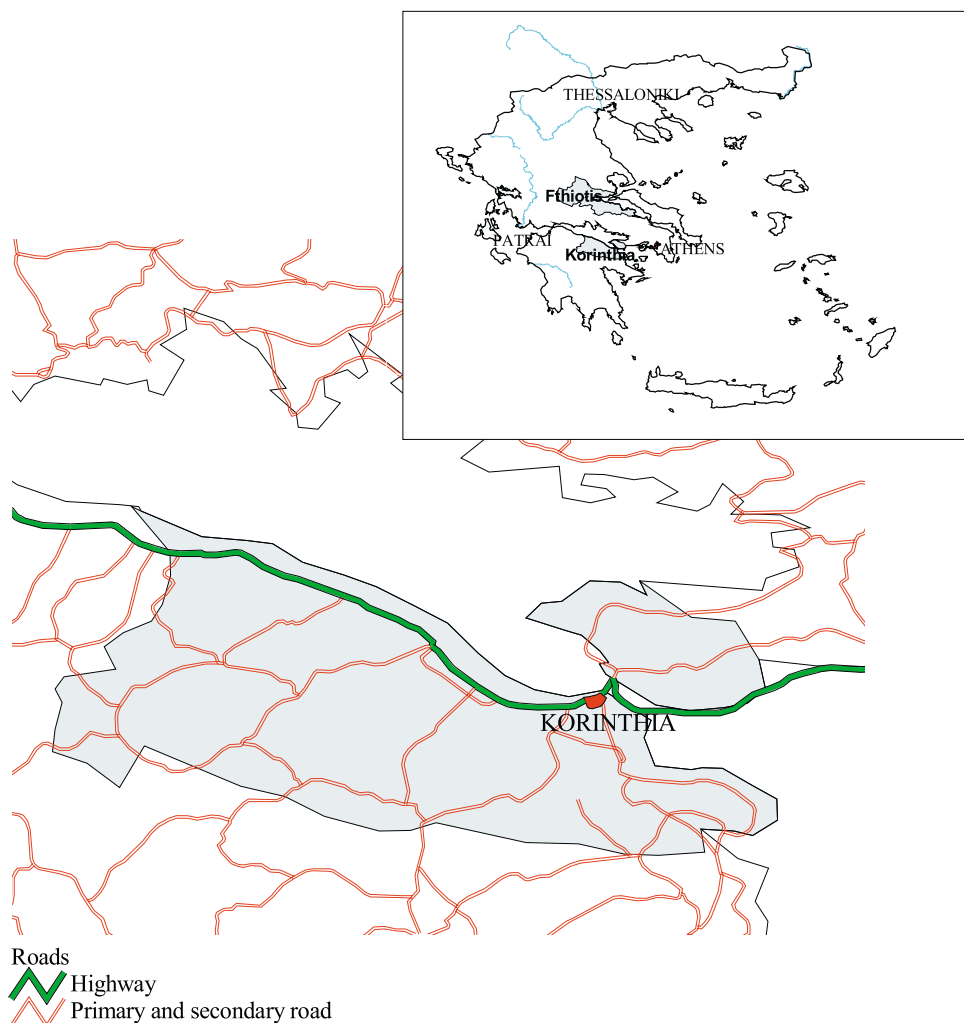
A1 ++	Capacity of local policy makers: The strong regional identity, based on a distinct culture and history, and the common perception of the initial natural, location and developmental disadvantages fostered co-operation and helped turn handicaps into development assets.
A2 ++	Capacity of local entrepreneurs: They are characterized by a strong commitment and innovation capacity.
A3 +	Capacity of local workers: They constitute a reliable workforce stemming from small part-time farms and their willingness to undergo training are seen as strong points.
A4 ++	Internal networks are very strong and are an essential reason for the success of Niederbayern. The common socio-cultural regional identity based on history, religion, and political affiliation is one of the underlying ties. An important network is obviously provided by the Bavarian Christian Social Union (CSU) that has been in power since World War II. The strong local and regional leaders have always been supported by the population.
A5 ++	Linkages in networks/institutions: The strong consensus in the region is also reflected in a territorial organization of public administration and non-governmental institutions. Regional actors operate at the same scale for the same region and are thus able to deliver a strong coherent message. Contacts with upper-level authorities are good, mainly facilitated through contacts with local Members of Parliament.
A6 ++	External networks: The local Members of Parliament created a kind of lobbying association cooperating in the interest of the region. Altogether they have been successful in ensuring strong (regional) policy support for the region and in attracting private investments, tourists etc.
A7 ++	Benefits from external networks concern private investments, public funds, migrants and tourists.
A8 ++	Assessment of 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. This migration balance differs from the emigration balance in the lagging case study region of Lüneburg.

A9	Initiatives for mobilizing the self-help capacity: The strong regional identity contributes to a common view. This forms a major incentive for mobilizing the self-help capacity of the region. In addition, the university is an important pool facilitating technology transfer.
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#### 5.4.4 Case study pattern of Korinthia

The region is located in the northeastern part of the Peloponnissos at a distance of 85-175 km from Athens. The region consists of a mountainous part in the south-west and a combination of hilly and level land in the north-east. The level area covers about 12% of the total area; nearly 60% of the population lives there. Until the 1960s, the region had a predominantly agricultural economy with some industrial activities like processing agricultural products and basic consumer goods (clothing, shoes, furniture etc.) for local

Figure 5.12 Case study region of Korinthia



markets. The turning point came in the late 1960s/early 1970s, due to spill-over effects of Athens' industrial development, and industrial decentralization and regional policies. Industrial activities mainly concentrated in level areas and simultaneously, tourism developed along the coast. These new employment opportunities encouraged exodus from agriculture. In the 1980s, employment growth in Korinthia was above the national average and its industrial and services sectors were able to absorb the agricultural exodus.

Figure 5.13 Case study pattern of Korinthia

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Sandy coasts, mountain areas covered with forests and endowed with natural biodiversity, villages with traditional architecture, archaeological sites and mineral water springs.
LR2 +	Raw materials comprise mineral water springs.
LR3 0/+	Transport infrastructure in the region: Compared to other Greek rural regions, the region has a well-developed road system in level areas; however, road infrastructure in the mountainous areas suffers from inadequacies.
LR4 +	External transport connections: The region is adequately integrated with the rest of Greece by the Thessaloniki-Athens-Patras highway. Two other main regional routes connecting Athens with the southern part of the Peloponnisos region cross Korinthia as well.
LR5 -	Soft infrastructure: There are no universities or technical colleges in the region. Absence of training structures is related to its proximity to Athens.
LR6 0	Agglomeration: Korinthos (population about 27,500), located in the level part of the region, is the regional economic centre. Nearly one-fifth of the population lives here.
<i>Economic activities</i>	
EA1 +	Employment growth: During the period 1981-1991, the region faced a decline in employment in agriculture and manufacturing, and experienced an increase in employment in construction, trade, hotels and restaurants, transport, financial services and community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: The number of accommodations is increasing.
EA4 +	Employment in tourism has increased.
EA7 +	Economic activities using local raw materials: Mineral water springs are exploited by several bottling companies.
EA8 +	Employment in the production of local raw materials has increased.
EA11 ++	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the lagging case study region (1980: 66 versus 54 in Fthiotis and in 1991: 57 versus 42; EU=100). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.
<i>Actors</i>	
A1 --	Capacity of local policy makers: Cooperation among policy makers is weak and constrained by inadequately developed mechanisms for planning, formulating, implementing and monitoring of programmes.

A2 +	Capacity of local entrepreneurs: 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. However, there is hardly any technological innovation.
A3 +	Capacity of local workers: Their attitude is very flexible due to the prevailing small size of business and a flexible labour market.
A4 --	Internal networks are hampered by little interaction among local actors and lack of cooperation among sectors. Their effects on the employment process are relatively marginal.
A5 --	Linkages in networks/institutions: Internal networks function mostly on an individual basis and are not effectively linked. Linkages between local and national policy makers are hampered by the historical lack of decentralization in Greece. However, this is changing progressively and more power is transferred to regional authorities. Local policy makers have managed to benefit from this shift.
A6 -	External networks are not optimal. External actors are mainly national authorities, importers of agricultural and industrial products produced in the region, external entrepreneurs investing in the region and tour operators.
A7 +	Benefits from external networks involve public funds, export possibilities, private investments and a large number of tourists. The region has a positive migration balance.
A8 ++	Assessment of migration balance: The positive migration balance consists of economically active, attracted by job opportunities in industries, tourism and other services. Illegal immigrants provide a sizeable part of seasonal labour. The immigration rate exceeds that in the lagging case study region of Fthiotis.
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.

#### 5.4.5 Case study pattern of Albacete

The region is situated in the southeast of the Central Iberian Plateau, at the Madrid-Alicante axis. The land area is predominantly made up of plains, while the southwestern part is mountainous. Until the mid-1970s, the economy of Albacete was predominantly agrarian with some traditional industries and outmigration to other regions. The turning point came after the fall of Franco (1975) and the economic crisis of the late 1970s/early 1980s. This crisis made outmigration difficult. The new Spanish constitution (1978) initiated a process of regionalization with the creation of 17 Autonomous Communities. Due to the increase in public expenditure, which resulted among others in the construction of highways, the establishment of a university and the implementation of a welfare system, and due to the almost complete replacement of policy makers at all levels, a process of vigorous economic growth has taken place in Albacete.

Figure 5.14 Case study pattern of Albacete

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: landscapes, springs, lakes and mountains in a part of the region.
LR2 +	Raw materials: aquifers (groundwater), mineral water, dolomites and special clay.

Figure 5.15 Case study region of Albacete

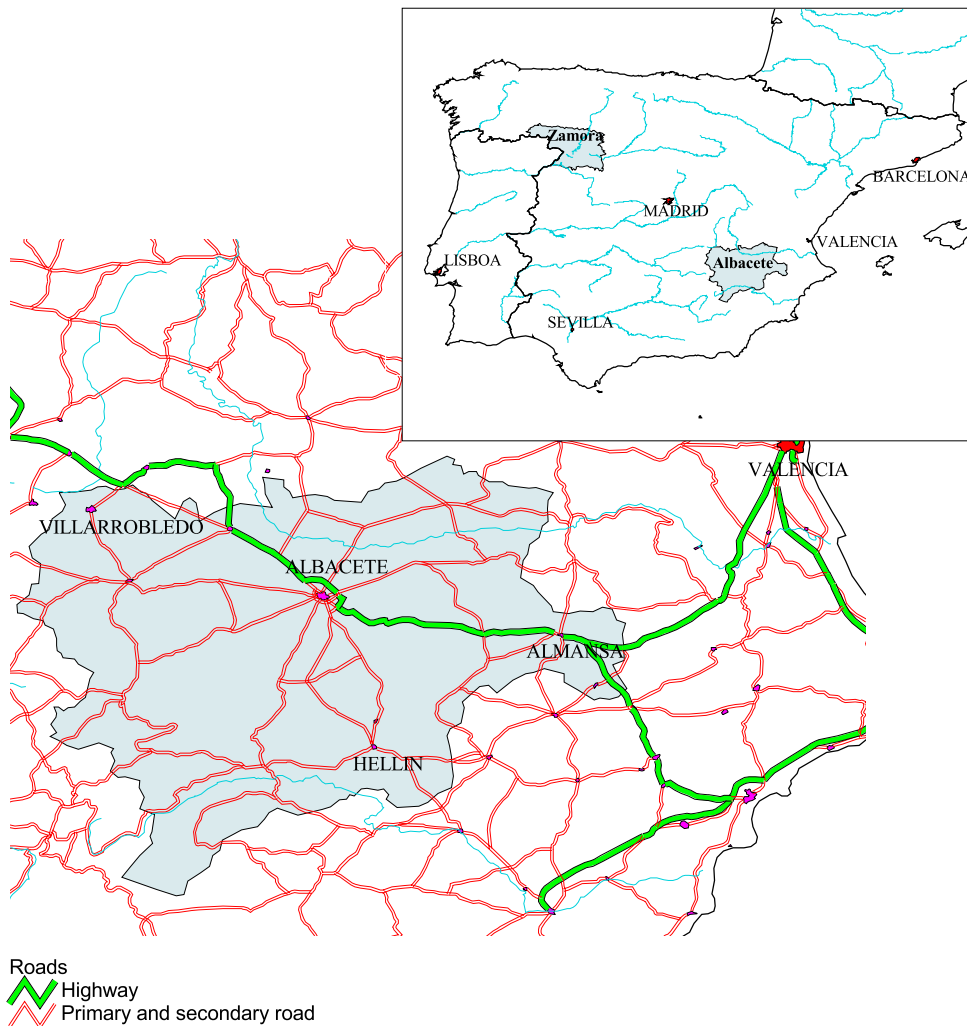


Figure 5.14 Case study pattern of Albacete (continued)

LR3 ++	Transport infrastructure in the region: The road transportation network has been markedly improved during the period under study. Whereas the region had no highways in 1980, the length of highways was over 150 km in 1995; the length of secondary roads has been doubled in the same period to about 3400 km. There is a well-developed railway system connecting the main cities.
LR4 +	External transport connections: Albacete is located on the transportation corridor between Madrid and the main cities like Valencia and Alicante on the southeast coast. Both the highway (A31) and the railway connecting Madrid and Alicante run across the region. The highway was constructed during the late 1980s and early 1990s.
LR5 +	Soft infrastructure: The university acts as a main catalyst for economic dynamics. Several research centres are established in the region. The number of training courses for the labour force has been increased.

LR6 ++	Agglomeration: The capital city of Albacete (population about 130,000) is the regional economic centre with many economic activities and a knowledge infrastructure built up by its university. Over one third of the region's population lives here.
<i>Economic activities</i>	
EA1 +	Employment growth: During the period 1983-1993, the region faced a decline in employment in agriculture and mining, and experienced an increase in employment in manufacturing, construction, trade, hotels and restaurants, transport, financial services and community services.
EA2 0/+	Valorization of rural amenities and tourist infrastructure: The tourist sector is quite new, but has potentials due to the increasing interest in non-coastal tourism in Spain. The number of accommodations is limited, but it is increasing.
EA4 +	Employment in the tourist sector has increased.
EA7 +	Economic activities using local raw materials: These activities refer to agriculture and indirectly to the agrofood industry, paints industry and ceramic production.
EA8 +	Employment growth in the production related to local raw materials: Irrigation by using aquifers opens prospects for new agricultural products. Although this development can not prevent a further decline of employment in the agricultural sector, it had positive impacts on the agrofood sector. Dolomites affected employment in the paints industry around La Roda and the special clay has been used in the construction sector in Ceramics Collado, Almansa.
EA5 ++	There are two filières in the region: a knifemaking filière round the city of Albacete produces sports knives and decorative knives, which are mainly exported to the rest of Spain; and a footwear filière in Almansa produces cowboy boots and quality shoes for the US market. These filières use local knowledge capital.
EA6 +	Employment has increased in the filières during the study period.
EA11 --	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the lagging case study region (1980: 45 versus 47 in Zamora and in 1994: 46 versus 51; EU=100). The increase in GDP/capita in the leading region was below that in the lagging region in the period under study.
<i>Actors</i>	
A1 ++	Capacity of local policy makers: As a result of the replacement of policy makers, a generation of new policy makers has emerged, who are young and well trained, and able to implement effective socio-economic development policies in the region.
A2 ++	Capacity of local entrepreneurs: The restructuring of the traditional industries resulted in new small enterprises, which are able to compete at the local and global market. Several market niches were created.
A3 +	Capacity of local workers: They possess a good attitude to work, and are prepared to work hard.
A4 ++	Internal networks: There are strong formal and informal internal networks (industrial districts, cooperatives and entrepreneurial organizations, LEADER I and II groups). The region has local leaders.
A5 ++	Linkages in networks/institutions: The Albacete Pact (1989-1995) operated as a thick ensemble of all relevant actors inside the region with policy makers at higher tiers. This Pact was used to guide and coordinate the development process.
A6 ++	External networks refer to market relations (mainly exports of footwear and wine), relations with policy makers and relations in tourism. The already mentioned Albacete Pact operated as an important mixed internal/external network.
A7 ++	Benefits of external networks: The Albacete Pact attracted a lot of public funds and private investments. The region has a positive migration balance.

A8 ++	Assessment of migration balance: The positive migration balance is constituted by the economically active, both from other regions and local return migrants. The positive migration balance contrasts with the negative balance in the lagging case study region of Zamora.
A9 ++	Initiatives for mobilizing the self-help capacity: The well-functioning networks continuously support the self-help capacity. The university provides R&D activities and has created a number of research and technical support centres. By using the European Social Fund, many training initiatives were introduced.
A10 ++	Local synergy of the filières: The filières are characterized by a dense network of small and medium sized firms, which facilitates the flow of labour, skills and knowledge among firms.
A11 ++	Local innovativeness of the filières: They manage to find niches and new specializations. The number of new firms exceeds the number of closed down firms.
A12 ++	Transterritorial networks of filières are mainly used for providing the filière with market information, and less for technological and organizational information. This market information is essential for timely response to the demands of the external markets.
A13 +	Assessment of exogenous changes: The establishment of the new Spanish constitution (1978) initiated a period of employment growth.

#### 5.4.6 Case study pattern of Alpes de Haute Provence

Alpes de Haute Provence is an alpine region located in southeast France, with high mountains in the east and lower mountains and plateaus in the rest of the region. Population is scattered in small villages and towns, with some concentration in the Durance Valley. Since the 1960s, the economy directly transformed from an agrarian economy towards a service-oriented economy dominated by tourism and its related services. Initially the focus was on winter sports with the establishment of several ski resorts; in a later stage, summer tourism based on natural and cultural resources was also developed. During the period under study, population increase was attributable to natural increase and immigration. Employment has increased as well.

Figure 5.16 Case study pattern of Alpes de Haute Provence

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Natural landscape, mountains, canyons, lakes, natural parks and historical villages, which attract tourists both in summer and winter, and the 'Provence image' (culture, gastronomy, folklore etc.).
LR3 0/+	Transport infrastructure in the region: The road network in the valleys is well developed; however, infrastructure in high mountain areas is insufficiently developed. The typically long and winding mountain roads make driving around a time consuming affair. The railway system consists of slow, secondary routes.
LR4 0/+	External transport connections: There is a motorway linking Aix to Marseille along the Durance Valley since 1990; highway links with other main directions like Grenoble, Lyon and Nice are absent.



Figure 5.17 Case study region of Alpes de Haute Provence

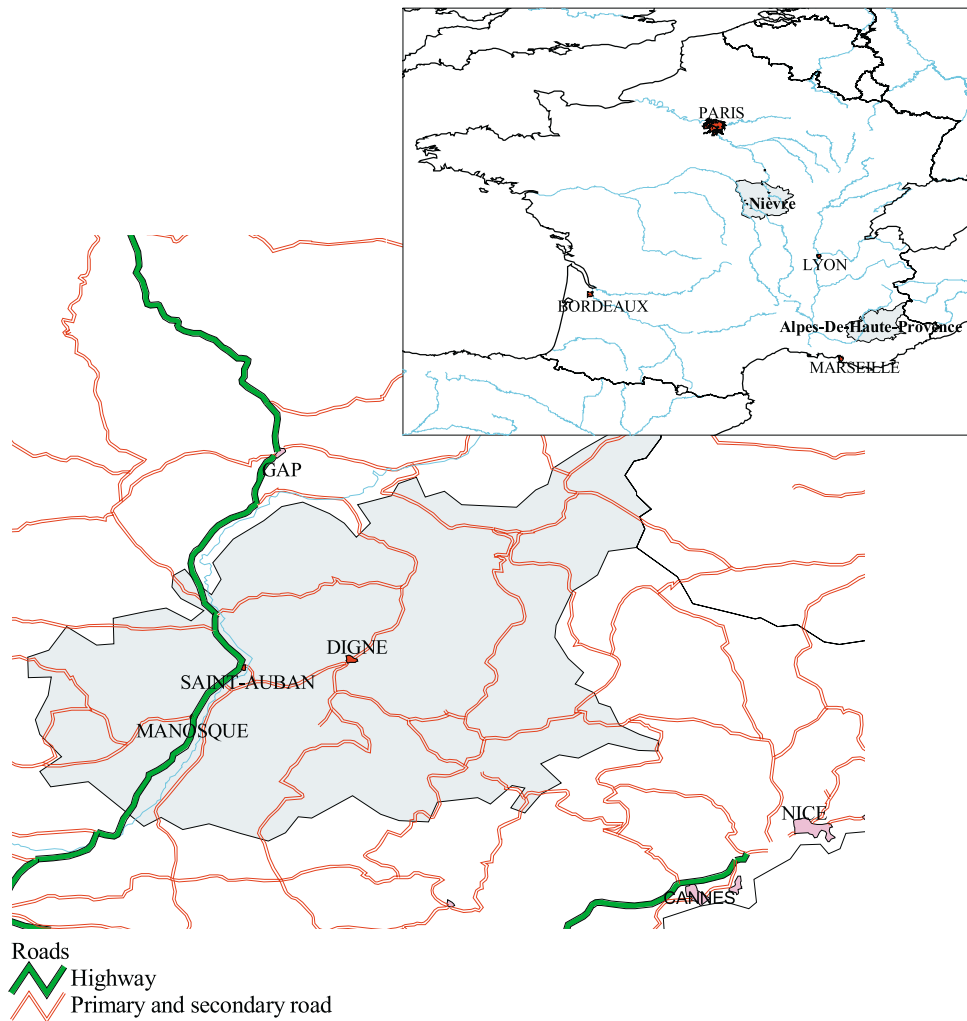


Figure 5.16 Case study pattern of Alpes de Haute Provence (continued)

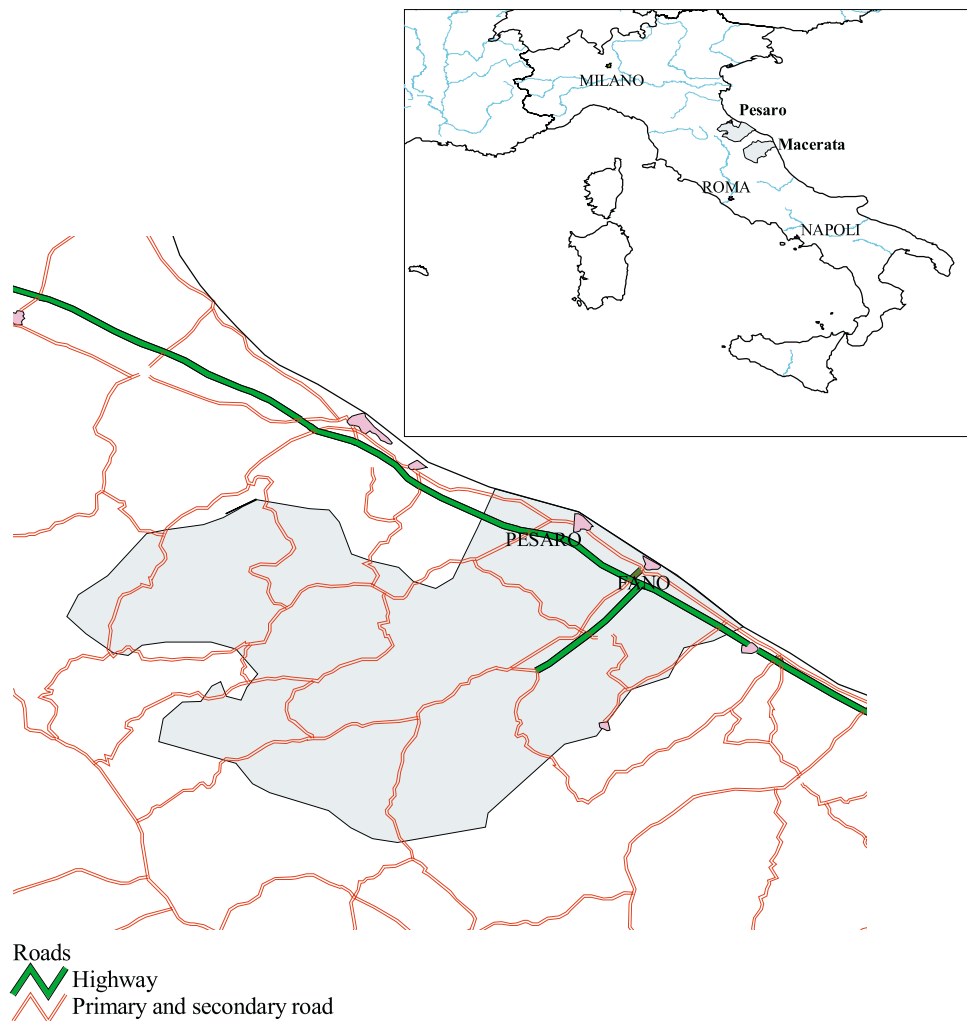
LR5 0	Soft infrastructure: There are no universities and research centres; however, the region benefits from the knowledge transfer of universities and research centres in the neighbouring regions.
LR6 -	Agglomeration: Manosque in the Durance Valley is the most important industrial centre (population of 19,000; 14% of total); Digne les Bains is the administrative centre (16,000; 12% of total).
<i>Economic activities</i>	
EA1 +	Employment growth: During the period 1981-1992, the region faced a decline in employment in agriculture and construction, and experienced an increase in employment in manufacturing, trade, hotels and restaurants, transport, financial services and community services.

EA2 ++	Valorization of rural amenities and tourist infrastructure: The tourist sector employs about 15% of the total labour force. Winter tourism started in the 1960s. In the 1980s, the economic situation of ski resorts worsened as a result of stagnating tourist numbers. With support from the local policy makers, ski resorts were better managed and more investments were poured into the resorts. Moreover, the diversification of summer activities was emphasized, e.g. aerial and water sports, hiking and horse riding. Tourist accommodations, both in hotels and lodgings in secondary homes, are continuously upgraded in order to meet the demands of tourists.
EA4 +	Employment has increased in the tourist sector.
EA11 0	Assessment of GDP/capita and its increase: Although GDP/capita was both in the beginning and the end of the study period above that in the lagging case study region (1986: 106 versus 90 in Nièvre and in 1993: 93 versus 87; EU=100), the increase in the former was, however, less than in the latter in the period under study.
<i>Actors</i>	
A1 ++	Capacity of local policy makers: On the whole, they are able to identify needs in the region and to deliver policies according to these needs. They have good contacts with the upper-level authorities.
A2 +	Capacity of local entrepreneurs: They tend to be innovative in searching for new initiatives and products as well as new ways of marketing of products. However, the technical and managerial knowledge is less developed.
A3 +	Capacity of local workers: They usually work hard, have no tradition of social struggle, and can easily be trained.
A4 +	Internal networks function well, but a certain degree of competition remains between towns, subregions and tourist resorts.
A5 +	Linkages in networks/institutions reflect the average situation in France: the state representatives work together with the local administrative layers and EU representatives, entrepreneurs are grouped in the Chamber of Commerce and workers are united in trade unions. Local policy makers have good contacts with higher-level authorities.
A6 +	External networks are used to obtain financial support from the national and EU funds for regional development, to lobby for the interests of the tourist sector in the mountainous areas, and for relations with multinational firms in order to protect employment in the subsidiary business in the region.
A7 +	Benefits from external networks pertain to public funds, affiliates of multinational firms and improvements in tourist accommodations. The region has a positive migration balance.
A8 ++	Assessment of migration balance: The positive migration balance is essentially made up of highly educated people, who set up enterprises, unemployed people looking for a cheap place to live, and retirees. The positive migration balance contrasts with the negative balance in the lagging case study region of Nièvre.
A9 ++	Initiatives for mobilizing the self-help capacity: The properly functioning networks continuously support the self-help capacity.

#### 5.4.7 Case study pattern of Pesaro

The region is located in central Italy by the Adriatic Sea. It consists of a rather flat coastal area in the east and a hilly and mountainous area in the Apennines in the west. The late 1950s marked a period of intense industrialization characterized by two main features: high specialization in the production of furniture and territorial concentration. This gave rise to the so-called furniture district, whose manufacturing reached a mature

Figure 5.18 Case study region of Pesaro



phase in the 1980s. It stood up to increasing international competition and rationalized production, which ensured that employment in the district did not decrease. Policy makers played a marginal role in this development process.

Figure 5.19 Case study pattern of Pesaro

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape in the inner rural areas and attractive beaches in the summer season.

LR3 0/+	Transport infrastructure endowment in the region is fairly developed in the coastal area with a highway connection: however, it is insufficiently developed in the inner areas. During the study period, some improvements in the internal roadwork have been made.
LR4 +	External road transport connections: the highway along the east coast in Italy crosses the region. This allows a good connection with Ancona, the main transfer centre in central-east Italy.
LR5 0/+	Soft infrastructure: Although the region has a well-known university, it is hardly integrated in regional economic activities. The performance of the regional school system is high relative to the Italian average, but it does not match the demand for unskilled labour in the regional economy.
LR6 +	Agglomeration: Economic activities are concentrated along the furniture district in the coastal areas. The two main cities of Pesaro and Fano have a population of respectively 80,000 and 49,000.

#### *Economic activities*

EA1 +	Employment growth: During the period 1981-1991, the region faced a decline in employment in agriculture and construction, and experienced an increase in employment in manufacturing, trade, hotels and restaurants, transport, financial services and community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: Tourist investments are predominantly oriented to the coastal areas and are still underdeveloped in the inner areas, but in recent years tourist activities in rural areas are emerging.
EA4 -	Employment growth in tourism: Due to a reorientation in the tourist sector towards bigger firms and higher quality services in the last decade, the traditional tourist structures based on small scale and family labour have progressively disappeared. As such, there has been a decrease in employment.
EA5 ++	Filières: There is a wood/furniture filière in the coastal area of Pesaro, which specializes in design furniture, including furniture with glass, which find an outlet all over the world. This filière uses local knowledge capital.
EA6 +	Employment increased in the filière during the study period, as a result of a small decrease in the number of employed and a dynamic increase in the number of new (small) firms.
EA11 0	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the lagging case study region (1980: 81 versus 87 in Macerata and in 1990: 105 versus 109; EU=100). However, the increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.

#### *Actors*

A1 --	Capacity of local policy makers: Their role in the development process was marginal. On the whole, they were unable to implement appropriate policies and were handicapped by weak administrative management of policies.
A2 ++	Capacity of local entrepreneurs: The recent industrial growth is largely attributable to the local entrepreneurial attitude, as entrepreneurs were able to reorganize their industrial activities in order to adjust to the changing market conditions and global competition. The local entrepreneurial system is characterized by an informal diffusion of knowledge and skills.
A3 +	Capacity of local workers: They are flexible, creative and highly motivated.
A4 +	Internal networks: The informal internal networks are highly important: they facilitate the diffusion of knowledge within and between firms, commercial relations within the industrial district, and involvement of heterogeneous labour from the traditional family. Conversely, formal and institutionalized networks are not so relevant.

A5 -	Linkages in networks/institutions: The informal networks of small firms are strong and form a thick tissue, but formal networks of policy makers and links with institutions are lacking.
A6 +	External networks mainly comprise market relations between local firms and national or international firms.
A7 +	Benefits from external networks are derived from access at international markets, in which the region is a competitive supplier of furniture. The region has a positive migration balance.
A8 +	Assessment of migration balance: The positive migration balance is attributable to incoming mainly North African male workers in low-tech and low-wage industrial activities. On the other hand, there is outmigration of young, high-educated people. The immigration rate is about the same level as in the lagging case study region of Macerata.
A9 +	Initiatives concerning the mobilization of the self-help capacity mainly involve the informal networks of firms.
A10 ++	Local synergy of the filière: The filière is characterized by a dense network of small and medium sized firms, which enable the flow of labour, skills and knowledge among firms.
A11 ++	Local innovativeness of the filière: The filière manages to find niches and new specializations, which is facilitated by the complexity of furniture production. The number of new firms exceeds the number of closed down firms.
A12 ++	Transterritorial networks of filières are mainly used for providing the filière with market information, and less for technological and organizational information. This market information is essential for timely response to external market conditions.

#### 5.4.8 Case study pattern of Drenthe

Drenthe is a flat area in the northern part of the Netherlands. Industrialization started after World War II, stimulated by industrialization policies of the national government, which were aimed at the creation of jobs in the peripheral parts of the country and to relieve the congestion of economic activities in the western part of the country. During the period under study both employment in the industry and the services sector increased. Policy makers applied a strategy towards concentration of economic activities in well-defined zones around Meppel/Hoogeveen/Coevorden/Emmen and Assen/Groningen; outside these zones economic activities were discouraged. The relatively high density of enterprises inside these zones stimulates the interaction among enterprises and attracts other enterprises, thus leaving space for other functions (i.e. housing, recreation, agriculture and nature) in other parts of the province. Drenthe enjoys spill-over benefits from the city of Groningen, the main economic centre in the north of the Netherlands located a few kilometres from the Drenthe border. Many companies look for opportunities to establish themselves close to Groningen, and often settle in the north of Drenthe. This is a main factor in the creation of employment in the northern part of Drenthe. Many workers with jobs in the city of Groningen prefer to live in the northern part of Drenthe because of its attractive housing circumstances.

Due to their peripheral location in the Netherlands, Drenthe shares many similarities with its neighbouring region Groningen, which we have selected as a lagging region in the RUREMPLO project. It should be noted that the labels 'leading' for Drenthe and 'lagging' for Groningen only apply to employment growth in the 1980s; if, for example, the period 1984-1996 is taken into account, total employment growth in Groningen exceeds that in Drenthe<sup>7</sup>. This shows that 'leading' and 'lagging' is not a permanent attribute, but may vary depending on the period considered.

Figure 5.20 Case study region of Drenthe

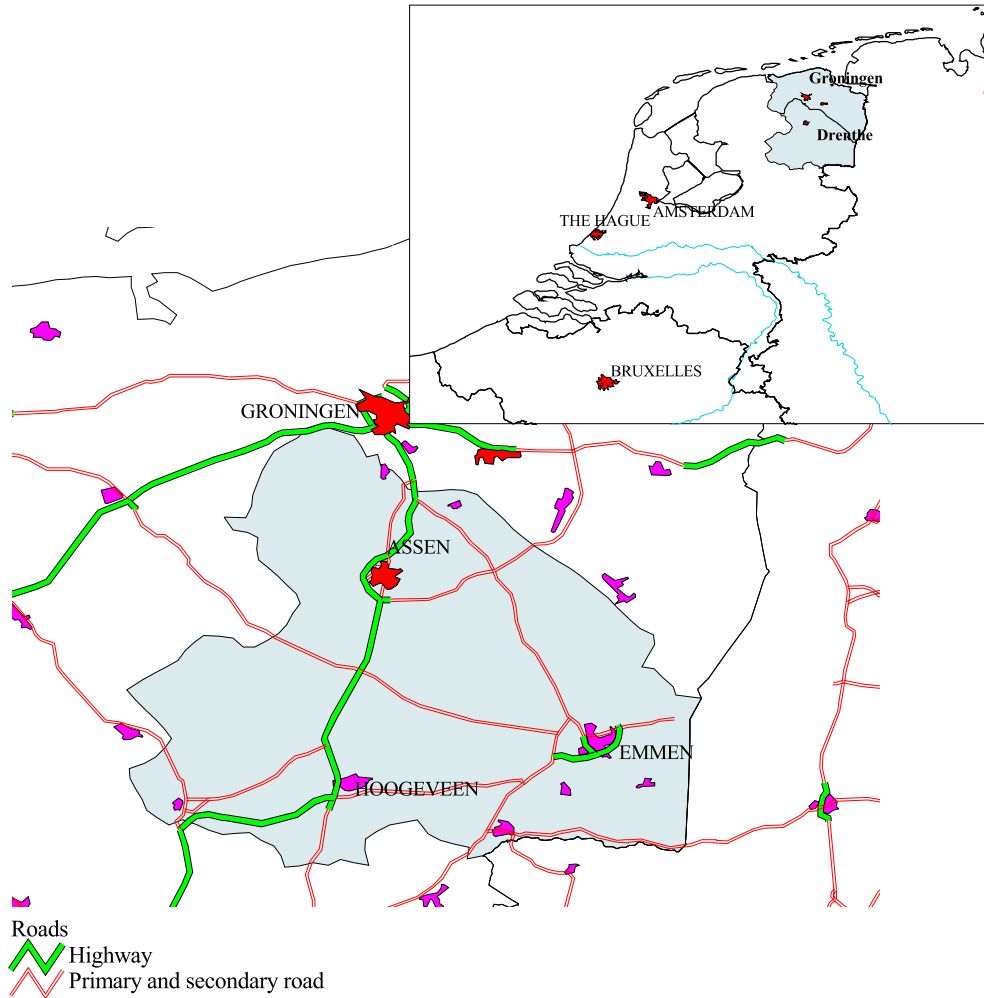


Figure 5.21 Case study pattern of Drenthe

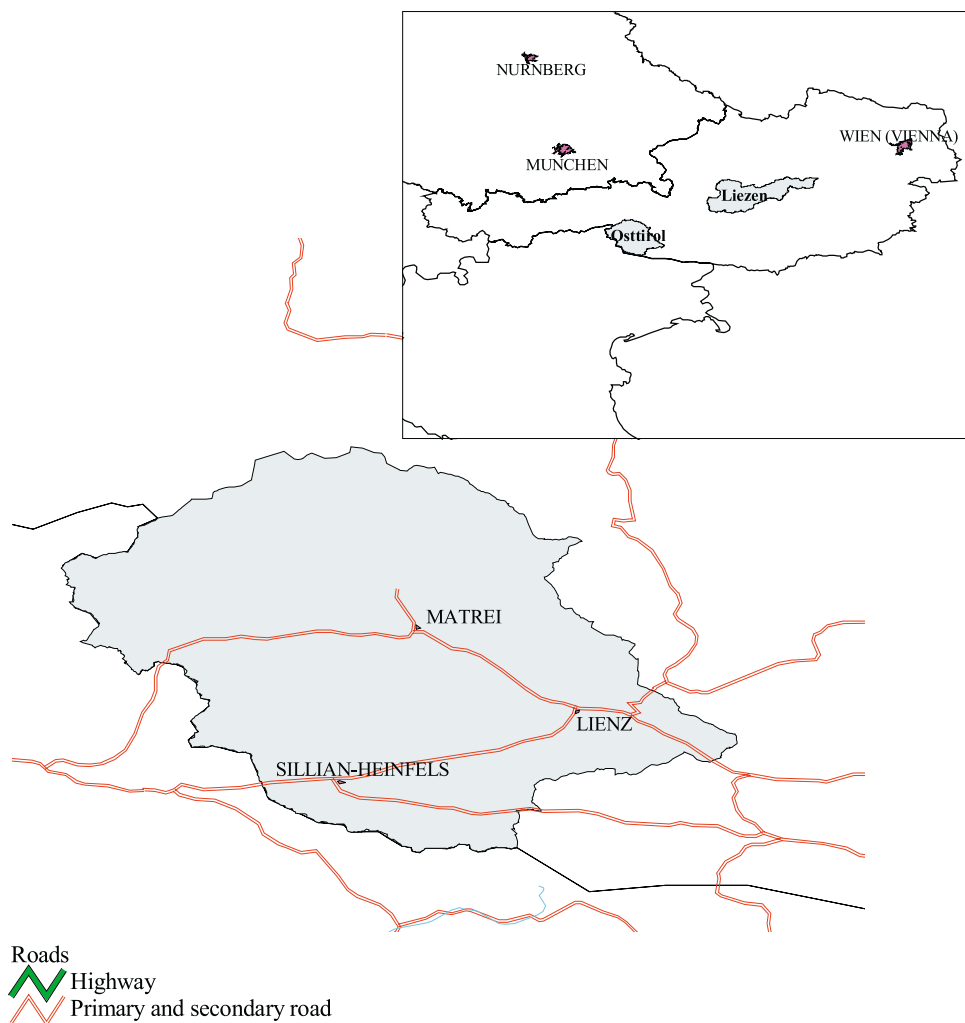
Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape with forests, peats, moors, brooks, 'esdorp' landscape and giant graves.
LR3 +	Transport infrastructure in the region: There is a well-developed highway running north-south; the east-west connection (N37) is less developed.
LR4 +	External transport connections: The region is well integrated in the national transport system of highways and railways.
LR5 +	Soft infrastructure: Education at all levels is available in the region, except at university level. However, the region benefits from the university in neighbouring Groningen. The region has several small research centres.

LR6 +	Agglomeration: There are two economic zones, in which economic activities are concentrated: the Assen-Groningen zone and the Meppel-Hoogeveen-Coevorden-Emmen zone. Emmen is the biggest city with a population of about 94,000; Assen and Hoogeveen have respectively about 53,000 and 47,000.
<i>Economic activities</i>	
EA1 +	Employment growth: During the period 1984-1996, the region faced a decline in employment in agriculture, and experienced an increase in employment in manufacturing, construction, trade, hotels and restaurants, transport, financial services and community services.
EA2 0/+	Valorization of rural amenities and tourist infrastructure: Considerable efforts are directed at the extensive bicycle track network, nature conservation, reconstruction of the original flows of brooks like the Aa, and at establishing national parks. On the whole, the quality of tourist accommodation is quite low and the networks in the tourist sector suffer from a lack of cooperation.
EA4 +	Employment in tourism has increased.
EA11 0	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the lagging case study region (1980: 97 versus 117 in Groningen and in 1994: 87 versus 102 (both years excluding gas revenues); EU=100). The increase in GDP/capita in the leading region slightly exceeded that in the lagging region in the period under study.
<i>Actors</i>	
A1 +	Capacity of local policy makers: They are able to implement policies according to the needs and priorities of the region within a broader development perspective. Recently they improved cooperation with the neighbouring provinces.
A2 +	Capacity of local entrepreneurs: They are often risk-averting and cautious. Their capacity to innovate is rather low as they tend to wait and hold back. Often newcomers act as innovators.
A3 +	Capacity of local workers: Their attitude towards work is good.
A4 +	Internal networks are characterized 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, there is little incentive to innovate. Local leaders are often of non-Drenthe origin.
A5 +	Linkages in networks/institutions: Networks of municipalities and firms sprung into action in order to lobby for the widening of N37 secondary road. Recently contacts with the two neighbouring provinces of Groningen and Friesland were intensified.
A6 0	External networks: Most of the external actors in the networks are located in the neighbouring provinces; contacts are less frequent with other external actors. There are some (multi) national firms in the region.
A7 +	Benefits from external networks comprise public funds, private investments and a large number of tourists. The migration balance is positive.
A8 ++	Assessment of migration balance: The migration balance is positive for those aged over 40 years (mainly retirees) and negative for the younger age groups (mainly the high-educated). In the 1980s, the positive migration balance contrasted with that in the lagging case study region of Groningen: in the 1990s, it was at a higher level than the slightly positive migration balance in Groningen.
A9 +	Initiatives for mobilizing the self-help capacity are taken by newcomers, who often act as local leaders, the development agency NOM which assists entrepreneurs in investment and establishment matters, and other networks.

### 5.4.9 Case study pattern of Osttirol

Osttirol is located in the southwest of Austria (bordering Italy) and it is part of the province of Tyrol. Due to the alpine location, settlement is more or less confined to the main valleys: the basin of Lienz in the southeast, Sillian Heinfels in the southwest and Matrei in the north of the region. The basin of Lienz is the regional centre with a share of just less than half of the regional population and over 60% of regional employment. Until the construction of the Felbertauern road in 1968, Osttirol was quite isolated from the rest of the country and its economy was predominantly agrarian. Since then, industrialization by both large firms and small and medium-sized firms has taken place, with increasing employment in the industrial and services sectors. Local politicians played an important role in attracting new firms from outside and showed their readiness to cooperate with firms. Active communities created suitable conditions for industrial development (industrial zones with necessary infrastructure) and attracted firms with offers of cheap

Figure 5.22 Case study region of Osttirol





land and cheap connection to energy, water and canalization, and generous support in the start-up period. Besides, firms were also attracted by the well-educated labour force with medium-level technical skills and keenness for further education and permanent training. Another advantage of the labour force in Osttirol was its relatively low labour costs.

Figure 5.23 Case study pattern of Osttirol

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: The beautiful landscape with mountains, extensive forests and alpine pastures is an important asset. In 1991, about one-quarter of the area of the region was included in the 'Hohe Tauern' national park.
LR2 +	Raw materials consist of forests.
LR3 0/+	Transport infrastructure in the region: The road network consists of secondary roads, which have improved since the early 1980s. Despite the absence of highways, the road infrastructure satisfies the needs of the region. The southern part of the region is connected to the railway network.
LR4 -	External transport connections: The Felbertauern road, constructed in 1968, is the main secondary road connection with the rest of the country. There is also a secondary road connection with Italy and the region is integrated into the national railway system.
LR5 0/+	Soft infrastructure: School infrastructure is well developed, including several technical schools. Hence the regional labour force is well educated and highly appreciated by firms. The region has no university and research centres.
LR6 0	Agglomeration: Lienz, located in a wide basin, is the main economic centre, with 63% of the total employment and 48% of the total population (about 23,000 ).
<i>Economic activities</i>	
EA1 +	Employment growth: During the period 1981-1991, the region faced a decline in employment in agriculture, the branch of electricity and gas, and the branch of transport, and experienced an increase in employment in manufacturing, construction, the branch of trade, hotels and restaurants, financial services and community services.
EA2 ++	Valorization of rural amenities and tourist infrastructure: Osttirol offers a tourism concept of an alternative, less high-tech infrastructure, aiming at a different group of tourists than the massive tourism in Northern Tyrol. Tourist infrastructure is well developed, consisting of trekking trails, a network of bicycle paths, and skiing and climbing facilities. Tourist service providers are organized in a regional network, with a common advertising office, which is incorporated in the national tourist network. A network of agrotourism is linked to this network as well. The quality of accommodations has substantially been improved, and supply provided by professionally run establishments has increased at the expense of the private.
EA4 0	Employment growth in tourism: This remained rather stable and amounted to about 10% of the regional labour force.
EA7 +	Economic activities using local raw materials: These are related to wood processing.
EA8 +	Employment growth in production related to the use of local raw materials: Many jobs have been created in wood manufacturing, especially in SME. Although employment in sawmills decreased, the production of furniture required many additional employees.

EA11 0	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the lagging case study region (1980: 68 versus 81 in Liezen and in 1992: 80 versus 82; EU=100). However, the increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.
<i>Actors</i>	
A1 +	Capacity of local policy makers: They were able to create suitable conditions for industrial development (industrial zones with appropriate infrastructure), showed a cooperative behaviour towards firms, and stimulated the creation of education facilities. There are good contacts between local policy makers and higher level authorities.
A2 0	Capacity of local entrepreneurs: Entrepreneurship is less developed than elsewhere in Austria, partly due to the risk-averting and conservative attitude, and partly due to the long period of isolation. In addition, the innovation capacity is low.
A3 +	Capacity of local workers: They have a positive attitude to education and work hard.
A4 +	Internal networks: Due to the low population density, social ties are strong and people generally know each other and are kept informed about what goes on in the close-knit neighbourhood; hence many arrangements take place on the basis of personal relations.
A5 +	Linkages in networks/institutions: Policy makers, firms and interest groups cooperate closely with each other.
A6 0	External networks: External contacts of enterprises and policy makers exist, but these contacts are hampered by the remoteness of the region.
A7 +	Benefits from external networks are concerned with public funds and private investments in firms and tourist projects. The region has a negative migration balance.
A8 --	Assessment of migration balance: The negative migration balance is mainly due to problems encountered in daily commuting and lack of job opportunities for the high-educated. The rate of outmigration exceeded that in the lagging region of Liezen.
A9 +	Initiatives for mobilizing the self-help capacity: The internal networks continuously support the self-help capacity.

#### 5.4.10 Case study pattern of Keski Suomen Lääni

This is a flat region with many lakes and forests in central Finland. About 50% of the population lives in the capital area around Jyväskylä. This is a dynamic regional centre with a university, which enjoys a high reputation among students, boosts the R&D infrastructure and supports the upkeep of the industrial know-how base of the region. On average, some 97.5% of Finland is covered with scattered settlements, and only 2.5% is occupied by cities or villages with densely built-up areas. During the last decades, rural population has tended to migrate from the outskirts of provinces to their capital areas and from all regions to the Helsinki region in the south. Because of this outmigration from rural areas, the story of forces behind employment dynamics in the Finnish rural regions is to a great extent a story about settlement structures and policies, and not so much about actors and networks. In this context, the capital city of Jyväskylä is one of the main strengths of the region, as it attracts both people and economic activities. Population in the region increased in the 1980s and 1990s. At the beginning of the study period, the share of employment in agriculture was 20%, and 34% and 47% respectively in industries and services. As a consequence of the severe economic recession, which struck the whole country in the early 1990s, employment in all branches declined, except for community services. External networks are important for the region, not only with regard to export-oriented wood, paper and machinery industries, but also with regard to the national redistribution policy.

Figure 5.24 Case study region of Keski Suomen Lääni

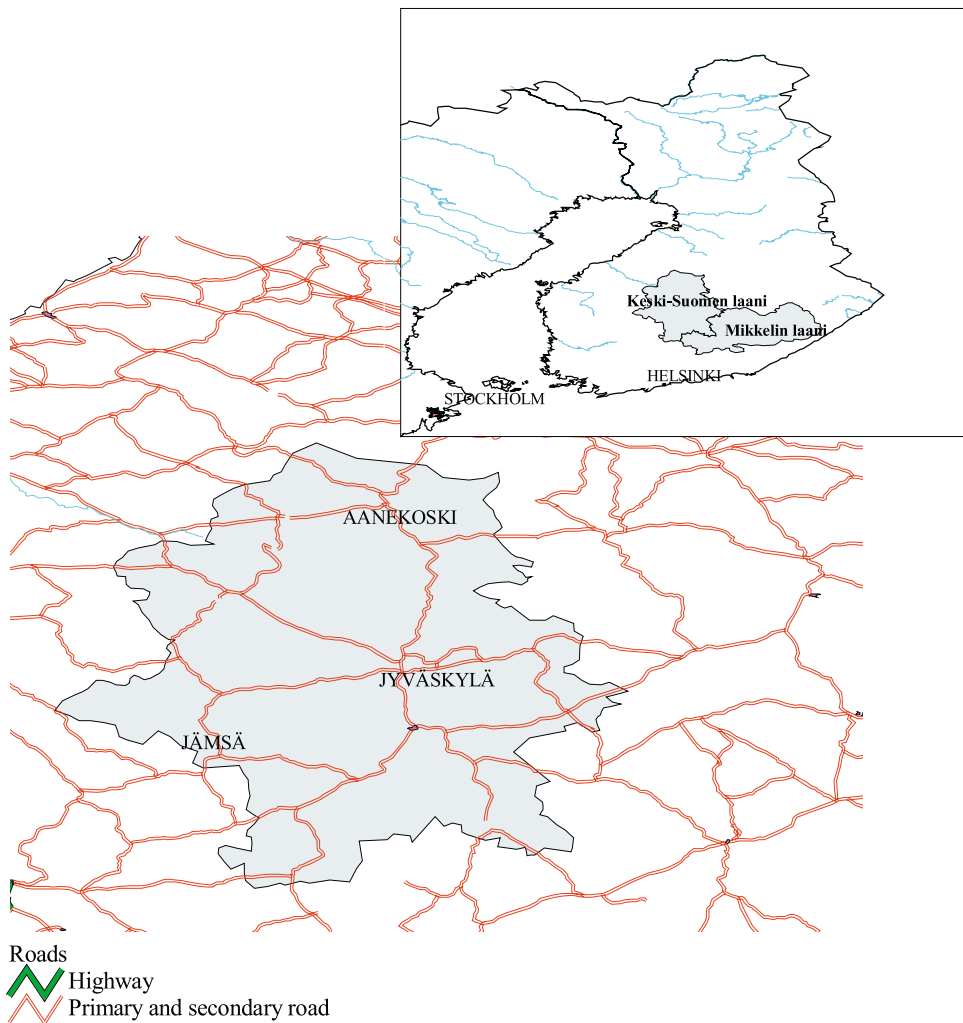


Figure 5.25 Case study pattern of Keski Suomen Lääni

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities comprise forests, lakes and landscape.
LR2 +	Raw materials are derived from the forests for the wood and paper industry.
LR3 0/+	Transport infrastructure in the region: The secondary road and railway network is well developed.
LR4 0	External transport connections: Road connections with the rest of Finland consist of secondary roads. The region is integrated into the national railway network and has a main regional airport.

LR5 +	Soft infrastructure: The region has a popular university, which fuels regional economic development by knowledge transfer. There are many research institutes and schools which offer secondary and tertiary education.
LR6 ++	Agglomeration: The area around the province capital Jyväskylä is the main economic centre: about 50% of population (about 125,000) lives here and Jyväskylä also accounts for about 50% of GVA in the region.

#### *Economic activities*

EA1 +	Employment growth: During the period 1980-1994, the region faced a decline in employment in agriculture, manufacturing, construction, trade, hotels and restaurants, transport, and financial services, and experienced an increase in employment in community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: During the study period tourist accommodation expanded. The numerous summer cottages attract a relatively high number of tourists.
EA4 +	Employment growth in tourism has increased.
EA7 +	Economic activities using local raw materials: The forest cluster accounts for about 8% of total employment.
EA8 -	Employment in the wood industry decreased due to a rapid increase in labour productivity.
EA11 ++	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the lagging case study region (1980: 90 versus 83 in Mikkelin Lääni and in 1995: 86 versus 72; EU=100). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.

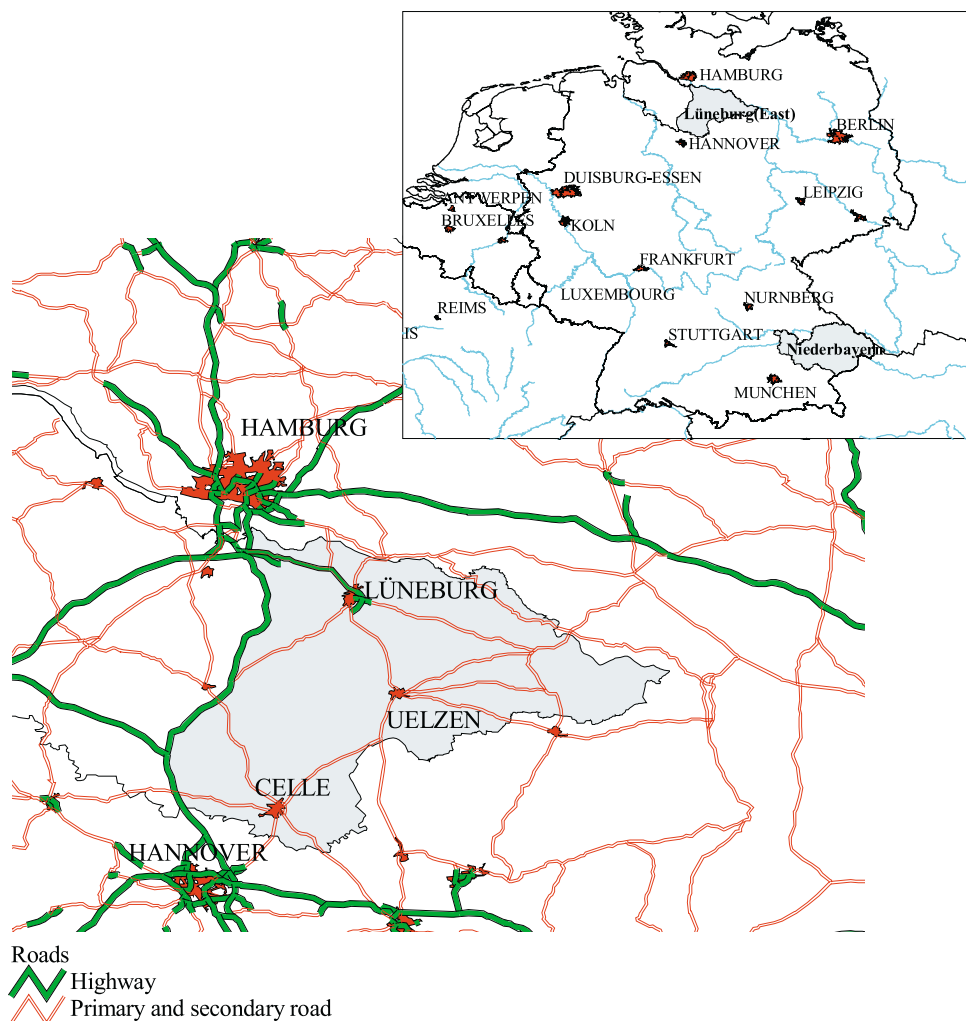
#### *Actors*

A1 +	Capacity of policy makers: The capacity of the local actors is not significantly different compared to the general situation in the country. Policy makers are successful in ensuring that the region remains attractive to students, entrepreneurs and workers.
A2 +	Capacity of local entrepreneurs: They are able to identify and get involved in branches with favourable prospects.
A3 +	Capacity of local workers: Their attitude towards work is good.
A4 +	Internal networks are well developed within sectors, especially in the central part of the region around the capital of Jyväskylä; inter-sectoral networks are less developed.
A5 +	Linkages in networks/institutions: These are especially well developed around Jyväskylä, for instance, the linkages between the university and main industries (i.e. paper and paper machines). These linkages are important for the maintenance of (inter)national competitiveness.
A6 +	External networks of policy makers are important, as many preconditions for operation in the region are national in 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.
A7 +	Benefits from external networks concern mainly public funds, redistributed in the scope of the 'great regional policy', and revenues from exports. The region has a positive migration balance.
A8 ++	Assessment of migration balance: The positive migration balance consists of immigration of young people (students) and outmigration of older, economically active. This positive migration balance contrasts with the negative migration balance in the lagging case study region of Mikkelin Lääni.
A9 +	Initiatives for mobilizing the self-help capacity: The properly functioning networks continuously support the self-help capacity. The university plays a main role in supporting the knowledge infrastructure in the region.

### 5.4.11 Case study pattern of Lüneburg

The region is located in the northeastern part of Germany. The case study area covers only the eastern part of the Regierungsbezirk Lüneburg. Parts of the landscape are flat, while other parts are hilly. The undulating landscape is covered by generally poor, sandy soils (historically overgrazed forests). It is dominated by the Lüneburg Heath (nature reserve) and expansive forest areas. Until 1989 it was handicapped by its location at the 'iron curtain', which discouraged major new investments. Light industrialization, food processing etc. were concentrated mainly in the small centres, none of which reached a critical mass to induce a major take-off. As a result of the German unification, the region experienced a boom in construction employment in the first half of the 1990s. However, many parts of the region today still have no access to major infrastructure networks. The territorial perimeter of the relevant public and private institutions involved in the regional/rural development process does not match the same territory. This hampers the

Figure 5.26 Case study region of Lüneburg



creation of a commonly shared development vision. As a consequence, policy makers at *kreise* (district) level tend to compete with each other. The region could not benefit from delocalization of the neighbouring urban centre of Hamburg, since the latter vigorously retains investments within its urban perimeter.

Figure 5.27 Case study pattern of Lüneburg

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: The region is known for its nature reserve. Some of the cities like Lüneburg and Celle have a rich history and cultural heritage.
LR3 0/+	Transport infrastructure in the region: Until 1989 the region was handicapped by its location at the 'iron curtain'. The road network consists only of secondary roads.
LR4 0	External transport connections: The region is not integrated in the national highway system, as the main east-west connections of Hamburg-Berlin and Hannover-Berlin do not cross the region. The only link with the national highway system runs between the city of Lüneburg and Hamburg.
LR5 -	Soft infrastructure: Although the region has a university, it has hardly any impact on employment dynamics, as it is not integrated with the regional economy and industrial activities.
LR6 +	Agglomeration: Celle (population of about 74,000) and Lüneburg (about 65,000) act as regional centres, each with a share of over 10% of the regional population <sup>8</sup> .
<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1980-1990, the region faced a decline in employment in agriculture, mining, manufacturing, construction, trade, hotels and restaurants, and transport, and experienced an increase in employment in financial services and community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: Tourist accommodations and investments in the nature reserve have been expanded. There are some initiatives to support the creation of a new regional image.
EA4 +	Employment has increased in tourism.
EA11 --	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the leading case study region (1980: 93 versus 101 in Niederbayern and in 1994: 95 versus 113; EU=100). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.
<i>Actors</i>	
A1 --	Capacity of local policy makers: They lack a coherent vision on the region. Policy makers at municipality ( <i>kreise</i> ) level tend to compete rather than cooperate with respect to economic development and attracting investments.
A2 -	Capacity of local entrepreneurs: The main deficiency is not primarily the capacity of entrepreneurs, but the lack of an stimulating entrepreneurial climate, based on a regional identity and vision. The 'comparatively' peripheral location fosters a rather pessimistic attitude.
A3 +	Capacity of local workers: Their attitude towards work can be characterized as good.

A4 --	Internal networks: 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.
A5 --	Linkages in networks/institutions are hardly developed, hampered by the heterogeneity of the various parts within the region.
A6 --	External networks: There is no orientation towards outside partners.
A7 -	Benefits from external networks pertain to public funds from national and EU authorities. The region can hardly benefit from decentralization tendencies, as Hamburg, the main economic centre in the neighbourhood, strives to retain investments within its own urban perimeter.
A8 --	Assessment of migration balance: The negative migration balance in the 1980s is mainly made up of economically active. This contrasts with the positive migration balance in the leading case study region of Niederbayern.
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.

#### 5.4.12 Case study pattern of Fthiotis

The region is located northwest of Athens, at a distance of approximately 180-300 km. It is a hilly and mountainous region with a central valley along the Sperhis River, which runs from west to east and widens as it approaches the sea. The level area covers about one-fifth of the total area and over half of the regional population lives there. Until the early 1970s, it was a predominantly agricultural economy with significant levels of disguised unemployment and a relatively high outmigration; industrial activities consisted of processing agricultural products and basic consumer goods for local markets. From the early 1970s, the region experienced a process of economic restructuring due to spill-over effects of Athens' industrial development, and due to industrial decentralization and regional development policies. Industrial activities like food processing, textiles, mineral resources and metal industries are mainly concentrated along the main highway axis that connects Athens and Thessaloniki. In addition to these industrial activities, tourism has developed in the coastal area. In the 1980s, the non-agricultural sectors did not manage to absorb the relatively large agricultural exodus, as employment in industries also declined. So the region experienced a decline in employment during the period under study.

Figure 5.28 Case study pattern of Fthiotis

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape, seashores, mountainous areas, cultural heritage, historical sites, a national protected forest and hot springs.
LR2 +	Raw materials: Mineral resources such as ferronickel, bauxite and chromium.

Figure 5.29 Case study region of Fthiotis

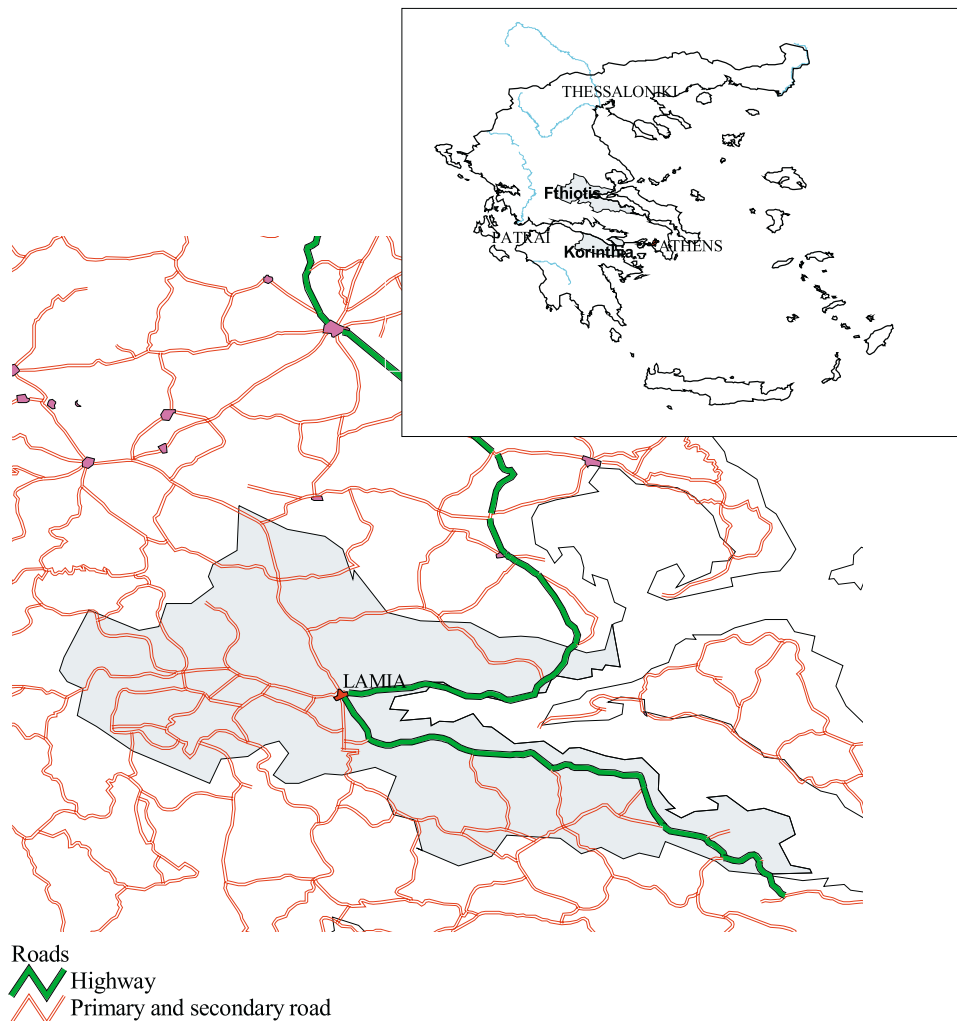


Figure 5.28 Case study pattern of Fthiotis (continued)

LR3 0/+	Transport infrastructure in the region: Compared to other Greek rural regions, the region has an average system of secondary roads and highways in level areas; however road infrastructure in the mountainous areas is plagued by inadequacies. Supported by the EU structural policies, major improvements in the road network have been made.
LR4 +	External transport connections: The region is connected with the rest of Greece by the Thessaloniki-Athens highway. Significant improvements in this highway have been undertaken, thereby reducing travel time to Athens. The railway line, that connects Athens with Thessaloniki and continues to Europe, crosses the region.
LR5 -	Soft infrastructure: There is no university and only one technical college. It is commonly felt that the number of technical schools should be increased in order to relieve bottlenecks in the skill match of demand and supply of labour.
LR6 +	Agglomeration: Lamia (population of about 44,000) is the regional economic centre. About one-quarter of the population lives there.



<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1981-1991, the region faced a decline in employment in agriculture, mining, manufacturing and construction, and experienced an increase in employment in the branch of trade, hotels and restaurants, financial services and community services.
EA2 -	Valorization of rural amenities and tourist infrastructure: Tourist activities started in the 1960s and expanded throughout the 1970s. Later on, the region was unable to face competition posed by other Greek regions, and the number of tourists declined. Lack of a tourist strategy concerning advertising, upgrading of accommodations and services rendered were the main reasons behind this stagnation.
EA4 +	Employment in tourism has increased.
EA7 +	Economic activities using local raw materials: The minerals are processed in the mineral industry.
EA8 -	Employment in the processing of local raw materials has declined.
EA11 --	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the leading case study region (1980: 54 versus 66 in Korinthia and in 1991: 42 versus 57; EU=100). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.
<i>Actors</i>	
A1 --	Capacity of local policy makers: The capacity to formulate strategies and effective policies is rather weak. Further constraints are inherent in the centralized administrative system and decision making in the country. However, this situation is improving. On average, local actors have a low ability to perceive and adapt to changing conditions.
A2 -	Capacity of local entrepreneurs: There is no tradition of entrepreneurship, and this constrains initiatives from entrepreneurs. Most large manufacturing companies originate from outside the region.
A3 +	Capacity of local workers: They have satisfactory skills, but there is room for improvement.
A4 --	Internal networks are hampered by little interaction among local actors and lack of cooperation among sectors. Their effects on the employment process are relatively marginal.
A5 --	Linkages in networks/institutions: Internal networks function mostly on an individual basis and are not effectively linked. Linkages between local and national policy makers are hampered by the historical lack of decentralization in Greece. However, this is changing progressively and more power is transferred to regional authorities.
A6 --	External networks: On the whole, the interaction of internal and external actors is not very efficient. External networks mainly comprise national and regional authorities and exporting-importing networks (cotton, tobacco, olives, textiles, minerals and processed food).
A7 +	Benefits from external networks are related to public funds and the integration of Fthiotis' economy into international markets. The region has a moderate positive migration balance.
A8 0	Assessment of migration balance: The moderate positive migration balance is the result of the return of retirees and the in-movement of the younger urban population mainly to the region's urban centre Lamia. The immigration rate is below that in the leading case study region of Korinthia.
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.

### 5.4.13 Case study pattern of Zamora

The region is a deep rural area located in the northwestern part of Spain, at the Portuguese border. The eastern part of the region is flat and in the west, the landscape is more mountainous. Till the 1980s the economy was predominantly agrarian: in 1980 nearly half of the labour force was employed in agriculture; in 1995 this share was reduced to a quarter. However, the industry and services sectors did not manage to absorb the agricultural exodus, resulting in continuous outmigration, population decline and progressive ageing of the population. The province's geographic isolation and socio-political marginality exacerbate this process. During the period under study, Zamora has remained cut off from mainstream development processes. Hence a traditional society is still in place, in which (conservative) farmers have retained their elite position and a policy of seeking assistance rather than development is firmly institutionalized.

Figure 5.30 Case study region of Zamora

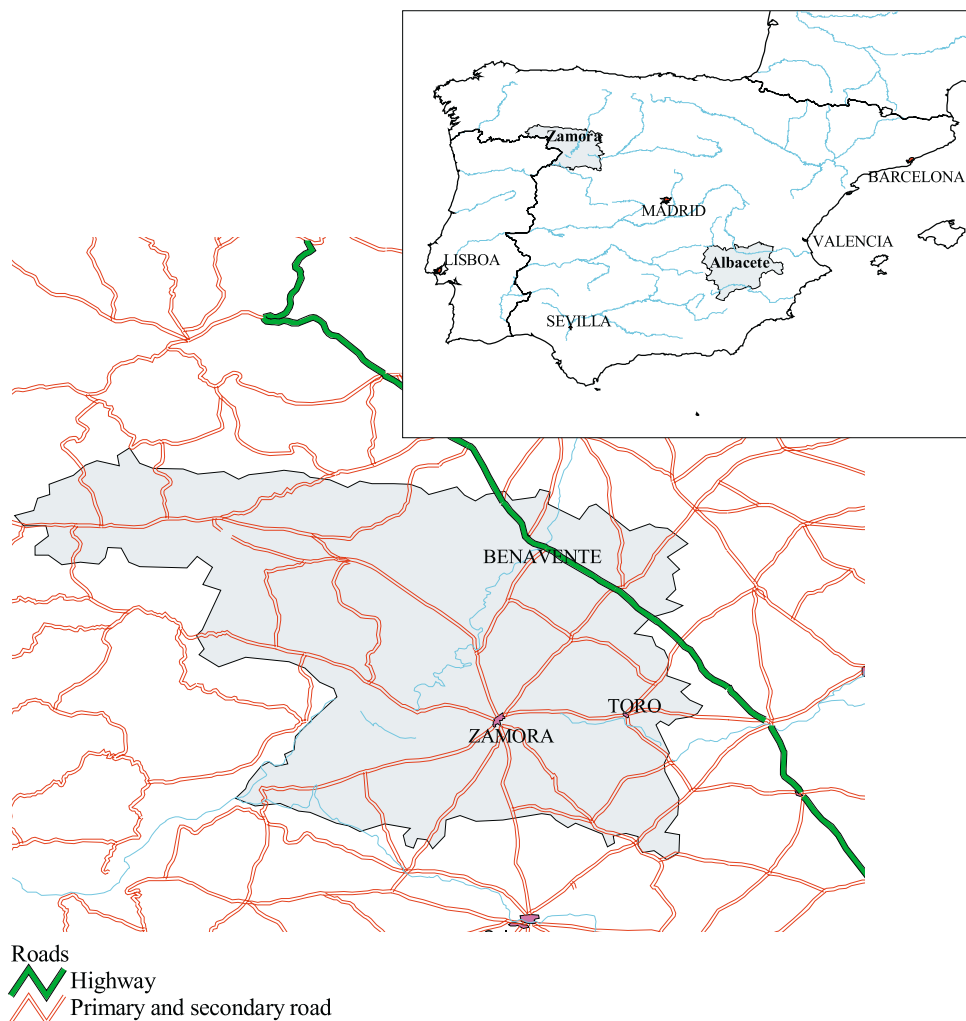


Figure 5.31 Case study pattern of Zamora

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Historical and cultural heritage (castles, dovecotes, etc.) as well as a number of natural parks.
LR2 +	Raw materials: Hydroelectric power, granite, slate, clay and limestone.
LR3 0/+	Transport infrastructure in the region: The road transportation network has been markedly improved during the period under study. Whereas the region had no highways in 1980, the length of highways had been extended to 50 km in 1995; the length of secondary roads has been increased in the same period by 60% to about 4,000 km. Roads at the Portuguese border are still in a bad condition. The railway infrastructure is of a low quality.
LR4 0	External transport connections: The Madrid-Galicia highway, which was constructed in the early 1990s, crosses the northeastern part of the region. Benavente is the only city located on this axis. The east-west connection between Valladolid and Portugal is, despite improvements in recent years, still a secondary connection. The railway connection between Castilla y Leon to Galicia, which crosses Zamora, is in a poor state.
LR5 0	Soft infrastructure: The primary and secondary school infrastructure is well developed. The university is small and has only a few faculties and there are no research centres.
LR6 +	Agglomeration: The capital city Zamora acts as the regional economic centre. Its population of 66,000 is equivalent to nearly one-third of the region's population.
<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1983-1993, the region faced a decline in employment in agriculture and experienced an increase in employment in manufacturing, construction, trade, hotels and restaurants, and community services.
EA2 0/+	Valorization of rural amenities and tourist infrastructure: Tourism is hardly of any importance, except for the Sanabria Lake. To date, the potentials of the natural areas and the dovecotes in the region have been discovered and, on a small scale, new tourist accommodation has been constructed.
EA4 +	Employment in tourism has increased.
EA7 +	Economic activities using local raw materials: These pertain to hydropower-electricity, slate extraction and granite processing.
EA8 0	Employment growth in the production using local raw materials: Employment in the exploitation of hydropower has dropped to less than 40 jobs in Zamora. The headquarters of the hydroelectric enterprise is in Bilbao, and most staff and employees are located there. Recently, slate extraction has intensified. It is mainly used for construction purposes and in the granite sector.
EA11 ++	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the leading case study region (1980: 47 versus 45 in Albacete and in 1994: 51 versus 46; EU=100). The increase in GDP/capita in the leading region was below that in the lagging region in the period under study.
<i>Actors</i>	
A1 --	Capacity of local policy makers: Often policy makers are old conservative farmers, who tend to personalize their political activities and are dictatorial in their approach. Policy makers have a local vision on events.

A2 --	Capacity of local entrepreneurs: Due to the lack of industrial tradition, the group of entrepreneurs is small. Entrepreneurs have a limited horizon, which matches the pessimistic economic climate in the region, and are mainly oriented towards the local market. They are not action-oriented, preferring to leave everything in the hands of the public administration and there is insufficient cooperation among entrepreneurs, exceptions notwithstanding.
A3 -	Capacity of local workers: Migration is common 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.
A4 --	Internal networks are characterized by a low degree of cooperation and difficult communication. Some constraints in developing dynamic networks are related to the conservative attitude of policy makers and the low density of actors.
A5 -	Linkages between networks and institutions are inadequately developed.
A6 --	External networks: The external networks of policy makers are poorly developed due to the marginal position of the region in the regional (Castilla y Leon) and the national context and due to lack of local leaders from Zamora. External market relations are hardly important because of the limited number of export-oriented activities.
A7 -	Benefits of external networks: Policy makers were slow in attracting public funds, and apply mainly for income transfers and public service improvements, rather than for projects which generate employment. The region has a negative migration balance.
A8 --	Assessment of migration balance: The negative migration balance consists of an outflow of economically active to other Spanish regions and a smaller inflow of retired (mainly return) migrants. This migration balance contrasts with the positive migration balance in the leading case study region of Albacete
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study, except for the two LEADER II groups.
A13 -	Assessment of exogenous changes: The establishment of the new Spanish constitution (1978) constituted an impulse for economic expansion in the leading case study region of Albacete. Although Zamora experienced the same impulse, it did not result in a cumulative process of economic growth there.

#### 5.4.14 Case study pattern of Les Ardennes

The region is located in the northeastern part of France. It consists of a mountainous area covered with forests in the north, a hilly area in the centre and a flat area in the south. Population and economic activities are concentrated along the Meuse River, which flows from east to north in the region. Due to this concentration, about 60% of the population lives in less than 15% of the whole area of the region. Les Ardennes has a long industrial tradition. However, its textile industry collapsed in the 1970s and the iron and steel crisis culminated in the closure of two large steel and iron plants in 1983, which put about 5,000 workers out of work. The regional policy makers did not have a unified territorial strategy towards employment. Hence they hardly exploited the available European recovery programmes for creating jobs. During the 1980s, the loss of jobs in the manufacturing sector was only partly compensated by new jobs in the services sector. Furthermore, the region experienced a population decline.

Figure 5.32 Case study region of Les Ardennes

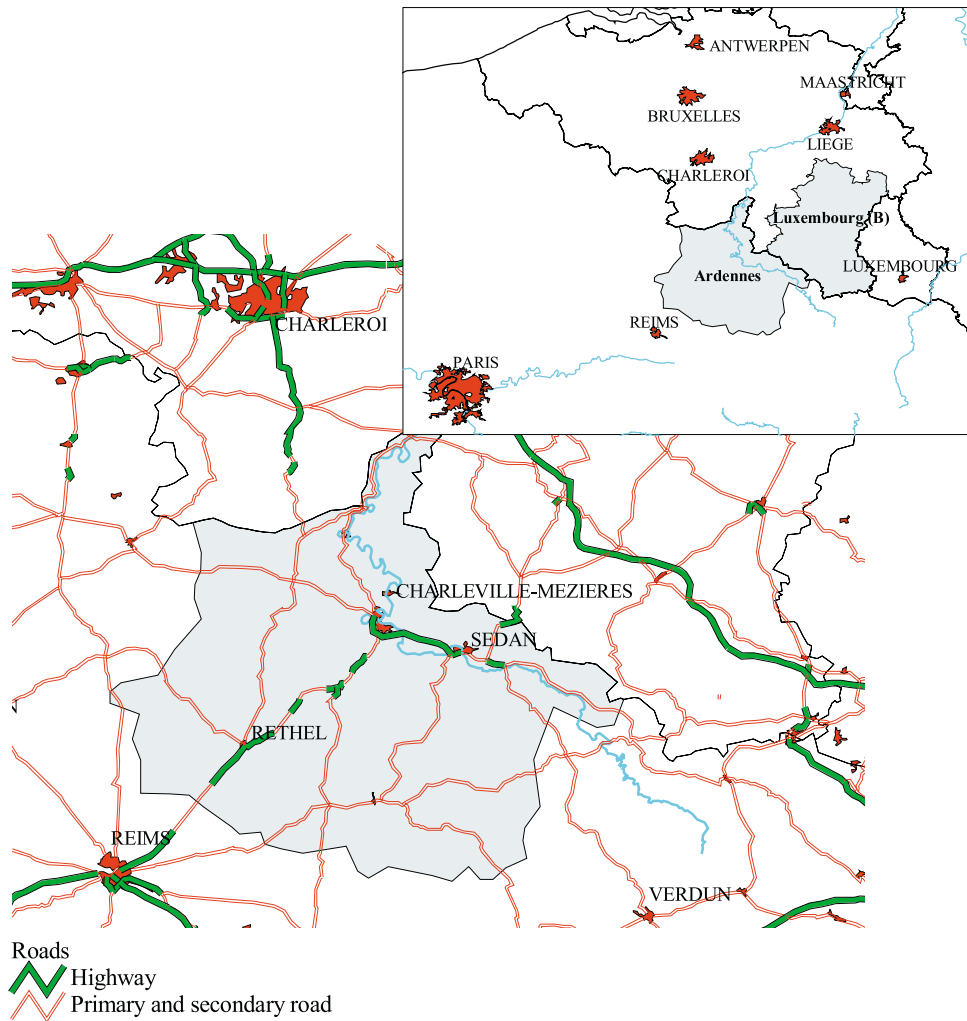


Figure 5.33 Case study pattern of Les Ardennes

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape (mountainous forests in the north and open field landscape in the Champagne area) and historical monuments (castles from the Middle Ages, fortified churches and abbeys).
LR2 +	Raw materials are derived from forests.
LR3 0/+	Transport infrastructure in the region: The internal secondary road infrastructure has been extended during the study period and is well developed. The length of highways is limited to 13 km. In the past the Meuse River and the canal along the Aisne River played a role in transportation.

LR4 -	External transport connections: There is no national highway connection crossing the region. The TGV high-speed trains do not cross the region.
LR5 0/+	Soft infrastructure: The region has a university-level school of technology and a regional centre for technological innovation and transfer. The participation in post-school training schemes is above the national average.
LR6 +	Agglomeration: Economic activities and population (about 60% of total) are concentrated in the northern part of the region along the Meuse river. The biggest city is Charleville-Mézière with a population of about 67,000.

#### *Economic activities*

EA1 -	Employment growth: During the period 1982-1990, the region faced a decline in employment in agriculture, manufacturing, and construction, and experienced an increase in employment in electricity and gas, trade, hotels and restaurants, transport, financial services and community services.
EA2 0	Valorization of rural amenities and tourist infrastructure: Investments in entertainment events, the restoration of historical monuments and natural sites were made. Since tourism accommodations were not upgraded and expanded simultaneously, the flow of tourists did not increase substantially.
EA4 0	There was no employment growth in tourism.
EA7 +	Economic activities using local raw materials: The forestry sector exploits the forests, but downstream activities are limited.
EA8 -	Employment growth in production related to raw materials (forestry) decreased due to the growth in labour productivity.
EA11 0	Assessment of GDP/capita and its increase: GDP/capita was in 1980 above the level in the leading case study region (112 versus 96 in Luxembourg (B); EU=100) but dipped below Luxembourg's level at the end of the study period (98 versus 101). So the increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.

#### *Actors*

A1 --	Capacity of local policy makers: There is no political consensus inside the region due to the economic heterogeneity of the different parts of the region. This resulted in an underutilization of the EU Structural Funds. The main feeling of local actors is that they are far from the national centre (Paris), rather than close to the centre of Europe. They also have the feeling of abandonment towards Reims, the capital of the NUTS2 region.
A2 -	Capacity of local entrepreneurs: The entrepreneurs of the family enterprises in the iron and steel industry were well known for their conservative, risk-averting attitude and their inability to adapt to technological change. Since 1980, the importance of these very conservative entrepreneurs in the local economy has considerably decreased. The managers of the surviving enterprises had to adapt to global market competition by diversifying or specializing in market niches, and hence they introduced new ways of management and modernized production processes. However, most manufacturing enterprises are too small to conduct sufficient research and development activities and to procure up-to-date information on new technologies like new metallic materials. Hardly any marketing activity is carried out by these small enterprises.
A3 0	Capacity of local workers: The attitude of workers and employees towards work is good. However, the overall education level and the skills are not commensurate with the labour demand. The labour force has adjusted slower than entrepreneurs to market and technological changes.
A4 --	Internal networks are weak since they are scattered throughout the region and suffer from conflicts and competition.
A5 --	Linkages in networks/institutions: These are hampered by the weak networks and the heterogeneity of the different parts in the region. Besides, linkages with regional and national authorities are poorly developed.

A6 --	External networks: In the administrative and political sphere, the external networks are weak due to lack of leadership and unified strategy. Top-down approaches seem to have prevailed over bottom-up approaches. In the market sphere, the manufacturing sector is endowed with the most efficient external networks (particularly the automotive industry).
A7 0	Benefits of external networks: Although the region receives public funds, the lack of political consensus resulted in an underutilization of the EU Structural Funds. The manufacturing sector has benefited from private investments. The region has a negative migration balance.
A8 --	The negative migration balance was mainly a result of the outmigration of young educated people and, to a lesser extent, of industrial workers who had lost their jobs. This migration balance stands in sharp contrast with that in the leading region of Luxembourg (B).
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.

### 5.4.15 Case study pattern of Nièvre

The region is located southeast of Paris. It consists of the Loire Valley with industries and vineyards, an agricultural heart dominated by cattle breeding and grain production and a mountainous part (the Morvan) covered with forest and meadows. For centuries, the region has supplied Paris with firewood and there is a tradition of outmigration to the Parisian labour market. In the 1950s and 1960s, the industrialization 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. Although employment in services increased in the period under study, it was insufficient to compensate for the loss of jobs in agriculture and industries.

Figure 5.34 Case study pattern of Nièvre

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape, mountains, forests, rivers, lakes, historical and archaeological sites, museums, churches and the Natural Park in the Morvan.
LR2 +	Raw materials comprise forests.
LR3 0/+	Transport infrastructure in the region: Most of the economic activities and population are concentrated in the Loire Valley with good highway and secondary road and railway infrastructure. In contrast, transport and communications are more difficult in the mountainous parts. During the study period, improvements in the road network have been made.
LR4 -	External transport connections: The region is not integrated into the national highway system.
LR5 -	Soft infrastructure: The region has a good system of primary and secondary schools; however, tertiary schools and a university are lacking. The number of schemes for training on the job has decreased.
LR6 +	Agglomeration: The Loire Valley, with the city Nevers (population of about 59,000 or 25% of the total) is the main economic centre.

Figure 5.35 Case study region of Nièvre

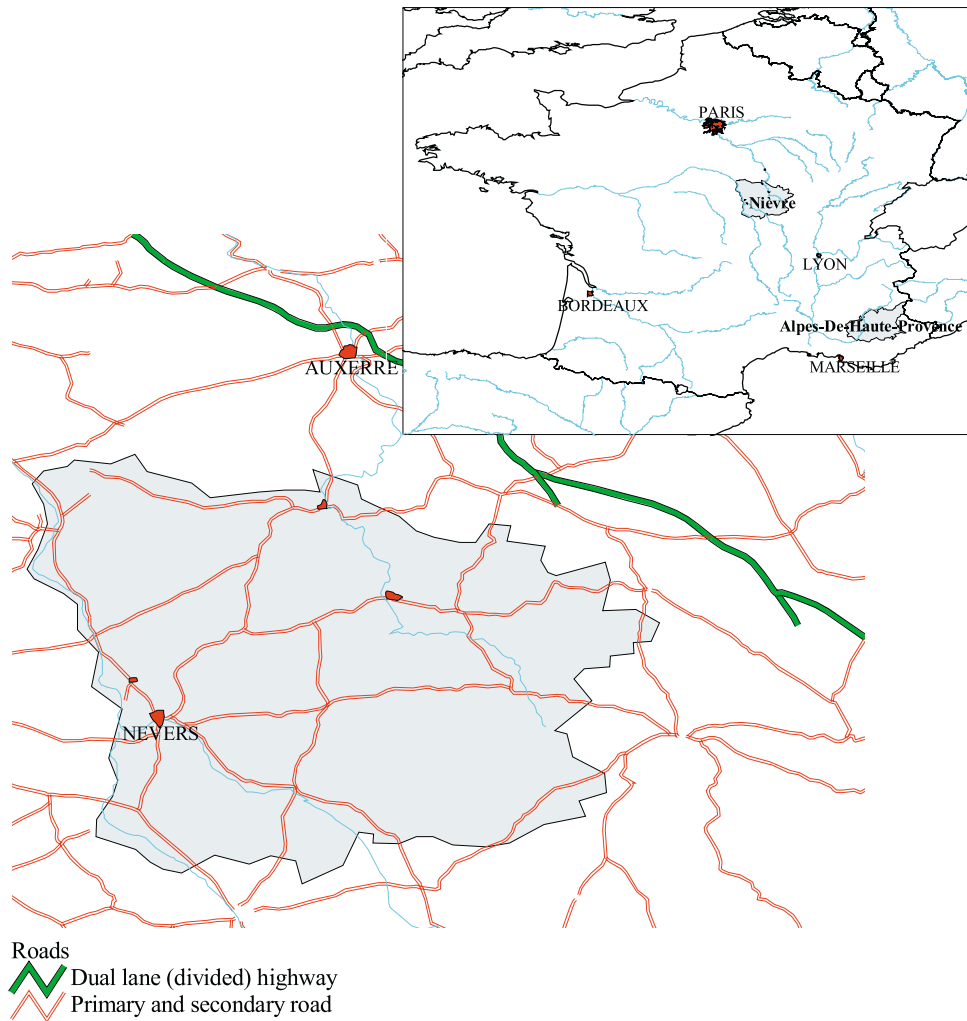


Figure 5.34 Case study pattern of Nièvre (continued)

<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1982-1990, the region faced a decline in employment in agriculture, manufacturing and construction, and experienced an increase in employment in trade, hotels and restaurants, transport, financial services and community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: The number of hotels increased and the quality of out-door tourist facilities (camping sites) has been improved.
EA4 +	Employment in tourism has increased.
EA7 -	Economic activities using local raw materials: For centuries, the region has supplied Paris with firewood. This export was ruined by the arrival of coal. Now there is some selective exploitation of hardwood, but further stages in processing are hardly developed.



EA8	Employment related to the processing of local raw materials has decreased.
-	
EA11	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the leading case study region (1986: 90 versus 106 in Alpes de Haute Provence and in 1993: 87 versus 93; EU=100). The increase in GDP/capita in Nièvre, however, exceeded that in the leading region in the study period.
0	
<i>Actors</i>	
A1	Capacity of local policy makers: In the 1980s, Nièvre had several powerful politicians who entered national politics. Today, the policy makers are less powerful. Local policy makers do not have good access to the regional policy makers in Dijon.
0	
A2	Capacity of local entrepreneurs: Entrepreneurship is less developed than in some other regions and entrepreneurs are risk-averse. The innovating capacity is quite weak.
--	
A3	Capacity of local workers: Education and skills of the labour force is on average reasonably good. Some groups of workers do not have the necessary qualifications demanded by the new jobs.
+	
A4	Internal networks: The intervention of networks on employment is relatively weak. This has to do with the fact that traditionally, it is the role of the state to manage the conflicts and competition between the actors, and to define a long-term strategy for employment.
-	
A5	Linkages in networks/institutions: These are hampered by the weak networks. The relations with the regional authorities are weak.
-	
A6	External networks: Multinational or big national networks comprise the SNCF (National Railway Company whose major train repair centre is located in Nevers) and the private Peugeot group. Political networks are weak.
-	
A7	Benefits from external networks pertain to private investments and public funds. The region has a negative migration balance.
0	
A8	Assessment of migration balance: The negative migration balance is attributable to outmigration of young people aged 30 years and below and an immigration of retirees. Already for a long time, workers have used outmigration as a strategy: alternate migration during the year by agricultural and forestry labourers, or long-term outmigration to the Parisian region by civil servants working in public sectors (postal services, electricity, railway transport) and return in the region after retirement. This migration balance stands in contrast with the leading region of Alpes de Haute Provence.
--	
A9	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.
-	

#### 5.4.16 Case study pattern of Macerata

The region is located in central Italy flanked by the Adriatic Sea. It consists of a rather flat coastal area in the east and a hilly and mountainous part in the Apennines in the west. The late 1950s market a period of intense industrialization distinguished by two main characteristics: high specialization in the production of shoes and territorial concentration. This resulted in the so-called footwear district. This district reached a mature phase in the 1980s. It did not manage to face the increasing international competition and to rationalize production, and employment in the district declined. Since employment growth in the services sector stagnated as a result of the public budget crisis, total employment in the region in the period under study declined. On the whole, policy makers played a marginal role in the development process.

Figure 5.36 Case study region of Macerata

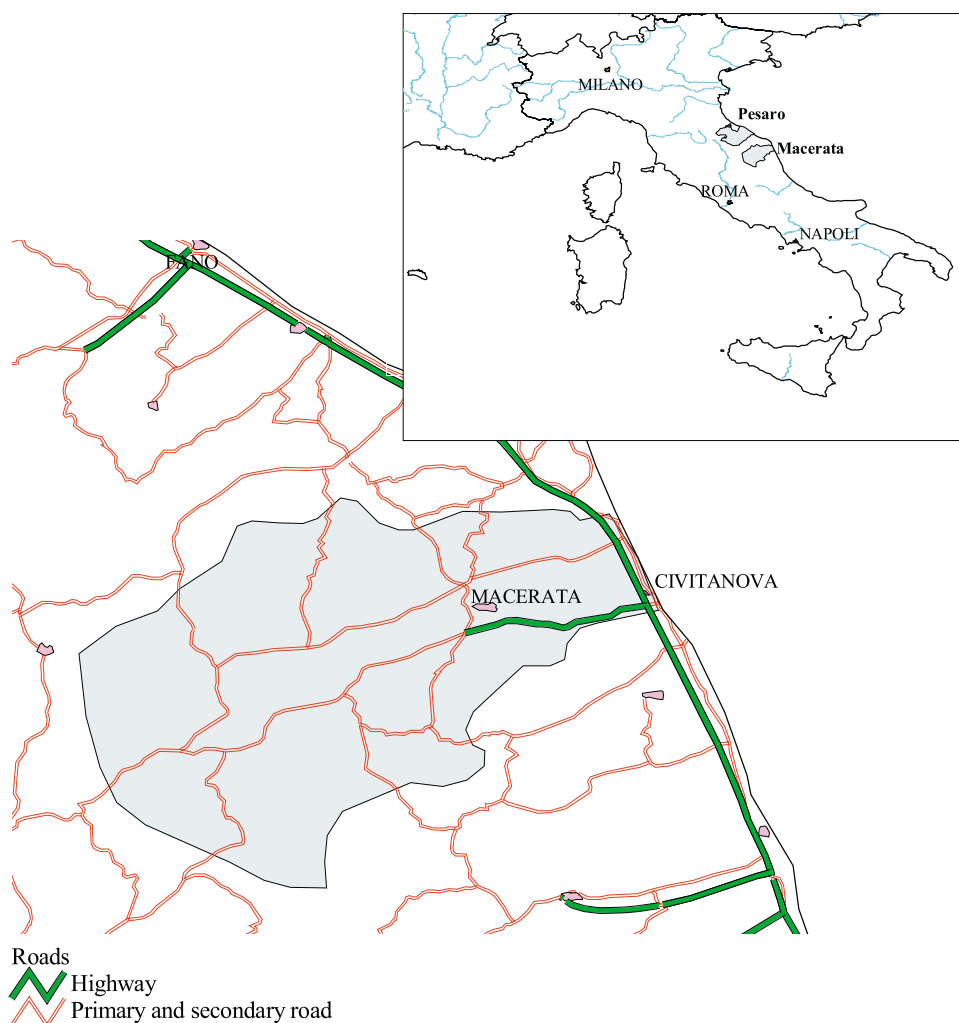


Figure 5.37 Case study pattern of Macerata

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities: Beautiful landscape, cultural traditions and natural attractiveness, coastal area and the national natural park of Sibillini.
LR3 0/+	Transport infrastructure endowment inside the region is rather developed in the coastal area with a highway connection between Macerata and Civitanova. However, it is insufficiently developed in the inner areas.
LR4 +	External road transport connections: The highway along the east coast in Italy crosses the region. This allows for a good connection with Ancona, the main transit centre in central-east Italy.

LR5 -	Soft infrastructure: The region has two universities, which are not integrated in the local economy. Technical schools for the purpose of training in higher technical skills are lacking.
LR6 +	Agglomeration: Economic activities are concentrated in the footwear district in the coastal area. The main cities are Macerata and Civitanova, each with a population of about 40,000.
<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1981-1991, the region faced a decline in employment in agriculture, manufacturing and construction, and experienced a modest increase in employment in trade, hotels and restaurants, transport, financial services and community services.
EA2 0/+	Valorization of rural amenities and tourist infrastructure: The tourist accommodations are of a good quality; however, the flow of tourists is rather limited as the attractiveness of the region is not yet well known to tourists.
EA4 +	Employment growth in tourism: There has been some modest growth in recent years.
EA5 ++	Filières: There is a footwear filière in the coastal area of Macerata, which produces all kinds of shoes, from boots to sports footwear, and footwear components, especially soles. About 75% of the production is exported to international markets all over the world. This filière uses local knowledge capital.
EA6 -	Employment in the filière did not increase in the study period, as the district did not manage to adapt itself to changing market conditions.
EA11 0	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the leading case study region (1980: 87 versus 81 in Pesaro and in 1990: 109 versus 105; EU=100) although Pesaro's increase in GDP/capita was higher in the period under study.
<i>Actors</i>	
A1 --	Capacity of local policy makers: Policies and strategies on regional employment dynamics are generally considered to be not very relevant. The regional economy is traditionally hallmarked by spontaneity and individualism; 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, some rural policies were implemented, largely driven by EU policies.
A2 0	Capacity of local entrepreneurs: In the 1980s, many inefficient firms were forced to close in the face of international competition. Such a reduction in industrial firms is a consequence of the selection process that sharpened the competitive capacity on international markets of the remaining entrepreneurs.
A3 +	Capacity of local workers: A typical strategy of workers has been to create new small firms related to the former bigger firm in which they were employed as workers. House-working is still important, especially in shoe production.
A4 0	Internal networks: The informal internal networks are highly important: they facilitate the diffusion of knowledge within and between firms, commercial relations within the industrial district, and involvement of heterogeneous labour from the traditional family. An important weakness was the lack of formal and institutional networks which facilitate industrial adaptation to changing market conditions and enable formulation of a long-term strategy for regional development.
A5 -	Linkages in networks/institutions: The informal networks of small firms are strong and form a thick tissue, but formal networks of policy makers and links with institutions are lacking.
A6 0	Prevalent external networks comprise market relations between local firms and national or international firms.
A7 +	Benefits from external networks are related to the access at international markets, to which the region exports shoes. The region has a positive migration balance.

A8 +	Assessment of migration balance: The positive migration balance is mainly made up of the economically active from Southern Italy, Africa and Central Europe. The immigration rate is at about the same level as in the leading case study region of Pesaro.
A9 +	Initiatives for mobilizing the self-help capacity are mainly attributable to the informal networks of firms.
A10 ++	Local synergy of the filière: The filière is characterized by a dense network of small and medium sized firms, which enables the flow of labour, skills and knowledge among firms.
A11 +	Local innovativeness of the filière: The filière manages to some extent to find niches and new specializations. The number of closed down firms exceeds the number of new firms.
A12 ++	Transterritorial networks of the filière are mainly used for providing the filière with market information, and less for technological and organizational information. This market information is essential for timely response to external markets conditions.

#### 5.4.17 Case study pattern of Groningen

Groningen is a flat region in the northern part of the Netherlands. Industrialization in textiles, shipbuilding and agrofood started already in the second half of the 19<sup>th</sup> century. The capital city of Groningen is the main economic centre in the north of the Netherlands. Its proximity to the neighbouring provinces of Drenthe and Friesland allows them to benefit from the city. Groningen University is one of the largest employers in the city, and it has contributed to the creation of a knowledge infrastructure around the city of Groningen, attracting many high-tech activities. About 70% of employment is concentrated in an east-west zone running from Delfzijl to the city of Groningen, including the cities of Veendam, Winschoten and Hogeveen-Sappemeer. The lack of job opportunities in the other parts of the region results in a relatively high unemployment among the low educated. Groningen has rich resources of natural gas. When the gas revenues (which in fact directly flow to the state) are included in the regional GDP, Groningen appears to be one of the richest EU regions where GDP/capita is concerned. During the period under study, employment in industries and services showed an increase, the majority of which were part-time jobs<sup>9</sup>.

Figure 5.38 Case study pattern of Groningen

Variable and assessment	Description
<i>Local resources</i>	
LR1 0	Rural amenities: Open landscape with expansive views, the Groningen Museum and several 'borgen' (i.e. former houses of local chiefs).
LR2 +	Raw materials consist of mineral resources like gas, salt and magnesium chloride.
LR3 +	Transport infrastructure, consisting of highways, other roads, railways and canals in the region is well developed. In the early 1980s, the highway between the city of Groningen and Germany (A7) has been widened. During rush hours, congestion occurs on the entry roads around the city of Groningen.
LR4 +	External transport connections: The region is well integrated in the national transport system of highways, railways and canals. It also has transport connections with Germany.

Figure 5.39 Case study region of Groningen

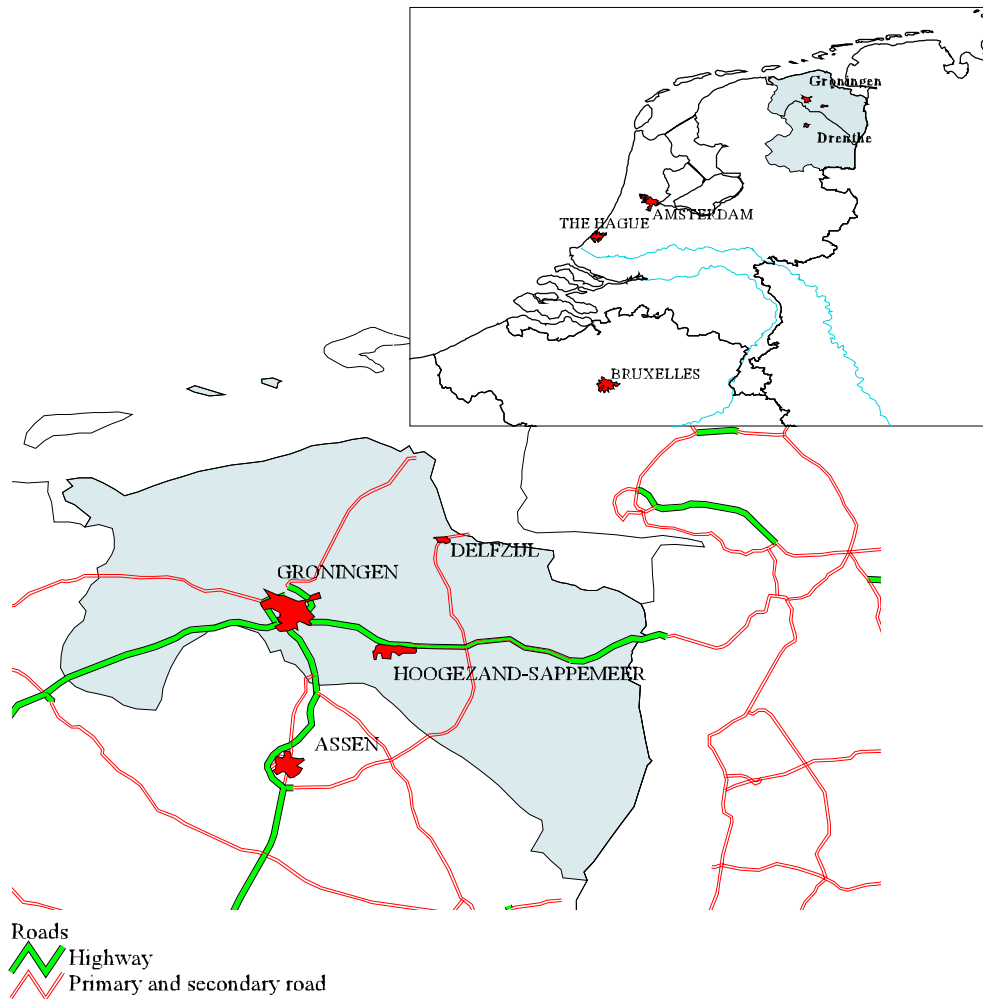


Figure 5.38 Case study pattern of Groningen (continued)

LR5 +	Soft infrastructure: The university in the city of Groningen has contributed to a knowledge structure, which attracts many high-tech activities. The supply of all kinds of education (secondary and tertiary) is extensive and there are several research centres.
LR6 ++	Agglomeration: The city of Groningen (population over 170,000) is the main economic centre of the north of the Netherlands; it accounts for about 45% of total employment in the region of Groningen. In addition, approximately 70% of total employment in the region is concentrated in an east-west zone running from Delfzijl to the city of Groningen, including the cities of Veendam, Winschoten and Hoogezand-Sappemeer.
<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1984-1995, the region faced a decline in employment in agriculture and in electricity and gas, and experienced an increase in employment in manufacturing, construction, trade, hotels and restaurants, transport, financial services and community services. Although employment on the whole increased, it lagged behind the national average.

EA2 0/+	Valorization of rural amenities and tourist infrastructure: Groningen has no tourist tradition and hence there are relatively few tourist accommodations. In recent years some initiatives have been taken to improve the tourist infrastructure, among others by farmers (agrotourism). The plan for the Blue City may enhance the future recreation potentials of the region.
EA4 +	Employment growth in tourism: The growth is especially related to the increase in employment in hotels, which is partly focused on business people.
EA7 +	Economic activities using local raw materials: There is a cluster of chemical industries around Delfzijl, which actively stimulates the establishment of new firms.
EA8 0	Employment growth in the production of local raw materials: Employment in the chemical industry increased, whereas that in the gas sector decreased.
EA9 +	Assessment of presence of economic activities using local knowledge capital: The region has a long tradition in shipbuilding, in which to date it is still successful.
EA10 +	Employment growth in the production related to local knowledge capital: The region managed to maintain some employment in shipbuilding (about 1-2% of total regional employment, derived from Bosma, 1999: 44-46).
EA11 0	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the leading case study region (1980: 117 versus 97 in Drenthe and in 1994: 102 versus 87 (both years excluding gas revenues); EU=100). The increase in GDP/capita in the leading region slightly exceeded that in the lagging region in the period under study.

#### *Actors*

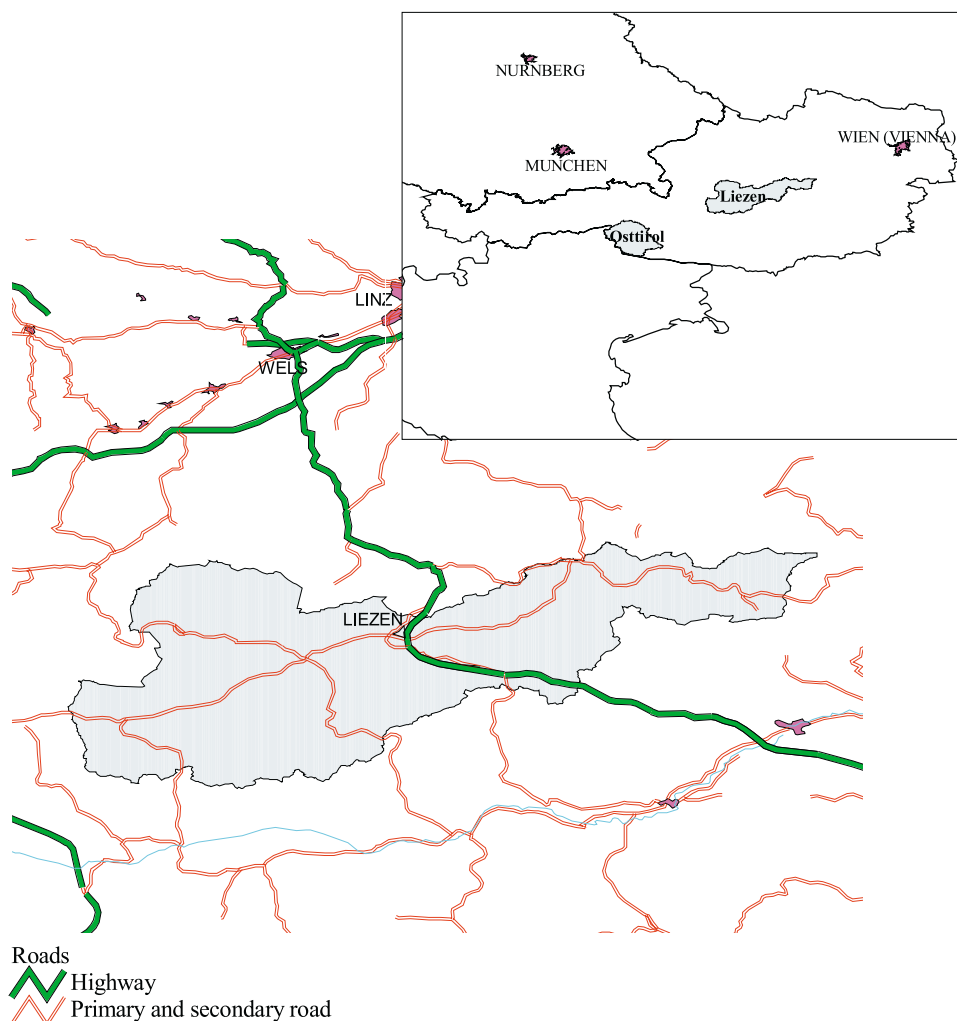
A1 +	Capacity of local policy makers: Insufficient cooperation with the provinces of Drenthe and Friesland, and the rather rigid attitude of policy makers towards entrepreneurs were the drawbacks in the early 1980s. However, since the end of the 1980s this situation has improved. Now, policy makers are rather dynamic and dare to launch innovative plans. On the whole, given the dependent attitude of Groningen people, their capacity to innovate is rather low. Nevertheless, the region has its share of innovative local actors, mainly originating from the young, policy makers and entrepreneurs.
A2 +	Capacity of local entrepreneurs: Groningen has a long tradition of industrial entrepreneurship. Entrepreneurs are conscious of making their business location attractive to other firms in order to increase the density of actors in the network, increase opportunities for cluster formation and for sharing service units.
A3 +	Capacity of local workers: Their attitude to work is generally described as good and loyal. There is a tradition of class struggle in the southeastern part of the region.
A4 +	Internal networks: Networks are small, surveyable and characterized by easy communication. 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 towards each other, because they are afraid of disrupting the unity among actors; that actors are too inward-looking; and that the density of actors is too low. Entrepreneurs themselves actively try to increase the density of actors in their business locations. Due to the long tradition of industrial entrepreneurship, local leaders in the networks of entrepreneurs consist both of native Groningen entrepreneurs and non-native entrepreneurs.
A5 +	Linkages in networks/institutions: Networks of firms and policy makers cooperated in improving the economic zones around the city of Groningen, Veendam and Delfzijl. Recently contacts with the two neighbouring provinces of Drenthe and Friesland were intensified.
A6 0	External networks: Local actors are too inward-looking and insufficiently directed towards actors outside Groningen. In recent years the cooperation with policy makers in the neighbouring provinces Drenthe and Friesland has been strengthened.
A7 +	Benefits from external networks refer to public funds, private investments and market outlets. The region had a small negative migration balance in the 1980s, which became slightly positive in the first half of the 1990s.

A8 --	Assessment of migration balance: Migration involves mainly an inflow of students and an outflow of those who are economically active aged 25-29 years. The negative migration balance in the 1980s contrasts with that in the leading case study region of Drenthe; in the 1990s it was more moderate than the migration balance in Drenthe.
A9 +	Initiatives for mobilizing the self-help capacity are taken by the university, which contributes to a knowledge infrastructure in the region, by local leaders, by the development agency NOM, which assists entrepreneurs in investment and establishment issues, and by other networks.

### 5.4.18 Case study pattern of Liezen

Liezen is an alpine region in the centre of Austria. Settlement is confined to valleys. The region can roughly be divided into three parts: west, centre and east. The west is the tourist zone and the centre is the industrial zone. Both areas have about a share of 40% in

Figure 5.40 Case study region of Liezen



regional population. The eastern area is rather remote. Liezen has a long industrial tradition, and in 1981, 39% of employment was in industry, compared with 13% in agriculture and 47% in services. Closures of big manufacturing firms (metal, non-metallic minerals and shoes) in the 1980s resulted in a rapid decline in industrial employment, which was only partly compensated by an increase in services employment. Except for the eastern part of Liezen, policy makers were not very active in attracting new firms. Instead they subsidized the declining industries. Furthermore, due to the lack of technical education facilities in Liezen, firms in Liezen experienced difficulties in finding qualified labour.

Figure 5.41 Case study pattern of Liezen

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities comprise the beautiful landscape with mountains and lakes, extensive forests, alpine pastures, a national park and numerous castles.
LR2 +	Raw materials consist of plaster of Paris, salt, talcum, marble, wood and hydropower.
LR3 0/+	Transport infrastructure in the region: The road network is rather well developed, except for the east-west highway connection. Since the early 1980s, interest groups have protested against the completion of this highway. The railway network is also quite extensive but suffers from some shortcomings like a one-track connection on the main east-west route.
LR4 +	External transport connections: The region is integrated into the national highway and railway systems.
LR5 -	Soft infrastructure: There are neither universities nor research centres in Liezen or its immediate neighbourhood. Besides, the region suffers from a lack of technical education facilities.
LR6 -	Agglomeration: There are four small economic centres, each with a population of about 5-7,000. Together they account for about 40% of regional employment and over 25% of regional population.
<i>Economic activities</i>	
EA1 -	Employment growth: During the period 1981-1991, the region faced a decline in employment in agriculture, mining, manufacturing, electricity and gas, and construction, and experienced an increase in employment in trade, hotels and restaurants, transport, financial services and community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: Liezen has a long tradition of tourism. Tourist infrastructure such as ski lifts and hotels has substantially been expanded and improved.
EA4 -	Employment in tourism decreased in the period under study. Nevertheless, with a share of about 10% in total employment, the tourist sector is rather large.
EA7 +	Economic activities using local raw materials: Liezen is located in a geologically rich zone and it has a long tradition of mineral exploitation. Copper mining and the extraction of iron ore have become outdated, but the manufacturing of magnesite, plaster of Paris, talcum and marble are still important, employing about 4% of the labour force.
EA8 -	On the whole, employment in the processing of local raw materials declined in the period under study. However, employment in the manufacturing of plaster of Paris expanded.



EA11 0	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period above that in the leading case study region (1980: 81 versus 68 in Osttirol and in 1992: 82 versus 80; EU=100) although the increase in GDP/capita in Osttirol was higher in the period under study.
<i>Actors</i>	
A1 --	The capacity of local policy makers is rather weak. They more or less confined their attention to helping the old large firms in crisis while active business location policies were rare.
A2 0	Capacity of local entrepreneurs: The traditional metal and non-metallic mineral industries collapsed, as these could not compete at the global level. New competitive firms have emerged, both in industries and services.
A3 +	Capacity of local workers: They have a good work attitude, but their skills are not always at a high level.
A4 0	Internal networks: Due to the low population density, people generally know each other, are kept informed about what goes on in the close-knit neighbourhood, and many transactions are based on personal relations. There is a close cooperation between entrepreneurs and policy makers in the western and eastern parts of the region, but not in the central part because of a lack of active actors.
A5 -	Linkages in networks/institutions: There is some cooperation among policy makers, firms and interest groups in some parts of the region. Linkages between local and upper-level policy makers are poorly developed.
A6 -	External networks: External contacts of enterprises and policy makers exist, but these contacts are hampered by the remoteness of the region. Besides, Liezen is part of the Styria province, in which decision-making is highly centralized. This hinders the contacts between policy makers in Liezen and higher-level authorities in Styria.
A7 0	Benefits from external networks concern public funds and private investments. The region has a negative migration balance.
A8 0	Assessment of migration balance: The negative migration balance is due to poor opportunities for daily commuting and scarce job opportunities for the higher educated. However, the migration balance was less negative than in the leading case study region of Osttirol.
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.

#### 5.4.19 Case study pattern of Mikkelin Lääni

This is a flat region with many lakes and forests, about 250 km northeast of Helsinki. The lakes cover as much as 25% of the area and their total circumference amounts to 28,000 km of lake shoreline. These are attractive assets, as it is more or less customary in Finland to have a summer cottage or a tiny sauna at the lakeside. With over 46,000 cottages, Mikkelin Lääni is the leading cottage and summer holiday region in the heart of 'Lake Finland'. As already explained in Section 5.4.10, a precondition for viability in Finnish rural regions is a large and dynamic city. With just over 30,000 inhabitants, the threshold of capital city Mikkelin is too low to foster economic and population growth. In 1980, the agricultural sector employed 27% of the labour force, and the shares of industry and services amounted to 32% and 41% respectively. During the study period, both population and employment declined. In the more remote parts of the region, the economic structure is predominantly directed at industrial and agricultural activities with declining employment opportunities, resulting in an unavoidable outflow of labour from these areas.

Figure 5.42 Case study region of Mikkelin Lääni

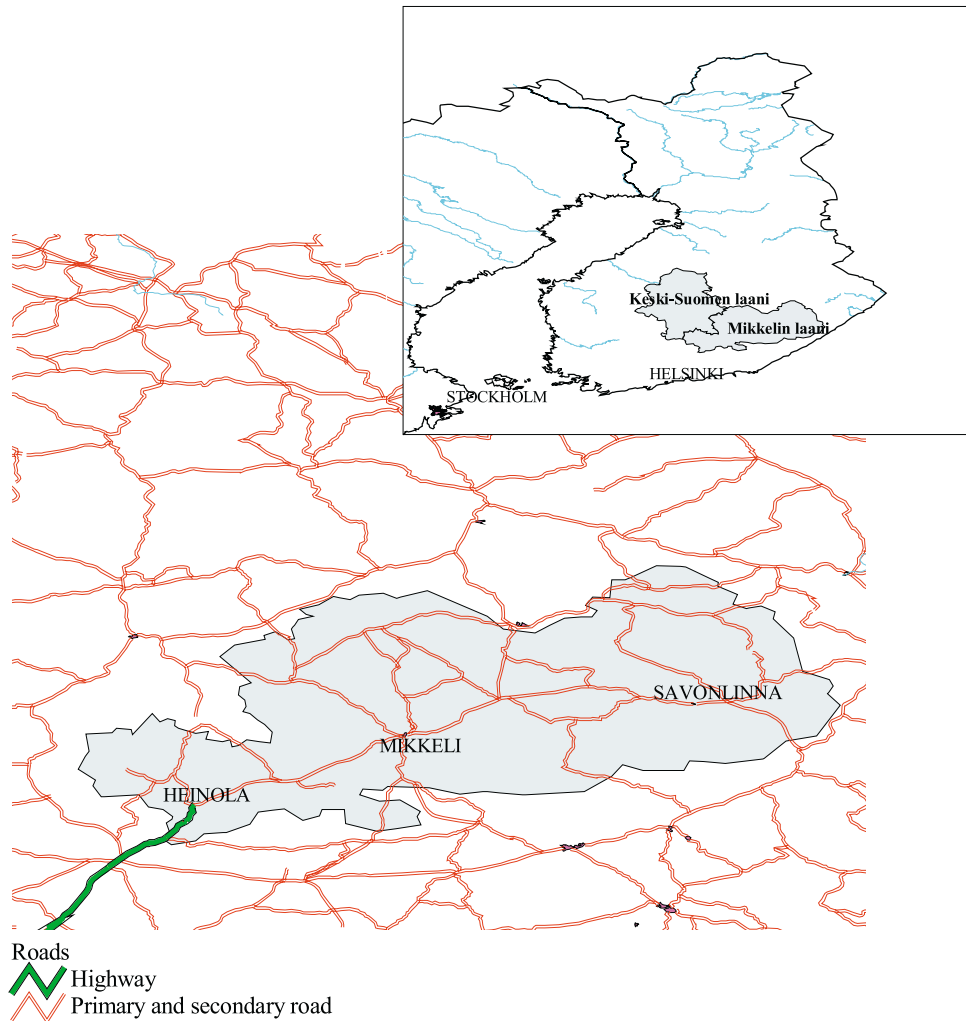


Figure 5.43 Case study pattern of Mikkelin Lääni

Variable and assessment	Description
<i>Local resources</i>	
LR1 +	Rural amenities comprise forests, lakes and landscape. The region is the 'number one' summer holiday province in Finland.
LR2 +	Raw materials pertain to forests for wood industry.
LR3 0	Transport infrastructure in the region: The secondary road and railway network is rather well developed. However, the many lakes hamper travel in the region and remote parts suffer from insufficient infrastructure.
LR4 0	External transport connections: The region is connected by means of a highway (Heinola-Helsinki), secondary roads and railways with the rest of Finland.

LR5 0/+	Soft infrastructure: The supply of secondary and tertiary education is well developed. The region does not have its own university, but there are affiliates of several universities and some research centres.
LR6 +	Agglomeration: The largest cities in the region are the capital city Mikkeli (population about 33,000 or 16% of the total) and Savonlinna (about 29,000) <sup>10</sup> .

#### *Economic activities*

EA1 -	Employment growth: During the period 1980-1994, the region faced a decline in employment in agriculture, manufacturing, construction, trade, hotels and restaurants, transport, and financial services, and experienced an increase in employment in community services.
EA2 +	Valorization of rural amenities and tourist infrastructure: During the study period tourist accommodation expanded. The numerous summer cottages attract a relatively high number of tourists.
EA4 +	Employment growth in tourism has increased.
EA7 +	Economic activities using local raw materials: The forestry cluster employs about 9% of the workforce.
EA8 -	Employment growth in the production of local raw materials: Employment in the wood industry decreased due to a rapid increase in labour productivity.
EA11 --	Assessment of GDP/capita and its increase: GDP/capita was both in the beginning and the end of the study period below that in the leading case study region (1980: 83 versus 90 in Keski Suomen Lääni and in 1995: 72 versus 86; EU=100). The increase in GDP/capita in the leading region exceeded that in the lagging region in the period under study.

#### *Actors*

A1 0	Capacity of local actors: The capacity of the local actors is not significantly different compared to elsewhere in the country. Policy makers tend to be more reactive than proactive in facing external forces.
A2 0	Capacity of local entrepreneurs: Entrepreneurs tend to be concentrated in declining industries.
A3 +	Capacity of local workers: Their attitude towards work is good.
A4 -	Internal networks are rather well developed within sectors; inter-sectoral networks are less developed. Internal networks are hampered by a low population density and long distances.
A5 0	Linkages in networks/institutions: The intersectoral cooperation among networks is weak. On the other hand, the linkages between local and upper-level authorities are well developed.
A6 0	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 national in origin (e.g. labour market regulation, finance of the public activities, agricultural and forestry policies).
A7 +	Benefits from external networks pertain mainly to public funds, redistributed in the scope of the 'great regional policy', and revenues from exports. The region has a negative migration balance.
A8 --	Assessment of migration balance: The negative migration balance is attributable to students and the economically active, who leave the region, whereas some retirees enter the region. The negative migration contrasts with that in the leading case study region of Keski Suomen Lääni.
A9 -	No substantial initiatives for mobilizing the self-help capacity were undertaken during the period under study.

## 5.5 Concluding remarks

In this chapter, employment and factors affecting employment in 18 rural regions in the EU were presented in case study patterns. These case study patterns are the second step in the method of pattern-matching, of which the first step was carried out in Chapter 4. In the next chapter, the last step of pattern-matching is carried out. The systematic classification of variables in the case study patterns enables us also to analyze main differences among leading and lagging case study regions. These are, for a large part, related with the role of the local actors. Below, we first focus on the main findings of the comparison of each pair of leading and lagging case study regions, and then, we discuss some main findings on the role of local actors in the development trajectories of the case study regions.

### *Differences and similarities in the pairs of leading/lagging case study regions*

A comparison of the values of the variables in the case study patterns reveals quickly the main differences and similarities in each pair of leading and lagging case study regions (Annex 5.4). It appears that differences mainly concentrate on the capacity of actors and internal and external networks. In the pairs Luxembourg/Ardennes, Niederbayern/Lüneburg, Albacete/Zamora, Alpes de Haute Provence/Nièvre and Osttirol/Liezen, both the capacity of policy makers and entrepreneurs is better developed in the leading region than the lagging region. The same applies for the functioning of the internal and external networks. In the pairs Korinthia/Fthiotis and Pesaro/Macerata the main differences stem from the capacity of entrepreneurs, which appears to be better developed in the leading region, whereas the capacity of local policy makers is weak in both leading and lagging regions. Hardly any differences exist between the variables in the case study patterns of Drenthe and Groningen. This is due to the fact that Drenthe and Groningen do not form a stable pair of a leading and a lagging region. The labels 'leading' and 'lagging' were based on employment performance in 1980-1991. However, when using employment data for the period 1984-1996, Groningen has a higher employment growth than Drenthe. This shows that 'leading' and 'lagging' is not a permanent situation, but depends on the period considered. Finally, in the Finnish pair of Keski Suomen Lääni/Mikkelin Lääni, it can be seen that the capacity of actors and networks are somewhat better developed in the leading region relative to the lagging region. However, the main difference here stems from the settlement structure. In the scarcely populated Finnish rural regions, population tends to migrate to regional centres or to the Helsinki region. The attractive capital city of Jyväskylä in Keski Suomen Lääni is such a regional centre, which fosters economic development in the region, whereas the capital city in Mikkelin Lääni is relatively small, attracts relatively few people, and lacks the appropriate sectoral mix to act as an engine of economic growth.

### *Three main development trajectories*

A development trajectory is interpreted here as the development path or course that a region follows over time. A focus on the role of local actors in these development trajectories - as specified in the case study patterns - allows a division of development trajectories into three main groups (Fig. 5.44):

Figure 5.44 Development trajectories in the case study regions

	Development trajectory characterized by		
	an active role of local actors	an active role of local entrepreneurs	a passive role of local actors
Internal networks	+	entrepreneurial networks: + policy makers networks: -	-
External networks	+	entrepreneurial networks: + policy makers networks: -	-
Capacity local actors	+	entrepreneurs: + policy makers: -	-
Self-help capacity	+	0/+	-
Territorial planning	+	-	-
Migration balance	immigration	both immigration and outmigration	outmigration
Case study regions	Luxembourg (B) Niederbayern Albacete AHP Drenthe Groningen <sup>b)</sup> Osttirol <sup>b)</sup> Keski-S.L.	Pesaro (Macerata) <sup>a)</sup>	Ardennes Lüneburg (Korinthia) <sup>a)</sup> Fthiotis Zamora Nièvre Liezen (Mikkelin L.) <sup>a)</sup>

a) Regions that do not meet all criteria in this group: Macerata scores lower on capacity of entrepreneurs and Korinthia higher; Mikkelin L. scores 0 on most items rather than -; b) Regions that do not experience immigration.

### 1 Development trajectory characterized by an active role of all local actors

In this type of development trajectory, local actors cooperate with each other in strong internal networks. These networks are, for example, enhanced by an action-oriented attitude of local actors, solidarity, easy communication and strong local leaders. Local actors manage to have good contacts with external actors and benefit from these external networks by means of public funds, private investments and exports. On the whole, the capacity of local actors is high. Positive aspects in the capacity of policy makers 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 suitable conditions for the establishment of firms. The well-developed capacity of entrepreneurs is often the result of a restructuring process in traditional industries, in which they are prompted to set up new and often small companies, which are competitive in national and international markets. However, the capacity of these small firms to innovate is often limited. Usually, newcomers tend to show a higher degree of innovativeness. The well-established contacts with the outside world, in which the attractiveness of the region for living and working can be made known, contribute to immigration. The high capacity of the local actors and the properly functioning networks

enhance the self-help capacity of the region. This type of development trajectory is often accompanied by territorial planning.

This development trajectory prevails in the leading case study regions, revealing that an active attitude of local actors is a promising tool for encouraging employment growth in rural regions.

### *2 Development trajectory characterized by an active role of local entrepreneurs*

This trajectory is characterized by a huge gap in the attitude of local entrepreneurs and local policy makers. Economic growth is mainly the achievement of entrepreneurs who reorganized their activities in order to face the changing market conditions and global conditions. Strong informal networks facilitate the diffusion of knowledge within and between firms. Entrepreneurs have strong external networks with national and international firms for marketing their products. On the other hand, the role of policy makers is marginal in this development path. They lack the capacity to implement appropriate policies and suffer from weak administrative management. Both internal and external networks of policy makers are weak. Industrial growth is limited to the district, as there is no territorial planning. In this development trajectory, industrial growth attracts unskilled immigrants, whereas high-skilled, young people often outmigrate due to lack of appropriate jobs.

This development trajectory is prevalent in the Italian case study regions with industrial districts. The experience in these case study regions shows that an active role of local entrepreneurs can result in employment growth in the short term, but that it is not sustaining. In the longer run, policy interventions are needed to provide, for example, infrastructure and all kinds of social services, as entrepreneurs cannot provide such basic requisites.

### *3 Development trajectory characterized by a passive role of local actors*

In this development trajectory, local actors tend to be reactive and conservative. As a result, networks are relatively weak. Internal networks suffer, for example, from little interaction among actors, lack of cooperation among sectors, internal conflicts, lack of active actors and lack of capacity of local actors. The poor development of external networks is mainly due to a 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. Apart from weak networks, the capacity of local actors shows also several shortcomings. Weaknesses in the capacity of local policy makers include the inability to formulate strategies, lack of political consensus, lack of good contacts with upper level authorities and inability to identify the needs and priorities of the region. Entrepreneurial capacity is in some cases weakly developed because of the absence of an industrial tradition. In other cases, entrepreneurs operate in small and medium sized firms, which often have a limited capacity to innovate. In this type of development trajectory, lack of employment opportunities and the unfavourable economic climate contribute to outmigration.

This development trajectory prevails in the lagging case study regions, showing that a passive attitude of local actors is a weakness that should be addressed in policies aimed at stimulating employment in rural regions.

## **NOTES**

1 The case study in Lüneburg covers only the eastern part of the (relatively large) NUTS2 region.

- 2 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 as a case study.
- 3 This review procedure has not been applied in the German, Greek and French case study regions and in Osttirol.
- 4 Unless otherwise indicated, information on the case studies is derived from Bertrand (1998), Dupraz and Henry de Frahan (1998), Dupraz *et al.* (1998), Efstratoglou *et al.* (1998a, b), Esposti and Sotte (1998a, b), Kuhmonen and Aulaskari (1999), Rosell and Viladomiu (1998a, b), Roux and Foscale-Baudin (1999), Terluin *et al.* (1999a, b, c), Terluin and Post (2000), Von Meyer (2000) and Weiss (1998a, b).
- 5 When GDP growth is only the result of increases in labour productivity, this is referred to as 'jobless growth'.
- 6 When a variable is not relevant, it will not be included in the case study pattern in this chapter. However, the sign will be used in the process of matching in Chapter 6.
- 7 It is rather difficult to make an analysis of employment development in the provinces of the Netherlands since 1980 till now, due to lack of a consistent time series for this period and due to the creation of a new province (Flevoland) in 1986. Several sources for employment data for short intervals since 1980 exist, but often these time series cannot be linked to each other and sometimes show opposite trends. For the selection of case study regions in the RUREMPLO project, we have used a Eurostat time series at provincial level on employment at the place of work, which is only available for the period 1980-1991. According to these data, non-agricultural employment growth rates in Drenthe and Groningen amounted to 4.2% and 2.6% respectively per annum compared with a national average of 2.9% during the years 1980-1991. The deviations from the national average of employment growth in Drenthe and Groningen satisfied the RUREMPLO criteria of 'leading' and 'lagging' (see Section 5.2).  
After the selection and in order to extend the period 1980-1991 to more recent years and to cover a more detailed ISIC level, another source of employment data was used in the RUREMPLO project: the provincial employment data base PWR, which is available for Drenthe for the period 1981-1996 and for Groningen for 1981 and 1984-1996. The problem with the time series of Eurostat and PWR is that these are difficult to compare and sometimes even show opposite results. A closer look into the PWR data shows that on the whole Drenthe and Groningen experienced more or less the same employment growth in the years 1981-1996, and that during the period 1984-1996 employment growth in Groningen even exceeded that in Drenthe (Terluin and Post, 2000:173-4).
- 8 Here we see some contradiction between our assessment of agglomeration (+ when population exceeds 30,000; see Section 4.3.5) and the finding in the case study region that the size of its cities was too small for a major take-off.
- 9 See Section 5.4.8 for some comments on similarities with Drenthe.
- 10 Like in the case of Lüneburg, here again, we find that our assessment of agglomeration (+ when population exceeds 30,000) is not in line with empirical findings of the case study region.

## 6 MATCHING OF THEORY AND CASE STUDY PATTERNS

### 6.1 Introduction

In Chapters 4 and 5 we have dealt with the first two stages of the method of pattern-matching. In this chapter the focus is on the third and last step of this method: the matching of the theory patterns and the case study patterns. Briefly, this matching implies that we check whether the values of the variables in the theory pattern have the same values as those in the case study patterns. The results of this check enable us to answer the research question whether development trajectories in the case study regions are according to the predictions of one or more examined regional economic growth theories (Section 1.2). If the values of the variables in the theory and case study pattern are the same, we conclude that the theory predicts the development trajectory in the case study region during the study period.

The organization of this chapter is as follows. In the next section we start with some introductory remarks on the matching process. Then we continue with the matching of each of the distinguished theory patterns with the case study patterns in order to examine whether theories predict development trajectories in the case study regions. In Section 6.3 we summarize the results of the pattern-matching and discuss which theories are widely supported by empirical evidence of the case studies and which theories are not. In that section we also identify clusters of regions which support the same theories. In the last section we make some concluding remarks.

### 6.2 Matching

#### 6.2.1 Introduction

In this section we discuss the matching process of the seven theory patterns with the case study patterns. We start with some introductory remarks on the matching process. These remarks deal with the assessment procedure of variables in the matching scheme, the valuation of so-called derived variables and the use of boldface type in the matching schemes.

##### *Assessment procedure in the matching scheme*

In the theory patterns, as specified in Section 4.3, we have identified independent and dependent variables and context events for each theory. We have also indicated how we operationalize these variables. As a next step, in the case study patterns presented in Section 5.4, we have collected information for all variables identified in the theory patterns. We have also valued these variables, varying from weak to strong. In this section, we ‘match’ the values of the variables in the theory pattern with those in the case study patterns in order to analyze whether the theory predicts the situation in the case study regions. In this matching, we follow the assessment procedure of variables as outlined in Fig. 4.3. We illustrate this assessment procedure in a simple matching scheme of a theory pattern and four case study patterns (Fig. 6.1). When we have completed this



Figure 6.1 Example of a matching scheme of a theory pattern with four case study patterns

Theory pattern	Case study patterns			
	Case 1	Case 2	Case 3	Case 4
Independent variable X	+	-	+	-
Dependent variable Y	+	-	-	+
Support for hypothesis?	yes		no	no
CE1	+	-	-	-
CE2	+	-	-	+
Does empirical evidence support occurrence of context events?	yes	no	yes	partly
End of matching				

scheme with the values of the independent and dependent variables in the case study patterns, we decide as follows: if X and Y in the case study pattern have the same values as those predicted by the theory (both + or both -, as in cases 1 and 2), we conclude that the hypothesis is supported by empirical evidence from the case study. If X and Y have other values (cases 3 and 4), we conclude that empirical evidence from the case study does not support the hypothesis. As a next step for cases 1 and 2, we compare the values of the context events CE1 and CE2 (or more) in the theory pattern and the case study pattern. If these events have the same value as expected in the theory, we conclude that empirical evidence also supports the occurrence of context events. If some or all values of the context events differ, we conclude that empirical evidence partly supports or does not support the occurrence of context events.

*Valuation of derived variables (DV)*

In a number of theory patterns, we have used so-called DV variables: these variables have been derived from other variables. For example, variable DV1 (an active role of local actors in internal networks) in the theory pattern of the mixed exogenous/endogenous development approach has been derived from variables A1 (assessment of capacity of local policy makers), A2 (assessment of capacity of local entrepreneurs), A3 (assessment of capacity of local workers) and A4 (assessment of internal networks) (Section 4.3.1). In contrast to all other variables, these DV variables have not yet been valued in the case study patterns in Section 5.4, but they are valued as an ‘average’ of the variables from which they are derived in the matching schemes in this section. For the sake of transparency of our valuation of these DV variables, we include the values of the underlying variables as well in the matching scheme. These DV variables usually act as the independent variable in the hypotheses of the theories.

Finally, due to the inclusion of derived variables and underlying variables in the matching schemes of the theory and the case study patterns, the list of variables is sometimes rather long. In order to facilitate the interpretation of the matching schemes, we have indicated the independent and dependent variables of the hypothesis, the assessment of the hypothesis, the context events and its assessment in bold.

Given these introductory remarks on the matching scheme of the theory and case study patterns, we now turn to the actual matching process. In each of the seven

subsections below, we discuss the matching scheme for one of the selected theories according to a fixed framework. First, we give an assessment of the hypothesis and present the matching scheme. Second, we summarize the main weaknesses and strengths of the various variables in the case study patterns. Third, if relevant, we discuss the findings on the context events. Finally, we give an overall assessment of the results of the matching of the selected theory.

## **6.2.2 Matching of the mixed exogenous/endogenous development approach**

### *Testing of hypothesis*

In the scope of the mixed exogenous/endogenous development approach we test - given the availability of labour and capital - the hypothesis that '*An active role of local actors in internal and external networks stimulates employment growth.*' In the matching scheme (Fig. 6.2) it can be seen that the hypothesis is supported by evidence from all case study regions, except for Korinthia and Groningen. Keeping the specific position of Groningen in mind (see Fig. 5.2), it can be said that the hypothesis would have been supported by empirical evidence from Groningen if employment growth had not been related to the national average. In this respect the falsification for this region is not 'as bad as it looks'. Below we elaborate on the values of the distinguished variables in the matching scheme.

### *Capacity of local policy makers*

Among the positive aspects/strengths in the capacity of local policy makers (A1) are a strong political and social consensus, often induced by the existence of a strong regional identity; the ability to implement policies according the needs and priorities of the region within a broader development perspective; the ability to create good preconditions for industrial development such as construction of industrial zones with appropriate infrastructure; the ability to attract many public funds and private investments; and good contacts with the upper level authorities. Negative aspects/weaknesses in the capacity of local policy makers include the lack of a coherent vision of regional development, which hampers the formulating of strategies and effective policies, constraints in the administrative structure like a centralized administrative system, poor access to the regional policy makers at higher administrative levels, inadequate mechanisms for planning, formulating, implementing and monitoring of policies, no political consensus and inadequate cooperation in the region, and a low ability to perceive and adapt to changing conditions.

### *Capacity of local entrepreneurs*

In the description of the capacity of local entrepreneurs (A2) in the case study patterns, usually aspects such as attitude to risk, innovation capacity, tradition of entrepreneurship and industrial restructuring are pertinent. In the case study regions, the attitude of entrepreneurs to risk varies from risk-averting to risk-taking. The capacity to innovate can also be ranked from low to high, often with newcomers entrepreneurs in the region being the most innovative. Furthermore, a long tradition of entrepreneurship often fosters an open and responsive attitude to changes, local diffusion of knowledge and skills and attractive business climate. On the other hand, in many case study regions the lack of a

Figure 6.2 Matching scheme of the mixed exogenous/endogenous approach

Theory pattern	Leading case study regions									Lagging case study regions								
	Luxembourg (B)	Niederbayern (GER)	Korinthia (GR)	Albacete (SP)	Alpes des H. Prov. (FR)	Pesaro (IT)	Drenthe (NL)	Osttirol (AUS)	Keski S.L. (FIN)	Lüneburg (GER)	Fthiotis (GR)	Zamora (SP)	Ardennes (FR)	Nièvre (FR)	Macerata (IT)	Groningen (NL)	Liezen (AUS)	Mikkeli L. (FIN)
Assessment of capacity of local policy makers (A1)	++	++	-	++	++	-	+	+	+	-	-	-	-	0	-	+	-	0
Assessment of capacity of local entrepreneurs (A2)	+	++	+	++	+	++	+	0	+	-	-	-	-	-	0	+	0	0
Assessment of capacity of local workers (A3)	+	+	+	+	+	+	+	+	+	+	+	-	0	+	+	+	+	+
Assessment of internal networks (A4)	++	++	--	++	+	+	+	+	+	--	--	--	--	-	0	+	0	-
<b>Do local actors play an active role in the internal networks? (DV1) (derived from A1-A4)</b>	++	++	-	++	+	+	+	+	+	--	--	--	--	-	<b>0</b>	+	-	-
Assessment of external networks (A6)	++	++	-	++	+	+	0	0	+	--	--	--	--	-	0	0	-	0
<b>Do local actors play an active role in the external networks? (DV2) (derived from A1-A3 and A6)</b>	++	++	-	++	+	+	<b>0</b>	<b>0</b>	+	--	--	--	--	-	<b>0</b>	<b>0</b>	-	<b>0</b>
Non-agricultural employment growth in the region (EA1)	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-
<b>Support for hypothesis?</b>	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
<b>Create linkages between internal networks and institutions (A5)</b>	++	++		++	+	-	+	+	+	--	--	-	--	-	-		-	<b>0</b>
<b>Affect the balance of power in networks in favour of local actors (A7)</b>	++	++		++	+	+	+	+	+	-	+	-	<b>0</b>	<b>0</b>	+		<b>0</b>	+
<b>Does empirical evidence support occurrence context events?</b>	yes	yes		yes	yes	p. a)	yes	yes	yes	yes	p. a)	yes	yes	yes	p. a)		yes	p. a)

a) 'p.' denotes partly.

tradition of entrepreneurship constrains entrepreneurial initiatives. Finally, many case study regions were confronted with industrial restructuring, as the old firms were no longer competitive in the global market. In such restructuring situations, new firms emerge in new activities, but the extent to which this process occurs, differs among case study regions.

#### *Capacity of workers*

In all case study regions except for Zamora and Ardennes, the capacity of workers (A3) is positively assessed. Usually this relates to a good attitude to work and the absence of a class struggle tradition. In a number of case study regions some groups of workers no longer possess adequate skills, often because industrial restructuring has necessitated new skills.

#### *Internal networks*

Strengths in the internal networks (A4) usually refer to a high degree of solidarity, easy communication and strong local leaders. It is often remarked that strong networks act as vehicles for the diffusion of knowledge and information among firms. In many lagging case study regions, internal networks were assessed to be weak due to a low density of actors and long distances, little interaction among internal actors, lack of cooperation among sectors, internal conflicts, lack of local leaders, and lack of formal networks which are able to guide the development process.

#### *External networks*

It appears that the most frequent use of external networks (A6) is to obtain financial support from regional/national/EU level (policy relations), to export products (market relations) and to be in contact with (multinational) firms, either due to the presence of subsidiary business in the region or to attract firms into the region (firm relations). External networks appear to be strong when local actors negotiate with external actors on the basis of political consensus and territorial approach. Weaknesses in the external networks are often the result of a marginal/remote position of the case study region within a larger administrative unit, lack of unified strategies, and an inward-looking attitude of the local actors.

#### *Assessment context events*

In the theory pattern of the mixed exogenous/endogenous development approach we have distinguished two context events: the creation of linkages between internal networks and institutions (A5) and affecting the balance of power in favour of local actors (A7). As the final step of the matching process, we assess for all case studies, except for Korinthia and Groningen, whether empirical evidence of the case studies also supports the occurrence of context events. In each of the concerned leading case study regions, except for Pesaro, a strategy towards linking internal networks with institutions can be seen (Fig. 6.2). This is reflected in cooperation among policy makers and firms, sometimes enhanced by regional consensus, and the good contacts between local policy makers and higher level authorities. Although there is a dense informal network of firms in Pesaro, strong networks of policy makers as partners of these informal networks are lacking. On the other hand, in the lagging case study regions links between internal networks and institutions are usually not properly developed. With regard to the second context event

on trying to profit from external networks (A7), it appears that all leading case study regions benefit from these through public funds, private investments, revenues of exports, tourism and an inflow of migrants. However, some of the lagging case study regions also managed to benefit from external networks, which is contrary to the expectation held by the theory.

#### *Final assessment*

The hypothesis is widely supported (in 16 out of 18 case studies). In the matching of the context events, it appeared that these were predicted in 12 out of 16 case studies, and partly predicted in the four remaining case studies. Therefore, it can be concluded that the mixed exogenous/endogenous approach is a useful theory for describing economic development in rural regions.

### **6.2.3 Matching of the theory of innovative milieu**

#### *Testing of hypothesis*

In the scope of the theory of innovative milieu we test - given the availability of labour and capital - the hypothesis that '*Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth.*' Filières are not very common in our case study regions: we found evidence of the existence of filières only in Albacete, Pesaro and Macerata. In the matching scheme (Fig. 6.3) it can be seen that the hypothesis is only supported by evidence from the case studies in Albacete and Pesaro. Below we elaborate on the values of the distinguished variables in the matching scheme.

#### *Identification of filières*

In the case study reports the term 'filière' has not been used. Nevertheless, by interpreting filières as a chain of vertically integrated sectors round a certain product, which produces for an international consumer market, which is located in a confined part of a region, and which is characterized by a close social interaction between the different firms in order to communicate (changes in the) specific properties of the product, we have identified four filières (EA5)<sup>1</sup>. These are a knifemaking filière and a footwear filière in Albacete, a wood/furniture filière in Pesaro and a footwear filière in Macerata. The knifemaking filière in the city of Albacete produces sports knives and decorative knives, which are mainly exported to the rest of Spain. The footwear filière in Almansa (Albacete) produces cowboy boots and quality shoes for the US market. The wood/furniture filière in the coastal area of Pesaro is specialized in design furniture, including furniture with glass, which is sold all over the world. Finally, the footwear filière in the coastal area of Macerata produces all kinds of shoes, from boots to sports footwear, and footwear components, especially soles. About 75% of the production is exported to international markets all over the world. Especially the wood/furniture filière in Pesaro is a complex one with a wide variety of products. The filières are all in traditional industries, in existence for a long time in the case study regions, indicating the presence of tacit knowledge. As a response to the global competition in these industries, a restructuring process in the case study regions has taken place, resulting in local production systems of vertically integrated SMEs.

Figure 6.3 Matching scheme of the theory of the innovative milieu

Theory pattern	Leading case study regions									Lagging case study regions									
	Luxembourg (B)	Niederbayern (GER)	Korinthia (GR)	Albacete (SP)	Alpes des H. Prov. (FR)	Pesaro (IT)	Drenthe (NL)	Osttirol (AUS)	Keski S.L. (FIN)		Lüneburg (GER)	Fthiotis (GR)	Zamora (SP)	Ardenne (FR)	Nièvre (FR)	Macerata (IT)	Groningen (NL)	Liezen (AUS)	Mikkeli L. (FIN)
Are there filières in the region? (EA5)	n.r.	n.r.	n.r.	++	n.r.	++	n.r.	n.r.	n.r.		n.r.	n.r.	n.r.	n.r.	n.r.	++	n.r.	n.r.	n.r.
Assessment of local synergy of the filières (A10)				++		++										++			
Assessment of local innovativeness of the filières (A11)				++		++										+			
Assessment of transterritorial networks (A12)				++		++										++			
Increase in employment in filière (EA6)				+		+										-			
Support for hypothesis?				yes		yes										no			

#### Local synergy and innovativeness

Local synergy in all filières (A10) is achieved by a dense network of small and medium sized firms, which facilitates the flow of labour, skills and knowledge among firms. The assessment of local innovativeness of the filières (A11) has been derived from the balance of new firms and closed down firms and the extent to which filières are able to find niches and new specializations. All filières are characterized by a high rate of firm closures and creation of new firms. In the filières of Albacete and Pesaro, the number of new firms exceeds the number of closed firms; in Macerata, the opposite applies. In addition, all filières were actively searching for niches and new specializations. From the case study patterns it appeared that Albacete and Pesaro were more successful than Macerata in this search.

#### Transterritorial networks

External networks (A12) provide the filière with technological, organizational and market information from outside the region, which is crucial for the continuous recreation of local competitiveness and innovation capability of the filière. In the four examined filières, it appears that external networks are mainly used for providing market information, and less for technological and organizational information. This market information is essential for timely response to the situation in the external markets.

#### *Assessment context events*

As there are no context events identified in the theory pattern, the matching process stops here.

#### *Final assessment*

Filières are not common in our selection of rural regions. We have identified four filières: a knifemaking filière and a footwear filière in Albacete, a wood/furniture filière in Pesaro and a footwear filière in Macerata. The hypothesis is consistent with evidence from filières in two regions: Albacete and Pesaro. The inconsistency of evidence from the filière in Macerata with the hypothesis can be related to lack of sufficient local innovative capacity to face the increasing global competition: the filière showed shortcomings both in the process of implementing ongoing reorganization and in the search for niches and new specializations. The evidence in Macerata reveals that filières in an innovative milieu have to continuously adapt themselves to changing circumstances in order to ensure their viability.

### **6.2.4 Matching of Bryden's theory**

In the scope of Bryden's theory on the potentials of immobile resources for creating competitive advantages in rural areas, we test - given the availability of labour and capital - the hypothesis that '*The exploitation of immobile resources stimulates employment growth.*' We have divided this hypothesis into four subhypotheses (Section 4.3.3):

- 1 The exploitation of social and cultural capital stimulates employment growth;
- 2 The exploitation of rural amenities and cultural capital stimulates employment growth in tourism;
- 3 The exploitation of local raw materials stimulates employment growth in the production related to these raw materials;
- 4 The exploitation of local knowledge capital stimulates employment growth in the production related to this local knowledge capital.

Below we discuss the matching of each of these subhypotheses.

#### *Testing of subhypothesis 1*

In the matching scheme (Fig. 6.4) it can be seen that the subhypothesis '*The exploitation of social and cultural capital stimulates employment growth*' is supported by evidence from all case study regions, except for Korinthia and Groningen. In the leading regions, this support is manifested in high values for both X (strong internal networks) and Y (non-agricultural employment growth), whereas in the lagging regions, support arises from low values for both X and Y. Keeping in mind the specific position of Groningen (see Fig. 5.2), it can be said that the hypothesis would have been supported by empirical evidence from Groningen if employment growth had not been related to the national average. In this respect the falsification for this region is not 'as bad as it looks'. For a discussion of the properties of internal networks (A4) we refer to Section 6.2.2.

Figure 6.4 Matching scheme of Bryden's theory

Theory pattern	Leading case study regions									Lagging case study regions									
	Luxembourg (B)	Niederbayern (GER)	Korinthia (GR)	Albacete (SP)	Alpes des H. Prov. (FR)	Pesaro (IT)	Drenthe (NL)	Osttirol (AUS)	Keski S.L. (FIN)		Lineburg (GER)	Fthiotis (GR)	Zamora (SP)	Ardennes (FR)	Nièvre (FR)	Macerata (IT)	Groningen (NL)	Liezen (AUS)	Mikklein L. (FIN)
<b>Assessment of internal networks (A4)</b>	++	++	--	++	+	+	+	+	+		--	--	--	--	-	<b>0</b>	+	<b>0</b>	-
<b>Non-agricultural employment growth (EA1)</b>	+	+	+	+	+	+	+	+	+		-	-	-	-	-	-	-	-	-
<b>Support for subhypothesis 1?</b>	yes	yes	no	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes	yes	no	yes	yes
Assessment rural amenities (LR1)	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	0	+	+
<b>Assessment of valorization rural amenities (EA2)</b>	++	+	+	<b>0/</b> +	++	+	<b>0/</b> +	++	+		+	-	<b>0/</b> +	+	+	<b>0/</b> +	<b>0/</b> +	+	+
<b>Employment growth in tourist sector (EA4)</b>	+	+	+	+	+	-	+	<b>0</b>	+		+	+	+	<b>0</b>	+	+	+	-	+
<b>Support for subhypothesis 2?</b>	yes	yes	yes	yes	yes	no	yes	no	yes		yes	no	yes	no	yes	yes	yes	no	yes
Assessment of local raw materials (LR2)	n.r.	n.r.	+	+	n.r.	n.r.	n.r.	+	+		n.r.	+	+	+	+	n.r.	+	+	+
<b>Assessment of economic activities using local raw materials (EA7)</b>			+	+				+	+			+	+	+	-		+	+	+
<b>Employment growth in production of local raw materials (EA8)</b>			+	+				+	-			-	<b>0</b>	-	-		<b>0</b>	-	-
<b>Support for subhypothesis 3?</b>			yes	yes				yes	no			no	p. a)	no	yes		p. a)	no	no
<b>Assessment of economic activities using local knowledge (EA9)<sup>2</sup></b>	n.r.	n.r.	n.r.	++	n.r.	++	n.r.	n.r.	n.r.		n.r.	n.r.	n.r.	n.r.	n.r.	++	+	n.r.	n.r.
<b>Employment growth in activities using local knowledge (EA10)<sup>3</sup></b>				+		+										-	+		
<b>Support for subhypothesis 4?</b>				yes		yes										no	yes		

a) 'p.' denotes partly.



### *Testing of subhypothesis 2*

The subhypothesis '*The exploitation of rural amenities and cultural capital stimulates employment growth in tourism*' is supported by evidence from 13 out of the 18 case study regions (Fig. 6.4). Rural amenities (LR1) such as cultural landscapes of outstanding scenic beauty or high nature value, forests, mountains, settlements with a rich history and architectural remains and protected areas like regional or national parks, are found in all regions, and they are valorized in all regions but one. However, this valorization does not always result in an increase in employment. Evidence from the case studies shows that this is largely related to the fact that there is much competition for tourists: already considerable efforts are required to safeguard the existing level of employment in the tourist sector, especially in regions with a long tradition in tourism. Below is a summary of variables distinguished in this subhypothesis in the matching scheme.

#### *Valorization rural amenities and tourist infrastructure*

All regions, except for Fthiotis, expanded their tourist accommodations in the period under study (EA2). In Albacete, Macerata, Zamora and Groningen, in which tourism developed only in recent years, this expansion was moderate. In a number of regions, there was a shift from private, small-scale family supply to professional supply. In many regions investments were made in the creation and/or upgrading of natural parks, entertainment facilities, and restoration of historical buildings. In several regions, the tourist sector benefited from a clear strategy, which was developed and implemented in a close cooperation between tourist entrepreneurs and policy makers. However, in some other regions weaknesses were identified such as low quality of tourist accommodations and insufficient cooperation of the suppliers in the tourist sector. On the whole, agrotourism is moderate.

#### *Employment growth in tourism*

Employment in the tourist sector (EA4) increased in all regions, except for Pesaro, Osttirol, Ardennes and Liezen. The decline in Pesaro is due to a reorganization in the tourist sector, in which small-scale, family supply was replaced by bigger firms offering higher quality services. Osttirol and Liezen have a long tourist tradition and the tourist sector has a share of about 10% in total employment. Clearly, some level of saturation has been reached in these regions. From all regions, the tourist sector in Alpes de Haute Provence employs relatively the largest number of workers: it has a share of about 15% in the total labour force.

### *Testing of subhypothesis 3*

Eleven case study regions are endowed with some kind of local raw materials (LR2), which are mostly forest-related. Other raw materials include granite, slate, limestone marble, plaster of Paris, salt, magnesium chloride, gas, ferronickel, bauxite, chromium, dolomites, mineral water and hydropower. The subhypothesis '*The exploitation of local raw materials stimulates employment growth in the production related to these raw materials*' is fully supported by evidence from four - and partly in two - of the 11 tested case study regions (Fig. 6.4). On the whole, these regions managed to create employment growth by including further stages of processing in the exploitation of the local raw materials. The lack of support in the other regions is mainly due to increases in labour

productivity, which led to a diminishing of jobs. Moreover, some types of local raw materials such as gas hardly offer opportunities for further processing. Below we give some summarizing comments on the valorization of local raw materials and employment growth related to the use of these raw materials.

#### *Valorization local raw materials*

Where local raw materials are available in the regions, these are exploited in economic activities (EA7) in the forest sector, wood manufacturing, paper industry, extraction and processing in chemical and metal industries, construction, granite processing, bottling companies etc. The size of these industries is rather limited. The biggest is found in Mikkelin Lääni, in which the forest sector employs 9% of the total labour force.

#### *Employment growth in production related to the use of local raw materials*

In four of the five regions with wood resources, employment (EA8) declined due to an increase in labour productivity in the wood industry. Osttirol was the one exception, which managed to create employment growth in furniture manufacturing. Korinthia and Albacete experienced some employment growth in the exploitation of their local raw materials, whereas Fthiotis and Liezen did not. Zamora and Groningen show some mixed experiences, as employment in some sectors using local raw materials (hydropower and gas production) declined, whereas in others (granite processing and chemical industry) it increased.

#### *Testing of subhypothesis 4*

The subhypothesis *'The exploitation of local knowledge capital stimulates employment growth in the production related to this local knowledge capital'* has been tested in only four regions (Albacete, Pesaro, Macerata and Groningen), from which we had evidence that local knowledge capital is exploited in the production process. The hypothesis is supported by evidence from three out of the four case study regions (Fig. 6.4). In our case study regions, local knowledge capital is applied in filières involved in the production of furniture, knives, shoes and in a shipbuilding cluster, which are subject to global competition, and whose employment can generally only be maintained by supplying market niches or non-bulk products. The impact of filières on employment has also been examined in the theory of the innovative milieu in Section 6.2.3. Below are some comments on the valorization of local knowledge capital and its related employment growth.

#### *Valorization local knowledge capital*

We have evidence that local knowledge capital is used (EA9) to a considerable extent in at least four regions: in the knifemaking and footwear filières in Albacete, the wood/furniture filière in Pesaro, the footwear filière in Macerata and shipbuilding in Groningen. As we have not collected information on the exploitation of local knowledge capital in the RUREMPLO case studies, it is not unlikely that other regions use local knowledge capital as well. Nevertheless, the impact of such use on total regional employment is probably limited, since it did not merit any attention in the case studies.

### *Employment growth in production related to local knowledge capital*

In Albacete and Pesaro, employment in the filières (EA6) showed an increase, whereas the footwear filière in Macerata experienced a decrease. These developments are closely related to the extent in which they are able to generate sufficient local innovative capacity to face the increasing global competition. Groningen managed to maintain a substantial amount of employment in the shipbuilding sector by supplying in the non-bulk segment.

### *Final assessment*

We have tested the hypothesis '*The exploitation of immobile resources stimulates employment growth*' by using four subhypotheses. From the 51 tests, the subhypotheses were consistent with empirical evidence in 75% of the cases. Our testing reveals that the exploitation of social and cultural capital exerts a considerable impact on employment growth. Although in all regions but one, rural amenities are exploited, this does not always result in employment growth. Especially in regions with an extensive tourist sector - which is close to or at a saturation level - considerable efforts have to be spent to maintain the existing employment rather than to expand it. Local raw materials and local knowledge capital are less common in the case study regions. The subhypothesis on the impact of the exploitation of local raw materials on employment was only in half of the cases supported, whereas the subhypothesis on the impact of the exploitation of local knowledge capital on employment growth was supported by three out of the four tested case study regions.

These test results suggest that Bryden's theory appears to be relevant in describing economic development in rural regions, especially with regard to the exploitation of social and cultural capital. The exploitation of rural amenities, local raw materials and local knowledge capital often affects economic development as well. However, it should be taken into account that the share of sectors using rural amenities, local raw materials and local knowledge capital in the regional economy is usually not large.

## **6.2.5 Matching of the community-led rural development theory**

### *Testing of hypothesis*

In the scope of the community-led rural development theory we test - given the availability of labour and capital - the hypothesis that '*A well-developed self-help capacity of communities stimulates employment growth.*' In the matching scheme (Fig. 6.5) it can be seen that the hypothesis is supported by evidence from all case study regions, except for Korinthia and Groningen. With the specific position of Groningen in mind (see Fig. 5.2), it can be said that the hypothesis would have been supported by empirical evidence from Groningen if employment growth had not been related to the national average. Most of the variables in this matching scheme, i.e. capacity of local policy makers (A1), capacity of local entrepreneurs (A2), capacity of local workers (A3), internal networks (A4) and external networks (A6) have already been discussed in section 6.2.2. So below we focus on the remaining variable in the matching scheme: administrative structures.

Figure 6.5 Matching scheme of the community-led rural development theory

Theory pattern	Leading case study regions									Lagging case study regions								
	Luxembourg (B)	Niederbayern (GER)	Korinthia (GR)	Albacete (SP)	Alpes des H. Prov. (FR)	Pesaro (IT)	Drenthe (NL)	Osttirol (AUS)	Keski S.L. (FIN)	Lüneburg (GER)	Fthiotis (GR)	Zamora (SP)	Ardennes (FR)	Nièvre (FR)	Macerata (IT)	Groningen (NL)	Liezen (AUS)	Mikkeli L. (FIN)
Assessment of capacity of local policy makers (A1)	++	++	-	++	++	-	+	+	+	-	-	-	-	0	-	+	-	0
Assessment of capacity of local entrepreneurs (A2)	+	++	+	++	+	++	+	0	+	-	-	-	-	-	0	+	0	0
Assessment of capacity of local workers (A3)	+	+	+	+	+	+	+	+	+	+	-	0	+	+	+	+	+	+
Assessment of internal networks (A4)	++	++	--	++	+	+	+	+	+	--	--	--	--	-	0	+	0	-
Assessment of external networks (A6)	++	++	-	++	+	+	0	0	+	--	--	--	--	-	0	0	-	0
Assessment of administrative structures (DV3) (derived from A5 and A7)	++	++	-	++	++	--	+	+	+	--	-	--	-	-	--	+	-	+
Is the self-help capacity well developed? (DV4) (derived from A1-A4, A6 and DV3)	++	++	-	++	+	+	+	+	+	--	--	--	-	-	0	+	-	0
Non-agricultural employment growth in the region (EA1)	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-
Support for hypothesis?	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
Initiatives for mobilizing self-help capacity (A9)	++	++		++	++	+	+	+	+	-	-	-	-	-	+		-	-
Does empirical evidence support occurrence context events?	yes	yes		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no		yes	yes

### *Administrative structures*

Strengths in the administrative structures (DV3) refer to well-balanced competences among the different administrative levels, which enable local policy makers to affect or to participate in the decision process. Such a role of local policy makers is enhanced when they are able to establish good working contacts with upper-level authorities. In addition, it appears that in such situations public funding is often spent on projects which are in line with the needs of the region. On the other hand, in a number of case study regions administrative structures were weak, due to a marginal position of the region in the larger administrative unit or to a tradition of centralization of decision making at upper levels. In such situations, local policy makers have usually poor working contacts with upper-level authorities. This often results in an underutilization of public funds or to a use of public funds for projects which are not really (or less) needed by the region.

### *Assessment context events*

In the theory pattern of the community-led rural development theory we have distinguished one context event: initiatives for mobilizing self-help capacity (A9). As a final step of the matching process, we assess for all case studies, except for Korinthia and Groningen, whether empirical evidence of the case studies also supports the occurrence of this context event. In each of the concerned leading case study regions, initiatives for mobilizing self-help capacity (A9) can be perceived. Usually, this is a self-reinforcing process: the properly functioning internal networks continuously mobilize actors and resources, which ensures the maintenance of the networks. In addition, in several regions, local leaders, development agencies or universities play a role in mobilizing the self-help capacity. It also appeared that a strong regional identity facilitates the mobilizing of the self-help capacity, as such an identity often coincides with a common view. On the other hand, lagging regions, except for Macerata, hardly take any initiatives to mobilize the self-help capacity, as factors that enhance the self-help capacity in leading regions are usually absent.

### *Final assessment*

The hypothesis is widely supported (in 16 out of 18 case studies). In the matching of the context events in 16 case studies, it appeared that these were predicted in all cases, except for Macerata. Therefore, it can be concluded that the community-led rural development theory is a useful theory for describing economic development in rural regions.

In the pattern-matching of this theory, it appeared that there was a close relationship with the mixed exogenous/endogenous approach. The independent variables (a well-developed self-help capacity and an active role of the local actors in the internal and external networks respectively) have been derived from the same subvariables. The only difference is the inclusion of the assessment of administrative structures in the independent variable of the self-help capacity. In Section 6.3 we will return to the implications of this overlap.

## 6.2.6 Matching of Illeris' theory

### Testing of hypothesis

In the scope of Illeris' inductive theory of regional development we test - given the availability of labour and capital - the hypothesis that 'A strong set of local conditions stimulates employment growth.' In the matching scheme (Fig. 6.6) it can be seen that the hypothesis is supported by evidence from six leading case study regions. In Groningen's case (see Fig. 5.2), it can be said that the hypothesis would have been supported by empirical evidence if employment growth had not been related to the national average. Below is an evaluation of the distinguished variables in the matching scheme. However, for the discussion of the variable 'rural amenities' (LR1), we refer to section 6.2.4

Figure 6.6 Matching scheme of Illeris' theory

Theory pattern	Leading case study regions									Lagging case study regions								
	Luxembourg (B)	Niederbayern (GER)	Korinthia (GR)	Albacete (SP)	Alpes des H. Prov. (FR)	Pesaro (IT)	Drenthe (NL)	Osttirol (AUS)	Keski S.L. (FIN)	Lüneburg (GER)	Fthiotis (GR)	Zamora (SP)	Ardennes (FR)	Nièvre (FR)	Macerata (IT)	Groningen (NL)	Liezen (AUS)	Mikklein L. (FIN)
Is the self-help capacity well developed? (DV4) (derived from A1-A4, A6 and DV3)	++	++	-	++	+	+	+	+	+	-	-	-	-	0	+	-	0	
Assessment of transport infrastructure in the region (LR3)	++	++	0/+	++	0/+	0/+	+	0/+	0/+	0/+	0/+	0/+	0/+	0/+	0/+	+	0/+	0
Assessment of external transport connections (LR4)	+	+	+	+	0/+	+	+	-	0	0	+	0	-	-	+	+	+	0
Assessment of soft infrastructure (LR5)	+	+	-	+	0	0/+	+	0/+	+	-	-	0	0/+	-	-	+	-	0/+
Assessment of rural amenities (LR1)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+
Assessment of agglomeration (LR6)	-	+	0	++	-	+	+	0	++	+	+	+	+	+	+	++	-	+
Non-agricultural employment growth in the region (EA1)	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-
Support for hypothesis?	yes	yes	no	yes	no	yes	yes	no	yes	no	no	no	no	no	no	no	no	no

### *Self-help capacity*

The self-help capacity (DV4) appears to be strong when the capacity of local actors is high, when the internal and external networks are strong and when administrative structures enable good working contacts between local and upper-level authorities. When these features are weak, a low self-help capacity results. From the matching scheme it can be seen that all leading case study regions, except for Korinthia, have a high self-help capacity, whereas all lagging case study regions, except for Groningen, are characterized by a low self-help capacity (see also Section 6.2.5).

### *Transport infrastructure in the region*

Positive aspects of the internal transport infrastructure (LR3) are evidenced by a well-developed infrastructure of highways, secondary roads and railways within the region. Weaknesses pertain to the absence of highways among main centres in the region and inadequacies in the road infrastructure in the mountain areas. The density of roads varies largely among regions, which is partly due to the presence of mountainous areas with few roads in a number of regions (Table 6.1). In most regions, transport infrastructure has markedly been improved and extended during the study period, often with support of EU Structural Funds (Table 6.2).

### *External transport connections*

Strengths in the external transport connections (LR4) concern the integration of the region into the (inter) national highway and railway system. In many cases, this integration was established or improved during the study period. However, external transport connections in a number of case study regions have been assessed to be weak since these regions are not, or only through cities at the border, connected to the national highway system.

### *Soft infrastructure*

Strengths in the soft infrastructure (LR5) are related with the presence of universities, which are important poles of technology and knowledge transfer to foster economic development in the region. However, universities can only perform this role if they are well integrated in the regional economy. In some case study regions, universities do not have such links, and this feature is assessed as a weakness. A number of case study regions are endowed with a well-developed supply of secondary and tertiary education facilities, technical schools, post-education training programmes and research centres, whereas other case study regions lack these facilities. In some regions, this is due to the proximity of education and research facilities in neighbouring regions. In such cases, regions can often benefit from an adequate supply of skilled labour and technology and knowledge transfer.

### *Agglomeration*

Agglomeration (LR6) has to be put in the context of rural regions; it cannot be compared with the degree of agglomeration in metropolitan areas. As explained already in Section 4.3.5, our threshold for agglomeration is a city with a population of at least 30,000. The case study regions of Albacete, Keski Suomen Lääni and Groningen have central cities/areas, which account for about half of total regional employment. Nevertheless, the population size of these agglomerated centres is moderate: less than 175,000. On the

Table 6.1 Density of transport infrastructure in several case study regions, 1980s-1990s (in km road per km<sup>2</sup> area)

Region	Year 1	Year 2	Motorways		Other roads		Railways	
			Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Luxembourg	1980	1993	0.002	0.035	2.597	3.352	0.076	0.068
Korinthia	-	1990s	-	0.157	-	0.334	-	-
Fthiotis	-	1990s	-	0.089	-	0.219	-	-
Albacete	1980	1995	0.001	0.010	0.126	0.227	0.018	0.018
Zamora	1985	1995	0.000	0.005	0.239	0.381	0.027	0.027
Drenthe	1980 <sup>a)</sup>	1994	0.028	0.031	2.106	2.319	0.040	-
Groningen	1980 <sup>a)</sup>	1994	0.009	0.027	1.612	1.845	0.064	-
Osttirol	-	1996	-	-	-	0.128	-	0.024
Liezen	-	1996	-	0.012	-	0.163	-	0.059
Keski S.L.	1985	1994	0.000	0.001	0.309	0.312	-	-
Mikkelin L.	1985	1994	0.000	0.000	0.335	0.344	-	-

a) 1985 for other roads.

Source: RUREMPLO project.

Table 6.2 Transport infrastructure in several case study regions, 1980s-1990s

Region	Year 1	Year 2	Motorways		Other roads		Railways	
			Length year 2 in km	Index year 2 (year 1 =100)	Length year 2 in km	Index year 2 (year 1 =100)	Length year 2 in km	Index year 2 (year 1 =100)
Luxembourg	1980	1993	154	2,200	14,881	129	301	89
Korinthia	-	1990s	360	-	765	-	-	-
Fthiotis	-	1990s	393	-	971	-	-	-
Albacete	1980	1995	153	1,700	3,395	180	270	100
Zamora	1985	1995	50	-	4,027	159	289	100
Drenthe	1980 <sup>a)</sup>	1994	84	112	6,215	110	-	-
Groningen	1980 <sup>a)</sup>	1994	80	296	5,473	114	-	-
Osttirol	-	1996	0	-	258	-	49	-
Liezen	-	1996	39	-	533	-	192	-
Keski S.L.	1985	1994	11	183	5,075	101	-	-
Mikkelin L.	1985	1994	7	-	5,616	103	-	-

a) 1985 for other roads.

Source: RUREMPLO project.

other hand, regions like Luxembourg, Korinthia, Alpes de Haute Provence, Osttirol and Liezen have small cities which can not be characterized as agglomerations, although within the regions they constitute a relative concentration of people and activities. All other case study regions have cities with a population range between about 30,000-90,000, and hence, can be characterized as regions with some agglomeration.



Nevertheless, the application of our threshold for agglomeration in the case study regions raises some doubts, as in several case study regions the size of cities like Mikkeli (33,000) and Celle (74,000) was considered as too small to induce a major take-off.

#### *Assessment context events*

As there are no context events identified in the theory pattern, the matching process stops here.

#### *Final assessment*

The hypothesis is only supported by evidence from one-third of the case studies. As illustrated in Fig. 4.11, Illeris' theory can be considered as an extension of the community-led rural development theory in the sense that Illeris' theory does not only consider the independent variable of self-help capacity as the community-led rural development theory does, but a number of additional variables as well. When looking only at the values of the variable of self-help capacity (DV4) in the matching scheme (Fig. 6.6), it appears that these exhibit values which conform to the theory pattern, except for Korinthia and Groningen. It was precisely this score, that generated high support for the hypothesis formulated with regard to the community-led rural development theory. However, the addition of the local conditions of road and soft infrastructure, rural amenities and agglomeration to the variable of self-help capacity in Illeris' theory changes the test results considerably. The resultant low support is especially due to the variables of rural amenities and agglomeration, which have in most leading and lagging case study regions a positive sign, and to a lesser extent to the variables of transport infrastructure. So these matching results suggest that self-help capacity is the trigger in Illeris' theory and that the other distinguished local conditions are less decisive.

### **6.2.7 Matching of Myrdal's theory**

#### *Testing of hypotheses*

As we already indicated in Section 4.3.6, the matching with Myrdal's theory is rather complicated due to its cumulative character and hence deviates from the matching of the other theories. For matching Myrdal's theory, we focus on a comparison of the development of the variables in each pair of leading/lagging case study regions with those specified in the theory pattern. In the scope of Myrdal's cumulative causation theory we test - given the availability of labour and capital - the following two hypotheses: '*Leading regions cumulate wealth*' and '*The level of wealth in lagging regions is below that in leading regions.*' In the matching scheme (Fig. 6.7) it can be seen that the hypotheses are only supported by empirical evidence from the pair of leading/lagging case study regions in Niederbayern/Lüneburg. The low score of the testing is partly caused by the fact that our leading regions are derived from employment performance and not from GDP/capita like in Myrdal's theory. It appears that our leading case study regions do not always have a higher GDP/capita or a higher increase in GDP/capita than the lagging regions. When there is, for example, a high employment growth in sectors with a relatively low labour productivity like the services sector, or when a region has a relatively large economically inactive population, GDP/capita may be at a moderate level and its increase may be limited. When we relax the criterion of

Figure 6.7 Matching scheme of Myrdal's theory<sup>a)</sup>

Theory pattern	Pairs of leading/lagging case study regions									Total score o.k.
	Luxembourg (B) / Ardennes (FR)	Niederbayern / Lüneburg (GER)	Korinthia / Fthiois (GR)	Albacete / Zamora (SP)	Alpes des H. Prov./ Nièvre (FR)	Pesaro/ Macerata (IT)	Drenthe / Groningen (NL)	Osttirol/ Liezen (AUS)	Keski S.L./ Mikkeliin L. (FIN)	
Assessment of GDP/capita and its increase (EA11)	not o.k.	o.k.	o.k.	not o.k.	not o.k.	not o.k.	not o.k.	not o.k.	o.k.	3
<b>Assessment of migration balance (A8)</b>	<b>o.k.</b>	<b>o.k.</b>	<b>o.k.</b>	<b>o.k.</b>	<b>o.k.</b>	<b>not o.k.</b>	<b>o.k.</b>	<b>not o.k.</b>	<b>o.k.</b>	<b>7</b>
Assessment of inflow of private and public investments (DV5) (derived from A7)	o.k.	o.k.	not o.k.	o.k.	not o.k.	not o.k.	not o.k.	o.k.	not o.k.	4
<b>Assessment of self-help capacity (DV4)</b>	<b>o.k.</b>	<b>o.k.</b>	<b>not o.k.</b>	<b>o.k.</b>	<b>o.k.</b>	<b>o.k.</b>	<b>not o.k.</b>	<b>o.k.</b>	<b>o.k.</b>	<b>7</b>
Assessment of internal transport infrastructure (LR3)	o.k.	o.k.	not o.k.	o.k.	not o.k.	not o.k.	not o.k.	not o.k.	o.k.	4
Assessment of external transport infrastructure (LR4)	o.k.	o.k.	not o.k.	o.k.	o.k.	not o.k.	not o.k.	not o.k.	not o.k.	4
Assessment of improvement in transport infrastructure (DV6) (derived from LR3 and LR4)	o.k.	o.k.	-	o.k.	-	-	not o.k.	-	not o.k.	3
Assessment of soft infrastructure (LR5)	o.k.	o.k.	not o.k.	o.k.	o.k.	o.k.	not o.k.	o.k.	o.k.	7
<b>Support for hypotheses?</b>	<b>partly</b>	<b>yes</b>	<b>no</b>	<b>partly</b>	<b>partly</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>partly</b>	<b>1: o.k. 4: partly</b>

a) o.k. means: according to the expectations of Myrdal's theory; not o.k. means: not according to the expectations of Myrdal's theory.

GPD/capita, the evidence from the pairs of case studies regions in Luxembourg/Ardennes and Albacete/Zamora is also consistent with the hypotheses. Next, according to Myrdal's theory, welfare states undertake all kinds of redistribution policies in favour of lagging regions. This can affect the score of leading and lagging regions on the inflow of public and private investments and the state of transport and soft infrastructure. When we also relax for the above mentioned criteria, evidence from the case study pairs of Alpes de Haute Provence/Nièvre and Keski S.L./Mikkeliin L. supports the hypotheses as well.

Below we elaborate on the values of the distinguished variables in the matching scheme in more detail. Since several distinguished variables in Myrdal's theory have already been discussed in the matching of theories in the previous sections, we restrict ourselves to an assessment of whether their development in each pair of case study regions is according to the expectations of Myrdal's theory.

#### *GDP/capita and its increase*

Within the scope of matching Myrdal's theory, we expect a higher GDP/capita and also a higher increase in GDP/capita in leading regions compared to lagging regions (EA11). In four pairs of leading/lagging case study regions (Niederbayern/Lüneburg, Korinthia/Fthiotis, Alpes de Haute Provence/Nièvre and Keski S.L./Mikkelin L.), GDP/capita in the leading region exceeded that in the lagging regions. Almost all leading case study regions showed a higher increase in GDP/capita compared with the lagging region during the study period, the pairs Albacete/Zamora and Alpes de Haute Provence/Nièvre being the exceptions.

#### *Migration*

All leading case study regions, except for Osttirol had a positive migration balance (A8) in the 1980s and early 1990s, reflecting the attractiveness of the region as a place of work and residence, both for the economically active and retirees. However, in some of these regions there was an outflow of the high-educated due to a lack of jobs requiring high qualifications. On the other hand, six out of the nine lagging case study regions experienced during the same period a negative migration balance, mainly made up of an outflow of students and the economically active and a smaller inflow of retirees. The outflow of those who are economically active suggests a pessimistic economic climate and erodes the human resource base.

Where matching of Myrdal's theory is concerned, we expect immigration of workers in leading regions and outmigration in lagging regions or a lower immigration than in leading regions. Except for Osttirol/Liezen and Pesaro/Macerata, all pairs of leading and lagging case study regions exhibit this situation. In the pair Osttirol/Liezen, the leading region has a higher outmigration than the lagging region, whereas in the pair Pesaro/Macerata both regions have about the same rate of immigration.

#### *Inflow of private and public investments*

In the scope of matching Myrdal's theory, we expect an inflow of private and public investments in leading regions and a lack of inflow of private and public investments in lagging regions or a lower inflow than in leading regions. The inflow of private and public investments (DV5) is derived from the variable of benefits of external networks (A7). In the pairs Luxembourg/Ardennes, Niederbayern/Lüneburg, Albacete/Zamora and Osttirol/Liezen, the leading region benefited more from the inflow of private and public investments than the lagging regions. In the other pairs of case study regions there is no distinct difference in the benefits, as both leading and lagging regions experienced an inflow of private and public investments.

### *Self-help capacity*

In the scope of matching Myrdal's theory, we expect that leading regions have a higher self-help capacity than lagging regions. In all pairs of leading/lagging case study regions, the self-help capacity (DV4) is high in the leading regions and lower in the lagging regions, Korinthia/Fthiotis and Drenthe/Groningen being the exceptions. Korinthia is saddled with a low self-help capacity, whereas the self-help capacity in Drenthe and Groningen is at about the same level.

### *Transport infrastructure inside and outside the region*

Where matching of Myrdal's theory is concerned, we expect transport infrastructure to be well developed and extensive in leading regions and less well developed and less extensive in lagging regions. In some pairs of case study regions, internal transport infrastructure (LR3) is better developed in the leading region, whereas in other pairs the state of internal transport infrastructure is more or less similar. The same applies to external transport connections (LR4). In all case study regions, improvements in transport infrastructure have been made in the study period (Table 6.2). In the leading regions of Luxembourg (B), Niederbayern and Albacete, the improvements exceeded those in the lagging region, whereas in the lagging regions of Groningen and Mikkelin Lääni a larger extension of roads took place with respect to their corresponding leading regions. Although transport infrastructure has been improved in the pairs of case study regions in Greece, France, Italy and Austria, we are unable to ascertain whether the improvement was higher in the leading case study region.

### *Soft infrastructure*

With regard to the state of soft infrastructure (LR5), we are interested in the question of whether leading case study regions have a better developed soft infrastructure compared to the lagging ones. It appears that almost all leading case study regions have a higher degree of soft infrastructure, except for the pairs Korinthia/Fthiotis and Drenthe/Groningen. Unfortunately, we have no information to assess whether soft infrastructure in leading case study regions improved at a higher rate than that in lagging case study regions.

### *Assessment context events*

In the theory pattern of Myrdal's theory we have distinguished one context event: exogenous changes. We have found exogenous changes (A13) for three case study regions: the establishment of the new Spanish constitution (1978) for Albacete and Zamora and the construction of the Felbertauern road (1968) for Osttirol. A period of employment growth followed in Albacete and Osttirol; however, Zamora did not enter a phase of self-sustaining economic expansion.

### *Final assessment*

There is only one pair of case study regions, whose values in the case study patterns conform to the expectation of the theory pattern. However, when we disregard the variables of GDP/capita, the inflow of investments and the state of transport and soft infrastructure, the set of hypotheses of Myrdal's theory is supported by five pairs of case study regions. This disregarding can be justified by two main reasons: first, we did not base our selection of case study regions on GDP/capita; second, in welfare states policy

inferences and spread effects may counteract the loss of wealth in lagging regions. Relaxing these criteria also enables us to identify the decisive variables in Myrdal's theory: self-help capacity and the migration balance. Self-help capacity has already been put forward as a main factor behind employment growth in the community-led rural development theory and in Illeris' theory.

### **6.2.8 Matching of the creative destruction model of community development**

In the scope of the creative destruction model of community development we test - given the availability of labour and capital - the hypothesis that '*Overexploitation of rural amenities destroys employment in sectors related to these rural amenities.*' In the creative destruction model five stages of exploitation of rural amenities are distinguished, of which the first two refer to early commodification and the third one to overexploitation of rural amenities (EA3). Nearly all case study regions valorize their rural amenities (EA2). However, in all case study regions, the valorization of rural amenities is in the first or second stage. So there are no case study regions which overexploit their rural amenities, and hence, it makes no sense to continue the matching process.

### **6.3 Discussion of the results of pattern-matching**

In the previous section we have carried out the matching process for seven selected theories and 18 case study regions. It appeared that - given the availability of labour and capital - the mixed exogenous/endogenous approach, the community-led development theory and the first hypothesis of Bryden's theory are widely supported by empirical evidence from the case studies, whereas the other theories have a lower score or are less common (Fig. 6.8). As a first step in this section, we discuss the scores of the theories in more detail. As a next step, we cluster the case study regions according the extent of support for the theories. As a last step, we comment on the analytical generalization of our matching results.

#### *Theories with a high score*

The mixed exogenous/endogenous approach and the community-led development theory are widely supported: in all case study regions except for Korinthia and Groningen. This makes them useful theories for describing economic development in rural regions. In the operationalization of the variables in the theory patterns of the mixed exogenous/endogenous approach and the community-led development theory, it appeared that the theory patterns were more or less the same, which explains the similar matching results. In both theories, a high capacity of local actors and strong internal and external networks - often indicated as self-help capacity - are supposed to be main factors behind employment growth. Although the community-led development theory has its roots in the endogenous approach, it also refers to external linkages like external partnerships and an appropriate institutional structure of policy makers at different hierarchical levels.

Figure 6.8 Overview of results of pattern-matching

Theory	Hypothesis	Number of tested cases	Number of cases which supported the hypothesis
Mixed exogenous/endogenous approach	An active role of local actors in internal and external networks stimulates employment growth	18	16
Community-led rural development theory	A well-developed self-help capacity of communities stimulates employment growth	18	16
Bryden's theory	(1) The exploitation of social and cultural capital stimulates employment growth	18	16
	(2) The exploitation of rural amenities and cultural capital stimulates employment growth in tourism	18	13
	(3) The exploitation of local raw materials stimulates employment growth in the production related to these raw materials	11	4
	(4) The exploitation of local knowledge capital stimulates employment growth in the production related to this local knowledge capital	4	3
Myrdal's theory	Leading regions cumulate wealth; The level of wealth in lagging regions is below that in leading regions	18	10
Illeris' theory	A strong set of local conditions stimulates employment growth	18	6
Theory of the innovative milieu	Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth	3	2
Creative destruction model of community development	Overexploitation of rural amenities destroys employment in sectors related to these rural amenities	0	0

The first hypothesis of Bryden's theory on the exploitation of social and cultural capital is supported in the same case study regions as are the mixed exogenous/endogenous approach and the community-led development theory. However, in Bryden's theory the focus is only on internal networks and not on the external networks as in the other two theories. The case studies suggest a relationship between the strength of internal and external networks: if local actors manage to create strong internal networks, they are also able to establish strong external networks. On the other hand, when internal networks are weak, the same usually applies to external networks. In this respect, Bryden's theory could be more explicitly extended to external linkages: in the present form, the theory does recognize the benefits of exogenous forces, but its premises focus only on endogenous potentials.

The second hypothesis of Bryden's theory on the exploitation of rural amenities and cultural capital is also quite widely supported. Rural amenities are valorized in almost all

case study regions, so this is not a differentiating variable with high values in leading regions and low values in lagging regions. Reasons for lack of support for this hypothesis pertain to an already high level of employment in tourism and labour-saving reorganization strategies in the tourist sector.

#### *Support from other research*

Our findings, that a well-developed capacity of local actors and strong internal and external networks are main factors behind employment growth, are in line with those from Stöhr (1990:5-7) who reported on local initiatives in 50 case studies in Europe during the period 1975-1985. He concluded that successful local initiatives usually rely on factors such as local cooperation, mobilization of local entrepreneurial resources, upgrading of skills and capacity of local actors and good working contacts with external actors (state agencies and private firms), whereas less successful development schemes often suffer from a lack of willingness of the local actors to cooperate, a lack of entrepreneurial activity and a heavy reliance on external (state) agencies.

#### *Theories with a lower score*

The theories of Illeris and Myrdal are less widely supported by empirical evidence from the case studies. As shown in Section 4.4, these theories can be seen as an extension of the mixed exogenous/endogenous approach and the community-led development theory, in the sense that they do not only assume that the capacity of local actors and networks affect employment growth, but transport and soft infrastructure, agglomeration, rural amenities, immigration, inflow of investments and GDP/capita as well. However, lagging regions do not score lower than the leading regions on most of these additional variables, except for soft infrastructure and immigration, and for that reason the hypotheses are often not supported by evidence from the case studies. Hence we found that the self-help capacity of actors and the migration balance can be considered as the main factors related to employment growth in Myrdal's theory, whereas self-help capacity seems to be the main trigger in Illeris' theory. This implies that we deal with the same factors behind employment growth as in the mixed exogenous/endogenous approach and the community-led development theory. The contribution of the migration balance to employment growth in Myrdal's theory can be related to the process of cumulative causation. Evidence from the case studies shows that leading case study regions tend to have immigration and lagging regions outmigration. So in the process of cumulative causation, employment growth goes together with a positive atmosphere that boosts immigration, whereas employment decline tends to be accompanied by a negative atmosphere that contributes to outmigration. The fact that the other distinguished variables in Illeris' and Myrdal's theories are less decisive is mainly due to two factors. First, most case study regions are endowed with rural amenities and some degree of 'rural agglomeration', rendering them indistinctive as variables. Second, due to redistribution policies of national authorities, transport infrastructure in almost all case study regions is rather well developed. As a result of the same redistribution policies, lagging regions also benefit from an inflow of public and private investments. Although soft infrastructure like universities and research centres is also dependent on such redistribution policies, we found that soft infrastructure is often better developed in leading regions. Usually, soft infrastructure can fuel economic development by diffusing new technologies.

*Theories which are less common*

The third and fourth hypotheses of Bryden’s theory and the theory of the innovative milieu deal with features which are not common to all case study regions. The third hypothesis of Bryden’s theory on the exploitation of local raw materials is applicable to just over half of the case study regions. It is not widely supported by evidence from the case studies, as it appears that increases in labour productivity, for example in the forest sector, often result in a decrease in employment. The fourth hypothesis of Bryden’s theory on the exploitation of local knowledge capital was only applicable in four case study regions. It appears that local knowledge is also applied in filières, which are the independent variable in the pattern of the theory of the innovative milieu. In the majority of the matched cases, the exploitation of local knowledge resulted in an increase in employment.

Finally, there was no evidence of overexploitation of rural amenities in our case study regions, so we could not match the creative destruction model of community development.

*Clustering of regions*

In the preceding we have discussed the pattern-matching results for each of the respective theories. However, the pattern-matching results can also be analyzed from the viewpoint of whether there are clusters of regions which support the same theories. When we disregard in the interest of further simplification the second, third and fourth hypotheses of Bryden’s theory and the theory of the innovative milieu, we can distinguish five main groups according to the extent to which empirical evidence from the case studies is consistent with the predictions of the theories (Fig. 6.9). The four leading case study regions in group 1 are consistent with hypotheses of all respective theories, whereas empirical evidence from the leading and lagging case study regions in groups 2 and 3

Figure 6.9 Clustering of regions according to their support for hypotheses in the theories<sup>a)</sup>

Theory	Group				
	1	2	3	4	5
	Luxembourg Niederbayern Albacete Keski S.L.	Pesaro Drenthe	Alpes de HP Lüneburg Zamora Ardenne Nièvre Mikkelin L.	Osttirol Fthiotis Macerata Liezen	Korinthia Groningen
Mixed exogenous/ endogenous approach	○	○	○	○	
Community-led rural development theory	○	○	○	○	
Bryden’s theory, hypothesis 1	○	○	○	○	
Illeris’ theory	○	○			
Myrdal’s theory	○		○		

a) ○ is used to indicate support for hypothesis; in order to avoid a too complex picture, we have excluded hypotheses 2-4 of Bryden’s theory and the theory of the innovative milieu, which have a rather heterogeneous score or are less common in the case studies.



support the hypotheses of all relevant theories except for either Illeris' theory or Myrdal's theory. Case study regions in group 4 are consistent with three theories. Finally, empirical evidence from the case study regions of Korinthia and Groningen does not support any of the theories included in Fig. 6.9. Nevertheless, empirical evidence from Korinthia and Groningen is in line with the expectations of the second, third and fourth hypotheses of Bryden's theory, but these hypotheses deal only with a part of employment (related with tourism, local raw materials and local knowledge capital respectively). Moreover, with the specific position of Groningen in mind (see Fig. 5.2), Groningen would have been classified in group 2 if employment growth had not been related to the national average.

### *Suggestions on factors behind employment growth in Korinthia and Groningen*

The matching results for Korinthia and Groningen deserve further explanation. In the case of Groningen, we have already argued that the matching results can be related to the fact that employment growth has been measured relative to the national average. The same does, however, not apply to the leading region of Korinthia. Below is a discussion which offers some suggestions on factors behind employment growth in Korinthia and Groningen.

#### *1 Korinthia*

The matching results for Korinthia prompt us to look at the question of other factors which determine employment development in this region if capacity of local actors and internal and external networks are to be discounted. Empirical evidence shows that the region benefits to a great extent from spill-over effects of neighbouring Athens. Combined with the fact that the region has a relatively large agricultural sector, which indicates that the region has not yet completed its transition from an agrarian economy to a modern services economy, it could be supposed that employment in such circumstances can be boosted by external forces from neighbouring expanding urban centres. In addition, we found evidence that the capacity of actors and the strengths of the networks have been improved in recent years. So if this trend continues, we could expect that if we repeat the pattern-matching in the future, empirical evidence from Korinthia would support the mixed exogenous/endogenous approach, the community-led development theory and the first hypothesis of Bryden's theory.

#### *2 Groningen*

With respect to Groningen, the situation is more complicated for several reasons. First, we have already pointed out that Groningen shows a relatively high employment growth, but that it is nevertheless classified as a lagging region because of our measurement of employment growth relative to the national average (Fig. 5.2). If we should consider absolute growth rates of employment, and given the observation that Groningen shows a more or less similar score on the capacity of local actors and networks as the leading region Drenthe, empirical evidence from Groningen would support the same theories as Drenthe does. Second, when we change the period on which the calculation of being a leading or lagging region in the Netherlands is based (1980-1991) to a more recent period, employment growth in Groningen exceeds that in Drenthe. From this it could be argued that Groningen has been wrongly classified as a lagging region and that the value of non-agricultural employment growth has to be changed from a minus into a plus in the matching schemes in the previous section. This would also imply that empirical evidence from Groningen supports the same theories as Drenthe does. Third, it can also be

assumed that employment in Groningen is affected by factors that are not considered in our selected theories and that we have to search for other theories which predict employment development in Groningen. Such an assumption can be justified by the widely held belief in the Netherlands that Groningen is a marginal or lagging region. Usually, this belief is related to the argument that Groningen is the most peripheral region relative to the Randstad, the economic centre of the Netherlands. Hence we should search for a theory that relates, for example, distance from an economic centre to employment growth. Finally, we can also argue that the matching results for Groningen are affected by our unit of analysis: we have - for pragmatic reasons - assumed that the borders of the province of Groningen coincide with a labour market area. This assumption can be disputed by referring to the location of the capital city of Groningen, which is the main economic centre in the north of the Netherlands. This city is not centrally located in the region of Groningen, but at the southwest border, implying that parts of the neighbouring regions Drenthe and Friesland also profit from economic activities in and around the city. Hence we should define the labour market area as the surroundings of the city of Groningen instead of the borders of the province of Groningen. Further research along the suggested lines may contribute to find explaining factors behind employment development in Groningen.

#### *Analytical generalization*

As the final part of this section, we discuss the generalization of our matching results. In pattern-matching, a theory is used as a template with which to compare the empirical results of the case study. If two or more cases replicate the theory, analytical generalization may be claimed: the theory applies to a larger number of cases with similar characteristics (see Section 4.2). Our findings show that absolute analytical generalization is difficult to claim: although several theories are widely replicated by case study patterns, there are also case study patterns that deviate from the theory pattern. This implies that we can only state that if a case has a high value of X, it is likely that Y occurs. In other words, the results of the pattern-matching of the mixed exogenous/endogenous approach, the community-led development theory and the first hypothesis of Bryden's theory indicate that if rural regions score high values for the capacity of local actors and the strength of internal and external networks, it is likely that they experience non-agricultural employment growth. On the other hand, if rural regions score low values for these variables, it is likely that they face a stagnation in employment. The same likelihood applies to the X and Y values in the second and fourth hypotheses of Bryden's theory and the theory of the innovative milieu.

## **6.4 Concluding remarks**

In this chapter we have matched the patterns of seven theories with the patterns of 18 case studies of rural regions. The matching results show that the mixed exogenous/endogenous development approach, the community-led development theory and the first hypothesis of Bryden's theory on the exploitation of social and cultural capital are widely supported by empirical evidence from the case studies. So it can be said that these theories are useful for describing economic development in rural regions in the EU. Broadly speaking, these theories relate employment development - given the

availability of labour and capital - to a high capacity of local actors and strong internal and external networks.

The theories of Illeris and Myrdal, which can be seen as ‘extensions’ of the mixed exogenous/endogenous approach and the community-led development theory, are less widely supported by empirical evidence from the case studies. This implies that the additional variables in ‘the set of strong local conditions’ are not always distinctive in employment growth. This is largely due to redistribution policies, which contribute to a high extent to the improvement of transport and soft infrastructure in lagging regions. The testing of the second hypothesis of Bryden’s theory on the valorization of rural amenities and cultural capital showed that this often results in employment growth. The third and fourth hypothesis of Bryden’s theory and the theory of the innovative milieu were relevant in a number of case study regions only with varying empirical support. Overexploitation of rural amenities, as theorized in the creative destruction model, was not found in the case study regions.

Given these matching results, we can compose the following list of independent variables in the theory patterns which may affect employment growth in rural regions:

- 1 capacity of local actors;
- 2 internal and external networks;
- 3 administrative structures;
- 4 soft infrastructure;
- 5 transport infrastructure;
- 6 migration;
- 7 valorization of rural amenities.

This list identifies a number of key elements, of which it seems useful to address them in strategies to stimulate employment growth in rural regions in the EU. In the next chapter, in which we give conclusions derived from this study as well as recommendations for strategies to stimulate employment in rural regions, we come back to these key elements.

## NOTES

- 1 It is not unlikely that other small filières in other case study regions exist as well. However, probably due to their small amount of employment, these filières have not been reported by researchers of the case studies as main factors in employment.
- 2 For Albacete, Pesaro and Macerata we used information from EA5.
- 3 For Albacete, Pesaro and Macerata we used information from EA6.

## **7 CONCLUDING REMARKS**

### **7.1 Introduction**

The challenge posed in this study was to analyze to which extent a number of selected theories contribute to explanations for the differential economic performance of rural regions in the EU during the last two decades. Rural regions have been defined as territorial entities, whose regional economy comprises agricultural, industrial and services activities, with a low population density, which include one or more small or medium sized cities surrounded by open space, and which usually reflect the size of a labour market area. By means of the method of pattern-matching, in which we have matched a number of selected theories on economic development with empirical evidence from 18 case studies in leading and lagging rural regions, we have sought to achieve our aim. The method of pattern-matching clearly combines the two strands in this study: theory (what is supposed to happen) and practice (what actually happens). In this final chapter we will highlight our main findings on theories on economic development in rural regions, and those derived from practice as reflected in main socio-economic trends in rural regions in general, and in empirical evidence from the case studies in particular. From our analysis, it appears that theory and practice of economic development in rural regions are also related to policy. In some theories, for example, policy makers and administrative structures are included among the independent variables. In addition, with regard to practice, policy makers have formulated and implemented rural development policy in order to reduce socio-economic disparities among regions. Therefore, rural development policy serves as a third main topic in this chapter. In particular, we will elaborate on the main implications of our study for strategies for policy makers to stimulate economic development in rural regions.

The organization of this chapter is as follows. In Section 7.2 we start with a discussion of our main findings from practice. Then, in Section 7.3 we turn to the main findings pertaining to our search for theories on economic development in rural regions. In Section 7.4 we suggest a number of recommendations for strategies aimed at stimulating economic development in rural regions. In the final section, we propose an agenda for further research based upon the findings of this study.

### **7.2 Economic development in rural regions: practice**

Recent literature shows evidence that the image of rural regions as losers of population and jobs, largely associated with the idea of rapid decline of employment in a supposedly dominant agricultural sector, needs re-adjustment (OECD, 1996a; EC, 1997a). Counterurbanization and the emergence of 'leading' rural regions with a relatively high economic performance have been put forward to counter the view that rural is synonymous with decline. We have tried to deepen the insight in socio-economic dynamics in rural regions in the EU since the beginning of the 1980s, first, by means of an analysis of statistical data on population, employment, GDP/capita and unemployment in Chapter 2, and second, by a more qualitative analysis of local resources, economic

activities and actors in 18 case studies in leading and lagging rural regions in Chapter 5. In such cross-regional comparisons several benchmarks arise, against which the individual performance of a rural region can be assessed, for example, the EU or national average, and the groups of urban regions or other rural regions. Depending on the objective of the study, one or more benchmarks may be employed. We have mainly used two benchmarks: the group of urban regions and the group of rural regions. However, for defining leading and lagging regions we have also used the national average as a benchmark. A comparison of rural with urban regions makes sense, for example, when a study is aimed at revealing differences in socio-economic indicators between rural and urban regions that may result from differences in the agglomeration of activities and actors. On the other hand, a comparison of a rural region with other rural regions may be useful when the objective is to study distinctive features of an individual rural region relative to the rural average. Our approach contributes to the understanding of socio-economic dynamics in rural Europe from both an urban-rural perspective and a rural perspective. This twofold perspective could be used due to the application of the recently developed OECD methodology on classification of regions according to their degree of rurality (Annex 2.1). By using a set of 465 regions in the EU, each of which more or less reflects the size of a labour market area, the application of this method resulted in a classification of EU regions into just over 40% most rural regions, 35% intermediate rural regions and nearly 25% most urban regions. In this section we will successively focus on some main findings on the socio-economic dynamics of rural regions in the EU from an urban-rural and a rural perspective, and those in 18 case studies in rural regions from a rural perspective.

#### *Rural regions in the EU from an urban-rural perspective*

According to our classification of rural and urban regions, at the beginning of the 1990s about one-fifth of the EU population resided in the most rural regions and one-third in the intermediate rural regions. Together they live on nearly 90% of the land area in the EU, leaving just over 10% of the area for the other half of the EU population in the most urban regions. In most member states, GDP/capita in rural regions is below that in urban regions, whereas unemployment rates vary in rural regions, being lower or higher than in urban regions. On the whole, employment growth in the non-agricultural sectors during the 1980s and the early 1990s in rural regions was above that in urban regions, Finland and Sweden being the exceptions. Although the sectoral structure of the economies in rural and urban regions differs in the sense that rural regions tend to have a larger agricultural sector, our data suggests that sectoral structures in rural and urban regions tend to converge. Whilst at the beginning of the 1980s the group of most rural regions had on average 20% of their employment in agriculture, this figure has declined to 13% at the beginning of the 1990s. At that time, the share of employment in agriculture in the intermediate rural regions was 7% and that in the most urban regions 3%. The shares in industrial employment amounted to about 30% in all three groups of regions in the beginning of the 1990s, whilst the share of employment in the services sector ranged from 58% in the most rural regions to 67% in the most urban regions. Finally, in most member states population growth in rural regions in the 1980s tended to exceed that in urban regions. In particular, intermediate rural regions showed a relatively large population increase. On average, we have not found indications of a population decline, the Portuguese rural regions being the exceptions. On the whole, these socio-economic

indicators largely support the view that socio-economic dynamics in rural regions in several cases seem to be greater than in urban regions. However, this does not apply to GDP/capita that tends to lag behind in rural regions. The higher GDP/capita in urban regions might be due to a higher capital intensity of urban economies and to commuting. However, when the conventionally lower costs of living in rural regions are taken into account, the purchasing power of income in rural and urban regions may match each other more closely than what our figures suggest.

#### *Rural regions in the EU from a rural perspective*

In order to obtain additional insight into the differences in socio-economic dynamics within the group of rural regions, the group was divided into leading, average and lagging regions, depending on their employment performance in the 1980s and early 1990s relative to the national average. The yardstick of employment growth was chosen because the creation of jobs is an important goal in rural development policy. Of course, other criteria could be used as well, like GDP/capita or unemployment rates, which probably would give rise to a different composition of the groups of leading and lagging regions. In our classification of leading and lagging regions, we noted also that the labelling may change when another period is under review. Therefore, it should be emphasized that leading and lagging are relative terms rather than permanent labels, depending on criteria and the period considered. In this study, the distinction between leading and lagging serves as a tool in the analysis.

According to our classification of leading and lagging rural regions, about one-third of rural regions was classified as 'leading' and about one-quarter as 'lagging'. On average, annual employment growth in the leading rural regions amounted to about 1% in the 1980s and early 1990s, whereas lagging regions faced a decline in employment of about 0.5-1% p.a. A sectoral breakdown of employment performance reveals that both leading and lagging rural regions experienced a reduction in agricultural employment, which tends to be larger in the lagging regions. Industrial employment in leading regions showed a moderate increase, whereas that in lagging regions decreased. Services employment in both leading and lagging regions increased, in which growth rates in leading regions exceeded those in lagging regions. It appears that leading rural regions also experienced population growth in the 1980s and early 1990s, whereas that in lagging rural regions stagnated, suggesting that employment growth tends to be accompanied by population growth. Although at EU level we have not analyzed which part of population growth resulted from natural increase and which part from migration, evidence from our case studies in rural regions suggests that population growth partly results from immigration. Evidence from the body of literature largely confirms the phenomenon of immigration into rural regions, with suggestions that the amalgamation of native and newcomers residents may have consequences for the power relations among the various groups of actors in the region. At this juncture, our discussion moves into the topics of networks, cooperation, capacity and interest conflicts among local actors, which requires a more qualitative assessment and which is dealt with in the next paragraph.

#### *Socio-economic dynamics in 18 case studies in rural regions*

In this study, case studies have been used in order to gain a deeper insight into qualitative variables such as capacity of local actors and networks. The case studies have been

derived from the RUREMPLO project (1997-9), in which researchers from nine EU countries participated. The aim of the RUREMPLO project was to reveal, and thereby better understand the forces behind rural employment dynamics and to contribute to the formulation of key messages for employment creation in rural regions. The case studies were carried out in such a way, that in each participating country employment dynamics in a leading and a lagging rural region during the period 1980-1997 was analyzed. Such a comparative analysis of leading and lagging rural case study regions across the EU was a relatively new approach within the field of rural studies in Europe. At about the same time as the start of the RUREMPLO project in 1997, however, in Canada the research initiative on the New Rural Economy (NRE) started, which focuses on leading and lagging rural sites in Canada. The RUREMPLO team has designed a conceptual model, called 'field of force of a rural region', which served as a starting point in the case study analysis (see Fig. 5.1). This model distinguishes three components: local resources, economic activities and actors. Below we will discuss the main findings on these components in the 18 case studies.

#### *1 Local resources*

Local resources include both natural resources, rural amenities, transport and soft infrastructure.

##### *1a Natural resources*

Several case study regions are endowed with natural resources like forests, salt, gas, marble and hydropower. These serve as raw materials for economic activities. It appeared that there is no relationship between the endowment of natural resources and being a leading region: in both groups of leading and lagging case study regions, some regions are endowed with natural resources, whereas others are not.

##### *1b 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 and 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 seem to prove, however, that it is not primarily the existence of amenities that matters, but the degree to which these assets are effectively valorized in an economic process generating added value. Some of the leading rural regions have already developed highly sophisticated, integrated techniques for promoting and marketing rural amenity values. In turn, many others have not yet properly exploited their potentials.

##### *1c Transport infrastructure*

In some pairs of leading and lagging case study regions, internal transport infrastructure and external transport connections appear to be better developed in the leading region, whereas in other pairs the state of internal and external transport infrastructure is more or less the same in the leading and lagging region. Especially mountainous parts of the regions are saddled with inadequate transport infrastructure. In all case study regions, improvements in transport infrastructure have been made in the study period. So here again, it is difficult to draw a conclusion on the role of transport infrastructure in explaining the difference in employment development between leading and lagging regions. Although in general it can be said that a well-developed road infrastructure may contribute to an efficient trade of services and goods, and that it forms an attractive location for firms, evidence from the case studies

suggests that the management of transport infrastructure is crucial. The more transport infrastructure is integrated in a broader development plan and accompanied by complementary incentives such as the construction of well-equipped business sites, the more transport infrastructure can trigger economic development.

#### *Id Soft infrastructure*

The evidence from the case studies suggests that soft infrastructure like universities, research centres and other secondary and tertiary education facilities are more often available in leading regions than in lagging regions. The case studies show that soft infrastructure may play an important role in the rural economy as poles of technology and knowledge transfer and foster economic development.

### *2 Economic activities*

Within the group of case study regions, there are both regions with a low and a high share of employment in agriculture, suggesting that the size of the agricultural sector does not necessarily impact on employment growth in the other economic sectors. For example, the leading regions of Korinthia (GR) and Albacete (SP) have a relatively high share of employment in the agricultural sector and experienced a relatively high employment growth in the other economic sectors. On the other hand, there are lagging regions with a limited share of employment in agriculture, which showed a poor performance in non-agricultural growth. Both in leading and lagging case study regions, there was an increase in employment in the sectors of community services and wholesale and retail trade, restaurants and hotels during the period 1980-1995, along with a decline in agricultural employment. Besides, some case study regions also showed a rise in employment in the financial services sector. The most striking difference between leading and lagging case study regions concerns 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. The pattern of employment growth shows that tourism, which is often one of the main pillars in rural development programmes, is not the only potential source of rural employment growth, but one amongst many other branches. The leading case study regions provide evidence that both specialization and diversification can be successful strategies. Some of the leading case study regions are typical examples of so-called 'industrial districts or filières' (e.g. Pesaro (IT) and Albacete (SP)) which, due to exceptional specialization in their economic system, manage even to compete internationally. Usually composed of networks of small firms, they do not primarily rely on local physical resources but on local tradition and tacit knowledge, specific societal and institutional settings, a high degree of internal, vertical differentiation, well-developed market outlets, and/or a high pace of product and process innovations. On the other hand, there are also leading case study regions that have been successful by diversifying their economic base.

### *3 Actors*

Out of the three components in our field of force of a rural region (local resources, economic activities and actors), the overall finding suggests that actors are an important, but often neglected factor in rural development. One of the main differences between leading and lagging case study regions seems to be related to the degree of mobilization and organization of local actors, be they private or public. Leading case study regions tend to be characterized by a development process, which is organized and experienced in a democratic, bottom-up process, involving a wide range of local actors. Such bottom-up processes are unlikely to emerge and succeed without local or regional populations



and administrations being prepared to face their situation and prospects in the broader national and international context. This intention mainly depends on the capacity of local actors and networks in which they are involved. Below we explain these two items into more detail.

### *3a Capacity of policy makers*

In most of the leading case study regions, the capacity of policy makers tends to be rather well developed, whereas in most of the lagging case study regions the capacity of policy makers often appears to be rather weak. Positive aspects in the capacity of policy makers in leading regions include the way in which they implement policies according to the priorities and needs of the region, their ability to attract public funds and private investments, whether they are able to establish good working contacts with upper-level authorities, and create preconditions for firms to set up operations. As such, policy makers may contribute to employment creation. Weaknesses in the capacity of policy makers in lagging regions are usually related to an inability 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.

### *3b Capacity of entrepreneurs and workers*

Evidence from case study regions suggests that the capacity of entrepreneurs tends to be better developed in leading than in lagging regions. A well-developed capacity of entrepreneurs is often related to the creation of new and small companies, which emerge from a restructuring process in traditional industries and which are competitive in national and international markets. However, the capacity of such small firms to innovate is often limited. In a number of case study regions, the capacity of entrepreneurs is rather weak due to a cautious and risk-averting attitude or to lack of industrial tradition. The capacity of workers seems to be roughly the same in leading and in lagging case study regions: they have a good work attitude and they are prepared to work hard.

### *3c Internal networks*

On the whole, leading case study regions were characterized 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, among other things, enhanced by an active attitude of local actors, solidarity, easy communication and strong local leaders. Problems encountered in the internal networks in the lagging regions mainly concern a low density of actors, little interaction among internal actors, a lack of cooperation 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.

### *3d External networks*

External networks are viewed here as the interactions of actors inside and 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 due to the presence of subsidiary business in the region or in an effort to attract firms into the region (firms relations). In the leading case study regions, external networks seem to function better than in the lagging case study regions. Difficulties in the external networks of lagging case study regions are mainly due to a 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.

### *3e The role of newcomers*

All leading and five lagging case study regions underwent population growth in the 1980s and early 1990s, whereas population showed a moderate decrease in four of the nine lagging case study regions. A more detailed analysis of population growth revealed that this comprised both natural increase and migration. Nearly all leading case study regions had a positive migration balance in the 1980s and early 1990s, reflecting the attractiveness of the region as a place of work and residence, both for the economically active and retirees. However, in some of these regions there was an outflow of the high-educated due to a lack of jobs requiring high qualifications. Mainly due to the fact that newcomers are characterized by a different attitude from the local actors, they are often able to mobilize local actors or act as local leaders. On the other hand, six out of the nine lagging case study regions faced a negative migration balance, mainly made up of an outflow of youngsters and the economically active and a smaller inflow of retirees. The outflow of the economically active suggests a pessimistic economic climate and erodes the human resource base.

Given these findings on socio-economic dynamics in the case study regions, we continue with some concluding remarks on practice of economic development in rural regions.

### *Practice in conclusion: a rural mosaic*

The preceding discussion of developments in rural regions in the 1980s and early 1990s largely supports the view that rural Europe is no longer the scene of job and population losses. The picture of rural Europe that emerges should be seen rather in terms of a mosaic of rural regions with winners, in-betweens and losers. In addition, our discussion also indicates that agriculture can no longer be considered the backbone of the rural economy: even in the group of the most rural regions, agriculture employed less than 15% of the regional labour force in the early 1990s. The pattern of employment growth in the case study regions shows that the industrial and services sectors provide a wide variety of potential branches of employment dynamics. Evidence from the case studies suggests that differentials in economic performance among rural regions seem to be related to the degree of mobilization and organization of local actors. On the whole, leading case study regions tend to be characterized by a development process, in which local actors have on the one hand, the capacity to identify strengths, weaknesses, opportunities and threats of their regions and to define development plans in line with these prospects, and on the other hand, the ability to cooperate in internal and external networks in order to realize their development plans. As a result of immigration, the community of local actors in leading regions includes native residents and newcomers who may act as local leaders. In contrast, in lagging case study regions the capacity of local actors and internal and external networks were often referred to as relatively weak. Finally, the involvement of local actors in external networks emphasizes another main issue: rural regions are affected by all kinds of local, national and global forces, implying that the development process in rural regions is dependent on the interplay of local (endogenous) responses and global (exogenous) forces - both mediated through national conditions - in which local actors should seek their room for manoeuvre to determine the outcome of the process.

### 7.3 Economic development in rural regions: theory

Empirical evidence, as discussed above, suggests that capacity of local actors and their ability to cooperate in internal and external networks form a main difference between leading and lagging rural regions. So theories on economic development in rural regions, which cover these factors, seem at first to be promising. In this section, we discuss the main findings from our search for theories on economic development in rural regions in advanced countries. We first focus on the debates in regional economics and rural studies, from which a selection was made of a number of theories on economic development in rural regions. Then, we turn to the method of pattern-matching, which we used to examine whether the selected theories explain economic development in the case study regions. Finally, we elaborate on the results of the pattern-matching and identify which theories are widely supported by empirical evidence from the case studies.

#### *Two debates*

There is no discipline of rural economics as such, so in order to compose an overview of theories on economic development in rural regions, we looked at other disciplines, which include economic development in rural regions among other topics. Hence we turned to the discipline of regional economics and the multidisciplinary field of rural studies. Within these two disciplines, we distinguished two theoretical debates. The first refers to the ‘debate on regional economics’, whose central issue is about how competitive firms realize output and employment growth in a given region. This debate involves mainly regional economists and economic geographers. The second deals with the ‘debate on economic development in rural regions’, which emerges from the field of rural studies. Rural sociologists, rural geographers and agricultural economists are among the main participants. This latter debate deals with the central question of ‘How can rural regions be put on a viable economic development trajectory?’ Hence, theoretical considerations in this debate are closely related with the issue of the best policy to implement. Although the above debates are held in rather closed circles of journals and conferences, there seems to be some overlap in theoretical conceptualization, which mainly has a one-way direction: from the debate on regional economics to that on economic development in rural studies.

In Chapter 3, we have discussed the main theories from both debates. Within both debates a classification of theories can be made, based on, among other things, premises or independent variables. We have classified the theories within the debate on regional economics into four groups, depending on the main factors in the production function of the theories: traditional models, pure agglomeration models, local milieu models and territorial innovation models. The sequence of these models demonstrates increasing complexity of the factors in the production function: in the traditional models, the focus is only on the availability of labour and capital; in the subsequent models, however, other factors are added to the production function, given the availability of labour and capital. Besides, the models reflect a certain degree of chronological sequence: the traditional models were prevalent in the 1950s, the pure agglomeration models in the 1960s, the local milieu models in the 1970s, and the territorial innovation models have dominated since the 1980s. Current theories largely focus on the interplay of labour, capital, regional location factors, such as skills of the labour force, technical and organizational

know-how, and social and institutional structures on the one hand, and on innovation - considered as a major driving force behind economic growth - on the other hand.

Within the debate on economic development in rural studies, usually three chronological phases are distinguished: the exogenous development approach, the endogenous development approach and the mixed exogenous/endogenous development approach. According to the exogenous development approach, rural development is considered as being transplanted into particular regions and externally determined, whereas the endogenous development approach assumes that rural development is mainly brought about by local impulses and local resources. The mixed exogenous/endogenous development approach rejects the polarization of exogenous and endogenous development models and proposes an approach to rural development that instead stresses the interplay between local and external forces. This approach relates rural development to the process of increasing globalization, due to rapid technological changes in the information and communication 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 may vary among regions. In this approach, rural development is, therefore, 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. Due to the overlap in theoretical conceptualization in both debates, it appears that the three stages in the debate on economic development in rural regions show a close relationship with respectively pure agglomeration models, local milieu models and territorial innovation models from the debate on regional economics.

From these two debates, a total of ten theories were chosen for further consideration. This selection includes the five theories, which we have found in the debate on economic development in rural studies. With regard to the selection of theories from the debate in regional economics, the choice was more complicated due to the larger variation in theories. In order to cover a wide range of viewpoints, five theories were selected which are rather distinctive in their conceptualization of economic development.

#### *Method of pattern-matching*

To test whether a theory explains economic development in rural regions in practice, we have used the method of pattern-matching (see Chapter 4). This method consists of three steps. First, a theory is specified as a predicted pattern of events. The events in this theory pattern act as a series of benchmarks against which actual data can be compared. Second, in the case study, information on all events is collected and also stored in a pattern. Third, both patterns are matched by analyzing whether the events in the case study pattern are in line with the events in the theory pattern. The higher the number of similar events in the theory and the case study pattern, the better the theory predicts the situation in the case study. The method can be used to examine analytical generalization: if two or more case study patterns replicate the theory pattern, it may be claimed that the theory applies to a larger number of cases with similar characteristics. We have applied this method to seven of the ten selected theories and 18 case studies. We had to omit three theories, as the case studies did not include the necessary data for constructing the required case study patterns where the growth pole theory and Porter's theory on the competitive advantage of nations were concerned. As for Kilkenny's relationship of transport costs and rural

development, its premises were too restrictive for empirical testing. Our main findings on the usefulness of the method of pattern-matching can be summarized as follows:

- by constructing a theory pattern and a case study pattern, the method highly suited our objective of examining whether development trajectories in selected rural regions are according to the predictions of one or more regional economic growth theories;
- the method is simple and transparent;
- the method can be applied to both simple and complex situations;
- the method allows for the matching of both qualitative and quantitative variables;
- the method can be used for both general and detailed information on variables;
- when cumulative processes are tested, the method has some shortcomings as it does not foresee cumulation between the variables;
- the definition and operationalization of variables in the theory pattern has to be made by the researcher, and this may affect the results of the pattern matching. The same subjectivity is present in the valuation of variables in the case study pattern;
- by comparing the variables in the theory patterns, the method also provides an easy way to reveal differences and similarities among theories. This may lead to surprising results when some basic assumptions in the context of the theory, for example, innovation as a main force behind economic development, is not included as a separate variable in the theory pattern but embodied in another variable, for example, in capacity of actors. In our comparison of theory patterns, this 'embodiment' resulted in a direct link between theories originating from different schools;
- our matching results show that it is difficult to claim absolute analytical generalization in our study. Although several theories are widely replicated by case study patterns, there are also case study patterns that deviate from the theory pattern. This implies that we can only state that if a case has a high value of X, it is likely that Y occurs.

Findings about the application of the method of pattern-matching of our seven remaining theories and 18 case studies are presented below.

#### *Theories which are widely supported by empirical evidence*

The matching results - as discussed in Chapter 6 - show that three theories are widely supported by empirical evidence from the case studies. These are the mixed exogenous/endogenous development approach, the community-led development theory and the first hypothesis of Bryden's theory on the exploitation of social and cultural capital. Below we briefly discuss these theories.

- 1 The mixed exogenous/endogenous development approach assumes - given the availability of labour and capital - that an active role of local actors in internal and external networks stimulates employment growth. We have matched this theory by assessing the local actors' capacity to identify strengths, weaknesses, opportunities and threats and their ability to cooperate with each other in order to address these issues, along with information on the strengths of the internal and external networks.
- 2 The community-led development theory hypothesizes that a well-developed self-help capacity of communities stimulates employment growth. We have evaluated self-help capacity of communities in practical terms by means of the same variables

as with the assessment of the active role of local actors in the mixed exogenous/endogenous approach, supplemented by an assessment of administrative structures.

- 3 The first hypothesis of Bryden's theory supposes that the exploitation of social and cultural capital stimulates employment growth. We have assessed this exploitation by using information on the strength of internal networks.

Although these three theories were presented as distinct theories in Chapter 3, in the process of pattern-matching a high degree of commonality could be found. This is most obvious for the mixed exogenous/endogenous approach and the community-led development theory, for which our operationalization of the hypotheses yielded more or less similar variables. On the other hand, notwithstanding the focus of the first hypothesis of Bryden's theory on endogenous factors, it appears from the case studies that strong internal networks tend to be accompanied by strong external networks. So if local actors manage to create strong internal networks, they also seem to be able to establish strong external networks. In this respect, the first hypothesis of Bryden's theory can be considered in terms of a partial hypothesis within the mixed exogenous/endogenous approach and the community-led development theory.

The second hypothesis of Bryden's theory focuses only on a part of the rural economy. This hypothesis assumes that the exploitation of rural amenities and cultural capital stimulates employment growth in tourism. This hypothesis is also quite widely supported by evidence from the case studies.

#### *Theories with a lower score*

The theories of Illeris and Myrdal are less widely supported by empirical evidence from the case studies. These theories can be seen as an extension of the mixed exogenous/endogenous approach and the community-led development theory, in the sense that they not only assume that the capacity of local actors and networks affect employment growth, but transport and soft infrastructure, agglomeration, rural amenities, immigration, inflow of investments and GDP/capita as well. Mainly due to redistribution policies of national authorities, lagging regions often do not score lower on most of these variables than the leading regions, and for that reason the hypotheses are often not supported by evidence from the case studies.

#### *Theories which are less common*

The third hypothesis of Bryden's theory, which supposes that the exploitation of local raw materials stimulates employment growth in the production related to these raw materials, is relevant for just over half of the case study regions. It is not widely supported by evidence from the case studies, as it appears that increases in labour productivity, for example in the forest sector, often result in a decrease in employment. The fourth hypothesis of Bryden's theory, which suggests that the exploitation of local knowledge capital stimulates employment growth in the production related to this capital, was only applicable in four case study regions. It appears that local knowledge is also applied in filières, which are the independent variable in the pattern of the theory of the innovative milieu. In the majority of the matched cases, the exploitation of local knowledge resulted in an increase in employment. Finally, there was no evidence of overexploitation of rural amenities in our case study regions, so it did not make sense to

carry out matching between the theory pattern of the creative destruction model of community development and the case study patterns.

#### *Theories which have not been matched*

For lack of data in the case studies, we were not able to match two selected theories. These are Porter's theory on the competitive advantage of nations and the growth pole theory. If we would have had the requested data in our case studies, it is not unlikely that we had found that either one or both these theories would contribute to explaining economic development in rural regions. The fact that we have not matched these theories can be considered a shortcoming of this study. Hence, future research on pattern-matching employing these theories can be recommended. The third theory that we were not able to match is Kilkenny's relationship of transport costs and rural development. Due to its restrictive premises, empirical testing is difficult. Kilkenny has not even undertaken testing.

#### *Theory: in conclusion*

Going back to our research question concerning the theories which can be used to explain economic development in rural regions in the EU, we can conclude as follows. The results of the pattern-matching show that the mixed exogenous/endogenous development approach, the community-led development theory and the first hypothesis of Bryden's theory are suitable for this purpose. Briefly, these theories assume - given the availability of labour and capital - that if rural regions have high values for the capacity of local actors and the strength of internal and external networks, it is likely that they experience non-agricultural employment growth. On the other hand, if rural regions have low values for these items, it is likely that they face a stagnation in employment. In addition, the second and fourth hypotheses of Bryden's theory and the theory of the innovative milieu also appeared to be able to contribute to the explanation of economic development in rural regions. However, these theories suggest relationships for only a part of the rural economy and/or were less common in the case studies.

### **7.4 Economic development in rural regions: recommendations for strategies for policy makers**

Based on the findings above on practice and theory of economic development in rural regions in the EU, we now try to design recommendations for economic development strategies in rural regions. A strategy can be described as a 'long-term plan aimed at achieving a specific goal'. Strategies in this section focus on economic development in rural regions. Due to the relationship between output growth and employment growth (Fig. 3.1), economic development usually implies employment growth. Given the wide support of the case studies for the mixed exogenous/endogenous development approach, the community-led development theory and the first hypothesis of Bryden's theory - as discussed above - capacity-building of local actors and strengthening of networks constitute key ingredients in recommendations aimed at stimulating economic development in rural regions. In addition, the theories discussed in Chapter 3 and the experiences in the case studies in Chapter 5 also provide several building blocks in the recommendations. In this section we give a number of suggestions that may help policy

makers to design strategies for encouraging economic and employment development in rural regions. In order to enhance the feasibility of these recommendations, current practices in planning and implementing rural development policy are an important frame of reference. These current practices have been discussed in Section 2.4 and mainly refer to emerging shifts towards enhancing the local development potential, towards emphasizing a multifunctional role of agriculture and towards a cautious territorial integrated policy, whereas in governance much attention is paid to the bottom-up approach. This approach emphasizes the involvement of local actors in planning and implementing policy, the creation of new institutional arrangements with partnerships of public, private and voluntary sectors, and tailor-made policies for individual areas. In this section, first, a general guideline is formulated for economic development strategies in rural regions, followed by a number of more specific recommendations to be implemented if they suit the needs of the region.

### *General guideline*

Since the socio-economic, physical and geographic situation of rural regions widely varies, there is no one unique development path towards more jobs. However, several general recommendations can be derived from the theories and the case studies, which together constitute a kind of general guideline for economic development strategies in rural regions. This guideline involves the following key issues:

- 1 Think global and act local. The development process in rural regions is affected by the interplay of global forces and local responses, in which local actors should seek their room for manoeuvre to determine the outcome of the process.
- 2 Improve the capacity (knowledge, skills and attitude) of local actors to establish and sustain development within the region. This capacity is related to the degree in which actors face their situation and prospects in the broader national and international context.

Main aspects in the capacity of policy makers pertain to their ability:

- to act effectively in planning and delivering policies;
- to select and support promising local initiatives and projects;
- to formulate policies to attract public and private investments.

Main aspects in the capacity of entrepreneurs pertain to:

- the ability to perceive changes and adjust to them;
- the willingness to respond to market changes.

Main aspects in the capacity of workers pertain to their ability:

- to adapt to changes;
- to upgrade their skills.

- 3 Strengthen the cooperation of local actors and the cooperation of actors inside and outside the region. This cooperation facilitates the creation and maintenance of networks and public/private partnerships and may result in local synergy. Key actors to be targeted at in initial stages are, among others, local leaders, public agencies, private firms, and a wide array of intermediary institutions in fields such as technology transfer and training provision. In addition, a cultural-territorial identity may also serve as a main catalyst in raising local consciousness towards cooperation.
- 4 Try to affect the balance of power in external networks in such a way that local actors benefit to a reasonable extent from these networks, for example, with regard



to the transfer of technological and organizational know-how and public funds. Such benefits may contribute to a continuous recreation of regional competitiveness and innovation capability.

- 5 Adjust administrative structures, i.e. the linkages between the local, regional, national and EU authorities, in such a way that the administrative structure stimulates and responds to bottom-up initiatives.
- 6 Use 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.

Local policy makers and entrepreneurs are the main actors in implementing these measures. In many cases, however, local actors will not or only partially manage to bring about these new developing routines. Therefore, often encouragement from upper administrative levels or other external actors such as development agencies and universities will be required. The recommendations above partly coincide with current practices, among others, the use of a territorial plan is quite similar to the development plans prescribed in EU structural policy, and the principle of public/private partnerships is also applied in EU structural policy. It can be said that these recommendations are not new but have already been floated for a longer time in the literature. However, our analysis of theories and international comparison of case studies in leading and lagging rural regions provide a broader empirical basis that the six issues given above are still among the key issues in economic development of rural regions during the last decades.

#### *Additional building blocks for strategies*

Within the framework of this guideline, the following, more specific recommendations - depending on whether they suit the needs of the region - may be selected and applied. However, these recommendations should not be equated with a guaranteed 'success formula' which always results in more jobs. The recommendations have to be seen rather in terms of building blocks, which may contribute to shaping prerequisites for economic development. In the recommendations no attention is paid to the way in which they have to be implemented, since that exceeds the scope of the present study.

#### *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 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, electronic communication infrastructure and other facilities. This suggests that infrastructure investments should be integrated into a broader comprehensive development concept, and 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.

### *Valorize rural amenities*

Almost all case study regions have some valuable rural amenities which contribute to their 'local identity'. However, the existence of these amenities is not sufficient to explain employment dynamics, but the degree to which these assets are managed and valorized by actors to generate added value and employment. In the valorization of amenities a kind of 'product differentiation' can be recommended: by developing uniquely attractive features, rural regions can distinguish themselves from others. Rural amenities have to be managed in such a way, that the sustainability is not endangered. In particular, overexploitation should be avoided.

### *Improve the perception of amenities by local actors*

There is often a gap in the perception of rural amenities by rural people and by those outside rural regions. An important precondition in the valorization of 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 a good state. 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.

### *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 also showed a rise in employment in the manufacturing and construction sectors. This diverse pattern of employment growth suggests that tourism is not the only potential source of rural employment growth, but only one amongst many other branches. Hence policies aiming at encouraging rural employment creation should follow a multisectoral approach, mainly by providing the necessary conditions for local agents.

### *Strengthen zoning of economic activities by spatial planning*

It appears that firms and actors tend to move to towns and agglomerated parts, a reflection of the attractiveness of concentrations to 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. Attractive 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 planning can be used to stimulate the creation of business sites in one or two villages/towns of the region. A concentration of economic activities in some parts also provides the advantage that it contributes to safeguard the attractiveness of rural amenities and living conditions in other parts of the region.

### *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 outside the region for a long time, and return to the region, can also be counted in the group of newcomers. Due to the fact that newcomers tend to have a different attitude from the local actors, they are often able to mobilize local actors. They can feed experiences into internal networks, help mobilize local actors and act as local leaders. They can provide access to external know-how and markets. They can project a positive regional image which supports advertising and marketing of local products.

### *Strive after a territorial match*

The case studies suggest that the opportunities for a favourable performance in development are better if the territorial perimeter of the relevant public and private institutions involved in the regional/rural development process - be they public administrations, labour offices, chambers of commerce, or other non-governmental organizations - matches the same territory. This helps to reinforce regional identity, create a commonly shared development vision, and facilitate joint development efforts. Where such a territorial match is achieved, it seems easier to set up networks of partners, strengthening coherence and cohesion internally and mobilizing external support from outside the region.

### *Aim at an appropriate regional mix of skills*

Education and training definitely play 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. It should be taken into account that this is a dynamic process as firms may change their labour demand due to shifts in production. Such shifts may emerge from a transition from bulk production towards a production that is more flexible, service-intensive and customer-oriented, in which firms prefer medium-skilled labourers to unskilled labourers. For example, in those regions where employment growth was particularly high in industrial firms, there was a large demand 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 in equipping manual workers with professional qualifications by providing on-the-job training. In those regions where strong regional networks and partnerships existed, the matching of skills seemed to work particularly well.

In the preceding of this section we have tried to outline a guideline comprising six key issues and a number of additional building blocks, all directed towards encouraging economic and employment growth in rural regions. We now conclude this section with some final remarks.

### *Recommendations for strategies: in conclusion*

One of the main differences between leading and lagging case study regions seems to be related to the degree of mobilization and organization of local actors, be they private or public. Therefore, local actors emerge as the main target point in our recommendations for strategies towards economic development in rural regions. Capacity-building and strengthening the cooperation in networks and partnerships have been suggested as main vehicles for transforming an attitude of apathy or dependency into one of spiritedness and self-reliance. Another main recommendation refers to the use of a comprehensive territorial development plan, based on assessment of the strengths, weaknesses, opportunities and threats of the region, in which all measures and projects are integrated. In addition to these general recommendations, we have formulated a number of specific recommendations, which may contribute to shaping the necessary conditions for economic development under certain circumstances, and which may be selected and applied if they suit the needs of the region.

## **7.5 Research agenda**

The insight gained from this study has raised some questions and identified gaps which require further investigation. In this final section, we will suggest some issues for the research agenda on economic development in rural regions.

### *Further research on theories which have not been matched*

Lack of data in the case studies prevented us from matching two of our selected theories: Porter's theory on the competitive advantage of nations and the growth pole theory. Future research on pattern-matching with these theories is recommended in order to assess the usefulness of these theories for explaining economic development in rural regions.

### *More insight in local processes*

In this study we have concluded that capacity of local actors and networks are important assets for economic development in rural regions. This finding has been based on an assessment of the existing situation and hardly any attention has been paid to micro-processes behind capacity building and the creation of networks. Hence, further research is needed about processes behind capacity building and the creation of networks and public/private partnerships, as well as related local processes such as social inclusion and exclusion, the integration of newcomers/immigrants in networks, the formation of new enterprises and the adaptation of innovations. In such studies on processes, gender issues also deserve attention.

### *Procedures with less bureaucratic paperwork*

Nearly all policy makers involved in the implementation of EU structural policy complain about the huge pile of bureaucratic forms to be completed at all stages of the programmes. At the local level, this often discourages initiatives of local actors who are not used to such time-consuming bureaucratic procedures. Of course, the European Commission might argue that these forms are needed to keep track of the efficiency and effectiveness of the spending of public money. Although these forms are also intended to be ex ante and ex post evaluations of policy performance, as a result of its complexity,

this objective is not always achieved. It should be explored, however, whether simpler and more transparent procedures can be designed. If such procedures are conceptualized as performance-oriented checks that enable and encourage a learning process within the system of rural development policy design and delivery, they might function as feedback mechanisms that are in the interest of the rural policy administration.

#### *More efforts on regional data collection*

Researchers in regional economic development often face the situation where issues and developments cannot be analyzed due to lack of data. Such situations arise, for example, when one wants to assess employment development within economic sub-branches such as tourism or specific kinds of manufacturing, or when one wants to get insight into the provision of basic services or commuting to certain parts of the region. Difficulties increase when one wants to compare such items among regions and for a longer time period. In a number of cases, different sources of data are available, for example, collected by Chambers of Commerce, municipalities, provinces and public employment services. However, usually such data is not easily accessible and mutually not comparable. Efforts to collect data systematically and to harmonize the collected data among regions should enrich research on rural regions in general and contribute to a better insight into economic development in rural regions in particular.

#### *Understanding the role of regional centers*

In our study we have focussed on employment development in the whole region, and only incidentally taken into account that a large part of employment was created in urbanized areas within the region. The role of small and medium sized cities in the economic development process deserves further research. Among the topics for research are their contribution to total regional employment growth, their role in providing jobs for population living in the surrounding countryside, and examination of thresholds for rural agglomerations, i.e. what is the critical level of the provision of services and institutional thickness for a rural city in order to generate a self-sustaining process of economic development. In this respect, the position of the rural city in the regional or national transport network and the impact of the distance of a rural city from a metropolitan area on economic development can also be taken into account.

#### *Future role of rural regions*

The validity of our findings is limited by the fact that they refer mainly to past developments. Thus, there is a need for some prospective analyses. Such analyses may address, for example, questions about the future role of rural regions in Europe. The case studies show that agriculture has continuously lost importance, and that tourism can only be part of the response. If, for the last decade, in most leading case study regions the industrial sector was crucial, it is unclear what kind of industries could survive in rural regions of high-wage countries, once competition from low-wage countries will get stronger. Also the question which needs to be addressed is about rural services that have the potential for export. In this respect, the impact of technology in general and that of information and communication technology (ICT) and the new economy in particular on the distribution of economic activities and population among urban and rural regions, as well as shrinking distances, should also be taken into account. In addition, capacity building of local actors to face the challenges of a changing economic base in rural regions deserves attention.

## SUMMARY

### *Search for driving forces behind economic development in rural regions of the EU*

From a recent OECD analysis, it appeared that there were dynamic rural regions which showed an employment performance above the national average during the 1980s, and that there were also rural regions whose employment growth lagged behind. This observation directly prompts the following question: why do some rural regions show a higher employment performance than others? Can the sectoral mix of employment explain these differences? Or are these differences mainly the result of factors like local resources, natural and cultural amenities, entrepreneurial tradition, work ethics, public or private networks? This study aims to provide answers to this question by giving a thorough analysis of how economic development theories conceptualize the driving forces behind economic development in rural regions. The insights achieved in this analysis can help policy makers in the design of strategies towards encouraging economic development in rural regions. In order to achieve this aim, the focus of this study will be on the following four objectives:

- a Analysis of regional economic growth theories, which can be used for the explanation of economic development in rural regions in the EU;
- b Analysis of development trajectories in selected rural regions in the EU, and examination of applied development strategies in those regions;
- c Pattern-matching in order to analyze whether development trajectories identified under (b) accord with one or more of the theories discussed under (a);
- d Design of a guideline for economic development strategies for rural regions in the EU.

Rural regions are the basic research units in this study. These can be described in terms of a territorial unit with one or more small or medium sized cities surrounded by large areas of open space, with a regional economy and with a relatively low population density. Usually, the size of a rural region reflects that of a labour market area. By examining the debates in the multidisciplinary field of rural studies and in regional economics, we compose an overview of theories on economic development in rural regions. From this overview we will select a number of theories for further analysis. We use the method of 'pattern-matching' to test whether these theories predict the development trajectories in 18 case studies in rural regions in the EU. As case studies we used those which were carried out in the scope of the RUREMPLO project. Based on the findings of the pattern-matching and the experiences in the case study regions, we formulate recommendations for economic development strategies for rural regions in the EU. Finally, this study is restricted to economic developments since the beginning of the 1980s.

### *Main socio-economic trends in rural regions of the EU*

In Chapter 2, we focus on main socio-economic trends in rural regions of the EU. To analyze socio-economic dynamics, we have used a set of 465 regions in the EU15, which we have divided (according to population density) into three groups: most rural regions, intermediate rural regions and most urban regions. Within each of these groups, we have made a further distinction (based on non-agricultural employment growth) into leading and lagging regions. According to our classification of regions, about one-fifth of the EU

*Table 1* The annual rate of change in employment and population by types of regions in '1980-93' (%)

Regions	Employment growth					Population growth
	Total	Agriculture	Industry	Services	Non-agriculture	
Leading most rural	0.8	-3.7	0.2	2.1	1.4	0.51
Leading intermediate	1.0	-3.6	0.3	2.4	1.6	1.09
Lagging most rural	-0.7	-4.6	-1.8	1.3	0.1	-0.06
Lagging intermediate	-0.7	-4.8	-2.0	1.0	-0.2	0.06
Most urban regions	0.5	-3.3	-1.1	1.5	0.6	0.32
All regions	0.4	-3.9	-0.9	1.6	0.7	0.37

population resides in the most rural regions and one-third in the intermediate rural regions. Together they live on nearly 90% of the land area of the EU, leaving just over 10% of the land area for the population in the most urban regions. In all three groups of regions, the agricultural sector employs only a small share of the labour force: in the most rural regions this share declined from 20% in the early 1980s to 13% in the early 1990s. In the intermediate rural regions, the agricultural sector employed on average 7% of the labour force in the beginning of the 1990s against 3% in the most urban regions. Employment in the 1980s in all categories of regions shows the common pattern in advanced countries: a decrease in agricultural employment and an increase in services employment (Table 1). One surprising feature is, however, the increase in industrial employment in the leading most rural and intermediate rural regions, as it is usually taken for granted that industrial employment declined in EU countries in this period. A second striking point is that employment in the leading most rural and intermediate rural regions increased at a higher rate than in the most urban regions. Finally, the groups of leading most rural and intermediate rural regions also showed a population growth in the 1980s and early 1990s, whereas population growth in the lagging ones stagnated (Table 1), indicating that employment growth and population growth tend to accompany each other. The population in the leading intermediate rural regions increased at a higher rate than in the leading most rural regions, but population growth in both groups of leading regions was above that in most urban regions.

#### *Main policy issues in rural regions of the EU*

In Chapter 2 we also deal with main policy issues. In order to reduce socio-economic disparities among regions, policy makers have implemented rural development policies, which mainly consist of measures aimed at the adjustment of the agricultural sector and measures aimed at the more general development of the rural economy. Since the 1950s, the emphasis in these policies has shifted under the pressure of global restructuring: within the agricultural measures, there has been a gradual shift from measures directed at productivity growth towards measures emphasizing the multifunctional role of the agricultural sector; within the measures aimed at the more general development of rural economies, a shift from measures encouraging inward investments (exogenous development model) towards measures enhancing the local development potential (endogenous development model) can be perceived. There is a tendency to integrate both

types of policy measures into territorial plans, which cover all sectors. The shift from an exogenous to an endogenous development model has been accompanied by a transformation of the role of national governments into a governance style in which the local and regional authorities have a greater role in defining and implementing policy, in which the empowerment of local actors is emphasized and in which partnerships between public, private and voluntary sectors are widely used. This shift can be referred to as a shift from a top-down to a bottom-up approach. The emphasis on a bottom-up approach in rural development has, however, been criticized as ‘more rhetoric than real’.

Figure 1 Overview of selected theories for further research and derived hypotheses

Theory	Factors in production function <sup>a)</sup>	Derived hypothesis for the purpose of this study (given the availability of labour and capital)
Growth pole theory	L, K, AE	A growth pole and its multiplier effects stimulates employment
Kilkenny’s relationship of transport costs and rural development	L, K, AE	Relatively low industrial transport costs stimulate the establishment of firms in rural regions
Myrdal’s cumulative causation theory	L, K, AE	Leading regions cumulate wealth whereas lagging regions lose wealth
Bryden’s theory on the potentials of immobile resources for creating competitive advantages in rural areas	L, K, LM	The exploitation of immobile resources stimulates employment growth We split this hypothesis into four subhypotheses: (1) The exploitation of social and cultural capital stimulates employment growth (2) The exploitation of rural amenities and cultural capital stimulates employment growth in tourism (3) The exploitation of local raw materials stimulates employment growth in the production related to these raw materials (4) The exploitation of local knowledge capital stimulates employment growth in the production related to this local knowledge capital
Creative destruction model of community development	L, K, LM	Overexploitation of rural amenities destroys employment in sectors related to these rural amenities
Community-led rural development theory	L, K, LM	A well-developed self-help capacity of communities stimulates employment growth
Mixed exogenous/ endogenous approach	L, K, LM, I	An active role of local actors in internal and external networks stimulates employment growth
Theory of the innovative milieu	L, K, LM, I	Filières, which are characterized by local synergy, local innovativeness and transterritorial networks, stimulate employment growth
Porter’s theory on the competitive advantage of nations	L, K, LM, I	A strong interaction and mutual reinforcement of the six determinants in the diamond enhances the competitiveness of firms
Illeris’ inductive theory of regional development	L, K, LM, I	A strong set of local conditions stimulates employment growth

a) L: labour; K: capital; AE: agglomeration effects, due to external effects or scale economies; LM: local milieu, which includes factors like space, human capital, technology, networks, trust, culture and policies; I: innovation.



### *Theories on economic development in rural regions*

In Chapter 3 we give an overview of theories that possibly can be used for the explanation of economic development in rural regions in advanced countries. For this purpose, we have examined the debates in regional economics and the multidisciplinary field of rural studies. From the quite large number of theories put forward in both debates, we have selected ten theories, which cover a wide range of viewpoints on economic development, for further research (Fig. 1). From each of the selected theories, we have derived a hypothesis, which has been explored further in the next chapters. These hypotheses consist of a relationship between events in a form expressed as: if X then Y. It can be seen that the theories offer a wide range of issues which may be responsible for employment growth, given the availability of labour and capital. It can also be seen from the hypotheses that sometimes theories overlap to a large extent.

### *Method of pattern-matching*

In Chapter 4 we discuss the method of pattern-matching, which we used in order to examine whether a theory predicts economic development in a case study region. Basically, this method consists of three steps. First, a theory is specified as a predicted pattern of events. The events in this theory pattern act as a series of benchmarks against which actual data can be compared. Then, in the case study, information on all events is collected and also stored in a pattern. As a final step, both patterns are matched by analyzing whether the events in the case study pattern are in line with the events in the theory pattern. The higher the number of similar events in the theory and the case study pattern, the better the theory predicts the situation in the case study. In fact, it can be said that the method of pattern-matching resembles the comparison of DNA profiles in forensic research, in order to examine whether they have the same structure.

### *Theory patterns and case study patterns*

In the second part of Chapter 4 we have carried out the first step of the method of pattern-matching by constructing theory patterns for the selected theories and in Chapter 5 the second step was carried out by constructing case study patterns. Our case studies comprise 18 leading and lagging case study regions conducted in the RUREMPLO project. Although data collected in the RUREMPLO case studies cover a wide range of variables, it appeared that we lacked data to construct case study patterns for the growth pole theory, Kilkenny's relationship of transport costs and rural development, and Porter's theory. So we had to omit these theories from our set of selected theories for further research.

### *Development trajectories of the case study regions*

The systematic classification of variables in the case study patterns enables us also to identify development trajectories of the case study regions. A development trajectory is interpreted here as the development path or course that a region follows over time. As local actors play a prominent role in our selected theories, it is especially interesting to focus on their role in the development trajectories. By doing so, we can divide the development trajectories into three main groups as follows:

#### *1 Development trajectory characterized by an active role of all local actors*

This development trajectory prevails in the leading case study regions, revealing that an active attitude of local actors is a promising tool to encourage employment in rural regions.

## *2 Development trajectory characterized by an active role of local entrepreneurs*

This development trajectory prevails in the Italian case study regions in which industrial districts are found. The experience in these case study regions shows that an active role of local entrepreneurs can result in employment growth in the short term, but that it is not sustaining. In the longer run, policy interventions are needed to provide, for example, infrastructure and all kinds of social services, as entrepreneurs cannot provide such basic requisites.

## *3 Development trajectory characterized by a passive role of local actors*

This development trajectory is prevailing in the lagging case study regions, showing that a passive attitude of local actors is a weakness that should be addressed in policies aimed at stimulating employment in rural regions.

### *Matching of theory and case study patterns*

In Chapter 6 we have matched the patterns of seven theories with the patterns of 18 case studies of rural regions. The matching results show that the mixed exogenous/endogenous development approach, the community-led development theory and the first hypothesis of Bryden's theory on the exploitation of social and cultural capital are widely supported by empirical evidence from the case studies. So it can be said that these theories are useful for describing economic development in rural regions in the EU. Broadly speaking, these theories relate employment development - given the availability of labour and capital - to a high capacity of local actors and strong internal and external networks.

The theories of Illeris and Myrdal are less widely supported by empirical evidence from the case studies. These theories can be seen as an 'extension' of the mixed exogenous/endogenous approach and the community-led development theory, in the sense that they do not only assume that the capacity of local actors and networks affect employment growth, but transport and soft infrastructure, agglomeration, rural amenities, immigration, inflow of investments and GDP/capita as well. This implies that the additional variables in 'the set of strong local conditions' are not always distinctive in employment growth. This is largely due to redistribution policies, which contribute to a high extent to the improvement of transport and soft infrastructure in lagging regions.

The testing of the second hypothesis of Bryden's theory on the valorization of rural amenities and cultural capital showed that this often results in employment growth. The third and fourth hypothesis of Bryden's theory and the theory of the innovative milieu were relevant in only a number of case study regions with varying empirical support. Overexploitation of rural amenities, as theorized in the creative destruction model, was not found in the case study regions.

### *Concluding remarks on economic development in rural regions in the EU: practice*

In the final chapter we reflect on our main findings on practice and theory of economic development in rural regions in the EU and we give some recommendations for strategies aimed at stimulating economic development in rural regions and identify topics for further research. Our findings on socio-economic development in rural regions in the 1980s and early 1990s largely support the view that rural Europe is no longer the scene of job and population losses. The picture of rural Europe that seems to emerge should be

seen rather in terms of a mosaic of rural regions with winners, in-betweens and losers. In addition, our findings also indicate that agriculture can no longer be considered to be the backbone of the rural economy: even in the group of the most rural regions, agriculture employs less than 15% of the regional labour force in the early 1990s. The pattern of employment growth in the case study regions shows that the industrial and services sectors provide a wide variety of potential branches of employment dynamics. Evidence from the case studies suggests that differentials in economic performance among rural regions seem to be related to the degree of mobilization and organization of local actors. On the whole, leading case study regions tend to be characterized by a development process, in which local actors have, on the one hand, the capacity to identify strengths, weaknesses, opportunities and threats of their regions and to define development plans in line with these prospects, and, on the other hand, the ability to cooperate in internal and external networks in order to realize their development plans. As a result of immigration, the community of local actors in leading regions includes native residents and newcomers who may act as local leaders. In contrast, in lagging case study regions the capacity of local actors and internal and external networks were often referred to as relatively weak. Finally, the involvement of local actors in external networks emphasizes another main issue: rural regions are affected by all kinds of local, national and global forces, implying that the development process in rural regions is dependent on the interplay of local (endogenous) responses and global (exogenous) forces - both mediated through national conditions - in which local actors should seek their room for manoeuvre to determine the outcome of the process.

#### *Concluding remarks on economic development in rural regions in the EU: theory*

Going back to our research question of which theories can be used for the explanation of economic development in rural regions in the EU, we can conclude as follows. The results of the pattern-matching show that the mixed exogenous/endogenous development approach, the community-led development theory and the first hypothesis of Bryden's theory are suitable for this purpose. Briefly, these theories assume - given the availability of labour and capital - that if rural regions have high values for the capacity of local actors and for the strength of internal and external networks, it is likely that they experience non-agricultural employment growth. On the other hand, if rural regions have low values for these items, it is likely that they face a stagnation in employment. In addition, the second and fourth hypotheses of Bryden's theory and the theory of the innovative milieu also appeared to be appropriate theories for explaining economic development in rural regions. However, these theories suggest relationships for only a part of the rural economy and/or were less common in the case studies.

#### *General guideline for strategies towards economic development in rural regions*

Several general recommendations can be derived from the theories and the case studies, which together constitute a kind of general guideline for economic development strategies in rural regions. This guideline involves the following key issues:

- 1 Think global and act local.
- 2 Improve the capacity (knowledge, skills and attitude) of local actors to establish and sustain development within the region.
- 3 Strengthen the cooperation of local actors and the cooperation of actors inside and outside the region.

- 4 Try to affect the balance of power in external networks in such a way that local actors benefit to a reasonable extent from these networks.
- 5 Adjust administrative structures, i.e. the linkages between the local, regional, national and EU authorities, in such a way that the administrative structure encourages and responds to bottom-up initiatives.
- 6 Use 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.

In addition to this general guideline, we have formulated a number of more specific recommendations that may be selected and applied if they suit the needs of the region.

## SAMENVATTING

### *Op zoek naar de drijvende krachten achter economische ontwikkeling in rurale regio's van de EU*

Uit een recent OESO-onderzoek blijkt dat in de jaren tachtig de werkgelegenheid in een aantal dynamische rurale regio's sneller toenam dan het nationaal gemiddelde, terwijl in andere rurale regio's de werkgelegenheidsgroei stagneerde. Dit roept de vraag op: waarom groeit de werkgelegenheid in sommige rurale regio's sneller dan in andere? Geeft de sectorale mix een verklaring voor deze verschillen? Of worden deze verschillen veroorzaakt door andere factoren zoals lokale hulpbronnen, natuurlijk en cultureel erfgoed, een ondernemerstraditie, de houding ten opzichte van werk, of publieke en private netwerken? Deze studie beoogt deze vraag te beantwoorden door te onderzoeken hoe economische ontwikkelingstheorieën de drijvende krachten achter de economische ontwikkeling in rurale regio's beschrijven. De resultaten van deze studie kunnen van nut zijn voor beleidsmakers bij het opstellen van ontwikkelingsstrategieën voor rurale regio's. De onderzoeksvraag in deze studie valt in vier delen uiteen:

- a Analyse van regionaal economische groeitheorieën, die kunnen worden gebruikt voor het verklaren van economische ontwikkeling in rurale regio's van de EU;
- b Analyse van ontwikkelingspaden in een beperkt aantal rurale regio's in de EU, waarbij ook de toegepaste ontwikkelingsstrategie in beschouwing wordt genomen;
- c Toepassing van de methode van 'pattern-matching' om na te gaan of de ontwikkelingspaden in (b) overeenkomen met één of meer theorieën in (a);
- d Het geven van aanbevelingen voor economische ontwikkelingsstrategieën voor rurale regio's in de EU.

Rurale regio's vormen de belangrijkste onderzoekseenheden in deze studie en kunnen als volgt worden omschreven: het zijn territoriale eenheden met één of meer kleine steden omgeven door grote open ruimtes, ze hebben een regionale economie en een relatief lage bevolkingsdichtheid. De grootte van een rurale regio komt gewoonlijk overeen met een arbeidsmarktgebied. Het overzicht van theorieën over de economische ontwikkeling van rurale regio's, dat in deze studie wordt gegeven, is gebaseerd op het debat in het multidisciplinaire vakgebied van rurale studies en dat in de regionale economie. Uit dit overzicht wordt een aantal theorieën voor verder onderzoek gekozen. De methode van 'pattern-matching' wordt toegepast om na te gaan of de verwachtingen van deze theorieën overeenkomen met de ontwikkelingspaden in 18 case studies in rurale regio's. Daarvoor worden de case studies gebruikt die zijn uitgevoerd in het kader van het RUREMPLO-project. Op basis van de resultaten van de 'pattern-matching' en de ervaringen in de case studiegebieden, worden aanbevelingen gegeven voor ontwikkelingsstrategieën voor rurale regio's in de EU. De studie beperkt zich tot economische ontwikkelingen vanaf 1980.

### *Sociaal-economische ontwikkelingen in rurale regio's van de EU*

In hoofdstuk 2 worden enkele belangrijke sociaal-economische ontwikkelingen in rurale regio's van de EU geanalyseerd. Daarvoor worden 465 regio's in de EU-15 gebruikt, die op basis van bevolkingsdichtheid zijn onderverdeeld in drie groepen: meest rurale regio's, intermediair rurale regio's en meest urbane regio's. Met behulp van de afwijking van de niet-agrarische werkgelegenheidsgroei ten opzichte van het nationaal gemiddelde zijn deze drie groepen verder verdeeld in succesvolle en achterblijvende regio's. Volgens

Tabel 1 Jaarlijkse verandering van de werkgelegenheid en de bevolking in EU-regio's, '1980-93' (%)

Regio's	Werkgelegenheidsgroei					Bevolkings- groei
	Totaal	Landbouw	Industrie	Diensten	Niet- landbouw	
Succesvol meest ruraal	0.8	-3.7	0.2	2.1	1.4	0.51
Succesvol intermediair	1.0	-3.6	0.3	2.4	1.6	1.09
Achterblijvend meest ruraal	-0.7	-4.6	-1.8	1.3	0.1	-0.06
Achterblijvend intermediair	-0.7	-4.8	-2.0	1.0	-0.2	0.06
Meest urbaan	0.5	-3.3	-1.1	1.5	0.6	0.32
Alle regio's	0.4	-3.9	-0.9	1.6	0.7	0.37

deze indeling woont ongeveer een vijfde van de EU-bevolking in de meest rurale regio's en een derde in de intermediair rurale regio's. Samen leven zij op ongeveer 90% van het grondgebied in de EU. De resterende 10% wordt bewoond door de bevolking van de meest urbane regio's. In de drie groepen van regio's is nog slechts een klein deel van de beroepsbevolking werkzaam in de landbouw: in de meest rurale regio's daalde het aandeel van de landbouw in de werkgelegenheid van 20% in het begin van de jaren tachtig tot 13% in het begin van de jaren negentig. In intermediair rurale regio's werkte in diezelfde periode nog 7% van de beroepsbevolking in de landbouw en in de meest urbane regio's 3%. De werkgelegenheidsontwikkeling in de jaren tachtig vertoonde het gebruikelijke beeld van ontwikkelde landen: een afname van de werkgelegenheid in de landbouw en een toename in de dienstensector (Tabel 1). De succesvolle meest rurale en intermediair rurale regio's lieten daarnaast een toename van de werkgelegenheid in de industrie zien. Deze toename is opmerkelijk, omdat het afwijkt van het beeld - gebaseerd op nationale gemiddelden - dat de industriële werkgelegenheid in deze periode afnam. Een tweede opvallend punt is dat de werkgelegenheid in de succesvolle meest rurale en intermediair rurale regio's in de jaren tachtig een hogere groei vertoonde dan die in de meest urbane regio's. Tenslotte blijkt dat de bevolking in de succesvolle meest rurale en intermediair rurale regio's ook groeide, terwijl die in de achterblijvende regio's stagneerde (Tabel 1). Dit toont aan dat werkgelegenheidsgroei en bevolkingsgroei vaak samen gaan. De bevolking in de succesvolle intermediair rurale regio's groeide sneller dan die in de succesvolle meest rurale regio's, maar beide groepen van regio's overtroffen de bevolkingsgroei in de meest urbane regio's.

#### *Ruraal beleid in de EU*

In hoofdstuk 2 komen ook enkele belangrijke beleidszaken aan de orde. Ruraal beleid beoogt de sociaal-economische verschillen tussen regio's te verkleinen. Dit beleid bestaat voornamelijk uit landbouwstructuurbeleid en meer algemene maatregelen om de ontwikkeling van de rurale economie te stimuleren. Mede onder invloed van de globalisering is de aandacht in het beleid sinds de jaren vijftig geleidelijk verschoven: in het landbouwstructuurbeleid is een verschuiving merkbaar van maatregelen gericht op productiviteitsverhoging naar maatregelen die de multifunctionele rol van de landbouw onderstrepen; en in de meer algemene maatregelen valt een verschuiving van het stimuleren van investeringen van buitenaf (het exogene ontwikkelingsmodel) naar het

versterken van het lokale ontwikkelingspotentieel (het endogene ontwikkelingsmodel) te zien. Er bestaat een tendens om beide soorten beleid in territoriale en multisectorale plannen te integreren. De verschuiving van het exogene naar het endogene ontwikkelingsmodel gaat gepaard met een verandering van de rol van de nationale overheid: lokale en regionale overheden spelen een grotere rol bij het ontwerpen en uitvoeren van beleid, het meedenken van lokale actoren wordt aangemoedigd en er wordt meer gebruik gemaakt van publiek-private samenwerking. Deze verandering kan worden getypeerd als een verschuiving van 'top-down' naar 'bottom-up'. Critici vinden de nadruk op de bottom-up-benadering echter meer retoriek dan werkelijkheid.

#### *Theorieën over economische ontwikkeling in rurale regio's*

In hoofdstuk 3 staat een overzicht van theorieën die mogelijk kunnen bijdragen aan het verklaren van de economische ontwikkeling in rurale regio's in ontwikkelde landen. Om dit overzicht te kunnen maken, zijn de debatten in de regionale economie en het multidisciplinaire vakgebied van rurale studies tegen het licht gehouden. Uit het grote aantal theorieën, die in deze debatten een rol spelen, zijn tien theorieën uitgekozen voor nader onderzoek (Fig. 1). Dit tiental geeft een breed scala aan verschillende zienswijzen op economische ontwikkeling. Uit elk van deze theorieën is een hypothese afgeleid, die in de volgende hoofdstukken aan een nadere analyse wordt onderworpen. De hypothesen beschrijven een relatie tussen twee gebeurtenissen, en zijn als volgt geformuleerd: als X dan Y. Uit het overzicht kan worden afgelezen dat de theorieën een groot aantal factoren noemen die kunnen leiden tot werkgelegenheidsgroei, gegeven de beschikbaarheid van arbeid en kapitaal. Het blijkt echter ook dat de hypothesen van verschillende theorieën soms een grote gelijkenis vertonen.

#### *Methode van 'pattern-matching'*

Om te onderzoeken of een theorie de werkelijke economische ontwikkeling in een case studiegebied beschrijft, is de methode van 'pattern-matching' gebruikt. Deze methode, die in hoofdstuk 4 wordt uitgelegd, bestaat uit drie stappen. Eerst wordt een theorie uitgedrukt als een voorspeld patroon van gebeurtenissen. Deze gebeurtenissen, die als variabelen kunnen worden opgevat, vormen de maatstaf waarmee informatie uit de case studiegebieden wordt vergeleken. Vervolgens wordt in het case studiegebied informatie over de gebeurtenissen verzameld. Deze informatie wordt opgeslagen in het zogenaamde case studiepatroon. Tenslotte worden beide patronen met elkaar vergeleken om na te gaan of de gebeurtenissen in het case studiepatroon overeenkomen met die in het theoriepatroon. Hoe groter het aantal gelijke gebeurtenissen in het theorie- en case studiepatroon, hoe beter de theorie de situatie in het case studiegebied beschrijft. De methode van 'pattern-matching' doet denken aan het vergelijken van DNA-profielen in forensisch onderzoek, waarbij wordt nagegaan of de profielen dezelfde structuur hebben.

#### *Theoriepatronen en case studiepatronen*

In de tweede helft van hoofdstuk 4 wordt de eerste stap van de methode van 'pattern-matching' uitgevoerd: het maken van theoriepatronen voor de geselecteerde theorieën. In hoofdstuk 5 volgen de case studiepatronen. Om deze op te stellen, is gebruik gemaakt van de 18 case studies in succesvolle en achterblijvende rurale regio's, die in het kader van het RUREMPLO-project zijn uitgevoerd. Hoewel de RUREMPLO-case studies een schat aan informatie bieden, bleek dat ze onvoldoende informatie hadden om case

*Figuur 1* Overzicht van geselecteerde theorieën voor nader onderzoek en de daarvan afgeleide hypothesen

Theorie	Factoren in de productiefunctie <sup>a)</sup>	Afgeleide hypothese voor het doel van deze studie (gegeven de beschikbaarheid van arbeid en kapitaal)
Groeiopooltheorie	L, K, AE	Een groeiopool en de daarbij behorende multiplier-effecten bevorderen de groei van de werkgelegenheid
Kilkenny's verband tussen transportkosten en rurale ontwikkeling	L, K, AE	Relatief lage transportkosten bevorderen de vestiging van bedrijven in rurale regio's
Myrdal's cumulatieve causatie theorie	L, K, AE	Succesvolle regio's stapelen rijkdom op terwijl stagnerende regio's steeds meer rijkdom verliezen
Bryden's theorie over de 'potentials of immobile resources for creating competitive advantages in rural areas'	L, K, LM	Exploitatie van 'immobile resources' bevordert de groei van de werkgelegenheid Deze hypothese is in vier sub-hypothesen geknipt: (1) Exploitatie van sociaal en cultureel kapitaal bevordert de groei van de werkgelegenheid (2) Exploitatie van natuurlijk en cultureel erfgoed en cultureel kapitaal bevordert de groei van de werkgelegenheid (3) Exploitatie van lokale grondstoffen bevordert de groei van de werkgelegenheid in de productie die samenhangt met deze grondstoffen (4) Exploitatie van lokale kennis bevordert de groei van de werkgelegenheid in de productie die samenhangt met deze kennis
'Creative destruction model of community development'	L, K, LM	Overexploitatie van natuurlijk en cultureel erfgoed vernietigt de werkgelegenheid in de aan dit erfgoed gerelateerde sectoren
'Community-led rural development' theorie	L, K, LM	Een goed ontwikkelde 'self-help capacity of communities' bevordert de groei van de werkgelegenheid
'Mixed exogenous/endogenous' benadering	L, K, LM, I	Een actieve rol van de lokale actoren in de interne en externe netwerken bevordert de groei van de werkgelegenheid
'Innovative milieu' benadering	L, K, LM, I	'Filières', die worden gekenmerkt door lokale synergie, lokaal innovatievermogen en transterritoriale netwerken, bevorderen de groei van de werkgelegenheid
Porter's theorie over de nationale concurrentiepositie	L, K, LM, I	Een sterke wisselwerking en onderlinge versterking van de zes determinanten in de diamant verbeteren de concurrentiepositie van bedrijven
Illeris' inductieve theorie over regionale ontwikkeling	L, K, LM, I	Een sterke combinatie van lokale condities bevordert de groei van de werkgelegenheid

a) L: arbeid; K: kapitaal; AE: agglomeratie-effecten als gevolg van externe of schaafeffecten; LM: lokale omgeving, die ondermeer factoren als ruimte, menselijk kapitaal, technologie, netwerken, vertrouwen, cultuur en beleid omvat; I: innovatie.

studiepatronen voor de groeiopooltheorie, Kilkenny's verband tussen transportkosten en rurale ontwikkeling, en Porter's theorie over de nationale concurrentiepositie te kunnen maken. Daarom zijn deze theorieën verder buiten beschouwing gelaten.



### *Ontwikkelingspaden in de casestudiegebieden*

Uit de systematische indeling van variabelen in de case studiepatronen kunnen ook ontwikkelingspaden in de case studiegebieden worden afgeleid. Een ontwikkelingspad wordt hier opgevat als het verloop van de economische ontwikkeling dat een regio kent door de tijd heen. Omdat lokale actoren een belangrijke rol spelen in de geselecteerde theorieën, is het met name interessant om naar hun rol in het ontwikkelingspad te kijken. Op die manier kunnen de ontwikkelingspaden van de case studiegebieden in drie groepen worden ingedeeld:

#### *1 Ontwikkelingspad waarbij alle lokale actoren een actieve rol spelen*

Dit ontwikkelingspad komt vooral in de succesvolle case studiegebieden voor. Hieruit kan worden afgeleid dat het bewerkstelligen van een actieve houding bij lokale actoren een belangrijke instrument is om de groei van de werkgelegenheid in rurale regio's te stimuleren.

#### *2 Ontwikkelingspad waarbij alleen ondernemers een actieve rol spelen*

Dit ontwikkelingspad is kenmerkend voor de Italiaanse case studiegebieden met industriële districten. De ervaring uit deze case studiegebieden leert dat een actieve rol van ondernemers op korte termijn weliswaar tot werkgelegenheids groei kan leiden, maar dat zich op langere termijn knelpunten voordoen, bijvoorbeeld ten aanzien van infrastructuur en sociale voorzieningen. Omdat ondernemers niet in staat zijn om zulke voorzieningen te verschaffen, zijn overheidsinterventies nodig om dergelijke problemen op te lossen.

#### *3 Ontwikkelingspad waarbij lokale actoren passief zijn*

Dit ontwikkelingspad overheerst in de achterblijvende case studiegebieden, wat aantoont dat een passieve houding van lokale actoren een zwak punt vormt. In maatregelen om de werkgelegenheid in rurale regio's te stimuleren, zou dat moeten worden aangepakt.

### *'Matching' van theorie- en case studiepatronen*

In hoofdstuk 6 worden de zeven theoriepatronen vergeleken met de case studiepatronen van de 18 case studiegebieden. Uit de resultaten van de 'matching' blijkt dat de 'mixed exogenous/endogenous' benadering, de 'community-led rural development' theorie en de eerste hypothese van Bryden's theorie inzake de exploitatie van sociaal en cultureel kapitaal breed worden ondersteund door empirisch bewijs uit de case studiegebieden. Deze theorieën zijn dus bruikbaar voor de beschrijving van economische ontwikkeling in rurale regio's in de EU. In grote lijnen komen deze theorieën er op neer dat er - gegeven de beschikbaarheid van arbeid en kapitaal - een positief verband bestaat tussen werkgelegenheids groei en een hoge capaciteit van lokale actoren en sterke interne en externe netwerken.

De theorieën van Myrdal en Illeris worden minder vaak ondersteund door empirisch bewijs uit de case studiegebieden. In zekere zin kunnen deze theorieën als een 'uitbreiding' van de 'mixed exogenous/endogenous' benadering en de 'community-led rural development' theorie worden gezien omdat ze veronderstellen dat naast de capaciteit van lokale actoren en de sterkte van de netwerken, ook factoren als fysieke en soft infrastructure, agglomeratie, natuurlijk en cultureel erfgoed, migratie, instroom van investeringen en BBP/capita de werkgelegenheids groei beïnvloeden. De 'matching'-resultaten geven aan dat deze additionele variabelen niet altijd een doorslaggevende rol in werkgelegenheids groei spelen. Dit kan in verband worden gebracht met het feit dat

veel overheden een beleid van herverdeling uitvoeren, dat in sterke mate bijdraagt aan de verbetering van fysieke en soft infrastructure in achterblijvende regio's.

De 'matching'-resultaten van de tweede hypothese van Bryden's theorie geven aan dat valorisatie van natuurlijk en cultureel erfgoed en cultureel kapitaal vaak gepaard gaat met werkgelegenheids groei. De factoren, zoals beschreven in de derde en vierde hypothese van Bryden's theorie en de 'innovative milieu' benadering, komen niet zo vaak voor in de case studiegebieden. Als ze echter wel aanwezig zijn, leiden ze niet in alle case studiegebieden tot werkgelegenheids groei. Overexploitatie van natuurlijk en cultureel erfgoed zoals verondersteld in het 'creatieve destruction model' blijkt zich niet voor te doen in de case studiegebieden.

#### *Slotopmerkingen over economische ontwikkeling in rurale regio's van de EU: praktijk*

In het laatste hoofdstuk wordt stilgestaan bij de belangrijkste bevindingen ten aanzien van economische ontwikkeling in rurale regio's van de EU in praktijk en theorie. Ook wordt een aantal aanbevelingen gegeven voor strategieën om de economische ontwikkeling in rurale regio's te stimuleren en worden suggesties voor verder onderzoek gedaan. De analyse van sociaal-economische ontwikkelingen in rurale regio's in de jaren tachtig en het begin van de jaren negentig toont aan dat ruraal Europa niet langer het toneel is van banenverlies en ontvolking. Het beeld van ruraal Europa dat naar voren komt ziet er veel meer uit als een mozaïek van winnaars, middenmoters en verliezers. Bovendien blijkt ook dat de landbouwsector niet langer de ruggengraat van de rurale economie vormt: zelfs in de meest rurale regio's was het aandeel van de landbouw in de totale werkgelegenheid aan het begin van de jaren negentig minder dan 15%. De ontwikkeling van de werkgelegenheid in de case studiegebieden laat zien dat de industrie- en dienstensector een groot aantal bedrijfstakken omvat die de potentie hebben om te kunnen groeien. Uit de vergelijking van de case studiegebieden kan worden opgemaakt dat verschillen in economische ontwikkeling vooral lijken samen te hangen met de mate van mobilisatie en organisatie van de lokale actoren. Globaal genomen worden de succesvolle case studiegebieden gekenmerkt door een ontwikkelingsproces, waarbij de lokale actoren enerzijds de capaciteit bezitten om de sterke en zwakke punten, de kansen en bedreigingen van hun regio te identificeren, en anderzijds in staat zijn om samen te werken in interne en externe netwerken om zo hun ontwikkelingsplannen uit te voeren. Als gevolg van vestiging bestaat de groep van lokale actoren in succesvolle regio's uit oorspronkelijke bewoners en nieuwkomers. Deze laatsten blijken vaak als 'local leader' op te treden. In de achterblijvende case studiegebieden daarentegen, worden de capaciteit van de lokale actoren en hun samenwerking in interne en externe netwerken vaak als zwak aangeduid. Tenslotte komt uit de betrokkenheid van lokale actoren in externe netwerken nog een ander belangrijk punt naar voren: rurale regio's worden beïnvloed door allerlei lokale, nationale en mondiale krachten. Dit betekent dat het ontwikkelingsproces van rurale regio's afhankelijk is van het samenspel van mondiale (exogene) krachten en lokale (endogene) reacties - beide gekleurd door nationale condities - waarin lokale actoren hun speelruimte moeten zoeken om de uitkomsten van het proces te kunnen beïnvloeden.

### *Slotopmerkingen over economische ontwikkeling in rurale regio's van de EU: theorie*

Terugkomend op de kernvraag welke theorieën kunnen worden gebruikt voor het beschrijven van de economische ontwikkeling in rurale regio's van de EU, kan nu het volgende antwoord worden gegeven. Uit de resultaten van de 'pattern-matching' blijkt dat de 'mixed exogenous/endogenous' benadering, de 'community-led rural development' theorie en de eerste hypothese van Bryden's theorie inzake de exploitatie van sociaal en cultureel kapitaal geschikt zijn voor dit doel. Kort gezegd veronderstellen deze theorieën - gegeven de beschikbaarheid van arbeid en kapitaal - dat als rurale regio's hoge scores kennen voor de capaciteit van de lokale actoren en de sterkte van de interne en externe netwerken, het waarschijnlijk is dat hun (niet-agrarische) werkgelegenheid groeit. Aan de andere kant: als rurale regio's laag scoren op deze factoren, dan is het waarschijnlijk dat hun (niet-agrarische) werkgelegenheid stagneert. Daarnaast blijken ook de tweede en vierde hypothese van Bryden's theorie en de 'innovative milieu' benadering geschikte theorieën te zijn voor het beschrijven van de economische ontwikkeling in rurale regio's. Deze theorieën beschouwen echter relaties die slechts gelden voor een deel van de rurale economie en/of relaties die zich minder vaak voordeden in de case studiegebieden.

### *Algemene richtlijn voor economische ontwikkelingsstrategieën voor rurale regio's*

Uit de theorieën en de case studiegebieden kan een aantal aanbevelingen worden afgeleid, die samen een soort van algemene richtlijn vormen voor een strategie gericht op de stimulering van de economische ontwikkeling in rurale regio's. Deze richtlijn bestaat uit de volgende kernelementen:

- 1 Denk mondiaal en handel lokaal.
- 2 Verbeter de capaciteit (scholing, vaardigheden en houding) van lokale actoren om een duurzame ontwikkeling in de regio tot stand te brengen.
- 3 Versterk de samenwerking tussen de lokale actoren en de samenwerking tussen actoren binnen en buiten de regio.
- 4 Probeer het machtsevenwicht in de externe netwerken zodanig te beïnvloeden dat lokale actoren in een redelijke mate voordeel hebben van deze netwerken.
- 5 Pas de verhoudingen in de bestuurlijke structuur van lokale, regionale, nationale en EU-overheden zodanig aan dat deze beter aansluiten bij 'bottom-up'-initiatieven.
- 6 Gebruik een integraal, territoriaal ontwikkelingsplan, gebaseerd op de sterke en zwakke punten, de kansen en bedreigingen van de regio, en integreer alle maatregelen en projecten binnen de kaders van dit plan.

Als aanvulling op deze algemene richtlijn wordt een aantal specifieke aanbevelingen gegeven, waarvan de relevantie wordt bepaald door de behoeften van de regio.

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## ANNEX 2.1 TERRITORIAL SCHEME OF THE OECD

In the scope of the Project on Rural Indicators, the OECD has made a typology of rural regions, which covers its whole territory (OECD, 1994). The typology consists of three types of regions, derived on population density:

- 1 predominantly rural regions;
- 2 significantly rural (or: intermediate) regions;
- 3 predominantly urban regions.

The typology is based on a territorial scheme of two hierarchical levels: the local community level and the regional level. Local communities are basic administrative units with a very detailed grid, like cantons in France, districts in the UK and municipalities in the Netherlands. Regions are larger administrative units or functional zones with a less detailed grid, like aemter in Denmark, provincias in Spain and provinces in Belgium and the Netherlands. When population density in local communities is less than 150 inhabitants per square kilometre, the community is classified as 'rural'; when population exceeds 150 inhabitants per square kilometre as 'urban'<sup>1</sup>. As a second step, regions are divided into three groups (Fig. A1):

- when more than 50% of the population of the region lives in rural local communities, the region is classified as 'predominantly rural';
- when between 15 and 50% of the population of the region lives in rural local communities, the region is classified as 'significantly rural' or 'intermediate'<sup>2</sup>;
- and when less than 15% of the population of the region lives in rural local communities, the region is classified as 'predominantly urban'.

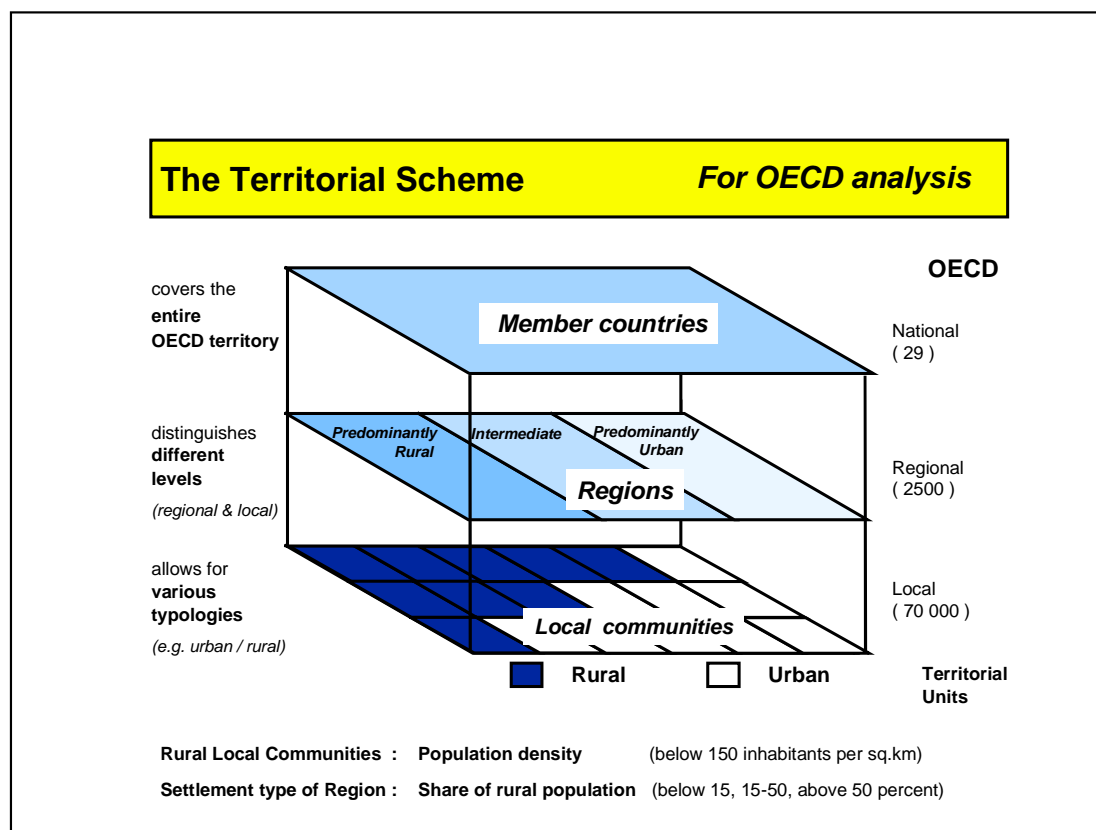
Moreover, when regions include a city of 200,000 inhabitants or more, the region is classified as intermediate; when regions include a city of 500,000 inhabitants or more, the region is classified as predominantly urban.

Within the scope of this scheme, a basic set of socio-economic indicators for these regions has been collected as well. The OECD designed this scheme and database of internationally comparable indicators in order to help member countries to improve their monitoring of changes and trends in rural economies, and to contribute to a sounder basis for decision making in rural development policy.

In the RUREMPLO project we have used this methodology for classifying EU15 regions. Since we have used a delineation of regions, which differs for some countries from the OECD delineation, we have adopted the labels of the three groups as follows:

- 1 most rural regions;
- 2 intermediate rural regions;
- 3 most urban regions.

Figure A1 The territorial scheme for OECD analysis



Source: OECD, 1996a.

## NOTES

- 1 For Japan the threshold is 500 inhabitants per square kilometre.
- 2 Originally, the term 'significantly rural' was used; as this was difficult to interpret for many users, later the term 'intermediate' was introduced.

## ANNEX 2.2 OVERVIEW OF THE REGIONAL LEVEL USED IN THE RURAL CLASSIFICATION OF EU 15 REGIONS

As already indicated in Section 2.2, in this study we have used the set of 465 EU regions, which has been composed in the RUREMPLO project. It was tried to delineate regions in such a way, that they more or less reflect the size of a labour market area. For some countries NUTS2 regions are appropriate for this purpose; in other countries NUTS3 regions are more suitable. Below we indicate which NUTS level is used for the different EU member states in the RUREMPLO data set. As the delineation of NUTS3 regions in Finland and Austria did not reflect labour market areas, an alternative delineation has been made in the RUREMPLO project.

Member state	Regional level		Number of regions
Belgium	NUTS2	Provinces	9
Denmark	NUTS3	Amter	12
Germany	NUTS2	Regierungsbezirke	31
Greece	NUTS2	Development regions	13
Spain	NUTS3	Comunidades Autonomas	50
France	NUTS3	Régions	96
Ireland	NUTS3	Planning regions	8
Italy	NUTS3	Provincia	95
Luxembourg	NUTS2	Country	1
Netherlands	NUTS2	Provinces	12
Austria	about NUTS3	(Gruppen von politischen Bezirken)	32
Portugal	NUTS2	Comissaoes coordenação regional	5
Finland	about NUTS3	(Maakunnat)	12
Sweden	NUTS3	Län	24
United Kingdom	NUTS3	Counties	65

## **ANNEX 5.1 OVERVIEW OF THE PROTOCOL, KEY ISSUES AND SWOT ANALYSIS IN THE RUREMPLO PROJECT**

In this Annex, first the contents of the RUREMPLO protocol is given (Fig. A5.1). For streamlining the summary of each case study report, we have made a list with 11 key issues, referring to each of the three main components of the field of force of a rural region (Fig. A5.2). Besides, the various forces in the field have been assessed by making a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for 1980 (beginning year 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 its problems and perspectives. The items in the SWOT analysis are given in Figure A5.3.

*Figure A5.1* Contents of RUREMPLO protocol<sup>a)</sup>

PREFACE
INTRODUCTION
PART ONE: THEORETICAL BACKGROUND
PART TWO: CONTENTS OF THE REPORT OF THE CASE STUDY
PART THREE: GUIDELINE FOR THE CASE STUDIES
SOME INTRODUCTORY REMARKS FOR THE PARTICIPANTS
CHAPTER 1 INTRODUCTION
CHAPTER 2 ANALYSIS OF LOCAL RESOURCES
CHAPTER 3 ANALYSIS OF ECONOMIC ACTIVITIES
CHAPTER 4 ACTORS: ANALYSIS OF LABOUR SUPPLY
CHAPTER 5 LABOUR MARKET
CHAPTER 6 ACTORS: ANALYSIS OF STRATEGIES
CHAPTER 7 DEVELOPMENT OF EMPLOYMENT: A SYNTHESIS

a) Chapter 1-7 refer to the chapters of the case study reports.  
Source: RUREMPLO team, 1997.

Figure A5.2 Key issues

*Local resources*

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

*Economic activities*

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

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

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

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

*Actors: analysis of labour supply*

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

*Actors: labour market*

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

*Actors: analysis of strategies*

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

(9) 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.

(10) 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).

(11) 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?

Source: RUREMPLO project.

Figure A5.3 Items of the SWOT analysis

<p><i>Strengths and weaknesses</i></p> <ul style="list-style-type: none"><li>• location of the region (proximity to a large economic centre)</li><li>• local resources which favour employment</li><li>• education level of the labour force</li><li>• low cost labour</li><li>• well-developed physical infrastructure</li><li>• favourable industry structures</li><li>• favourable climate</li><li>• favourable amenities</li><li>• presence of universities and other major research centres</li><li>• specialisation of the regional economy</li><li>• diversification of the regional economy</li><li>• vertical coordination within sectors</li><li>• horizontal coordination across sectors</li><li>• capacity (knowledge, skills and attitude) of local actors</li><li>• capacity of local actors to innovate</li><li>• entrepreneurial climate</li><li>• internal networks</li><li>• external networks</li><li>• market 'niches'</li><li>• tourism</li></ul> <p><i>Opportunities and threats can refer for example to:</i></p> <ul style="list-style-type: none"><li>• market opportunities (often expressed in relation to a certain sector)</li><li>• development of market 'niches'</li><li>• development of tourism</li><li>• European integration and extension</li><li>• political events like GATT/WTO and the transformation process in Central and Eastern European Countries</li><li>• 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)</li><li>• improvement of the access to markets</li></ul>
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Source: RUREMPLO project.

## ANNEX 5.2 OVERVIEW OF LARGEST CITIES IN THE RUREMPLO CASE STUDY REGIONS

<i>Leading case study regions</i>	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	27,400	19
	Loutraki	9,400	7
	Kiato	9,100	6
Albacete (SP)	Albacete	130,000	36
	Hellin	24,200	7
	Almansa	22,600	6
	Villarrobledo	20,700	6
Alpes de Haute Provence (FR)	Manosque	19,100	14
	Digne-les-Bains	16,100	12
Pesaro (IT)	Pesaro	80,500	24
	Fano	48,700	14
Drenthe (NL)	Emmen	94,000	20
	Assen	53,000	12
	Hoogeveen	47,000	10
Osttirol (AUS)	Lienz	11,900	25
	Matrei	4,500	9
	Sillian Heinfels	2,900	6
Keski- Suomen Lääni (FIN)	Jyväskylä	74,000	29
	Aanekoski	13,800	5
	Jamsa	13,100	5
	Keuruu	12,400	5
<i>Lagging case study regions</i>			
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	43,000	14
	Civitanova	37,300	13



Groningen (NL)	Groningen	171,000	31
	Hoogezand-Sappemeer	34,000	6
	Delfzijl	33,000	6
Liezen (AUS)	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

Source: Terluin *et al.*, 1999:37-46.

**ANNEX 5.3 OVERVIEW OF THE SHARE OF EMPLOYMENT INCREASE/DECREASE BY BRANCH IN THE TOTAL INCREASE/DECREASE IN THE CASE STUDY REGIONS (%)**

	1 Agri- cul- ture	2 Mi- ning	3 Manu- factu- ring	4 Electr. /Gas	5 Con- struc- tion	6 Trade/ Rest./ Hotels	7 Trans- port	8 Finan- cial serv.	9 Com- munity services
<i>Leading case study regions</i>									
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
Albacete (SP) 1983-1993	-93	-6	+18		+11	+20	+5	+2	+44
Alpes de Haute Provence (FR) 1981-1992	-14		+1	+1	-86	+23	+3	+36	+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 (AUS) 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
<i>Lagging case study regions</i>									
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) <sup>a)</sup> 1982-1990	-33		-59	+9	-4	+63	-4	+8	+21
Nièvre (FR) <sup>a)</sup> 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 (AUT) 1981-1991	-40	-3	-48	-6	-3	+5	+21	+33	+41
Mikkelin Lääni (FIN) 1980-1994	-40		-28		-13	-8	-9		+99

a) Branch 6 contains all market services which are not included in branch 7 and 8.

Source: Terluin *et al.*, 1999:57-9.

## ANNEX 5.4 OVERVIEW OF THE VALUES OF THE VARIABLES IN THE CASE STUDY REGIONS

		Luxembourg (B)	Ardennes	Niederbayern	Lineburg	Korinthia	Fthiois	Albacete	Zamora	AHP	Nièvre
	<i>Local resources</i>										
LR1	Rural amenities	+	+	+	+	+	+	+	+	+	+
LR2	Local raw materials	n.r.	+	n.r.	n.r.	+	+	+	+	n.r.	+
LR3	Transport infrastructure in the region	++	0/+	++	0/+	0/+	0/+	++	0/+	0/+	0/+
LR4	External transport connections	+	-	+	0	+	+	+	0	0/+	-
LR5	Soft infrastructure	+	0/+	+	-	-	-	+	0	0	-
LR6	Agglomeration	-	+	+	+	0	+	++	+	-	+
	<i>Economic activities</i>										
EA1	Non-agricultural employment growth	+	-	+	-	+	-	+	-	+	-
EA2	Valorization of rural amenities and tourist infrastructure	++	0	+	+	+	-	0/+	0/+	++	+
EA3	Overexploitation of rural amenities	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
EA4	Employment increases in tourism	+	0	+	+	+	+	+	+	+	+
EA5	Filières	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	++	n.r.	n.r.	n.r.
EA6	Employment growth in the filière	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	+	n.r.	n.r.	n.r.
EA7	Presence of economic activities using raw materials	n.r.	+	n.r.	n.r.	+	+	+	+	n.r.	-
EA8	Employment growth in the production related to the local raw materials	n.r.	-	n.r.	n.r.	+	-	+	0	n.r.	-
EA9	Presence of economic activities using local knowledge capital	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
EA10	Employment growth in the production related to the local knowledge capital	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
EA11	Assessment of GDP/capita and its increase	0	0	++	--	++	--	--	++	0	0
	<i>Actors</i>										
A1	Capacity of local policy makers	++	--	++	--	--	--	++	--	++	0
A2	Capacity of local entrepreneurs	+	-	++	-	+	-	++	--	+	--
A3	Capacity of local workers	+	0	+	-	+	+	+	-	+	+
A4	Internal networks	++	--	++	--	--	--	++	--	+	-
A5	Linkages in networks/institutions	++	--	++	--	--	--	++	--	+	-
A6	External networks	++	--	++	--	--	--	++	--	+	-
A7	Benefits of external networks	++	0	++	-	+	+	++	-	+	0
A8	Assessment of migration balance	++	--	++	--	++	0	++	--	++	--
A9	Initiatives for mobilizing the self-help capacity	++	-	++	-	-	-	++	-	++	-
A10	Local synergy of the filières	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	++	n.r.	n.r.	n.r.
A11	Local innovativeness of the filières	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	++	n.r.	n.r.	n.r.
A12	Transterritorial networks of the filières	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	++	n.r.	n.r.	n.r.
A13	Exogenous changes	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	+	-	n.r.	n.r.

		Pesaro	Macerata	Drenthe	Groningen	Ostiröl	Liezen	Keski S.L.	Mikkelin L.
	<i>Local resources</i>								
LR1	Rural amenities	+	+	+	0	+	+	+	+
LR2	Local raw materials	n.r.	n.r.	n.r.	+	+	+	+	+
LR3	Transport infrastructure in the region	0/+	0/+	+	+	0/+	0/+	0/+	0
LR4	External transport connections	+	+	+	+	-	+	0	0
LR5	Soft infrastructure	0/+	-	+	+	0/+	-	+	0/+
LR6	Agglomeration	+	+	+	++	0	-	++	+
	<i>Economic activities</i>								
EA1	Non-agricultural employment growth	+	-	+	-	+	-	+	-
EA2	Valorization of rural amenities and tourist infrastructure	+	0/+	0/+	0/+	++	+	+	+
EA3	Overexploitation of rural amenities	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.		
EA4	Employment increases in tourism	-	+	+	+	0	-	+	+
EA5	Filières	++	++	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
EA6	Employment growth in the filière	+	-	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
EA7	Presence of economic activities using raw materials	n.r.	n.r.	n.r.	+	+	+	+	+
EA8	Employment growth in the production related to the local raw materials	n.r.	n.r.	n.r.	0	+	-	-	-
EA9	Presence of economic activities using local knowledge capital	n.r.	n.r.	n.r.	+	n.r.	n.r.	n.r.	n.r.
EA10	Employment growth in the production related to the local knowledge capital	n.r.	n.r.	n.r.	+	n.r.	n.r.	n.r.	n.r.
EA11	Assessment of GDP/capita and its increase	0	0	0	0	0	0	++	--
	<i>Actors</i>								
A1	Capacity of local policy makers	--	--	+	+	+	--	+	0
A2	Capacity of local entrepreneurs	++	0	+	+	0	0	+	0
A3	Capacity of local workers	+	+	+	+	+	+	+	+
A4	Internal networks	+	0	+	+	+	0	+	-
A5	Linkages in networks/institutions	-	-	+	+	+	-	+	0
A6	External networks	+	0	0	0	0	-	+	0
A7	Benefits of external networks	+	+	+	+	+	0	+	+
A8	Assessment of migration balance	+	+	++	--	--	0	++	--
A9	Initiatives for mobilizing the self-help capacity	+	+	+	+	+	-	+	-
A10	Local synergy of the filières	++	++	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
A11	Local innovativeness of the filières	++	+	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
A12	Transterritorial networks of the filières	++	++	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
A13	Exogenous changes	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.

## ANNEX TABLES

Table A2.1 Sectoral structure of employment in the EU regions, '1980-1993' (%)

		Period Y1-Y2	Agriculture		Industry		Services	
			Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Belgium	Most rural	1980-92	11	8	21	19	68	73
	Intermediate rural	1980-92	3	3	33	25	63	72
	Most urban	1980-92	3	2	33	28	64	70
	National average	1980-92	3	2	33	27	64	70
Denmark	Most rural	1981-93	14	8	30	30	57	61
	Intermediate rural	1981-93	9	6	30	29	62	66
	Most urban	1981-89	1	1	.	.	.	.
	National average	1981-93	8	5	27	26	65	69
Germany	Most rural	1980-93	14	8	38	37	47	55
	Intermediate rural	1980-93	7	4	43	38	50	58
	Most urban	1980-93	2	1	43	36	55	67
	National average	1980-93	5	3	43	37	52	62
Greece	Most rural	1981-91	46	32	24	23	29	45
	Intermediate rural	1981-91	48	29	17	19	36	53
	Most urban	1981-91	11	8	37	28	51	64
	National average	1981-91	29	20	31	25	40	55
Spain	Most rural	1980-95	39	20	26	27	35	53
	Intermediate rural	1980-95	23	11	34	29	43	60
	Most urban	1980-95	7	3	41	31	52	65
	National average	1980-95	19	9	35	30	45	61
France	Most rural	1981-92	16	10	35	30	50	60
	Intermediate rural	1981-92	8	5	36	29	56	66
	Most urban	1981-92	1	1	32	25	66	75
	National average	1981-92	8	5	34	28	58	67
Ireland	Most rural	1985-94	22	17	29	30	49	53
	Intermediate rural	-	-	-	-	-	-	-
	Most urban	1985-94	1	1	27	24	71	75
	National average	1985-94	16	12	28	28	56	60
Italy	Most rural	1982-95	20	12	28	28	5	60
	Intermediate rural	1982-95	16	10	33	31	2	58
	Most urban	1982-95	7	5	36	34	.	62
	National average	1982-95	12	7	34	32	7	60
Luxembourg	Most rural	-	-	-	-	-	-	-
	Intermediate rural	1980-92	5	3	38	.	57	.
	Most urban	-	-	-	-	-	-	-
	National average	1980-92	5	3	38	.	57	.

Table A2.1 Sectoral structure of employment in the EU regions, '1980-1993' (%) (continued)

		Period Y1-Y2	Agriculture		Industry		Services	
			Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Netherlands	Most rural	-	-	-	-	-	-	-
	Intermediate rural	1987-91	8	7	.	26	.	67
	Most urban	1987-91	4	4	.	25	.	70
	National average	1987-91	5	4	.	25	.	70
Austria	Most rural	1981-91	18	12	42	38	41	49
	Intermediate rural	1981-91	4	3	43	36	53	61
	Most urban	1981-91	1	1	36	28	63	71
	National average	1981-91	9	6	41	35	51	59
Portugal	Most rural	1980-90	43	35	27	.	29	.
	Intermediate rural	1980-90	28	20	42	.	29	.
	Most urban	1980-90	13	10	33	.	54	.
	National average	1980-90	27	20	35	.	38	.
Finland	Most rural	1980-93	18	12	35	28	46	60
	Intermediate rural	1980-93	12	9	40	33	47	58
	Most urban	1980-93	4	2	29	23	66	75
	National average	1980-93	13	8	34	27	51	64
Sweden	Most rural	1980-93	8	3	38	29	54	66
	Intermediate rural	1980-93	5	2	34	26	61	70
	Most urban	1980-93	1	0	23	17	76	80
	National average	1980-93	5	2	33	25	61	71
United Kingdom	Most rural	1985-91	7	6	29	27	64	67
	Intermediate rural	1985-91	4	3	32	29	64	68
	Most urban	1985-91	1	1	31	27	68	72
	National average	1985-91	2	2	31	27	67	70
EU	Most rural	1980-91	20	13	32	29	48	58
	Intermediate rural	1980-91	12	7	37	33	51	60
	Most urban	1980-91	4	3	36	30	61	67
	Average	1980-91	9	6	36	31	55	63

Source: RUREMPLO project.

'-' denotes that the group does not exist; '.' denotes that data is not available.

Table A2.2 Employment growth in the EU regions, '1980-1993' (% p.a.)

		Period Y1-Y2	Agricul- ture	Industry	Services	Non- agriculture	Total
Belgium	Most rural	1980-92	-1.9	-0.1	1.5	1.2	0.9
	Intermediate rural	1980-92	-2.2	-2.7	0.8	-0.3	-0.3
	Most urban	1980-92	-1.8	-1.4	0.9	0.2	0.2
	National average	1980-92	-1.8	-1.5	0.9	0.2	0.1
Denmark	Most rural	1981-93	-3.5	0.6	1.1	0.9	0.4
	Intermediate rural	1981-93	-2.7	0.3	1.2	0.9	0.7
	Most urban	1981-89	-2.5	.	.	0.5	0.5
	National average	1981-93	.	.	.	.	.
Germany	Most rural	1980-93	-3.9	0.4	1.9	1.3	0.7
	Intermediate rural	1980-93	-3.8	-0.3	1.8	0.9	0.6
	Most urban	1980-93	-3.7	-1.3	1.7	0.2	0.1
	National average	1980-93	-3.8	-0.8	1.7	0.6	0.4
Greece	Most rural	1981-91	-3.7	-0.9	4.4	2.3	-0.1
	Intermediate rural	1981-91	-5.0	1.0	3.9	3.1	0.0
	Most urban	1981-91	-2.1	-1.7	3.3	1.5	1.1
	National average	1981-91	-3.4	-1.3	3.7	1.8	0.5
Spain	Most rural	1980-95	-5.3	-0.3	2.0	1.1	-0.8
	Intermediate rural	1980-95	-4.4	-0.6	2.7	1.4	0.4
	Most urban	1980-95	-4.1	-1.0	2.3	1.0	0.8
	National average	1980-95	-4.7	-0.7	2.4	1.2	0.4
France	Most rural	1981-92	-4.2	-1.4	1.6	0.5	-0.1
	Intermediate rural	1981-92	-3.8	-1.4	1.9	0.8	0.4
	Most urban	1981-92	-3.4	-2.2	1.3	0.3	0.2
	National average	1981-92	-4.0	-1.6	1.6	0.5	0.2
Ireland	Most rural	1985-94	-2.0	1.2	1.8	1.6	0.9
	Intermediate rural	-	-	-	-	-	-
	Most urban	1985-94	-4.9	0.0	2.2	1.6	1.5
	National average	1985-94	-2.1	0.8	1.9	1.6	1.1
Italy	Most rural	1982-95	-4.6	-1.0	0.0	-0.2	-1.0
	Intermediate rural	1982-95	-4.8	-1.3	0.2	-0.3	-0.9
	Most urban	1982-95	-3.8	-1.3	0.0	-0.5	-0.7
	National average	1982-95	-4.5	-1.3	0.1	-0.4	-0.8
Luxembourg	Most rural	-	-	-	-	-	-
	Intermediate rural	1980-92	-2.9	.	.	2.2	2.0
	Most urban	-	-	-	-	-	-
	National average	1980-92	-2.9	.	.	2.2	2.0
Netherlands	Most rural	-	-	-	-	-	-
	Intermediate rural	1987-91	-1.3	.	.	3.3	3.0
	Most urban	1987-91	1.5	.	.	2.7	2.6
	National average	1987-91	1.0	.	.	2.8	2.7

Table A2.2 Employment growth in the EU regions, '1980-1993' (% p.a.) (continued)

		Period Y1-Y2	Agricul- ture	Industry	Services	Non- agriculture	Total
Austria	Most rural	1981-91	-3.3	-0.6	2.0	0.8	0.2
	Intermediate rural	1981-91	-2.2	-0.9	2.3	1.0	0.8
	Most urban	1981-91	-1.8	-2.1	1.5	0.3	0.3
	National average	1981-91	-3.1	-1.0	2.0	0.7	0.4
Portugal	Most rural	1980-90	-3.4	.	.	-0.1	-1.4
	Intermediate rural	1980-90	-3.4	.	.	1.2	0.1
	Most urban	1980-90	-2.3	.	.	0.2	-0.1
	National average	1980-90	-3.2	.	.	0.5	-0.4
Finland	Most rural	1980-93	-4.4	-3.1	0.8	-0.7	-1.3
	Intermediate rural	1980-93	-4.1	-3.3	0.1	-1.3	-1.6
	Most urban	1980-93	-6.1	-2.1	0.9	0.0	-0.2
	National average	1980-93	-4.5	-2.9	0.7	-0.6	-1.0
Sweden	Most rural	1980-93	-6.4	-2.4	1.3	0.0	-0.3
	Intermediate rural	1980-93	-6.0	-2.0	1.0	0.2	0.0
	Most urban	1980-93	-5.1	-1.5	1.0	0.6	0.6
	National average	1980-93	-6.2	-2.1	1.1	0.2	0.0
United Kingdom	Most rural	1985-91	-1.3	0.3	2.7	2.0	1.7
	Intermediate rural	1985-91	-1.5	0.0	2.3	1.5	1.4
	Most urban	1985-91	-1.9	-1.6	1.6	0.6	0.6
	National average	1985-91	-1.5	-1.0	1.8	1.0	0.9
EU	Most rural	1980-93	-4.1	-0.8	1.7	0.8	0.0
	Intermediate rural	1980-93	-3.9	-0.6	1.7	0.8	0.4
	Most urban	1980-93	-3.3	-1.1	1.5	0.6	0.5
	Average	1980-93	-3.9	-0.9	1.6	0.7	0.4

Source: RUREMPLO project.

'-' denotes that the group does not exist; '.' denotes that data is not available.



## **CURRICULUM VITAE**

Ida Joke Terluin was born in Schalsum on June 27, 1961. She attended the Bolwerkschool in Franeker from 1967-1973. She started the first year of the secondary school with the so-called 'havo-brugklas' at the Anna Maria van Schurman CSG in Franeker; then her secondary education was continued at the Lienward College in Leeuwarden from 1974 to 1979. Next she worked for one year as an archivist at Buro Vijn in Oenkerk, an agency involved in spatial and urban planning. In 1980 she started her study in history at the Rijksuniversiteit Groningen (RUG). In 1984 she chose to enrol in economics as well. She obtained her Master's degree in history in October 1987. From that time until her Master's degree in economics in November 1989, she worked part-time as a teaching assistant at the Department of Development Economics of the RUG Economics Faculty. In the summer of 1989 she underwent a three-month traineeship in Luxembourg at EUROSTAT, the statistical bureau of the EU. Since February 1990 she has been employed as a researcher at the Agricultural Economics Research Institute LEI in The Hague. Her research topics include aspects of the Common Agricultural Policy, with emphasis on structural and rural developments. Her research is characterized by an international comparative approach of topics. Since 1995 she participated in the meetings of the OECD Steering Group on Rural Indicators, which was disbanded due to reorganization in 1999. Since 2000 she is one of the Dutch delegates in the OECD Working Party on Territorial Indicators.