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The future of Europe’s rural periphery, the role of Entrepreneurship in responding to employment problems and social marginalization

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SOCIAL SCIENCES AND HUMANITIES

The future of Europe's rural periphery,
the role of Entrepreneurship in
responding to employment problems
and social marginalization

FERP

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Preface

Within the Fifth Community RTD Framework Programme of the European Union (1998–2002), the Key Action ‘Improving the Socio-economic Knowledge Base’ had broad and ambitious objectives, namely: to improve our understanding of the structural changes taking place in European society, to identify ways of managing these changes and to promote the active involvement of European citizens in shaping their own futures. A further important aim was to mobilise the research communities in the social sciences and humanities at the European level and to provide scientific support to policies at various levels, with particular attention to EU policy fields.

This Key Action had a total budget of EUR 155 million and was implemented through three Calls for proposals. As a result, 185 projects involving more than 1 600 research teams from 38 countries have been selected for funding and have started their research between 1999 and 2002.

Most of these projects are now finalised and results are systematically published in the form of a Final Report.

The calls have addressed different but interrelated research themes which have contributed to the objectives outlined above. These themes can be grouped under a certain number of areas of policy relevance, each of which are addressed by a significant number of projects from a variety of perspectives.

These areas are the following:

- **Societal trends and structural change**
  16 projects, total investment of EUR 14.6 million, 164 teams

- **Quality of life of European citizens**
  5 projects, total investment of EUR 6.4 million, 36 teams

- **European socio-economic models and challenges**
  9 projects, total investment of EUR 9.3 million, 91 teams

- **Social cohesion, migration and welfare**
  30 projects, total investment of EUR 28 million, 249 teams

- **Employment and changes in work**
  18 projects, total investment of EUR 17.5 million, 149 teams

- **Gender, participation and quality of life**
  13 projects, total investment of EUR 12.3 million, 97 teams

- **Dynamics of knowledge, generation and use**
  8 projects, total investment of EUR 6.1 million, 77 teams

- **Education, training and new forms of learning**
  14 projects, total investment of EUR 12.9 million, 105 teams

- **Economic development and dynamics**
  22 projects, total investment of EUR 15.3 million, 134 teams

- **Governance, democracy and citizenship**
  28 projects; total investment of EUR 25.5 million, 233 teams

- **Challenges from European enlargement**
  13 projects, total investment of EUR 12.8 million, 116 teams

- **Infrastructures to build the European research area**
  9 projects, total investment of EUR 15.4 million, 74 teams
This publication contains the final report of the project “The future of Europe's rural periphery, the role of Entrepreneurship in responding to employment problems and social marginalization”, whose work has primarily contributed to the area “Internationalisation, technology and employment in different geographical environments”.

The report contains information about the main scientific findings of FERP and their policy implications. The research was carried out by seven teams over a period of 34 months, starting in March 2000.

The abstract and executive summary presented in this edition offer the reader an overview of the main scientific and policy conclusions, before the main body of the research provided in the other chapters of this report.

As the results of the projects financed under the Key Action become available to the scientific and policy communities, Priority 7 ‘Citizens and Governance in a knowledge based society’ of the Sixth Framework Programme is building on the progress already made and aims at making a further contribution to the development of a European Research Area in the social sciences and the humanities.

I hope readers find the information in this publication both interesting and useful as well as clear evidence of the importance attached by the European Union to fostering research in the field of social sciences and the humanities.

J.-M. BAER,

Director
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The report at hand is the outcome of a research project that was financed by the 5th Framework Programme of the European Community for Research, Technology Development and Demonstration activities (1998-2002 - Key action “Improving the socio-economic knowledge base”). I would like therefore to take the opportunity here to thank the EC for providing us the opportunity to materialise this project.

Furthermore I would like to thank my colleagues from the different national teams as well as those individuals that have participated in this project and their names are listed with thanks in the appropriate chapters.

Most of all I would like to thank all those who contributed their valuable time in replying to our questionnaires (i.e. 4000 questionnaires to the general public and 1000 questionnaires to enterprises), or whose long conversations with us gave us valuable insights (i.e. more than 150 key informants) and whose names were impossible to mentioned.

The whole endeavour was quite an experience for all of us, since we had to work collectively to produce this outcome. This partnership has by now quite a long history. It began its interaction in its present form in 1998 when a proposal was drafted and submitted to the EU. However, most of us already knew each other and had already collaborated on a bi-lateral basis for several years before that. In a sense this report is a collaborative work throughout. That is, though individual teams are responsible for each particular chapter, it constitutes a collective authorship in the sense that there were extensive discussions for 34 months over every minor detail of this report. Needless to say, this is particularly true of the introductory as well as the concluding chapters.

At times it brought us up against the limits of our potential for agreement as individuals and as national teams and opened up some productive, and I must stress productive, tensions. I believe that we all learned not only through the actual research but also by working with other research teams from different countries as well as from different scientific disciplines, and I must admit that this was a very interesting and rewarding experience too, though at times it proved to be quite difficult for all of us and particularly for the coordinating team.

The duration of the project was 34 months, March 2000 - December 2002 and needless to say many things changed during this long period that we worked together (e.g. some have shifted to another University while others have moved into a different job
altogether). During this period we had to revise our time schedule several times which unfortunately resulted in “penalising” those teams that were the most punctual.

I would like to thank the two successive scientific officers Mr. Marshall Hsia, and particularly Dr. Nikos Kastrinos for his continuing interest and helpful comments, as well as for his willingness to find solutions to all the plethora of bureaucratic problems that have arisen during the course of this work so as to allow us to proceed undistracted on our project.

Perhaps, in retrospect, the research proposal was much too ambitious, but we have tried our best to deliver what we promised.

Lois Labrianidis

Thessaloniki, January 2003
Abstract

Recent technological advances alongside changes in the global institutional framework are having profound effects upon the development paths of Europe’s rural areas. Indeed, it is fair to argue that in the context of a rapidly changing international division of labour, Europe’s countryside has to re-invent itself. Within this context, this project sets out to examine the extent to which economic agents (namely entrepreneurs, knowledge-based institutions, and policy-makers) in Europe’s rural areas are demonstrating an ability to rise to the challenges at hand.

Drawing upon the results of extensive fieldwork investigation from ten case study areas in five European countries we argue economic development in rural peripheral areas is closely associated with the entrepreneurial talent of the local population. Unfortunately, in some rural areas, those who could reasonably have been expected to perform the entrepreneurial function may well have been the first to seek to out-migrate to more inviting urban areas. At the same time, in other rural regions, in-migration appears to be a source of entrepreneurial capacity. Therefore, we advance the idea that rural development policies should centre on the enhancement of the entrepreneurial human capital in the countryside. This means developing a supportive environment, which would allow individuals with entrepreneurial talents to remain or move into Europe’s rural areas and to facilitate the development of productive entrepreneurship. In line with this, policy decision-making should include a combination of direct (such as business support) and more importantly indirect (such as projects focused on building institutional capacity) measures to support entrepreneurship. Young and educated human capital is crucial for the development of entrepreneurship in European rural peripheral areas so as to enable them to compete in the international division of labour. However, in a context where most European rural areas still suffer from ageing and depopulation, policies must be developed to secure not only the cessation of out migration but also the fostering of the opposite trend (counter-urbanisation).
I. EXECUTIVE SUMMARY

1. Overview

At the dawn of a new millennium Europe’s rural areas are confronted with the task of re-inventing themselves. Changes in the international division of labour together with rapid advances in information and communication technologies (ICTs) offer rural localities a combination of opportunities and threats that is qualitatively different from earlier historical precedents. More specifically, the long-term process of structural change away from agricultural pursuits has been intensified as a result of changes in policy, such as the review of the CAP and the GATT agreement. Enterprises outside agriculture are now finding it more and more profitable to outsource increasing amounts of productive activities in the global network of production and distribution. At the same time, however, advances in ICTs support a more positive evaluation of the development prospects of the countryside. Endogenous economic advancement in sparsely populated and remote areas may be encouraged through the uptake of ICTs. Moreover, there is growing empirical evidence supporting the proposition that rural enterprises, by virtue of their location, are becoming more pro-active in the pursuit of distant and often overseas markets. The key research question emerging in the context of the changing rural landscape is the extent to which economic agents (namely entrepreneurs, knowledge-based institutions, and policy-makers) in the countryside have the ability to rise to the challenges at hand. This project aspires to address this question by drawing upon the findings of empirical research in ten case study areas from five European countries (namely Germany, Greece, Poland, Portugal, and the UK).

2. The Approach

Our review of the literature on peripherality and rurality suggests that there is a need for a more comprehensive view of rural areas. This perspective takes into account the importance of transition development processes, of the actors involved in them, as well as the contexts that shape their actions. It also takes into account both objective and subjective aspects (attitudes, values, behaviour, and expectations). In other words, the complexity and diversity which we know to be characteristic of peripheral rural areas today imply a need for a holistic approach capable of bringing together the multiplicity of factors involved in a coherent and balanced way.

Our main points of departure are: a) a "post-consumerist" view of rurality, which is the main reason that led us to focus our analysis on entrepreneurship as a key factor that might facilitate the development of rural areas. In fact we consider entrepreneurship as a
social process which in turn led us to adopt a historical, contextual approach to issues related to entrepreneurship (e.g. propensity and incidences of entrepreneurship). b) an integrated, territorially based view of rural development which led us to a holistic approach to the development of rural areas. Peripherality has different meanings, corresponding both to threats and opportunities and this led us to adopt a multi-dimensional concept of periphery i.e. as distance, dependence, distinctiveness and discourse. c). Even the most remote rural areas are more and more integrated into wider spaces of interdependency, this led us to consider globalisation processes and the evolution of the EU in particular as crucial contextual factors to our analysis. d) Technology is becoming a crucial means for development, hence technology and even more so ICTs, can be of particular importance for rural areas. e) Market failures are particularly relevant in peripheral rural areas, which led us to focus our analysis on the need for public intervention. Present policy initiatives are not sensitive enough to distinctive characteristics existing within the rural environment; this is the main reason that we are stressing rural complexity and diversity and defining target-groups with specific needs.

In order to systematically analyse the empirical findings from the diverse environmental settings of the ten CSAs under investigation we have developed and implemented a suggestive analytical approach. Our point of departure is the introduction of a divide between the factors of unity (FoU) and the factors of diversity (FoD). These refer to similarities as well as differences between the different rural settings which we thought that will afford us a more manageable and focused schema than mere description. This was combined with the development of a coherent analytical approach that is based upon the idea that the development of rural areas and the development of entrepreneurship in rural areas is highly determined by issues such as: access to main markets, economic base of the area (i.e. of the nation and the particularities of the CSAs e.g. importance of agriculture), of social norms, modes of governance, degree of development of social capital as well as the characteristics of key actors/stakeholders in the area which all are highly differentiated between the various rural areas.

3. Great diversity of rural areas in Europe

A precise demarcation of rural areas in Europe although very important is anything but an easy task. The difficulties stem from the changing character as well as the varied and heterogeneous structures of rural areas. The longstanding axioms defining rural areas as the non-urban space or the space of agriculture and physical landscape, are inadequate to describe today’s complex reality and have been vigorously questioned during the past decade. Alternatively, rural areas can be defined in terms of a number of socio-spatial
characteristics, such as population densities and distance from major cities. More recent approaches define 'rural' more in terms of a social representation of reality, placing the emphasis upon the way people strive after a rural ideal and try to achieve this in their everyday lives. This approach is becoming more important as the traditional production functions of rural areas (i.e. agriculture and forestry) decline in importance and various consumption functions (e.g. recreation and leisure) become more significant, particularly in certain countries. The debate about what constitutes rurality is therefore symptomatic of the changes which are occurring in the economy and social composition of these localities in the European context.

The results of the empirical research suggest that national characteristics influence key areas of the rural regions in a significant way. Indeed, the role of the particular national context is probably greater than other analytical categories, such as spatial categories etc. Moreover, the national framework component prevails over rural international diversity: i.e. the differences between the environments in which businesses operate are more significant between countries than between different degrees of rurality in the same country.

It is only few social settings that are wholly devoid of trust hence it is best to speak of high-trust and low-trust relationships. However, it appears that there are quite significant differences in regard to this between the countries of "Southern Europe" and those of "Northern Europe", while developed transition economies (such as Poland) seem some how to stand in the middle. Needless to say, this divide is not clear-cut, we are arguing about degrees of difference rather than a clear-cut divide and moreover there are "niches" in all three groups. In particular, in the countries of "Southern Europe" centralized state structures and a weak civil society lead to hierarchical clientelistic networks inhibiting the building of social capital. Hence, "civil society" cannot function as the arbitrator of market and non-market rules of contact, or act as the intermediary between the self-seeking individual and society.

The multidimensional concept of peripherality – peripherality as distance, dependence, distinctiveness and discourse – underlies many interviewee’s answers, although generally in an intuitive and therefore not very structured way. There are different degrees of peripherality.

The characteristics of the development potential of a rural area are related to its degree of peripherality as well as to its economic base. One might argue that there are four basic type-situations of rural areas that is: a) Rural areas with poor access and poor physical resources; b) Rural areas with a specialised economic base; c) Rural areas with
a diversified economic base; and d) Rural areas near urban agglomerations of significant size. These four type-situations complement the peripheral (mountainous); semi Peripheral; accessible/semi-urban rural areas trilogy.

This diagram enables us to confirm that peripherality vis-à-vis the main markets is important, but not the only factor determining present and future characteristics of the entrepreneurial fabric and economic base of a given region. Peripherality matters but history matters as well. Moreover, there is no single type of rural area that is bound to succeed or to fail; it all depends on the development trajectory that will be followed in the near future. Hence, policies are of major importance in the sense that they can facilitate a substantial shift to the future economic development of a rural area. Finally, one should understand the relativities of the rural diversity. In fact, “huge” differences within the rural world seem much more modest when they are directly compared to urban areas.

4. Understanding Rural Entrepreneurship

Entrepreneurship is not an undifferentiated boon. Instead, in rural areas we can identify a multiplicity of entrepreneurial process at work: some of them are locality specific, whilst others appear in more than one national context. It is interesting that the incidence of these processes does not follow national or spatial divides. These processes are evolving through time (i.e. some are declining or disappearing altogether, others are in a process of transformation and new forms are emerging) and are path dependent (i.e. they can not be readily transposed from one context to another). The influence of the rural character of the entrepreneurial location varies considerably between processes: i.e. whilst some entrepreneurial processes are distinctly rural, others simply occur more or less incidentally in the countryside. Thus, the degree of embeddedness of each process within the local milieu varies significantly, with significant implications for the emerging enterprise strategies.

Undoubtedly however, specific environments can be associated with the emergence of particular entrepreneurial processes. Thus, need driven entrepreneurial processes are prevalent in the case of the two most hostile socio-economic regimes, namely Lesvos and Baixo Alentejo. An element of opportunism is present in all the other CSAs, however its form and significance varies from CSA to CSA.

Throughout the ten CSAs there appear to be five common factors in the stimulation of entrepreneurship. These include the over-representation of males; younger age; the acquisition of higher education qualifications; parental entrepreneurial influences (partly through the provision of role models and partly through inheritance of a family business
– i.e. reluctant entrepreneurs morally obliged to perform such roles) and previous experience of running a business. The consistent and invariably significant influence of these factors lends support to the thesis that out-migration deprives rural areas of individuals (young and well-educated) who can identify opportunities, and on account of their (urban-university) experiences break the mould of deprivation and produce change. There are also four factors (of diversity) that have a differential impact upon entrepreneurship in the ten CSAs under investigation. These are: origin, unemployment prior to entrepreneurship, education prior to entrepreneurship, and occupational background. They provide us with a powerful reminder of the pervasive influence of local historical trajectories that shape entrepreneurial behaviour.

The network of social and professional contacts that entrepreneurs had established outside the region at some point in their lives were essential to the emergence and growth of their enterprises. The contexts that afforded them these networks were varied, such as: study in a university or elsewhere, military service elsewhere, setting up as a migrant in another area/city, being newcomers to the area, setting up as an emigrant in another country, employment in a multinational firm in another country.

Overall, in-migration appears to be a very significant source of entrepreneurial talent in all regions, since a third of all business owners are in-migrants, while in some of the regions they spectacularly outnumber local business owners. The impact of in-migration on business activity seems to create a rather distinct pattern, since in-migration seems to be of extreme importance in some cases, while in others its impact is marginal.

Out-migration deprives rural areas of young and well-educated individuals who can identify opportunities, and on account of their urban-university experiences introduce discontinuity and change. The absence of such individuals locally is particularly apparent in some – mainly Southern European – CSAs, in terms of the absence of corresponding entrepreneurial groupings. Whilst, in some areas (Kilkis, Oeste) this gap is filled by in-migrants who frequently perform entrepreneurial roles, more peripheral localities (Lesvos and Baixo Alentejo) lack young and well-educated entrepreneurs who pursue opportunities rather than reluctantly engage in pre-existing family businesses.

In spite of these variations, entrepreneurship can be generally considered to be a major source of employment. The mechanisms of employment creation seem to operate in two broad, substantially different, ways: in the less developed areas by self-employment, through the creation of micro firms, in the more developed areas by the creation of waged employment. The former communist regions seem to be converging towards the second category, even though we should stress that the three ex-communist regions
included in our study are part of two of the success stories of transition, and we would expect most of the Eastern European regions to fall into the first category.

A careful consideration beyond the averages into specific entrepreneurial clusters suggests it is the ‘marginal’ entrepreneurial processes (female petty entrepreneurs, local need-driven in Lesvos etc) that impact upon disadvantaged socio-economic strata.

We argue that the human factor emerges as the key influence in the ability to exploit opportunities and confront challenges in the changing geography of the European countryside. This takes us further than existing arguments regarding the characteristics of the environment. Whilst factors such as the legitimisation of entrepreneurial ventures (either at the level of society at large or within a specific social grouping), a supportive ideology, a deeply embedded need for achievement and in many cases a minority (ethnic, religious or otherwise) that experiences status withdrawal are necessary they are not sufficient in providing fertile ground for new venture creation. To be more precise: in the absence of the factors listed above rural entrepreneurship is unlikely to flourish. However, entrepreneurship may also fail to flourish in settings where these factors are apparent. The physical presence of (entrepreneurial) human capital is vital for rural development. Indeed, from our research it seems safe to conclude that some localities lack altogether types of entrepreneurs who could act as the engine of economic development.

5. Rural enterprise in context

Drawing upon the findings of the literature review, the results of the population and enterprise surveys, as well as the interpretation of the key informant interviews, we identified a number of enterprise development paths specific to the CSAs of the country concerned. A synthesis of these enabled us to distinguish enterprise development paths that appear in more than one country (FoU). These encapsulate the essence of the project: i.e. how entrepreneurs (from different groupings) were able to utilise the resources of a rural locality, in exploiting opportunities and addressing threats emanating from regional, national and international markets. Innovation, the use of new technologies and the development of new markets, as well as attempts to compete on the basis of lower costs are the defining elements of the enterprise development paths.

The great majority of rural ‘dynamic’ enterprises are invariably well embedded in their context i.e. they derive the bulk of their inputs and direct the bulk of their outputs from and towards the regional and national markets. Moreover, the incidence of establishments outside the CSA, and more importantly, the national context is infrequent. The incidence of fully or extensively globalised enterprises among those
surveyed (note: those most dynamic in their regional context) is relatively low. The only exceptions are those located in Kilkis and, to a lesser degree, Waldshut.

However, it is unclear whether the incidence of fully or extensively globalised firms is the result of their location or other factors. This is particularly the case given that the incidence of fully or extensively globalised enterprises is influenced mainly by the sector (manufacturing and transport) and size (medium and large) of the enterprise.

The internet offers virtually free access to huge amount of information: it transcends geographical borders and speeds up global diffusion of information; by overcoming distance and isolation it can revitalize rural communities. Almost 68% of the firms in our survey which already use some ICTs feel that they help overcome the constraints of being located in a rural area. However, for all these benefits to be realised by rural areas there is a basic prerequisite: that is the smooth distribution of ICTs across regions, which certainly is not the case. The differences between our 10 CSAs were impressive, since in the German or UK regions firms not using ICTs constituted a very small minority, while in the remaining regions almost half of the firms surveyed did not use any ICT application. The same is also true regarding the types of applications used, with the more technologically advanced applications being more intensely used in the same countries.

The widespread use of ICTs can also pose a threat to rural areas in the sense that ICTs expose the weaknesses of rural business and make them more vulnerable to outside competition.

Enterprises – despite their local embeddedness – may not be able to tap into competitive advantages, conferred by their rural location, beyond lower costs of production. Local enterprises do not appear to tap into local sources of know-how, whilst accessing sources of information located elsewhere in the country undoubtedly involves greater costs and commitment than those required by enterprises located in urban settings. Similarly the ability of local entrepreneurs to tap into the ‘image’ of “the rural” is limited, especially in certain contexts.

In almost all rural areas there are “local products”, such as prepared food using “grandmother’s recipes”. What is argued is that though such firms can be very important they will never be sufficient on their own. What is also needed are new, fresh ideas, know-how etc coming from outside the region as well as the development of opportunities of selling in national and international markets. This is not an argument per se in favour of endogenous development however, “endogenous” development is not always a choice; it can simply be the only way forward.
The product’s geographic association constitutes a quality characteristic ("authentic", "healthy", "traditional"). Regional labelling can bring economic benefits since it enjoys premium prices. Hence, it is very important for rural areas and particularly LFAs and rural areas in Southern Europe.

The impact of firms producing ‘local’ products appears to be positive in the development of the region, as it implies the existence of backward and forward linkages with the local economy (i.e. holistic development). In this context, such activities could lead to the strengthening of a multitude of sectors of the local economy and implicitly encourage pluriactivity. Nevertheless, this does not imply that endogenous development is perceived as the only development course for rural areas. Moreover, the development potential of firms producing “local” products is threatened by powerful protagonists whose networks may stretch across continents.

However, a local product can be a myth, in the sense that the notion of the "local" product can be socially constructed and firms sell their product based on different connotations such as: they sell the locality/rurality/notion of “island” –leisure. Big national companies or TNCs may sell “local” products either by buying them ready made or through global sourcing. Finally, a TNC takes over an existing company and sells the product through its own powerful distribution network around the world. Since firms producing local or ‘local’ products are far from homogeneous, their impact on the local economy is extremely diverse.

6. Policies for the development of entrepreneurship in rural areas in conjunction with policies for the development of rural areas

6.1. The importance of human capital to foster entrepreneurship

European countries are among the most economically developed of the world; in this sense they have to aim for the high value added products in the International Division of Labour. This means that European rural peripheral areas have to compete on the basis of quality and value added rather than just price where less developed countries possess competitive advantages. In this context, investment in human capital (education, training etc) in rural areas is essential for expansion. Furthermore there is a need for such educated human capital in rural areas because people living in rural areas are increasingly involved in many activities outside agriculture; they have become multi-active (e.g. they can be farmers as well as hotel owners).

Young and educated human capital is crucial for the development of entrepreneurship in European rural peripheral areas so as to be able to compete in the international division
of labour. However, most European rural areas still suffer from ageing and depopulation. Hence policies must be developed to secure not only that out migration will seize but also that in some cases we might have the opposite trend (counter-urbanisation), a trend that already exists in certain countries (e.g. Britain).

6.2. Policies directly enhancing entrepreneurship

Policies to facilitate potential sources of entrepreneurship i.e. Young people, in-migrants, leading figures - animators: Also policies to develop those regional infrastructures that are needed to underpin and support entrepreneurial activities in rural areas such as Education and Training and creation of business incubation centres. Finally, policies to enhance the knowledge infrastructure of the local economy; facilitating linkages with organisations not located in the area; to enhance entrepreneurial thinking in rural areas, etc.

6.3. Policies indirectly enhancing rural entrepreneurship

- There is a need to enhance the level of education in certain rural areas in Europe. There are remarkable disparities in the level of educational attainment of the interviewees in the various CSAs.

- There is a need for improving physical and social infrastructure. One of the main reasons for the depopulation of the countryside is the poor physical and social infrastructure of rural settlements.

- There is a need for an integrated perspective on towns and the countryside.

6.4. European policies by groups of countries, type of area and type of enterprise

The main argument which runs throughout this Report is that rural development is desirable and entrepreneurship is perhaps the most important means to achieve this since among other things it increases employment. Public support is more than crucial for development in European rural areas since they are most in need and usually there is an additional cost in delivering support there (“rural premium”). More specifically, what is needed as far as policies go is to know what are the needs of both entrepreneurs and of rural areas around Europe.

There exist already a large number of policies to encourage entrepreneurship in rural areas in Europe. However they are often provided in a disjoined and fragmented pattern and there is also a poor level of dissemination of information and knowledge on issues
concerning rural enterprise development. Furthermore, some policies are missing their target because they are based on a poor understanding of the local context on which enterprises operate. There is a need for a more strategic and coordinated approach towards building the entrepreneurial capacity in peripheral rural areas.

Needless to say that there is quite a significant degree of difference between countries related to the number of policies, their provision, their adequacy for each country etc. with ‘northern’ countries in the best position and Poland in the worst.

Hence we argue for European policies to foster entrepreneurship in rural peripheral areas and the development of rural peripheral areas by groups of countries (southern/northern/transition) as well as by types of rural areas and types of enterprises.
II. BACKGROUND AND OBJECTIVES OF THE PROJECT

Lois Labrianidis1

1. Rural areas today

Overview

At the dawn of a new millennium Europe’s rural areas are confronted with the task of re-inventing themselves. Changes in the international division of labour together with rapid advances in information and communication technologies (ICTs) offer rural localities a combination of opportunities and threats that is qualitatively different from earlier historical precedents. More specifically, the long-term process of structural change away from agricultural pursuits has been intensified as a result of changes in policy, such as the review of the Common Agricultural Policy (CAP) and the General Agreement on Tariffs and Trade (GATT) agreement. Enterprises outside agriculture are now finding it more and more profitable to outsource increasing amounts of productive activities in the global network of production and distribution. At the same time, however, advances in ICTs support a more positive evaluation of the development prospects of the countryside (Kalantaridis, 2003). Endogenous economic advancement in sparsely populated and remote areas may be encouraged through the uptake of ICTs (Analysys, 1989). Moreover, there is growing empirical evidence supporting the proposition that rural enterprises, by virtue of their location, are becoming more pro-active in the pursuit of distant and often overseas markets (Smallbone et al., 1999). The key research question emerging in the context of the changing rural landscape is the extent to which economic agents (namely entrepreneurs, knowledge-based institutions, and policy-makers) in the countryside have the ability to rise to challenges at hand.

Economic growth in rural peripheral areas is closely associated with the entrepreneurial talent of the local population. This is not particularly unexpected given that the specific characteristics of these economies imposed considerable constraints upon the influx of sizeable investment projects. However, the supply of potential entrepreneurs confronting the threats and exploiting the opportunities available in the countryside, is by no means guaranteed. This is because those who could reasonably have been expected to perform the entrepreneurial function may well have been the first to seek to out-migrate to more inviting urban areas. This problem is thus part of a wider issue in the literature addressed to the question of how a critical mass of entrepreneurship is to be built.

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More recently, rural peripheral areas in some European countries (such as the UK as well as Portugal and Italy) have also experienced a wave of in-migration by relatively affluent, formerly urban dwellers. This urban-rural population flow has not been the result of a search for new employment opportunities but rather the pursuit of more desirable residential environments. Indeed, social and environmental problems within cities prompted relatively affluent urban dwellers to relocate to the countryside (Clout, 1993).

While in other European countries (e.g. Greece in the 80’s and 90’s) out-migration flows from rural areas has declined in conjunction with a trend for return migration of economically active people to semi-urban areas. Although accessible rural areas or areas with a trajectory of tourist development have been the main beneficiaries, many more peripheral locations have also experienced a halt or a reversal in their long-term population decline so that the arrival of these new inhabitants has, in many cases reversed, the long-term population decline reported in Europe's rural periphery. However, the arrival of these new inhabitants has had significant economic consequences from the arrival of new rural inhabitants. They often possess considerable expertise in the management of business enterprise, information and contacts as well as the finances necessary to initiate new venture formation. Therefore, a significant minority of these new inhabitants soon became involved in entrepreneurial activities, expanding the number of enterprises in rural peripheral areas.

In addition it is important to recognise the transformation, within an increasingly globalising environment, of Southern Europe (Greece, Portugal, Spain and Italy) into a new immigration area. This transformation has resulted from a shift in the region’s position within the international division of labour (King & Rybaczuk, 1993), and has led to what has been coined “the Southern European immigration model” (King, 2000). A significant part of those immigrants settled initially, at first at least, in the countryside contributing to its revitalisation but, as yet, to the enhancement of the entrepreneurial activity there (for the case of Greece see Labrianidis & Lyberaki, 2001).

Women constitute another important potential agent of change regarding entrepreneurship in rural areas. The overall trend towards a gradual reduction of female employment in traditional agricultural pursuits is combined with greater female entrepreneurship at the margins. In fact, as mentioned in Braithwaite (1994), in the EU the role of women is far more important in small holdings than in large ones with the consequence that the “feminisation” of farm activities is far more pronounced in southern  

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2 In fact, the last three decades, Southern European economies were incorporated in the ‘developed block’. Hence, the post-war ‘development rift’ shifted to the south: this imagined line, from Istanbul to the Straits of Gibraltar, passing from Cyprus, Crete, Sicily to Sardinia can be characterised today as Europe’s “Rio Grande” (King, 2000).
European countries (Pfeffer, 1989; Ventura, 1994). Although in many instances this transfer of power is illusory in those cases where it is real, the “feminisation” of entrepreneurial activities in agriculture, is very important since women tend more easily to adopt a fresh outlook to life as well as to production. They are more ready to get involved in alternative forms of farming (such as of biological products, of quality products, etc.), and the production and direct sale of fresh or processed products through micro-retail outlets on the farm. These combined with agrotourism offer considerable opportunities for female entrepreneurs and the re-dressing of gender inequalities in rural peripheral areas (Bock, 1994; Miele, 1994; Ventura, 1994; Ilbery et al, 1995).

Technology and knowledge constitute key elements in the external environment with the potential to both enable and hinder the entrepreneurial processes in rural peripheral areas. In fact, there is a growing belief among some researchers that knowledge is the most important source of local economic transformation (Ludval, 1992; Herdzina & Blessin, 1996). This is particularly true regarding parts of knowledge involved in untraded interdependencies (uncodified know-how), which cannot be dissociated from its human and social context. Consequently, issues such as the institutional capacity of the area, the capabilities of the political leadership, as well as social rules of conduct and human values, emerge as of equal - if not greater - importance than physical factors (such as product markets and markets for factors of production) in the entrepreneurial process (Doeringer & Terkla, 1990; Putman, 1993) and this is heavily differentiated between countries.

Knowledge-based institutions embedded in the traditional milieu of rural peripheral areas in both advanced and developing economies also play a significant role (OECD, 1992; Morgan, 1997). Indeed, the implementation of technological change is conditioned by the pervasive influence of universities and other R&D providers supporting the interregional and interpersonal transfer of knowledge and technology and reducing regional information deficiencies thus playing a significant role in the entrepreneurial process (Herdzina & Nolte, 1995; Nolte, 1996). Institutions of this type offer the possibility of gaining new technological knowledge, of taking part in technological change, and in this way of raising their own innovative and entrepreneurial potential - and thus that of the economic region. With regard to the development of rural areas, the so-called 'intermediate' and 'incubatory' functions of the institutions of knowledge and technology transfer are of particular importance.

Another set of economic actors instrumental in the process of redefining the rural includes the multitude of agencies involved in policy decision-making. Increasing awareness of the specificities, as well as the problems associated with the rural, and the
ensuing adoption of a pro-active approach at all levels of decision-making, means that the role of policy agencies becomes increasingly important. Their influence upon the historical trajectories of the European countryside constitutes both a factor of unity as well as a factor of diversity (a theme recurrent throughout the report). More specifically, during the post-war era the European Union (EU), as a supranational policy organisation, has been of paramount importance in the development of initiatives and actions transcending national boundaries. At the same time national and regional policy agencies reflecting distinct historical processes at work have been instrumental in generating diversity; often a reflection of diverging local and/or national realities.

2. Great diversity of rural areas in Europe

2.1. The distinction between urban and rural areas becomes more and more vague

A precise demarcation of rural areas in Europe although very important is anything but an easy task. The difficulties stem from the changing character as well as the varied and heterogeneous structures of rural areas. The longstanding axioms defining rural areas as the non-urban space or the space of agriculture and physical landscape, are inadequate to describe today’s complex reality and have been vigorously questioned during the past decade. The root of the division between ‘urban’ and ‘rural’ lies in the separation of society from the land through the development of increasingly indirect methods of organising subsistence. According to Max Weber (1958), for example, the city is an ideal type distinguished by sociological characteristics (anonymity of size), economic characteristics (market self-sufficiency) and political-administrative-legal characteristics.

The increasing complexity of the pattern of economic organisation, which underlies the urban/rural distinction, has, however, undermined this same distinction. Definitions of the ‘urban’ based on economic function have grown increasingly apart from definitions based upon physical development. Using the terms loosely, England, for example, is in physical terms predominantly ‘rural’ but in socio-economic terms it is overwhelmingly ‘urban’.

In the past, the distinction between urban and rural areas was sufficiently unambiguous for one or two familiar attributes to provide a basis for consistent definitions. Modern urban areas are simply too varied for such regularities to hold true, not least because some settlements (e.g. some New Towns in UK) have large populations living at low densities. The result is that the categories urban and rural can only be said to each have a ‘resemblance’ across a variety of characteristics. This ‘fuzziness’ of the urban/rural distinction has important implications for methods of delimiting urban and rural areas in
practice: no single approach can provide the 'definitive answer'; the process of defining urban and rural is somewhat arbitrary and only partially achievable through reliance on quantitative indicators; different approaches, stressing different characteristics, fit different purposes.

Thus, it may be more appropriate to suggest that there are a series of distinctions such as land cover, population characteristics and social organisation. As the space-economy has evolved these have changed. This sectoral – spatial approach directly connects rural space with agriculture and urban space with industry and services. However rural space is no longer confined to agricultural activities and land uses, but is extended to include multi-sectoral activities. Small and medium towns integrated into the agricultural context, manufacturing and tourism activities, as well as coastal areas, are fit for inclusion in rural areas. Despite significant dissimilarities between them, urban and rural areas are not autonomous and self-sufficient entities. On the contrary they constitute a continuous space of interdependence and interaction (Saraceno, 1994).

These changes are associated with a broader debate regarding the dramatic changes currently underway in rural Europe. Over the past decade or so the countryside has been socially and economically remoulded. As the post war agricultural modernisation project has gradually and unevenly faded, new processes and actions, associated with both public and private interests, are at work and produce new patterns of diversity and differentiation within the contemporary countryside. The common trends affecting rural areas can be separated, according to Marsden (1999), into those affecting the whole of society and those specific to rural locations. Amongst the former are the globalisation, the strengthening of free market ideology, a shift of governance to popular participation and partnerships, the liberalisation of international trade, and changes in cultural values. While amongst the latter are the decline in agricultural employment, the emergence of environmentalism, the emergence of new uses of rural space. These processes have led to an externalised and consumerised countryside, one which exhibits a wide range of external relationships and is subject to wide-ranging demands.

These processes vary enormously across Europe (see the dramatic changes occurring since the 1989 in former Eastern Bloc). Regarding the Southern Eastern European rural areas, as Hadjimichalis (2001) argues, they have resulted in the emergence of new uses of rural space and new societal demands on the land and landscape, not only in coastal areas and certain islands (which have changed towards tourism and second homes) but also in the interior. In parallel there is a trend towards marginalisation and abandonment of certain areas and a growing demand for “nature” and “rural heritage” in others.
2.2. Different Approaches for defining Urban and Rural Areas

The very essence of the researching the rural presupposes the existence of a definition or a supranational reference framework preferably based on simple and comparable criteria that are expected to be able to capture the notion of rurality and peripherality in each country. However, there are profound differences between and within European countries\(^3\) with regard to their population density and to their geomorphology, let alone their historical trajectories which must be taken into account. Vast lowlands form its northern part while the southern part is home to mountain chains and a few small, hemmed-in, coastal plains. European countryside is characterized by a diversity of terrains, climates, landscapes and population densities that find their counterpart in the great variety of economic activities, agricultural productions, problems and opportunities.

The Netherlands and Luxembourg apart, and this largely because of their size, each country contains at least two contrasting types of landscape. Scandinavia for example, has a northern part is characterised by an arctic climate and a sparse population whereas the more hospitable southern Sweden and Finland enjoy rich soils. In Germany, the large farms in the north-eastern lowlands contrast sharply with the cultivation methods and ownership structures more suited to the hilly terrain of the southwest. In mountainous countries like Spain and Italy, there seems to be an endless alternation of valleys and mountains.

Of the two most intractable natural handicaps, altitude is an omnipresent constraint in Austria, Greece, Spain and Italy. The climate is also a defining obstacle, whether it is drought in southern Spain, Italy and Greece, low rainfall in certain central regions of Germany, like Brandenburg, or the cold resulting from the latitude in Finland and Sweden. Poor soil and low-yield agriculture often predispose towards extensive farming practices and/or the predominance of forestry over agriculture. That is the case for entire countries like Ireland, Greece, Finland and large parts of the UK, Spain, Portugal and Italy.

There are also huge disparities between the historical trajectories of different European countries. Roughly speaking a distinction can be made between a first group of European countries where the major changes to rural areas date back to the beginning of the 20th century or the 1950s. In these countries, the economic, demographic and social situation of rural areas is more or less stable, either slowly declining (France, Denmark, Italy) or slightly improving (Sweden and southern UK). In the second group (i.e. Portugal,\(^3\) In fact Europe is a densely populated continent and its countryside is characterised by a great diversity in many respects (i.e. territorial characteristics, climate, economic structure etc).
Ireland, Spain, Greece, ex German Democratic Republic and Finland), the rural world is or was recently confronted with various crises, outmigration, a sharp rise in unemployment and the accelerated restructuring of production and farms. In the first group rural development policies encourage diversification of all economic activities, not just farming. There is an emphasis on vocational training, living conditions and tourist facilities. In the second group rural development has mainly focused on improving farmers’ skills, lending assistance for restructuring and upgrading production techniques, as well as on efforts to reduce the isolation of more remote regions.

As a result, there are several definitions of rural areas. Traditionally, rural areas have been defined as those areas given over to particular resource based economic activities, notably agriculture and forestry, and areas of natural open space such as moorlands and mountainous areas. Alternatively, rural areas can be defined in terms of a number of socio-spatial characteristics, such as population densities and distance from major cities (this led for example to the construction of ‘an index of rurality' for England and Wales based on census variables -Cloke, 1977 and Cloke & Edwards, 1986). More recent approaches define ‘rural' more in terms of a social representation of reality, placing the emphasis upon the way people strive after a rural ideal and try to achieve this in their everyday lives (Hoggart et al, 1995). This approach is becoming more important as the traditional production functions of rural areas (i.e. agriculture and forestry) decline in importance and various consumption functions (e.g. recreation and leisure) become more significant, particularly in certain countries (Ilbery, 1998). The debate about what constitutes rurality is therefore symptomatic of the changes which are occurring to the economy and social composition of these localities in the European context.

The operationalisation of the multitude of criteria into a working definition is more than usually problematic. Therefore, the vast majority of national conventions focus upon rather simple measures of the size of the population in a locality and/or population density. For instance, despite the limited reliability of quantitative criteria, international organisations (such as the OECD and EUROSTAT) usually adopt these for the definition of rural regions as they are particularly useful for inter-regional or inter-state comparisons. It can be argued that two of the few attributes common to European rural regions are relatively low population densities and the significant role of agriculture in the local economy. It is noteworthy that population density has been traditionally used for the definitions of rural areas in Europe. In particular, at the NUTS5 level rural areas are defined by EUROSTAT as those with a population density of less than 100 inhabitants per km². Thus, according to the EUROSTAT classification, 17.5% of the total EU population lives in administrative units that belong to rural regions and cover more than 80% of the
total of the EU area. These percentage figures range from less than 5% in the Netherlands and Belgium to more than 50% in Finland and Sweden.

It can be argued that the usefulness of the above classification is relatively limited. In particular, the criterion of population density is not sufficient for a robust classification between urban and rural regions. Low population densities are not always associated with rural populations. Neither do high population densities always suggest the existence of an urban population. For example, in the predominantly rural southern Italy the rural populations have traditionally resided in urban centres and commuted daily. In contrast, in central Italy, where manufacturing plays an important role, the populations of very small towns have been traditionally involved with “urban” jobs (Saraceno, 1995: 457).
III. SCIENTIFIC DESCRIPTION OF PROJECT RESULTS AND METHODOLOGY

1. Globalisation and European Rural-Peripheral Areas

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1.1. Introduction

Interacting processes of globalisation and the approaching EU enlargement will modify the trajectory of development of the rural periphery, mainly through:

- changes in the size and structure of finance transfers flowing to rural periphery within the framework of Structural Funds (SFs) and CAP;
- a potential to combine mobile production factors; and
- competitiveness of rural periphery and its ability to achieve advantages which improve the quality of life (e.g. access to financial resources, attracting external investors, preserving capital in the region and so on).

The aim of this report is to explore the effects of the growing integration of global production and distribution networks in localities and regions; the implications of the gradual liberalisation of world trade following the success of the Uruguay Round, and the potential effects that the anticipated enlargement of the European Union (EU) will have upon rural peripheral areas of existing and new member states.

The chapter is organised in 4 main sections. The first two sections are devoted to changes in the nature of EU policies. It can be assumed that, following present tendencies, also in the future the trajectory of development of rural periphery will be a reflection of EU policies. Thus, a big influence on the development of rural periphery will be exerted by the approaching EU enlargement involving the Central and Eastern European countries and it will bring about changes in the size and structure of finance transfers flowing to rural periphery, particularly within the framework of SFs and CAP. Globalisation will affect rural periphery rather indirectly, through the filter of EU policies; provided it fundamentally modifies CAP.

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The section 1.4. concentrates on factors forming the potential of combining mobile production factors in rural periphery, where particular attention is paid to SMEs. However, the role which will be played by these firms in the formation of the development trajectory of rural areas will be a result of the nature of opportunities and threats which accompany the wave of increasing internationalisation and the quality of the response to new challenges. The nature of opportunities and threats will be modified by a series of additional factors, among which the most important role will be played by the following ones: the kind of conducted activity and structural factors connected thereof; sensitivity of individual SMEs to liberalisation of international trade and strategies of firms. As far as the quality of SMEs response to new challenges is concerned, it is to a considerable extent (larger than in the case of big firms) dependent on the nature of external conditions. It also refers to agricultural production as far as it takes the form of a complex food chain with a dominant role of food-processing industry in the development of the food sector (vertical integration of agriculture with food-processing plants), gradually taking over specific production processes from agricultural farms. However, the main areas of food production connected with land (production of agricultural raw products) are more resistant to globalisation as they are by nature committed to maintaining headquarters or a presence in a specific "home" country. Actually, they can extend their service functions outside the country's boundaries through sales, distribution and specialised customer services, and in this way be subject to a pressure of increasing – in connection with arrangements of the Uruguay Round - liberalisation of trade in food products. Therefore, the main points of interest of this section focus on an interaction between the potential of SMEs located in rural areas to combine production factors (including particularly the dynamics of entering foreign markets and competing beyond own country's boundaries as well as capability of facing overseas competition in the domestic market) and competitiveness of rural periphery.

The last section is devoted to the consequences of enlargement for SMEs.

1.2. Development of Europe's Rural Periphery in the context of globalisation and enlargement

Rural areas account for more than 80% of the EU territory and represent a variety of economic and social structures, within which agriculture, forestry, crafts and manufacturing activities, as well as trade and services, develop from the local market-oriented to more internationally-oriented (Berkowitz & Schulz-Greve, 2000). Among the whole range of rural areas one can distinguish a variety of different types of rural areas having a varied sensitivity to globalisation, especially as the process itself stems from many sources and the understanding of globalisation raises many controversies.
Amidst the main sources of globalisation are phenomena of (i) investment nature, including first of all the development of Transnational Companies (TNCs), which establish the fundamentals for globalisation of cross-country exchange; (ii) financial nature, especially the size and liquidity of international financial markets, which allow international mergers and acquisitions and (iii) institutional nature, mainly liberalisation and opening-up of markets, including the results of agreements within the framework of WTO (Parker, 1998; EC, 1998f).

These processes were known in the economy already in the 19th century, which was characterised by unprecedented scale of international flows of capital and labour force. But the processes gained a particularly rapid pace only in the second half of the 20th century, which witnessed three following waves: (i) the rapid growth of international exchange of goods whose dynamics exceeded, from the 1950s on – the dynamics of GDP; (ii) intensifying international capital flows, which – from the 1980s on, have been increasingly quicker than trade turnover; and (iii) intensification of information flows which are characterised by an unprecedented dynamics exceeding the dynamics of growth of trade turnover and capital flows (EC, 1998f).

A particularly new source of globalisation is a dynamic technology growth, especially the growth of information society, which, owing to worldwide information webs connecting people and firms even in very distant corners of the world, contributes to an emerging new global economy described frequently as Global Information Infrastructure – Global Information Society (GII-GIS). The omen of GII-GIS is a sudden growth of Internet which incorporates the world economy into the web of information connections (OECD, 1997f). On the other hand, it should be remembered that the new economy is not yet a common phenomenon. Leaving aside the fact that the concept of a new economy itself remains a transient idea meaning different things for different people, an increasing role of new information and telecommunication technologies is relevant only to certain parts of the world (primarily to the United States of America) while the growth factors typical for a traditional economy continue to be important (OECD, 2000f).

\[66\] In order to strengthen their competitive position these firms blend international aspects of their activities into their strategies and organisational structures, mainly through leaving aside some activities; establishing smaller independent organisational units performing different operations (groups of operations) in different places and different countries; changing a location of manufacturing activities; achieving an economy-of-scale effect owing to placing own products in new markets; mergers, acquisitions and strategic alliances. This also leads to emerging new forms of international co-operation (particularly in hi-tech areas and sectors of intensive exchange of goods), including licence agreements, joint research and services aimed at technology transfer. Activities of TNCs raise numerous controversies, which can be found, among others, in: Amoroso et al., 1993.
In the broadest sense globalisation is a process of increasing openness of both traditional
and less material boundaries, including time and space, frontiers of countries and
economies, industries and organisations, cultural standards and views on surrounding
reality (Parker, 1998). As such, it is hardly subject to direct measurement and frequently
it is identified as internationalisation (EC, 1993f; Strategor, 1993). But the adversaries of
such an approach claim that the processes of internationalisation bring about mainly
quantitative changes resulting from extending an economic activity outside the
boundaries of a given country, which leads to a geographically wider configuration of the
economy. The processes of globalisation are qualitatively different and find their
expression in both a functional integration of internationally dispersed activities (Dicken,
1998) and the loss of a leading role in the international arena by states and governments
in favour of multinational corporations7 (Hirst & Thompson, 1996).

These differences concerning the relationship between globalisation and
internationalisation translate into different assessments of the degree of globalisation of
the contemporary economy. At one extreme, we find views according to which
boundaries between countries to a large extent disappear8, at least if the map of
competitiveness, which presents actual streams of economic and financial activities, is
considered. And the most meaningful factor here is probably information flow (Ohmae,
1994). At the opposite extreme, there are views according to which as yet we have
witnessed only increasing internationalisation of economies and it is too early to use the
expression “global economy” - it can be done only as licentia poetica. Most of production
and turnover still takes place within national boundaries, capital mobility we have
observed in recent years has not exceeded yet that registered at the beginning of the
previous century; only a small number of firms can be called global9, and governments
still form an integral part of the overall economic structure. In other words, state
boundaries will not lose their importance for a long time (Tsoukalis, 1997; Hirst &
Thompson, 1996).

This is especially true with regard to rural areas which still remain isolated from world
markets.

International trade in agricultural products has been for a long time hampered by
protectionism, despite progressing liberalisation of international trade, which followed

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7 For the review of most frequently appearing views, see: Hirst & Thompson (1996); Allen & Hamnett (1997);
8 They can be talked about only in relation to the political map of the world.
9 Most firms called as TNCs can be rather qualified as multinational corporations, who build their international
success on the basis of clear, nationally specified competitive advantages.
seven successive (beginning from 1947) negotiation rounds within the GATT. The last, eight round of GATT, the so-called Uruguay Round (1986-1994) extended liberalisation into new fields, including trade in services, intellectual property protection and trade aspects of foreign investments as well as trade in agricultural products.

In fact, the evaluation of effects of trade liberalisation in agricultural products is exceptionally difficult, all the more so that it is not identical with the opening of markets. The latter is a consequence of not only the size of tariff barriers, but also non-tariff barriers, technological changes, transport and communication costs etc. According to the Uruguay Round Agreement on Agriculture, the Community undertook commitment to reduce protectionism in agriculture within 6 years following the Final Act in such areas as: access to markets, domestic subventions and exports support, and in particular to: tariff on non-tariff means of agricultural markets protection and reduction of these duties; reduce the internal system of agricultural production subventions (AMS); reduction of export subventions and reduction of the volume of subsidised exports (Jędrzejewski, 1997).

The analysis of short-term effects of the Uruguay Round for OECD countries (Diakosavvas, 2001), basing on the absolute and relative comparison of the level or the changes in the level of a number of indices of trade openness within the period of 6 years preceding the Round completion (1989-1994) and in the period of subsequent 6 years following the Round completion (1995-2000), shows that the Agreement had only a limited impact on either increasing agricultural imports to or exports from OECD countries. In the case of many agricultural products there was no (until now) marked openness of markets10, particularly because:

- Tariffs for agricultural products still remain on a very high level (also as a result of a considerable level of discretion in the process of tariffication). While for most industrial goods the average duty rate amounts to 5-10%, for agricultural products it amounts to 62%.

- There are very big variations among particular countries and in relation to particular product groups. Duties for agricultural products range from zero to several hundred percent, and amount from 50% to 91% on average and reach the highest level for tobacco, meat, dairy products, sugar and sweets. A phenomenon of "tariff escalation" can be noticed, which means that tariffs tend to increase with the level of processing.

10 Conclusion derived from making the comparison of trade openness indices, import penetration, export performance and net trade performance.
• There is a lack of transparency of principles and comparability of rates used, mainly due to withdrawing from ad valorem rates\textsuperscript{11} in favour of specific or mixed duties.

• Maintenance of high duties led to spreading out of tariff quotas\textsuperscript{12} (TRQs) within the framework of the so-called minimum access commitments. More than 80\% of all TRQs are concentrated in five product groups: fruits and vegetables, meat, cereals, dairy products, oilseeds. Although TRQs cover only 6\% of tariff lines, they are prevalent in the sensitive sectors of meats, dairy products, sugar and cereals. TRQs are not equivalent to the commitment to imports; they only provide a possibility to import according to lower (than it results from tariffication) duty rates. In the period 1995-2000 the OECD countries used only two thirds of agreed TRQs, and the index of use fell from 66\% in 1995 to 59\% in 2000.

The biggest progress was achieved in the reduction of export subsidies. However export subsidies are allowed to continue and a number of policies with the potential to affect export competition were excluded from the discipline.

However, there was no significant drop in the level of agriculture protection\textsuperscript{13} and the level of domestic prices still exceeds the world prices’ level (in the years 1995-2000 by 40\% on average). Moreover, despite the change in the structure of agriculture support instruments\textsuperscript{14}, still predominant are market-price support and output-related payments, which isolates farmers from the world markets and significantly affects both the production volume and the directions of international trade in agricultural products.

For this reason the trajectory of development of rural areas will be primarily a consequence of increasing mobility of production factors. The fundamental role will be played here by the allocation effect, which should be, in combination with the development of the economy and knowledge-based society, the factor of overcoming marginalisation of these areas. Theoretically, it should lead to a better exploitation of

\textsuperscript{11} Ad valorem duties are duties, which are based on the commodity value (price), and its size is calculated as a percentage of this value. Specific duties are duties which are based on the measure or weight unit of a given commodity.

\textsuperscript{12} TRQs impose a relatively low tariff (in-quota) on imports up to a specified level (minimum access commitments) while any imports above that level are charged a much higher (over-quota), and often prohibitive tariff.

\textsuperscript{13} Conclusion derived from making the comparison of average total support to the agricultural sector, calculated as a share of assistance directed to agriculture to GDP and producer and consumer Nominal Protection Coefficients (NPC). The producer NPC is an indicator of the nominal rate of protection for producers which measures the ratio between the average price received by producers, including payments per tonne of output and the border price. The consumer NPC is an indicator of the nominal rate of protection for consumers measuring the ratio between the average price paid by consumers and the border price.

\textsuperscript{14} Withdrawing from institutional prices that are ultimately financed by consumers in favour of direct subventions that are financed by tax payers.
comparative advantages of rural peripheral areas and the specialisation thereof. Especially that an agricultural activity sensu stricto has been losing a function of a driving force of rural areas’ development\textsuperscript{15}, and agriculture itself is undergoing an internal transformation and to a bigger extent complies with a discipline of a market tendency to level out the rates of profitability of production factors in relation to other sectors of the economy (Cecchi, 2000). In practice, however, mobile production factors (particularly capital) begin to flow to those regions which offer the best conditions of location; most frequently capital heads for the regions of higher productivity and higher level of technology and labour force flows to regions which offer valuable places of work. As a rule, central regions are characterised by such features\textsuperscript{16} (McDonald, 1994; Weise et. al, 2001).

Moreover, the processes of specialisation and concentration, which accompany the deepening of integration, tend to generate marked inequalities unfavourable for peripheral areas where industries most sensitive to negative effects of changes are concentrated\textsuperscript{17}. Therefore, within the modern EU there are still considerable differences in the level of economic development between different countries, and even bigger inequalities with respect to particular regions\textsuperscript{18}. These differences will be further deepened with the coming enlargement.

\textsuperscript{15} One of the characteristics of contemporary economic development is a decreasing role and share of agriculture in the national economy; a decreasing percentage of labour force employed in agriculture; a fall in the share of a food products’ manufacturer in the retail price of food; a fall in the share of food expenditures in income etc. This leads to a degressi on of economic and social valuation of agricultural production, and more generally – to deepening marginalisation of rural areas.

\textsuperscript{16} Both an economic activity and human capital are primarily concentrated in central regions of the EU. They account for only 14% of the Community’s territory, but they concentrate one third of the whole population and produce as much as 47% of GDP. In these areas also concentrate specialist infrastructure, research and development, know-how and other high value-added activities, which determines the fact that low value-added activities are located in the periphery of the Community. It is predicted that if present tendencies do not change, so until 2015 the EU space will focus around the core of development formed by main metropolitan areas and regions neighbouring them. (EC, 2001b) See also: Foucher, 1997; Treuner & Foucher, 1997. Although it is noticed that the deepening of integration in combination with cost advantages of poorer regions may stimulate the process of convergence, however, this tendency does not concern periods of recession. (EC, 1999d) And further existence of differences in economic development between individual regions is a factor restraining the growth of the welfare level of the whole Community. For more information on a negative correlation between the size of inequalities in income and the dynamics of economic growth, see: Aghion & Williamson, 1998.

\textsuperscript{17} For more information, particularly in the context of a single market, see: Buigues et al. 1990; The Case of Greece, Ireland, Portugal and Spain, 1996; Study on the impact of Community agricultural policies on economic and social cohesion, 2001.

\textsuperscript{18} For instance, in the Community’s most wealthy regions GDP per capita is bigger than the EU’s average level by 60%, while in the poorest regions it is by 40% lower than the EU’s average. So, the relationship between GDP per capita in the 10% of the richest and the 10% of the poorest EU regions is like 2,5 to 1.
Apart from regional variations within the EU as a whole there is a significant regional differentiation within particular countries\textsuperscript{19}, and these – contrary to the observed tendency of lowering intra-EU regional variations – tend to increase (which can be observed especially in countries being characterised by a relatively low dynamics of economic growth) or freeze at the level reached previously. In some countries these disparities between regions were diminished, however this can be the result of fluctuations, because, as mentioned earlier, retarded regions tend to make up for differences rather during the economic boom than during the recession.

Simultaneously, a diversity of factors which determine the attractiveness of location and which are provided by the market mechanisms cannot secure sustainable economic growth. Obviously, much depends on the starting situation and capabilities of adaptation of the periphery\textsuperscript{20}, necessary is however a mechanism counteracting a negative development of a situation which is formed by a series of EU policies. In fact, in most cases these policies do not have a regional nature, but the instruments used by them as well as a direct influence on the behaviour of individual market players significantly affect individual regions. Although their influence on shaping the spatial structure is hardly subject to direct measurement, it certainly can be said that: they modify the spatial structure and the economic and social potential of individual regions; they change the model of exploitation of agricultural areas and affect their importance and competitive position in the configuration of space within the framework of the European economic system and settlement structure (ESDP, 1999; Study on the impact, 2001).

The latter factor is of particular importance in the context of SMEs and their role in the development of the rural periphery as a force generating new jobs and stimulating the process of convergence of these areas (which is all the more relevant because poorer, rural peripheries are characterised by a continuous outflow of labour force, which maintains despite some signs of economic revival and overcoming the fall in GDP per capita).

Yet the location decisions of SMEs, especially bigger firms, are made on an equally rational basis as the decisions of large firms; as a place to run their activities they choose

\textsuperscript{19} In the majority of EU countries one or few regions have GDP per capita much higher or lower than the country’s average. Among the richest regions are most frequently a country’s capitals, while peripheral regions in most cases have income significantly lower than the average.

\textsuperscript{20} Determined by, among others, intensity of necessary structural changes (growth of industries characterised by higher intensity of exploitation of modern technologies and technology transfer to peripheral regions), which play – beside the abundance of capital and skilled workforce – a crucial role in the dynamics of economic growth. (Doyle & O’Leary, 1999)
those areas which offer the biggest location advantages\textsuperscript{21}. It should not be surprising that they more often concentrate in central regions, with well-developed territorial socio-economic systems, equipped with necessary economic, technical, social and cultural factors, owing to which they have greater chances to achieve success in international competition (Porter, 1990; Porter 2001; Davies, 1995). Smaller SMEs, in turn, are formed in most cases in the vicinity of the place of living of the owner. However, the role of these firms in the development of the rural periphery depends on local and regional conditions of development (resources of adequately skilled workforce, networks of suppliers, customers, subcontractors, sales markets and so on), therefore it is dependent on the quality of broadly understood local and regional environment (von Stackelberg & Hahne, 1998).

1.3. The Effects of EU Policies on Rural Peripheral Areas

Within the EU there are significant disparities in economic development between the countries and the regions of the Member States. Rural peripheral areas in particular experience low incomes compared to the Community norm. And, in order to lessen such disparities between the prosperous and the less developed regions the Structural Policy of the EU was created. Since the agricultural sector is vital for rural areas, the Common Agriculture Policy (CAP) plays an important role for their development.

1.3.1. The effects of the Common Agriculture Policy of the EU

The CAP of the EU was established in 1962. It was designed to increase the Community’s agricultural productivity, to ensure a fair standard of living for the agricultural community, to stabilise markets, to guarantee the availability of supplies for consumers and to price those products reasonably (Art. 33 and 39 EC-Treaty, Anderegg 1999). The CAP is based on three main principles (EC, 1996: 6; Koester, 2001: 320-327). The first is that there should be a unified market for all agriculture products. Secondly, that all Member States had to show a preference for products grown and produced within the Community. Thirdly, that the financial subsidies to farmers were pooled at the European level (principle of “financial solidarity”). There are also elements of structural policy embodied in the framework of CAP, which were introduced in 1972 (Koester, 2001: 340-344).

\textsuperscript{21} For the review of location theories in the context of regional development, see: von Stackelberg & Hahne, 1998.
The CAP was subject to several revisions (EC,’ 1990–1999 Schmitt, 1998: 191-195). A liberalisation of CAP was forced by the 1994 Uruguay Round Agreement on Agriculture\textsuperscript{22}, which led to the formulation of the agricultural part of Agenda 2000.\textsuperscript{23} Further influence on CAP will be exerted through the agricultural part of the ‘Doha development agenda’, which was adopted in 2001, and through several reform proposals presented by the European Commission\textsuperscript{24}.

From the beginning of the CAP consumers benefited in a number of ways. The choice of available goods became wider and the self-supply of agricultural goods in the Community was ensured. Despite price rises however the amount that the average community household spends on food has in fact fallen over the past twenty years from 28\% for the total family budget to nearer 20\%. The cost of the CAP is 154 euro per year per EU-Citizen (EC 1996, 7). On the other hand a number of disadvantages were caused by the unifying of the product prices in the Community and by the implementation of guaranteed minimum prices for agricultural products set against a background of increasing productivity. Consequences were that the gap between world market and EU prices widened further and surplus «Food Mountains» and "milk lakes" were created (Schmitt, 1998: 178-187). Also, the pursuance of the common principle of showing a preference for products grown and produced within the Community led inevitably to rising economic costs over time (Koester, 2001: 321).

As a result of the CAP and its reforms the average farm income across the Community steadily rose. For example, by over 6\% in 1994 with peaks of 20\% in Portugal and 10\% in Greece. But the increases in income depended on the size of the agricultural businesses (Schmitt, 1998: 190). Meanwhile, the majority of farmers have diversified and become pluri-active, earning incomes increasingly from non-agricultural sources. The result is that average farm household incomes are, in most Member States, on a par with the average household income (Diagram. 12).

**Changes in Employment in Agriculture**

Following a global economic trend, the number of jobs in the agricultural sector as well as the number of farms in the EU decreased steadily over the last twenty years (Grant 1997; Huck 1999). In 2000, there were approximately 6,8 million people working in the agriculture sector in the EU-15 accounting for 4,3\% of the EU jobs. The agricultural

\textsuperscript{22} For further details see chapter 1.
\textsuperscript{23} For details about the Agenda 2000 see Caesar, 2000; EC,1999b; EC,1999c and EC,2000a.
\textsuperscript{24} For details about the Doha development agenda see EC, 2001a; EC, 2002a; WTO, 2002. For details about the reform proposals from the EC see EC,2002b; Breustedt & Brümmer, 2002.
employment in the EU can be considered in terms of production types. In southern countries with labour intensive production such as Portugal and Spain farming accounts for 9 to 10% of jobs on average. Since, by contrast arable farming and animal husbandry require less labour, agriculture accounts for an average of about 3% of total employment in northern countries like Denmark and the Netherlands (compare Diagram 13.) (EC, 2002c). The decrease in agricultural employment has been particular severe in those countries with the highest number of jobs in farming. Italy, Spain, Portugal and France lost more than one-third of their farming jobs between 1987 and 1997. Following the CAP reform in 1992 however the downward trend has slowed somewhat. Employment in agriculture is falling more slowly and the rate of disappearance of farms has noticeably reduced, from -5.2% in 1991 to -1.6% in 1998 at the Community level (Barthelemy, 1999).

Throughout Europe family labour predominates in agriculture with four out of every five jobs in 1995. In Finland for example, 97% of the agriculture work force consists of family members. The two countries where the number of non-family workers is highest are the UK and Denmark. Part-time workers are also of considerable importance in agriculture. In Greece, Portugal, Italy and Spain, nearly half of all farmers and more than half of all agriculture labourers work part-time compared to less than 30% of the farmers in the other eleven Member States (Barthelemy, 1999).

There is an inherent structural weakness in the agriculture sector, since the share of agricultural employment is generally higher than agriculture Gross Value Added in the Member States. The exceptions are Denmark, the Netherlands and UK. The gap between the two variables is particularly wide in the case of Portugal and Ireland where agriculture accounts for 13% of jobs and 4% of GDP and 11% of jobs and 5% of GDP, respectively. The comparison between employment and Gross Value Added in agriculture indicates a possible need for structural adjustment in the agriculture sector in certain regions as well as the crucial importance of farming jobs in some rural areas (Barthelemy, 1999).

The Influence of Diversifying Measures and Agriculture Environment Policy

The agricultural production causes several negative externalities on the environment (Brouwer & Lowe, 2000). Taking these effects into account and in order to encourage farm diversification the EU has implemented certain diversification measures (Council Regulation No 2078/92 and 2080/92). Within the framework of these regulations a significant number of diversification activities have been developed. According to Barthelemy (1999) the preservation of landscape, the sustainable management of
forests, the development and use of plants for non-food purposes, and organic farming are all of importance for job creation.

Organic farming in the EU is still a minority activity covering only 3% of the agriculturally used area (Haering, 2002: 15) and accounting for only 1.49% of all farms in 1998. However, the situation changed since 1985 when the number of organic and in-conversion farms in the EU was 6300. The number has exceeded 100,000 in 1998 (Foster & Lampkin, 2000). The growth rates in this sector were particularly high in Italy, Austria, Sweden, Spain, Finland, Greece, which represent nearly 70% of all organic farms in the EU. The 1992 CAP reform may have been an important stimulus to organic farming for Greece and Italy. But Austria, Finland and Sweden were already well advanced along this path before joining the EU (Hau & Joaris, 1999). As Offermann and Nieberg (2000, 89) note, on average the 1992 CAP had positive effects on organic farming due to the combination of the effects from the support in the framework of the EC Reg. 2078/92, the introduction of the compensatory payments which no longer depended on the output level, and the set-aside premium. Unfortunately, these positive effects were diminished by several other factors. There are few statistics available for organic farming covering employment figures. But it is clear that this branch of agriculture must make an effort to ensure its long-term credibility and to find new consumption channels to increase its market share. In order to meet these requirements, new structures and new jobs in agriculture and in related areas will be necessary (Barthelemy). Other studies estimate that there will be little stimulation for the labour market through organic farming (Haering, 2002) and the effects on rural areas will be felt rather indirectly such as through increased tourism due to the ecological image of the region (Haering et al., 2001: 1).

Studies on agro-environmental programmes have, in general shown a positive environmental influence. Deblitz (1999) describes the difficulties of analysing influences of environmental-environmental programmes. Some difficulties are caused by the fact that a direct coherence between the impacts and the implementation of the measures is not easy to identify in the first place. Secondly, studies do not always refer directly to the different measures and indicators. Gilg, Battershill (1997) and Morris, Potter (1997) analyse the participation in agro-environmental programmes in the south of England. They identify a positive ecological impact in the form of resurgent bio-diversity and positive income effects caused by agro-environmental programmes. Their study shows that farm incomes increased about 35-105 pounds per ha. The increase of species attributable to ESA programmes is also analysed by Wilson (1996) who stresses the importance of the farmers' age and educational background for participation in ESA-Programmes. For Germany, Ahrens, Lippert, Rittershofer (2000) point to a number of
income effects of agro-environmental programmes. In some cases these programmes generate income effects that may go far beyond 20% of the total transfer payments to farmers.

**1.3.2. The Effects of the Structural Policy of the EU**

In this chapter only the effects of one part of the structural policy of the EU, the Regional Policy, will be described. Regional policy is defined as the explicitly spatially concentrated form of the structural policy (Klemmer, 1998: 459).

There was no common Regional Policy in the European Community until in 1975 when the Member States established the European Regional Development Fund (ERDF)\(^{25}\). With the enlargements in the 1980ies the Commission initiated the Integrated Mediterranean Programmes. In the 1988 reform, five priority objectives (six after the enlargement in 1995)\(^{26}\) were introduced, which are financed by the ERDF, the European Social Fund (ESF) and the Guidance Section of the EAGGF. The reform also stressed the need for regions, national governments and the Commission to co-operate in the administration and the evaluation of the funds. With the revision in 1993 the Financial Instrument for Fisheries Guidance (FIFG) and the Cohesion Fund were implemented (Franzmeyer, 2001; Klemmer, 1998; Leonardi, 1999; Tkaczyneski & Rossmann, 2001). In addition to the Fund measures Community joint initiatives were set up in 1989 designed to resolve specific problems existing in the EU. One of the most important initiatives for the development in rural areas is LEADER\(^{27}\) (Axt, 2000). The reform in the framework of Agenda 2000 resulted in a concentration of structural assistance in geographic terms as well as in the assistance and management of the funds. The horizontal regulations of the SFs concentrate on three primary objectives\(^{28}\) instead of the previous six. The number of joint initiatives was reduced from 13 to four: Interreg, LEADER, Equal and Urban (Wulf-Mathies, 1999; Axt, 2000).

The evaluation of the effects of policy programmes presents several methodological problems: first, finding a valid scientific definition of “economic and social cohesion”; second, measuring the “real” influence of the structural policy on macroeconomic indicators without knowing the development of these indicators minus the impact of the policy support measures; thirdly, “internal factors” that also exert influence on the regional development can not be considered to a sufficient degree (Axt, 2000: 138).

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\(^{25}\)For details about EU Funds see Tkaczynski & Rossmann, 2001.
\(^{26}\) For a detailed description of the Objectives see Axt, 2000 and inforegio, 2003.
\(^{27}\) For details about LEADER see AEIDL 2003.
\(^{28}\) For details about the Objectives see EC2000a, Axt 2000, inforegio 2003.
Furthermore, the evaluation of effects of the structural policy on rural areas has to deal with the following difficulties. There are only a few sources that adequately describe the effects on rural areas, mainly in the context of support in the framework of the former Objective 5b and LEADER. For the cohesion countries the effects are described for the whole country, since the whole country receives support.

The Development of Regional Disparities within the European Union

According to the EC (1999a and 2001b) the process of convergence within the EU has been successful. The GDP per capita of the poorer regions has converged more closely to the average of the EU. From 1988 to 1998 the 10% poorest regions experienced an increase in the GDP per capita from 55% to 61% of the EU average (25% poorest regions: 67% to 68%). At the same time, the GDP per capita in the cohesion countries Spain, Portugal, Greece increased from 68% to 76% of the EU average. However, significant disparities are still apparent. Rural peripheral areas tend to catch up more slowly than urban areas. A description of the development of the unemployment rate must come to a less positive conclusion. The unemployment rate of the most affected regions increased during the last ten years from 20% to nearly 24%. There are also considerable differences between regions within specific countries. In Italy for example there is a difference of nearly 25 percentage points between the region with the lowest unemployment rate and the region with the highest. Significant regional disparities also persist in the activity rate, which in 2000 was 77,2% in the 10% best region and only 46% in the 10% poorest regions. However a positive development trend can be observed in rural areas: the employment growth in these regions is at 1% p.a. (1995 to 1999) somewhat higher than the overall European value (0,8% p.a.) (EC, 1999c, 2001b and 2002d).

Several studies also describe a decrease in the economic disparities between the Member States. Irmen and Blach (1996: 718) see a general trend of cohesion between the "weaker" and the "stronger" Member States. The activity rates in the weaker countries have been growing faster than the activity rates in the stronger countries. Differences in the GDP and in the rate of unemployment have also decreased over the last 30 years. While disparities in incomes decreased during the seventies this trend did not continue in the same way during the eighties and the nineties (Arnold 1995, 3). With regard to the income per capita the cohesion countries have made up their leeway, but the income per capita still differs between rural and urban areas. Most economic development in 1983 until 1993 was made in urban regions (Klemmer, 1998: 486). Busch, Lichtblau and Schnabel (1997) investigated 143 regions on NUTS I level. They identify a coherence between the level and the development of the economic power per capita. Regions which
had a higher base level are growing more slowly than weak regions. They assume that with a coherence rate of 1.6% (which they have calculated for the period of 1980-1993) it takes about 43 years for the regions to halve existing disparities.

Holtzmann (1997) outlines the nature of the dependency of evaluations which attempt to analyse the level and development of regional disparities. Such results are highly dependent on the chosen analysis methods and the variables used. With the "right" choice an increase as well as a decrease of disparities may be proved. With a cluster analysis that includes not only the static income situation but also the labour market situation and dynamic developments he shows an increase of disparities between the regions analysed during the period 1984 to 1991.

In conclusion, the overall picture of regional development of the EU results from a number of very different single processes. Regions which started at the same "point of departure" have developed very differently. So it would appear it is not possible to identify a common process of convergence or divergence (Axt, 2000; Neven & Gouyette, 1995). Moreover, according to Quah (1996, 1999) the catching-up process of the cohesion countries is driven mainly by the richer regions in these countries. But there are different development paths determined by the factors of national growth and national convergence: Between 1980 and 1989 Greece experienced the lowest national growth rate and an increase in national convergence. Spain and Portugal showed a higher national growth rate, but also an increase in regional divergence. There would seem to be a trade-off between national growth and national convergence in the Cohesion Countries, particularly in Spain and Ireland in the nineties. This trade-off appears clearly in the early stages of the catching-up process, whereas in wealthier countries a combination of national growth and a reduction in regional disparities may be possible. These facts also have implications for the design of support measures. Policy-makers should be aware of these potential trade-offs since if they try to minimise regional disparities in the early stages of the catching-up process they might limit the expansion of the national growth poles and thus reduce the national growth rates (Davis & Hallet, 2002).

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29 The problem of a potential trade-off between national and regional development in catching-up countries has already been provided by Williamson (1965) by referring to the work of Kuznets, Myrdal and Hirschmann.

30 But this relationship is not “automatic”. Whereas West Germany can be seen as an example for this case, the case of Italy is less clear-cut.
Influence of Specific Measures in Rural Areas

In this chapter the focus will be on the effects of development in the former Objective 1\textsuperscript{31}, 5b\textsuperscript{32} and LEADER regions, because they mainly include rural areas (Axt, 2000; EC, 1997a).

Although the GDP per capita in the Objective 1 areas has converged from 63\% of the average within the EU in 1988 to 71\% in 1999, it is still very low. There are also considerable differences in the development process between the Objective 1 regions. For example the East German regions and Ireland have caught up fast while parts of Greece and Italy have even lost ground. The Commission (1999c) explains this difference as due to a low productivity of only 78\% of the European average and a lower activity rate of 52\% in 1997 in these regions. However, the Commission has also indicated that the gap between the Objective 1 regions and the other regions is decreasing because of faster growing productivity in these regions. The growth of productivity can be shown by the GDP per employee which increased from 76\% in 1988 to 79\% in 1993 of the European average (EC, 1999c and 2001b). On the other hand, the unemployment rate in the Objective 1 regions increased from 15,6\% in 1989 to 16,2\% in 1999 against an average of 9,2\% in the EU in 1999 despite the support given in these regions. During the last three years the unemployment rate decreased slightly in the Objective 1 regions, but the gap between those and the rest of the EU has grown wider (EC, 1999c: 226; EC, 2001b). The EC (1997a: 33–47) describes the specific effects of the measures taken in Objective 1 regions. For example, in the five new Federal States of Germany 23.000 ha of trade and industrial area were created up to 1994, in Greece 180.000 working places were supported from 1994 until 1999 and in Portugal about 100.000 working places were created through the measures implemented in the first period. Higgins \textit{et al} (1999) assume that aid from funds from 1994 to 1999 strengthened the future growth capacity in Objective 1 regions by supporting research, technology development and innovation although direct economic impacts at this stage are very low.

As to the impacts of the Objective 5b policy, there are a number of positive effects so far (EC, 2000c). A survey of the impacts of the Objective 5b policy for each country was delivered by the EC (1997a). The implementation of the Objective 5b policy has indeed contributed to a significant improvement of the socio-economic structure in the regions concerned. Employment both for Germany and the Netherlands was reported to rise. A significant number of new jobs have been created, especially outside the agricultural

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\textsuperscript{31} Objective 1 regions: regions where the BIP per inhabitant is less than 75\% of the EU average.

\textsuperscript{32} Objective 5b is facilitating the development and structural adjustment of rural areas.
sector. Also important in this context was the support of SME with new information technologies and efforts to extend economic activities to international markets, as in the case of Finland. In several countries many existing jobs were made secure, especially due to farm diversification measures such as on-farm tourism and landscaping. Denmark in particular benefited from extra revenue due to on-farm tourism. Another significant impact of the Objective 5b policy has been the improvement of the rural infrastructure and the improvement of ecological conditions. A positive example of the impacts of the Objective 5b policy can be made by Spain where the economic disparities between the EU and that country have been reduced significantly.

The bottom-up approach of LEADER is meant to promote innovative measures enhancing the regions' endogenous potential which can then be used as models for other rural areas (Schön, 1997: 76). Being an instrument of "soft development", the impacts of LEADER cannot be analysed by quantitative indicators only, but need to be evaluated by consideration of qualitative aspects also (Jouen, 1999: 1). Jouen (1999:1) points out that the impacts of LEADER depend largely on the general starting conditions and socio-economic settings (e.g. the historical and political context) in the different member countries. The overall impacts of LEADER seem to have been very satisfactory so far. According to Esparcia et al. (1999: 192) many of the LEADER principles have had a leverage effect in the wider decision-making process and development strategies of the member countries. As to the consolidation of local partnerships, they state that LEADER has frequently encouraged the constitution or consolidation of associations, co-operatives, and businesses. In their paper about the ex-post evaluation of LEADER I in Germany, Geissendörfer et al. (1998: 554) describe several significant impacts on the German LEADER I regions such as the preservation or creation of jobs, the economic stabilisation of farms, the increase in tourism due to an improvement of the leisure infrastructure, the promotion of the cultural identity, the improvement of the environment, the improvement of the living and working conditions due to village development measures, and the improvement of the qualification structure of the regional workforce.

There is, however no unanimity of opinion concerning the total effects of the Regional Policy. Busch et al. (1997) did not find any statistical significant correlation between the economic growth per capita and the amount of subsidies from the regional funds. Otherwise the EC (2001b) estimates that by using the HERMIN Model\footnote{The validity of such econometric models is controversial due to the problems of defining its assumptions. Therefore these models are not considered suitable for the determination of exact values (Fankenfeld, 2002).} the Regional Policy positively influences the GDP and the employment situation. For example, in 1999,
the GDP in Greece (Spain) was 9.9% (3.1%) higher compared to the hypothetical situation without any support.

1.4. SMEs located in rural periphery in the processes of globalisation

Those SMEs which are defined as global show (OECD, 1995f):

- the ability to move flexibly and to identify and take advantage of opportunities anywhere in the world;

- the ability to source inputs, distribute products/services and move capital across borders;

- a lack of a home or national base (in the sense of not being committed to maintaining headquarters or a presence in a specific "home" country);

- being present (usually as establishments, alliances or parts of networks) in a number of different countries;

- the management that thinks and acts "globally";

- the ability to market products/services successfully in different countries (although the products/services may be adapted to specific markets).

Globalisation may take a form of inward (necessity of facing foreign competition in own market) or outward (entering foreign markets and competing outside boundaries of own country), and it is measured by means of a 10-point scale\(^\text{34}\), which takes into consideration the following: (Table. 1)

\begin{itemize}
  \item the proportion of the SMEs outputs and inputs (including capital) that are traded across national boundaries, either directly or indirectly;
  \item the number of establishments or affiliations in different regions or countries;
  \item the number and range of regions whose management perceives market opportunities and/or competitive threats.
\end{itemize}

Although the proportion of SMEs involved in different ways in the globalisation process is assessed at about 60% (with a perspective of a further growth), a very low proportion of firms operate on a truly global scale, which means that they conduct activity (or possess

\(^{34}\text{More information on global industries and measuring industry globalisation, see: Sleuwaegen et al, 2001.}\)
capabilities to conduct activity) in many countries and/or many continents\textsuperscript{35}. In the case of manufacturing firms\textsuperscript{36} it amounts to maximum 1%. Another 5% to 10% are firms with a high degree of internationalisation, which generate over 40% of their turnover from international activity. Further 10% to 20% are firms generating from 10% to 40% of their turnover from international activity and they operate in at least three (except own) countries (OECD, 1995f).

This proportion is even lower in the case of SMEs located in rural peripheries. Although we used in our research only a partial index of globalisation\textsuperscript{37}, the results show however that slightly more than 30% of firms are involved in a various ways in the globalisation process. The highest proportion of firms - amounting to over 34% - carry out less or more intensive and systematic export activity, while the lowest one (amounting to 11.5%) possess their own establishments or affiliates outside a firm’s location (Diagram 1.).

Table 1. SME index of globalisation

<table>
<thead>
<tr>
<th>Index</th>
<th>Description</th>
<th>Traded inputs and outputs</th>
<th>Establishments and affiliations</th>
<th>Market opportunities and competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2</td>
<td>No globalisation &quot;Domestic&quot;</td>
<td>All inputs sourced from local area, all outputs sold in local area</td>
<td>Single establishment, no establishments or affiliations outside local area</td>
<td>No market outside local area, no potential competition from outside local area</td>
</tr>
<tr>
<td>3 4</td>
<td>Limited globalisation &quot;Mainly domestic&quot;</td>
<td>&lt;10% of inputs sourced across borders, and &lt;10% revenue from across borders, usually within a limited span of nations</td>
<td>At least one establishment or affiliate outside local area or outside national area</td>
<td>Barriers to entry to outside markets and to local market (for competitors) are significant and amount to more than 50% of cost</td>
</tr>
<tr>
<td>5 6</td>
<td>Major globalisation &quot;Internationalised&quot;</td>
<td>&gt;10% but &lt; 40% of inputs sourced internationally, and &gt;10% but &lt;40% revenue from across borders, usually across two major international regions</td>
<td>Establishments or close affiliates in at least four different nations and in two major international regions (e.g. Europe, North America, Asia)</td>
<td>Barriers to entry are noticeable, male up to 10% of cost disadvantage, but can be overcome fairly easily</td>
</tr>
</tbody>
</table>

\textsuperscript{35} For barriers of SME globalisation, see among others: Reck, 1994; OECD, 1995; Belussi, 1999; Piasecki, 2001.

\textsuperscript{36} In this case to SME category one included firms employing up to 500 persons (OECD, 1995)

\textsuperscript{37} Based on: (i) directions of supply and sales divided into regional, domestic and foreign; (ii) the number and the location of establishments and affiliations divided into inside v. outside local area and inside v. outside own country. While in the last case the analysis was limited to maximum four establishments and affiliations.
Extensive "Globalised": >40% of inputs sourced internationally, >40% of revenue from outputs traded across borders, across all major international regions.

Establishments or close affiliates in at least one country in all three major international regions.

Barriers to entry to international markets are not a significant impediment for firm or competitors, make up less than 5% of cost disadvantage.

Complete "Fully Globalised": Majority of inputs of any establishment sourced across borders, large majority of outputs traded across borders.

Multiple establishments or affiliates in many countries and in all major international regions.

Markets in all major international regions, competition likely to be present or come from any international region.

Globalisation scale

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<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Not Globalised</td>
<td>Domestic</td>
<td>Limited</td>
<td>Mainly domestic</td>
<td>Major</td>
<td>Internationalised</td>
<td>Extensive</td>
<td>Globalised</td>
<td>Complete</td>
<td>Fully Globalised</td>
<td></td>
</tr>
</tbody>
</table>

Source: OECD, 1995f: 22-23

The minimum proportion of firms – amounting to only 0.4% - conduct their activity on a more global scale, which means that they have from 1 to 3 affiliates located outside local or national area, <10% of inputs sourced across borders, and <10% revenue from across borders (such conditions are fulfilled by 0.2% of the surveyed firms), or they have at least 4 affiliates outside national area, >10% of inputs sourced internationally, and >10% of revenue from across borders (0.2% of the surveyed firms).

At first sight, it seems that a decisively higher level of globalisation is typical for Greek firms being on similar level with German and UK firms (0). E.g. only 21% of Greek firms source all their inputs from the local area compared with almost 59% of such firms in Germany and more than 75%-78% of such UK or Polish firms. An exception here are Portuguese firms, similarly to Greek firms, of which only slightly over 21% limit their supply to domestic sources (which can be a result of limitations posed by a small domestic market). Greek firms also take leading places with respect to the propensity of exports; in this case, with 38% of exporting firms they rank at the position similar to German and UK firms (about 47% and about 42% respectively). In turn, German firms outpace firms from the remaining countries with respect to the number of establishments and affiliates outside local and national area (over 20% of German firms have establishments and affiliates outside local/national area compared with nearly 15% of Greek firms and from 5% to 10% of Polish, Portuguese or UK firms in this category).
Apparently, it seems that firms located in three CSAs: Waldshut in Germany, Kilkis in Greece and Left Bank in Portugal (Table. 14) show the higher level of globalisation.

**Diagram 1.** Proportion of rural SMEs in the globalisation processes

1. **% of input sourced internationally**
   - 1 - All inputs sourced from local area (Domestic)
   - 2 - <10% of inputs sourced across borders (Mainly domestic)
   - 3 - >10% but < 40% of inputs sourced internationally (Internationalised)
   - 4 - >40% but < 50% of inputs sourced internationally (Globalised)
   - 5 - >50% of inputs sourced internationally (Fully globalised)

2. **% of output sold internationally**
   - 1 - All outputs sold in local area (Domestic)
   - 2 - <10% revenue from across borders (Mainly domestic)
   - 3 - >10% but <40% revenue from across borders (Internationalised)
   - 4 - >40% of revenue from outputs traded across borders (Globalised)
   - 5 - >50% of revenue from outputs traded across borders (Fully globalised)

3. **Establishment or affiliations**
   - 1 - Single establishment, no establishments or affiliations outside local area (Domestic)
   - 2 - At least one establishment or affiliate outside local area or outside national area (Mainly domestic)
   - 3 - At least one establishment or affiliate outside national area (Internationalised)

However, our research has shown that the relationship between the country and the level of globalisation of rural SMEs and the relationship between the level of globalisation and the CSA are statistically less significant (it results from the methodology of our survey; all our CSAs were rural and peripheral) than from the influence of such firm’s features as: (Table 13)

Age (Table. 16). The bordering line here is 5 years. It is especially important considering the fact that – as it is assumed – SME internationalisation (which can take different forms) proceeds in stages and reflects an endogenous learning process. According to these views, it involves several stages. The first stage is no involvement in international
activity. The second stage is "initial" involvement, in which a predominant role is played by occasional export stimulated most often by unsolicited (unexpected) orders from abroad. The further stage is directed export resulting from an aware reaction to perceived opportunities, which is characterised most often by a lack of regularity (occasional export). Only another stage means an active involvement in international division of labour taking the form of systematic, regularly developed export and an involvement in other forms of internationalisation. In the ideal situation, a final effect should be the establishment of own firm abroad (EC, 2000).

Diagram 2. Level of globalisation by country

Size (Table 16). A decisively higher level of globalisation is characteristic for medium and large firms. For small firms a wider entering into an international arena is not as simple and calls for reinforcement of resources. While there is a danger that they encounter a number of problems, in particular: a lack of symmetry in rights of partners, a lack of capability to organise an effective (from the cost viewpoint) management system, inability to enforce a just division of benefits resulting from such co-operation, disproportionate (to the scale of activity costs) adjustment to industrial law requirements and regulations which are obligatory in various sectors (See also: Reck, 1994; Belussi, 1999).

- Intensity of co-operation relationships (Table 17), so that the relationships of collaboration and co-operation between firms from different countries could stimulate the increase in the level of globalisation. However, they encounter a number of difficulties in such fields as labour market, construction and housing,
social services, environment and planning, tax policies, education and research, infrastructure and logistics, culture and shared identities, and industrial politics (EC, 2002f).

A different structure of firms located in particular countries and CSAs from the point of view of these three features determines the observed variations (Table 19.).

The poor quality of environment formed by rural peripheries, and as result its low competitiveness, is one of the crucial factors limiting the SME globalisation potential.

This was confirmed by the results of our research, in which we gathered opinions of the firms located in rural peripheral areas on:

- accessibility of basic services,
- what are the main barriers and to what extent are the barriers identified related to rural environment.

As concerns basic services, the firms could assess their accessibility using a 5-point scale, where 1 meant very poor accessibility, and 5 meant a perfect one (Diagram 14.).

Among the services with good accessibility one can mention only telecommunication services; 86% of the surveyed firms assessed the accessibility to the telecommunication network as good, very good or perfect. Only 14% claimed that it is very bad or bad. The accessibility to education services (claimed to be very bad or bad by nearly 32% of the firms) and the accessibility to the road network (claimed to be very bad or bad by over 33% of the firms) were assessed as much worse. The worst opinion was given to public transportation (almost 51% of the surveyed firms assessed its accessibility as very bad or bad) and the availability of skilled labour (which received very bad or bad opinions from more than 60% of the respondents). In the latter case an exception was made by Polish firms, which assessed the availability of skilled labour as good, very good and perfect (80% of indications of this kind).

Nevertheless, these general assessments are varied between particular countries and particular CSAs, and they point at a more or less advantageous framework conditions to establish and develop rural SMEs (e.g. access to education services was assessed by Greek firms as the worst, while availability of skilled labour received the worst assessment by Portuguese firms).

Taking into consideration the differences between the percentage of negative opinions and the percentage of such indications for the whole population observed in each of the
countries and each CSAs it can be said that – according to the respondents’ opinion – less favourable conditions of SMEs development are in Waldshut in Germany, Lesvos in Greece and Left Bank in Portugal (Table 20. Diagram 15.).

These assessments do not have to reflect the actual differences observed in particular CSAs with respect to the provision of basic infrastructure equipment. This is confirmed, for instance, by a discrepancy between a very good assessment of the accessibility of services made by Polish firms (almost 80% of Polish firms assessed that educational provision, availability of skilled labour, accessibility to the road network, public transport and access to telecommunication networks were good, very good or excellent) and lower than the average in the EU countries saturation of Polish CSAs in infrastructure equipment (an exception here are educational services that flourished during the 1990s).

These assessments reflect essential, regional variations in the levels of expectations about the desired level of saturation of the local environment with infrastructure equipment. It is characteristic that the higher level of expectations is typical for firms that are more actively involved in various forms of globalisation (the worst assessment of the accessibility of services is recorded for these CSAs, which are most strongly involved in different forms of globalisation). Thus, it can be assumed that the increasing globalisation level:

- Increases a firm’s awareness of the relationships between its environment and capability to compete on broader markets.
- The expectations about the parameters of environment (the saturation with infrastructure equipment and business services) become more specified.
- Increases the role of local authorities in shaping an effective package of auxiliary services.

This is confirmed by the respondents’ answers about the relationship between the following barriers:

- Barrier of development of product and service innovations.
- Barrier of development of new markets.
- Barrier of accessibility to information and the scope of the use of promotion and distribution instruments.

and a firm’s location in rural environment. Also, in this case firms that are more actively involved in different forms of globalisation more often point to such a relationship.
As concerns the first barrier (Diagram 16.), as many as 80% of the surveyed firms point to the existence of barriers that hinder the development of product and service innovations. At the same time over 48% of these firms claim that these barriers are related to some or considerable degree to their rural environment, mainly through the small local market (over 66% of indications), poor business environment (nearly 50% of indications), poor technical infrastructure and absence of public sector business support organisations (29.5%, respectively) and absence of producer services providers and business incubators (10% and 5.4% respectively).

In addition, in the opinion of almost 18% of firms, rural environment limits their access to information useful in the firm’s technical development and over 11% pointed to the fact that rural environment could be a barrier to improve the firm’s technical development.

In the case of new markets’ development (Diagram 17.) over 76% of the respondents pointed to the existence of barriers, and among them as many as 43% claimed that the barriers were related to rural environment and resulted from: remote geographical position (almost 72% of indications), high transport costs (over 45% of indications), poor transportation/communication infrastructure (nearly 40%) and – similar as in the case of barriers to innovation development – the absence of public sector business support services and the absence of producer services providers (almost 31% and more than 9%, respectively).

Opinions about the relationship between a firm’s location and its access to information and the methods of promotion and distribution used (Diagram 18.) are varied. Such a relationship can be noticed by only about 20% of firms. This outcome cannot be surprising when considering the fact that the majority of firms actively use information and telecommunication technologies, particularly e-mail (nearly 53% of the respondents), website (over 43%), on-line databases (almost 26%) and electronic data interchange (almost 24%), which effectively overcomes communication limitations imposed by rural peripheral areas.

These technologies are used especially intensively by German and UK firms and these are the firms which most rarely see the impact of rural environment on access to market information and the methods of promotion and distribution used.
1.5 Consequences of EU enlargement for SMEs in the European Union and candidate countries

The above-characterised quality of the rural environment becomes even more important in the light of the soon-expected enlargement of the Community, changing the crucial business conditions for SMEs, especially SMEs located in rural periphery. It is estimated that the EU enlargement will impart greater dynamics to mutual trade (trade growth by 20-50%) and – although to a smaller degree – it will contribute to the economic growth within the EU. Its consequence will be the emergence of a number of new opportunities and threats for both EU firms and firms located in the candidate countries. However, from the analysis of opportunities and threats emerge some areas of generating inequalities, which will be disadvantageous for SMEs in the candidate countries. Except for obvious differences in the length of the period of SME market development and the experience of operating on the internal market they include particularly:

- short-term as well as long-term adjustment costs;
- the emerging model of trade and accompanying differences in the level of SME competitiveness;
- the framework of other conditions (macroeconomic situation, technological and R&D potential, system of education and human resources, legal and political environment, labour market regulations, costs of labour, industrial costs, tax regulations, existing infrastructure, pro-SME policies etc.), within which the SMEs operate, and which aim at increasing – in accordance with the competitiveness pyramid, which was mentioned above – the competitiveness of SMEs.

Adjustment costs encompass a wide circle of issues and are born by all SMEs regardless of the fact if they operate in international, local or regional markets. These costs appear

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38 Annual growth of imports from the CEECs reaching 10% will contribute to increasing the economic growth rate in the present EU by 0.1% to 0.5%. (Inotai, 1998; The impact of EU Enlargement on Cohesion, 2001; EC, 2001e)

39 During the times of the centrally-planned economy the SMEs did not exist at all or were only a marginal phenomenon. Poland was the only exception – here the non-agricultural private sector managed to survive throughout the entire post-war period, although its growth was very slow. Hungary was another exception of this kind. There the private sector appeared in the 70s. Some entrepreneurial traditions can also be spotted in Bulgaria – there the private sector was born in 1984.

40 These experience is significant not only because of the economies of scale or the learning curve results, but also because of an ability to adopt a strategical approach to preparing for the new challenges. This will require putting more emphasis (than is done currently by SMEs from candidate countries) on quality, new technologies and customer-oriented services (as only enterprises, which take such a course of action will be able to increase their turnovers due to the introduction of the internal market) rather than on reducing costs.
both in a short and a longer term and they are borne by SMEs either directly or indirectly, in the latter case taking the form of the costs of restructuring of the economy.

Among the costs appearing in a short term, worth noticing are the costs of adjustments to the internal market standards. These include both necessary investment outlays, and organisational, personal and technical costs being characteristic for changes of each kind and connected with adjustments to new regulations, and they may mean deterioration in the situation of some domestic producers (EC, 1993f; Smallbone et al. 1996; Syrett, 1996). Within the framework of the present enlargement they are born merely by SMEs from the candidate countries. Although these costs are concentrated mainly within the period of the first five years, during this period they will decrease (sometimes considerably) competitiveness of some SMEs.

In a longer term, more and more important will become restructuring costs that result from different scenarios of adjustments of economies to the internal market conditions\(^{41}\). Although these adjustments are made mainly within the scenario of intra-industry specialisation, particular countries specialise in the manufacture of products of a different quality and price. In the context of the whole internal market, this produces benefits in the form of a much wider (in price and quality categories) range of products and a growth of effectiveness owing to specialisation based on relative comparative advantages inside the sector (innovations, design, distribution) (EC, 1996f). However, this entails a danger of the concentration of higher quality/price production in richer EU member states and a shift of lower quality/price production to poorer EU member states (Aiginger, 2000).

Confirmation of that is the analysis of export and import streams, which points to the emergence of three groups of countries, characterised by possessing a comparative advantage in a manufacture of products of a different quality\(^{42}\): The biggest share of high quality/price products is characteristic for exports of Ireland (78.1%) and Germany (61.8%) which also show the lowest proportion of low quality/price products in exports (only 10%). They are followed by: Denmark, Sweden and Great Britain. Greece and Spain are at the end of the list with only 25% share of high quality/price products in their export offer (while almost 30% of exports are generated by low quality/price products). Simultaneously, countries specialising in exports of high quality/price products are most often importers of products of this kind as well.

\(^{41}\) See also: EC, 1996f; EC, 1996e; EC, 1996e; Tsoukalis, 1998. For more latest publications see, Hallet, 2000; Midelfart-Knarvik et al., 2000; EC, 2001b; Rogut, 2002.

\(^{42}\) Although it is obvious that specialisation of this kind could have been different in particular sectors.
An increase in intra-industry trade of products of various quality and price (and a drop in inter-industry trade) is recorded in all sectors, including sectors with traditionally intensive inter-industry trade\textsuperscript{43}. The opening of the internal market results, in the case of these sectors, in a constant growth of intra-industry trade, particularly within products differentiated with respect to quality and price (especially wooden products, paper, textiles, clothing, food and beverages). However, in certain sectors, which are traditionally dominated by intra-industry trade\textsuperscript{44}, the opening of the internal market results in some decrease in the proportion of this turnover, which can be explained by the fact of the production concentration of these products in a few countries which specialise in their production in accordance with the structure of comparative advantages.

For SMEs in countries which specialise in low quality/price products this means an increased threat, which is connected with deepening their specialisation in labour-intensive sectors (e.g. a part of the food sector, textiles and clothing, furniture), where they have a comparative advantage. These are, however, sectors with a relatively low potential of a demand growth and additionally they are exposed to an increasing competition from cheaper producers outside the Community. As a result, they are subject to production shifts to countries with lowest labour costs and restructuring, which, in turn, eliminates part of SMEs from the market. The reality of these threats is confirmed by the evidence from the Greek, Italian, and Portugal economy (Karagianni & Labrianidis 2001; Labrianidis, 1996, 2000 and 2001; Belussi, 1999; Syrett, 1996).

These dangers are even more clearly related to SMEs in the candidate countries. Available data show that most candidate countries are not yet capable of effectively competing with the current EU members (including the Southern states of the EU) in the same segments of the market (EC, 2001b). Although it is true that the model of trade between the candidate countries (including Poland) and the EU is increasingly intra-branch in character, a more detailed analysis shows that the export conducted by the candidate countries to EU regarding industrial goods is (EC, 2000):

- Competitive only with regards to a limited number of goods which are characterised by high or growing values of comparative advantage indices.

\textsuperscript{43} These sectors include: manufacture of food products, beverages, coal mining, textiles, non-ferrous minerals. The sectors generate ca. 1/3 of industry’s value added.

\textsuperscript{44} These sectors include: manufacture of mechanical and electrical appliances, manufacture of vehicles, manufacture of professional equipment, chemicals, part of wood and paper industry. The sectors generate ca. 2/3 of industry’s value added.
• Concentrated more on the labour consuming segments – the comparative advantage is built mainly around the abundance of cheap labour force. Considering the speed with which the differences in wages are being reduced, it may be assumed that this model will be dominant in the coming years as well.

• Dominated by low quality, cheap products, unlike the EU exports, which are mainly high quality, expensive goods.

Foreign direct investment (FDI) could stimulate the change in the present situation, as it is expected that the candidate countries, as was the case during the association period, will benefit by increased FDI streams (RWI, 2001). The EU experiences show (an example of Ireland and Portugal) that foreign investments may support the development of technologically advanced sectors. Portugal, for example, managed to improve the relation between import and export in the car industry and electronics industry. These sectors are dominated by branches of foreign companies which are export-oriented. However, these sectors are often “incomplete” in that Portugal did not develop a full range of activities in those sectors. Despite those shortcomings, some branches of industry developed certain areas of intra-branch competitive specialisation thanks to either foreign investments or co-operation between domestic and foreign companies. Ireland too is an example which shows that foreign investments may lead to the development of high technology sectors. Ireland also shows the risks that accompany foreign investments in case the industrial policies of the government do not strengthen the domestic companies which are increasingly open to foreign competition. As a result, a dichotomous structure of industry may be created (as was the case of Ireland), which is characterised on one hand by a highly effective, technologically advanced sector, where the production is rapidly growing but which is dominated by foreign companies and, on the other hand, by the local industry which is less competitive.

However, FDI may also hinder the growth of effectiveness of domestic economy. The FDI leaves the domestic industry open to a test of international efficiency standards. Should the efficiency of domestic enterprises be insufficiently higher than the efficiency of foreign competitors to match any advantages resulting from local wages, then the sector will lose. If a given country loses an ability to compete in a group of sectors characterised by high efficiency and high wages, then the quality of life in this country may be threatened (Porter, 2001).

For these reasons it is expected that mainly EU-based SMEs will pick up the benefits of integration. There are five sectors, which are the greatest beneficiaries in the EU. These sectors have the greatest share of EU exports to the candidate countries. There are also
five sectors which are the greatest beneficiaries in the candidate countries. These sectors have the greatest share of imports into the EU from the candidate countries.

As far as services are concerned it may be assumed that mainly the EU-based SMEs will benefit from the integration. They will have greater benefits than their counterparts, which are based in the candidate countries, over a period of several years after the integration. The reason for this is that the EU-based SMEs are already well developed (thanks to the opening of the internal market among other reasons) and probably they are more technologically advanced (especially those, which operate in sectors where new technologies, knowledge and skills are used extensively). The services sector in the candidate countries on the other hand is badly developed and dominated by micro-enterprises which have very limited export capabilities.

The consequences of the enlargement will also have their regional dimension, particularly in the case of border regions. The elimination of barriers here (liberalisation of capital and workforce movement, liberalisation of services, a growing compatibility of educational systems, etc.) will make the border co-operation more dynamic and will create additional opportunities for activity of local SMEs and handicraft. However, the loss of a border character may lead, among others, to the loss of jobs in institutions which specialised earlier in providing services to the border movement and competition intensification, especially among SMEs. Additionally, in regions strongly differentiated with respect to the framework of other conditions (the level of economic development, the production structure, the level of income and social benefits, the unemployment rate, prices of land, energy, water, tax level, etc.) the differences may be the reason for a change of a firm’s location (as well as a household’s location). This will result in: (i) a gradual restructuring of economies which adapt to the strengths of both border regions; (ii) a change in the importance of local economic centres; (iii) a possible increase in interregional disproportions in the growth potential which causes a migration from poorly developed to richer regions (and consequently a deterioration of the latter).

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45 It is believed that the western border regions of CEEC were during the period of socialist economy peripheral regions and were placed in a disadvantageous situation due to the geo-political orientation of CEECs. After 1999 these regions began to draw benefits resulting from the new political situation. Neighbouring to the EU countries, relatively well developed infrastructure and cheap skilled labour force contributed to stimulation of the market development and encourage to invest in the western regions. They also benefit from the developed infrastructure. For instance, the Poland’s western regions have the much more diversified structure of industry and a bigger number of SMEs. In Hungary the western regions experience a decrease in unemployment during the last years and a considerable inflow of investments as well as investments flowing from the neighbouring countries. (The impact of EU Enlargement on Cohesion, 2001) Another additional advantage is a growth of tourism, cross-border retail sales and educational and technological initiatives, including international universities (Frankfurt/Oder-Słubice, technological and business park ACCESS on the Austrian and Czech border.)
Still different a situation will be observed in regions, where the border brought about a boom of SME activities connected with transport, customs agencies, and retail trade (border checkpoints). In this case, an elimination of borders will change the situation for the worse and cause, among others, the loss of jobs in customs agencies and, after a harmonisation of indirect taxes, elimination from business of a number of border shops.

1.6. Final comments

The traditional agricultural regions more and more frequently become regions displaying post-industrial features, characterised by the co-existence of a reduced agricultural sector with other sectors in the same space. This leads to a diversity of rural areas resulting from the combination of agriculture and industry in one area that allows for a flexible exploitation of resources in different types of activities. For the agricultural sector this means an evolution of the structure of farms (breaking the separation of the sector through technical changes in the production of goods and an exploitation of specific features of resources from the market perspective). For a non-agricultural activity it means the possibility of freezing the resources in rural areas and exploiting them in the "diverse economy". However, the barrier with this respect is a relatively low potential of combining mobile production factors in rural peripheral areas.

The main reason for this is low competitiveness of rural peripheries understood as both:

- a lack of proper conditions for SMEs operating there, which could allow them to gain competitive advantages in the elements remaining beyond their control

and

- the inability to offer benefits of a different kind to SMEs operating there (e.g. access to financial resources, attracting external investors, maintaining the capital in the region, etc.).

Although it is generally accepted that in the case of these individual firms (groups of firms) which have an obligation to secure their own competitiveness46, the role of public authorities (of various levels) is, according to the concept of the competitiveness

46 They maintain their competitiveness through effectiveness and flexibility of meeting the needs of the market, capability of adjusting to structural changes, dynamics of creating new markets and meeting new needs. Skills necessary to fulfil these tasks are the result of the quality of management at a firm’s level.
pyramid, is to support a firm’s competitiveness through establishing adequate framework conditions in which a given enterprise is operating.\footnote{Among these conditions the following are most frequently mentioned: a general macroeconomic situation, R&D and technological potential, education and human resources, legal and political environment, labour market regulations, labour costs and industrial costs, tax regulations, telecommunication infrastructure. (Zielińska-Głębocka, 2000) For more information on a competitiveness pyramid, see: EC, 1996e.}

A low competitiveness of rural peripheries is also one of the important factors limiting the globalisation potential of rural SMEs, which is lower than the globalisation potential of SMEs located in peripheral areas other than rural.

A way to increase the globalisation level of rural SMEs efficiently is an improvement of effectiveness and commonness of using instruments of support directed to those firms. Of particular importance seem to be activities scheduled to increase the level of qualifications of local labour markets. This is so because rural peripheries do not create conditions that would favour running globally competitive economic activity, among others, with respect to relatively low skills of employees and (potential) entrepreneurs. Acquiring suitable human capital always affects the development of each firm, however SMEs have, from this point of view, special requirements which include both adaptiveness and versatility of staff and the adjustment of the supply of skills to sectoral requirements which are described by expectations of those sectors, in which the number of SMEs grows most dynamically. In other words we are more frequently dealing with the diversity between demand for specific qualifications (especially in new sectors, including services) and possibilities of meeting this demand by labour market. For the system of education of vocational improvement this means the necessity of providing conditions in which future requirements of the region’s competitiveness will not be restricted by the shortage of skilled employees.

It is also important that the level of education and the quality of the system of education affect the form and scale of SME development, among others through: stimulating the potential of entrepreneurship in the region, specifying the quality and chances of development of newly established firms\footnote{The relationship between the entrepreneur’s education and SME’s development is neither direct nor obvious, since the skills acquired during training do not guarantee the success of the firm. The significance of the entrepreneur’s education as a factor influencing the growth of the firm will be different in different sectors: it will be bigger in sectors relying on the advanced technologies and knowledge and it will be smaller in sectors focussing on crafts. It may also grow with the growth of the firm (Storey, 1994).}, the supply of entrepreneurs, especially in sectors of advanced technology, the influence on the development potential and SME competitiveness, specifying the intensity and boundaries of regional development of business infrastructure, especially in the field of supporting the transfer of technology and innovations.
From this viewpoint it is advisable:

- to increase successively the scale of educational investments in order to increase the number of persons with secondary and especially tertiary education,

- to extend and improve considerably the functioning of business infrastructure in order to secure effective training for the needs of SMEs which would be directed at the growth of their competitiveness in the market (local, domestic and foreign). The areas of priority should be an increase of skills in the field of marketing, an ability to prepare business plans, finance and innovation management. Although it can be assumed that this task should be realised mainly by the private sector, however, public administration can perform the role of a catalyst that stimulates and supports the scope of services (through e.g. subsidising the costs of training, assistance in equipping training institutions, etc.).

2. Rurality, Peripherality and rural areas in Europe

Ferrão João (Co-ordinator)⁴⁹, Lopes Raul⁵⁰, Ferreiro Fátima⁵¹

2.1. Introduction

This chapter aims to define some basic guidelines for an approach to economic development and prosperity in peripheral rural areas.

Section 2.2. summarises the main ideas on rurality and peripherality covered by the scientific production of recent decades. In relation to the former, we sum up by suggesting the use of a holistic approach in order to achieve a better understanding of rural areas today. In the latter case, the available literature leads us to put forward a four-dimensional concept of periphery: periphery as distance, periphery as dependency, periphery as distinctiveness and periphery as discourse. A final synthesis is then presented, stressing the complexity and diversity of peripheral rural areas.

In section 2.3. we analyse the FoU and diversity of economic dynamics in peripheral rural areas based on the results of the fieldwork carried out in ten case-study areas from five different countries.

Finally, several key questions are raised in Section 2.4., aimed at defining an approach to economic development and prosperity in peripheral rural areas which may provide

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support for rural development strategies and policies which are better suited to the complexity and diversity of the rural world.

2.2. Review of the Theoretical Literature

2.2.1. Rurality: towards a holistic approach

A summary of the main international literature shows that traditional approaches to rural areas basically pursue three different analytical dimensions: the economic function; patterns of human settlement and land use; way of life and cultural identity. Whether taken in conjunction or separately, they are predominantly defined by their opposition to the corresponding characteristics of urban space.

As changes took place in those dimensions, so the approach to the rural also changed. In chronological terms these changes can be organised into three distinct periods: the period leading up to World War II, the 30 years which followed it, and the last 15 years.

Until World War II rural areas were basically seen as those which were left over from the urban world. Their main economic function was to produce food. Land use was dominated by the “natural” landscape and the population density was low. People had a poor standard of living and lacked an “urban” framework of values and behaviours.

This situation was to change radically with World War II. It began to be seen that apart from its not inconsiderable positive effect on the balance of trade, self-sufficiency in food played a strategic role. In addition, the modernisation of agriculture was considered as an essential part of the effort to industrialise Europe. This explains why academics and politicians began to show an interest in the rural world — because agriculture was located there!

In the decades following World War II rural issues achieved a significant degree of prominence in the academic literature, especially in the 60s and 70s. Four main approaches to rural issues are to be found during this period:

- an approach which focuses on the management of agricultural units or farms (Heady, 1952; Fromont, 1957; Lauwe, 1963). In this area there is predominance of works which fail to take into account the social and cultural aspects of rural societies in general and of agriculture in particular;

- an approach which stresses the social change, taking place in the countryside. This area is dominated by Marxist-oriented studies (Halbwachs, 1955; George, 1964; Gervais et al, 1965; Kayser, 1973; Massey & Catalano, 1978; Newby, 1979 and
that see themselves as an alternative, adopting a critical stance in relation to the prescriptive implications of the previous approach;

• an approach focused on the peasant family and on its modes of reproduction (Chayanov, 1966 [1925]; Shanin, 1971; Vergopoulos & Amin, 1975; Vergopoulos, 1976; Mouzelis, 1978). This so-called “populist approach” criticised both the mode of capitalist accumulation and the Marxist point of view, and attempted to lay in peasant families the foundations for a third development path;

• finally, in an intermediate position by comparison to the three other approaches, we find a number of writers, namely from Southern Europe, who belonged to the Catholic rural movement (Colson, 1981). Although they were in favour of productive efficiency in agriculture, they were also committed to an ethical code for farm workers and were aware of the social aspects of life in the countryside.

The attempt to modernise agriculture which had been started in the preceding decades led to profound changes in the rural world: the social and economic role of agriculture declined; the rural exodus stagnated; standards of living in the country rose to a level which was close to that of the towns; and there was a growing social consciousness of the environmental consequences of intensive farming methods.

In addition, the processes of economic growth together with the increase in mobility had led to stronger linkages between the rural and urban worlds, so that rural areas now became increasingly differentiated according to how accessible they were from urban centres. The segmentation of the rural world between accessible rural areas involved in intensive farming and remote rural areas which had been unable to modernise their agriculture became a visible fact in most European countries.

Since the mid-eighties a revival of interest and a new way of looking at the rural environment has become evident. Three main approaches can be identified in the literature:

• an approach which stresses the social urbanisation of the countryside, although recognising the persistence of cultural and symbolic meanings related to rural identity (Chamboredon, 1985; Mathieu, 1985; Mendras, 1985), in line with early writings such as those of Pahl 1966, Rambaud 1969 and Williams 1973.

• an approach focused on ecological concerns (Mathieu & Jolivet, 1989; Buckwell, 1989; Hampicke, 1990; Bromley, 1991 and 2000; Lowe & Ward, 1993; OECD, 1994; Whitby, 1994). Bio-diversity, environmental sustainability and the wise use of rural resources become the key concepts in this area;
• a holistic approach, based on a territorial and systemic view of the environmental, social, economic and institutional dimensions of the rural world (Kayser, 1990; OECD, 1993 and 1998; Marsden ed. 1993; Berger & Rouzier ed. 1995; Kayser, 2000; Vatn, 2000).

These three approaches have several features in common. Firstly, they are not tied to a view of the rural as being equivalent to agriculture; on the contrary they strongly support multi-functionality. Secondly, they attempt to overcome the rural-urban dichotomy through key concepts such as functional integration and complementarity. Thirdly, they stress the diversity of types of rural space and rural development trajectories. Finally, they seek to establish a conceptual framework which will make it possible to adopt a territorially integrated approach. Taken as a whole, they represent what Shorthall and Shucksmith (2001) have called the shift from a sectoral (agriculture) approach to a territorial approach.

As mentioned by Perrier-Cornet and Hervieu (2002), the changes which have taken place in the countryside in Europe over the last thirty years have meant that it no longer makes sense to speak of rural societies. As an alternative, it does make sense today to speak of *rurality* as away of describing and understanding spaces which, despite their diversity, continue to share certain characteristics such as low population density and the economic, social and symbolic significance of natural resources.

There are not many studies, however, which go so far as to give concrete form to a general theory of rurality aimed at encompassing the specificity of each local area. Among the authors who have made such an attempt we should mention Berger and Rouzier (1995), who put forward a territorial approach to rural spaces based on the GREMI “milieu” concept. However, Schmitt and Goffette-Nagot (2000: 44) seem to be right when they conclude from a review of the more recent literature in the field that we are still faced with the impossibility of “putting forward a simple, precise and complete definition of rural space”, let alone a general theory of rural development.

In this document, the word “rural” will be used as a useful category for identifying and describing certain areas which have relatively specific uses or which give rise to certain specific social representations. The term “rurality” will be used as a concept, which seeks to describe those characteristics and development processes of areas which are classified as rural.

The adoption of a holistic approach to the study of rural areas provides us with a broader perspective for understanding the respective economic foundations, that is to say, an approach in which a key role is assigned to explanations of a social, cultural and
institutional nature. To what extent are rurality and development mutually related? In more concrete terms, in what distinctive ways do different types of rurality affect the propensity to entrepreneurship, entrepreneurial behaviour, corporate structure and company performance? And to what extent should the relationship between rurality and economic development be reflected in policies for the promotion of economic prosperity in rural areas? These are key questions, which this research project will seek to answer.

2.2.2. Periphery: towards a four-dimensional concept

Over the last few decades very different meanings have been attributed to periphery in the literature of regional issues. In some cases, issues related to peripheral regions are discussed against a clear conceptual backdrop. In others, descriptive categories or mere spatial metaphors are put forward. In yet others it is possible to detect an implicit reference underlying the ideas which are set out, but this is never quite formalised. This diversity of situations makes it difficult to carry out a literature survey on the main theoretical approaches to periphery. The attempt to organise such a survey, which follows, inevitably reflects that difficulty.

Regional studies which deal specifically with the periphery problem as well as those which make a significant contribution to discussing it, even though they do not contain direct pointers to the subject, suggest that there are four different conceptual approaches: periphery as distance; periphery as dependency; periphery as distinctiveness and, finally, periphery as discourse.

In traditional regional studies (Dunn, 1954; Loesch, 1954; Isard, 1956), where there is a predominance of the geometric view of space, the concept of periphery is associated with the distance from a given location to a point of reference, basically a place which is central in terms of markets and access to information and communications. Many studies, particularly those carried out in the 60s and 70s, have sought to show the extent to which the distance effect influences the spatial distribution of different phenomena, processes of spatial diffusion, mechanisms of spatial interaction and even the perceptions of the local population (Hagerstrandt 1952, Pred 1967, Gould 1969, Gould and White 1974). The view of periphery as relative geographical position, which identifies peripherality with distance and remoteness, is still dominant today in a number of studies (see Wegener et al, 2001, and the extensive bibliography mentioned therein), although this approach is tending to be shaded by other factors.

The concept of periphery as dependency was used in particular in the framework of core-periphery models of development, mainly under the theory of circular, cumulative causation (Perroux 1950; Myrdal, 1957; Boudeville, 1961; Friedmann, 1966 and 1972)
as well as in the Marxist unequal exchange theory (Sunkel, 1970; Coraggio, 1972; Seers et al 1979; Aydalot, 1980). In both cases, the peripheral condition, in its causes and consequences, is seen as situation to be denounced and fought against. What these writers are interested in are the reasons for actually being peripheral, much more than the implications of being located in the periphery. In this approach, the periphery is structurally associated with situations of dependency, and accordingly with under-development.

From the end of the 70s onwards, the genealogical approach to places led to an emphasis on the particular nature of each place. Places are presented as unique entities, by virtue of their history and the specific way in which they relate to processes with are universal in scope (Friedmann & Weaver 1979; Sthor & Taylor, 1981; Massey 1984; Cooke, 1986). In this context, the particular characteristics of many peripheral rural areas began to be seen as a positive local distinguishing factor (Moseley 1996, in Scott 2002). The existence of particular “authentic” landscapes and cultures helps to develop strategies of differentiation, which attract people and investment from the outside. In a world, which is increasingly competitive and globalised, the concept of periphery as local distinctiveness undoubtedly becomes strategically significant.

Finally the growth of representational approaches to places puts even greater emphasis on the significance of the specific character of each place, not only on the basis of its special characteristics in objective terms, but above all on the basis of the social meaning attributed to it (Short 1992; Massey & Jess, 1995; Keating, 1998). The key concept here is that of periphery as discourse or narrative.

Even though these approaches to periphery are contradictory in themselves, they do contain complementary elements. In fact an all-embracing view of peripheral regions must take into account all four aspects identified above: distance, dependency, distinctiveness and discourse. However, each of these four elements has today a different meaning to the one originally attributed to it, given the recent changes, which have taken place in contemporary economies and societies.

Relative distance from places that concentrate strategic resources to improve quality of life and economic performance is still relevant. But the effect of friction of distance, to adopt the language formerly used, is very different today. Factors as diverse as the elimination or reduction of tariff and non-tariff barriers to the mobility of people and goods, of which the European Community is an excellent example, or the expansion of the new ICTs, as evidenced by the spectacular growth in Internet use, reduce relative distance, sometimes in dramatic fashion, in terms of transport costs, travel time and
capacity to access new knowledge and new markets (Grimes & Lyons, 1994; Ray & Talbot, 1999; Grimes, 2000). At the same time, the growth of networked organisations and the emergence of polycentric structures, many of them at a global level, make the relationships between centre and periphery much more complex, encouraging multiple and cross-linked forms of integration which in no way fit in with the old dichotomies. However, relative distance from the main towns and cities – that is, from the main spatial concentrations of development resources, from more diversified and demanding markets, and from the key nodes of internationalisation – continues to have a very strong limiting influence. To sum up, the idea of periphery as distance/remoteness is still current, provided that: i) the distance concept is analytically split into two components: geographical (physical distance) and functional (connectivity); and ii) the distance aspect is analysed in conjunction with the above three other dimensions associated with the concept of periphery.

The idea of periphery as dependency is also still relevant, provided it is re-assessed in the light of today’s realities. The way in which mechanisms of internationalisation, transnationalisation and globalisation have developed over the last few decades suggests the need to replace the dichotomous concept of core-periphery dependency with more complex relations of interdependence. The general notion of peripheral territories which are dominated or exploited by interests from the “centre” has to give way to an understanding that the real world is much more fragmented, in part made up of networks of interdependence which actors from peripheral regions develop and control in very different ways.

The question of difference and local distinctiveness is therefore crucial if we are to have an adequate understanding of peripheral realities. Perhaps the relatively unexpected emergence of success stories during the 70s in some countries and regions which had been classified as peripheral led to an overestimation of the possibility of such positive and relatively singular trajectories becoming widespread. But it had the merit of breaking down the earlier structural association between periphery and underdevelopment, opening the door to associating periphery with positive difference from the standards of growth and development prevailing in regions and countries which are regarded as being more advanced. From now on, the periphery issue is not just a problem of regional imbalances to be eradicated. It is also a challenge, the assertion of difference and distinctiveness.

Finally, the idea of periphery as discourse has been shown to be very effective in several cases. But on occasion there are question marks over its sustainability over time. It is true that some peripheral regions became well-known in a way which few would have
thought possible until recently, some by reason of the “authenticity” of their culture, others by reason of the wealth of their landscapes and environment, and yet others, in smaller numbers, by reason of the niches of the world market which they have successfully created or captured. But in a world where marketing strategies and media images are so decisive and there is a thirst for novelty, the visibility peripheral regions have achieved is not always reflected in lasting mechanisms enabling new models of local development to take root. Once again, the end-result seems to be relatively unpredictable. The way forward is not blocked: but it is also not guaranteed.

This four-dimensional view of periphery helps us to understand its effects in a wide-ranging way. Distance and dependency are mainly associated with factors which hinder development in general, and economic prosperity in particular. By contrast, distinctiveness and discourse are factors which attract people and investment, and for this reason may contribute significantly to bringing about an improvement in economic conditions. Looking at the four dimensions all together enables us more effectively to understand the diversity of the impact which a region’s peripheral nature may have on key aspects of this research project: social representations of business activity, the propensity to entrepreneurship, the economic base, the behaviour of entrepreneurs, and company performance.

2.2.3. Peripheral Rural Areas in Motion: complexity and diversity

A review of the literature on rurality and peripherality enables us to identify how issues relating to peripheral rural regions have been addressed over the past five decades.

The traditional approach defines peripheral rural areas as being mainly agricultural, far from the largest urban centres and subject to an accelerated negative transformation determined by external factors. This view is best described by four key words, namely agriculture, social decline, remoteness and dependence.

In the past fifteen years, the concept of peripheral rural regions has undergone profound change.

On the one hand, the need to look at peripheral rural areas in a multifunctional way has become evident. On the other hand, an approach which tends to conduct comparative evaluations of threats and opportunities as well as weak and strong points has become widespread. From this point of view, concepts such as environmental sustainability, amenities, character, rural imageries and rural competitiveness have become increasingly relevant.
These conceptual developments, although summarised in a very simple way, raise some interesting questions.

First, it is important to point out that in some regions or even countries the conventional view is still relevant for a large part of the population. It has not lost its significance. In a realistic or symbolic way, agriculture, social decline, remoteness and dependence are still critical factors in the understanding of many peripheral rural areas.

Secondly, it is true that we have a more comprehensive view of peripheral rural areas today, since mere observation of the facts has emphasised the artificiality of certain commonly accepted dichotomies: agriculture vs. industry and services; rural vs. urban; traditional vs. modern; physical isolation vs. informational connectivity; etc. This comprehensive view means that peripheral rural areas must be addressed as complex realities marked by strong internal and external interdependencies.

Finally, growing diversification of situations in the peripheral rural areas seems to be taking place, whereby winner and loser regions may co-exist. Furthermore, the success factors in winner regions may vary significantly, and the levels of sustainability of this success over time are also very diverse. Fragmentation and differentiation are therefore two important features of peripheral rural areas as a whole.

Our review of the literature on rurality and peripherality suggests the need for a dynamic and comprehensive view of rural areas (see also Eskelinen & Snickars, 1995). This perspective should take into account the change processes, the actors involved in them, as well as the contexts which shape their actions. It should also take into account both material and subjective aspects, like attitudes, values, behaviour, and expectations. In other words, the complexity which we know to be characteristic of peripheral rural areas today imply a need for a holistic approach capable of bringing together the multiplicity of factors involved, in a coherent and balanced way. It is against this background of complexity, which contains FoU and FoD at the same time, that we should interpret the cultural, social and institutional foundations of economic development in peripheral rural areas.

2.3. Empirical Findings

In this section we re-examine the contents of Part 1 taking into account the results obtained in the 10 CSAs distributed across the five countries involved in the research network. Fieldwork was basically carried out during 2001. Two sources will be used in the following sections: an Entrepreneurship Survey applied to the 100 top innovating firms in each case-study area and interviews with local key informants.
2.3.1. Businesses in Peripheral rural Areas: Factors of Unity and Diversity
According to the Results of the Entrepreneurship Survey

Factors of unity

The main defining characteristics of the sample of surveyed firms can be summed up as follows:

• Businesses run by middle-aged men

Gender (more than 80% are men) and age (30 to 60 years, with preponderance of the 40 and 49 age group) are the attributes of entrepreneurs most commonly shared by all the regions.

• Small or very small-size mature businesses, acting in a large variety of lines of business

About 80% of the businesses interviewed are micro businesses (50%) or small businesses (30%), that is to say, businesses with fewer than 5 or 20 workers and predominantly having a turnover of less than €275,000 in 2000. 46% of the businesses were set up over 10 years ago, while only 28% have been set up in the last 5 years. Activities are quite diversified, although the following predominate: trade, restaurants and similar activities, business services, building and non-metallic mineral products industries, food processing, clothing and agriculture.

• Businessmen and businesses with relevant local integration but little value added through local know-how

There is considerable local integration of businessmen and businesses, both in the social and economic spheres. With the exception of the Polish, more than 40% of businessmen are members of trade associations/chambers of commerce. The majority (58%) were born in the place where the firm is located52. Looking at the regions as a whole, about 50% of businessmen say they chose their present location because they were born there, by reason of their family or because the business was already located there. That is to say, the location was a conditioning factor rather than a personal choice.

Despite businessmen’s strong local embeddedness, only a few (19%) state that they took advantage of local know-how at the level of product innovation. The English regions, Left

52 The German and English regions are an exception, since the proportion of businessmen coming from outside the region is high, and sometimes very high—as in Nordwestmecklenburg—73%.
Bank and Lesvos stand out in a positive way, with 30% to 40% of businesses stating that they have taken advantage of local know-how.

- Businesses with weak internationalisation and strong dependence on the regional market

There is weak internationalisation (only 32% of businesses sell their products abroad and, for 56% of those, exports account for less than ¼ of their turnover) and a strong dependence on the regional market. For 56% of the businesses selling to the regional market this is the destination of over 75% of their sales.

- Businesses with a predominantly passive innovation profile

All the businesses interviewed were selected from the set of businesses that were regarded as being innovative in the regional context53. In spite of this, 40% of businesses had not taken any recent active steps towards innovation. They showed an increase in turnover, but without an active innovation strategy. This is the typical situation in Oeste and the Polish regions. In these cases economic success is due not so much to the effort of innovation, but to the degree of business initiative combined with regional market dynamics, together with proximity and ease of access to urban centres of significant size.

- Businesses with good or reasonable economic performance

Taking as points of reference the change in turnover and in the number of employees between 1998 and 2000, as well as the average turnover per worker in 2000, we defined a typology based on businesses’ economic performance levels (Table 2.). The comparative economic performance of over 60% of businesses can be classified as good or reasonable.

- Positive perception of rural location

Over 1/3 of the businesses interviewed were located in remote rural areas. However, some 60% of entrepreneurs interviewed consider that the access to both educational services and road networks is “good”. On the other hand, 54% of businesses do not regard their rural location as being an obstacle to innovation.

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53 It must be stressed that for 38% of the businesses there is no information regarding their innovative profile (the following regions stand out: English regions, where the lack of answers to the corresponding questions is widespread; and Bialystok, where about half of the questionnaires does not contain information on this subject).
Table 2. Typology of businesses’ economic performance levels

<table>
<thead>
<tr>
<th>Levels of economic performance</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>Average turnover per worker (2000) &gt; € 50,000, change in turnover 2000/1998 &gt; 10% and change in number of employees 2000/1998 &gt; 0%</td>
</tr>
<tr>
<td>Good</td>
<td>Average turnover per worker (2000) &gt; € 50,000, change in turnover 2000/1998 &gt; 10% or change in number of employees 2000/1998 &gt; 0% OR Change in turnover 2000/1998 &gt; 10% and change in number of employees 2000/1998 &gt; = 0%</td>
</tr>
<tr>
<td>Reasonable</td>
<td>Mixed results fitting Reasonable and Weak performance criteria</td>
</tr>
<tr>
<td>Weak</td>
<td>Average turnover per worker (2000) &lt; € 50,000, change in turnover 2000/1998 &lt; -10% and/or change in number of employees 2000/1998 &lt; 0%</td>
</tr>
</tbody>
</table>

Factors of diversity

Alongside the predominant common characteristics mentioned above, there are also aspects which differentiate between the CSAs. The following two seem to be the most significant:

- Access to, and the use of, ICTs

Access to, and use of, ICTs is undoubtedly the aspect that best shows the differences between the CSAs and at the same time that which best explains the way in which the national conditions shape the specificity of each country’s rurality. In fact, 84% of businesses interviewed in Nordwestmecklenburg and 93% of those interviewed in Waldshut have access to the Internet. In the English regions this occurs in 61% of businesses in Cumbria and 67% of those in Devon. By contrast, in the other six regions the proportion of businesses having access to the Internet ranges from 27% in Bialystok to 54% in Kilkis.

E-mail is by far the main use which businesses make of the Internet, followed a long way off by use as a source of information on markets and/or suppliers. Only in the German and English regions is the Web used by a significant number of businesses as a tool for commercial advertising. Only rarely are ICTs used as a support mechanism for E-commerce or B-Commerce. Moreover, the use of ICTs in management, data interchange or in computer-aided manufacture is of key significance to 10 to 25% of users, obviously from among those located in one of the German and English regions.
Entrepreneurial profiles

Through a process of multiple correspondence analyses, we have identified 7 entrepreneurial profiles (Table 3.). These profiles are different from region to region, this being the main aspect which differentiates between the CSAs.

Table 3. Main entrepreneurial profiles

<table>
<thead>
<tr>
<th>Entrepreneur profiles</th>
<th>Characteristic attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>University education</td>
<td>University graduates or postgraduates, 40-49 years, started in business when they were 30-39 years old</td>
</tr>
<tr>
<td>Technical education, member of a family with entrepreneurial experience</td>
<td>Technical education, sons of businessmen, 30-39 years old</td>
</tr>
<tr>
<td>Secondary school, middle-aged</td>
<td>Secondary school, 40-60 years old</td>
</tr>
<tr>
<td>Primary school</td>
<td>Primary school, 30-39 years old</td>
</tr>
<tr>
<td>Older, latecomer entrepreneurs</td>
<td>Age &gt; 50 years old, started in business when they were 50 years old</td>
</tr>
<tr>
<td>Young, parents run a business</td>
<td>18-29 years, sons of entrepreneurs</td>
</tr>
<tr>
<td>No formal education</td>
<td>&lt; complete primary school</td>
</tr>
</tbody>
</table>

In the German and Polish regions, more than 70% of businessmen fit into two profiles: those having graduate or post-graduate education (predominant in Nordwestmecklenburg and Bialystok), and those having medium-level technical education, generally the descendants of persons with business experience.

In the Greek and English regions, these two profiles are combined with those of middle-aged entrepreneurs having secondary education, and account for at least 62% of these region’s businesses, except in Devon where the proportion is lower (48%).

Finally, in the Portuguese regions, about half the number of entrepreneurs have completed only primary school education or have no formal level of education at all (this last group of entrepreneurs is also significant, 24%, in Devon).

In addition to these profiles, the following profiles, although of lesser significance, should also be mentioned: i) businessmen who started out in the activity after their fiftieth birthday (an over-represented group in the English regions, in about 20% of businesses), and ii) young entrepreneurs under 30 who are sons of businessmen (over-represented in the Portuguese regions and in Lesvos, where they account for about 10% of businesses).
Additionally, the following aspects also correspond to a relevant divide for some of the case-study areas:

- **Size of firms**

The German regions, Kilkis, Białystok and Cumbria stand out by reason of the relevant number of medium and large-size firms, some of them established over 20 years ago.

- **Innovation dynamics**

In the Left Bank and in the Greek, German (and possibly in the English) regions the entrepreneurial fabric emerges divided in this aspect, with a significant minority of businesses pursuing active product, process and market innovation strategies. In these cases, about 1/5 to 1/3 of businesses are positioning themselves as competitors not only in the regional market but also in the national and international markets.

- **Perception of accessibility and rural location as constraints to innovation**

The perception that the businessmen interviewed have of how accessible their respective region is enables us to group them into three categories:

- For entrepreneurs in the English, Polish and Nordwestmecklenburg regions their location provides them with a good or even very good/excellent access;

- At the opposite end we find entrepreneurs from Lesvos, the Left Bank and Waldshut, where the proportion of those who judge their accessibility to be bad or very bad is unmatched in the remaining regions. In the case of Lesvos, 46% of entrepreneurs make this assessment. In the other two regions the values are, respectively, 29% and 21%;

- Oeste and Kilkis are in an intermediate group. Most entrepreneurs judge that they have good accessibility.

Surprisingly, the above clustering of regions does not tie up with perceptions of rural location as an obstacle to innovation. This may mean that accessibility to road and telecommunication networks is not of itself the main constraint on innovation for the majority of the businesses interviewed.

In fact, the main obstacles to innovation (product/service, process/technological and market innovations) mentioned by businessmen as being associated with their rural location are as follows: remote location (25% of businesses); economic structure (19%); and the entrepreneurial fabric (16%). The low level of available business support services
was mentioned by 13% of businesses and the lack of a qualified/specialised workforce was mentioned by just 4%. If we take these last four factors as indicators of the “dependency” element in the four-dimensional concept of periphery, then it would seem correct to state that it has a greater effect on company behaviour than the “distance” element.

**Rurality and economic regional dynamics**

Having outlined the characteristics shared by the ten regions under study and those that contribute to their differentiation, the key question is: to what extent can we explain the diversity of economic regional dynamics by the kind of rurality that operates as an environment for the businesses?

Table 4. shows that the economic performance of a business differs considerably from region to region, and even within each region.

If we weight the proportion of businesses in each region by their respective economic performance level (see criteria used in Table 2.), we are able to order the regions’ results on two rough levels:

- on the first level, with medium to good performance, Cumbria and the German and Portuguese regions stand out, since at least half of businesses achieve *Good* or *Very Good* performance and the *Weak* category is under-represented;

- on the second level we have the Greek and the Polish regions, where most businesses achieve only *Reasonable* or even *Weak* performance.
Table 4. Percentage of businesses by economic performance (%)

<table>
<thead>
<tr>
<th>Case study areas</th>
<th>Levels of economic performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Good</td>
</tr>
<tr>
<td>Lesvos</td>
<td>5</td>
</tr>
<tr>
<td>Kilkis</td>
<td>0</td>
</tr>
<tr>
<td>Oeste</td>
<td>6</td>
</tr>
<tr>
<td>Left Bank</td>
<td>8</td>
</tr>
<tr>
<td>Nordwestm</td>
<td>17</td>
</tr>
<tr>
<td>Waldshut</td>
<td>23</td>
</tr>
<tr>
<td>Bialystok</td>
<td>7</td>
</tr>
<tr>
<td>Zary</td>
<td>7</td>
</tr>
<tr>
<td>Devon</td>
<td>19</td>
</tr>
<tr>
<td>Cumbria</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
</tr>
</tbody>
</table>

What is the explanation for these different regional patterns of economic performance?

We might have expected that better economic performance would be associated with better qualified entrepreneurs, greater efforts at innovation, larger-size businesses, less peripheral location, or larger settlement size. But this is not the case.

From among the explanatory factors analysed, the one which differentiates the regions the most is entrepreneurial qualifications, an area in which Portuguese businessmen dramatically contrast with German and Polish ones. However, this asymmetrical pattern is not matched in the levels of regional economic performance. For example, if we look at the businesses which perform well or very well, any of the Portuguese regions has better results than the Polish ones. Actually, the Portuguese regions are at the level of the German and English regions, in spite of the marked differences in the qualifications of entrepreneurs in these regions.

There is no link either between the level of regional economic performance and innovation patterns, as the case of the Greek regions illustrates. Good/very good performance is much more likely to be found in a business which actively innovates globally, but for businesses with other innovative profiles there is no conclusive link between innovation and performance.
There is also no clear relation between regional economic performance level and business size. When it seems to exist, it is due to the fact that there is a greater incidence of global innovation strategies among the larger firms, while micro businesses tend to limit themselves to the exploitation of regional market niches.

Finally, if we look for an explanation of the differences in regional economic performance in the degree of geographical peripherality or in settlement size, the only association one can establish is that weak economic performance is more often found in large places located at semi-urban rural areas.

In addition, every attempt at cluster analysis using multiple matching methods showed that the national component accounted for more differences than did different rural categories.

As far as regional economic performance is concerned, this result is in line with our analysis. Indeed, the national framework component prevails over rural internal diversity: the differences in businesses’ performances are more significant between countries than between different rural areas in the same country. If we take into account the leading characteristics of the research sample, such results are not surprising. The majority of the businesses analysed adopt only the region as a market reference, because they do not actively compete in the international market. In these circumstances, the national market of which the region is a part shapes the businesses’ referential price system. In other words, it is possible to find in the rural areas successful businesses in their territorial context which would not be even viable if they had to compete actively in the international market.

This suggests that business behaviours must be assessed in the light of the local context where they operate:

- A more competitive context necessarily implies more proactive behaviours as far as innovation is concerned. German regions seem to illustrate this well.

- In some contexts, however, the larger scale of the market may not be reflected in increased competition, but instead in more business opportunities, even without active innovation strategies, simply because of the extension of the market threshold necessary to make the business viable. This is what seems to happen more often in the regions of Oeste, Bialystok and Zary.

- On the other hand, the success of businesses located in remote regions with a small local market is dependent on success in extra-regional markets. To achieve this,
they need to make a greater effort at innovation. Lesvos and Left Bank seem to illustrate this well.

### 2.3.2 Peripheral Rural Areas: factors of unity and diversity according to the results of the interviews

#### An approach to the dynamics of rurality

In each of the ten CSAs at least fifteen interviews were carried out with: i) successful entrepreneurs derived from the Entrepreneurship Survey or suggested by key informants or other local actors, covering the most relevant sectors of business and different types of rural areas, and ii) public and co-operative entities having a significant role in the business dynamics of the area under study. These interviews enabled us to complement the results of the Entrepreneurship Survey previously carried out.

#### Table 5. Peripheral Rural Areas: Main FoU and FoD according to the interviews carried out

<table>
<thead>
<tr>
<th>Factors of unity</th>
<th>Factors of diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main opportunities</strong></td>
<td><strong>Main Threats</strong></td>
</tr>
<tr>
<td>Natural environment and quality of life</td>
<td>Structural change in traditional industries</td>
</tr>
<tr>
<td>In-migration (inward migration) flows: urban population relocation to rural areas (retired and working age people)</td>
<td>Out-migration (outward migration) flows</td>
</tr>
<tr>
<td>ICT role to overcome remoteness constraints</td>
<td>Ageing and decline of indigenous population</td>
</tr>
<tr>
<td>Low production costs (wages and land prices)</td>
<td>Income polarisation</td>
</tr>
<tr>
<td>Impact of urban lifestyle on the expansion of local markets</td>
<td>Environmental degradation</td>
</tr>
<tr>
<td></td>
<td>Disruptive impact of urban lifestyle on local culture and regional identity</td>
</tr>
<tr>
<td></td>
<td>Skill shortage, seasonal employment, availability of young apprentices</td>
</tr>
<tr>
<td></td>
<td>Changes in CAP</td>
</tr>
<tr>
<td></td>
<td>Competition from less developed countries</td>
</tr>
<tr>
<td></td>
<td>Relocation of manufacturing plants</td>
</tr>
<tr>
<td></td>
<td>Shortage of industrial and commercial premises</td>
</tr>
<tr>
<td></td>
<td>Location/physical conditions/accessibility</td>
</tr>
<tr>
<td></td>
<td>Population density, size of settlements</td>
</tr>
<tr>
<td></td>
<td>Socio-economic base</td>
</tr>
<tr>
<td></td>
<td>Endowment of technical infrastructures</td>
</tr>
<tr>
<td></td>
<td>Institutional capacity</td>
</tr>
<tr>
<td></td>
<td>Risk and co-operation propensity, innovation capacity</td>
</tr>
<tr>
<td></td>
<td>Human capital development and labour mobility</td>
</tr>
<tr>
<td></td>
<td>Capital availability, investment intensity</td>
</tr>
<tr>
<td></td>
<td>Size of local market</td>
</tr>
<tr>
<td></td>
<td>Stock of businesses, entrepreneurial skills and managerial experience</td>
</tr>
<tr>
<td></td>
<td>Local supply of goods and services</td>
</tr>
<tr>
<td></td>
<td>Public support available</td>
</tr>
<tr>
<td></td>
<td>Land use and landscape protection regulation</td>
</tr>
<tr>
<td></td>
<td>Job opportunities</td>
</tr>
<tr>
<td></td>
<td>Level of productivity</td>
</tr>
<tr>
<td></td>
<td>Level of income and prosperity</td>
</tr>
</tbody>
</table>
The Entrepreneurship Survey provides us with a quantitative description of various aspects which seek to relate the different contexts of rurality with the behaviour of entrepreneurs and companies. The interviews provide us with a more procedural view of those relationships. It is true that, because there are not many of them, we cannot use them to make broad generalizations. But provided we keep the existing literature in mind when looking at the replies we obtained, we can legitimately interpret them in a way which has a wider reach than the restricted universe of the 10 areas under study. The comments which follow seek to establish a balanced relationship between the limited number of interviews carried out, the specific nature of the cases studied and the existence of trends and processes for which the available literature provides copious examples.

Table 5. summarises the main FoU and FoD in these rural areas, as highlighted by the various interviewees. This list confirms the need to look at these areas in a comprehensive manner, and to assess both their negative and positive aspects at the same time.

The interviews conducted also help us to understand the ongoing processes of change in the areas under study. The following paragraphs analyse the results obtained in relation to the economic base and entrepreneurial strategies, and seek to relate them with the dynamics of development observed in differing rural areas.

**Development paths for different types of rural areas**

The typology of rural areas based on the trilogy remote/accessible/semi-urban areas is a relevant starting point but an insufficient one. In fact the location of rural areas vis-à-vis the main markets and the main national and international access routes is an element which significantly affects their development. But the location effect must be weighed up against other factors, mainly each region’s history and economic profile, that is to say, its development path.

Four basic situations can be considered, taking as the main reference the classification of rural areas used by the Federal Office for Building and Regional Planning (Germany) (Diagram 3.):

- **Rural areas with poor access and poor physical resources**: these are essentially mountainous or semi-mountainous areas with low population density and unfavourable living conditions; they also include some border areas.

- **Rural areas with a specialised economic base**: these are areas with very different characteristics in terms of location and living conditions, but which have in common
situations of structural decline or intense restructuring of previously prosperous activities: agriculture, mining and manufacturing industries, tourism.

- **Rural areas with a diversified economic base**: these are regions which, for accidental reasons or by reason of their relative location, based their development on a relatively diversified set of activities, usually from a dynamic regional market which created the conditions for the growth and diversification of local businesses.

- **Rural areas near urban agglomerations of significant size**: these are regions functionally integrated in urban, and mainly metropolitan, development dynamics; they have a diversified economic base, which benefits from their proximity to a large consumer market and also from the fact of being able to attract activities that require cheap space and a low-cost workforce.

These four basic type-situations complement the remote/accessible/semi-urban rural areas trilogy used earlier and enable us to place the results of the interviews in a more general interpretative context.

Path dependency is a crucial feature if we are to obtain a better understanding of the development of rural areas. It is therefore important to understand the ways in which each of the above-mentioned type-situations will develop and the preferred options for that development.

Throughout the history of rural areas with poor physical and location conditions, traditional forms of agriculture, generally of a peasant nature, have prevailed. The demographic decline recorded in these regions has lead to changes in land use, and the replacement of agriculture with activities which involve less human labour (forestation, for example). If the emigration and ageing trends recorded over recent decades are maintained, many of these areas will become totally uninhabited, some will be transformed into natural parks, and others just abandoned.

The interviews carried out in the CSAs with these characteristics enabled us to identify two types of activities with development potential:

- **Activities based on tourism and leisure of an alternative type to the traditional sun-beach summer destinations** (winter skiing resorts, centres for active mountain sports such as rafting, tracking, climbing, mountain bicycle, centres of winter vacations, etc.).

- **Agricultural methods based on the conversion of conventional practices to organic farming**.
These two types of activities can obviously be linked, as in the case of agro-tourism initiatives.

Rural areas with a specialised economic base - agriculture, mining, manufacturing, tourism – are characterised by the intensive exploitation of local, natural and human resources which these regions possess in abundance. The results of these activities were often devastating, not only on account of the depletion of the exploited resources, but also for the environmental and cultural destruction they brought about. The structural decline of the prevailing activity and increasing competition from less developed countries, with lower wages and less demanding legislation in the environmental and social areas, adds to the problem of resource depletion and the side effects of their exploitation.

In general terms, these rural areas are faced with three possible development scenarios: i) continuation of the same kind of activity and business behaviour, with inevitable degradation of the environment and local quality of life; ii) continuation of the same kind of activity, but integrated into a wider and improved regional value chain, capturing new, more demanding and specialised markets; iii) total reconstruction of the previous economic base.

The results of the interviews show the need to avoid the first scenario and the implausibility of the third. It is important therefore to find out to what extent it is possible to bring about the second scenario. How things develop depends clearly on the present economic specialisation:

- **Areas specialised in mass-production agriculture**: development of organic farming and agro-food clusters oriented towards more demanding markets, as far as the product quality and authenticity is concerned.

- **Areas specialised in intensive mass tourism**: development of tourism and leisure clusters based on adding value to local amenities and heritage, and oriented towards specific target consumers (environmental and cultural tourism, etc.).

- **Areas specialised in labour-intensive mining and manufacturing activities**: the conversion of existing activities is, in these cases, substantially more difficult, requiring special support programmes for the restructuring of the local economy. To some extent, the development scenario for this type of area is closer to the third scenario identified earlier.

Changing the pattern of existing economic specialisation presupposes, in every case, greater diversification of the region’s economic base: on the one hand, as a consequence
of the development of clusters of related activities, and not of a single specific segment of the value chain as happened before; on the other hand, because the improvement in the quality of life of the local communities encourages the expansion of more specialised personal and social services. On- and off-farm diversification support programmes are good examples of this type of development path.

Areas with a diversified economic base stand out by reason of two main factors: accessibility and quality of life. Ease of access to the national and international markets and the preservation of a quality rural environment are the main elements in retaining people and businesses and in attracting newcomers from the urban regions, where living conditions are less and less favourable.

Although the diversity of the economic base may be linked to real-life situations in which there are differing degrees of competitiveness and sustainability, this type of area in general provides a better foundation for development than those described earlier. The existence of a dynamic regional market and the capacity to attract newcomers with diverse social and economic profiles contribute to positive development which does not disrupt the previous life of the region.

The results of the interviews carried out in the ten areas under study identified several main emerging clusters:

- **Tourism & leisure cluster**, involving such distinct elements as agro-tourism, theme parks, regional restaurants, the different forms of active tourism (horse-riding, cycling-tourism, etc), environmental, cultural and sports activities for students, decentralisation of museums from the big cities, etc.; these changes contribute to transforming the tourist sector from one oriented towards the short summer season, to one aimed at the all-year round market.

- **Health & care cluster**, reflecting the increasing demand for this type of service, which is associated with the increase in purchasing power and the ageing of the local populations, and also the creation of health centres and other private nursing and care homes for the elderly urban population; in many cases – rest cures and hot baths tourism, for example – the activities of health care may be associated with activities in the tourism and leisure cluster.

- **New business clusters**: i) ICT sector: graphic design, computer software, web design, communications, multi-media, and television and video; these businesses are typically very small, consisting of just one or two people often running them
from their homes; ii) environmental and renewable energy technology, especially chemicals and biotechnology; iii) marine technology, etc.

At the same time, consumer services, manufacturing SMEs and trade enterprises are developed, reflecting the dynamism of the regional market and the improvement in the qualifications of human resources and in the telecommunications infrastructure.

Finally, the areas close to main urban agglomerations will tend to increase their dependency in relation to those centres. Improvements in communications and the saturation and increasing costs of urban spaces reinforce the direct influence of these agglomerations. This growing urban pressure has contradictory consequences on rural areas. On the one hand, it facilitates access to the large consumer market and the attraction of a great number of people and businesses to the accessible rural areas. But this trend increases the price of houses and of labour in the receiving rural regions, encouraging moves to more remote areas. And it may also contribute to depriving the rural areas of their character, as they become increasingly suburban.

Development trends in this type of rural area are relatively unpredictable. They will depend heavily on the type of relations established in the future with the closest city, and on the effectiveness of land use regulation procedures in rural areas. The regions analysed show that, besides the development of diversified activities, promoted by the combined effects of expanding regional and nearby urban markets, there is one particular cluster which has strong development potential:

- **Transport and logistics cluster:** proximity to a large consumer centre, good access and the availability of space explain the development of a set of activities connected with the logistics of product distribution. This becomes more complex as the urban agglomeration becomes larger and more diversified.

*In short,* the results of the interviews carried out in the ten CSAs seem to confirm the following:

- **Periphery as distance** is a crucial element in explaining the existence of different types of rurality, but it is particularly relevant in extreme situations: remote rural areas with negative physical and locational conditions (remoteness effect) and rural areas close to main urban agglomerations (market proximity effect);

- The **distance-periphery criterion** must be complemented with elements relating to the type of economic base prevalent in each region, which is strongly related to the dependence and distinctiveness components of the 4D periphery concept:
i) Nature of the economic base (e.g. specialised vs. diversified base).

ii) Nature of the main businesses (e.g. those in structural decline vs. emerging activities).

iii) Business organisation (e.g. segmented vs. clustered activities).

iv) Market-orientation (e.g. regional vs. national and international markets).

In the same way, the types of economic players and entrepreneurial strategies to be found in different rural areas should be assessed in the light of the prevailing type of rurality in each case (Diagram 3.).

Diagram 3. Development paths for different types of rural areas

[Diagram showing development paths for different rural areas]

A - Traditional prevailing activities; B - Recent / near future trends; Winner activities; Looser activities
Business strategies and regional differentiation

Here too, our interviews brought out interesting facts. Based on the available information for the CSAs, we were able to identify six predominant business strategies among the businesses which have some innovative potential:

- Regional players: market expansion within the region

These are businesses which seek to increase sales by obtaining more clients of the same type within the region. It is therefore a strategy of extensive, regionally-based growth, which generates moderate increases in profits.

This strategy is particularly significant among local businessmen, owners of micro businesses, who do not intend to innovate at the level of product, process, or markets. They operate in regional markets that are dynamic or that have not yet reached saturation point in terms of local supply.

- Niche players: product differentiation partially supported by process innovation

This strategy is based on product differentiation, sometimes of a handicraft nature and therefore taking advantage of the local accumulation of specific know-how. Process innovation tends to have a secondary role, depending on the type of innovation carried out at the product level.

This strategy is adopted in particular by local businessmen, owners of micro businesses or SMEs. Most of them are well integrated in the local entrepreneurial milieu. In some cases, remote location or poor accessibility has helped to protect them from outside competition, a fact which may have been crucial in an initial phase of development.

The most successful businesses may become leading regional players, standing out from other companies in the same line of business. In these cases, an orientation towards the national or even international market tends to take over from the previously prevailing orientation towards the regional market or visitors to the region.

- Late rationalization: technological modernization and employment decline

This strategy can be found in traditional lines of business undergoing structural change. The innovation here is based on technological modernisation, aimed at reducing workforce numbers and increasing productivity. The majority of the businessmen involved in this type of strategy are indigenous, but the size of the firm and the type of activity are very different.
• Urban survivors: conservative development strategies in large settlements

This strategy is based on the reactive adoption of incremental product and process innovations to try to maintain the present market share in urban areas. As with the previous strategies, it is mainly adopted by local businessmen. The reactive and conservative nature of this strategy is confirmed by the fact that, in a significant number of cases, it was unable to reverse the trend towards lower turnover.

• Regional leading players: organizational innovation based on ICT

This strategy is developed in innovative businesses mainly owned by newcomers or local second-generation businessmen, with high or medium-to-high levels of educational attainment. The search for new markets outside the region is crucial for the implementation of this strategy.

Increases in sales and in workforce numbers take place as a result of entry into new national or even international markets. Size of firms varies substantially. They may be limited to 1 or 2 persons working from home or they may have a considerable number of workers. Investment in process innovation and the existence of shared capital by other firms outside the region are also elements generally associated with this type of strategy.

• Globally innovative firms: product/service, process and organisational innovation

Businesses adopting this strategy are committed in a global and integrated fashion to every component of innovation. The businesses involved are very diverse but, in general, their activities have high added value. Generally, they stand out by reason of their strong economic performance and because they are strongly committed to obtaining new customers and penetrating new markets. In some cases, penetration of the regional market operated as a springboard for subsequent entry into more sophisticated markets and for obtaining more demanding customers.

In abstract terms, each of these business strategies may be found in each type of rural regions previously identified. But it is understandable that the relative incidence is differentiated by region. One may therefore ask: how does the incidence of these different strategies vary by type of region?

The empirical evidence from the case studies is not conclusive in this area. Within each of the regions analysed there are variations according to accessibility and settlement size. There are also differences between the ten regions which seem to be linked to how near or far they are from the centre, in both European and national terms. However, there are
no clear patterns which might enable us to derive a broad linear relationship between the type of rural region and the prevailing types of business and innovation strategies.

2.4. Final Remarks

The results of the fieldwork carried out in the ten CSAs enable us to stress the following key

- Rurality: the incomplete shift from sectoral approaches to holistic approaches

The holistic view of the rural world is today shared by a significant number of businessmen and institutional actors, but there is no consensus on this as yet.

The sectorally biased view, based on agriculture-related activities, is maintained at the level of individual representations or even of the formulation of some rural development support policies. The persistence of this stance seems to be positively correlated with the degree of the region’s underdevelopment. In areas where the economic and symbolic role of agriculture is still significant, and where the incidence of urban values and lifestyles is weaker, the identification of the rural world with agriculture remains strong. For this reason, rural areas are seen as clearly opposing urban areas.

By contrast, in the more developed countries and regions, the preservation of the environment and the quality of life in rural areas are seen as strategic elements in encouraging the establishment and attraction of a more diversified scope of activities run by individuals with high or medium-to-high levels of educational attainment. In this conception, there is no fundamental opposition between rural and urban realities. On the one hand, because it is acknowledged that the rural areas are inevitably becoming more and more urbanised in social and cultural terms. On the other hand, because it is acknowledged that there are a growing number of situations in which it is not possible to establish a clear line of demarcation between rural and urban spaces based on conventional morphological and functional criteria.

- Rurality differentiation: from local to national explanatory factors

The results obtained enable us to see that national characteristics influence key areas of the rural regions in a significant way. For example, the differences in the levels of educational attainment, in the propensity to innovation, in planning culture or in the State’s methods of providing support to business tend to be greater as between different countries than between different rural regions within the same country. This means that any analysis of the existing differences between rural regions of different countries must try to identify the relative importance of national and regional explanatory factors.
The concept of peripherality: beyond the geographical position approach

The multidimensional concept of peripherality suggested in Part 1 – peripherality as distance, dependence, distinctiveness and discourse\(^ {54}\) – underlies many interviewees’ answers, although generally in an intuitive and therefore not very structured way. The results obtained show that there is no straight-line association between peripherality and remoteness or negative situations in the minds of a great many of the businessmen surveyed and the key informants interviewed. Although distance to the main markets is considered to be a significant constraint, both interviewees’ representations and business performance figures show that there is no linear relationship between peripherality and the occurrence of less favourable situations due to their relative geographical position.

The definition of peripherality: from national to international explanatory factors

Liberalisation of frontiers and deregulation of markets imply that the peripheral nature of a region can no longer be defined at just the national level. Globalisation processes in general, and the consolidation of the European market in particular, mean that the four analytical dimensions of regional peripherality are increasingly defined simultaneously in national and international terms. The results obtained confirm this. This means that many peripheral rural regions of the more developed countries are certainly less “peripheral” than many central rural regions in peripheral countries.

From rurality and peripherality to peripheral rural areas: the need for a dialectical synthesis

Our analysis shows that the adoption of comprehensive approaches for the concepts of rurality and peripherality makes these two dimensions inseparable.

The assessment of the rurality of a region necessarily takes into account the degree and the nature of its peripherality. Likewise, the peripherality of a region reflects its type of rurality. Rurality and peripherality are constitutive elements of each other.

International typologies of rural areas: which criteria are the most significant?

The production of typologies of rural areas applicable to different countries presupposes the definition of a supranational reference framework based on simple criteria and comparable indicators. There are many international typologies, based on a variety of different criteria. As far as economic development is concerned, the results obtained

\(^{54}\) In actual fact we obtained only a superficial understanding of this element, because it requires a methodological approach which is different to the one used in our field work.
suggest the relevance of the following three criteria: access to the main markets (e.g. physical and functional integration in wider spaces), economic base (e.g. business structure and functional specialisation) and key actors (e.g. individual, institutional and collective capabilities and skills, social relationships).

- Peripheral rural areas and economic development

Our results enable us to draw a general picture of the type of businesses prevailing in peripheral rural areas – or at least of the type which is over-represented by comparison to other regions: the middle-aged businessman, well integrated into his local community, who owns a small or very small company which performs well or reasonably well, basically as a result of having pursued strategies of extensive growth (selling the same type of product or service to more customers in the region). Companies with a more proactive stance, as far as innovation and penetration of new markets are concerned, stand out from this general type. They all make intensive use of new ICTs and are more international in their outlook. The relative significance of these factors has to be examined in the light of very different factors, some of which are national in scope, others which have to do with the specific history of each region. The next chapter, on entrepreneurship, will look at these issues in greater depth.

- Peripheral rural areas and economic development policies

The complex and diverse nature of peripheral rural areas underline the need to look at their economic development through bottom-up approaches capable of generating policies and tools which are suited to the needs, the priorities and the opportunities in each region. However, the significant impact of other factors which are national and international in scope, as our results clearly show, implies a need to coordinate those policies and tools with top-down approaches at the national and community levels. This issue will be examined in greater depth in the chapter covering policies for the promotion of local entrepreneurship and economic development in peripheral rural areas.
3. A suggested typology of rural areas in Europe\textsuperscript{55} 

\textit{Labrianidis Lois, Kalogeressis Thanassis}\textsuperscript{56} 

There is a need for more sophisticated methodologies of classifying European regions, based on the increasing availability of a wealth of socio-economic and demographic data at the regional level. In the context of this study, we used a 149 x 1093 data table\textsuperscript{57} that contained socio-economic and demographic information on 1093 NUTS 3 regions. However, given that our main aim was to create a typology for rural regions, we decided to exclude from the analysis all the regions, which had within their administrative boundaries an urban agglomeration with a population larger than 500,000 inhabitants. Further, we excluded all the regions, which had a population of over 65% living in conurbations with more than 10,000 inhabitants. It can be argued that these variables capture different aspects of the socio-economic, demographic and urban or rural character of NUTS3 regions.

Based on these criteria, our initial population of regions was split into rural and urban areas or areas that had a predominantly urban character. The next step was to further split the rural regions into sub-groups on the basis of their accessibility. First, we disaggregated all rural regions into \textit{peripheral}, \textit{Semi-peripheral} and \textit{accessible rural} on the basis of the travel time to the nearest of the 52 important international agglomerations. In particular, we used the time required to travel from each region by road, rail and boat\textsuperscript{58}.

After exploring various combinations of travel time-based criteria, we concluded that it would be reasonable to define as \textit{peripheral} the 25% of regions with the highest travel time (211 regions in total). It is noteworthy that all these rural regions had a travel time, which was more than 135 minutes. Likewise, we defined as \textit{accessible rural} the 50% of regions with the lowest travel time and as \textit{Semi-peripheral} all the remaining regions. All the \textit{Semi-peripheral} regions had a travel time less than 135 minutes and more than 82 minutes, whereas the \textit{accessible rural} areas had travel times less than 82 minutes (Table 6.) depicts the spatial distribution of all the regions.

\textsuperscript{55} This section is based on a joint paper with Ballas D. 
\textsuperscript{56} both at RDPRU, University of Macedonia, Thessaloniki 
\textsuperscript{57} The main data source used throughout the analysis was Eurostat’s \textit{Regional database} (REGIO). For a complete list of the variables collected see 0. 
\textsuperscript{58} The data on accessibility used was provided by the transport network model of the BBR (former BfLR) (see Lutter & Pütz, 1998)
The next step in the analysis was to further disaggregate the regions on the basis of their economic dynamism and competitiveness. It can be argued that the latter is expressed to a certain degree by the number of patent applications in each region. In the context of this paper we used the average number of patent applications in each region for the years 1989-96 as a competitiveness and economic dynamism criterion. Nevertheless, it should be noted that the values of the thresholds were determined on the basis of the type of area being disaggregated. For instance, all peripheral areas were split into advancing and lagging using the 2.275 threshold, which is also the mode of this variable for all peripheral areas (Table 6.). Likewise, the patent application thresholds that were used to determine the dynamism and competitiveness of semi-peripheral and accessible rural areas were 8.3125 and 14.3625 respectively. The reason for adopting this approach to determining disaggregation thresholds is that the use of the same threshold for different types of areas can lead to meaningless classifications (e.g. using the patents threshold of 8.3125 to split peripheral areas into advancing and lagging would mean that all peripheral areas would be classified as lagging, as there may be no peripheral areas with such a high number of patent applications). As a result of the second disaggregation, the 210 peripheral regions were split into lagging (111 regions) and advancing (209 regions). In addition, the semi-peripheral and accessible rural regions were disaggregated into areas of high and low competitiveness (418 and 421 regions respectively) (Table 6.).

**Table 6. Themes and criterion hierarchy (criteria used in the disaggregation)**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Criterion hierarchy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Accessibility (average travel time to 52 important agglomerations)</td>
<td>Peripheral TTIME &gt; 135 minutes</td>
</tr>
<tr>
<td>3. Economic Performance (GDP per capita)</td>
<td>Relatively High &gt; 10379.1</td>
</tr>
<tr>
<td>4. Role of Agriculture (Share of employment in agriculture)</td>
<td>Very Important &gt; 15.97%</td>
</tr>
</tbody>
</table>
In the context of this study we used Principal Component Analysis to reduce the original variables to a number of factors that would explain at least 90% of the variance of the original variables.

Not surprisingly, the counties with the highest proportion of peripheral areas are the Nordic ones, closely followed by the southern European countries (Table 7.). At the other end of the spectrum are the central European countries (Belgium, the Netherlands, Luxemburg and Germany), with most of their territories being accessible rural.

### Table 7. Share of area type by country

<table>
<thead>
<tr>
<th></th>
<th>Peripheral</th>
<th>Semi-peripheral</th>
<th>Accessible rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>85,9</td>
<td>8,4</td>
<td>2,3</td>
<td>3,3</td>
</tr>
<tr>
<td>Sweden</td>
<td>82,8</td>
<td>13,0</td>
<td>2,8</td>
<td>1,4</td>
</tr>
<tr>
<td>Greece</td>
<td>68,5</td>
<td>10,8</td>
<td>15,0</td>
<td>5,7</td>
</tr>
<tr>
<td>Denmark</td>
<td>62,0</td>
<td>16,7</td>
<td>21,0</td>
<td>0,2</td>
</tr>
<tr>
<td>Spain</td>
<td>54,2</td>
<td>12,4</td>
<td>11,6</td>
<td>21,8</td>
</tr>
<tr>
<td>Portugal</td>
<td>44,9</td>
<td>20,6</td>
<td>33,4</td>
<td>1,1</td>
</tr>
<tr>
<td>Ireland</td>
<td>37,6</td>
<td>24,6</td>
<td>36,4</td>
<td>1,3</td>
</tr>
<tr>
<td>Italy</td>
<td>34,5</td>
<td>19,4</td>
<td>26,8</td>
<td>19,3</td>
</tr>
<tr>
<td>France</td>
<td>29,3</td>
<td>29,6</td>
<td>29,0</td>
<td>12,1</td>
</tr>
<tr>
<td>Austria</td>
<td>27,5</td>
<td>38,9</td>
<td>30,8</td>
<td>2,8</td>
</tr>
<tr>
<td>UK</td>
<td>27,2</td>
<td>31,9</td>
<td>33,9</td>
<td>7,0</td>
</tr>
<tr>
<td>Germany</td>
<td>6,4</td>
<td>27,7</td>
<td>58,1</td>
<td>7,8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3,3</td>
<td>11,5</td>
<td>78,5</td>
<td>6,7</td>
</tr>
<tr>
<td>Belgium</td>
<td>0,0</td>
<td>0,0</td>
<td>67,3</td>
<td>32,7</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>0,0</td>
<td>0,0</td>
<td>100,0</td>
<td>0,0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49,4</td>
<td>19,4</td>
<td>22,4</td>
<td>8,9</td>
</tr>
</tbody>
</table>

*Source: Own estimations*

#### 3.1. The peripheral regions

There are 211 regions classified as peripheral (types 1-8 -Table 21.), of which 105 and 106 are further classified as lagging and advancing respectively (Diagram 19.).

Most peripheral lagging regions are concentrated in Southern Europe, and in particular, Portugal, western Spain, southern Italy and eastern and western Greece and most of the
Greek Islands. Nevertheless, it is noteworthy that there are several peripheral lagging regions in the Scandinavian countries. Further, there are some peripheral-lagging regions in Germany and the UK mostly in Scotland, Wales and Cornwall) too (Table 7).

The geographical pattern of advancing peripheral regions appears to be more diverse than the respective pattern of lagging regions. Most of these regions are in central and northern Italy, northern Spain, central and western France, Eastern Germany and Austria, most of the northern parts of Denmark and Sweden and western Ireland.

All of the Portuguese, most of the Spanish and many of the French peripheral regions are dependent on agriculture. Surprisingly, this does not appear to be the case in Greece, where only a minority of regions in the southern mainland is dependent on agriculture. Naturally, the situation is significantly more straightforward when it comes to economic performance, where there is a quite visible divide between the traditional European periphery (Greece, Portugal, Spain, S. Italy and Ireland) and the other parts of Europe, with the former (except some parts of Spain and Ireland) characterised by low economic performance. The only other cases of low economic performance are found in some of the former East German Nuts3 peripheral rural regions, and quite unexpectedly, in most British peripheral regions.

### 3.2. Semi-peripheral regions

There are 209 regions that are classified as Semi-peripheral (types 9-16 Table 16, Diagram 20) and they are mainly in Germany, France, Italy, the Netherlands and the UK less in Finland, Sweden, Greece, Spain and Portugal (Table 7.).

There is significant variation in the distribution of particular types of Semi-peripheral regions. Precisely, the Semi-peripheral regions which have low competitiveness, low economic performance and are dependent on agriculture (type 9 regions –Table 21) are mainly in western Spain and Portugal, southern Italy, central Greece, Northern Ireland and eastern Germany. In contrast, the most affluent areas, which are highly competitive and attain high levels of economic performance (type 16 –Table 21.), are mostly in northern Europe. Most of them are found in France, northern Italy, Germany, Sweden and Finland. It is noteworthy that France and Italy are the only member states, which have regions that belong to different subtypes of Semi-peripheral regions. It can thus be argued that there is a greater degree of dualism and polarisation in these countries. In contrast, the rest of the Mediterranean member states have predominantly Semi-peripheral regions of low competitiveness and economic performance. On the other hand, the northern member states have predominantly highly competitive and affluent regions.
This trend becomes more apparent in the next section, which discusses the geographical patterns in the distribution of accessible rural regions.

### 3.3. Accessible rural regions

Most of the 419 accessible rural regions are found in central, northern and north-west Europe (Table 7.). It is noteworthy that more than half of these regions are concentrated in Germany. Six countries have more than 50% of their non-urban areas classified in this category (types 17 to 24 –Table 21.-). That is, 100% of Luxemburg’s and Belgium’s, 83.5% of Netherlands’s, 62.9% of Germany’s, 57.2% of UK’s and 51.7% of Portugal’s, NUTS3 regions are accessible rural.

What is interesting is that Portugal’s accessible rural regions are almost exclusively concentrated in type 17 (low competitiveness – low economic performance - dependent on agriculture) and to a lesser extent in type 18 (low competitiveness – low economic performance - non-dependent on agriculture –Table 21.).

From the positioning of each CSA in the typology developed (Table 21) it is evident that all the three basic types (peripheral, deep rural and accessible rural) are represented. The peripheral character as well as the relative backwardness of Baixo Alentejo, Lesvos and Cornwall is evident, while Devon and Cumbria are classified as Semi-peripheral areas finally Nordwestmecklenburg, Oeste and Kilkis are accessible but of low competitiveness and economic performance. It is only Waldshut that stands up as an accessible rural area highly competitive, with high economic performance and non-dependent on agriculture. The two Polish region are not positioned in this classification due to the lack of compatible data.

As can be seen, the countries that have the majority of their regions to be least competitive are: Greece, Spain, Portugal, Ireland and Italy. In most of these regions agriculture plays a relatively important role. It should be noted though that there are also several least competitive regions with low economic performance in the UK, Eastern Germany and Austria. However, in most of these regions the role of agriculture is much less significant than in their southern European counterparts and Ireland.

On the other hand, the countries that have a majority of highly competitive regions with high levels of economic performance can be found in central Europe (predominantly in Germany and north-west France) and Northern Europe (The Netherlands and Denmark). Further, there are some regions of this type in the Scandinavian member states and in the UK. It is also noteworthy that the latter has a high number of regions that are highly competitive but attain relatively low levels of economic performance.
Overall, the outcome of the methodology adopted was quite satisfactory. It clearly points out the huge diversity of rural areas between as well as within countries. Furthermore, unlike most other classifications, it manages to depict quite well the various national differences. This is particularly important in the case of the smaller countries, such as Greece or Portugal, which, in most other classifications, usually fall into two or three classes. There are however, shortcomings to the approach. The most significant one is the fact that the outcome depends heavily on the choice of themes. Hence, it is quite clear that the results would be different had we used a different sequence of themes. In other words, this is by no means a universal classification of European regions. Nor do we think that such a classification is feasible, although it would undoubtedly be useful. The reason is that quantitative data is not capable of depicting the various processes at work, or the historical trajectories of each rural area. This is further aggravated by the fact that the proposed typology is static in the sense that the quantitative analysis is not based on data refer to a historical period. In this context, such a classification should only be used as mere approximation of very complex and contextual realities and as a guideline into more thorough analysis.

4. Entrepreneurial Behaviour in Rural Contexts

Kalantaridis Christos\textsuperscript{59}

4.1. Introduction

Our understanding of the impact of the entrepreneurial process in rural socio-economic milieus is incomplete. To date there have been only a handful of relatively small-scale, empirical studies deploying diverse methodological approaches in different settings (reviewed in greater detail in Section 4.3.). As a consequence, the findings of bottom-up studies can not be compared with each other providing only limited scope for generalisation. Top-down approaches on the other side are virtually non-existent. Indeed, to date there has been only one attempt to conceptualise entrepreneurship in a rural context (Chell, 1990). Although the advanced model was suggestive it was never followed-up with rigorous empirical research. This could be explained in large part by the main argument developed by Elizabeth Chell, i.e. that ‘to understand the process of entrepreneurship it is essential to discern those factors in the environment that impact upon the performance and hence success of the business. Whether the location is urban, semi-urban, semi-rural or rural is not important in itself’ (Chell, 1990:194). Instead, she

\footnote{59 University College Northampton}
advanced the idea that entrepreneurship research should focus upon specific localities rather than abstract spatial categories – such as the rural.

This outcome is not particularly unexpected given the absence of a widely accepted paradigm in entrepreneurship research, and the diverse ‘realities’ associated with the rural. The conceptualisation of the rural – like most analytical categories – is based upon commonality in a small number of important characteristics. However, profound diversities exist, between localities that possess the characteristics associated with the rural, regarding a host of other salient factors influencing entrepreneurial behaviour. Moreover, more than two hundred and fifty years after Cantillon introduced the ‘entrepreneur’ to the social sciences, and despite the publication of a large number of theoretical and empirical studies no generally accepted theory of entrepreneurship has emerged. The accumulated body of literature, emanating from diverse disciplinary backgrounds (such as anthropology, economics, education, history, political science, psychology, sociology and the broad area of business studies), provides suggestive insights in understanding entrepreneurship and the dynamics of the entrepreneurial process. However, it falls short of a consistent theoretical system of the statute or scope of the classical political economists or the marginalists\(^\text{60}\).

This chapter sets out to revisit the issue of entrepreneurship in a rural context. We aim to address two key research questions: what are the sources of entrepreneurial talent, and to what extent are they influenced by the characteristics of the rural. Our approach differs in three significant ways from earlier empirical and conceptual studies. Firstly, we develop a model derived in large part from empirical findings in ten rural areas, across Europe, and previous work in the area of entrepreneurial studies. Our model is not a creation de novo but a process in which certain contributions are central. These contributions are explicitly acknowledged, enabling other scholars to position our research in the wider literature. Secondly, the chapter present and interprets a large body of empirical data collected in five countries (Germany, Greece, Poland, Portugal and the UK) as part of an EU funded project. The fieldwork research comprised of a survey of a representative sample of the population using a structured questionnaire (4,939 valid responses), and a survey of dynamic\(^\text{61}\) entrepreneurs in the same localities (996 valid responses).

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\(^{60}\) This inability to develop a broadly accepted theoretical construct, emanates - in part - from the multi-disciplinary character of research in this field. Thus, researchers from one discipline tended to work more or less independently from their counterparts in other disciplines. This combined with the fact that the study of entrepreneurship invariably constituted part of a broader agenda influenced by the specificities of time, space and discipline provided further obstacles in theory building.

\(^{61}\) Criteria used for the selection of dynamic entrepreneurs included: product or process innovation (at least at the regional context), strong growth in sales turnover, or recent start-up.
responses). Finally, in order to capture the characteristics of the CSAs under investigation we deploy an approach that identifies elements of similarity (factors or clusters of unity) and elements of diversity (factors or clusters of diversity). This approach is used throughout the application of the analytical framework developed in Section 4.2., and provides suggestive insights into the entrepreneurial processes at work in the rural areas under investigation.

4.2. Theorising Entrepreneurship

It is widely held in the literature that the entrepreneur constitutes a key influence in conditioning the pace and direction of change as few - if any - other economic actors are able to do. But this much having been acknowledged, it has been proved more than usually problematic to incorporate the entrepreneurial function into the mainstream models of value theory or the theory of the firm (Baumol, 1995). Earlier research in the field has concentrated in defining entrepreneurship, as well as addressing a multitude of often disjointed research questions.

We think of entrepreneurship as putting together factors of production, as well as contracts with other entrepreneurs and other economic actors in a network of production and distribution. Entrepreneurship, unlike management, involves the realisation, and, the ability to make judgemental decisions about the process in its entirety. This function is commonly, though not exclusively, performed by individuals. Indeed, other units of analysis (some of them emanating from pre-capitalist or non-capitalist milieus) may display entrepreneurial behaviour.

Previous research in the area of entrepreneurial studies has addressed a large number of research questions. A comprehensive review of these key research issues goes well beyond the confines of our inquiry. Moreover, the value-added from such an exercise is limited given the number of reviews published during the 1990s (for good examples see Binks and Vale, 1991; Martinelli, 1994; Ricketts, 1987). There are however, two key research issues, identified in the literature that are of particular relevance for the purposes of our inquiry: what drives entrepreneurial behaviour, and whether and how environmental factors influence the decisions of practicing entrepreneurs.

In economics, the debate around what drives the entrepreneur has been heavily influenced by mainstream assumptions regarding rationality and profit maximisation. An unwillingness to diverge from the prevailing orthodoxy led economists involved in the study of entrepreneurship to complement rather than replace the existing model of human agency. Some scholars focused upon the mental capacities and processes of the entrepreneur. Superior foresight has been commonly been identified as the attribute that
distinguishes the entrepreneur from other economic actors (Cantillon, 1755; Knight, 1921). Foresight is defined as one’s ability to perceive and predict the actions and reactions of other economic agents better than they could predict his own. The concept of foresight bears some resemblance to the Austrian notion of entrepreneurial alertness (Kirzner, 1981) – though the latter places a greater emphasis on awareness of opportunities rather than superior calculative abilities. However, Schumpeter (1934) rejects arguments explaining entrepreneurship in terms of different mental processes: instead he points at the significance of motivational factors. He identified the dream and the will to establish a private kingdom; the will to conquer - to succeed for the shake of it not the fruits of success; and the joy of creating as the main motives behind the realisation of entrepreneurial behaviour. However, attempts at addressing this issue were tempered by an innate desire to maintain the essence of the ‘economic man’ in one format or another.

Psychologists, sociologists and other specialists of human behaviour have also shown a considerable interest on entrepreneurial behaviour. All the arguments developed within this context, implicitly or explicitly assume that entrepreneurship is associated with specific traits and/or characteristics. Thus, entrepreneurs are economic agents that differ in some way or another from the norm: they are unique (in a way reminiscent of Schumpeter and to some extent Cantillon, Knight and advocated of the Austrian tradition). The list of characteristics attached to the entrepreneur is lengthy, and could include creativity, need-achievement, leadership, independence, tolerance of ambiguity and uncertainty, resourcefulness, optimism. The association of entrepreneurship with traits and characteristics has significant implications upon the research approach used in the identification of factors that influence the incidence of entrepreneurial behaviour. Whereas economists (who focus on the function) explore the environment in broad and abstract terms, sociologists and more importantly psychologists set out to identify specific processes at work. Within this context, the research question is transformed into: why certain individuals (psychologists) or socio-economic groupings (sociologists) display a greater propensity to entrepreneurship? The responses to this question tend to be elaborate and sophisticated but not plausible as overarching and all-embracing explanations62.

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62 This is nowhere more apparent than in Hagen’s (1962) theoretical schema. The typical non-innovative personality is the outcome of a stable traditional society. However, in certain instances, individual socio-economic groupings experience status withdrawal, i.e. the perception among members of the group that their purposes and values in life are not respected by groups in the society whom they respect and whose esteem they value. When this is combined with a mother’s rejection of father and husband it leads to protective nurturance who eventually fosters creative personalities. However, these creative individuals find conventional avenues for social advancement (army, civil service, church, politics) blocked due to their marginal status in the wider
On the question: what determines the incidence of entrepreneurial behaviour, there is considerable diversity of opinion among economists. One school (Cantillon, 1755; Say, 1804; Leibenstein, 1961; Wilken, 1979) has it that economic stimulus through the market mechanism provides the best explanation for the advent of entrepreneurs. According to this approach the same factors that account for economic growth (such as market opportunities, risk, availability of labour, capital and raw materials) explain the emergence of entrepreneurship. More specifically, Cantillon argued that the economy is an organised system of interconnected markets that operate in such a fashion as to achieve equilibrium. Therefore, entrepreneurs are allocated through the same mechanism that allocates labourers or goods. Wilken offers a more sophisticated interpretation of the stimuli to entrepreneurial behaviour. He argued that emergence of entrepreneurship should be explained firstly in terms of economic opportunity, and only to a secondary degree to non-economic factors. A similar argument (in the sense of advancing the supremacy of economic factors) is developed by the Austrian tradition, which emphasises the role of prices in transmitting information about market opportunities.

In contrast, Schumpeter highlights the importance of an appropriate social climate for entrepreneurship – in the sense of affording legitimacy and recognition to innovative behaviour (an argument also advanced by Binks and Vale, 1991). Cochran also stressed the importance of cultural themes and sanctions in the emergence of entrepreneurship. Baumol (1995), in a very suggestive contribution, points at the importance of social and institutional factors in the direction and form of entrepreneurial behaviour. He argues that although entrepreneurship is present in all socio-economic milieus, entrepreneurial energies may not always take the form of constructive and innovative activities. In fact, the entrepreneur may at times lead a parasitic existence that may be damaging to the economy. Thus, in early middle ages, where wealth and social status were the main determinants of wealth and social status, the pursuit of economic objectives was manifested in warfare. Poorly defined private property rights, combined with no legitimacy to entrepreneurial pursuits in post-socialist economies may result in the society, leading to the realisation of entrepreneurial behaviour. The time span between status withdrawal and actual entrepreneurship, according to Hagen, varies between five generations and 800 years. On its own this interpretation can not adequately explain entrepreneurial behaviour. However, its explanatory power is enhanced if placed within the context of the wider debate among sociologists and psychologists regarding the legitimacy of entrepreneurship.

However, we must stress that the presence of social structures and legal frameworks that hinder entrepreneurship may be overcome. The experience of developing countries suggests that entrepreneurial talent can be imported (TNCs) and legal frameworks evaded (informal sector).

This stands in sharp contrast with the bulk of published work that departs from the premise that entrepreneurial activities constitute a positive influence in the process of economic growth. This is particularly apparent in the case of Schumpeter who explores the revolutionary character of the entrepreneur with the same admiration that Marx showed for the proletariat.
realisation of entrepreneurship in informal or outright illegal pursuits. Thus, following Baumol’s argument changes in the rules (in the sense of social norms and institutions) of the economic game results to changes in the manifestations of entrepreneurial behaviour.

Casson (1993) attempts to combine these two – not mutually exclusive – approaches using a supply and demand side diagrammatic presentation. The demand curve traces the expected rewards per entrepreneur as the number of entrepreneurs increases – economic stimulus. The supply curve is influenced by the prevailing ‘reserve wage’ in the local socio-economic milieu. The position of the supply curve traces the stock of entrepreneurial talent existing in the population - which is socially and institutionally determined – and the proportion of these who are qualified (in the sense of having command over resources) to become entrepreneurs. In the long-run the intersection of the demand and the supply side curve will determine the active number of entrepreneurs.

The review of theoretical constructs in the area of entrepreneurial studies highlighted the significance of the interplay between actors and contexts. Entrepreneurs are economic agents who work in specific structural contexts. However, the contextualisation of entrepreneurial behaviour proved more than usually problematic. Earlier attempts to understand entrepreneurial behaviour were confronted with the issue of the relative importance factors internal to the economic actor and those emanating from the external environment. Whilst the limitations of mono-causal explanations have been apparent for a considerable period of time, there has been little success in developing a meaningful synthesis65.

4.3. Rural Entrepreneurship Research

Scholarly research on Europe’s rural areas has come from a number of quarters, including agricultural economics, economic anthropology, sociology and more recently business studies. However, the bulk of this work has focused upon structural issues, and transformations at the macro-level (region), whilst there have been only a small number of published studies investigating entrepreneurship at the micro level. As a result, our knowledge of the processes at work is fragmented, often coming from one or two locality

65 In that part of the literature emanating from economics this was manifested in a divide between those stressing the importance of the individual’s free will versus those focusing upon the impact of the environment (for a review see Seckler, 1975). A similar divide is also apparent in the broad and loosely defined area of business studies between those emphasising the freedom of the individual to take strategic decisions, and population ecology (for a review see Gardner 2001).
specific studies that hinder generalisation, and rarely building upon existing theoretical constructs from the area of entrepreneurial studies.

One of the key factors that historically defined rurality has been the prevailing agrarian structure. Admittedly the significance of agriculture has diminished significantly in certain regions and countries, however, a number of studies explore the contribution of the size of the holding to the incidence of entrepreneurship. In the case of Cambridgeshire – one of a handful of a UK counties that still depends to some degree on agriculture - Carter (1997) found that large farmers demonstrated a considerable propensity to entrepreneurial ventures outside agriculture. At the same time however, a number of other empirical studies (Kalantaridis, 1997; Kasimis & Papadopoulos, 1997; Daskalopoulou & Petrou, 1998) support the argument that there is a negative relationship between the size of holding and the incidence of entrepreneurial ventures outside agriculture. Research from Germany also provides support in this direction (Anderson, 2000).

The role of the State in stimulating entrepreneurial ventures has also been identified by a number of studies. More specifically, in Greece the entrepreneurial process within small agricultural holdings was boosted by state initiatives. For example in the case of introducing new tobacco varieties, the National Tobacco Organisation and the Agricultural Bank of Greece were instrumental in introducing change (Dimara & Skuras, 1998). They enabled small farmers to adjust quickly and effectively to the new conditions, since the new crops required different production techniques and novel managerial prices. A similar process of state-induced entrepreneurship has been reported in Portugal. The experience of the UK, however, differs significantly from that of Southern European economies. In Britain the State focused in the provision of infrastructural support, ensuring that “few if any significant local environmental differences appear to exist between urban and rural locations in relation to constraints on access to business services, finance capital or infrastructure such as communications” (Keeble & Tyler, 1995: 991). This combined with well functioning markets, and marginal direct state interventions were often perceived as instrumental in the realisation of entrepreneurial behaviour (Mallalieu, 1993).

Markets, or more precisely imperfect markets, were cited as a negative influence in the emergence of rural entrepreneurship in Poland. As a result of the process of post-socialist transformation the functioning of the market process is more than usually problematic. This combined with the marginal marketing potential of producers mean that Polish farmers enter and develop new areas of agricultural economic activity only to a small degree.
In some instances the disadvantages associated with rurality and peripherality were overcome through the development of forms of local co-operations. This was particularly the case regarding co-operatives in Germany, which constitute the main distribution channel for agricultural produce of small and medium-sized farmers. These co-operatives also provide many of the inputs required for the production process, as well as getting involved in food-processing, particularly in the case of milk and dairy products. In the case of Greece, the problem of unequal possession of means of production is alleviated by local networks of inter-family co-operation (Goussios, 1995). Rural communities are instrumental in facilitating the flow of information, and production factor availability both in agricultural and non-agricultural pursuits (Kalantaridis, 1997).

Production factor endowments have also been identified as instrumental in the emergence of entrepreneurial ventures in rural peripheral areas. Specifically, the contribution of human capital has been often highlighted in empirical studies. This took two forms in the experience of the British countryside. Firstly, the inflow of new inhabitants (seeking a rural lifestyle) increased the supply of entrepreneurial talent. Indeed, there is a growing body of empirical evidence suggesting that newcomers – equipped with a multitude of skills and contacts – account for a significant percentage of entrepreneurial ventures in the UK (Keeble & Tyler, 1995). Secondly, the traditional labour characteristics of the rural space have also been perceived as an enabling factor. Earlier research carried out by Smallbone (1999: 122) has shown that entrepreneurs in remote rural firms were adopted more labour intensive forms of expansion than their urban counterparts. This was the case not only because of the lower cost of labour but also because of a number of qualitative advantages of the rural workforce such as its reliability, adaptability and relatively low turnover rates.

A corollary of this is that in environments where there is little availability of human capital, there is a lower incidence of entrepreneurial ventures. This is the case in mountainous and semi-mountainous parts of Greece. In average 50% of the leaders of Greek agricultural holdings are above 57 years old, while 30% of them above 65. It is needless to say that the age structure is even worse at the mountainous and remote rural areas of the country (Greek Ministry of Agriculture 1999). Furthermore, rural population is not characterised by its high level of education, while the existence of experienced entrepreneurs is extremely limited. Psaltopoulos & Skuras (2000) suggest these factors explain the small number of entrepreneurs in parts of rural Greece.

The availability of capital has often been identified as an influence conditioning the incidence of entrepreneurship. Taking once more as an example the Greek case, with the possible exception of a limited number, mostly tourist areas, the majority of rural areas
are defined by low per capita incomes. The majority of the population is still employed in low productivity traditional segments of agriculture while the employment opportunities in the other sectors of economic activity are extremely limited. As a result, a significant part of the population cannot afford to initiate any business assuming risks related to entrepreneurial activity. The presence of a positive relationship between the availability of capital and entrepreneurship is also supported by evidence emanating from the UK. Indeed, Carter (1997) argues that larger agriculturists venture into non-agricultural enterprise on account of easy access to finance.

The degree of integration of rural areas in the economic systems of the main urban conurbations has been a positive influence in the incidence of entrepreneurship in the majority of national environments explored. In the case of Greece the incidence of entrepreneurial ventures outside agriculture, and the ensuing employment diversification has been associated with proximity to urban centres (Hadjimichalis and Vaiou, 1987; Simmons and Kalantaridis, 1994).

Empirical evidence suggests that rural entrepreneurship is more developed in some of the countries under investigation than others on account of differentiated agrarian structures, well-functioning markets, supportive infrastructure, conducive traditions and differentiated state intervention. Factors influencing the supply of entrepreneurial talent (invariably linked with the social and cultural) rarely feature in existing empirical studies. Moreover, there is hardly any published work exploring the individual entrepreneurs.

4.4 The Case Study Areas: Factors of Unity & Factors of Diversity

The CSAs under consideration share some common environmental factors – by virtue of their rurality – among those influencing the emergence of entrepreneurship. More specifically, the local output markets in each locality under investigation are smaller than those in core metropolitan regions. Thus, opportunities for expansion locally are limited prompting the most dynamic enterprises to adopt an outward orientation. Our CSAs also possess smaller and idiosyncratic input markets, i.e. demonstrating greater availability of land and land related skills than urban areas in the same country. Of course the degree of availability of such resources varies considerably between our CSAs. Moreover, they all have recent records of out-migration among the young, and most energetic members of the local population. The intensity, direction, temporality and impact of such population movements however, may vary between CSAs even within the same national context. Another factor of unity concerns the weaker than elsewhere in the same country – and undoubtedly the main urban conurbations – knowledge infrastructure. Even CSAs that enjoy the benefits of local higher education institution (such as Lesvos), or the diffusion
effects from a large, high technology company (such as Cumbria) are at a disadvantage when compared with the corresponding national cores (Athens and London respectively). Lastly, all ten CSAs possess relatively distinct norms: that place greater emphasis upon tradition, and continuity.

The CSAs under investigation\textsuperscript{66} are also characterised by considerable diversity, that is indicative, though not representative, of that prevailing in Europe as a whole. Thus, the size of each national market, as well as the prevailing distribution channels differ significantly. The Greek (Lesvos and Kilkis) and Portuguese (Oeste and Baixo Alentejo) localities operate within very small national markets – encouraging internationalisation – in contrast to their British (Devon & Cornwall and Cumbria) and German (Waldshut and Nordwestmecklenburg) counterparts. Moreover, areas located in the outer periphery of Europe, such as Bialystock and Lesvos, are examined alongside accessible, in relation to the EU (Waldshut) or national (Kilkis, Oeste) core localities. Therefore, the degree and nature of integration in the national and global context varies significantly between CSAs. Population density and change as well as the degree of economic advancement are also profoundly different. Even the significance of agriculture – a defining feature of the countryside – varies significantly between Southern Europe regions (Lesvos, Kilkis, Oeste and Baixo Alentejo) and their counterparts in the UK (Devon & Cornwall and Cumbria) and Germany (Waldshut and Nordwestmecklenburg). Moreover, three of the CSAs examined here are currently undergoing processes of post-socialist transformation. However, their experiences vary significantly: Nordwestmecklenburg Mecklenburg enjoys the advantage of EU membership and a supportive state, Zary benefits from geographical proximity to the German markets combined with lower wage and land costs, whilst Bialystock is relatively peripheral. Thus, any attempts at enhancing our understanding across such disparate space are problematic: abstraction may lead to inappropriate generalisations, whilst attempts at synthesis may create arguments so complex and rendered with numerous qualifications that are rendered meaningless. Our point of departure, is an attempt to gain a systematic and purposeful understanding of the similarities and the differences of rurality in the CSAs.

The CSAs under investigation could only be loosely grouped together regarding the characteristics of the environment confronting entrepreneurs. The areas that appear to offer the most hostile institutional setting for the emergence of entrepreneurial ventures

\textsuperscript{66} Overall, we studied two diverse rural areas in each of the five countries that participated in the project. More specifically we explored the experience of Lesvos and Kilkis in Greece, Oeste and Baixo Alentejo in Portugal, Nordwestmecklenburg Mecklenburg and Waldshut in Germany, Zary and Bialystock in Poland, and Devon and Cornwall and Cumbria in the UK.
are Lesvos and Baixo Alentejo in Southern Europe, and in a different manner Bialystock in Poland (Diagram 22.). However, given the profound impact of post-socialist transformation the latter can not be readily placed alongside the two Southern European CSAs. It occupies the bottom end of the transition regimes: which also include Zary, and Nordwestmecklenburg. The latter however, exists in the interface between post-socialist regimes and advanced industrialised CSAs (alongside Waldshut, Devon & Cornwall, and Cumbria). Lastly, Oeste and Kilkis constitute more advantageous Southern European rural areas.

4.5. The Origins of Rural Entrepreneurs

4.5.1. The Incidence of Entrepreneurship in Case Study Areas

The incidence of entrepreneurship – as measured in the survey of a sample representative of the population – varies significantly between CSAs. The highest incidence of entrepreneurial behaviour is apparent in the two Greek CSAs, where more than one in four of those of working age are involved in such activities (Diagram 23.). The lowest incidence of entrepreneurship is reported in the peripheral Bialystock (8.5%) as well as the two German areas, Nordwestmecklenburg (9.3%) and Waldshut (10%).

An interesting finding emanating from Diagram 23. is the similarity in the entrepreneurial propensity of the population in CSAs that come from within the same country. Indeed, the differences between the two German CSAs is 0.7%, the two Greek CSAs is just 1.1%, and the Portuguese 2.9%. This underlines the importance of the national context, a theme apparent in several aspects of our investigation. Marked differences exist in the incidence of entrepreneurship between Zary (16.5%) and Bialystock (8.5%), though this could be attributed in large part to the profound differences in location and the ensuing entrepreneurial opportunities. There is also a significant disparity in the incidence of entrepreneurship between Devon & Cornwall (21%) and Cumbria (14.2%). This disparity is largely on account of the influence of Western Cumbria (an old industrial area undergoing a process of structural change), where the incidence of entrepreneurship is very low (11%). No such locality exists within the Devon & Cornwall study area.

4.5.2. Rural Entrepreneurship: factors of unity and factors of diversity

Exploring the characteristics of individuals entrepreneurs in the ten CSAs under considerations is more than usually problematic. This is because the diverse nature of the socio-economic structures prevailing in the rural localities under investigation precludes over-arching and all-embracing generalisations. Instead, a more cautious approach is adopted where the characteristics of the entrepreneurs are compared with those of the
rest of the population. In doing so, we developed eleven indices (0 drawing upon the model developed in Section 4.2). These indices aim to capture key characteristics such as gender, origin, education, employment history, previous entrepreneurial experience, parental entrepreneurship, and age.

There are five entrepreneurial demographic characteristics that are apparent in all or most CSAs (FoU). The first concerns with the lower incidence of females among entrepreneurs than the rest of the population, a characteristic common in all ten localities. This is particularly the case in Nordwestmecklenburg (0.24) and Bialystock (0.4), even though former socialist regimes were considered advanced on issues of gender equality. A corollary of this is the greater incidence of males among entrepreneurs than the population as a whole. The second entrepreneurial characteristic that is common in all CSAs is age. Entrepreneurs appear to be younger than the population at large especially in the Southern European localities. A possible interpretation of this could be found in the ageing of rural inhabitants, partly on account of a recent history of out-migration, rather than early start-up on behalf of entrepreneurs. The third common characteristic is the positive influence of parental entrepreneurship. Indeed, in all but one locality (Nordwestmecklenburg) parental involvement in business enterprise is more widely reported among entrepreneurs than the rest of the population. The fourth entrepreneurial characteristic was the greater than average incidence of higher education qualifications (with the exception of Oeste). This was particularly profound in all three CSAs undergoing a process of post-socialist transformation: underlying the point, already stressed in the literature, that entrepreneurship in this context constitutes a preferred option for the most dynamic and best qualified individuals (Ageev et al., 1995; Smallbone & Welter, 2001). The final common entrepreneurial characteristic is previous experience of running a business. This did not apply in the case of the two Polish CSAs – probably on account of the limitations imposed by the previous regime. However, it was relevant in the case of Nordwestmecklenburg where nearly half of all entrepreneurs were in-migrants from the former West Germany.

There are four entrepreneurial demographic characteristics, which differ significantly between CSAs (FoD). The first concerns with the origin of rural entrepreneurs. In most CSAs they are locally born. This is particularly the case in Zary, in Poland (0.73), and the Southern European countryside. In contrast, there is an over-representation of in-migrant entrepreneurs (in comparison to non-entrepreneurs) in Bialystock (1.33), Nordwestmecklenburg (1.31) and Cumbria (1.19). The second concerns with the greater incidence of unemployment prior to entrepreneurship than salaried employment. This is apparent in the peripheral Southern European areas (Lesvos, Baixo Alentejo), as well as
the two Polish CSAs. It also appears to be important in the case of Cumbria, however, this is based on a comparison of very low rates unemployment and thus is not significant. At the other extreme, unemployment was never prior to entrepreneurial ventures in the two German areas and Devon. The third factor of diversity is the decision to become an entrepreneur soon after completing education. This appears to be often the case in Oeste, Kilkis and Bialystock, in contrast to Cumbria and Waldshut. The fourth factor of diversity involves the occupation background of individuals (captured through four variables in 0). Entrepreneurs coming from professional occupations are common in Zary, as well as all the Portuguese, German and UK cases whilst non-existent in rural Greece. Entrepreneurs coming from managerial occupations are widely reported in Lesvos, Baixo Alentejo, Nordwestmecklenburg, Zary and Cumbria, whilst manual occupations appear to be over-represented only in the case of entrepreneurs in Lesvos.

4.6. Distinguishing Entrepreneurial Clusters

Hierarchical cluster analysis was used in order to identify distinct categories of entrepreneurs. In doing so we have used variables relating to entrepreneurial characteristics and attributes (Table 23.). We outline below the key characteristics which ensure a group’s cohesiveness, and which indicate what differentiates one group from the other. The same statistical procedure was performed individually for each CSA.

The conduct of the same Hierarchical Cluster Analysis procedure in each CSA, resulted in considerable disparity in the number and characteristics of the emerging entrepreneurial grouping. Indeed, in areas such as Kilkis and Bialystok we have only two such clusters, whilst in Zary five. The main characteristics of the twenty-eight clusters identified in nine CSAs are presented in Table 24.. There is considerable diversity between the entrepreneurial groupings, however, some common patterns are also apparent. Gender disparities are apparent in most groupings, whilst in virtually all CSAs there are groups that demonstrate considerable incidence of individuals who became involved with entrepreneurial pursuits soon after completing education.

4.6.1. Clusters of Unity

Given the presence of some similarities between entrepreneurial groupings we decided to examine whether we could derive composite clusters that were present in more than one CSAs. Hierarchical Cluster Analysis was identified as the most appropriate means of doing so, however, in this instance the inputs were not the entrepreneurs identified in the population survey, but the twenty-eight entrepreneurial groupings identified in each CSA. The input variables used are described in Table 19.. As can be seen from this Table this procedure was run twice: the first time we used the appropriate percentages for
each cluster, whilst the second time we developed indices that positioned each cluster in relation to the totality of entrepreneurs in the specific CSA. The final results were not dissimilar, and the findings presented here are those of the first procedure. Lastly, in order to increase the coherence of the composite clusters, some marginal groupings were excluded and are presented separately.

**Female Petty Entrepreneurs**

The first composite cluster comprises mainly of females (the only one of its kind), who mainly come from within the localities under investigation (Table 19.). Even those who were in-migrants, have moved in the area some time ago (a mean of 18.5 years prior to the date of the survey). Thus, they are embedded within the institutional settings prevailing in the countryside. There are some disparities regarding the influence of parental entrepreneurship in this composite cluster. This is commonplace among the Portuguese, but not among the Greek and Polish respondents. An upbringing within an entrepreneurial family was combined with poor educational attainment. Indeed, the respondents falling in this composite cluster were rarely educated to degree level and were engaged in administrative pursuits prior to entrepreneurship. Thus, it is nor particularly unexpected that most of them did not have any experience of running a business before they started their current venture. As a consequence, the incidence of managerial experience (a variable not used in the cluster analysis) in this cluster was very similar to that for the sample as a whole. Attempts to gain managerial qualifications or receive training were also very infrequent among those falling in this cluster. Sectoral experience was of some importance among female petty entrepreneurs: nearly 30% started businesses in the sector of their previous employment (the highest figures among all five composite clusters). Female petty entrepreneurs demonstrated considerable stability in their employment history prior to start-up: indeed more than half (54%) had worked for a single or no employer in the past. At the time of the survey the mean age for these entrepreneurs was the early forties, and in many cases started in their contemporary business during their mid thirties.

The characteristics of the individuals making-up this composite cluster undoubtedly influenced the types of enterprises created. Thus in most instances (96%) enterprises were very small, employing only a handful of people. The remaining 4% of the enterprises created by female petty entrepreneurs employed were small-scale. As far as the sectoral composition of the enterprises is concerned, more than two thirds (67.5%) were engaged in distribution and consumer services – sectors traditionally associated with female entrepreneurship. No other sector accounted for more than a tenth of the total. Most female petty entrepreneur run relatively mature businesses (63% more than
seven years old), a figure not dissimilar with that for the sample. Despite the very small of size and mature nature of the enterprises, the incidence of innovation is reported by some 43% of those in this cluster – a figure above average \(^{67}\). Four groupings (one from Greece, two from Portugal and one from Poland) fell in this composite cluster, accounting for 17.9% of rural entrepreneurs.

**Local Artisans**

The second composite cluster comprises mainly, though not exclusively of males. In all but two of the groupings they are predominantly of local origin. Even those who were in-migrants moved in the study areas concerned nearly twenty years prior to the conduct of the survey. Thus, embeddedness to the local setting appears to be strong among those falling in this grouping. Parental entrepreneurship is reported by around one in three individuals, and appears to be of lesser importance in stimulating start-up. Two common characteristic among the respondents falling in this composite cluster is that they very rarely possess university qualifications, and were involved in manual occupations before start-up. Previous entrepreneurial experience is infrequent, and this is reflected in limited managerial experience (reported by just one in ten of those falling in this cluster). There was also little – if any – effort to develop management skills through formal qualifications (3.7%) or training (6.4%). Previous industrial experience was of modest importance in the choice of sector: reported by 23% of the total. In just under half of the cases (45%) their employment history involves just one previous employer. The average age of those falling in this composite cluster at the time of the survey was the late forties, and most were over forty when their contemporary ventures were started.

The enterprises created by individuals falling in the second composite cluster were invariably very small (96%) or small (4%). In terms of sectors, distribution and consumer services accounted for 56% followed by construction (16%) and manufacturing (16%). As far as the age of the businesses is concerned, more than half (59%) existed for seven years or more. However, the incidence of innovation was relatively modest at only 29%. Six groupings (two from Greece and Poland, one from Portugal and one from the UK) fall in this composite cluster, accounting for 27.6% of rural entrepreneurs.

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\(^{67}\) The incidence of innovation is based exclusively on the respondent’s perceptions and ideas. No additional questions – probing into the nature and degree of innovation – were asked. Thus, the results presented here are used only as broad indicators and are meaningful only in instances where wide disparities are apparent.
In-migrant Artisans

There are certain similarities between the second and the third composite cluster. More specifically, they are both made-up predominantly of males, with little – if any – incidence of university education. Moreover, both groupings comprise individuals who were engaged in manual occupations prior to setting-up their business ventures, and were relatively older (late forties early fifties) at the time of the survey. However, this is where similarities end. In-migration is frequent among those falling in the third composite cluster (unlike the second one). However, artisans who in-migrated in the rural areas under investigated have developed very strong local roots: indeed nearly 70% have lived locally for more than twenty years, whilst the mean time since the move was 32 years. They reported considerable employment instability (in relation to the sample as a whole): with just 32% having worked for a single employer prior to start-up. Moreover, the great majority (around two thirds) of those in the third composite grouping have previous experience of starting or running a business, thus managerial experience was reported by nearly 80% of these entrepreneurs. This was complement with the acquisition of managerial qualification (16%) and training (23.6%) by a significant minority of those falling in this cluster. Parental entrepreneurship is also frequent.

The enterprises created by those falling in the third composite grouping are different from those formed by entrepreneurs in the second composite grouping, despite similarities in the attributes of the entrepreneur. More specifically, there is a considerable incidence of very small (86%), small (8%) and some medium-scale (6%) enterprises in the former cluster, with mean employment of eight persons per unit. Most enterprises were involved in distribution and consumer services (40%), agriculture (15%), manufacturing (13%) and construction (13%). Two thirds of the enterprises were formed seven years ago or earlier, whilst innovation was reported by 61% of the total. Two groupings (one from Portugal and one from Germany) fall within the third composite cluster, accounting for 8.5% of the total.

Young Entrepreneurs

The fourth composite cluster comprises predominantly of males, who – in all but two groupings (Nordwestmecklenburg & Zary) – originated from within the study area. The incidence of university education among those falling in the third composite cluster is low, with the notable exception of two groupings (Nordwestmecklenburg & Zary). A defining feature of the entrepreneurs falling in this cluster is that they became involved in the process of business enterprise immediately after education. Indeed, the mean age
of the respondents at the time they started their current venture was just twenty-seven years old, whilst some 40% have not worked (full-time) anywhere else throughout their lives. An interesting feature of the third composite cluster is that there appears to be a trade-off in the incidence of previous involvement with running a business and parental entrepreneurship: i.e. those grouping reporting a high incidence of the former identified a low incidence of the latter and vice-versa. Thus, management experience is reported by around in four (23%) of entrepreneurs in this cluster, who however, also pursued managerial qualifications (21%) and training (19%). Sectoral background is not relevant among young entrepreneurs, as many of them do not possess any employment history. In terms of average age, those falling in this composite grouping, were either in their late thirties or early forties, at the time of the survey.

Entrepreneurs falling in this composite cluster created enterprises of similar size with in-migrant artisans. Thus some 85% were very small, with 10% being small and 5% medium-sized. The sectoral profile of the enterprises was similar to that of the previous composite cluster, concentrating in distribution and consumer services (40%), manufacturing (14%) and construction (13%). Mature businesses were also very prominent, whilst innovation was reported by 37% of respondents. Overall, eight groupings fell in the third composite cluster, accounting for 28.7% of rural entrepreneurs.

**Opportunity-seeking Entrepreneurs**

The fifth composite cluster comprises overwhelmingly of males, who were born outside the study areas under investigation. In fact, many of them (one in every five) moved in the study areas under consideration during the five years prior to the conduct of the survey. Individuals in this cluster are invariably educated to degree level or above, and were involved in professional and managerial occupations prior to start-up. The overwhelming majority – some 80% - of those falling in this composite cluster had two or more (full-time). Previous managerial experience was reported by more than half (58%) of the total, whilst a significant minority (14%) also possessed managerial qualifications, and received management training (30%). Within this composite cluster there were disparities regarding the incidence of previous experience in starting and/or running a business and parental entrepreneurship: these being very infrequent in Poland and commonplace in the UK. The importance of the sectoral context, was the highest among all composite clusters – 35% had worked in the past in the same the industry as their enterprise venture. The average age of those falling in this cluster, at the time of the survey, was early forties.
Most enterprises created by those falling in the fifth composite cluster were micro ones (73%). However, a minority of opportunity-seeking entrepreneurs were involved in managing medium (5%) and even large enterprises (7%). As far as the sectoral divide of the enterprises is concerned, some 31% were in distribution and consumer services, with 20% in construction and 17% in financial & business services. An interesting feature of the enterprises created by these entrepreneurs was that they were to a considerable extent (35%) new initiatives. Innovation was reported by 37% of the opportunity-seeking entrepreneurs, a figure virtually identical with the average. Only two groupings (one from Cumbria and one from Zary) fell in the fifth composite cluster, accounting for 6.4% of the rural entrepreneurs.

The description of the five composite clusters that are present in at least two national contexts provide suggestive insights in the entrepreneurial processes reported in European rural areas. More specifically, we argue that, firstly, in many instances the decision to become an entrepreneur is ‘needs driven’. This is apparent in the experiences of both female petty entrepreneurs as well as local artisans, and to a lesser degree young entrepreneurs. These are individuals who are neither well equipped to engage in entrepreneurial ventures nor have shown in the past a disposition to engage in such pursuits (through previous ventures, frequent employment change etc). Interestingly, female petty entrepreneurs and local artisans are present only in the poorest CSAs in Greece, Portugal and Poland, where they make-up a significant of all entrepreneurs: this ranges from 32.5% in Oeste to 63.3% in Lesvos and 71.3% in Baixo Alentejo (Diagram 24.). They rely heavily upon their embeddedness to the local (and invariably traditional) institutional setting for survival, whilst growth is not of paramount importance. Indeed, the vast majority of entrepreneurs in these two composite groupings run very small enterprises, who have not expanded despite the fact that they have existed over a number of years. However, the importance of female petty entrepreneurs and local artisans should not be underestimated: it rests with their numbers (significant at the local level), and their ability to generate opportunities for themselves, i.e. individuals not well equipped for entrepreneurship. Secondly, in a minority of cases family reasons, and especially the need to maintain the family business or farm, constitute a key driving influence. This is nowhere more apparent than in the case of young entrepreneurs. They have little – if any – educational qualifications, often no experience of working outside the family venture, and become involved in business enterprise very early on in their lives. They are present in all but one of the CSAs (Cumbria), and make up a significant percentage of the total entrepreneurs in these localities. This varies from 16.4% in the case of Zary to nearly half of the total in Bialystock and Kilkis (Diagram 24.). Their importance rests with continuity of individual ventures over the generations, which
enables some of them to expand beyond the very small, to small and medium-scale. Thirdly, in some cases entrepreneurs are driven by the opportunities available in rural areas. This appears to be the case among in-migrant artisans, and opportunity-seeking entrepreneurs. Both of these composite clusters comprises predominantly of in-migrants, who may bring in access to new sources of information and institutional settings. Even though in some cases these individuals have lived in the locality under consideration for a long period of time, they appear to be best equipped to introduce discontinuities and change. Opportunity-seeking entrepreneurs operate in the advantageous setting of Cumbria and the challenging but opportune Zary, whilst in-migrant artisans are present in Oeste and Waldshut. Not unexpectedly Zary, Waldshut, and Oeste are accessible to the European or national core, whilst Cumbria benefits from a long-term move away from the main population centres – particularly profound in the UK context. Although a minority, even within these CSAs, such individuals create a number of medium and even large-scale enterprises which exist in a multitude of sectoral contexts.

4.6.2. Clusters of Diversity

The remaining six groupings that emerged from the Hierarchical Cluster Analysis of the population survey data did not readily fit in any composite cluster that had an international dimension, i.e. groupings from at least two countries. Three of these groupings were from the German CSAs, and one (each) from Greece, Poland and the UK. Together, they accounted for 11% of rural entrepreneurs. Their characteristics are briefly presented below.

Local Need-Driven Entrepreneurs: Lesvos

This grouping comprises exclusively of males, who in two third of the cases were born locally. They do not possess any university qualifications and were all unemployed prior to start-up. Thus, none of them has experience in management or managerial qualifications and training. Their mean age at the time of the survey was 44 years old, but have started their contemporary venture earlier on in life, i.e. when 26 years old. As far as the characteristics of their enterprises are concerned, all of them were very small, engaging in distribution and consumer services (43%) and construction (29%). None of them claimed that their organisations were innovative. Fourteen individuals from Lesvos fell in this grouping, making 12% of all entrepreneurs in the CSA.
Opportunity-Driven: Nordwestmecklenburg

Those falling in this grouping possess some, though not sufficient, similarities with the opportunity-seeking entrepreneurs of Cumbria and Zary. They are mainly, though by no means solely, males – females account for 40% of the total. Some of them (44%) were born outside the area, and had no entrepreneurial influences in the parental household. Instead they opted for university education – nine out of ten possess degrees or above – and managerial careers. Thus, they possess managerial expertise, as well as management qualifications and training, despite the fact that they have no previous experience of start-up. Their mean age at the time of the survey was 46, however, they were late starters, setting up their own ventures when they were nearly 40. Opportunity driven entrepreneurs created enterprises of all sizes: some 12% established medium-scale ventures, whilst 5% large ones. In terms of sector, they are mainly involved in manufacturing (44%) and construction (25%). Innovation is reported by around half of the total. Overall, there were eighteen opportunity-driven entrepreneurs, accounting for 42% of the total in Nordwestmecklenburg.

Entrepreneurial Professionals: Nordwestmecklenburg

This group comprises mainly – though not exclusively – males, nine out of ten of whom are in-migrants. Parental entrepreneurship is of importance in influencing the decision to become entrepreneurs. However, most of these individuals did not acquire university qualifications, and worked in professional occupations prior to start-up. Despite the fact that they did not possess any experience of running their own business, they report considerable uptake of management qualifications and training. They are older individuals, mean age of 49 at the time of the survey, who became involved with entrepreneurship relatively later on in life (42). Nearly two thirds (63%) run very small businesses, with the remaining owning small ventures. In terms of sector they are engaged in manufacturing (38%) and construction (38%). Six out of every ten respondents in this grouping claimed that their enterprises were innovative. There are eight such individual, making up 19% of the total in Nordwestmecklenburg.

Entrepreneurial Professionals: Waldshut

This group is very similar with the synonymous one in Nordwestmecklenburg, and when put together they comprise an entrepreneurial process common in the rural localities of Germany, but exclusively so i.e. not present in any other country examined here. They are also males, many of whom migrated in the CSA. Parental entrepreneurship was a significant influence among opportunity-driven entrepreneurs in Waldshut. Most of them
had university qualifications, and were previously engaged in professional occupations. Despite the absence of earlier entrepreneurial experiences, most individuals falling in this grouping had managerial experience, as well management qualifications and training. They were somewhat younger than their counterparts in Nordwestmecklenburg: their mean age was 40 years, whilst the age at start-up was 29. The enterprises created by entrepreneurial professionals were very small (86%) and small (14%), involved in distribution and consumer services (36%) and manufacturing (21%). Innovation is reported by six out of every ten enterprises run by entrepreneurs of this type. There were fourteen entrepreneurial professionals making-up 30% of the total in Waldshut.

**Local need-driven professionals: Zary**

This grouping comprises mainly – though not exclusively of males – who were born locally, many in families who were involved in entrepreneurial pursuits. None of them have acquired university qualifications, but were in professional occupations prior to start-up. This combined with the fact that they did not have previous experience of business enterprise, meant that they did not possess managerial experience or management qualifications and experience. Their mean age at the time of the survey was only 35 years old, in comparison to 30 when start-up occurred. All of their enterprises were of very small scale, engaged heavily in distribution and consumer services. Overall, there were ten such individuals accounting from 13.7% of total entrepreneurs in Zary.

**Enterprising Females: Cumbria**

This group comprises overwhelmingly of females, who were born locally (55%) or elsewhere in the UK (45%). Nearly half of them were brought-up in entrepreneurial families, but did not acquire any university qualifications. Although coming from administrative occupations, many of them have previous experience of start-up. This equipped them with managerial experience, which was complemented in some cases with management qualifications and training. Their mean age at the time of the survey was 50 years old. More than two thirds of the businesses created by enterprising females were very small, with the remaining being small, whilst nearly two thirds were in distribution and consumer services.

The description of the six entrepreneurial groupings that do not easily fit in international patterns reinforce the issue of the specificity of the processes at work. In the case of Lesvos there is a distinct though again, as in nearly all of the Greek entrepreneurial groupings, need-driven process: from unemployment to petty venture creation. These are individuals who do not identify opportunities but rather create them in order to met individual and family needs. Though not of considerable importance in terms of the
numbers of jobs created they provide employment to unemployed individuals. Pull factors in contrast are of considerable importance in the case of the opportunity-driven entrepreneurs of Nordwestmecklenburg. In their case, as in that of opportunity-seekers in Zary, they exist because of their ability to exploit opportunities generated in the relatively hostile environment of post-socialist transformation. The case of entrepreneurial professionals is of particular interest: present in both CSAs it appears to be nation-specific entrepreneurial process. Individuals in this grouping do not fit easily into a push/pull motivational schema. Instead they appear to exploit the skills they possess in order to set-up ventures that do not have considerable potential or drive to expand. The case of local need-driven professionals in Zary constitutes another variant of the need-driven processes: influenced by the local employment and social structures. Lastly, enterprising females in Cumbria appear to needs driven onto entrepreneurial pursuits, however, they possess significantly greater attributes and capabilities than the female petty entrepreneurs elsewhere in the European countryside.

4.6.3. Entrepreneurial Clusters: A Corrective

We have examined the comprehensiveness of the rural entrepreneurial clusters upon the findings of the entrepreneurs’ survey, with the underlying aim of examining whether there were entrepreneurial groupings which have been excluded by the population survey on account of the methodology deployed. Indeed, the entrepreneurs’ survey indicated the importance of entrepreneurs who live outside the CSA in Kilkis and Nordwestmecklenburg. In the latter category such individuals were present in the population survey, whilst this was not the case in Kilkis68. Thus, we decided to present the characteristics of this entrepreneurial cluster in the Greek CSA.

These individuals are overwhelmingly males, who live in the nearby city of Thessaloniki, even though at least one third of them come from within Kilkis. Parental entrepreneurship was non existent among those falling in this grouping. Some 40% of them were educated to degree level or above and had some experience in management, though not at starting and running their own business. Most of them have started in business earlier on in their life (mean age of 25), however at the time of the survey nearly 40% were fifty years old or above. The enterprises created by urban-based entrepreneurs are – some 21% are medium and large-scale ventures. In terms of sectoral divide they are engaged mainly in manufacturing industries (60%).

68 This mainly on account of the decision to deliver the population survey on a face-to-face basis in the small towns and villages of Kilkis.
4.7. Conclusion

4.7.1. The Incidence of Entrepreneurship

The incidence of entrepreneurship in rural areas does not appear to be linked with specific (enabling, hostile or otherwise) environmental settings. This could be explained on account of the diversity of entrepreneurial processes (clusters) at work in rural areas: some of which are need driven and more widely reported in the most challenging (for entrepreneurs) institutional regimes, whilst others are opportunity driven and commonly identified in enabling environs. An interesting finding from our study is the similarity in the entrepreneurial propensity of the population in the CSAs that come from within the same country. This lends support to the thesis that the national context is one of the greatest influences of the entrepreneurial processes at work.

4.7.2. Factors of Unity and Factors of Diversity

Throughout the ten CSAs there appear to be five FoU in stimulating entrepreneurship. These include gender (and specifically the over-representation of males); younger age; the acquisition of higher education qualifications; parental entrepreneurial influences; and previous experience of running a business. The consistent and invariably significant influence of these factors lends support to the thesis that out-migration deprives rural areas from individuals (young and well-educated) who can identify opportunities, and on account of their (urban-university) experiences advance discontinuities and change. There are also four factors (of diversity) that have differential impact upon entrepreneurship in the ten CSAs under investigation. The include origin; unemployment prior to entrepreneurship; education prior to entrepreneurship; occupational background. They provide us with a powerful reminder of the pervasive influence of local historical trajectories that shape entrepreneurial behaviour.

4.7.3. Entrepreneurial Characteristics

In order to explore entrepreneurial characteristics we have identified a number of clusters (composite or not). These clusters also perform the task of proxies for entrepreneurial processes at work. Before drawing some conclusions from this exercise we would like to emphasise that these should not and are not perceived as deterministic or prescriptive. Instead, they are used as analytical instruments that enable us to decipher the complex processes at work in the diverse local settings under investigation. The capture similarity but undoubtedly conceal diversity in the specificities of the entrepreneurial processes that can not be underestimated.
The entrepreneurial clusters (processes) identified in this chapter suggest that entrepreneurship in Europe’s rural areas is not an undifferentiated ‘good’. Instead, there is considerable diversity between the experiences and characteristics of the individuals as well as the nature of the emerging organisations between local need-driven entrepreneurs in Lesvos and opportunity-seekers in Cumbria. Commonality is tentative and only concerning the function performed by these individuals in the process of market transaction.

The entrepreneurial clusters (processes) identified in the rural areas under investigation are case specific (local need-driven, opportunity-driven, local need-driven professionals, enterprising females, and urban-based), country specific (entrepreneurial professionals in Germany), and some that appear in different national contexts (female petty entrepreneurs, local artisans, in-migrant artisans, young entrepreneurs, and opportunity seekers). These clusters (processes) are evolving through time (i.e. some are identified with older individuals with no or few new recruits, whilst other comprise overwhelming of younger more recent entrants to entrepreneurship) and are path dependent (i.e. they can not be readily replicated from one context to another). For example the replication of in-migrant artisans (i.e. the ability to attract outsiders who can replace the young locals who out-migrated in enacting change) may not be possible even within the same national context (Oeste to Baixo Alentejo).

Specific environments can be associated with the emergence of certain entrepreneurial clusters (processes). Thus, need driven entrepreneurial clusters (processes) are profound in the case of the two most hostile socio-economic regimes, namely Lesvos and Baixo Alentejo. An element of pursuing opportunities is present in all the other CSAs, however its form and significance varies from CSA to CSA.

Lastly, entrepreneurial activity does have a significant impact on the relatively disadvantaged in the most challenging environments. It enables individuals who are either unemployed, or coming straight from education, as well as a significant percentage of females, to create their own (employment or enterprise) opportunities.

### 4.7.4. An Analytical Model

The review of the literature and the empirical findings presented here suggest that entrepreneurial behaviour is conditioned by the pervasive influence of two sets of factors: those specific to the individual (i.e. the factors that enable entrepreneurial thinking and
motivation), and those emanating from the external environment. However, there is precious little agreement between scholars regarding the definition and relative importance of each set of factors, as well as the processes at work. In this Section we attempt to shed light to these three issues that are of considerable importance in developing a coherent model for the study of entrepreneurial behaviour.

The host of environmental factors that influence the emergence of entrepreneurs are described in Diagram 25. For purposes of convenience they are clustered into three main grouping: markets (economic), structures (economic and social) and norms (social). The impact of the rural is profound upon input markets, and to a lesser degree structures and norms. However, both structures – especially the political ones – as well as norms, are formed at the national level, thus, explaining our argument about the importance of the national context (see above). Diagram 26., constitutes an attempt at depicting the factors that influence the entrepreneur. We suggest that entrepreneurial cognition and motivation are not mutually exclusive, and a model aspiring to capture entrepreneurial behaviour should attempt to combine both dimensions. What drives entrepreneurs however, is of particular importance in defining their actual and potential contribution to economic advancement. This is formed by the interaction between a number of factors: some of which are unidirectional – more or less irrespective of context – (FoU), whilst others have differentiated outcomes (on account of diverse national and local settings). For example living outside the confines of the invariably small and often inward looking communities of parts of the European countryside may undoubtedly enhance the scope for the identification of opportunities. However, embeddedness in the very same close knit communities may enhance the ability to tap into the local resources needed in order to exploit opportunities. Lastly, Diagram 27. brings together contextual and individual influences in the entrepreneurial process. It highlights the importance of accessing and interpreting information in the identification of appropriate opportunities.

4.7.5. Some Policy Implications

Our findings regarding the entrepreneurial processes at work has significant implication for policy. These could be summarised as follows:

- Given the importance of the national context, policies developed and implemented nationally are of particular importance. As a consequence, consideration of the

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69 We would like to point out that whilst these sets of factors are identified as useful analytical categories. However, considerable overlap exists between the cognitive and environmental, as well as the motivational and environmental.
potentially differential impacts of national policy upon rural settings may impact more upon entrepreneurship in the countryside than rural-specific initiatives.

- Diversity in entrepreneurial attributes is an important parameter in policy formulation. Take-up of policies (especially those replicated from elsewhere) may be influenced by the entrepreneurial processes at work in specific localities. More importantly however, targeted initiatives aimed at the formation of certain types of enterprises may fail on account of the absence of appropriate individuals to perform the entrepreneurial function.

- Stimulating entrepreneurial talent through educational initiatives is of particular importance in rural areas. The questions policy makers have to address is what types of entrepreneurial talent? Do initiatives aspire to create new types of entrepreneurs (for example opportunity seekers in Greece and Portugal), or greater number of the existing types of entrepreneurs?

- Recognition of the economic development potential even of marginal entrepreneurial processes can have significant positive contribution upon regional economic performance. Thus, initiatives aiming at ‘fragile’ but ‘existing’ entrepreneurial ventures may be particularly appropriate in a rural context.

- Lastly, maintaining young individuals with aspirations for personal advancement, or attracting such persons from urban localities is a key priority.

5. Technology, peripherality and rurality

Labrianidis Lois, Kalogeressis Thanassis

5.1. Introduction

This chapter is quite central to our understanding of the issue of entrepreneurship in rural areas in the sense that, on the one hand innovation is increasingly becoming a crucial parameter in the development process, knowledge is a key asset for competing firms and learning a key process, for nations, regions, and individual enterprises. On the other hand, it is apparent that there are enormous disparities in the spatial diffusion of innovation between and within countries with rural areas being, generally speaking, the least favoured.

70 both at RDPRU, University of Macedonia, Thessaloniki
The first part of this chapter attempts an overview of the main theoretical approaches dealing with technical change, technology and knowledge. Most of the existing work does not deal directly with peripherality and rurality, but with the role of technology and knowledge in fostering innovation and growth. Nevertheless, the way in which our understanding of the role of technology has improved over the last 20 years has important implications for issues of spatial concern at national, regional and local level. In presenting a theoretical overview of technology, we attempt to highlight the points of particular concern to rural areas and draw some preliminary conclusions stemming from current theoretical understanding and in particular from the systems of innovation approach.

In the second part of this chapter we try to understand how firms in rural European areas behave with regard to innovation based both on secondary material and on extensive fieldwork.

There are huge differences between the five countries under investigation in terms of level of ICT Infrastructure: Germany and to a lesser extent Britain have highly advanced ICT infrastructures while Portugal, Greece and Poland have much less developed ones.

The “technology gap” is not only a quantitative problem besetting development but is related to structural factors too. Economic action is also inevitably social action, and its success depends on a supportive social context. The existence of social capital is often cited as a crucial factor in good economic performance, while on the contrary the lack of it explains poor economic records. In Southern European countries the combination of centralized state structures and a weak civil society creates conditions favourable for hierarchical clientistic networks inhibiting rather than encouraging long term social capital-building. The institutional context of society plays a major role in fostering the traits towards cooperation or towards self-interest that all individuals possess. “Northern” countries generally have more sophisticated and better adapted support schemes for the promotion of innovation than less developed ones.

5.2. Review of the theoretical literature

5.2.1. Technology and knowledge in neo-classical theories

Neo-classical approaches

Until the emergence of new growth theories, neo-classical approaches treated technology as something exogenous to the economic system and at the same time freely and instantly available to all. New technologies are perceived to develop exogenously and firms adjust instantaneously and optimally to changes in the available set of choices.
In the neo-classical theories of trade (expressed in their “pure” form in the Hecksher-Ohlin models) technology is represented by production functions assumed identical for all countries. This means that all countries have equal access to a “global” pool of knowledge (Lundvall, 1997) and are equally capable of using it. This set of assumptions, however, raises serious problems when it comes to knowledge development and the necessary allocation of resources for this purpose. As Lundvall (1997: 43) puts it,

“if these theoretical generalisations reflected what is going on in the real world, there would be little innovation in the private sector. Why should a firm invest in developing a new blueprint if its competitors could copy it at no cost? Innovation would be accidental rather than systematic and R&D laboratories a serious waste of money, possibly reflecting the vanity of capitalists.”

According to Smith (1997:22), Kenneth Arrow (1962) emphasised the discrepancy between the implications of the neo-classical theory and the real world practice, and argued that technological knowledge has distinctive features that create market failures and require public action. These characteristics refer to: a) Lack of appropriability. It is very difficult to create a market for knowledge and therefore difficult for producers of knowledge to appropriate the benefits of it; b) Uncertainty. The process of knowledge production is such that it is not possible to predict with any accuracy outputs from inputs; c) Indivisibility and economies of scale. In the sense that a minimum stock of knowledge must exist before any production can take place, and that this necessary minimum is independent of the rate of production.\footnote{An illustrative example given by Smith (1997:22) refers to railway, which “must be constructed in its entirety before any trains can use it; and it must be constructed whether it is used by one train per day or fifty.”}

These characteristics of knowledge imply that market economies will under-invest in knowledge production (i.e. R&D) and this will lead to a typical market failure that calls for public funding of R&D efforts. However, as Lundvall (1997) points out, if neoclassical assumptions hold, the need for public intervention is not that obvious. Governments should leave it to their domestic firms to tap into the “free pool of global knowledge”. Of course this is not what happens in the real world. Practically all governments invest in knowledge production, probably recognising that some of the neo-classical assumptions do not reflect reality. In addition, neo-classical theory treats knowledge as synonymous with information (Lundvall, 1997). It ignores completely the tacit character of a considerable part of it, which, apart from being significantly less mobile, has two more
important properties: a) it is a necessary condition for someone to be able to use codified knowledge (or “information”) and b) a major part of it is not tradable.

**New growth theories**

Their main contribution is that they seek to analyse technological knowledge and its impact on economic growth as an endogenous variable in their models, in other words as something that occurs inside the economic system. New growth models emphasise the role of increasing returns to scale occurring from the production of knowledge, and consequently the role of investment in R&D, the role of trained human capital and the mediating role of investment in the diffusion and promotion of technical change (OECD, 1992).

Two characteristics of knowledge, i.e. the fact that it is a non-“rivalrous” product and it can be only partially excludable, result in the generation of external benefits (spillovers) from knowledge production (i.e. R&D) since people other than the inventor may benefit from the new knowledge produced and lead to the creation of further knowledge, thus increasing the stock of accumulated knowledge and creating increasing social returns (Jaime Rojo de la Viesca, 1997).

Another major contribution of new growth models is the emphasis paid to the existence of highly qualified human capital. Existing knowledge facilitates both the production of new technologies and the diffusion and exploitation of knowledge produced elsewhere (Jaime Rojo de la Viesca, 1997). To sum up, following Lundvall (1997), “new growth models” move away from some of the neo-classical assumptions, such as perfect competition and increasing marginal costs. Nevertheless they retain a number of restrictive assumptions: economic agents are homogeneous, perfectly informed and optimising units. Knowledge remains identified with information, and institutions do not matter. So, although they have undoubtedly significantly altered the neo-classical perception of the role of technological knowledge in economic growth, they are still characterised by limitations in the way in which they treat knowledge creation and innovation.

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72 Dosi mentioned a very illustrative example: a document containing the latest Fermat theorem is only useful to very few mathematicians who can actually understand it. For someone who doesn’t possess the necessary knowledge, even this extremely codified piece of information is completely useless.
5.2.2. The technology gap approach

One of the most powerful implications of neo-classical growth models is that economies will converge in the long-run as a result of the existence of a negative relationship between the initial level of income per capita and the growth rate. However, according to the “technology gap approach”, (influenced by the Schumpeterian approach to capitalist development), economic development is a disequilibrium process, in which there are two conflicting forces: a) innovation, which tends to increase technological (and economic) differences between countries, and b) diffusion or imitation of technology which tends to reduce them (Fagerberg, 1988). As a consequence, the ability of less developed countries to converge is not automatic, but depends on their ability to imitate the technologies used by the leading countries, and of course, on both their own innovative performance and the innovative performance of the frontier countries.

Abramovitz identified two crucial factors related to the benefits of imitation: technological congruence and social capability (Verspagen, 1997). The former refers to the possibilities of matching the technologies used by the leading countries to the needs of the weaker economies. Social capability refers to the ability of an economy (or society) to understand, absorb and exploit technologies produced elsewhere. It is linked with institutional factors such as the availability of adequately qualified human capital, the educational system, the availability of capital, the R&D activities within the country, etc.

Fagerberg (1988) proposes a model where economic growth depends on three factors: a) the diffusion of foreign technology (imitation). b) The development of the country’s own capacity to exploit available technology and c) The creation of new technology within the country (innovation). This last factor is of crucial importance in the sense that even if a country succeeds in reducing the productivity gap through technological imitation, it cannot overtake leading countries unless it engages in innovative activities itself.

5.2.3. Evolutionary theories

Evolutionary theories are an attempt of the early 80’s to analyse the dynamics of technical change and economic growth in a radically different way from mainstream economic theories of growth. The Schumpeterian notion of disequilibrium dynamics, as well as the notion of qualitative change and the generation of economic diversity, have been fundamental to evolutionary approaches. They argue that capitalism is an evolutionary process driven by technical and organizational innovation, a process in which firms face a greater degree of uncertainty and instability than is ever admitted in
neo-classical theory; a process in which social institutions other than the market play a major role.

In summary, evolutionary approaches offer a number of alternative perspectives to the analysis of economic and technical change.

These relate primarily to: a) **Heterogeneity**: economic agents are not perceived to be homogeneous, context independent units, and as such they cannot be “reduced” to a representative agent. b) **Uncertainty** for the outcome of choices is a direct implication of heterogeneity. c) Economic growth is a process of **transformation**, not of convergence to a steady-state growth path. d) Linked to the above, variation and selection lead to **qualitative changes** in the system. Search activities are a major driving force of variation, and competition is process that serves as a selection mechanism. e) **Technology (and consequently innovation)** is a key factor in the process of economic growth. Nevertheless a distinction has to be drawn between **radical and incremental innovations**. The former open up possibilities for radical restructuring of the economy, creating new industries or reforming existing ones. The latter can be associated with the diffusion of radical innovations or with adjustments within existing technologies and are dependent on the institutional and historical context (*path dependency*). f) Finally, although a number of contributions to evolutionary theories have remained within the borders of economic science, the most recent research in the area has opened the way for a more **systemic view** of technical and economic change, thus contributing to the emergence of “systems of innovation” approaches.

### 5.2.4. Systems of Innovation

“Systems of innovation” is not a theory in the formal sense of the term (Edquist, 1997). It is rather a methodological approach, an analytic conceptual framework that seeks to understand the complex relationships characterising processes of innovation, identify certain factors that appear to be crucial in these processes and hopefully draw some useful inferences and guidance for policy-makers.

The central theme of the various contributions to the “systems of innovation” approach is that: a) knowledge and innovation are crucial factors in shaping the competitiveness and growth potential of modern economies and b) that innovation is a very complex process; it involves the production and diffusion of new knowledge and the transformation of (at least) parts of it into new products and processes of production. This process depends on continuous and complex interactions between firms and their environment, the latter including several important actors: other firms, universities, R&D organizations,
institutional factors (e.g. the educational system and market regulation), government policies, etc.

Being a conceptual framework rather than a formal theory, the “systems of innovation” approach has been very open to influences from other theories and approaches. Evolutionary theories, interactive learning and innovation theories (Lundvall, 1992, 1997), institutional economics (Hodgson 1988 and Johnson 1992), regional economics (Camagni, 1992; Storper, 1992 and 1997), history of technology (Pacey 1991; Hughes, 1987 and 1994), science and technology studies (Williams and Edge, 1996) and organizational theories (Dahmen, 1988; Porter, 1990 and 1998) have all provided very useful contributions to developing the systems of innovation approach.

Brief overview of the literature

The “systems of innovation” approach emerged in late ‘80s probably as a response to the growing recognition of the roles of knowledge and innovation in improving international competitiveness.

Three parallel efforts emerged in roughly the same period (1987-88). Chris Freeman (1987) focused on the interdependence between company R&D and production in large Japanese companies, on the conglomerate structure of industry and on the ability of the system (and government) to channel resources towards innovation and investment in new technologies. He focused on social, institutional and policy factors and stressed the role of public policies, particularly the role of Ministry of International Trade and Industry of Japan (MITI) (Smith, 1997). His main point was that the impressive performance of the Japanese economy could be attributed to a combination of public policy, corporate governance, industry structure and education and training systems. Nelson (1988) concentrated his efforts on the analysis of the USA innovation system. He identifies three characteristics of national innovation systems common to capitalist economies: the privatisation of much new technology; the existence of multiple and independent sources of new technology; and a heavy reliance on ex-post market forces to act as a selection mechanism among the various innovations produced. In the USA study, he adopts a rather narrow definition of innovation systems, focusing on the three main pillars underpinning knowledge and technology production: private industry, with its R&D laboratories, universities and government. Lundvall (1987-88) followed a somewhat different approach to systems of innovation. He and his colleagues focused on firm-level studies, examining the relationships between producers and users of technology,

73 This section draws heavily on a very interesting paper by Smith (1997).
stressing the role of interactions between firms in the emergence of new technologies as well as the importance of common cultural environments. Lundvall’s approach is centred on the notion of user-producer relationship and interactive learning.

These approaches were later taken up in two major books on national systems of innovation, published in 1992 and 1993, edited by Lundvall and Nelson respectively. Since then, a growing number of scientists have been working in the systems of innovation conceptual framework. Most work remains at a national level talking of “national systems of innovation” (Edquist, 1997; Archibugi & Michie, 1997; McKelvey, 1997, etc.), some has paid more emphasis to sectoral approaches and technological systems (Carlsson & Stankiewitz, 1995; Breschi & Malerba, 1997), while others have adopted a regional approach to innovation, preferring the term “regional innovation systems”, arguing that regions are gaining importance as economic actors in a globalising environment (Cooke, 1996; Howells 1999 and Landabaso, 2001).

Common characteristics in the systems of innovation approach

**Systems of innovation are about systems**

This is more than a simple tautology. The term “system of innovation” has been used in different senses by various researchers in this domain. Nelson and Rosenberg (1993) for example, primarily concerned with technical innovations, have omitted concepts such as interactive learning or factors linked with social and organisational innovation. Others restrict their notion of a system to a particular technological domain (Carlsson & Stankiewitz, 1995). Lundvall, however, adopts a much broader definition: “a system of innovation is constituted of elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge” (Lundvall, 1992: 2).

The main contribution of the holistic, systemic approach of the “systems of innovation” is that it demonstrates the complexity of the innovation process and the interdependence of several factors, economic, technical, institutional, social and political. This change of perception has important implications, since it suggests that improvement in a country’s international competitiveness requires coordinated policy action in a number of different—but interrelated- areas (e.g. technology policy, industrial policy and education policy).

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74 This section relies heavily on an excellent review by Edquist (1997).
Information, codified and tacit knowledge

Knowledge has been central to all analyses of the system of innovation approaches and researchers of this persuasion draw particular attention to the distinction between codified and tacit knowledge. Codified knowledge is a “piece” of knowledge that has undergone a process of transformation into what can be called “information”, in the sense that it can be transmitted by means of books, articles, or more importantly by the use of ICT. This transformation though, is necessarily a process of standardisation, reduction and conversion. As a result, codified knowledge is not precisely congruent with the initial “piece” of knowledge and its tacit elements will necessarily be lost. It is an irreversible process: once codified it cannot go back to its original tacit state (Foray and Lundvall, 1996).

Tacit knowledge is the part of knowledge that cannot be codified into pieces of information. What is important about tacit knowledge is that it is not a tradable commodity and cannot be transmitted easily. It tends to remain highly localised and its transferability depends on social contexts and human networks.

An important element in the analysis is that these two types of knowledge are complementary and co-exist. This relationship becomes crucial when looking at the comprehension, utilisation and creation of codified knowledge. As Lundvall (1992) points out most codes relating to science, technology and innovation can only be decoded by scientists who have invested heavily in learning them. Thus, the increased flow of information now being experienced, thanks to the growing use of ICT, is not a sufficient condition for increased productivity of firms and regions. Tacit knowledge is a crucial factor in developing a region’s (or country, area and firm) capacity to successfully incorporate knowledge produced elsewhere, and even more so in developing its potential for the creation of new technological knowledge.

Interactive learning – the learning economy

The notion of interactive learning has been developed extensively by Lundvall, according to whom (Lundvall ed., 1992: 1):

“The most fundamental resource in the modern economy is knowledge and accordingly the most important process is learning...learning is predominantly an interactive and therefore socially embedded process which cannot be understood without taking into consideration its institutional and cultural context.”
Lundvall pays particular emphasis to more informal learning activities (in contrast to “formal learning” that takes place in the educational system, universities, etc) that occur at the workplace mainly during interactions between producers and users of technologies, researchers working on common projects, etc. In fact, interactive learning appears to be the main process through which, apart of codified knowledge, tacit knowledge can be shared. The importance that Lundvall attaches to learning has led him to introduce the term “learning economy” as an alternative to the “knowledge based economy”.

He also points to two important observations in this respect:

- That the learning economy is not necessarily a high-tech economy. Learning occurs in all parts of an economy, including traditional and low-tech sectors.

- One of the main consequences of the learning economy is its tendency to regional and social polarisation. Slow learners (both individuals and firms) risk becoming marginalized in a changing and increasingly competitive environment. Differentiated access to knowledge and learning is a major factor behind regional disparities (Fagerberg, 1996; Landabaso, 2001). A transition of a less developed region into a modern learning economy involves policy measures aimed at improving the local learning capability. Such measures could include investment in knowledge infrastructure, strengthening of existing knowledge institutions, participation in national and international knowledge-intensive networks, and so on (Gregersen & Johnson, 1998).

Historical perspective and path-dependency

Knowledge creation is seen as a cumulative approach built over time. The development of new technologies is constrained by the past and present, as well as by other factors specific to the particular systems under consideration Nelson (1993).

A historical perspective seems therefore essential in the analysis of systems of innovation, since technological developments usually occur in small incremental steps and involve a parallel development of human resources and their specific skills. Furthermore, the gradual, incremental development does not refer to technological innovations only (Edquist, 1997). It is a feature of the development of institutions and organisations within a system, implying that innovations do not occur in a vacuum as mainstream economic approaches suggest. Agents (such as firms) build their knowledge over time in certain technological areas linked to their area of economic activity. This creates a “bounded vision” (Smith, 1997) for search and potential innovation; they will
try to learn and innovate along the technological trajectory in which they operate. History as well as other factors (place, geographical features, institutions, human capital, etc) matter in shaping the innovation potential of a system at a national, regional or local level.

Institutions and organisations

A common feature of all contributions to the systems of innovation approach is the central role attributed to institutions. What is not common however, is what is meant by the term “institution”. For some, institutions are formal and informal “rules of the game”. They are things “that pattern behaviour” like rules, norms, routines guiding everyday actions in production, distribution and consumption etc. (Lundvall, 1992). For others, institutions are “formal structures with an explicit purpose” (e.g. R&D departments, universities and firms) (Nelson & Rosenberg, 1993). This latter definition of the term is what Edquist (1997) called “organisations”, a distinction that has since been widely adopted.

Both concepts are crucial in the innovation process. Institutions are important both as barriers and stimulants for change. By definition they regulate the relations between people as well as between organisations. Since innovation is perceived as an interactive process, institutions directly affect the innovative potential of a system. The role of organisations in the innovation process is less ambiguous. All authors agree on the prominent role of firms in the innovation process, while scientists like Nelson and Rosenberg also stress the role of universities and research laboratories. Most formal research activities take place within these organisations, which in addition to their research activities perform a very important teaching function.

5.2.5. New regional economics and regional systems of innovation

Interest in the role of ‘region’ (defined as a ‘sub-national’ geographical entity) was revived in the ‘80s’. At a time when the forces of globalisation (e.g. in transport, telematics and organizational techniques) appear to have reduced the world to a “placeless mass”, regions are seen as entities that could provide the basis for economic and social life favouring increased specialization and flexible, knowledge-based production systems (Storper, 1998). Interest in the literature in industrial agglomerations, as Hassink (1997) argues, has increasingly shifted from “economic” reasons for growth (e.g. product specialization, and vertical disintegration of the division of labour) to “social” and “cultural” reasons (e.g. social consensus, institutional support for local business, innovation, skill formation and circulation of ideas) (Amin & Thrift 1994; Asheim, 1996).
Inspired by the institutional structures found in successful, modern industrial districts (e.g. Third Italy and Baden-Württemberg) scholars, as Hassink (1997) argues, are writing about the institutional aspects of regional economic development. Terms that have been used include: “institutional thickness” (Amin & Thrift, 1994), “intelligent regions and collective entrepreneurship” (Cooke and Morgan, 1994), “regional innovation systems” (Braczyk et al., 1997), “organizational learning and un-learning” (Maskell & Malmberg, 1999) and “tacit knowledge and untraded interdependencies’ (Storper, 1995) and “the learning region”. Asheim, (1996). All these approaches, as Hassink (1997) argues, have at least three characteristics in common: a) they consider that proximity still matters because learning is still primarily a localized process, b) they see innovation as an outcome of wider economic and social processes, c) they offer policy solutions to the threat of job decline caused by globalisation.

According to Storper (1998) three main schools of thought seem to have emerged in what is often called ‘new regional economics’: scientists interested in flexibility, specialisation and institutions; those with a particular interest in industrial organisation and transactions; and those focusing on technological change, innovations and learning. (We will very briefly present the main points of each of the three ‘schools of thought’, and then go into more detail in the regional systems of innovation which can form –in our view- a conceptual framework that can incorporate many of their common elements.

**Flexibility, specialisation and institutions**

Detailed theoretical and empirical work on the “Third Italy” case forms the foundation of this approach. It began with the work of Bagnasco (1977), followed by Piore and Sabel (1984) and Becattini (1989 and 1991) who studied the industrial districts of Tuscany in detail. Their main ideas can be summarised follows: Flexibility and specialisation can act as successful alternatives to mass production. Placing their analysis in a historical context, they spoke of an ‘industrial divide’ separating post-war mass production patterns from contemporary flexible production methods combined with increased specialisation depending heavily on region-specific institutional pressures. As a consequence, technological learning and economic development have a strong local character shaped by their respective institutional set-ups. Institutionalised networks are essential to successful adaptation of regional economies, especially in a period of rapid technological change and increased uncertainty. Paloscia (1991) argues that other factors

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76 The presentation of the main points of the three schools relies almost exclusively on Storper (1998). Therefore references to this book will be omitted in this part of the text, unless an exact quotation is used.
such as clear elements of continuity between the new territorial formation ("urbanised countryside") derived from diffused industrial development strongly mixed with agricultural activity, and an original society strongly marked by its socio-cultural, economic and spatial order, played also crucial role in the case of the “Third Italy”. The backwardness of southern Italy is not due so much to the lack of manufacturing firms as to the haphazard aggregation of different scales of production that prevents the formation of a necessary productive matrix. The opposite is true in the developed areas in the North where production activities exist in integrated systems based on the model of large business/small satellite business, in a clearly dependent relationship. In Third Italy the highly integrated production system is not induced by large companies but is the result of small, varied and specialized production activities springing from the socio-cultural characteristics of the area i.e. availability of a labour force with an agricultural background derived from a rural community with its peculiar characteristics and a consolidated and widespread artisan tradition in specific sectors. The internal historical conditions of the area are of paramount importance.

**Industrial organisation, transactions and agglomeration).**

What Storper refers to as the “California school” of thought, is work initiated by Scott (1988), and taken up by himself and other scholars who were interested in the relationship between the division of labour, transaction costs and agglomeration. The initial argument was based on the assumption that in periods of increased uncertainty large industries try to reduce risks by disintegration, which has the disadvantage of multiplying transactions thus increasing transaction costs. Agglomeration is therefore a response to increased transaction costs since geographical proximity is seen as a factor helping to reduce these costs through tacit knowledge transfer and mutual trust. This argument was later further developed to include also the possibility that agglomerations, once created, constituted places where endogenous dynamics of knowledge creation and transfer occurred. Such dynamics were seen to depend on user-producer relations and on institutional arrangements within the industrial agglomerations. Storper argues that such 'internal' institutional arrangements are not independent from the general institutional environment of the region but on the contrary they are mutually interdependent. Like the “flexibility-specialisation” approach, the California school stresses the importance of institutions for local development.
Technological change, innovations and learning

Unlike the previous two approaches where innovation is seen as a consequence of institutional and organisational settings, this approach is based primarily on technology and innovation as a starting point. Storper identifies two branches of thought within this approach: the American one concentrating on an analysis of Silicon Valley in California and Route 128 in Massachusetts, and the European one focusing on the concept of “milieu innovateur”. The American ‘branch’ (Saxenian, 1988; 1991 and 1994) identified several factors that played a role in the development of these areas, with the strong links between universities and local firms singled out as the most important one. Other scholars (Marcusen, 1986 and 1991) put more emphasis on the importance of political coalitions and public procurement that supported the development of these areas. The so-called “European approach” is principally the work of the GREMI (Groupe de Recherche Europeen sur les Milieux Innovateurs) group (among others, Aydalot, Camagni and Perrin) that based their analysis on the concept of "milieu innovateur". The “milieu innovateur” approach emphasises the interaction that takes place between economic, socio-cultural, political and institutional actors in a given place: the complex web of relationships tying firms, customers, research institutions, the school system and local authorities to each other. Space is not merely a “container”, in which attractive location factors may happen to exist, but a milieu for collective learning through intense interaction between a diverse set of actors. The milieu is a “created space” that results from and is a prerequisite for learning –an active resource rather than a passive surface (Coffey & Bailly, 1995). Apparently, the notion of ‘milieu innovateur’ is very close to the concept of a regional (or local) system of innovation. This latter though, influenced by other research traditions, offers a more complete framework of analysis by bringing into the picture additional mechanisms and concepts such as the evolutionary and cumulative nature of knowledge, technological trajectories and path dependency.

Regional Systems of Innovation

Regional innovation systems should not be seen as an alternative to national systems, but as a different layer of analysis that allows region specific characteristics to be identified and analysed. As Landabaso (1997) mentions, significant regional disparities exist in the EU where the technology gap is twice as great as the economic one. As shown by Oughton et al. (2000), variation across regions in terms of R&D intensity and innovation activity is significantly greater than between nation-states in the EU. Empirical evidence suggests therefore that there should be differences in at least some of the
factors that determine innovation performance and affect “regional competitiveness”: the resources available in the region, the physical structures established in the region over time, and the region’s specific institutional endowment.

A crucial element in this respect refers to the non-tradable/non-codifiable consequences of knowledge creation –the embedded tacit knowledge- the product of hands on activity. National/regional features and distinctions are not swept away by the formation of global markets precisely because of the way that embedded tacit knowledge differentiates space. In fact, the more tacit the knowledge involved the more important the spatial proximity. The proximity argument is related: a) to the fact that, everything else being equal, interactive collaboration will be cheaper and smoother the closer the participants. b) to proximity of a social and cultural kind. Communication of tacit knowledge requires a high degree of mutual trust and understanding related both to language and shared values and culture.

Howells (1999: 72) identifies three elements that differentiate regions and strengthen the need for analysis at regional level: a) The regional governance structure, both in relation to its administrative set-up and in terms of legal, constitutional and institutional arrangements; b) The long-term evolution and development of regional industry specialisation and c) Additional core/periphery differences in industrial structure and innovative performance.

Interestingly he comments that, even in cases where regions share a common legal and institutional environment and a similar administrative structure, the way in which policies are delivered may differ substantially. (Howells, 1999: 77).

This point has been further developed in Oughton et al., (2000) where the idea of “regional innovation paradox” is developed. This term refers to the observed contradiction between the need to increase spending on R&D and innovation related activities in the less developed regions and their reduced capacity to absorb these funds and use them in an effective way emphasising the importance of internal dynamics in determining a region’s overall performance.

Systems of Innovation can also be a very useful analytical tool at a territorial level below that of a region. The issue that arises however, is that the smaller a system gets, the more ‘open’ it becomes with respect to the outside world. In very small systems therefore, the interactions of their constituent parts with the outside world may actually

77 i.e. the capacity of the region to attract and hold firms with stable or increasing market shares in an activity while maintaining or increasing standards of living for those participants.
become more frequent and more important than the interactions within the system which in turn questions –by definition- the existence of a system.

Howells (1999) provides a very interesting contribution to this question by identifying a number of processes that should exist for the identification of a local innovation system:

Localised communication patterns relating to the innovation process, both at an individual and a firm (or group of firms) level. Patterns of communication relate negatively to geographical distance. This is shown by a number of studies (Allen, 1970 and 1977 in Howells, 1999: 82). Lundvall’s references to informal contacts also reinforce this. Despite the enormous progress in ICT, face-to-face contacts and co-operation in joint projects remain crucial as vehicles for tacit knowledge transfer and the creation of networks based on mutual trust.

Localised search procedures. Firms and especially small ones operating in local markets, have a bounded knowledge of where, and what resources exist. As a result, the existence in their vicinity of sophisticated, technology-intensive firms or organisations improve opportunities for innovation and becoming part of networks facilitating knowledge transfer and interactive learning.

Localised invention and learning patterns. The central role attributed to producer-user relationships in the innovation process is in accordance with the observation that inventive activities follow highly localised patterns (Howells, 1999). Data based on the European Community Innovation Survey, show that only a small proportion of firms engage in innovation activities on their own, and that most innovations occur in innovation networks. The local dimension of such networks is crucial and consequently spatial proximity becomes a factor of increasing importance (Lundvall, 1997).

Localised knowledge sharing. The key issue here is the existence of locally available tacit knowledge disseminated through interactions involving networks of firms and knowledge centres. Transfer of knowledge within these networks is facilitated by trust and common culture, usually developed through geographical proximity (Lundvall, 1997).

Localised patterns of innovation performance. The existence, locally, of firms that can act as ‘early users’ of potential innovations and engage in active user-producer interactions facilitates the rapid improvement (or early rejection) of technological innovations and increases the innovative performance of an area.

Obviously, not every local area is characterised by the processes identified by Howells above. Rural areas, in particular, may very well be characterised by opposing factors: Low-level, low-tech economic activities, lack of knowledge infrastructure and skilled
workers, and weak interactions with knowledge-intensive regions or urban centres. This observation though, should not lead to the conclusion that there are not rural areas, or at least cases, where the potential exists to develop a local innovation system (see section 5.6.).

5.2.6. Complementary theoretical approaches to systems of innovation

There are also other theoretical approaches influencing the systemic approach to technology development and innovation. The “markets as networks” approach focuses on buyer-seller relationships and in particular on their continuity and complexity. The “history of technology” approach perceives technologies as integrated systems developed within broader social contexts. Along similar lines, the “social shaping of technology” studies, concentrate on the content of technology and the related processes of innovation. They argue that there is not a single pre-determined outcome in the development process of a new technology but several possible technical options depending on political, cultural and social factors. As a consequence, technologies are in essence as much a social product as a technical one.

5.3. Disparities in Innovation Performance Between EU Member States78

5.3.1. Technological potential as an important source of competitive advantage

As shown in the previous section, it is becoming increasingly evident that innovation constitutes one of the most important factors determining the ability of a firm to compete effectively in international markets. Firms innovate to improve the quality of their products/services, open up new markets, increase their market share, and reduce their labour costs. Accordingly, at the EU Summit in Lisbon (2000), the Union set itself the goal of becoming the most competitive and dynamic knowledge-based economy in the world within a decade.

The EU scores quite poorly in innovation compared to the US and Japan. In fact, while the US scores 5.6 in the “summary innovation index” (SII)79, and Japan scores 3.8, the EU only scores 0. There are significant disparities between EU member states. While certain member states are world-class leaders in many innovation indicators, Greece and

78 We would like to mention here the contribution of Dr. Sofia Skordili adjunct Lecturer in the Harokopian University Athens, on an earlier draft of this section.
79 The innovation scoreboard consists of statistical data on 17 indicators in four areas: human resources; knowledge creation; transmission and application of new knowledge; innovation finance, output and markets.
Portugal appear at the bottom of most indices. These disparities are greatest in those areas where the private sector predominates.

Furthermore, national aggregate figures might conceal the dual nature of economies with marked regional differences, with a few “advanced” regions rapidly converging with the “advanced” R&TD profile while LFAs, or the “traditional economy” develop a profile that diverges from and lags behind that of developed economies (Lanadabaso, 1997 cites Ireland and Spain).

Most of the debate on technology and rural areas focuses on two rather specific fields of interest: a) technological developments in agriculture and b) the impact of ICTs in rural areas. The second point will be dealt with in some detail in the last section of this chapter. This section very briefly outlines the debate on technology and agriculture, stressing however that rural areas should not be solely identified with agriculture. Indeed, recent policies for rural development both at national and European level, aim precisely at creating alternative employment opportunities.

Technological development has been a major concern in agriculture for over a century. Developments in engineering and the chemical industry (fertilizers, pesticides, etc) have been absolutely crucial in shaping today’s agricultural production patterns and performance. However the current debate seems to be qualitatively different, being dominated by two main factors: a) the technological breakthroughs in biotechnology and the subsequent heated debates on the opportunities and threats linked to the use of GMO’s; and b) with the increased pressures on the environment resulting from intensive methods of agricultural production and the growing environmental awareness of consumers –at least in the developed countries. Sustainability has become a key-issue in farming and technological development has become centred on reconciling economic objectives (such as efficiency, quantity and productivity) with concerns about health and environmental and social sustainability. The term “sustainable farming systems” refers to “the capacity of agriculture over time to contribute to overall welfare by providing sufficient food and other goods and services in ways that are economically efficient and profitable, socially responsible, while also improving environmental quality” (OECD, 2000).

While sustainability itself can be a geographically delimited concept, the technologies required for sustainable farming systems are increasingly being developed at a global level. Both conventional and emerging technologies related, for example, to biotechnology, information technologies, precision farming techniques, biological pest control and organic farming systems, are being developed by large organisations
operating on a global scale. Nevertheless, their application takes place at farm level, and, through regulatory mechanisms, can have a significant impact at the level of (one or more) rural areas (OECD, 2000). The shift in future demand patterns may open new opportunities for relatively under-exploited rural areas to develop environmentally and socially sustainable agricultural activity.

Technology is not only an important factor in the production of agricultural and other craft products, but also in their processing, distribution and marketing. Herdzina et al. (1996), analysed craft enterprises in rural areas in Germany and concluded that successful enterprises had a stronger propensity to take risks, more innovative competencies, a higher willingness to learn, more constantly checked their method of solving problems and engaged in knowledge exchange activities, than less successful ones. Similar studies in Portugal showed a developing interest in the adoption of innovative technologies in rural peripheral areas, with a view to creating new niche markets for high quality traditional local products, such as cheese, wine, olive oil and cork-based goods.

Technology in a rural peripheral context can therefore provide opportunities for the competitive repositioning of agricultural and other types of production, while achieving objectives related to environmental concerns, or for rationalising existing production processes by introducing new methods. Regarding rationalisation, Smallbone et al. (1997) found that during the 1980s remote rural firms in the UK were encouraged to adopt more labour intensive forms of expansion than their urban-based counterparts. Smallbone et al. (1999) found little evidence that rural SMEs had used technology as a means of rationalisation; instead replacement investments seemed to be the norm.

An example of new technologies leading to diversification and innovation is provided by the cooperative of asparagus producers in Evros, a poor agricultural region on the Greek-Turkish border. With EU support, they have not only succeeded in using technology to grow a new type of asparagus but also managed to enter the competitive market by mobilising the Greek immigrant community. Packed in recyclable containers, their products sell in the high quality segment of the German fresh vegetable market. It is not an exclusively local initiative, with the Greek Ministry of Agriculture, the Prefecture of Evros, as well as private Dutch companies, being also participants in the cooperative. The keys to success have been the energetic local mobilisation of growers, willingness to apply technological solutions and the ability to manage networks providing access to information.
New technologies can also have adverse effects on the relative position of rural areas, if not addressed in a pro-active way. Herdzina and Nolte (1995) studied how the economic competitiveness of regions in Europe is affected by fundamental changes in the worldwide division of labour, changes in demand patterns and technological and organizational innovation. They argue that one of the main structural weaknesses of rural areas in the regional adjustment processes lies in SMEs inability to innovate. Technology can also be a source of stress within companies, as Herdzina and Blessin (1996) and Blessin (1997) point out. Combining organisational efficiency with internal stability and the ability to respond quickly to external changes posing new threats or presenting new opportunities, is important and firms located in rural areas and less likely to possess this kind of skill, can therefore be more exposed to such pressures.

The importance of existing (formal and informal) relationships between the heterogeneous actors, including policy makers and entrepreneurs, involved in technology issues in this context, as well as of relationships extending beyond the rural boundaries, also needs emphasising.

5.3.2. Empirical findings: Innovation in rural Europe

Firms in the entrepreneurs’ sample were selected on the basis of being innovative. In all CSAs, more than 60% of firms had three or more innovative products, while in the two Greek regions over 10% of firms claimed to have more than 10 innovative products/services.

The rather vague characteristic of ‘better quality’ was in most cases the factor that made products or services innovative, accounting for 45,5% of responses to the question regarding the most significant characteristic.

Nevertheless, there were significant regional variations, creating quite a unique pattern, with two very distinct groupings of CSA – characteristics combinations. More specifically, the Greek and Polish regions form one cluster, mainly affected by the characteristics ‘better quality’ and to a lesser extent ‘lower price’, while the remaining regions (with the notable exception of Devon & Cornwall) form the second cluster, mainly affected by the characteristic ‘more sophisticated’. Since ‘better quality’ is much more generic than ‘more sophisticated’ we could hypothesize that firms from the first group (i.e. Greek and Polish firms) are significantly vaguer about the sources of innovation than firms from the other three countries.

Some of the innovative products were introduced to the market 30 or 40 years ago, justified by the very broad definition, including uniqueness in a regional context, given to
the term innovation. However, assuming that the broad definition applied equally to all regions, the year of introduction of the innovative product/service in the market is another indication of the specificity (both regional and national) of innovation. In this context, approximately 40% of the innovative products of English firms were introduced in the market more than a decade ago, while for the German and Polish firms, the respective proportion is zero, except Waldshut, where it stands at 3%. The remaining regions are split between these two extremes, with Kilkis resembling the two English CSAs.

In the majority of cases the time required for the development of the innovative product was approximately two years (a mean of 2.07 years for the total sample).

Our empirical findings seem to confirm that innovation, is also a social process, significantly affected by the social environments in which it is embedded. Participation of other people (apart from the entrepreneur) in the inception of the innovative product/service varies quite considerably between the regions examined. In this context, in the southern European regions (except Oeste) and the German regions, more than half the innovations were developed in cooperation with others.

Further differences appear once ‘others’ is disaggregated. Hence, the importance of company employees is much more significant in Bialystock, the two German regions and Kilkis, the four regions with the largest firms in the sample. The importance of family and friends is clearly reduced in all these regions except Kilkis, where family and friends appear to be a dominant influence in smaller firms. Thus, while the importance of such informal social networks is clearly negatively related to the size of the firms, it appears to be more important in southern Europe.

The results show similarities in sources of information, the market, the production processes and sources of finance for the innovative product. In all cases, the importance of information from family and friends is much more important in the southern regions (except Kilkis, for the reasons mentioned above), and to a lesser extent the Polish regions.

Even when it comes to the sources of finance for the innovation there are significant differences. While few Polish firms have used external finance for their innovative product, the most impressive finding is the very high dependence of Greek and Portuguese firms on public sector grants.
There are significant differences between CSAs in the share of entrepreneurs who feel that they have to face barriers to the innovation of their products/services. This ranges from 96.8 for Lesvos to 61.8 for Oeste.

Lack of finance is by far the most important barrier to innovation of products/services in all CSAs, ranging from 31.5 in Lesvos to as high as 60 in Devon & Cornwall. Four barriers (i.e. Lack of finance, Inability to find skilled staff, Lack of time and Lack of knowledge about the market) constitute well over 50 % of the impediments to innovation. It is interesting that in almost all countries (i.e. Greece, Germany, and Poland) enterprises in the two CSAs rate the main barriers to innovation in the same order. In the other two countries (i.e. Portugal and the UK) enterprises in the two CSAs concur about two out of their three most important barriers.

The highest proportions of enterprises believing the problems of innovation for their products/processes have no relation to operating in a rural environment, are either in transition economies with much more important problems (e.g. Bialystok and Zary) or in very developed countries where such barriers have, in a sense, been overcome (through the provision of adequate infrastructure etc).

It is interesting to note that the smaller the settlement the firm operates in, the less it considers the rural environment as a barrier to the innovation of its products/services (i.e. 61.5% for small settlements decreasing to 52,1% for medium and 47.1% for large settlements).

Rural environment hampers innovation mainly through: “small local market”, “poor business environment” and “poor technical infrastructure”. These three factors constitute 56.8% of the reasons mentioned. It is also noteworthy that in each country there is a specific pre-eminent factor apart from the three already mentioned. In the case of Portugal it is the “Absence of Public Sector Business Support Organisations”, in Poland the “Low demand, low income, unemployment”, in UK the “Planning restrictions” while in Greece, both “Absence of Public Sector Business Support Organisations” and “remoteness” are cited.

It is quite revealing that reservations of enterprises located in more accessible areas and in larger settlements about the barriers they faced were more severe than those of their counterparts in less accessible or smaller settlements. Generally, the more developed an enterprise, the more obstacles it sees. In particular entrepreneurs in semi-urban areas thought that they faced more problems with regard to small local market, poor technical infrastructure and absence of Public Sector Business Support Organisations, etc. While enterprises located in large settlements tended to think the barriers they faced as being
more severe than did their counterparts in smaller settlements (e.g. small local market, Poor business environment, absence of Public Sector Business Support Organisations and Lack of qualified personnel).

5.4. Importance of Institutional and Social Factors to Development

5.4.1. The “technology gap” between countries is related to their relative institutional frameworks and to the level of development of their civil societies

The “technology gap” is not only a quantitative problem besetting development but is also related to structural factors. Economic action inevitably involves social consequences and its success depends on a supportive social context. The ‘embeddedness’ of all institutions suggests that the content of a successful economic reform package, as well as the nature of the obstacles likely to be faced, is likely to be society-specific. The institutional context of society has a big role to play in fostering either the cooperative or self-interested traits inherent in all individuals.

The notion of social capital is often used to interpret good economic performance; its lack is seen as explaining poor economic records. Social capital includes norms such as that of generalised reciprocity, which can ‘restrain opportunism and resolve problems of collective action’ (Putnam, 1993: 172). Social capital is defined in terms of the features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating cooperation. Like other forms of capital, social capital is productive in the sense that it makes possible the achievement of certain ends unattainable in its absence. As with conventional capital, those who have social capital tend to accumulate more while most forms, such as trust, are what A. Hirschman has called “moral resources” –i.e. resources whose supply increases rather than decreases through use and dwindles if unused (Putnam, 1993: 167, 169). Social capital exists in and is nurtured by, communities, associations, networks, families, and clans.

Rational economic conduct presupposes the creation of a free market and the institution of market rules within a contractually established society. Supposing that the free market gives people free rein for aggression and selfishness, the rules of this market ensure protection from chaos and from non-economic “antisocial” conduct. Conformity to those rules is considered a self-evident cultural presupposition. Such concepts as honesty, virtue, work ethics, and discipline, specialised competence and organizational rationality reflect, on a regulatory level, the fetishisation of rationality, a peculiarity specific to the market.
In such a framework, as Tsoukalas (1993: 13) argues, behaviour of a "free rider" type – observed in countries such as Greece - are treated as obvious breaches of a basic social contract demanding equality, not only in the enforcement of the law, but also in the concept of civic rights and duties as defined by convention.

"Civil society", functions as the arbitrator of both the market and non-market rules of contact, or as the unofficial normative intermediary between the self-seeking individual and society as a whole. Putnam (1993) (whose views on social capital stem from his work on Italy) has been particularly influential in stressing the importance of 'civic community', as evidenced in cases where there exist horizontally ordered groups such as cooperatives and mutual aid societies. His argument is that it is horizontal networks of civil engagement that are important in solving the dilemmas of collective action. Such horizontal networks are prevalent in the North, whereas vertical networks and ties of kinship dominate the South (Putnam, 1993: 174-175). Vertical networks such as patron-client relations common in clientistic politics 'no matter how dense and no matter how important to their participants, cannot sustain social trust and cooperation', not least because 'in the vertical patron-client relationship, characterised by dependence instead of mutuality, opportunism is more likely on the part of both patron (exploitation) and client (shirking)'. Kinship ties on the other hand, while horizontal, are also inimical to fostering wider ties and merely sustain cooperation within the (extended) family but not between groups. In the "uncivic regions" public life is organised hierarchically, the ‘very concept of citizen is stunted’ as political ‘participation is triggered by personal dependency or private greed, not collective purpose’, ‘laws are made to be broken’ while ‘corruption is widely regarded as the norm’ (Putnam, 1993: 115).

Existing evidence from countries of Southern Europe (Putnam, 1993; Paraskevopoulos, 1998 & 2001; Lyberaki & Paraskevopoulos, 2002) suggests that the combination of centralized state structures and weak civil society creates conditions favourable for hierarchical clientistic networks that inhibit rather than encourage the long-term process of social capital-building.

Greece, in particular, is widely considered a country poor in social capital and consequently with a weak civil society, characterised primarily by a state structure simultaneously centralised and weak80. The general picture of voluntary associations and social networking in Greece seems to reflect the typical characteristics of the Southern European paradigm of civil society, which involves a strong tradition of authoritarian statism and, at least in the Greek case, the dominant role of the political parties during

80 For more on the structure and dynamics of the Greek society see Tsoukalas (1993)
the post-dictatorship period. This has blurred the boundaries between state and civil society and produced a situation where even if civic activism exists, it may have been mediated either by state agencies/funds or by party machines thus contributing to the fragmentation characterising civic voluntarism in Greece (Lyberaki & Paraskevopoulos, 2002).

The nature of the Greek economy did not make many claims on trust and long-term relationships which also explains the continuing prevalence of very small-scale firms since in a low trust environment kinship ties may offer some defence against opportunistic behaviour (Humphrey & Schmitz, 1996; Lyberaki, 1998). However this type of ‘ascribed’ trust (based on family, ethnic or other attributes) may be highly vulnerable and prone to destabilisation by growth itself, economic differentiation and the increasingly significant role played by outsiders. Thus it is worth speculating that while kinship ties played an important role in Greece’s impressive growth period of the 1950s and 1960s, they were unable to do the same in the 1970s and 1980s when the Greek economy became less protected, partly because of its ever closer relationship with the then European Community.

Central and northern Europe together with North American society are characterized by relatively weak family links and the Mediterranean region by strong family ties. Southern European family protects its members from the vagaries of economic and employment cycles and thus the social implications of unemployment tend to be hidden within the family (Reher, 1998: 216).

The weak nature of civil society in southern European countries is one factor hindering development in the sense that the countries of southern Europe lack adequate support schemes for the promotion of innovation while their entrepreneurs seem to lack trust and even to be sometimes inherently suspicious towards others (this is even more acute in post-communist societies that, as Humphrey and Schmitz (1996: 2) argue, are trapped in a deep syndrome of mistrust). This leads to: a non-cooperative attitude towards other companies; Non-participation in Trade Associations etc; Lack of “investment” in their employees; A generalised lack of trust/acceptance of the social context; a generalized lack of professionalism; an underestimation of the importance of knowledge in making their company more competitive.
All these factors are very significant in the creation of business systems\textsuperscript{81}. More specifically, according to Whitley (1992), the factors that shape business systems can be grouped into two large categories. That is a) Proximate institutions: Structure and policies of the state – developmental or regulatory; Nature of the financial system and its role in economic development; Education and training system; Labour market organisation; Trades union structure and attitudes; Attitudes and beliefs about work, material values and authority relations. b) Historical institutions: Family and kinship relations, identities and authority structures; Trust and co-operation between kinship groups; Traditional cosmologies affecting attitudes towards risk, planning horizons and preferences about specialisation and formalisation within authority structures. The combination of these institutions will thus create quite distinctive outcomes, which can differ between countries, or in certain cases groups of countries, leading to very different conditions.

5.4.2. Empirical findings: the importance of family relations in the “south”, formal relations outside the family in the “north”

It seems that enterprises in the “south” (i.e. based in Greece and Portugal) tend to be family based while their counterparts in the “north” (i.e. the German and English firms) appear to be more heavily influenced by the wider business environment outside the family. There appears to be some sort of “north–south“ divide while countries in transition (such as Poland) appear to behave in a distinctively different manner.

In other words, in most of the cases where the influence of the wider environment can be assessed, systematic differences appear between the three broad groups of CSAs as defined above. A rather straightforward example has to do with the share of firms employing unpaid labour (usually family members –Table 8.). With the exception of Oeste, there is a marked split between the Southern and the Northern regions.

\textsuperscript{81} According to Whitley (1992: 13) business systems are "distinctive configurations of hierarchy-market relations which become institutionalised as relatively successful ways of organizing economic activities in different institutional environments. Certain kinds of activities are co-ordinated through particular sorts of authority structures and interconnected in different ways through various quasi-contractual arrangements in each business system. Thus, what resources are organized by differently structured hierarchies and markets varies between these systems, as do preferred ways of developing businesses and making choices. They develop and change in relation to dominant social institutions, especially those important during the process of industrialization. The coherence and stability of these institutions, together with their dissimilarity between nation states, determine the extent to which business systems are distinctive, integrated and nationally differentiated".
Table 8. Share of firms employing unpaid labour

<table>
<thead>
<tr>
<th>CSA</th>
<th>%</th>
<th>CSA</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesvos</td>
<td>30,8</td>
<td>Bialystok</td>
<td>23,2</td>
</tr>
<tr>
<td>Kilkis</td>
<td>33,3</td>
<td>Zary</td>
<td>33,0</td>
</tr>
<tr>
<td>Oeste</td>
<td>6,1</td>
<td>Devon &amp; Cornwall</td>
<td>11,0</td>
</tr>
<tr>
<td>Left Bank</td>
<td>18,0</td>
<td>Cumbria</td>
<td>14,0</td>
</tr>
<tr>
<td>Nordwestmecklenburg</td>
<td>11,0</td>
<td>Total</td>
<td>19,4</td>
</tr>
<tr>
<td>Waldshut</td>
<td>13,0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nevertheless, this does not imply that regional, or even national differences do not exist\(^{82}\). In fact, differences do exist even at the regional level but they are not big enough to undermine the general picture and most can be explained. In order to disaggregate and give a fuller image of the actual situation, an analysis at three levels was performed, as outlined in Table 9.\(^{82}\).

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\(^{82}\) In any case, our sample of firms is not representative, even at the regional level, and making inferences about groups of countries would simply be unscientific. However, seen tentatively, the results appear to conform to the theoretical expectations and can be quite useful in the creation of a wider view, without at the same time losing the detail.
### Table 9. The impact of the environment on innovation

<table>
<thead>
<tr>
<th></th>
<th>Market</th>
<th>Production processes</th>
<th>Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Friends and family</td>
<td>Wider business environment</td>
<td>Friends and family</td>
</tr>
<tr>
<td>South</td>
<td>23,7</td>
<td>38,7</td>
<td>17,7</td>
</tr>
<tr>
<td>North</td>
<td>11,3</td>
<td>49,1</td>
<td>12,7</td>
</tr>
<tr>
<td>Poland</td>
<td>20,3</td>
<td>51,6</td>
<td>15,6</td>
</tr>
<tr>
<td>Total</td>
<td>18,8</td>
<td>43,9</td>
<td>15,7</td>
</tr>
<tr>
<td>Greece</td>
<td>19,6</td>
<td>39,5</td>
<td>14,1</td>
</tr>
<tr>
<td>Portugal</td>
<td>30,4</td>
<td>37,4</td>
<td>23,5</td>
</tr>
<tr>
<td>Germany</td>
<td>10,4</td>
<td>44,8</td>
<td>12,8</td>
</tr>
<tr>
<td>Poland</td>
<td>20,3</td>
<td>51,6</td>
<td>15,6</td>
</tr>
<tr>
<td>England</td>
<td>12,6</td>
<td>55,2</td>
<td>12,6</td>
</tr>
<tr>
<td>Total</td>
<td>18,8</td>
<td>43,9</td>
<td>15,7</td>
</tr>
<tr>
<td>Lesvos</td>
<td>27,3</td>
<td>52,0</td>
<td>19,2</td>
</tr>
<tr>
<td>Kilkis</td>
<td>10,6</td>
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</tr>
<tr>
<td>Oeste</td>
<td>28,6</td>
<td>31,0</td>
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<td>Left Bank</td>
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<tr>
<td>Nordwestmecklenburg</td>
<td>7,0</td>
<td>45,6</td>
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<td>Waldshut</td>
<td>13,2</td>
<td>44,1</td>
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<tr>
<td>Bialystok</td>
<td>23,5</td>
<td>52,9</td>
<td>11,8</td>
</tr>
<tr>
<td>Zary</td>
<td>16,7</td>
<td>50,0</td>
<td>20,0</td>
</tr>
<tr>
<td>Cumbria</td>
<td>12,6</td>
<td>55,2</td>
<td>12,6</td>
</tr>
<tr>
<td>Total</td>
<td>18,8</td>
<td>43,9</td>
<td>15,7</td>
</tr>
</tbody>
</table>

Statistical significance of the $x^2$ tests: *** 1%, ** 5% and * 10%

The figures are proportions of innovative firms influenced
In the upper section of the table, the 10 CSAs (except Devon & Cornwall) have been combined into three broad groups, namely ‘South’ (the Portuguese and Greek CSAs), ‘North’ (the German and English CSAs) and Poland. There is a quite clear and systematic distinction (and in most cases statistically significant) between the South and North groups, with the former being affected more by friends and family than the latter, while the situation is reversed in relation to the wider business environment.

In the section of the table that follows the groups are replaced by countries. In general, the divide between South and North remains, however, it is no longer systematic, especially regarding the information about finance section. In other words, the national characteristics appear to be quite significant in determining how the environment affects the innovation process.

At an even lower level it becomes apparent that regional characteristics are also important. For example, it appears that Kilkis and Oeste (which are the two more ‘developed’ regions in Greece and Portugal respectively) appear to be among the regions in our sample that are least susceptible to environmental influences, while Lesvos has one of the highest proportions of innovative firms influenced by the wider business environment.

Nevertheless, what is quite apparent is that regional or national peculiarities do not completely refute the overall picture. In order to further clarify the situation, the same tests were performed on two further subgroups of firms. The first was composed of firms with less than 17 employees, while the second (which was considerably smaller) contained the larger firms. Not surprisingly, the results of the two groups were quite different. In the large firms group the findings agreed with the general direction of the previous findings, however, no relationship was statistically significant. In the smaller firms group, on the other hand, the results bore more similarity to the overall findings. In other words, the North – South divide, appears to be conditioned by a significant number of variables many of which are predominantly local in nature. When it comes to innovation, the historical conditions that shaped each region’s social structure and norms apparently create a more variable landscape with, however, some signs of convergence, particularly when it comes to larger, less locally embedded structures.
5.5. The Geography of ICTs: The “Digital Divide”

5.5.1. The importance of ICTs

Undoubtedly, the rapid developments at the intersection of information and telecommunications technology (ICTs) have played a major role in facilitating and accelerating the process of knowledge codification and transmission over long distances. The widespread application of ICTs is the most important contributory factor in overcoming the ‘friction’ of time and space. They constitute the “enabling technologies”, a fundamental prerequisite for the evolution of international production (Dicken, 1998).

ICTs, by providing a fast and reliable quality service at reasonable cost regardless of geographical location, could reduce regional disparities in economic activity and employment. Hence, they are very important for rural areas that are characterised by geographical isolation and problems of access to urban areas (EC, 1994). Additionally, it is argued that the benefits of ICTs are of particular importance to rural firms, enabling them to overcome the friction of distance and the scattered and fractured nature of their local markets. They appear to provide the possibility of transcending the geographical marginality of rural areas and regions in the delivery of services and the location of economic activity.

Nevertheless, some researchers have expressed caution, considering theorizing about the potential impact of ICTs in reducing the distance and inaccessibility of rural areas to be overly optimistic. They support the view that the income gap between urban and rural areas will widen further, coupled with a “digital divide”. Although providing new options and tools for rural development these technological changes also pose a threat. Rural markets can be more easily penetrated and served from a distance. Without public support it is likely that, in an increasingly deregulated and privatised market, rural areas will be at the back of the queue for the necessary investment in infrastructure and training (Marsden, 1999: 513).

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83 The term “digital divide” refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access ICTs and to their use of the Internet for a wide variety of activities. The digital divide reflects various differences among and within countries (OECD, 2001: 5)
5.5.2. Huge inequalities in ICT infrastructure between and within countries

The creation of ICT infrastructure networks in less developed areas has been among the main priorities of the EU since the introduction of the Community Support Frameworks (CSF) in the 90’s. Access to such networks could potentially overcome a number of physical and geographical obstacles and reduce spatial disparities.

Despite the considerable progress that has been made over the past 10 years in reducing existing disparities in telecommunication infrastructure across the EU, disparities still exist.

It is evident that the emergence of a global economy based on telecommunication systems has led to new rounds of uneven development and spatial inequality. Evidence from several European countries suggests such investment is concentrated in large urban areas, particularly in sectors, which are major users of new technologies such as software and telemarketing. One of the main constraints of advanced telecommunication networks is the need for commercial viability. Network providers prioritise densely populated areas where returns are higher i.e. a “virtuous cycle” in which strong demand for advanced telecommunications produces innovation and high level of service, which in turn increases the level of demand (Grimes, 2000).

The Internet has grown at rapid rates, roughly doubling in networks and users every year. However, equal access to everyone still remains largely a myth, since it is highly concentrated in the most economically developed parts of the world, most notably the USA, Europe and Japan. The case of the USA highlights the huge inequalities, since this nation alone creates almost 90% of the global internet traffic, while most of Africa and Asia (with the exception of India, Thailand and Malaysia) have little or no access. In 2000 there were 168.7 Internet hosts per 1000 inhabitants for North America, 59.2 Oceania, 20.2 Europe, 2.5 central and South America, 1.9 Asia and 0.3 Africa (OECD, 2001: 13). Hence, as Warf (1999) argues, the geography of the Internet reflects and consolidates previous rounds of capital accumulations.

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84 In EU countries there are between 40 and 69 main lines per 100 inhabitants. The leader being Sweden with 69 lines per 100 inhabitants while the cohesion countries have much lower (i.e. Portugal and Spain 40, Ireland 41 and Greece 52 lines. Digital systems account for practically all lines in the cases of Luxembourg, France, Netherlands, Sweden Finland, and the UK while they represent over 70% of the lines in the other countries of the EU. Greece seems to be the only country lagging significant behind with a digitalisation rate of 43%, although since then considerable progress has been made. Estimates for 1998 show that this percentage has been raised to 70% (The World Competitiveness Yearbook 1998 and EITO 98).
Domestic access to the Internet in Europe is highest in the Netherlands and in Scandinavia, followed by the UK, while the lowest rates are in the Mediterranean countries. The low use rate for France could also be due to the widespread diffusion of Minitel in France, which provides some of the same services.

The tendency is for Internet access prices to continue to fall across OECD countries, making communication costs increasingly insensitive to distance (The Economist, 23/09/00). However, there is a strong correlation between the penetration of Internet hosts and the average price for Internet access (OECD, 10/2000b).

*Internet access among households in urban areas is greater than in rural areas all over the world* (i.e. Canada 32.6% in urban and 23.7% in rural; Japan 17.7% and 13.6%; Netherlands 28.7% and 22.7%; US 42.3% and 38.9% data of 1997-2000). Members of households in urban areas are more likely to have occupations where computers and the Internet are part of their work environment. *Costs tend to be higher and quality of access lower in rural areas*, despite some efforts to ensure standardised pricing and quality. The discrepancies observed during our study in Greek regions are illustrative in this respect. Internet speed of a typical dial-up connection can be up to 10 times faster in urban areas than in remote rural ones. Incomes tend to be lower in rural areas and ICT costs are relatively higher for low-income groups (OECD 2001: 24). In developed countries though differences between urban and rural areas in Internet access are diminishing. For example in the US over the 1998 to 2001 period, growth in Internet use among people living in rural households has been at an average annual rate of 24 percent, and the percentage of Internet users in rural areas (53 percent) is now almost equal to the national average (54 percent- US Dept of Commerce 2002).

Moreover, apart from the distribution of physical infrastructure there are other things related to intangible infrastructure that matter too. For example, the rural population does not seem to have benefited adequately from such services. Investment in education is crucial to ensure that local people are properly equipped to exploit and benefit from such technology. There is little point in connecting villages to the Internet if most people are not familiar with such technology. Certain researchers suggest that user-resistance arises to some extent from techno-phobia (Clark et al., 1995). Although the continuous out-migration of young population from rural areas deprives them of potential users to a small extent, this lack of dynamism can be ameliorated by in-migration of professionally skilled outsiders having established contacts with core regions (Grimes, 2000).
How ICTs can influence economic activity

Traditionally, rural areas were viewed by large manufacturing firms as locations for resource based and labour intensive activities. To what extent has the use of new ICTs by large firms modified the role and potential of rural areas in their locational strategies?

Large manufacturing firms have made extensive use of the new ICTs and implemented wide-ranging strategies for reorganisation and relocation\(^85\). The use of computer networks within and between such companies is of central importance, as is the existence of a small hub networking with many other enterprises to produce and market the product (Stanworth, 1998). However, it is quite clear that most key functions in manufacturing, i.e. headquarters, R&D, Regional Administrative Centres, as well as, phases of production processes needing skilled labour, are still centralised in urban areas, implying that the creation of more dispersed organisational structures, have only marginally benefited rural areas.

Teleworking was once widely hyped as the best prospect for rural areas since its “footloose” nature allowed its relocation from urban areas to small towns and rural areas. More than 4.5% of the EU workforce is involved in Teleworking, while in some countries it was really high i.e. Netherlands 18.2%, Denmark 11.6%, Finland 10% (EC, 1999).

There are three main types of teleworkers. Part-time teleworkers tend to be relatively high skilled, usually well paid and have some degree of autonomy over where and when they work. The nature of their work demands some proportion of regular office work, making it difficult to relocate to rural areas so they are predominantly found in suburban or peri-urban areas. In contrast, teleworking at remote sites, such as rural peripheral areas, includes lower profile jobs. Finally, work on Call Centres or word processing, data entry and other clerical jobs is vulnerable to geographical displacement offshore as there is a great deal of competition from developing countries where employment costs are lower (Stanworth, 1997).

In fact, “Call Centres” (i.e. the computer assisted processing of telephone calls, or teleservices, comprise a particular case of back-office activity) aim to improving

\(^{85}\) Sports footwear producer NIKE is a prominent example. The extensive use of ICTs has enabled NIKE to focus on core value added activities and subcontract the greater part of its production chain to a network of overseas subcontractors enabling rapid shifts in production processes from one factory to another following labour cost variations. In a few years NIKE has shifted its international ties from first generation New Industrialised Countries, like the Philippines and Hong Kong, to second generation NICs like Malaysia and Indonesia (Barff, 1995). Due to the creation of flat structures and team-orientation, firms such as NIKE have been labelled “Virtual Corporations”
corporate competitiveness and responding to changing market conditions and customer service requirements utilizing ICTs. They first emerged in the financial sector but have since developed in a range of services. The location determinants of Call Centres are the proximity to pools of low cost labour, suitable telecommunications and transport infrastructure, as well as cheap and abundant office space. Call Centres are attracting increasing attention as footloose activities that can be potentially established in rural areas. However, the results of a recent research study conducted in the UK indicate that there is a propensity to site Call Centres close to existing concentrations of allied activity, with preferences for densely populated areas mediated by needs to maintain employee access and avoid staff turnover problems (Bristow et al., 2000).

Service firms were characterised by greater locational rigidity than manufacturing. Advanced telecommunications and the impetus of rising inner city rents have enabled large service companies to relocate back-office activities, i.e. routine clerical jobs such as word processing, data entry, questionnaires coding, etc, in peripheral areas.

A few large service firms have begun to export “intelligent” office work, as opposed to “mindless” data entry. Such kind of activities, like checking the company’s liabilities or software development are mostly relocating to lower-wage economies on the periphery of Europe, like Ireland (Pearson & Mitter, 1993) while the software industry in Bangalore India thrives due to English-speaking workers with good technical skills and low labour costs (The Economist, 23/09/00). However the internationalisation of “intelligent office work” remains small in absolute terms.

Not all places around the globe benefit from technological innovations in transport and telecommunications. While the world’s leading national economies and the worlds major cities are pulled closer together, other, less industrialized countries or smaller towns and rural areas are, in effect, being left behind (Dicken, 1998). The bulk of activity relocation is primarily directed from city centres to suburban areas or to overseas urban areas around the globe (Pearson & Mitter, 1993). Moves into rural areas are rather limited since such offices, besides requiring advanced telecommunications infrastructures, seek

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86 Such as travel services, telecommunications, motor vehicle sales, insurance, mail order, etc. In the UK telephone Call Centre employment has increased rapidly during the 1990s and was estimated to employ 250,000 in 1998, around 1% of the total workforce.

87 For example, Swissair flies its ticket stubs to an office in Bombay, India, to record flight information and to circulate the amount earned from and owed to other airlines while several New York based life insurance companies have set up back office facilities in Ireland with the active encouragement of the Irish government. Another example of the movement of work is a US company using clerical workers in South East Asia to enter court decisions into electronic databases (Pearson and Mitter, 1993; Allen, 1995).
labour with specific skills such as computer literacy. Needless to say that rural areas outside the English-speaking world have even less possibility of attracting such attention.

**Empirical findings: The adoption of ICTs by Rural SMEs**

It is widely accepted that the adoption of telematic services by rural firms will improve their access to national and international markets. However it must be kept in mind that telecommunications are a means of a two-way communications and while they can help isolated companies to increase sales in distant markets, they also integrate such enterprises into national and international competition (Grimes, 2000). Telematics could expose the weaknesses of rural business and make them more vulnerable to outside competition (Clark et al., 1995), since the Internet allows consumers and firms to seek the lowest price.

In this context, ICTs have the potential to radically alter economic activity and social environments in rural areas. E-commerce\(^\text{88}\) is changing the way business is conducted, by linking small businesses and households with global markets. It reduces the importance of geographical proximity and time by speeding up production cycles, allowing firms all over the world to operate in close co-ordination and enabling consumers to conduct transactions around the clock. It already affects large sectors such as communications, finance and retail trade and it holds promise in areas such as education, health and government (OECD, 2000b). It is likely that the largest impact of the business-to-business segment of e-commerce, which currently contributes 80% of total e-commerce activity, will be on SMEs and micro firms since many large firms already have EDI systems in place (OECD, 2000b).

The evidence from our survey is quite mixed. When it comes to EDI, firm size is significant, however, its adoption appears also be conditioned by other factors, the most significant of which must be the respective national levels of ICT spread. In this context, the German regions are on their own when it comes to the adoption of ICTs, while the firms from Kilkis (which were also quite big) were far behind.

Regarding e-commerce and b-commerce, although the firms surveyed were the most innovative in the ten CSAs, the figures are extremely low, since in no region had more than 5% of the firms adopted them. Again, the situation is slightly better in the two German regions. Another finding is that unlike what the literature suggests, EDI and e-commerce do not appear to be substitutes.

\(^{88}\) At present e-commerce in USA is accounting for about 80% of the global total (The Economist 23/09/00).
SMEs have an essential role in rural areas since they comprise the bulk of local entrepreneurial activity. The adoption of ICTs by SMEs is, in general, lower compared to large firms for a number of reasons the most important being that large firms have the needed liquidity to finance investments in ICTs. Also certain business functions, such as accounting, personnel, management and marketing are more highly differentiated in large firms so there is increased scope for the use of specialised ICT services (Clark et al. 1995; Mitchell & Clark, 1999). Furthermore the fact that ICTs equipment quickly becomes obsolete renders SMEs reluctant to invest in this technology (Clark et al., 1995).

The relationship of firm size and adoption of ICTs turned out to be significant in our survey. The average size of the firms using some ICTs is significantly higher than those that are not. More specifically, the average size in total employment of the former is 27.2 compared to 11.28, while the difference between the two groups is statistically significant. Furthermore, this relationship was true for all regions except Devon & Cornwall.

The firms most dependent on telecommunications are mainly large multi-branch service enterprises. For example, in Northern Ireland 80 of the firms and organisations with more than 500 employees make use of the British Telecom “Kilostream” network, while only 8 of SMEs do so. According to a Survey conducted of more than 500 large enterprises in Europe, 59 considered the availability of advanced telecommunications infrastructure as an important determinant for their potential location (EC, 1996).

Regardless, of the, often considerable, regional disparities among the CSAs surveyed, the firms that expect to improve their business performance through the use of ICTs are generally larger than the ones who feel that ICTs will not improve their business performance. Furthermore, this difference is statistically significant in all ICT applications cited, except three: e-mail, website and any other uses of ICT. In other words, it appears that when it comes to the relatively basic, and perhaps more in vogue, applications, firm size does not affect the firms’ perceptions regarding their impacts.

Several surveys of SMEs in rural areas all over the EU found considerable under-use of equipment and telematic services. In the UK context, research conducted in the South Midlands, showed that almost two-thirds of rural businesses had at least one computer. However they were used mostly for word-processing, book-keeping, accounting and management information purposes and only 10 for telematic services (Mitchell & Clark, 1995). In the Greek and Portuguese context the respective use of telematic services is even less. The low percentage is ascribed to the late developments of
telecommunications that has hindered the development of telematics (Skayannis, 1998). Although from a slightly different point of view, our findings would tend to corroborate the above. More specifically, a number of the firms in our sample proceeded with some changes in processes during the last two years, which involved the use of computers or advanced technology. When these firms were asked to identify the applications, the computerisation of the accounting department turned out as the most significant item. Interestingly, this was not the case in the CSAs with the largest firms (i.e. the German CSAs, Kilkis and Białystok).

Many rural SMEs still do not know what computers can do and how they can be integrated into their businesses. However the levels of adoption and use of ICTs by SMEs vary according to a series of interrelated factors:

Firms with non-local dependencies have more ICT equipment and make greater use of telematic services than those with a strong local orientation. Many firms adopt ICTs principally to conform the requirements of their major customers and suppliers. This trend is evident in rural food processing firms supplying major supermarket chains. These firms have been obliged to invest heavily in ICT, mainly in EDI systems, in order to retain contracts with their retailers. Also, several rural subcontracting firms, active in automobile, clothing, footwear industries etc., are obliged to be connected on-line with the procurement network of their contractor (Mitchell & Clark, 1999). In contrast, firms exclusively servicing local customers fall short in adoption and usage of ICTs (Grimes, 2000).

The findings of our survey were quite similar. More specifically, use of ICTs and outward orientation appear to be positively correlated in most aspects. The firms with local orientation and links (input origin) are clearly worse off than the firms that were more extrovert. It appears that the more firms broaden their reach (from the region, to the national market, to international markets), the more intense users of ICTs they become.

Firms with strong supply or market links to traditional rural activities, such as farming and forestry, are lower adopters and users than those active in non-rural sectors (Mitchell & Clark, 1999).

The primary sector and trade firms are the ones more clearly characterized by no ICT use, while construction and business services are the ones found to be using more ICTs. However, what is most interesting is the position of the regions in the diagram. The location of the northern regions at the right hand side of the diagram indicates a greater propensity to the use of ICTs, with the possible exception of Cumbria which lies somewhere in the middle. The southern regions along with the Polish regions are on the
left side of the diagram, even though the latter are clearly more disadvantaged. Furthermore, the fact that the southern regions are not tightly clustered indicates that the use of ICTs in Southern Europe, and more so in Poland, is highly influenced by the sector of firms, as opposed to the northern regions.

The inadequacy of qualified labour is another obstacle. Many computer users in SMEs are self-taught or receive inadequate guidance from colleagues. A research-study about regional obstacles during the start-up and early development phases of an enterprise, conducted in rural areas in Germany, points out that a serious obstacle in choosing the location of a new enterprise is lack of qualified labour and the lack of a start-up and business foundation climate (Wimmer, 1996).

There is a strong correlation between entrepreneurship and propensity to adopt ICTs. The adoption of ICTs is linked to management ability. Managers who are most receptive to ICTs tend to be one or more of the following: young, educated to degree level or beyond, have experience of technology, and are risk takers (Mitchell & Clark 1999). Another study conducted in the area of Reutlingen in Baden–Württemberg showed that the attitude of managers to risk was one of the crucial factors leading to entrepreneurial success (Herzina et.al., 1996). Quite surprisingly, not all of the above were verified in our survey. More specifically, age does not seem to be a satisfactory explanatory variable in the adoption of ICTs, while younger certainly does not mean more technologically oriented, even though the opposite appears to be true (i.e. older means less technologically oriented). On the other hand, both education and previous managerial experience significantly affect the choice to adopt ICTs.

Rural environment as such constitutes a major hindrance to the introduction of ICTs. The unwillingness of managers to undertake risks, their deep-rooted scepticism and resistance, is directly associated with the traditional character of rural societies. Traditional businessmen prefer to deal with “real” money and cheques instead of EDI. There is an increasing need to focus on the social and institutional dimensions. Such conventional attitudes and obstacles to the adoption of ICTs from local SMEs are to be expected in a rural peripheral environment. The prominent example of the industrial districts of Third Italy, where the effective networking and cooperation among local SMEs as well as the collective marketing system has been based in the extensive use of ICTs, is an exception rather than the rule. The success of Third Italy is due to the industrial atmosphere and the rich institutional network that benefits from the urban and semi-urban environment (Piore & Sable, 1984).

89 It has to be noted, that surveys are not directly comparable
Apparently, the entrepreneurs of our sample were not very optimistic regarding the impact of ICTs in helping them overcome the constrains of being located in a rural region. Overall, only 42.6% of all respondents were optimistic regarding the potential impacts of ICTs, while 19.7% were very optimistic. The remaining 57.4% was either sceptical, or refused to answer. The differences between, as well as within the countries were significant, with the Polish respondents being the most sceptical. On the other hand, the German respondents and those from Devon & Cornwall were those with the stronger opinions, since no more than 6% in each region failed to answer the question, while at the same time they were the most optimistic ones.

In an effort to clarify the underlying factors, age, once again turned out to be unimportant, while education could explain some of the variation. However, it appears that the national level of ICT development is the main factor on which the significant variations should be attributed to.

In fact technologically oriented start-ups tend to prefer proximity to large urban areas. A study concerning the location of technologically oriented start-ups in Germany, found that they tend to locate near big agglomeration centres (particularly in Munich, Stuttgart, Karlsruhe and Düsseldorf) while they are underrepresented in regions close to the former border with East Germany as well as in rural areas of Bavaria, Rheinland-Pfalz, Schleswig-Holstein and Saarland (Lessat, 1999).

There are huge differences between the five countries under investigation as to the level of their firms’ ICT Infrastructure. The use of ICTs ranges from 93 to as low as 41 and this is directly almost unmistakeably related to the level of development of the country (i.e. Germany 93, UK 64- 87, Greece 49,5 - 63,9, Portugal 49-52,2 and Poland 41-50).

As far as each particular ICT application is concerned once again it is obvious that there is a positive relation between the level of development of the country and the percentage of firms that use each application. In fact in all cases Germany always has the highest scores and Portugal or Poland have the lowest. With regards to CAM where the English firms (Devon in particular) have the lowest shares, this must be attributed to the structure of the region’s sample (i.e. very small percentage of manufacturing firms). On the other hand, and for the exactly opposite reason (i.e. very high shares of manufacturing firms) Kilkis clearly stands out, regarding the usage of both CAD and CAM. The most popular applications in a descending order are: e-mail, website, on-line databases, EDI, MIS, CAD and video conferencing.
5.6. Concluding Remarks: Can Rural Areas Become Innovative?

One of the main contributions of the systems of innovation approach is that it emphasised the complexity of the innovation process, the importance of several factors and –perhaps more importantly- of the interactions between them. Firms, institutions, organisations, human skills, public policies and infrastructures all play a significant role in producing, diffusing and absorbing new, economically useful knowledge in a certain area. As the relevant literature has shown (e.g. Edquist, Howells, Oughton, Landabaso and others) the systems of innovation approach can be applied in a useful way at several geographical layers (countries, regions and even local areas). Regardless the level of analysis, what the systems of innovation approaches seem to argue (albeit in an implicit way) is that the existence of at least some of the above factors is a prerequisite for an area to become innovative. This in turn, raises a critical question in the context of the present work. What is the development potential of rural areas in such a framework.

Undoubtedly, most rural areas lack many –if not all- of the elements that the systems of innovation theorists regard as crucial. Most empirical findings of our study seem to confirm this hypothesis. Firms (that are in the core of the innovation process) are usually fewer, smaller, and with relatively limited management capabilities with respect to their urban counterparts. Moreover, as shown also by the wide definition used for “innovation” by most firms of our samples, they usually operate in traditional sectors and aim at local markets which are narrow and, arguably, less “innovation-demanding Knowledge infrastructure is also limited in most rural areas. Universities, Schools of Technology and R&D departments tend to be located in –or around- urban centres. The same applies to knowledge-related infrastructure, in particular IT networks, that develop primarily in urban areas where demand is higher. Human potential is a further restrictive factor since on the whole highly skilled and highly educated people tend to reside in urban areas. Finally, the local institutional capacity in rural areas (firms, local authorities, professional associations, etc), is often less effective in implementing and exploiting specific public policy measures. This situation will probably have important repercussions to the mechanisms that influence the innovation process: Local tacit knowledge will tend to accumulate around traditional sectors and activities and will therefore strengthen the path dependence of rural areas. Localised search activities will also be hampered by the absence of knowledge-intensive firms and/or organisations and as a result, interactive learning may be weak and insufficient for the development of an innovative environment.

However, the picture may not be as grey as it looks at first sight. First of all, not all rural areas face the same conditions. There are significant differences between the different countries regarding their ability to innovate, which are related to their level of economic
development, tangible and intangible infrastructure and most of all to the way that society is formed (e.g. developed civil society or not). These differences are reflected in the observed wide disparities between rural areas in different countries. However, even within the same country some rural areas are closer to urban centres than others and this may have important consequences for knowledge transfer, networking and interactive learning with firms and organisations based in their vicinity. Similarly, the existence of larger markets in their geographical proximity may act as an incentive for innovative firms to settle in rural areas. The observed trends in certain cases (as in the U.K. for example) seem to confirm such hypotheses. In other areas, firms may be in a better position due to the existence of a “knowledge infrastructure” (university, R&D centre, etc) to carry out search activities or to get access to qualified manpower. Public policies may also play a significant role in attracting new firms and highly qualified people, and in improving the institutional capacity of rural areas. Finally, the attitude of people may prove crucial: Trust and cooperation seem to be deciding factors in establishing viable networks through which knowledge accumulates and new knowledge is produced and shared.

As a concluding comment, rural areas face several difficulties in achieving an innovation-based development. However, their fate is far from being pre-determined. The complexity of the innovation process and the interactions between many different factors allow for several possible outcomes depending on: the specific characteristics of each separate case, the design of public policies, the capacities of local institutions and the overall attitude of people and needless to say the specificities of the country itself.

6. European Policy To Foster Entrepreneurship In Rural Peripheral Areas.

North David, Smallbone David⁹⁰

6.1. Introduction:

The purpose of this chapter is to review relevant literature and evidence from the CSAs relating to policies which, directly or indirectly, are concerned with the encouragement and support of rural enterprise and forms of entrepreneurship. The aim is to identify some lessons which can be learned from the experience of enterprise policies in remote rural areas. This will involve identifying various deficiencies in existing approaches, as well as identifying ‘good practice’ elements which may be transferable to other rural contexts. The chapter will conclude by making a number of recommendations concerning the areas that policy needs to focus upon in order to try to build-up the entrepreneurial

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capacity of remote rural areas. Whilst recognising that there are some similarities in the needs of remote rural areas in different European countries, the importance of producing policy solutions which are appropriate to specific national and local circumstances will be a key theme running through the discussion.

6.2. Policies for rural enterprise

There is a diverse range and complex structure of programmes and policies which, in some way or another, are concerned with stimulating and supporting various kinds of rural enterprise. Most obviously, this is a product of the differing origins of enterprise policies in the various countries, reflecting specific cultural and ideological histories relating to the role of private enterprise in the economy and the role of state policy in relation to enterprise. It is also associated with differences in government structures and the degree to which regional and local tiers of government have been involved in economic development.

The following table (Table 10.) represents a schematic attempt to categorise the various policies which are concerned with the development of rural enterprises. On one dimension, it distinguishes between different levels of policy which accord with various levels of governance, ranging from EU programmes through national government level policies to policies formulated by regional and local level institutions. There is of course an increasing interdependence between these various levels of policy as the EU becomes a key source of funding for national and local policy initiatives. In contrast to the situation in Germany and the UK, in Greece and Portugal there are few policies at the regional and local level other than those funded by EU programmes.

The other dimension is indicative of the various types of policies which relate to rural enterprise development. Most of these are not solely focused on rural enterprise, but are also concerned with other aspects of economic and social development as well. Thus territorial (or area based) policies generally adopt a fairly holistic approach to the economic development of designated areas, including investments in both hard and soft infrastructure, but frequently include priorities and measures concerned with new enterprise creation and small business development. Sector-based policies can be an important stimulus to enterprise activity in rural areas when they are concerned with the restructuring and modernisation of traditional land-based sectors or the growth of new sectors. Another key type are those programmes which are concerned with the development of rural communities (notably the EU’s Leader programme) and which include support for various community based forms of entrepreneurial action, such as social enterprises. In addition to the enterprise strands within these broad programmes,
some countries have dedicated national level policies for stimulating enterprise activities and providing support for small businesses. These sometimes provide generic support to all kinds of businesses, but more often consist of policy measures which target particular types of entrepreneur (e.g. women entrepreneurs) and types of business (e.g. new start-up businesses).

**Table 10. Typology Of Policies For Rural Enterprise**

(Showing examples of types of programmes and agencies at different levels)

<table>
<thead>
<tr>
<th>Policy Levels</th>
<th>EU</th>
<th>National</th>
<th>Regional</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Types</td>
<td>SFs (obj 1 &amp; 2 areas + previous 5b)</td>
<td>England's Rural Development Programme</td>
<td>England's Regional Development Agencies (incl. rural regeneration)</td>
<td></td>
</tr>
<tr>
<td>Territorial/area based</td>
<td>Leader programme</td>
<td>Greece's Regional Incentives Law</td>
<td></td>
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<tr>
<td></td>
<td>Interreg programme</td>
<td>Germany's Joint Initiative for the improvement of Regional Economic Structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHARE programme</td>
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<td>England's Small Business Service (Business Links)</td>
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Table 20 - Table 24. contain a list of the relevant programmes and policies in each of the countries included in this project, outlining the main elements of these initiatives and the organisations involved in their delivery.

### 6.3. The support needs of enterprises in peripheral rural areas

#### 6.3.1. Defining support needs

Policy initiatives aimed at encouraging the formation and growth of enterprises in peripheral rural areas need to take account of the distinctive characteristics of the businesses in these areas. It has been suggested that enterprises in remote rural areas tend to be much smaller than urban based businesses, with a higher proportion of micro-
businesses and one person businesses, and therefore less likely to be able to meet their needs from their own internal resources (Lowe & Talbot, 2000). Policy-makers also need to take into account the difficulties resulting from the characteristics of the business environment itself. These can impose constraints on the ability of rural businesses to grow and will influence the course of development path which is chosen or emerges.

Business ‘support’ typically refers to the external resources that a business draws upon from time to time in order to extend or strengthen its internal resource base. Any business needs access to resources if it is to develop, including access to adequate and appropriate finance, labour, premises, information, management skills, and competencies. In the case of small businesses, limited internal resources are likely to increase the need to access external resources compared with larger firms. Moreover, external assistance is likely to prove particularly important in the case of someone starting-up their own business for the first time. There is a wide range of possible sources of external support which may be relevant, including private and professional organisations (e.g. banks, accountants, solicitors), consultants, customers, suppliers, business associates, family members, friends, as well as a number of publicly funded support agencies (e.g. enterprise agencies, business development centres, innovation and technology centres).

### 6.3.2. Distinctive support needs

The central question is therefore whether new and small businesses in peripheral rural areas have particular support needs. Unfortunately, there is a heavy UK bias in the literature relating to the support needs of rural enterprises. We might expect that the special needs of small businesses in peripheral rural areas in the UK will be even more apparent in the case of the peripheral rural areas in some of the other countries, particular those in southern and eastern Europe, because peripheral areas in a UK context are much closer to major urban areas and more advanced in terms of socio-economic development than those in these other countries.

From the literature, enterprises in peripheral rural areas can be expected to have the following support needs:

- The need to penetrate non-local markets at an earlier stage of their development than would typically be the case in more urbanised areas. The adoption of proactive marketing methods in order to extend their geographical markets is likely to be necessary to achieve growth, yet this can present additional management problems for young and very small businesses, requiring specialist knowledge and expertise which are lacking in the business itself (Smallbone et al, 1997).
• There is a tendency for enterprises in peripheral rural areas to be slower to adopt new technologies than firms in more accessible rural and urbanised areas (Keeble et al., 1992; Smallbone et al., 1993; North et al., 1997). Part of the explanation for this might be found in the lower cost of labour in these areas, encouraging a more labour-intensive form of development. Remote rural enterprises are therefore likely to have special needs for external support and advice about what are the most appropriate technologies.

• A related need concerns e-commerce and the use of the Internet more generally. A survey of rural businesses in Northeast England (Talbot, 1997) concluded that “rural areas are characterised by a plethora of tiny firms, many of which have no computers and little understanding of how telematics could help their business”. The need for investing in and making effective use of ICT appears to be particularly acute amongst remote rural enterprises (North et al., 1977, Lowe & Talbot, 2000).

• Enterprises in peripheral rural areas are likely to have distinctive needs in relation to workforce and management training. The small size and occupational composition of rural labour markets can impose a constraint on rapidly growing enterprises (CEEDR, 1998). Businesses may also be significantly disadvantaged in terms of access to suitable training, largely because the majority of ‘off the job’ training opportunities are urban based (Bennett & Errington, 1995). An overdependence upon ‘in-house’ training is likely to have the effect of reinforcing the skill limitations which already exist within the firm and less likely to upgrade the human resource base than the use of external specialist training provision.

6.3.3. The use of external support by firms in the enterprise survey

Participation in Local, National and/or EU Support Programmes 1997-2001

Some evidence on the extent to which rural enterprises make use of external support comes from the enterprise survey carried out in each of the ten CSAs. As Figure 1 shows, over a third of all surveyed enterprises (38%) had accessed some form of external assistance involving finance, from a local, national or EU support programme during the five years prior to the interviews in 2001, typically involving a loan or some form of subsidy. At the same time, there is a significant difference between CSAs (0.001 level) that reflects a significant national variation (0.001 level). In interpreting these figures, it must be kept in mind that surveyed firms represent the more dynamic firms in terms of innovation and/or growth orientation, rather than a representative sample of the population of all enterprises.
There are a number of factors influencing these variations in the level of participation in publicly funded programmes. For example, the low proportion of firms in the two Polish CSAs partly reflects the weakly developed business support infrastructure in Poland in general and the CSAs in particular. Elsewhere, the above average take-up in both Greek regions and in the Left Bank region in Portugal reflects the high priority placed on peripheral regions in Southern European countries by EU policy-makers; and NW Mecklenburg is also a priority target for policy assistance, in view of its previous position in the DDR and its border status in modern Germany. As in the case of Germany, the experience of the two UK regions is contrasting, reflecting the greater opportunities for firms to access national and EU funded projects in Cumbria over the 1994-99 period compared with Devon & Cornwall.

**Diagram 4.** Proportion of surveyed enterprises in each CSA using publicly funded support

Firms receiving publicly funded support are typically larger than firms not supported (average employment of 25 employees compared to 20 employees) (significant at the 0.001 level). More detailed analysis shows that there is also a highly significant difference in the propensity of firms to have accessed external support between size groups (0.001 level), although the relationship is not a linear one. It is small firms that show the highest propensity to have used external assistance of this type (51%), compared with 39% of medium sized firms and 32% of microenterprises. This may reflect a higher propensity for small firms to seek support compared with microenterprises, as well as the targeting criteria of support organisations in some cases (e.g. UK).

With respect to EU programmes, 15% of the total enterprises surveyed across all ten CSAs had received EU support (usually financial support) in the last five years, although
again there were some marked differences with the highest levels of participation being found in Greece and Portugal (59% of firms in Kilkis and 26% in the Left Bank region).

Public sector support at start-up

Entrepreneurs in businesses that had started-up during the two year period prior to the interviews were asked a number of questions concerning the sources of any information and/or advice that had been accessed at the time of start-up. The results for the 121 young firms show that:

- just 16 (13%) reported using a public agency as a source of information about markets - these were mainly in Greece, Portugal and Germany;
- 10 firms (8%) used a public agency as a source of information/advice about production/service processes, including technology;
- 24 (20%) used a public agency as a source of information about sources of finance;
- 30 (25%) reported approaching a public agency for start-up finance, of which 22 (73% of those applying or 18% of all new firms) received some, again mainly in Greece, Portugal and Germany.

Use of public sector support by established firms

The evidence for the 672 established rural enterprises shows that only a small proportion make use of support from public sector agencies. A much larger proportion make use of external support, but usually from other sources. The following gives an indication of the kinds of support that business support agencies are being used for:

- 61 firms (9%) that judged their products to be innovative by the standards of their regional market reported using a business support agency as a source of information and/or advice about markets for innovative products/services (spread across the regions apart from Zary, Bialystok & Kilkis);
- 60 firms (9%) reported using a business support agency as a source of information and/or advice about production or service processes;
- 114 firms (17%) reported using a business support agency as a source of information and/or advice about sources of finance, this being highest in Oeste and Cumbria;
60% of all respondents reported using some form of information/advice with respect to new markets; of these just 29 (6%) reported using a business support agency for this purpose, particularly in Cumbria and the two Greek regions;

a similar proportion of firms (6%) using some form of information/advice about new equipment or software reported using a business support agency to support the introduction of new equipment/software.

6.4. What lessons can be drawn from existing policies for rural enterprise?

6.4.1. The approach used in assessing policies

The purpose of this section is to review some of the existing programmes and policies concerned with encouraging and supporting entrepreneurial activity in the different CSAs. It should be emphasised that it has not been an aim of this project to carry out an evaluation of the effectiveness and impact of the various kinds of interventions which affect entrepreneurial activities in rural areas. However, it has been possible to make some assessment of selected policies, including a consideration of the extent to which they are addressing the needs of enterprises as well as the needs of these rural areas. This enables us to identify policies that appear to be working well and elements of good practice, as well as ways in which existing policy is deficient and not working as intended. This provides a basis for identifying lessons which can inform future policy development.

Information and opinions about relevant policies was obtained from various sources:

i) use was made of existing documentary sources, including literature relating to a particular policy or project and any evaluative material that was made available to us;

ii) interviews were carried out with a number of key actors in each CSA, these being people who were involved in the formulation and delivery of policy programmes aimed at encouraging and supporting various forms of entrepreneurship. These interviews provided information on the rationale for the policy, the delivery mechanisms including the identification and selection of clients, views on the strengths and weaknesses of the programme and how the effectiveness of the programme might be improved (see Table 10. for list of questions used);

iii) for most of the CSAs, we identified at least one example of an innovative scheme or project which, on the basis of the evidence available, appeared to be
reasonably successful. In some cases we interviewed beneficiaries of the scheme/project as well as those responsible for its delivery.

We have organised this review of existing policies around a number of key 'principles', identifying issues which are common across remote rural areas as well as those which seem to apply to specific rural contexts. Examples of particular schemes/projects will be inserted at appropriate places in the text.

6.4.2. The appropriateness of policies to particular rural contexts

In the case of both European and national level programmes, a key question that arises is the degree to which the policy tools are appropriate to particular rural contexts. There is some evidence from the Greek CSAs to indicate that 'top-down' programmes formulated at the European level can be insensitive to local circumstances, being based on assumptions about the nature and motivations of SME owners which can be out of step with the reality in particular rural contexts. The terms and priorities of these EU programmes are often heavily influenced by knowledge of other European societies and economies that have little in common with Greek rural areas.

The broad characteristics of SMEs operating in Greek rural areas can be summarized as being their small size, traditional specializations, adoption of labour-intensive techniques and low profitability. These features contribute to their low economic development potential. However, two highly neglected interrelated factors, the conservative management style of rural entrepreneurs, as well as the lack of cooperation among rural firms, seem to be crucial in understanding the behaviour of rural SMEs.

The majority of rural entrepreneurs adopt a highly conservative management style, being preoccupied with every day problem solving. This can be explained by their low educational qualifications, as well as by their active involvement in all aspects of the business. Hence they are too busy, unaware of the broader business environment and too insecure to shape a clear business strategy. They react, often on an ad-hoc basis, to changes of the external business environment.

Another key characteristic of rural firms in Greece is the lack of cooperation between local firms. In recent decades, several attempts have been made, mostly by State organizations, to encourage the development of cooperative forms of behaviour by rural SMEs. Given that small size and a remote location are the main defining characteristics of these rural SMEs, it might be expected that entrepreneurs would welcome initiatives such as the common procurement of raw materials, common marketing of finished products, or common access to information. However, the success of these State initiatives
encouraging the formation of associations and partnerships among SMEs has been very poor. This can be ascribed to the strong feeling of self-sufficiency and reliance shown by local entrepreneurs. Whilst there are close ties and relations of support between members of the same family, this is not the case between other people where suspicion and lack of trust are more likely to be found than collaboration and support. These kinds of attitude are deeply entrenched and difficult to change. Thus those policies which aim to assist the formation of networks of firms and promote common actions between local firms are unlikely to be successful in Greek rural areas because they fail to take account of the local social and cultural context affecting entrepreneurial behaviour.

Available evidence tends to indicate that the European and national programmes that work best are those which allow for considerable local autonomy with regards to project formulation and implementation. As described in (ch. 0), one EU programme that is more adaptable to local circumstances is the Leader programme, where the broad overall programme objectives are established centrally (after consultation between the EU institutions, national governments and other interested parties) but local appraisals, plans and projects are devised, implemented and delivered locally through Local Action Groups. Leader II (1994-99) and Leader + (2000-2006) programmes are concerned with encouraging rural development in local communities via local action groups, providing funding for a wide range of projects which involve community based forms of entrepreneurial action. Most evaluations agree that Leader has succeeded in defining new approaches to rural development programmes, some of which are likely to be transferrable to other programmes and to other local contexts (Midmore, 1998).

The extent to which the Leader II programme has given rise to innovative projects which address the needs of different areas can be illustrated with reference to some examples from Germany and the UK. Examples of the kinds of projects to support enterprise activities in the Waldshut and Nordwestmecklenburg CSAs include: investment grants enabling the expansion of small enterprises in the food processing and timber industries (see case studies); support for the development of farmers markets; and the establishment of a communal forum aimed at promoting a municipality externally as well as achieving closer social integration.

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<th>Case Study 1: Fichtenhofbrennerei Marder in Waldshut CSA</th>
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<td>The Fichtenhofbrennerei Marder is a distillery for high quality distillates. The clientele are gastronomy, first class hotels, specialised trade and private connoisseurs. The enterprise operates in the national German market and is a part-time operation. Marder predominantly uses inputs</td>
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(mainly basic materials like fruits) from the region, whereby there is particularly attention paid to a high quality of the inputs.

The enterprise received a 10% grant towards the investment costs for a new sales room and new production hall. As Mr. Marder told us, the LEADER support essentially influenced the enterprises’ advancement: in order to maintain sustainable productive efficiency and to assure the ability to compete, the investment activity had to be on a larger scale than originally planned.

The LEADER support was a central contribution to set the long-term strategy of the enterprise:

• Sustainable growth
• Supplying highest-quality products
• Change from part-time operation to full-time operation
• Further expansion (a new stockroom is already planned)
• Intensification of the use of ICT for marketing purposes (e-commerce and b-commerce)
• Implementation of international co-operation with foreign distilleries in order to co-ordinate marketing activities (visit of trade fairs and exhibitions)

Case Study 2: Blattert Mühle (the Blattert mill) in Waldshut CSA

The Blattert mill received LEADER support for the construction of a storage depot and a new sales room. With these investments Mr. Blattert wants to improve the efficiency of his production processes.

According to the owner, the impacts of the investments supported by the LEADER Initiative have been:

• The continuity of the enterprise.
• The investment helped the enterprise to adjust itself to the structural changes of the customers: the mill has two important customer groups. On the one hand there are the farmers, who bring their crop to get them
milled and who buy animal feed, on the other hand there are the bakeries buying the flour.

• The farmers are subject to a structural change at present with many small farms going out of existence. Therefore the investment of Blattert was a necessary measure to keep in touch with the bigger farms which want to work with bigger mills. The same reasoning applies for the bakeries. In order to open up the market of the large bakeries, Blattert plans further investments.

• The investments enabled Blattert to go ahead with his strategy for developing his enterprise:
  • To adjust his enterprise size to the clientele’s concerns.
  • To push the idea of “the marketing of regional, agricultural products”.
  • To open up the market of the large bakeries. Blattert’s mill has (1) to grow rapidly (in order to present itself as a potential partner for the large bakeries) and (2) to orientate itself towards the decision makers on the national market.
  • To make use of innovative trade channels: Blattert plans to establish e-commerce with his products.
  • To take into consideration a co-operation-strategy with other local mills in order to realise scale economies.

Two further examples from the Devon & Cornwall CSA illustrate the way in which the Leader programme has been used to achieve higher levels of cooperation between existing enterprises, as well as helping to start local, community-based initiatives.

Case Study 3: Claytag in Devon & Cornwall CSA

Farmers cooperative for the electronic identification and traceability of cattle (Claytag Ltd). Claytag is a group of Cornish farmers striving for improved quality and welfare through Electronic Identification and Traceability of Cattle. The aims of Claytag are:

• To reduce the time spent on cattle records and to improve farm efficiency through accurate information.
• To offer a marketing advantage through electronic traceability.

• To sell animals through electronic markets.

The Claytag group started in 1998 with 20 members and has grown to 25 members, with an average farm size of around 270 acres. They got support from the China Clay Leader II Local Development Group. Leader II staff encouraged the project and supported a group of 9 farmers to visit the manufacturers of different tagging equipment in Scotland. According to the chairman of the group, the Leader II manager played a very important role in supporting the project, including helping with writing the bid for funding under the programme. Each member contributed £850, with the banks supporting the initiative through providing cheap overdraft facilities. The group set up a limited company to reduce the risk if the enterprise failed.

The Claytag project has had some longer term impacts. Objective One funding has been secured to support a further 300 farmers across Cornwall to use electronic tagging, and the leaders of the Claytag group have helped set up other tagging projects funded by the Leader II programme.

Case Study 4: The Happy Pear project in Devon & Cornwall CSA

A community shop and café shop (the Happy Pear project, Hartland, Devon). This has the following aims:

• To sell organic vegetables, fruit, wholefoods and fairtrade goods.

• A café selling local and organic produce.

• To reinvest any profit in the community.

• To provide a craft and exhibition centre.

It was established three years ago and now employs 5 part time staff, and is managed by three board members. It received funding from the Leader II Torridge Local Development Group and also funding from Devon Food Link. It has very close links with the Hartland Small School that provides a ‘holistic education’ to 60 pupils.
Funds came from the Small School as a result of the sale of a property and Leader II employed ERDF monies to fund 21 per cent of the cost of the project. Devon Food Links also supported it. The project has had to tackle considerable bureaucracy from the Government Office and MAFF, which were not supportive of retail enterprises. Grant support in the form of a capital element for the community group to buy the premises was also limited, leading to tensions as the Leader programme could not do what the community group wanted. The project became a reality due to a committed team of volunteers who were able to raise funding from the private sector.

The project has saved the local shop and is the only supplier of organic food in the community. The shop and café was aiming to be in surplus by 2000 but their turnover was reduced because of the foot and mouth epidemic.

6.4.3. Encouraging the diversification of the farming and land based sectors

Farmers are an important element of the small business population of peripheral rural areas, even though they may not have traditionally been thought of as owning and managing an SME. In more developed economies, such as the UK, farmers are having to become more entrepreneurial by diversifying into other activities, becoming involved in the formation of non-farm enterprises, and renting out farmland and buildings to non-farm businesses (Carter, 1998). Moreover, reductions in agricultural support, combined with changing market trends and the foot and mouth crisis, have intensified the pressures on farmers to diversify their activities in order to survive and make a living.

Of course, in many European rural regions, pluriactivity is an established way of life amongst farm households. For example, a major study in 24 regions in western Europe in the late 1980s indicated that 58% of farm households were pluriactive and that one third obtained more than half of their income from off-farm sources (Fuller, 1990). Interestingly, this study found that only a fifth of pluriactive farms were using additional activities as a strategy of disengagement from their farm business, the majority using it as a way of generating income to maintain the farm business. Pluriactivity continues to be common amongst the rural communities of the Greek and Portuguese study areas.

Research on farm diversification in the UK shows that the ‘adopters’ of farm diversification schemes tend to share certain characteristics which distinguish them from ‘non-adopters’ (Ilbery & Bowler, 1993; Carter, 1998). They tend to have larger farms,
higher incomes and a greater willingness to borrow capital. They also tend to be younger in age and to have continued in full-time education after school, and more likely to have received formal agricultural training. Significantly, a greater proportion of the ‘adoptors’ have children wishing to continue the farm business, acting as a stimulus to diversification. Further research by Ilbery et al (1998), specifically on farm-based tourism in upland areas of Northern England, showed that tourism was invariably a strategy for farms which were short of family labour, but where the female partner could run the tourism accommodation side of the operation. However, the authors conclude that farm-based tourism does little more than ensure the survival of family farm businesses and that it is unlikely to prove a major growth point for the rural economy.

In Germany, farm diversification, especially in the fields of farm-based tourism and direct marketing, has traditionally been cited to create jobs for the female rural population. However, women living in the countryside are becoming more critical of such projects (Bahl, 1997: 165). Seibert, et al. (1997) report on an innovative project, which was realised under the Objective 5b programme in Bavaria. This involved collaboration between the Social Ministry and the Ministry of Labour in building a kindergarten on a farm, thereby bringing a redundant building back into use and creating local jobs.

There has also been a recognised need to encourage more innovative forms of diversification as illustrated by the following farm diversification programme in Devon & Cornwall using Objective 5b funding during the 1994 - 99 period. A central element of the Objective 5b programme has been to promote the diversification of agricultural enterprises, as part of its broader aim of assisting diversification within declining sectors of rural economies. The Objective 5b programme has been complemented by other programmes such as the South West Tourism Farm Diversification, the former Rural Development Commission’s Redundant Building Grant Scheme (which since 1999 has been run by the South West of England Regional Development Agency), and Business Link advisory support.

The assistance to farmers has come in the form of pre-investment support of up to 50% of the costs of feasibility studies and business plans; capital grants of between 30% and 50% of the total cost of the project; and post investment support to help businesses to survive and grow. Business Link (which is the main business support provider in England) was given the contract to deliver the pre- and post- investment support. There were two Business Link staff, together with other consultants (such as from the Agricultural Development Advisory Service) concerned with providing support.
The beneficiaries for the diversification support had to be farmers with a turnover of at least £15,000 and a demonstrated need. There were no restrictions on the sectors that farms were diversifying into and a sample of 23 final year Business Link supported projects showed that there were three in retail, four in property development, eleven in various forms of manufacturing including food processing, and five in other services. Analysis of the gender balance of the 23 projects shows that there were 12 applications from men, 6 from women and 5 from couples. The main demand for Objective 5b assistance has come from farmers looking for secondary or tertiary income streams and reducing their dependence on a single market. All of the farm businesses interviewed stated that they also wanted to re-use a redundant building, showing that obtaining rental income from the conversion of farm buildings was a key way of compensating for declining farm incomes.

The interviews with the advisors and some of the beneficiaries of the scheme have helped to identify a number of good practice elements of the Objective 5b agricultural diversification programme. These include:

- the use of experienced consultants and business advisors to support bid writing and the generation of ideas;

- funding to help applicants with proposal writing. Farmers may not have the liquid cash to pay for consultants, although they have other assets that can be developed into successful businesses;

- the paperwork was kept relatively straightforward as the programme only had to work with one government department;

- the most successful projects, which are sustainable without further support, are those concerning the conversion of farm property for tourism and office space.

Finally, one of the main advantages of the Objective 5b farm diversification programme has been that, being a territorial rather than sector based programme, it was possible to link the support given to farmers with other policy initiatives as part of an integrated programme of rural economic development.

The insert below describes a particular farm diversification initiative in Cumbria which illustrates how a modest outlay of resources can help farmers move into value added food processing activities.
Case Study 5: The Mobile Preparation and Manufacturing Unit in Cumbria CSA

This initiative, which started in February 2001, has been concerned with encouraging farmers to move into value added, food processing activities without having the additional costs and risks associated with obtaining their own facilities. It is linked to the growth of farmers markets in Cumbria and is being delivered by the ‘Made in Cumbria’ promotion programme, using funding from the Leader II ‘Fells and Dales’ programme. It takes the form of a mobile preparation and manufacturing unit which is available for hire by farmers/producers in Cumbria and North Lancashire.

The mobile kitchen is essentially an adaptable learning tool for giving farmers some training in food processing of various kinds. All the users receive training in intermediate food hygiene which ensures the safe production of local food whilst giving the farmer/producer the confidence to experiment with different lines. This training can then lead on to other training opportunities in marketing and web design. The idea is to help farmers with the first stage of new business development. Farmers can use the mobile kitchen for up to three times per year and then they are encouraged to put together a business plan and buy the needed machinery themselves. The geographical remoteness of the beneficiaries has not made any difference to the demand to use the mobile kitchen, although much of the interest during the first year came from small-scale farmers.

An example of a successful new business which has made use of the mobile kitchen is Country Fare, set up by the wife of a medium size farm and which produces high quality baking using the finest ingredients and tried and tested recipes. As well as selling the products at farmers markets and in local shops, an outside catering service is also available for a wide range of occasions and corporate hospitality events. Country Fare hired the mobile kitchen to provide outside catering to a film company in a neighbouring county. This proved to be a lucrative contract which has provided sufficient funds for the business to invest in converting one of the farm’s barns into a kitchen. This new business is
now more profitable than the farm itself and employs up to 12 people, several of them being the wives of other farmers in the area.

Whilst the experience of farm diversification policies has been mainly in the more developed economies, the need for farm diversification is now becoming more apparent in the underdeveloped regions as well. In Greece for example, farmers have been shielded and subsidised by the State and the EU, but the removal of trade restrictions by the WTO, CAP reform, and EU enlargement will reduce the number of farms that are viable and increase the need for diversification into non-farm activities. And the need for farm diversification will be even greater in the accession country of Poland where some 60 per cent of the working population of peripheral rural areas obtain their income from agriculture.

6.4.4. Overcoming barriers to the adoption of new technologies

At its most basic level, a commonly encountered argument has been that the economic transformation of peripheral rural areas lies in grasping the opportunities provided by advances in ICT since this has the potential for rural enterprises to overcome the disadvantages of their location with respect to markets and access to business services. However, a more critical perspective on the contribution of ICT to economic development within remote rural areas of Europe is provided by Grimes (2000). Drawing upon a detailed evaluation of telematics projects in rural areas, Grimes criticises the technological deterministic assumptions which have underpinned many projects, i.e. that the provision of computer equipment and telecommunications infrastructure will automatically lead to economic development. He considers that this technical ‘quick fix’ approach has been encouraged by publicly funded projects which provide subsidised equipment. Thus in regions like the Highlands and Islands of Scotland for example, where there was a head start in installing ISDN lines, the take-up of services by businesses has been disappointing.

As shown by Ilbery et al (1995) in an EU programme of research on the use of telematics by rural small businesses in four countries, there are many barriers to the adoption of telematics services, not least user-resistance because of ‘techno-phobia’ and lack of training. The evaluation of European telematics projects referred to above highlights the need for enhancing the human dimension in ICT policies, not least the provision of appropriate training and skills development in rural areas; “technology cannot substitute for entrepreneurship, nor for well thought out strategies for development” (Grimes, 2000). It also demonstrates the need to develop applications which are better adapted to
the needs of rural small businesses, as well as the characteristics and competencies of those running them (Ilbery et al., 1995).

As shown ch. 5, there are marked differences between the five countries in this study in the propensity for rural firms to adopt new technologies and use ICT. The difficulties of achieving technological advancement are most acute in the most underdeveloped regions, as the following example from the Greek island of Lesvos illustrates. During the 1980s and the beginning of the ‘90s a number of technology-intensive firms had been established on the island largely as a result of substantial financial incentives. The technological advancement of existing firms and the establishment of new technology-intensive firms were among the prime targets of the State Industrial and Regional Development Policy in that period.

Currently, however, there is little evidence of technology intensive firms locating on Lesvos. This became evident during the selection phase for the enterprise survey as it proved very difficult to identify 100 innovative firms and/or firms using technology-intensive processes.

There are several interrelated factors which result in the low incidence of technology-based enterprises and the trend towards more labour-intensive activities:

- The massive inflow during the 1990s of economic immigrants originating from ex-Socialist countries, notably Albania. Their need for survival, combined with their low skills, made them willing to undertake temporal, tiresome and risky jobs at rates of pay that were mostly rejected by the indigenous population. Immigrants are now the main workforce in many primary sector enterprises, resulting in a lack of investment in more automated methods in these sectors, which could threaten the long-term competitiveness of these enterprises.

- Lack of skilled labour. The majority of entrepreneurs share the view that there is a shortage of labour with ICT skills. Survey results revealed that although a substantial number of enterprises possess computers and other ICT equipment, the degree of use was extremely low. They are mostly used for word processing and book keeping while more sophisticated applications and network connections were the exception to the rule.

- The remote location of the island, combined with the poor transport infrastructure, is also a major obstacle to technological modernisation of firms. Firms making use of and/or showing an interest in investing in technology-intensive processes are in need of a constant flow of information about technical specifications and potential
uses of new products. These are mostly imported products traded in Greece by a few agents located mostly in Athens and to a lesser extent in Thessaloniki who organise formal presentations of new products at their offices. However it is not always easy for an entrepreneur located in a remote rural area to attend these presentations. Moreover, ICT equipment is sophisticated machinery that needs specialised maintenance which is unlikely to be available locally.

The experience of Lesvos, which is certainly not unique, illustrates the dilemmas facing policies aimed at increasing the adoption of new technologies in peripheral rural areas. Despite the alleged distance shrinking advantages of new technology, it shows that one effect of the adoption of ICT technologies is to increase a rural area’s dependence on enterprises and skilled labour located in urban conurbations. The example also serves to emphasise the importance of human capital investments if the potential advantages of new technology are to be realised.

6.4.5. Ensuring the delivery of policies is 'enterprise friendly'

From a business perspective, the main deficiencies of existing policies often relate to the way in which they are delivered and to the relationships with the agencies involved, rather than concerns about the appropriateness of policies to their expressed needs. The following evidence from the Portuguese CSAs illustrates some of the problems. It is based on an assessment of EU and national programmes by business managers themselves.

Territorially-based programmes (generally Community initiatives such as Leader or INTERREG) have performed a significant role in the municipalities of the Left Bank of River Guadiana, but have been less often used in the Oeste Region. Differences between the two areas are also apparent in the use of sector-based programmes, with greater use being made of employment, training and social development programmes in the Left Bank region, whereas there has been greater demand for research and innovation support programmes in the Oeste region. This reflects the greater fragility of the social and economic fabric of the Left Bank municipalities compared with the stronger market orientation in the Oeste region municipalities.

Business managers’ assessment of the programmes confirms, in general terms, the results of the several ex-ante, intermediate and ex-post assessments carried out for the Portuguese government or for the Community authorities in the last few years. This focuses primarily on various criticisms of the way in which the programmes are delivered, particularly the fact that the process of applying for assistance is perceived by businesses as being complex and too bureaucratic.
The following is a list of the criticisms which are typically made:

- excessive complexity of the application form and bureaucracy in the process of submission of the application;
- excessive restrictions in the definition of eligible investments;
- excessive delay in the processes of assessment and selection of applications;
- insufficient justification for, or credibility of, some of the decisions taken in the assessment and selection of applications;
- excessive centralism in the management of the programmes but, at the same time, excessive subjection of decentralised decisions to local and personal recommendations and relations;
- conflicts between different bodies responsible, resulting from overlapping powers and functions;
- rules constantly changing, and insufficiently clear regulations;
- delay in payments to approved projects, causing additional costs of indebtedness to banks, diversion of funds from primary investments and, in extreme situations, bankruptcy;
- excessive weight of administrative tasks related to regular control and inspection procedures, to the detriment of management and operational tasks.

These deficiencies in the delivery of enterprise support programmes have a number of implications: Firstly, they result in unfairness in access to existing programme. Factors like the weight of bureaucracy, the slowness of the decision processes or the delay in payments affect the smaller and more vulnerable organisations in particular. For many of them they are a disincentive, or barrier which prevents them from becoming genuine beneficiaries of these programmes.

Second, the selection criteria often discriminate against projects which address the need of rural enterprises and rural areas. For example, the co-partnership funding required, or the minimum number of technicians needed, may be difficult to reconcile with the size of the organisation or the diversity of activities to be developed; this situation may lead to applications being rejected on criteria that have nothing to do with the merit of the project, but rather with the financial and technical capabilities of the applicant. Also, the fact that sector-based national programmes apply uniform eligibility criteria for the whole
country means that the strategic importance of a project to the area where it is located is not taken into account; only the territorially-based programmes permit the assessment of applications in the light of the project's relevance to an integrated local development strategy.

Third, the present periodical inspection procedures, by operating after the event, do not encourage the learning and error correction processes that technical assistance and on-site support actions could provide; these actions are considered particularly important in areas with a weak entrepreneurial tradition and for projects headed up by young people.

Similar criticisms to those made by businesses in the Portuguese study areas were also made by those businesses that had applied for assistance in the Greek areas, whereas higher levels of satisfaction were found amongst businesses in Germany and the UK. This would seem to be an indication of the more decentralised and 'enterprise friendly' support systems in these more developed economies.

**6.4.6. The need to improve the internal and external coherence of policies**

The effectiveness of rural enterprise policies in several of the CSAs has been impeded by either the lack of internal coherence within a programme, or the lack of external coherence resulting from tensions between different policies, as illustrated by reference to the Leader programme in both Greece and Germany.

In the case of the Greek island of Lesvos, there has been a lack of internal coherence in the way the Leader II programme has been implemented. Although several agro-tourist resorts, as well as a number of traditional food processing firms have been financed under the programme, there has been little attempt to integrate them in anyway. For example, although food processing firms face a serious problem of market access, they have not reached any kind of agreement with agro-tourist cooperatives to place their products in agro-tourist resorts and/or retail outlets.

There has also been a lack of external coherence in the sense that the Leader II programme has not been well integrated with other support programmes. Confusion has existed between the roles of several quite similar agencies operating in the area. The overlap of activities has led to a state of competition instead of cooperation between these agencies and the urge of each agency to have an active presence at the local level has led to some unprofessional actions. For example, the manager of the local economic development agency (ETAL) was very upset that the Ministry of the Aegean awarded a prize to the owner of a boatyard, a traditional local activity that had been abandoned and
restarted with the help of Leader funding, without any reference to those responsible for implementing the Leader programme.

Also with respect to the Leader programme, the German CSA of Waldshut in Baden-Württemberg illustrates problems that have been encountered in matching Leader’s funding criteria with those of possible matched funding programmes. All projects and initiatives that are supported by the Leader programme have to be supported by national or regional support programmes with the same amount of money. In Baden-Württemberg, the ELR programme (programme for the development of rural regions) is a favoured co-financing programme. However, this has given rise to the following problems:

- projects that would satisfy the conditions of the Leader programme (the projects have to show innovative features) often do not suit the rules and regulations of the national and regional support programmes (most of which are rather conservatively oriented);
- due to the complex co-financing guidelines, it is very difficult for the Leader coordinators to explain the functionality of the Leader programme regarding the procedure of approval and financing to the particular groups of applicants;
- for agricultural enterprises it is less attractive to apply for Leader support since they are not classified as business enterprises and thus cannot be supported by the ELR programme. Agricultural enterprises have to apply for other, sectoral specific support programmes which provide subsidised loans rather than investment grants.

6.4.7. The need for an integrated business support system

Another common problem from a business perspective is becoming aware of the different types of support that are available and which agencies to approach. The different levels of support, ranging from European programmes to local initiatives, together with the plethora of delivery agencies, can often lead to entrepreneurs becoming confused. This can result in the owner managers of those businesses that are most in need of support not bothering to avail themselves of the assistance that is available.

The UK CSAs illustrate steps that have been taken to move towards a more integrated and coordinated system of providing a range of support to new start-ups as well as to existing SMEs. In both Devon & Cornwall and in Cumbria the policy support is a local version of the national approach, under the umbrella of the Government’s Small Business Service (SBS). During the mid 1990s, responsibility for enterprise support in rural areas shifted from the Rural Development Commission to Business Links (BLs), which
represented a shift from specialist support to rural small businesses, delivered through a network of dedicated rural business advisers, to a more generic mainstream approach focused particularly on growth orientated established SMEs (with between 10 and 200 employees). Local enterprise agencies (typically operating at the local authority district scale) provided support to people thinking of setting up a business and to new and very small businesses. More recently, the establishment of the SBS and the restructuring of Business Links in April 2001 resulted in a wider remit for BLs to offer assistance to all types of small enterprise in all locations. As far as rural areas are concerned, important elements of this wider remit are the inclusion of start-ups and micro enterprises as part of the target group. In addition, responsibility for delivering support to farmers has also been brought under the SBS umbrella, with the establishment of the new Farm Business Advisory Service. This represents an important landmark in treating farms alongside other rural enterprises.

In line with the national picture, not all the business support in Devon & Cornwall is delivered in-house by Business Link, which currently operates through a brokerage model, with key partners (‘gateway partners’). This represents a deliberate attempt to reduce the fragmentation and associated confusion in the minds of potential clients. An example of the operation of the brokerage principle in practice is start-up support, which is delivered through a network of local enterprise agencies, most of whom were providing similar support previously. In fact, the ten enterprise agencies in Devon & Cornwall had already recognised the need for closer integration and cooperation by forming an association. The benefits have included sharing best practice as well as certain costs. In the case of farmers, specialist support is delivered through the South West Agricultural and Rural Development (SWARD) project, which involves a specialist agricultural institution that is part of the University of Plymouth, as well as a local enterprise agency which has advisers specialising in farm diversification.

Although it is too early to assess the impact that this new system of providing business support is having in rural areas, it does represent a clear shift towards a more coherent and integrated model, linking national level support programmes to local delivery agencies. It emphasises the importance of effective networking and referral between support agencies, as well as the need for a high profile and accessible hub organisation which is likely to be the first port of call for many businesses.
6.5. What kinds of policies are needed to develop the entrepreneurial capacity of peripheral rural regions?

Having now identified a number of issues relating to existing policies which are concerned with stimulating and supporting entrepreneurial activities in the study areas, we now consider a number of ways in which policy interventions can contribute to building-up the entrepreneurial capacity of peripheral rural regions. Given the wide range of rural areas throughout Europe, which reflect marked economic, social, and cultural differences, it is clear that there are distinctive issues, found in particular rural contexts, which require policy tools which are sensitive and appropriate to those particular circumstances. At the same time, there are other issues which are shared between different rural contexts and can be tackled by more generic policies. In what follows, we shall endeavour to identify these common issues, as well as those which are more specific to particular rural contexts.

6.5.1. Potential sources of entrepreneurship

Young people

There is a clear need in most peripheral rural areas to find ways of developing entrepreneurial awareness and ambitions amongst young people if endogenous business development is to occur. It has been shown that young people whose parents have been entrepreneurs have a higher propensity to become entrepreneurs themselves than where there is no family tradition of entrepreneurship and business management. The children of existing entrepreneurs are therefore likely to be an important source of future entrepreneurs in a rural area, but they need to be encouraged to remain within these rural communities, or return to them once they have completed their education. There has been a long established trend for the better-educated and more skilled young people, including those more willing to take risks and to display initiative, to move away to urban areas, yet rural areas cannot afford to lose such people. The reversal of these trends will require substantial investment in the physical and social infrastructure of rural areas to make them more attractive to young people (see 6.5.2. Physical and social infrastructure below).

Obviously, encouraging young people to become entrepreneurs is going to be most difficult in those rural areas where there is no tradition of becoming self-employed or setting-up businesses. The west Cumbria area illustrates this, since the incidence of entrepreneurship in the population is very low, especially amongst men, largely as a result of the historic dependence of the population upon working for large employers. Despite the decline in this type of employment, it is proving difficult to break away from
this ‘employee culture’, even in the thinking of young people. The lack of an entrepreneurial tradition is also evident in the Left Bank region of Portugal, stemming from the historical predominance of the large farm, which turned most of the labour force into wage-earners. Here, the social inequalities associated with the large farm property contributed to perpetuating the idea that the employer is synonymous with social exploitation. Changing these perceptions and encouraging a positive social image of the entrepreneur is fundamental to stimulating local entrepreneurship in these areas. This is likely to require campaigns aimed at promoting the social status of the entrepreneur, involving local councils, schools and business associations. The attribution and wide publicity of awards to local cases of entrepreneurship may help to raise the profile of entrepreneurs and act as a source of encouragement to others. Steps are already being taken via the EU’s EQUAL programme to give school children the opportunity to be in close contact with business reality with a view to encouraging a disposition towards entrepreneurship.

Although the entrepreneurial culture in the German area of Waldshut is probably stronger than that of most of the other study areas, there is still a concern about the need to raise the entrepreneurial awareness of the population. Various initiatives have been taken in recent years, including the establishment of a virtual start-up network involving banks, chambers of commerce, and local government aimed at encouraging a more positive attitude towards entrepreneurship by means of a start-up competition and various promotion events. Another example is of an initiative concerned with trying to develop entrepreneurial awareness amongst school age young people.

**Case Study 6: The project of the “Juniorenfirma Pro You der kaufmännischen Schulen Waldshut” (junior enterprise driven by the students of the school for commercial education Waldshut)**

**The Initiative**

The idea is to create an enterprise within the school, whose members are exclusively recruited from the students of the school. This junior enterprise acts

- as an incorporated enterprise;
- with marketable products and services;
- on real markets;
The school for commercial education Waldshut implemented the junior enterprise in 2001. The enterprise mainly sells commodities for office and school. The salesroom is located in the school. So the students are able to sell their products to their schoolmates and to the teachers during the school breaks.

**Aims**

The students are meant to experience economic processes under real conditions. They learn to think entrepreneurially and how to come to a managerial decision. Many different entrepreneurial situations are played through so that there are real economic and financial consequences for the students.

The project of the junior enterprise can be considered as a best practice example for anchoring entrepreneurial thinking and acting in the educational process. A career as an entrepreneur is presented as one attractive possibility (among others), that the students should take into consideration to organise their professional future.

**Structure of the enterprise and the members**

The enterprise consists of an executive board (one executive manager and one representative) and four operating departments (buying department, sales department, marketing and accounts department). The executive board is legitimised by election; the other members of the enterprise work alternately in one of the four operating departments. After one year, the members of the enterprise are completely replaced: the enterprise is referred to the next generation of students. The members of the enterprise produce an annual report and a financial statement. The junior enterprise has received start-up financing from the local trustee savings bank.

The members of the enterprise are students who passed the Hauptschule (lowest level of secondary school in Germany) and are currently in two years of job-preparing courses. The students are between 15 and 17 years old. Each student who participates in the junior enterprise project will receive a certificate written out by the coaching teachers.
Furthermore the students are involved in the enterprise's financing: each member of the firm possesses equity in the amount of 10 €, in the end of the year they receive profit participation.

**Role of in-migrants**

The population survey has shown that in-migrants are an important source of entrepreneurs in some remote rural areas, particularly those areas that are perceived as being environmentally attractive such as the Devon & Cornwall and east Cumbria study areas in the UK and Nordwestmecklenburg in Germany. A high proportion of the more innovative enterprises in these areas have been set-up by people moving in from other regions and in some instances relocating an existing business in the process. Other people have set up more ‘lifestyle’ types of businesses with the motive of earning a reasonable living rather than developing a growing business. In addition, in-migrants of retirement age (and especially those that have taken early retirement) often bring with them entrepreneurial and management experience which can be of value to younger people setting up businesses. Initiatives to encourage the in-migration of people with entrepreneurial experience and skills could make an important contribution to the development of those rural areas lacking endogenous sources of entrepreneurship.

**Case Study 7 - the ‘Digital Peninsula Network’ in Devon & Cornwall CSA**

A trend noted by several of the interviewed key informants was the in-migration of people wanting to set up small, internet based businesses in the rural areas of Devon & Cornwall. It was thought that the main motives were the prospect of a better quality of life, the decision of some to leave the corporate world with all its pressures and to go into self-employment, and the opportunity to capitalise on the high house prices in London and the South East.

A small concentration of entrepreneurs running ICT businesses has developed in the most peripheral part of Cornwall (the Penwith district). Largely as a result of an initiative taken by one individual in 1999, a few self-employed people and owners of micro businesses in the ICT field (including several in-migrants) started meeting to see how they could help each other’s businesses, the aim being “to see if digital professionals and knowledge workers in SMEs in Cornwall could offer one another help, support and advice”. A key aspect has been to promote the activities of its members which cover a wide range of ICT
sectors including business services, communications and networks, film and television, graphics and multimedia, publishing, and web design.

By 2002, the membership of what became known as the Digital Peninsula Network had grown to 185 members, many of whom were self-employed individuals working from their own homes. These businesses typically work on a project basis, building up ‘alliances’ to serve a particular market and to work on a particular project. The digital and creative industries sector is particularly conducive to the formation of networks and the transfer of knowledge between businesses.

The Digital Peninsula Network (DPN) became a company limited by guarantee and acquired its own premises which were equipped with the latest hardware and software as well as broadband ISDN internet connection. In fact, a key activity of the network soon became a campaign for a better telecommunications infrastructure in Cornwall.

Although a privately-led initiative, the DPN has received public sector support from a number of sources including EU Objective 1 funding, the South West Regional Development Agency (from the Innovative Cluster Fund), The Rural Development Programme, and from the local district council.

The above example from Devon & Cornwall illustrates the contribution that in-migrants have been making to the organic development of a new cluster of ICT businesses, which has been assisted by various sources of public funding.

**The role of animators**

The findings of the population and enterprise surveys have drawn attention to the leading role played by a small number of key entrepreneurs who are invariably involved in several different business ventures. This was particularly evident in the study areas of some of the more developed economies. Thus in Devon & Cornwall, the enterprise survey highlighted the importance of a small minority of portfolio or serial entrepreneurs who were typically the owners of the more successful and dynamic enterprises. They were more likely to have products/services judged to be innovative by national and global market standards than firms owned by entrepreneurs with single business interests and more likely to have been involved in new market development.
There are some unique examples in a couple of study areas of where a highly successful entrepreneurial venture can have a major impact upon the economic development of a region. One such example is the high profile Eden project in Cornwall, which is a particularly visionary eco-tourism and education project led by a social entrepreneur (Tim Smit, an in-migrant to the region) who had had considerable success previously with a garden restoration project also in Cornwall. Within its first year, the Eden project attracted 1.7 million visitors and generated over £100 million of additional spending within the area, thereby creating market opportunities for a large number of local enterprises. A key to the success of the project has been the ability of its founders to access various public funds, including £10 million of ERDF funds.

The following Greek example also illustrates the catalytic role played by a leading entrepreneurial figure – Boutaris.

**Case Study 8: Vine Cultivation in Kilkis CSA**

For example, Boutaris’ presence in Kilkis led to the re-introduction of viniculture in Goumenissa where it had once been an important tradition. In fact in the mid-70s it persuaded certain people, mainly non-farmers, to shift, under contract farming, from fruit production to vines. Later on Boutaris facilitated the establishment of wine producing firms. It is worth mentioning here that the people who were first persuaded to try vine cultivation were not farmers but doctors, professionals and others enjoying a certain social status. In general most innovative ideas in rural areas come from people that are not farmers (e.g. teacher, taxi driver, ex-emigrant worker in Germany).

Admittedly the above examples are exceptions. One of the main problems in developing the entrepreneurial capacity of the more underdeveloped rural regions is the absence of such people. Local entrepreneurs are typically very conservative, unable to think innovatively, not well educated, usually older than the average population, and have life experiences limited by their rural environment. It is unlikely in these situations, therefore, that the required animators will emerge from within the indigenous population.

This is where the establishment of Local Action Groups by the Leader initiative can play an important role in promoting the development of rural areas with weak social and entrepreneurial structures. Such a role might also be played by ex-villagers who ‘weekend’ in the village and bring with them their urban experiences, by senior employees of an incoming large firms, or by in-migrants.
The role of inward investment

Again, particularly in those areas lacking endogenous entrepreneurship potential, greater emphasis is likely to be placed on attracting inward investment. However, there are strong arguments both for and against the use of inward investment in regional economic development, ranging from those who argue that it only serves to exploit the region and that inward investors are quite capable of ‘flying away’ at any time, to those who see it as a valuable source of know-how, skills development, local demand, and spin-out businesses. Much depends upon the type of inward investment that is attracted and the capacity of local entrepreneurs to exploit the potential market opportunities it can offer. Ideally, preference needs to be given to those forms of inward investment which are most likely to help create new enterprises and generate demand for the products and services of existing small enterprises. In other words, inward investment needs to be regarded as a way of stimulating, rather than crowding out, entrepreneurial activities. There are examples from the study areas of where this is being achieved. For example, in Cumbria, one of the impacts of the Sellafield nuclear power station, which has been the county’s largest inward investment project, has been to develop the Westlakes Science and Technology Park which accommodates around 30 new businesses. This contrasts with the marginal spill-over effects of other inward investment schemes such as the several call centres which have been attracted to the rural areas of Cumbria by the low cost of female labour.

As shown by a comparison of the two Portuguese study areas, inward investment is most likely to be attracted to the more developed rural regions which have the better infrastructure and skills base. More emphasis has been placed in the Oeste region than the Left Bank region on attracting inward investment, whether national or foreign, made possible by the region’s better road and rail access and availability of sites for business activities. Harnessing inward investment as a stimulus to local enterprise activities is clearly going to be most difficult to achieve in the more peripheral rural areas suffering from poor access to markets.

6.5.2. Developing the infrastructure to support entrepreneurship

Policy has a clear role to play in developing those regional infrastructures which are needed to underpin and support entrepreneurial activities in remote rural areas.

Education and Training

First and foremost, especially in the case of the least developed of the rural areas, is the need to invest in the education and training system. This is most obvious in the study
areas of Poland where the limitations of the current education system are proving to be one of the main barriers to entrepreneurship development. The relatively low skill levels of the rural workforce and potential entrepreneurs have an adverse affect on the form and scale of SME development, the supply of entrepreneurs, especially in high technology sectors, and on influencing the development potential and competitiveness of existing SMEs. This requires education investments aimed at increasing the number of people receiving both secondary and tertiary level education, and investments in the training provision for business owners to raise marketing skills, the ability to prepare business plans, financial management and the quality of innovation management. Although much of this training could be provided by private sector organisations, public intervention has an important catalytic role in stimulating and supporting the services provided (e.g. through subsidising the costs of training).

The creation of an appropriate training infrastructure to help develop an entrepreneurship culture is also regarded as a policy priority by interviewed key informants in Portugal. This needs to comprise the widespread introduction of modules of entrepreneurship in professional training courses; a greater supply of training specifically oriented for entrepreneurship promotion in areas of low population density and weak entrepreneurial culture; greater flexibility in the eligibility criteria for training programmes orientated towards self employment; and the development of regional and sub-regional coordination mechanisms of training supply to prevent duplication on the one hand or gaps in provision on the other.

**Physical and social infrastructure**

The development of the entrepreneurial capacity of peripheral rural areas is also unlikely to be successful unless improvements occur to the physical and social infrastructure. This applies especially in the case of Poland’s rural periphery where substantial improvements to the physical infrastructure are necessary before local enterprises can take advantage of the new market opportunities resulting from Poland’s accession to the EU. Moreover, public investment in modernising the physical infrastructure can in itself create market opportunities for enterprises in a rural region, especially if a specific objective of the programme is to award some contracts to local companies and thereby contribute to the development of the region’s entrepreneurial capacity.

In the case of Greece too, one of the main reasons for the depopulation of the countryside is the poor physical and social infrastructure of rural settlements, with even the parents advising their children to leave farming and seek employment in the main urban centres. Yet a precondition of the economic development of the countryside is the
retention of the younger generation. It seems that securing them an income is necessary but not sufficient, as they must have good living conditions along with employment prospects and social status. It follows that the creation of medium size urban centres with the necessary physical and social infrastructure is likely to be a requirement of holding onto the kind of young people who are most likely to contribute to developing the entrepreneurial capacity of these peripheral rural regions.

**Creation of business incubation centres**

The situation that exists in several of the study areas has led to the suggestion that the creation of a number of business incubation centres could prove a useful way of stimulating the formation and growth of new rural enterprises. As well as providing physical space for new businesses, such centres would also provide a range of support services and training courses to help inexperienced entrepreneurs negotiate the various hurdles involved in starting a new business, including identifying product markets, producing business plans, and applying for financial support. Whilst there is considerable experience of business incubation centres in urban areas (notably in the UK), they also have a potential contribution to make to remote rural areas through helping to create a critical mass of new businesses which can then form the basis for the sustained growth of entrepreneurial capacity.

Business incubation centres are particularly appropriate to those rural regions where there is a lack of local support and consulting services available to entrepreneurs, such as the Left Bank region of Portugal. Given this gap in the provision of services to entrepreneurs, it is suggested that the creation of business incubation centres, possibly linked to universities and technical education institutions, could help consolidate and develop the various competencies which start-up businesses require. Assistance in accessing various types of financial support, including venture capital, would need to be one of the services provided in such centres.

**6.5.3. Overcoming the barriers to innovation and enterprise development**

The enterprise survey has shown that rural enterprises face barriers to making innovations which their owner-managers frequently attribute to various characteristics of their rural business environment. For example, 46% of enterprises in Cumbria identified their rural location as a barrier to making product innovations, as did 37% of firms to the making of market innovations. The limited size of the local market was identified as the main constraint on product and service innovation, while remoteness and transportation costs were stressed in the case of new market development. Skill deficiencies and the difficulties of accessing information were also identified as constraints on innovation.
These results are similar to those found in other case study regions; for example, the smallness of local markets together with the poor business environment proved to be the main barriers to innovation in the case of enterprises in Nordwestmecklenburg.

Policies aimed at improving the innovativeness of rural enterprises therefore need to focus on finding ways of overcoming these constraints. As referred to above (section 6.3.2.), initiatives which help firms enter non-local markets are likely to be very important here, such as external assistance with market development, exporting, and the adoption of new marketing techniques. In some areas initiatives have been taken to promote local products, such as a ‘Made in Cumbria’ initiative, started by the county’s economic development officer over ten years ago, which aims to promote and sell local food and craft products made by small enterprises in the county. These kinds of initiative may be one of the few options available in the short-term in the case of some of the poorest rural areas where most enterprises are concerned with agricultural products of one kind or another.

Also needed are policy initiatives aimed at encouraging rural entrepreneurs to participate in information and knowledge networks as another key influence in encouraging entrepreneurship and innovation is the strength of contacts which entrepreneurs have ‘with the outside world’. This was found to be particularly important in those rural areas, such as in Portugal, that did not have a strong entrepreneurial tradition and had a poorly qualified entrepreneurial culture. The analysis of the life narratives of the owners of the most innovative firms confirmed this and seemed to apply irrespective of their level of educational attainment. This emphasises the importance of encouraging rural entrepreneurs to enter into non-local networks of entrepreneurs and organisations within their sector if they are going to benefit from the exchange of knowledge, ideas, new market opportunities, and best practice. The creation of some form of ‘knowledge exchange’ network comprising brokers who can help access knowledge resources may be one way of raising the awareness of rural entrepreneurs.

In addition to these barriers which are commonly experienced by rural enterprises in different countries (although to varying degrees of intensity), mention should be made here of the particular challenges which will face enterprises in the new accession countries such as Poland as a result from EU enlargement (see section 6.3.5.). Over the medium term, support with the costs of adjusting to the internal market will be needed which is tailored to the behavioural characteristics of entrepreneurs in these peripheral rural regions. Over the longer-term, it is likely that various kinds of support will be needed to help firms move into higher value added products and services so that
enlargement does not lead to a deepening specialisation in low value-added labour-intensive sectors.

6.5.4. Towards a more strategic approach towards developing the entrepreneurial capacity of peripheral rural areas.

Whilst this review of the kinds of policies which exist to encourage entrepreneurship and enterprise development in peripheral rural areas has shown that, with the possible exception of Poland, there are a lot of policies in place, the overall impression is one of a disjointed and fragmented pattern of provision. This results from the diverse range of programmes which incorporate an enterprise dimension, but where the primary focus is on other priorities. Another common characteristic of several of the study areas is the poor level of dissemination of information and knowledge occurring not only between enterprises, but also between the various institutions and agencies with an interest in rural enterprise development. This can prevent the formation of a shared idea about the entrepreneurial potential of the region and the creation of a strong collective voice capable of making a national and international impact. Moreover, the review has also shown that in some areas, particularly the less developed ones, some policies relating to rural enterprise are ‘missing their target’ because they are based on a poor understanding of the local entrepreneurial culture and the factors which stand in the way of entrepreneurship and innovation in existing enterprises.

In our view, these inadequacies in the existing policy framework demonstrate the need for a more strategic and coordinated approach towards building the entrepreneurial capacity of peripheral rural areas, based on a clear vision of the role that enterprise can play in future rural development and agreement about the actions which are required to achieve it. Given the structural and global processes affecting these areas and the need for a transformation of their rural economies, we would argue that the case for producing rural enterprise and innovation strategies at the level of these rural regions has become more urgent. Whilst this applies in varying degrees to all the national contexts covered in this project, it is obviously most urgent in the case of the more peripheral rural areas in southern and Eastern Europe. Experience also suggests that an approach which actively involves rural communities, enterprises, and economic development agencies is most likely to work best, although regional level economic development organisations are probably in the best position to achieve the level of integration between different interests and agencies which will be required.
7. Methodology

7.1. Overview

This Report sets out to explore the question of whether entrepreneurship in the countryside could perform the role of an engine for rural development and enable rural locales to re-invent themselves. In addition we set out to investigate the roles of both knowledge-based institutions and policy-makers – at the regional, national and EU wide levels – in assisting the process of rural development. The main objectives of the Report are:

- To identify the key causes and effects of the economic restructuring currently affecting Europe’s rural peripheral areas.

- Explore the consequences that 'Global Integration' processes – and especially EU enlargement - have had and will have upon the development trajectories of rural peripheral areas.

- To identify sources of entrepreneurship (new, existing and potential) and examine their distribution between different gender, age and other social groupings.

- To evaluate the extent to which the existing institutional, social and technological environment and infrastructure encourages and facilitates entrepreneurship.

- To explore how new employment opportunities are distributed between gender, age and other social groups.

- To assess the appropriateness of existing policy approaches and instruments in identifying initiatives of wider application in Europe’s rural periphery.

7.2. The adoption of a holistic approach

Our review of the literature on peripherality and rurality suggests that there is a need for a more comprehensive view of rural areas. This perspective should take into account the importance of transition development processes, of the actors involved in them, as well as the contexts that shape their actions. It should also take into account both objective and subjective aspects (attitudes, values, behaviour, and expectations). In other words, the complexity and diversity which we know to be characteristic of peripheral rural areas today imply a need for a holistic approach capable of bringing together the multiplicity of factors involved in a coherent and balanced way.
7.3. The analytical approach

Our main points of departure are: a) a "post-consumerist" view of rurality, which is the main reason that led us to focus our analysis on entrepreneurship as a key factor that might facilitate the development of rural areas. In fact we consider entrepreneurship as a social process which in turn led us to adopt a historical, contextual approach to issues related to entrepreneurship (e.g. propensity towards and incidences of entrepreneurship). b) an integrated, territorially based view of rural development which led us to a holistic approach to the development of rural areas. Peripherality has different meanings, corresponding both to threats and opportunities and this led us to adopt a multi-dimensional concept of periphery i.e. as distance, dependence, distinctiveness and discourse. c). Even the most remote rural areas are becoming more and more integrated into wider spaces of interdependency, this led us to consider globalisation processes and the evolution of the EU in particular as crucial contextual factors to our analysis. d) Technology is becoming a crucial means for development, hence technology and even more so ICTs, can be of particular importance for rural areas. e) Market failures are particularly relevant in peripheral rural areas, which led us to focus our analysis on the need for public intervention. Present policy initiatives are not sensitive enough to distinctive characteristics existing within the rural environment; this is the main reason that we are stressing rural complexity and diversity and defining target-groups with specific needs.

In order to systematically analyse the empirical findings from the diverse environmental settings of the ten CSAs under investigation we have developed and implemented a suggestive analytical approach.

Our point of departure is the introduction of a divide between the FoU and the FoD. These refer to similarities as well as differences between the different rural settings which we thought would afford us a more manageable and focused schema than mere description. This was combined with the development of a coherent analytical approach based upon the idea that the development of rural areas and the development of entrepreneurship in rural areas are highly determined by issues such as: access to main markets, economic base of the area (i.e. of the nation and the particularities of the CSAs e.g. importance of agriculture), of social norms, modes of governance, degree of development of social capital as well as the characteristics of key actors/stakeholders in the area which all are highly differentiated between the various rural areas (Diagram 5.).

Admittedly, the specificities of the analytical approach may differ depending on the purpose for which it is deployed. Thus, whilst the essential schema remain unchanged,
the relative importance and the choice of constituent sub-elements may vary (e.g., whether for regional development purposes or to enhance entrepreneurship). This analytical approach we thought would enable us to gain an in-depth understanding of the processes at work in diverse geographical settings.

**Diagram 5.** The analytical approach: Factors of Unity and factors of Diversity

This analytical approach has enabled us to gain an in-depth understanding of the processes at work in diverse geographical settings.

### 7.4. Basic economic and locational characteristics of the CSAs

The study of rural entrepreneurship deployed a multitude of research methodologies, such as desk-top research, key informant interviews, a survey of rural inhabitants, and a survey of a stratified random sample of innovative entrepreneurs. The field work has been carried out in 10 CSAs in five countries (Germany, Greece, Poland, Portugal and UK). Four countries that are EU members and the fifth one (Poland) a country in a transition state that is to become an EU member in 2004.

All ten CSAs have: a higher share of Gross Value added coming from agriculture than the national average; a greater proportion of employment in agriculture than the national average, the only exception seems to be Zary but this must be attributed to the gross distortion due to the huge contribution of the back economy; a population density lower than the national average, the only exception being Oeste; a lower GDP/capita than the national average, the only exception being Cumbria and Kilkis (Table 11.). Finally, all CSAs are “border” regions in the sense that either they have - the majority that is - borders with another country (i.e. Baixo Alentejo, Kilkis, Waldshut, Bialystok and Zary) or a coastline (i.e. Oeste, Lesvos, Nordwestmecklenburg, Devon and Cumbria) (Diagram 6.).

It was decided to include European countries with different levels of development: i.e. more developed ones such as Germany and the UK; less developed ones such as Portugal and Greece and finally a pre-accession country such as Poland.
Within each country peripheral areas were selected. Even Waldshut which is located in the Federal State of Baden-Württemberg, one of the most developed areas in Europe is peripheral. Agriculture accounts for 40% of the land use and 49% of the area is forested. It is bordered by Switzerland to the south and France is in close proximity to the west. The average travel time by car to the next higher-order centre (Oberzentrum) is 60 minutes on average, which is above the aim of regional planning in Germany that the nearest higher-order centre should be accessible within 45 minutes (BBR, 2000a: 50). This distance and the location next to a Non EU Member Country underline the “peripherality” of Waldshut.

With the exception of Waldshut which is most central on both the European and the national level; Kilkis, Oeste and Nordwestmecklenburg, can also be classified to a certain extent as central on both the European and the national levels. Moreover, there are two areas that are central at national level but peripheral on a European level (i.e. Cumbria and Zary). Finally, there are four areas that are peripheral on both the European and the national level (i.e. Lesvos, Baixo Alentejo (Left Bank), Devon & Cornwall and Bialystok) (Table 12.).

Three of the CSAs belonged up to very recently to a socialist country (Bialystok and Zary in Poland and Nordwestmecklenburg in East Germany).

In addition, there are very significant differences in terms of the distance of each CSA from large urban areas, measured in terms of the urban areas that are within a radius of 100 Kms from the centre of each CSA (Diagram 7., Diagram 8., Diagram 9., Diagram 10., Diagram 11.). That is,

1st the most accessible group: Waldshut has within the 100 Kms radius cities like Strasburg, as well as Zurich, Basel and Mulhouse in Switzerland) and very important cities just few Kms further away (i.e. Stuttgart and Bern). Nordwestmecklenburg has within the 100 Kms radius cities like Rostock, Hamburg, Luebeck and Kiel). Cumbria has within the 100 Kms radius cities like Tyneside, Preston and Blackpool) and more important cities just few Kms further away (i.e. Leeds, Manchester and Liverpool).

2nd the intermediate group: Oeste has Lisbon within the radius of 100 Kms and no other large city close by. Kilkis has Thessaloniki within the radius of 100 Kms and no other large city nearby. Zary has no important cities within the radius of 100 Kms while there are important cities a few Kms further away (i.e. cities like Poznan, Wroclaw, as well as Dresden and Berlin in Germany). Bialystok has Grodno within the radius of 100 Kms and quite a few Kms further away the cities of Brest and Warsaw. Finally, Devon & Cornwall should have been classified in the most accessible group having within the 100 Kms
radius cities like Swansea, Cardiff and Plymouth) and a very important cities just few Kms further away (i.e. Bristol). However, since the actual distance that one has to cover in order to reach these cities is much higher, it has been classified here.

3rd the least accessible group: Baixo Alentejo has no important city within the 100Kms radius while much further away in another country (Spain) is Seville. Lesvos has no important city within the 100Kms radius while much further away in another country (Turkey) is Izmir.

This classification "improves" the overall position of certain areas (i.e. of Cumbria and Bialystok) and deteriorates the overall position of other areas (i.e. Oeste and Kilkis).

7.5. The research methods

The desk-top research involved a comprehensive review of national and international literature as well as the collection and processing of Secondary data. Specific datasets used in each country include: annual agricultural surveys, annual population change data, population census, the annual employment survey, census of employment etc.

Key-informant interviews were conducted in order to examine the extent to which the existing institutional and social environment encourages and facilitates entrepreneurship. Key informants were persons with considerable knowledge of the areas under investigation as well as suppliers of education, training and support. A semi-structured questionnaire was used in the conduct of the key-informant interviews. A total of 10-20 key informant interviews were conducted in the summer of 2000 in each CSA.

Drawing upon the findings of the entrepreneurs survey we conducted 10 case studies per CSA where we analysed in great detail the particular characteristics of the historical trajectory of each enterprise. For that matter in each case study we conducted interviews with both the entrepreneurs and 1 or 2 employees.
Diagram 6. The location of the 10 Case Study Areas

The field work (i.e. 4,939 questionnaires to the general population, 996 questionnaires to successful entrepreneurs and more than 150 interviews with key informants) has been
carried out in 10 CSAs in five countries. The two data sets compiled (population and Entrepreneurship) were developed in SPSS 10 for Windows.

7.5.1. Population sample

The population survey was used in order to explore the potential for entrepreneurial activity. Based on the findings of desk-top research and key informant interviews a stratified random sample of the population was identified. Criteria that used in the stratification and the subsequent analysis of the data include age and gender. For the purpose of the survey a structured questionnaire was devised. The instrument of the Survey, a structured questionnaire of 47 variables plus few other variables added by each national team, was produced after several rounds of discussions and amendments made by all participating teams in order to ensure its efficacy in alternative rural environments.

The questionnaire included Sections on the personal details of the respondent (age, gender, socio-economic strata), educational and work experience, general perceptions of entrepreneurship, and (specific to those who display an entrepreneurial propensity) causes, processes and obstacles in the realisation of their enterprising potential.

The method that was used for the selection of the sample was a random sample of permanent residents of the area with quotas for gender and age and controlling for unemployment.

The basis for the telephone interviews for the population survey was the telephone directories in each of the region. From this list a sample of 2500 telephone numbers were randomly selected taking into consideration the regional distribution of the population. In order to respect this regional distribution 20% of the telephone numbers in each location were required to be interviewed. For face-to-face interviews there was a random selection of households and people on the street.

The population for the Survey was the permanent residents of each CSA. Permanent residence was a perquisite for responders, since we were interested to register the views and opinions of the inhabitants of the selected rural areas, not the transient impressions of temporary visitors.

For the survey each CSA was divided in three cohesive sub-regions. The distinction between these sub-regions was based mainly on accessibility within the region. The only criterion used was the time-distance (by private car) from the main urban settlement of the region (e.g. for Greece: Mytilene, in the case of Lesvos, Kilkis, in the case of the
Prefecture of Kilkis). Three types of areas: urban agglomerations, rural areas with easy accessibility to urban agglomerations and remote rural areas.

Some 4,939 questionnaires were completed, almost 450 for each CSA, between January and March 2001. All national teams had carried out a number of in-situ pre-tests in advance. Pre-tests led to minor amendments in routing and phrasing of a small number of questions, as well as to the addition of a few “national” questions, mainly of explanatory nature. Before the beginning of field work the project was announced/advertised locally, so as to inform the population and hence reduce the rate of rejection among the interviewees. In order to reach different subgroups of the population the interviews were conducted at varying daytimes between 9 a.m. and 8 p.m.

Due to a number of reasons, the proportion of the sample age-gender segments was slightly different than the total population figures. In order to correct for these discrepancies, so that inferences to the total population could be made, we had to apply weightings to the sample. In the tests that followed it became evident that the weightings had only a marginal effect but, for reasons of comparability it was decided that the weights should remain. In the few cases where weightings distort the results, they were removed, and clearly marked.

7.5.2. The entrepreneurship survey

From the outset of this survey, there was no intention to create a representative sample. More specifically, the firms chosen for inclusion in the sample had to be innovative or dynamic in a regional context. This highly selective sampling means that it is difficult to generalise on the characteristics of entrepreneurship in rural areas.

The main aim of the Entrepreneurship Survey was to evaluate the contribution of the entrepreneurial ventures in stimulating economic development on rural areas. The analysis of the collected data has provided us with a valuable amount of information on this key question, as well as on a number of interrelated topics, such as: the nature and type of existing “dynamic” enterprises in the CSAs, the profile of the local entrepreneurs, the significance of entrepreneurship in generating employment and economic growth in a rural environment, the extent to which the existing institutional, social and technological environment and infrastructure, encourages and facilitates entrepreneurship, the implications of ICTs to local firms and their actual contribution to surmounting the barrier of remote location.
A survey of 100 innovative entrepreneurs in each CSA was conducted in order to gain an in-depth understanding of the processes at work in the countryside. In order to monitor the innovative propensity of the enterprise a number of screening questions were asked during a short telephone interview. An additional stratification criterion used in the selection of the sample was sector. There were some minor discrepancies between the sectoral composition of employment in the regions and the composition of the sample but this was on account of the difficulty in identifying innovative enterprises in some of the sectors concerned (agriculture, hotels and restaurants and other services). However, the enterprises surveyed are broadly representative of the total in each CSA and thus innovative within their sectoral context. For the purposes of the survey a questionnaire that combined closed (mainly) and open-ended (to a lesser degree) questions was used. The questionnaire included sections on the enterprise, the start-up process, product/service innovation, market change, technological change, information, and the entrepreneur.

The eligibility of firms for inclusion on the Survey was checked by a filter questionnaire containing five questions. The precondition for eligibility was at least one positive answer. The first three questions check the innovativeness, while the remaining two the efficiency of the firm.

The innovativeness of the firm was checked in terms of products/services, processes used, or any other aspect of the firm. It should be noted that innovativeness is defined at the regional context only. It is known that there is a reverse relation between level of the development and standards for innovation: the less developed the region the lower the standards for innovation. Also innovativeness was not measured by some objective framework of reference, but by the subjective statements of the entrepreneurs only.

The efficiency of the firm was checked in terms of increase in sales by two questions. The first asked if any active steps had been taken by firm in order to increase its sales or profits during the previous two years, while the second if there has been an actual increase (in absolute values) in sales during the previous two years.

The definition of the population of the sample was not an easy task, for both areas. No local agency had a clear picture of the actual enterprise stock active in the area and its dynamics. Hence it was necessary to collect partial information from a multitude of sources (e.g. directories of firms, list of firms that have benefited from Incentives Laws during the last years, list of firms that had received a grant by Leader I initiative). Key informants (Regional Chambers of Industry and Commerce, Regional branch of Ministry of Agriculture, Local Development Agencies, Business Consultants, etc.) provided
national teams with a list of local enterprises that were known to be in some way innovative or dynamic. Finally, use was made of the snowball mechanism. During the initial stages of the Survey interviewees were asked to indicate us specific firms they considered dynamic.

In certain CSAs (e.g. the Greek, Polish and the Portuguese ones) there were difficulties in locating 100 really dynamic firms for each area, within these immense pools of firms. Practically the sample coincides with the population of our Survey. The researchers are, however, certain that the samples included the significant majority of the dynamic firms active in the area.

The initial intention of the Survey was to include innovative enterprises only. However a first round of search for innovative firms revealed that these were thin on the ground in several CSAs (e.g. this was the case of Greece, Portugal and Poland). Hence, besides the criterion of innovativeness, an additional criterion of efficiency was added. Therefore the Survey is addressed to innovative and/or efficient enterprises. Hereafter these will be referred to jointly under the joint term dynamic.

The rejection rate during the telephoning filter questionnaires was low. The significant majority of the entrepreneurs were willing to participate in the Survey. The initial intention was to include in each sample a, more or less, proportionate mix of the sectors active in each CSA. This was not always feasible since the percentage of innovative/dynamic firms differed significantly among the sectors.

The instrument of the Survey, a structured questionnaire of 709 common variables, was produced after several rounds of discussions and amendments made by all participating teams in order to ensure its efficiency in alternative rural environments. In addition to the number of pre-testing interviews was conducted by members of each national teams and the realization of the interviews and the coding of questionnaires, the researchers provided a summary text for each enterprise they visited. In these they had the opportunity to provide us with their subjective evaluations, as well as, to make reference to qualitative information.

A significant difficulty we faced while conducting the Survey was the schedule of meetings with the interviewees. The questionnaire was addressed to the entrepreneur only. Not unexpectedly, given the small size of enterprises in many countries, entrepreneurs were very busy people and it was always a problem to fix the exact date and hour of the interview, as well as to have the full attention of the entrepreneur during the interview. This unavoidable difficulty resulted in the extension of the planned Survey period for several weeks.
The subject of Survey inquiry was the entrepreneur. However, since entrepreneurs are difficult to trace outside their businesses, the unit of analysis was the enterprise. The entrepreneurs were visited by one member of the research team and the interviews were conducted during a conversation of about two to three hours. In advance of the field work the whole project and the interviews with entrepreneurs and population were announced in several local and regional publications.

The Survey was conducted during the winter/spring/summer of 2001. The precise period was selected on purpose so as to locate the various seasonal economic units related to tourist sector in operation, but still in the low season of their activities, in order to ensure the participation of the entrepreneurs in the Survey.

7.6. The structure of the Report

The core of the project is the relationship between entrepreneurship (i.e. type of entrepreneurs, business strategies) and the characteristics of rural regions (FoU, FoD, trajectories of regional development). Both entrepreneurship and rural areas are heavily influenced by the characteristics of the country that they operate. The combination of these two led to the proposed policy initiatives (i.e. common issues, distinctive issues, policy lessons and good practices transfer). The main aim of the project and the objective around which it has been constructed is policy formulation.

As we argued already, entrepreneurship is a crucial issue for rural development since the “mass productivist model” as well as the “heritage” approach are not sufficient to stimulate sustainable development of rural areas. Hence, it is important to understand how to facilitate entrepreneurship in the rural context. For that matter, we followed a contextual approach, able to take into consideration the different levels of conditioning factors: global, European, national, regional. Taking into consideration the above mentioned “conditioning factors” and the needs of enterprises in rural areas, we were able to identify why and what sort of public action/policy is important: in rural areas in general as well as in specific types of rural areas. Policy recommendations resulted from the comparison of policy needs to actual policy initiatives. Once again, the generic versus specific divide applies. However, different levels of "specific" situations are considered: North/South; remote/peripheral/central.

The analysis of this interplay between regional characteristics and entrepreneurship gives rise to a whole range of policy responses, which are a very significant part of the report, since it forms the main input of our policy recommendations (chapter 5). More specifically, what we need as far as policies go is what are the needs of entrepreneurs and of rural areas. What existing policies do? That is we want a concise analysis of the
policies regarding entrepreneurship in the CSAs. What is of primary importance is the analysis of the impacts of each policy; in case of failures, which were the reasons and what lessons are there to be taught; in case of success, what were the conditions that lead to it, and how can it be replicated? Problems related to delivery of policies. A summary of recommended policy initiatives as well as support delivery issues is provided. What should public policy be doing to develop entrepreneurship and develop rural areas? Gap analysis: what is missing in the existing policies. Needless to say that policy recommendations are to be at a strategic level, at most defining target groups (i.e. particular types of: regions – entrepreneurs – activities) and priorities.

The Report is based on a literature review enlightened by the field work in 10 CSAs in five European countries on the main issues of this Report that is: Globalisation, enlargement and European rural-peripheral areas (chapter 4); Rurality, peripherality and rural areas in Europe (chapter 5); A suggested typology of rural areas in Europe (chapter 6); Entrepreneurial behaviour in rural contexts (chapter 7); Technology, peripherality and rurality (chapter 8); European policy to foster entrepreneurship in rural peripheral areas (chapter 9): It ends up with a concluding chapter (IV) which is a synthesis based on both the theoretical issues dealt with in previous chapters as well as on the analysis of entrepreneurship in the 10 rural areas of Europe. The analysis of each CSA, based on the relevant literature and the secondary data, is presented in its national context (Part B National Reports).
IV. CONCLUSIONS AND POLICY IMPLICATIONS

Lois Labrianidis91

1. Rurality and Peripherality

1.1. Main findings

1.1.1. Rural Diversity: from local to national explanatory factors

The results of the empirical research suggest that national characteristics influence key areas of the rural regions in a significant way. Indeed, the role of the particular national context is probably greater than other analytical categories, such as spatial categories etc. Moreover, the national framework component prevails over rural international diversity: i.e. the differences between the environments in which businesses operate are more significant between countries than between different degrees of rurality in the same country.

Economic action is inevitably social action and hence depends for its successful implementation on a supportive social context. The institutional context of society has a major role to play in fostering either cooperation or self-interest, traits common to individuals. Within this context, firms realise that they can profit not only through competition but through co-operation as well92. In addition, the wider environment of the firm (i.e. the social and political system in which it is embedded and with which it interacts- can play a vital role in facilitating or frustrating its learning capacity. Thus, the key issue is not the organizational form but what Cooke and Morgan (2000: 17) call the “associational capacity” i.e. the capacity to create and sustain a robust architecture for generating and using knowledge from a wide variety of sources, including employees, suppliers, customers and public bodies. As Cooke and Morgan (2000: 30) argue, only a few social settings are wholly devoid of trust, hence it is best to speak of high-trust and low-trust relationships.

91 RDPRU, University of Macedonia, Thessaloniki
92 This contrasts with Transaction cost economists (e.g. Williamson, 1985), who argue that firms are trying to find the optimal governance structure so as to minimize transaction costs. In particular, when transaction costs are high, such exchanges will be transferred from markets to alternative governance structures, principally to hierarchies (vertical integration) or to long term contracting. They assume that there are limits to what agents can know (bounded rationality) and that agents engage in self interest seeking and thus may lie, cheat, steal etc (opportunism). That is, the central problem of the firm in transaction theory is how to find the optimal governance structure for transaction costs under the assumption that inputs, outputs and technology are given (Cooke and Morgan, 2000:14).
However, it appears that, in this aspect, there are quite significant differences between the countries of "southern Europe" and those of "Northern Europe", while developed transition economies (such as Poland) seem somehow to stand in the middle. To put it in another way: the differences between the historical trajectories of Greece and Portugal are smaller than those between Greece and Portugal on the one hand and Germany and the UK on the other. Needless to say, this divide is not clear-cut, *the argument is about degrees of difference rather than a clear-cut divide* and moreover there are “niches” in all three groups. In particular, in the countries of “Southern Europe”, centralized state structures and a weak civil society lead to hierarchical clientelistic networks inhibiting the building of social capital. Hence, “*civil society*” cannot function as the arbitrator of market and non-market rules of contact, or act as the intermediary between the self-seeking individual and society. Thus in Southern Europe certain factors are more frequently noticeable: ‘free rider’ attitudes; a non-cooperative attitude towards other companies; lack of willingness to participate in Trade Associations etc; lack of willingness to “invest” in their employees; an absence among entrepreneurs of long-term commitment and trust; lack of trust/acceptance of the social context, lack of professionalism etc.

### 1.1.2. Differentiation of Peripherality: from national to international factors

The multidimensional concept of peripherality – peripherality as distance, dependence, distinctiveness and discourse⁹³ – underlies many interviewees’ answers, although generally in an intuitive, and therefore not very structured, way. There are *different degrees of peripherality*. Thus, areas located in the *outer periphery of Europe*, such as Lesvos, are examined alongside other more geographically *advantaged localities* (Waldshut). There are also very significant differences of degree in terms of the distance of each CSA from large urban areas, as measured in terms of the urban areas that are within a radius of 100 Kms from the centre of each CSA. Location near a large urban area may offer significant advantages for the development of the area: Commuting from Devon to Plymouth, from Kilkis to Thessaloniki, from Oeste to Lisbon. Proximity to a large urban centre is crucial, in the sense that enterprises that locate there enjoy the benefits of both worlds. *The very fact that a rural area is next to a border can influence its development*. This depends further on whether borders are “hard” – hostile border with non-EU countries (Lesvos, Kilkis and Bialystock), or “soft” – friendly border (Waldshut, Baixo Alentejo and Zary). Mainly – though not exclusively - in the latter cases, there are more relations (e.g. sales to the neighbouring country) in enterprises in

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⁹³ In actual fact we obtained only a very superficial understanding of this particular element, because it requires a methodological approach which is very different to the one used in our field work.
border areas (i.e. Baixo Alentejo, Kilkis and Waldshut) than from the rest of the country. Furthermore, when there are significant differences in the levels of development between the two countries there is a “drain” from the less developed to the more developed one. This is the case even for a highly developed area such as Waldshut. German people from there commute to work in Switzerland, while Waldshut is the “shopping region” for residents of Zurich (lower prices, reimbursement of the VAT, etc) and the location of Swiss FDIs etc.

1.1.3. Typology of rural areas

The characteristics of the development potential of a rural area are related to its degree of peripherality as well as to its economic base. One might argue that there are four basic type-situations of rural areas that is: a) Rural areas with poor access and poor physical resources; b) Rural areas with a specialised economic base; c) Rural areas with a diversified economic base; and d) Rural areas near urban agglomerations of significant size (Diagram 3.). These four type-situations complement the peripheral (mountainous); semi-peripheral; accessible/semi-urban rural areas trilogy.

This diagram enables us to confirm that peripherality vis-à-vis the main markets is important, but not the only factor determining present and future characteristics of the entrepreneurial fabric and economic base of a given region. Peripherality matters but history matters as well. Moreover, there is no single type of rural area that is bound to succeed or to fail; it all depends on the development trajectory that will be followed in the near future. Hence, policies are of major importance in the sense that they can facilitate a substantial shift to the future economic development of a rural area. Finally, one should understand the relativity of rural diversity: apparently “huge” differences within the rural world seem much more modest when directly compared to urban areas.

1.2. Contribution to the state of the Art

We propose an analytical framework to understand the relationship between peripheral rural areas and economic development processes. The assessment of the recent literature on rurality and peripherality lead us to propose a holistic approach to rural areas, capable of grasping the social, cultural and institutional foundations of economic development. Rurality and peripherality are treated here as constitutive elements of each other in the sense that the assessment of the rurality of a region necessarily takes into account the degree and the nature of its peripherality likewise, the peripherality of a region reflects its type of rurality. Furthermore, we advanced here a multidimensional view of the concept of peripherality (peripherality as distance, dependency, distinctiveness and discourse), capable of overcoming the limitations of the approaches
which identify peripheral situations with remoteness, that is to say, which predominantly define periphery as a question of geographical position.

In turn, the holistic approach to rurality and the multidimensional view of peripherality enable us to examine the peripheral rural areas as contexts that condition in a specific way the processes of economic development. Each region’s economic development expresses the interplay of regional, national and international scope factors. In fact, national characteristics influence key areas of the rural regions in a significant way while the liberalisation of frontiers and the deregulation of markets imply that the peripheral nature of a region can no longer be defined at just the national level. This means that many peripheral rural regions of the more developed countries are certainly less “peripheral” than many central rural regions in peripheral countries.

2. Understanding Rural Entrepreneurship

2.1. Main findings

2.1.1. Characteristics of entrepreneurs by CSA

Entrepreneurship is not an undifferentiated process; rather, in rural areas we can identify a multiplicity of entrepreneurial process at work: some of them are locality specific, whilst others appear in more than one national context. It is interesting that the incidence of these processes does not follow national or spatial divides. These processes are evolving through time (i.e. some are declining or disappearing altogether, others are in the process of transformation and new forms are emerging) and are path dependent (i.e. they can not be readily transposed from one context to another). The influence of the rural character of the location for entrepreneurship varies considerably between processes: i.e. whilst some entrepreneurial processes are distinctly rural, others simply occur more or less incidentally in the countryside. Thus, the degree of embeddedness of each process within the local milieu varies significantly, with significant implications for the emerging enterprise strategies.

Undoubtedly however, specific environments can be associated with the emergence of particular entrepreneurial processes. Thus, need driven entrepreneurial processes are prevalent in the case of the two most hostile socio-economic regimes, namely Lesvos and Baixo Alentejo while an element of opportunism is present in all the other CSAs, however its form and significance varies from CSA to CSA.

Throughout the ten CSAs there appears to be five common factors in the stimulation of entrepreneurship. These include gender (specifically the over-representation of males); younger age; the acquisition of higher education qualifications; parental entrepreneurial
influences (partly through the provision of role models and partly through inheritance of a family business) and previous experience of running a business. The consistent and invariably significant influence of these factors lends supports to the thesis that out-migration deprives rural areas of individuals (young and well-educated) who can identify opportunities, and, on account of their (urban-university) experiences, break the mould of deprivation and produce change. There are also four factors (of diversity) that have a differential impact upon the propensity of individuals to engage in entrepreneurship in the ten CSAs under investigation. These are: origin, unemployment prior to entrepreneurship, education prior to entrepreneurship, and occupational background. They provide us with a powerful reminder of the pervasive influence of local historical trajectories shaping entrepreneurial behaviour. Legal restrictions, namely the qualification requirements needed to become entrepreneurs, also appear to be an influence on the incidence of rural entrepreneurial ventures. This is manifested in a comparison between Germany, where strict rules exist, which can act as barriers to entry and Greece and Poland, where there are no such restrictions. Finally, there appear to be significant differences in the legitimacy afforded to entrepreneurship. A factor invariably affecting the general attitude is the existence of a (recent or earlier) history of social structures inhibiting the development of individualism. This is achieved through surprisingly diverse mechanisms, such as the latifundi organisation in Baixo Alentejo, or the communist systems of Poland and former GDR. The result is a suspicion of entrepreneurship or the entrepreneur.

2.1.2 Geographical mobility as an element facilitating the introduction of discontinuities and change

The network of social and professional contacts, established by entrepreneurs outside the region at some point in their lives, were shown to be essential to the emergence and growth of their enterprise ventures. The contexts that afforded entrepreneurs these networks were varied, such as: study in a university or elsewhere, military service elsewhere, setting up as a migrant in another area/city, being newcomers to the area, setting up as an emigrant in another country, employment in a multinational firm in another country. In all these cases, the contact with different socio-cultural realities also constitutes a source of new knowledge that enables entrepreneurs to break with local tradition and introduce discontinuity and change. Thus, we advance the thesis that those who possess experiences acquired outside the rural localities under investigation are better equipped (through both networks of contacts and different cognitive frameworks) to act as agents of change.
2.1.3. The role of in-migrants in fostering entrepreneurship

Overall, in-migration appears to be a significant source of entrepreneurial capacity in all regions, since a third (33.8%) of all business owners are in-migrants, while in some of the regions they spectacularly outnumber local business owners. The impact of in-migration on business activity seems to create a rather distinct pattern, since immigration seems to be of extreme importance in some cases, while in others its impact is marginal. In general, in the southern CSAs in-migrants are relatively few and they tend to engage less in business ownership than locals (e.g. 27.8% of in-migrants in Lesvos are engaged in business ownership, while the respective share for locals is 31.6%). In the other CSAs (Nordwestmecklenburg, Bialystok and Cumbria) the rates of involvement of in-migrants is almost double that of locals. In the remaining three CSAs the shares of in-migrants are slightly lower than those of locals. In Devon & Cornwall this might be attributed to a very high percentage of the retired among in-migrants.

In a different respect, recent in-migrants (i.e. those who arrived within the last decade) appear to be the most intensively involved segment of the population in six of the ten CSAs. In Lesvos and Waldshut the two categories of in-migrants (recent and older) display the most dissimilar behaviours; in the former, recent in-migrants are far more engaged in business-ownership than older ones, while in Waldshut the situation is reversed.

2.1.4. Reducing out-migration is a key issue in some rural areas

Out-migration deprives rural areas of individuals (young and well-educated) who can identify opportunities, and on account of their (urban-university) experiences introduce discontinuity and change. The absence of such individuals locally is particularly apparent in some – mainly Southern European – CSAs, in terms of the absence of corresponding entrepreneurial groupings. Whilst, in some areas (Kilkis, Oeste) this gap is filled by in-migrants who frequently perform entrepreneurial roles, more peripheral localities (Lesvos and Baixo Alentejo) lack young and well-educated entrepreneurs who pursue opportunities rather than reluctantly engage in pre-existing family businesses.

2.1.5. Entrepreneurship is a significant source of employment throughout rural Europe

In spite of these variations, entrepreneurship can be generally considered to be a major source of employment. The mechanisms of employment creation seem to operate in two broad, substantially different, ways: in the less developed areas containing fewer urban centres by self-employment, through the creation of micro firms, in the more developed
areas by the creation of waged employment. The former communist regions seem to be converging towards the second category, even though we should stress that the three ex-communist regions included in our study are part of two of the success stories of transition, and we would expect most of the Eastern European regions to fall into the first category.

At first sight, entrepreneurship in rural Europe does not appear to have a significant impact upon disadvantaged social strata. Entrepreneurship is more a male than a female activity, whilst individuals with some experience in business ownership, either their own or that of their parents, are generally more likely to start a business themselves. This also explains why only a few respondents with businessman status were formerly unemployed. However, careful investigation, beyond the averages, into specific entrepreneurial clusters suggests it is the ‘marginal’ entrepreneurial processes (female petty entrepreneurs, local need-driven in Lesvos etc) that impact upon disadvantaged socio-economic strata.

2.2. Contribution to the State of the Art

Research on the factors which influence the incidence of entrepreneurial ventures has followed two distinct lines of enquiry. One school has it that economic stimulus through the market mechanism provides the best explanation (Baumol, 1993), whereas another, earlier tradition, argues that is social and psychological features which are the most important (Wilken, 1979). To begin with our aspiration was to combine these two, not mutually exclusive, traditions and explore the interaction between demand and supply side consideration in rural peripheral areas. However our findings suggest otherwise. This is because, the supply of potential entrepreneurs is by no means guaranteed because those persons who could reasonably have been expected to respond might well have been the first wanting to out-migrate to more inviting urban areas. Thus, the human factor emerges as the key influence in the ability to exploit opportunities and confront challenges in the changing geography of the European countryside, set within a specific institutional and national context.

This takes us further than existing arguments regarding the characteristics of the environment. Whilst factors such as the legitimisation of entrepreneurial ventures (either at the level of society at large or within a specific social grouping), a supportive ideology, a deeply embedded need for achievement and in some cases a minority (ethnic, religious or otherwise) that experiences status withdrawal are necessary, they are not sufficient in providing fertile ground for new venture creation. To be more precise: in the absence of
the factors listed above, rural entrepreneurship is unlikely to flourish. However, entrepreneurship may also fail to flourish in settings where these factors are apparent.

The physical presence of (entrepreneurial) human capital is vital for rural development. Indeed, from our research, it seems safe to conclude that some localities are altogether lacking in types of entrepreneurs who could act as engines of economic development. Whilst some emphasis has been placed on developing entrepreneurial skills, policies must be developed to secure sufficient levels of infrastructure (physical and social) provision in the countryside to stem the tendency to migration and moreover possibly attract people into these areas.

3. Rural enterprise in context

3.1. Main findings

3.1.1. Development Paths of enterprises

Drawing upon the findings of the literature review, the results of the population and enterprise surveys, as well as the interpretation of the key informant interviews, each national team identified a number of enterprise development paths specific to the CSAs of the country concerned. A synthesis of these enabled us to distinguish enterprise development paths that appear in more than one country (unity - FoU). These encapsulate the essence of the project: i.e. how entrepreneurs (from different groupings) were able to utilise the resources of a rural locality, in exploiting opportunities and addressing threats emanating from their regional, national and international operating environments. Innovation, the use of new technologies and the development of new markets, as well as attempts to compete on the basis of lower costs, are the defining elements of the enterprise development paths.

The development paths presented here must be hedged with two qualifications. Firstly, they are development paths associated with enterprise dynamism in the local context. Indeed, the enterprises which participated in our survey in each CSA were identified on account of their dynamism – either in terms of innovation or growth in employment and sales turnover. Thus, development paths associated with stagnation or even decline are not included here. Secondly, any attempts to generalise should be cautious, on account of the profound diversity of rurality we encountered.
3.1.2. Passive/Reactive development path:

This development path involves the adoption of a reactive stance to the market place. Thus, the enterprises concerned adopt local and/or incremental product/service and process innovations which are invariably well established in the market, with the sole aim of survival. In many instances, this may lead to considerable growth in sales or the employment provided by the enterprise – and this is why their presence is apparent only in the CSAs where growth was widely used as a proxy for dynamism. Thus, these enterprises are present in the two Greek CSAs (Kilkis and Lesvos), the two Portuguese ones (Oeste and Baixo Alentejo), and Zary.

Cost focused:

We were able to identify two variants of cost focused development paths, reported in the CSAs under investigation:

Support dependent: These firms usually express no intention in obtaining new customers, developing new products, or processes. They are characterised by significant diversity in sector and size, including small or medium size agricultural firms as well as, often larger, manufacturing firms. In the majority of the cases the owners are quite old, and very often, second-generation businesspeople. The firms’ strategies are usually nothing more that responses to the changing environment. These enterprises are present in the two Greek CSAs.

Cost paring development path: This development path builds upon cost advantages of being located in rural areas. The ultimate aim is to gain competitive advantage through lower production costs. Manifestations of this strategy may vary from country to country. For example in Greece this development path centres upon the exploitation of the incentives of the regional development policy and EU structural funds (which reduce the capital investment required for start-up), whereas in Germany the focus is on accessing low priced land and labour. The adoption of a cost focus should not necessarily be perceived as evidence of lack of ambition: indeed, many of the enterprises falling in this grouping use extensive networks of information, and actively seek to expand to new markets. Concerns however, may exist regarding the long-term viability of a cost focused competitive strategy. Enterprises adopting this strategy are present in Kilkis, Lesvos, Nordwestmecklenburg as well as both Polish CSAs.
Market focus: spatial market expansion

This development path constitutes a reaction to the realisation of the growth constrains imposed by local markets. Thus, the enterprises adopting this approach attempt to expand nationally (often in immediately adjacent region in the case of micro enterprise) or even internationally. The pursuit of the international option was particularly profound in the case of enterprises located in border regions (especially those with other EU or EEA countries). This strategy was identified in Oeste, Baixo Alentejo, Waldshut, Cumbria, Bialystock and Zary.

Product/service focus

There were at least five development paths (of unity) common to all areas which fell within this category. These included a very large number of enterprises which focused upon niche products/services, further subdivided between those whose competitive advantage is based upon local sources or images and those who produce other specialist products/services, and product/service differentiation.

Local products/services: This development path attempts to utilise the local as a source of competitive advantage. It involves either the utilisation of local sources of raw materials, or traditional local products/services or even exploiting the rural image for the creation of ‘new-traditions’ of rural products/services. The enterprises concerned may market their products locally, especially through outlets in the tourist industry, or direct them to the national markets. This development path was reported in most CSAs, including Kilkis and Lesvos, Oeste, Baixo Alentejo, Waldshut, Devon & Cornwall, Cumbria, and Zary and, in each of these CSAs, the number of enterprises adopting this approach was significant.

Specialist products/services: This development path builds upon the specialist know-how of the entrepreneur, in order to develop products/services that cater for niche, though geographically broad, markets. In many cases this expertise was acquired by the entrepreneurs during their employment outside the area: in fact in UK CSA, the entrepreneurs are in-migrants from elsewhere in the country. This development path was reported in Kilkis, Lesvos, Waldshut, Nordwestmecklenbug, Cumbria, and Bialystock.

Product diversification: Several entrepreneurs, mainly in manufacturing industries, became increasingly aware that their markets for their traditional products/services were declining. In response, they attempted to develop new products/services (broadly in the same industrial context) that offered greater scope for market expansion. These diversification development paths are often associated with the introduction of new
processes and the need for constant learning for the entrepreneurs and employees. Product diversification was reported in Waldshut, Nordwestmecklenburg and Cumbria.

Co-operative: Small and medium sized enterprises in “traditional” industries of the crafts and trade sector and the manufacturing sector, co-operate, in a more or less institutionalised way, to overcome the disadvantages of smallness, to reduce costs, to extend the variety of products, to create new services and thereby to compete with large enterprises. These co-operations enable the SMEs to execute projects that exceed the capacity of one particular enterprise and to offer different services with “one front to the customer”. This helps to reduce the customers’ transaction costs and thereby enhances competitiveness of the small and medium sized enterprises. This co-operation is not comparable to traditional subcontracting relationships but can rather be characterised as some kind of low-level, regionalised virtual enterprises. This development path is apparent in both German and Polish CSAs.

Innovation using academic know-how: This development path entails the use of reciprocal technology transfer from universities in order to improve enterprise knowledge concerning the nature and quality of their products as well as the quality of their production processes. This method of cooperation is mainly used by enterprises whose products require extensive applied research, but which are not able to maintain research equipment and research capacity on their own (due to lack of finance). Such products are explored in the research facilities of the university, while the university gets feedback in terms of useful practical experience. This development path is apparent in both German and Polish CSAs.

Product & Market focus

These enterprises are probably among the most dynamic in the rural areas under investigation. They introduce industry-wide innovation and market it both nationally and internationally. Many of them are parts of extensive international networks, either as subsidiaries of TNCs or through ‘deep’ integration in the global markets. Although they are involved in a diverse range of activities, they have in common the high value added of their activities. These global leaders are present in Kilkis, Lesvos, Oeste, Baixo Alentejo, Devon & Cornwall and Cumbria. However, their number in Lesvos is very small.

These development paths enable us to draw some key points regarding the manner in which entrepreneurs use local resources in exploiting opportunities:

The significance of the product/service focus. Indeed, six out of the ten development paths identified focus heavily upon the product/service range provided by the enterprise.
The realisation by many dynamic entrepreneurs of the development limitations of the local market. Thus, market expansion – either geographically or through the development of new types of customer – is frequently at the head of rural enterprise development paths.

The relative insignificance of the rural cost structure (invariably lower than that of the urban within the same national context) as a source of competitive advantage. This is particularly the case in the UK but less so in Greece and Nordwestmecklenburg. Given the method used for the selection of the enterprises surveyed this suggests that dynamism (even the low cost setting of the rural) can not be based upon price competitiveness, with the exception of the poorest settings.

3.1.3. Between the local and the global

The great majority of rural ‘dynamic’ enterprises are invariably well embedded in their context i.e. they derive the bulk of their inputs and direct the bulk of their outputs from and towards the regional and national markets. Moreover, the incidence of establishments outside the CSA, and more importantly, the national context, is infrequent (i.e. the incidence of fully or extensively globalised enterprises is rare). The incidence of fully or extensively globalised enterprises among those surveyed (note: those most dynamic in their regional context) is relatively low. The only exceptions are those located in Kilkis and, to a lesser degree, Waldshut.

However, it is unclear whether the incidence of fully or extensively globalised firms is the result of their location or other factors. This is particularly the case given that the incidence of fully or extensively globalised enterprises is influenced mainly by the sector (manufacturing and transport) and size (medium and large) of the enterprise.

Enterprises – despite their local embeddedness – may not be able to tap into competitive advantages conferred by their rural location beyond lower costs of production. Local enterprises do not appear to tap into local sources of know-how, whilst accessing sources of information located elsewhere in the country undoubtedly involves greater costs and commitment than those required by enterprises located in urban settings. Similarly the ability of local entrepreneurs to tap into the ‘image’ of “the rural” is limited, especially in certain contexts.
3.1.4. Information technologies as a means to facilitate development of enterprises in rural areas and of rural areas

The internet offers virtually free access to huge amount of information: it transcends geographical borders and speeds up global diffusion of information; by overcoming distance and isolation it can revitalize rural communities. Almost 67.6% of the firms in our survey which already use some ICTs feel that they help overcome the constraints of being located in a rural area. However, for all these benefits to be realised by rural areas there is a basic prerequisite: that is the smooth distribution of ICTs across regions, which is certainly not the case. The differences between our 10 CSAs were impressive, since in the German or English regions firms not using ICTs constituted a very small minority, while in the remaining regions almost half of the firms surveyed did not use any ICT application. The same is also true regarding the types of applications used, with the more technologically advanced applications being more intensely used in the same countries. Moreover, there are types of information and knowledge exchange that continue to require regular and direct face-to-face contact. Consequently it is only routinized activities (teleworking, call centres, etc) that have become increasingly footloose and relocate from city centres to suburban areas or to urban areas around the globe while, the move towards rural areas is rather limited. Interestingly, the evaluation of the impact of ICTs appears to be negatively correlated with the spread of ICTs. In other words, firms in the German and English regions are much more sceptical about the extent to which ICTs have helped them address the problems associated with their rural location than Greek and Portuguese firms. The Polish regions appear to stand out, as they are the ones with the lowest spread of ICTs and the most negative attitudes. Furthermore, the size of the firms is not associated with different evaluations.

The widespread use of ICTs can also pose a threat to rural areas in the sense that ICTs expose the weaknesses of rural business and make them more vulnerable to outside competition (internet auctions).

3.1.5. Local products can be a suitable means for the development of some rural areas and especially the LFAs.

In almost all rural areas there are “local products”, such as prepared food (jams, marmalades, etc) using “grandmother’s recipes”. What is argued is that though such firms can be very important, they will never be sufficient on their own. What is also needed is new, fresh ideas, know-how etc coming from outside the region as well as the development of opportunities of selling in national and international markets. This is not
an argument in favour of endogenous development. However, “endogenous” development is not always a choice; it can simply be the only way forward.

The product’s geographic association constitutes a quality characteristic (“authentic”, healthy”, “traditional”). Regional labelling can bring economic benefits since it enjoys premium prices. Hence, it is very important for rural areas and particularly rural areas in Southern Europe. For LFAs “local” products can be crucial for their development.

The impact of firms producing ‘local’ products appears to be positive in the development of the region, as it implies the existence of backward and forward linkages with the local economy (i.e. holistic development). In this context, such activities could lead to the strengthening of a multitude of sectors in the local economy: agriculture, cattle rearing, micro manufacturing, guesthouses, retail trade etc., and implicitly encourage pluriactivity. Nevertheless, this does not imply that endogenous development is perceived as the only development course for rural areas. Moreover, the development potential of firms producing “local” products is threatened by powerful protagonists whose networks may stretch across continents (e.g. ouzo Lesvos by Pernaud Riquard and Remy Martin).

However, a local product can either be a reality or a myth. Myth in the sense that the notion of the “local” product can be socially constructed and firms sell their product based on different connotations such as: they sell the locality/rurality/notion of “island” – leisure. Big national companies or TNCs may sell “local” products either by buying them ready made (buyer driven chains) or through global sourcing (e.g. Italian companies purchasing olive oil very cheaply in bulk from Lesvos, then bottling it and selling it very expensively in small bottles. Finally, a TNC (e.g. Pernaud Recard) takes over an existing (e.g. ouzo producing) company and sells the product through its own powerful distribution network around the world.

Firms producing local or ‘local’ products are far from homogeneous, hence their impact on the local economy is extremely diverse. In the Greek context, we identified three broad groups of firms producing such products (see Part B - National Reports - chapter 2):

The first group is comprised of micro enterprises producing local products, which are closely tied to the local economy (e.g. using local raw materials). These firms contribute to the development of the local economy although their contribution is minimal due to their small size and vulnerability (e.g. Goumenisses)
The second group is comprised of SMEs, whose dynamism stems from the fact that they produce for market niches (Ragian) or they produce a high quality local traditional product (Varvagiannis). Their impacts are significant in the sense that they are closely tied to the local economy (especially the former -Rajian), which provides them with raw materials and labour. However, they are often faced with significant structural problems (such as hygiene considerations – Ragian) or the family based management structure (Varvagiannis).

The third group comprises firms with a global perspective, either as affiliates of a TNC, or because of the characteristics and vision of the entrepreneur. Their contribution to the local economy is very small (only low rank employees – Remy Martin) or almost nonexistent (some employment and some sub-contracting – Mylelia). Moreover, they are quite capable of “flying away” from the area at any time. However, such firms may, in the long run, prove to be extremely important in the sense that they may bring new ideas into the area (i.e. know-how, a way of thinking and working), a few highly trained employees, national and international market outlets etc, which might provide a model to other local entrepreneurs in the long run.

3.2. Contribution to the State of the Art

Our research indicates that rural enterprises which display a significant degree of dynamism place considerable weight upon product/service definition. These are enterprises which turn the perceived disadvantage of the rural into a source of competitive advantage through the emphasis of the local character of products, or are able to overcome it altogether through the development of collaborative arrangements. These collaborative arrangements involve either linkages with other enterprises or higher education institutions. However, these linkages are present only in two of the countries under investigation (Germany and Poland).

Our findings are more equivocal regarding the impact of ICTs upon rural enterprises. More specifically, ICTs appear to have the potential to make a significant positive contribution to the development paths of rural enterprises, a potential realised in the CSAs of the UK and Germany. However, the realisation of this potential is very low in other CSAs as a result of poor infrastructure resulting in low ICT take-up rates among enterprises.
4. Policies for the development of entrepreneurship in rural areas in conjunction with policies for the development of rural areas

4.1. Main findings

4.1.1. The importance of human capital to foster entrepreneurship

European countries are among the most economically developed of the world; in this sense they have to aim for the high value added products in the International Division of Labour. This means that European rural peripheral areas have to compete on the basis of quality and value added rather than just price, where less developed countries possess competitive advantages. In this context, investment in human capital (education, training etc) in rural areas is essential for expansion. Furthermore there is a need for such educated human capital in rural areas because people living in rural areas are increasingly involved in many activities outside agriculture; they have become multiactive (e.g. they can be farmers as well as hotel owners).

Young and educated human capital is crucial for the development of entrepreneurship in European rural peripheral areas to enable them to compete in the international division of labour. However, most European rural areas still suffer from ageing and depopulation. Hence policies must be developed to secure not only that out migration will cease but also that in some cases we might have the opposite trend (counterurbanisation), a trend that already exists in certain countries (e.g. Britain). A basic prerequisite for that is the provision of a sufficient level of infrastructure (physical and social) in the countryside.

4.1.2. Policies directly enhancing entrepreneurship

Potential sources of entrepreneurship

There are several ways in which policy interventions can contribute to building-up the entrepreneurial capacity of remote rural regions such as:

- **Young people:** There is a clear need in most remote rural areas to find ways of developing entrepreneurial awareness and ambitions amongst young people if endogenous business development is to occur.

- **Role of in-migrants:** In-migrants are an important source of entrepreneurs in some remote rural areas, particularly those areas that are perceived as being environmentally attractive such as the Devon & Cornwall and east Cumbria study areas in the UK and Nordwestmecklenburg in Germany.
• **The role of leading figures - animators:** One of the main problems in developing the entrepreneurial capacity of the more underdeveloped rural regions is the absence of key people who can mobilise entrepreneurship. People in rural areas are often conservative and reluctant to take any initiative unless they are quite certain of a positive outcome. Moreover, they are often not well educated, usually older than the average population and have life experiences limited by their rural environment. Thus, the presence of individuals capable of being animators (e.g. incomers to the area, people from the area with experience outside the area) is extremely important for the development of a region. The existence of just one or two leading figures can play a catalytic role for a whole area.

Hence it is easy to understand why the establishment of Local Action Groups by the Leader initiative played such an important role in promoting the development of rural areas with weak social and entrepreneurial structures. Such a role might also be played by ex-villagers who “weekend” in the village bringing with them their urban experiences; or by high ranking employees of an incoming large firm or even by public employees who stay a few nights per week in the area.

**Developing the infrastructure to support entrepreneurship**

Policy has a clear role to play in developing those regional infrastructures that are needed to underpin and support entrepreneurial activities in rural areas such as:

• **Education and Training:** Need to invest in the enhancement of training through schemes tailored to the needs of rural areas.

• **Creation of business incubation centres:** The creation of a number of business incubation centres could stimulate the formation and growth of new rural enterprises especially in areas where there is a lack of local support and consulting services available to entrepreneurs (see Left Bank, Kilkis and Lesvos).

**Actions to enhance the entrepreneurial capacity of rural areas**

This can be achieved through:

• **Enhancing the knowledge infrastructure** of the local economy through facilitating linkages with HEI and other R & D providers.;

• **Facilitating linkages with organisations not located in the area.** Especially in instances (sectoral, functional) where the local knowledge infrastructure is weak or
absent, business support providers can function as identifiers and facilitators of linkages with organisations outside the area;

- Concentrating support on new enterprise formation.

- **Fostering the endogenous potential of the region**: this includes implementing and the fostering co-operation between businesses as well as co-operation between businesses and local authorities.

- A system of regional marketing which promotes the particular comparative advantages of the regions (e.g. tourism or agriculture) also seems to be a promising instrument to coordinate resources in developing an effective and efficient way of revealing the endogenous potential of individual regions.

- Responding to the need for measures that foster entrepreneurial thinking in rural areas. This can be done through several means including the existing education system: examples of such kinds of measures are project workshops or voluntary working groups that deal with entrepreneurial issues and encourage students to think about the possibilities of why and how to become an entrepreneur as an alternative to become an employee. There is also scope for vocational training and advanced training that develop and improve specialised know-how in terms of commercial, financial and legal aspects of entrepreneurship.

**4.1.3. Policies indirectly enhancing rural entrepreneurship**

**Need to enhance the level of education in certain rural areas in Europe**

There are remarkable disparities in the level of educational attainment of the interviewees in the various CSAs. Two distinct groupings of CSAs are quite clearly distinguishable. More specifically, the four southern regions (Lesvos, Kilkis, Oeste and Baixo Alentejo), which are very clearly characterised by very low educational qualifications, contrast sharply with the two German and the two Polish regions, in which the situation is much better. Although three of the regions (the two Polish regions and Nordwestmecklenburg) are among the poorest areas of the sample, the finding of quite high educational qualifications is not surprising given the rigorous educational policies of the former socialist regimes.

The situation becomes rather more complex when one looks into the educational qualifications of the younger age groups (18-34 years). The trends in the southern regions remain, where in fact the situation seems to vastly improve compared to the
total population, since illiteracy seems to be nonexistent in all areas except Baixo Alentejo (where the figure is slightly less than 2%).

All the ex-socialist regions (and especially the Polish regions) seem to have benefited from their socialist legacy. Unexpectedly, the situation is much more confused and problematic in the UK regions with both regions boasting the highest levels of people with no educational qualification, while Devon & Cornwall seems to be the only CSA where the young are less qualified than the total population.

The relatively better educated would tend to be found in semi urban areas while at the other end of the spectrum, the less educated tend to be found in rural remote areas.

**There is a need for improving physical and social infrastructure:**

One of the main reasons for the depopulation of the countryside is the poor physical and social infrastructure of rural settlements. Educational provision is very poor, and there are very few, if any, entertainment opportunities. Moreover, in small communities, people, especially the younger generation, resent the social control and want to escape to an urban centre where they can enjoy “anonymity”. Young people leave the potential wealth of the countryside and migrate to large cities where they are willing to work in poorly paid jobs (pizza boys) just to stay in the city.

*It is of considerable importance to enhance the knowledge infrastructure of the rural economy:* This can be done either by taking advantage of people that are already in the area (e.g. academic staff in Lesvos), or can be attracted to the area or through the facilitation of links with organisations outside the two CSAs.

There is a need for the enhancement of knowledge infrastructure and the institutions necessary for a shift to higher quality products. At the moment production and services are aimed to the lower end of the market. For example, some farmers can diversify into organic products. Some might be able to process and pack agricultural products so as to take advantage of “added value”.

*The social environment is crucial for the development of entrepreneurship in the area:* The lack of trust leads entrepreneurs to not cooperating with each other even in cases where there are co-locations of firms belonging to the same sector. You cannot expect people to be willing to work under conditions that are “outdated” and hence not conducive to their own social benefit. For example stock raisers and tobacco growers find their occupational aroma an impediment to their marriage prospects, so very reluctantly, if at all, do people accept such employment.
The need for an integrated perspective on towns and the countryside if local problems are to be solved in Europe

In southern European countries rural areas are still suffering, though less in the last decade, due to the emigration of their populations. This is not the case in the “Northern countries” where rural areas are growing more rapidly than urban. There is a steady pattern of a growth of population in rural areas and a matching pattern of decline in larger urban conurbations. This is attributed to commuting, retirement migration and second home purchase, all of which are determined mainly by ‘lifestyle’ choices. That is, while urban dwellers in northern countries feel completely alienated from the rural areas and hence want to migrate there, in southern countries (e.g. Greece) the urban population has never ceased to have strong links with the countryside (a plot of land that they own or even cultivate themselves, close relatives in the countryside etc).

Historically, a concern to protect ‘best quality’ agricultural land was a fundamental consideration in planning systems, and this has acted to limit the development opportunities in rural areas. In an era of agricultural surpluses and a globalised market in agricultural products, this concept is becoming less of an absolute constraint on rural development in its own right, but is perhaps being superseded by a more generalised concern for the protection of the countryside and a desire to resist the forces of urbanisation. This desire is made manifest in policies to limit the consumption of land, to protect an increasing area of ‘valuable’ countryside, and to limit development in the countryside to protect its character.

While improvements to road and rail infrastructure are often seen as significant enabling assets in facilitating urban and rural development – for example, giving easier access to suppliers and markets – they are not an unalloyed benefit. The greater ease of access is also a greater ease of egress and improved communications can result in the ‘export’ of jobs and the increase of commuting flows. In addition to policies for the provision of road and rail infrastructure, pricing and scheduling policies for service provision are also of great significance in influencing the pattern of flows between localities.

The city and countryside are part of one functional, spatial entity with diverse relationships and interdependencies (ESDP). The best possible conditions for development are when towns and rural areas complement each other. There is therefore a need for an integrated way of looking at towns and countryside if local problems are to be solved.

A precondition for the development of the countryside is the retention of the younger generation. It seems that securing them an income although a necessity is insufficient on
its own, they must have good living conditions along with employment prospects and social status. Hence, it seems that it is of utmost importance to make sure that certain semi-urban areas in each region are made attractive by satisfactorily equipping them with physical and social infrastructure.

Small to medium size urban centres located amidst otherwise rural areas can be of utmost importance (Tarling et al, 1993). These essentially rural towns are instrumental in the provision of services to both enterprises and the population at large (DoE, 1995). It has been argued by influential policy-making bodies, such as the Rural Development Commission, in Britain that such towns may significantly affect and enhance the developmental trajectories of their rural hinterlands. However, changes in agriculture and the ways that agricultural materials and equipment are supplied, and goods marketed have removed the economic purpose of several rural towns. The centralisation of some professions and services in larger conurbations, the development of out of town superstores and changes in the pattern of leisure activities have also contributed to the gradual demise of towns in rural areas.

4.1.4. There is a need for a policy to support agriculture in certain rural areas

Shift from a productivist to a consumerist vision of the countryside: Current EU policy priorities seem to have shifted from a productivist to a consumerist vision of the countryside, where consumption and leisure will be of more importance. However, at this stage in countries like Poland, Greece and Portugal, it is difficult to imagine the development of the countryside without a prominent role for agriculture, excepting perhaps certain regions (e.g. where tourism predominates) so policies for the development of rural areas in such countries must cater for making agriculture more competitive.

There is a need for diversification into non-farm activities: This involves on farm non-agricultural activities in the form of rural tourism services (serviced accommodation, self catering accommodation, open farms, farm house teas/café, sports, etc), manufacturing, preservation of the heritage of the countryside, protection of the environment, etc. This is important for all rural areas in Europe (e.g. for northern Europe because of the decline of rurally based industries such as coal mining, defence industry, etc.).
4.1.5. European policies by type of area and type of enterprise

The main argument which runs throughout this Report is that rural development is desirable and entrepreneurship is perhaps the most important means to achieve this since among other things it increases employment. Public support is more than crucial for development in European rural areas. Rural areas are most in need and usually there is an additional cost in delivering support there (e.g. in delivering training and business support to rural business), referred to as the “rural premium”. The interplay between entrepreneurship (i.e. type of entrepreneurs, business strategies), the characteristics of rural regions (FoU, FoD, trajectories of regional development) and the characteristics of the country that they operate within, gives rise to a whole range of policy responses.

More specifically, what is needed as far as policies go is to know what are the needs of both entrepreneurs and of rural areas around Europe. Also, what are the impacts of each policy; in case of failures, what were the reasons for failure and what lessons are there to be learnt; in case of success, what were the conditions that led to it, and how can it be replicated? Problems related to the implementation of policies. Recommended policy initiatives as well as support delivery issues. What should public policy be doing to develop entrepreneurship and develop rural areas. Policy recommendations must be at a strategic level, aimed mostly at defining target groups (i.e. particular types of: regions – entrepreneurs – activities) and priorities.

There already exist a large number of policies to encourage entrepreneurship in rural areas in Europe. However they are often provided in a disjointed and fragmented pattern combined with a poor level of dissemination of information and knowledge on issues concerning rural enterprise development. Furthermore, some policies miss their targets because of a lack of understanding of the local context in which enterprises operate. There is a need for a more strategic and coordinated approach towards building the entrepreneurial capacity in peripheral rural areas.

Needless to say that there is quite a significant degree of difference between countries in relation to the number of policies, their provision, their adequacy for each country etc. with ‘northern” countries in the best position and Poland in the worst.

There is a distinction between northern – southern – transition countries in terms of policy needs and policy delivery. That is “Northern” countries have a better knowledge of the problems, better evaluation of policies applied, more sophisticated policies, more adapted to the needs, better administered, with a better delivery of support (proactive approach). In “southern” countries existing policies are not always the most suitable to
help alleviate the problems. In certain countries they simply apply the EU policies formulated by other country members, mainly due to their inability to influence policy formulation (lack of political power, lack of know-how, etc).

Moreover, forms of policy delivery are not adequate (i.e. bureaucracy, political clientelism, ineffective policy support mechanisms). In some countries (mainly “southern”, certainly this is the Greek case) because local authorities are very weak and this is even truer for the small rural communities, the authorities are unable to help the development of entrepreneurship in their area. Also in the same countries the institutions of civic society are very weakly developed (no important NGOs, trade associations etc) and this again undermines support for entrepreneurship.

Hence we argue for European policies to foster entrepreneurship in rural peripheral areas and the development of rural peripheral areas by groups of countries (southern/northern/transition) as well as by types of rural areas and types of enterprises and not by country (re-nationalisation of policies).

4.2. Contribution to the State of the Art

Although general principles emerge, our research demonstrates the importance of policies to foster entrepreneurship in rural areas being sensitive to local, regional and national conditions. This is because of the importance of institutional behaviour and national frameworks, as influences on the level of entrepreneurship, as well as reflecting differences in levels of economic development, social conditions and historical development paths. This is specifically reflected in differences between regions in the nature and extent of the development of local/regional markets for business services, which is a key issue affecting the case for public policy intervention.

A strategy to encourage and support entrepreneurship in peripheral rural areas must incorporate long- as well as a short term perspectives and must recognise the variety of ways in which public policy can impact on the nature and extent of entrepreneurship, rather than narrowly focusing on direct support measures. In this regard, the role of educational institutions in shaping attitudes towards business ownership and entrepreneurial behaviour appear critical. The study has revealed some good practice principles of rural enterprise and entrepreneurship policy, although the impact in practice is typically reliant on the effectiveness of institutions and delivery mechanisms, which are far from uniform.
V. DISSEMINATION AND EXPLOITATION OF RESULTS

Web site

This was launched at the very beginning of the project and will last for another two years after the end of the project.

The Web site has been proved to be an effective medium for informing people about the project as well as of disseminating of the findings of the Project.

National expert seminars

In three of the participating countries (Germany, Portugal and Poland), the participants have organised a 'national' expert seminar (coinciding with the meeting of our research team there) with key representatives from the private and public sector. The purpose of these seminars was to disseminate the insights of the comparative and integrative research in the context of the specific national conditions brought out by each of the specific case studies.

Structured Workshops

Towards the end of the project a number of structured workshops has took place in participating countries. These had three main objectives. Firstly, to examine the policy initiatives at the local level and to understand what key stakeholders feel about the development potential of their area; secondly, to fine tune our arguments/conclusions derived from the research project and thirdly to assure the best dissemination of the empirical findings of our investigation among the local community.

Publications

Publication of a book in English: Details the main theoretical contributions and the key empirical findings and policy conclusions of the project will be published. There are a variety of reputable commercial publishing houses interested in the project. This project will target both academic and policy-related audiences. We have in writing a provisional acceptance from Asghate publishers (although not actually a contract yet, something we expect to have once they have evaluated the Final report that we have submitted to them).

Publication of a book in national languages. Some of the teams (Greek, Portuguese and Polish) are going to publish in book form a translation of part of the Final Report together with their national report by a national publisher. The Greek team has already submitted
its proposal to a Greek publisher (Paratiritis) and there has been a positive reaction to that (the contract is expected at any time). The book is due to be published on September 2003.

*Publication of a special issue of a high quality international scientific journal* that focuses on related topics. We have submitted our proposal to a journal, but there has been no reaction yet.

*Publication of articles in international and national journals.* a) The issues that are related to thematic WPs (i.e. globalisation, rurality, entrepreneurship, technology and policy) are going to be published by one or more national teams. b) issues related to comparisons of national experiences are going to be published by small groups of national teams; c) issues related to a particular national experiences are going to be published by individual national teams. A series of academic articles in national and international journals has already been generated and there are many more to come from the results of the project. They are mainly aimed at academic audiences.

**Databases**

The database with the secondary data and the data base with the primary data are valuable sources of processed information that can support both policy-makers at the national and European level, and other researchers in the years to come.

**Workshops**

The Portuguese team is organizing two workshops to present the outcomes of the project.

**International Conference**

Our team, together with two related 5th Framework projects headed by Gordon Clark and Teresa Vaz, is organizing an International Conference, probably on November 2003 in Lisbon, where in addition to the project teams there will be 2-3 top academics experts on the topic as invited speakers, in addition to other speakers. Key representatives from the various governmental levels of each of the participating countries and from the Commission services will also be invited.
Dissemination through other means

The results of this research will be disseminated by teams in their respective countries through public lectures, presentations and direct communication with the relevant ministries. Since all of the key members of the research teams are academics working in Universities, they are being encouraged to use the material of the project in their lectures on the EU, Regional Development, Economic Policy etc. Individual members of the research teams have been encouraged to submit articles to newspapers either nationwide ones or restricted to the areas under investigation, so as to increase awareness about the project, its aims and objectives and key findings. Finally, it goes without saying, all members of the research team are available to brief staff of the EC on the results of the study if requested;
VI. REFERENCES AND BIBLIOGRAPHY

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VII. ANNEXES

WP appendices
Table 11. Basic characteristics of CSAs, 1995*

<table>
<thead>
<tr>
<th>Case Study Area</th>
<th>Area (km²)</th>
<th>Population (000 inh.)</th>
<th>Population density (inh/km²)</th>
<th>Share of employment in agriculture</th>
<th>Share of employment in manufacturing</th>
<th>Share of employment in services</th>
<th>Gross Value Added in Agriculture</th>
<th>Unemployment</th>
<th>GDP per capita</th>
<th>GDP per capita as % of country</th>
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</thead>
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<tr>
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<td>19.362,4</td>
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<td>12,6</td>
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<td>16,9</td>
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<td>8,2</td>
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</tr>
<tr>
<td>Country</td>
<td>Area (km²)</td>
<td>Population (000 inh.)</td>
<td>Population density (inh/km²)</td>
<td>Share of employment in agriculture</td>
<td>Share of employment in manufacturing</td>
<td>Share of employment in services</td>
<td>Gross Value Added in Agriculture</td>
<td>Unemployment</td>
<td>GDP per capita</td>
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</tr>
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<td>------------</td>
<td>-----------------------</td>
<td>------------------------------</td>
<td>-----------------------------------</td>
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<td>---------------------------------</td>
<td>---------------------------------</td>
<td>---------------</td>
<td>----------------</td>
<td></td>
</tr>
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<td>Federal Republic of Ger</td>
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<td>81.978,6</td>
<td>229,6</td>
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<td>24,2</td>
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<td>1,8</td>
<td>6,2</td>
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<td>3.970,8</td>
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*Source: Regio Database, Eurostat*

*: 2000 for Polish data
Table 12. The importance of the 10 CSAs on a European and on a national level

<table>
<thead>
<tr>
<th>Case Study Area</th>
<th>Accessibility by road &amp; rail to 52 most important international agglomerations</th>
<th>European level: Central National level: Central</th>
<th>European level: Peripheral National level: Central</th>
<th>European level: Peripheral National level: Peripheral</th>
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</thead>
<tbody>
<tr>
<td>Waldshut</td>
<td>38</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumbria</td>
<td>123</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devon&amp;Cornwall</td>
<td>178/303</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Kilkis</td>
<td>47</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nordwestmecklenburg</td>
<td>66</td>
<td>+</td>
<td></td>
<td></td>
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<tr>
<td>Lesvos</td>
<td>774</td>
<td></td>
<td>+</td>
<td></td>
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<tr>
<td>Oeste</td>
<td>48</td>
<td>+</td>
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<td></td>
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<tr>
<td>Baixo Alentejo</td>
<td>145</td>
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<td>+</td>
<td></td>
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<tr>
<td>Zary</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Bialystok</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Source: Lutter and Pütz, 1998
Diagram 7. CSA and the main urban areas around them in a 100 Kms radius: the case of Greece
Diagram 8. CSA and the main urban areas around them in a 100 Kms radius: the case of Portugal.
Diagram 9. CSA and the main urban areas around them in a 100 Kms radius: the case of Germany
Diagram 10. CSA and the main urban areas around them in a 100 Kms radius: the case of Poland
Diagram 11. CSA and the main urban areas around them in a 100 Kms radius: the case of UK
Diagram 12. Average disposable income of agriculture households relative to the all-household average in selected Member States

Source: EC, 1994

Diagram 13. Agricultural employment as a proportion of total employment, 2000

Source: EC, 2002c
Table 13. Measures of the relationship strength between the level of globalisation and the firm’s origin (country and region), its age, size and intensity of cooperation relationships

<table>
<thead>
<tr>
<th>Variables</th>
<th>P</th>
<th>Contingency index</th>
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<tr>
<td>Establishments x Country</td>
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<td>0.187211</td>
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<tr>
<td>Establishments x Region</td>
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<td>0.2221153</td>
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<tr>
<td>Establishments x Size</td>
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<tr>
<td>Establishments x Age</td>
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</tr>
<tr>
<td>Establishments x Subcontract</td>
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<td>Establishments x Contract</td>
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<tr>
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<tr>
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<td>Input x Subcontract</td>
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<td>=.00000</td>
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### Table 14. Level of globalisation by country and regions

<table>
<thead>
<tr>
<th>Level of Globalisation</th>
<th>Germany</th>
<th>Greece</th>
<th>Poland</th>
<th>Portugal</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>CSA1</td>
<td>CSA2</td>
<td>Total</td>
<td>CSA1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>CSA1</td>
<td>CSA2</td>
<td>Total</td>
<td>CSA1</td>
</tr>
<tr>
<td>Total</td>
<td>70.2</td>
<td>58.9</td>
<td>62.2</td>
<td>57.7</td>
<td>20.7</td>
</tr>
<tr>
<td>CSA1</td>
<td>57.7</td>
<td>20.7</td>
<td>76.8</td>
<td>50.0</td>
<td>78.0</td>
</tr>
<tr>
<td>CSA2</td>
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<tr>
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<tr>
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<td>77.0</td>
<td>79.0</td>
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<td></td>
</tr>
<tr>
<td>CSA2</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>80.5</td>
<td>74.0</td>
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<td>CSA1</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSA2</td>
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<td></td>
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<td></td>
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<tr>
<td>Total</td>
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<td></td>
</tr>
<tr>
<td>CSA1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSA2</td>
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</table>

- **Traded inputs (% of firms)**

<table>
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<tr>
<th>Level of Globalisation</th>
<th>Germany</th>
<th>Greece</th>
<th>Poland</th>
<th>Portugal</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>CSA1</td>
<td>CSA2</td>
<td>Total</td>
<td>CSA1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>CSA1</td>
<td>CSA2</td>
<td>Total</td>
<td>CSA1</td>
</tr>
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<td>70.2</td>
<td>58.9</td>
<td>62.2</td>
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<td>&quot;Domestic&quot; (all inputs</td>
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<td>76.8</td>
<td>50.0</td>
<td>78.0</td>
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<td>sourced from local area)</td>
<td></td>
<td></td>
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<td></td>
<td>75.5</td>
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<td>7.5</td>
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<td>13.7</td>
<td>11.8</td>
<td>15.5</td>
<td>28.8</td>
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<td>&quot;Internationalised&quot; (&gt;10%</td>
<td>15.5</td>
<td>28.8</td>
<td>7.1</td>
<td>18.2</td>
<td>7.5</td>
</tr>
<tr>
<td>but &lt; 40% of inputs</td>
<td>28.8</td>
<td></td>
<td></td>
<td></td>
<td>11.0</td>
</tr>
<tr>
<td>sourced internationally)</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Extensive &quot;Globalised&quot;</td>
<td>4.4</td>
<td>5.3</td>
<td>2.2</td>
<td>8.2</td>
<td>43.8</td>
</tr>
<tr>
<td>(&gt;40% but &lt;50% of inputs</td>
<td>8.2</td>
<td>43.8</td>
<td>9.1</td>
<td>8.0</td>
<td>2.0</td>
</tr>
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<td>sourced internationally)</td>
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<td></td>
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</tr>
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<td></td>
<td>4.0</td>
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<td></td>
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<td>3.9</td>
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<td>Complete &quot;Fully</td>
<td>8.8</td>
<td>8.4</td>
<td>10.8</td>
<td>6.2</td>
<td>31.1</td>
</tr>
<tr>
<td>globalised&quot; (&gt;50% of</td>
<td>6.2</td>
<td>31.1</td>
<td>4.0</td>
<td>21.6</td>
<td>5.0</td>
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<td>internationally)</td>
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<td>5.0</td>
</tr>
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<td>20.3</td>
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<td>13.8</td>
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<td></td>
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</tr>
</tbody>
</table>

266
<table>
<thead>
<tr>
<th></th>
<th>Traded outputs (% of firms)</th>
<th>Establishments and affiliations (% of firms)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traded outputs (% of firms)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Domestic&quot; (all outputs sold in local area)</td>
<td>65.5 52.6 73.7 32.0 62.0 68.6 55.9 77.3 78.8 75.8 78.5 88.9 65.1 57.8 57.9 57.1</td>
<td></td>
</tr>
<tr>
<td>Limited globalisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Mainly domestic&quot; (&lt;10% revenue from across borders)</td>
<td>14.0 19.3 15.8 22.7 9.5 8.6 8.6 13.1 10.1 16.2 9.4 4.0 16.9 18.8 16.8 21.4</td>
<td></td>
</tr>
<tr>
<td>Major globalisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Internationalised&quot; (&gt;10% but &lt;40% revenue from across borders)</td>
<td>10.1 14.6 5.3 23.7 11.0 11.4 10.8 5.1 6.1 4.0 6.1 2.0 10.8 13.5 15.8 11.2</td>
<td></td>
</tr>
<tr>
<td>Extensive &quot;Globalised&quot; (&gt;40% but &lt;50% of revenue from outputs traded across borders)</td>
<td>3.2 5.2 1.1 9.3 6.0 6.7 5.4 1.0 2.0 0 1.7 1.0 2.4 2.1 1.1 3.1</td>
<td></td>
</tr>
<tr>
<td>Complete &quot;Fully globalised&quot; (&gt;50% of outputs traded across borders)</td>
<td>7.2 8.3 4.2 12.4 11.5 4.8 19.4 3.5 3.0 4.0 4.4 4.0 4.8 7.8 8.4 7.1</td>
<td></td>
</tr>
<tr>
<td><strong>Establishments and affiliations (% of firms)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Domestic&quot; (single establishment, no establishments or affiliations outside local area)</td>
<td>88.5 78.8 80.9 76.8 85.5 92.9 78.7 94.9 96.0 93.9 92.7 94.8 90.1 90.5 91.8 89.2</td>
<td></td>
</tr>
<tr>
<td>Limited globalisation &quot;Mainly domestic&quot; (at least one establishment or affiliate outside local area or outside national area)</td>
<td>10.2</td>
<td>18.7</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Major globalisation &quot;Internationalised&quot; (at least four different establishments or close affiliates outside national area)</td>
<td>1.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Total no of firms</td>
<td>937</td>
<td>193</td>
</tr>
</tbody>
</table>
Table 15. Level of globalisation by sector

| Section of NACE | Total | A+B | C | D | E | F | G | H | I | J | K | M | N | O |
|-----------------|-------|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Traded inputs (% of firms) | | | | | | | | | | | | | | | |
| No globalisation “Domestic” (all inputs sourced from local area) | 70.2 | 80.3 | 100.0 | 57.9 | 33.3 | 79.2 | 72.9 | 87.5 | 70.8 | 100.0 | 74.6 | 100.0 | 88.9 | 77.1 |
| Limited globalisation “Mainly domestic” (<10% of inputs sourced across borders) | 7.0 | 2.9 | 0 | 9.1 | 33.3 | 7.5 | 7.6 | 8.3 | 0 | 0 | 7.9 | 0 | 0 | 2.9 |
| Major globalisation “Internationalised” (>10% but < 40% of inputs sourced internationally) | 9.5 | 8.0 | 0 | 13.3 | 0 | 5.7 | 9.7 | 4.2 | 12.5 | 0 | 4.8 | 0 | 11.1 | 5.7 |
| Extensive “Globalised” (>40% but <50% of inputs sourced internationally) | 4.4 | 5.8 | 0 | 5.8 | 33.3 | 1.9 | 2.8 | 0 | 8.3 | 0 | 1.6 | 0 | 0 | 5.7 |
| Complete “Fully globalised” (>50% of inputs sourced internationally) | 8.8 | 2.9 | 0 | 13.9 | 0 | 5.7 | 6.9 | 0 | 8.3 | 0 | 11.1 | 0 | 0 | 8.6 |
| Traded outputs (% of firms) | | | | | | | | | | | | | | | |
| No globalisation “Domestic” (all outputs sold in local area) | 65.5 | 68.3 | 50.0 | 51.6 | 33.3 | 71.2 | 80.7 | 61.2 | 43.5 | 100.0 | 82.9 | 100.0 | 90.1 | 69.2 |
| Limited globalisation “Mainly domestic” (<10% revenue from across borders) | 14.0 | 12.5 | 0 | 17.7 | 33.3 | 21.2 | 9.7 | 16.3 | 8.7 | 0 | 6.6 | 0 | 10.1 | 17.9 |
| Major globalisation “Internationalised” (>10% but <40% revenue from across borders) | 10.1 | 8.8 | 50.0 | 12.9 | 33.3 | 7.7 | 6.2 | 16.3 | 21.7 | 0 | 6.6 | 0 | 0 | 7.7 |
| Extensive “Globalised” (>40% but <50% of revenue from outputs traded across borders) | 3.2 | 2.9 | 0 | 5.8 | 0 | 0 | 0.7 | 2.0 | 13.0 | 0 | 1.3 | 0 | 0 | 0 |
| Complete “Fully globalised” (>50% of outputs traded across borders) | 7.2 | 7.5 | 0 | 11.9 | 0 | 0 | 2.8 | 4.1 | 13.0 | 0 | 2.6 | 0 | 0 | 5.1 |
| Establishments and affiliations (% of firms) |  |  |  |  |  |  |  |  |  |  |  |  
|-------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| No globalisation “Domestic” (single establishment, no establishments or affiliations outside local area) | 88.5 | 92.8 | 50.0 | 82.7 | 66.7 | 92.0 | 93.3 | 100.0 | 81.8 | 67.7 | 86.3 | 75.0 | 84.6 | 86.5 |
| Limited globalisation “Mainly domestic” (at least one establishment or affiliate outside local area or outside national area) | 10.2 | 7.2 | 50.0 | 14.6 | 0 | 6.0 | 6.0 | 0 | 18.2 | 33.3 | 13.8 | 25.0 | 15.4 | 10.8 |
| Major globalisation “Internationalised” (at least four different establishments or close affiliates outside national area) | 1.3 | 0 | 0 | 2.7 | 33.3 | 2.0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 2.7 |
| Total no of firms | 989 | 252 | 2 | 314 | 3 | 53 | 145 | 52 | 24 | 4 | 82 | 4 | 13 | 41 |
### Table 16. Level of globalisation by size and age

<table>
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<th>Total</th>
<th>Size</th>
<th>Age</th>
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</thead>
<tbody>
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<td></td>
<td>0-9</td>
<td>10-49</td>
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<tr>
<td>Traded inputs (% of firms)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (all inputs sourced from local area)</td>
<td>70.2</td>
<td>79.2</td>
<td>60.3</td>
</tr>
<tr>
<td>Limited globalisation “Mainly domestic” (&lt;10% of inputs sourced across borders)</td>
<td>7.0</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (&gt;10% but &lt; 40% of inputs sourced internationally)</td>
<td>9.5</td>
<td>7.0</td>
<td>13.8</td>
</tr>
<tr>
<td>Extensive “Globalised” (&gt;40% but &lt;50% of inputs sourced internationally)</td>
<td>4.4</td>
<td>2.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Complete “Fully globalised” (&gt;50% of inputs sourced internationally)</td>
<td>8.8</td>
<td>4.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Traded outputs (% of firms)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (all outputs sold in local area)</td>
<td>65.5</td>
<td>76.9</td>
<td>49.8</td>
</tr>
<tr>
<td>Limited globalisation “Mainly domestic” (&lt;10% revenue from across borders)</td>
<td>14.0</td>
<td>10.9</td>
<td>18.1</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (&gt;10% but &lt;40% revenue from across borders)</td>
<td>10.1</td>
<td>6.8</td>
<td>14.8</td>
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<tr>
<td>Extensive “Globalised” (&gt;40% but &lt;50% of revenue from outputs traded across borders)</td>
<td>3.2</td>
<td>1.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Complete “Fully globalised” (&gt;50% of outputs traded across borders)</td>
<td>7.2</td>
<td>3.6</td>
<td>12.8</td>
</tr>
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<table>
<thead>
<tr>
<th>Establishments and affiliations (% of firms)</th>
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<tbody>
<tr>
<td>No globalisation “Domestic” (single establishment, no establishments or affiliations outside local area)</td>
</tr>
<tr>
<td>Limited globalisation “Mainly domestic” (at least one establishment or affiliate outside local area or outside national area)</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (at least four different establishments or close affiliates outside national area)</td>
</tr>
<tr>
<td>Total no of firms (size)</td>
</tr>
<tr>
<td>Total no of firms (age)</td>
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Table 17. Level of globalisation by subcontract linkages

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<th>Contract</th>
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<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Traded inputs (% of firms)</td>
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<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (all inputs sourced from local area)</td>
<td>70.2</td>
<td>72.1</td>
<td>61.5</td>
</tr>
<tr>
<td>Limited globalisation “Mainly domestic” (&lt;10% of inputs sourced across borders)</td>
<td>7.0</td>
<td>6.7</td>
<td>8.9</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (&gt;10% but &lt; 40% of inputs sourced internationally)</td>
<td>9.5</td>
<td>10.2</td>
<td>10.6</td>
</tr>
<tr>
<td>Extensive “Globalised” (&gt;40% but &lt;50% of inputs sourced internationally)</td>
<td>4.4</td>
<td>3.7</td>
<td>6.1</td>
</tr>
<tr>
<td>Complete “Fully globalised” (&gt;50% of inputs sourced internationally)</td>
<td>8.8</td>
<td>7.4</td>
<td>12.8</td>
</tr>
<tr>
<td>Traded outputs (% of firms)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (all outputs sold in local area)</td>
<td>65.5</td>
<td>69.0</td>
<td>59.6</td>
</tr>
<tr>
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<td>12.7</td>
<td>16.4</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (&gt;10% but &lt;40% revenue from across borders)</td>
<td>10.1</td>
<td>8.9</td>
<td>10.4</td>
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<tr>
<td>Extensive “Globalised” (&gt;40% but &lt;50% of revenue from outputs traded across borders)</td>
<td>3.2</td>
<td>2.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Complete “Fully globalised” (&gt;50% of outputs traded across borders)</td>
<td>7.2</td>
<td>6.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Establishments and affiliations (% of firms)</td>
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<td>90.2</td>
<td>82.4</td>
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<td>10.2</td>
<td>9.0</td>
<td>13.7</td>
</tr>
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<td>Major globalisation &quot;Internationalised&quot; (at least four different establishments or close affiliates outside national area)</td>
<td>1.3</td>
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<td>3.8</td>
</tr>
<tr>
<td>Total no of firms (podwykonawstwo)</td>
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<td>623</td>
<td>182</td>
</tr>
<tr>
<td>Total no of firms (zleceniodawstwo)</td>
<td>815</td>
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<td>567</td>
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Table 18. Level of globalisation by distance of each CSA to large urban areas

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>The most accessible group*</th>
<th>The intermediate group*</th>
<th>The least accessible group*</th>
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<tbody>
<tr>
<td><strong>Traded inputs (% of firms)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (all inputs sourced from local area)</td>
<td>70.2</td>
<td>64.6</td>
<td>72.0</td>
<td>75.6</td>
</tr>
<tr>
<td>Limited globalisation “Mainly domestic” (&lt;10% of inputs sourced across borders)</td>
<td>7.0</td>
<td>10.8</td>
<td>4.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (&gt;10% but &lt; 40% of inputs sourced internationally)</td>
<td>9.5</td>
<td>10.8</td>
<td>9.3</td>
<td>8.0</td>
</tr>
<tr>
<td>Extensive “Globalised” (&gt;40% but &lt;50% of inputs sourced internationally)</td>
<td>4.4</td>
<td>4.9</td>
<td>2.9</td>
<td>6.8</td>
</tr>
<tr>
<td>Complete “Fully globalised” (&gt;50% of inputs sourced internationally)</td>
<td>8.8</td>
<td>9.0</td>
<td>10.9</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Traded outputs (% of firms)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (all outputs sold in local area)</td>
<td>65.5</td>
<td>55.1</td>
<td>75.1</td>
<td>67.0</td>
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<tr>
<td>Limited globalisation “Mainly domestic” (&lt;10% revenue from across borders)</td>
<td>14.0</td>
<td>19.2</td>
<td>9.7</td>
<td>12.2</td>
</tr>
<tr>
<td>Major globalisation “Internationalised” (&gt;10% but &lt;40% revenue from across borders)</td>
<td>10.1</td>
<td>14.0</td>
<td>5.6</td>
<td>11.2</td>
</tr>
<tr>
<td>Extensive “Globalised” (&gt;40% but &lt;50% of revenue from outputs traded across borders)</td>
<td>3.2</td>
<td>3.6</td>
<td>2.1</td>
<td>4.8</td>
</tr>
<tr>
<td>Complete “Fully globalised” (&gt;50% of outputs traded across borders)</td>
<td>7.2</td>
<td>8.1</td>
<td>7.4</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Establishments and affiliations (% of firms)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No globalisation “Domestic” (single establishment, no establishments or affiliations outside local area)</td>
<td>88.5</td>
<td>84.6</td>
<td>91.0</td>
<td>91.6</td>
</tr>
<tr>
<td>Limited globalisation &quot;Mainly domestic&quot; (at least one establishment or affiliate outside local area or outside national area)</td>
<td>10.2</td>
<td>13.8</td>
<td>7.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Major globalisation &quot;Internationalised&quot; (at least four different establishments or close affiliates outside national area)</td>
<td>1.3</td>
<td>1.6</td>
<td>1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Total no of firms (podwykonawstwo)</td>
<td>996</td>
<td>400</td>
<td>399</td>
<td>197</td>
</tr>
</tbody>
</table>
Note: The most accessible group – there are large urban areas within the 100 km radius (Waldshut and Nordwestmeclenburg in Germany, Cumbria and Devon&Cornwall in UK); The intermediate group - there is a large urban area within the 100 km radius (Oeste in Portugal, Kilkis in Greece, Zary and Bialystok in Poland); The least accessible group – there are no important urban areas within the 100 km radius (Left Bank in Portugal, Lesvos in Greece)
### Table 19. Size of firms, their age and co-operation linkages by country and region

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Germany</th>
<th>Greece</th>
<th>Poland</th>
<th>Portugal</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA1</td>
<td>CSA2</td>
<td>CSA1</td>
<td>CSA2</td>
<td>CSA1</td>
<td>CSA2</td>
</tr>
<tr>
<td><strong>Size (% of firms)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment 0-9</td>
<td>66.6</td>
<td>52.5</td>
<td>51.0</td>
<td>54.0</td>
<td>69.5</td>
<td>54.0</td>
</tr>
<tr>
<td>Employment 10-49</td>
<td>25.1</td>
<td>31.0</td>
<td>36.0</td>
<td>26.0</td>
<td>20.5</td>
<td>33.0</td>
</tr>
<tr>
<td>Employment 50-249</td>
<td>7.4</td>
<td>14.0</td>
<td>11.0</td>
<td>17.0</td>
<td>10.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Employment &gt;=250</td>
<td>0.9</td>
<td>2.5</td>
<td>2.0</td>
<td>3.0</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Age (% of firms)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;0 and &lt;=1 year</td>
<td>6.5</td>
<td>8.5</td>
<td>10.0</td>
<td>7.0</td>
<td>6.8</td>
<td>7.5</td>
</tr>
<tr>
<td>&gt;1 and &lt;=3 years</td>
<td>10.5</td>
<td>8.5</td>
<td>11.0</td>
<td>6.0</td>
<td>12.6</td>
<td>15.1</td>
</tr>
<tr>
<td>&gt;3 and &lt;=5 years</td>
<td>11.8</td>
<td>6.0</td>
<td>9.0</td>
<td>3.0</td>
<td>14.0</td>
<td>12.3</td>
</tr>
<tr>
<td>&gt;5 and &lt;=10 years</td>
<td>26.3</td>
<td>32.5</td>
<td>48.0</td>
<td>17.0</td>
<td>17.4</td>
<td>17.9</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>45.0</td>
<td>44.5</td>
<td>22.0</td>
<td>67.0</td>
<td>49.3</td>
<td>47.2</td>
</tr>
<tr>
<td><strong>Co-operation linkages (% of firms)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The firm doesn’t work on a subcontract basis for other firms</td>
<td>77.8</td>
<td>70.1</td>
<td>63.3</td>
<td>76.8</td>
<td>70.4</td>
<td>72.4</td>
</tr>
<tr>
<td>The firm works on a subcontract basis for other firms</td>
<td>22.2</td>
<td>29.9</td>
<td>36.7</td>
<td>23.2</td>
<td>29.6</td>
<td>27.6</td>
</tr>
<tr>
<td>The firm doesn’t subcontract out any part of its activities</td>
<td>70.0</td>
<td>48.5</td>
<td>52.6</td>
<td>44.4</td>
<td>75.9</td>
<td>78.4</td>
</tr>
<tr>
<td>The firm subcontracts out any part of its activities</td>
<td>30.0</td>
<td>51.5</td>
<td>47.4</td>
<td>55.6</td>
<td>24.1</td>
<td>21.6</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Total no of firms</td>
<td>996</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diagram 14. Accessing the provision of the services in the region (% of respondents accessing the provision as very poor or poor)

Educational provisions

Availability of skilled labour

278
Diagram 15 Profiles of countries and CSAs (% of respondents accessing the provision as very poor or poor)

- Educational programmes
- Availability of skilled labour
- Accessibility to the road network
- Public transport
- Access to telecommunication network
Diagram 16. Rural environment as a barrier to product/service innovation

**Poor business environment**

**Small local market**

- **UK CSA 2**
- **UK CSA 1**
- **UK**
- **Portugal CSA 2**
- **Portugal CSA 1**
- **Portugal**
- **Poland CSA 2**
- **Poland CSA 1**
- **Poland**
- **Greece CSA 2**
- **Greece CSA 1**
- **Greece**
- **Germany CSA 2**
- **Germany CSA 1**
- **Germany**
- **Total**
Poor technical infrastructure

Absence of public sector business support organisation
Diagram 17. Rural environment as a barrier to developing new markets

Remote geographical position

High transport costs
Poor transport/communication infrastructure

Absence of public sector business support organisation
Absence of producer services providers

- UK CSA3
- UK CSA1
- UK
- Portugal CSA2
- Portugal CSA1
- Portugal
- Poland CSA2
- Poland CSA1
- Poland
- Greece CSA2
- Greece CSA1
- Greece
- Germany CSA2
- Germany CSA1
- Germany
- Total

0% 9.3% 25% 50%
Diagram 18. Rural environment as a factor to some extent or to a considerable extent affecting the access to market information and the methods of promotion and distribution used (% of respondents)

Market Information

Methods of promotion used

290
Methods of distribution used

<table>
<thead>
<tr>
<th>Country</th>
<th>CSA 1</th>
<th>CSA 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal (CSA2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal (CSA1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland (CSA2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland (CSA1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece (CSA2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece (CSA1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany (CSA2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany (CSA1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 18.7%
Table 20. The variables collected

<table>
<thead>
<tr>
<th></th>
<th>Description of variable</th>
<th>Period covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Area of region</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Population</td>
<td>1995-1997</td>
</tr>
<tr>
<td>3</td>
<td>Population density</td>
<td>1989-1997</td>
</tr>
<tr>
<td>4</td>
<td>Crude birth rate</td>
<td>1980-1997</td>
</tr>
<tr>
<td>5</td>
<td>Crude death rate</td>
<td>1980-1997</td>
</tr>
<tr>
<td>6</td>
<td>Gross Domestic Product (GDP) - (ECU)</td>
<td>1986-1996</td>
</tr>
<tr>
<td>7</td>
<td>GDP per capita (ECU)</td>
<td>1986-1996</td>
</tr>
<tr>
<td>8</td>
<td>Share of employment in agriculture</td>
<td>1988-1995</td>
</tr>
<tr>
<td>9</td>
<td>Share of employment in manufacturing</td>
<td>1988-1995</td>
</tr>
<tr>
<td>10</td>
<td>Share of employment in services</td>
<td>1988-1995</td>
</tr>
<tr>
<td>11</td>
<td>Share of households in densely populated areas</td>
<td>1992-1994</td>
</tr>
<tr>
<td>12</td>
<td>Share of households in intermediate areas</td>
<td>1992-1994</td>
</tr>
<tr>
<td>13</td>
<td>Share of households in sparsely populated areas</td>
<td>1992-1994</td>
</tr>
<tr>
<td>14</td>
<td>Share of agriculture in total Gross Value Added</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Share of manufacturing in total Gross Value Added</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Share of services in total Gross Value Added</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Total unemployment</td>
<td>1988-1998</td>
</tr>
<tr>
<td>18</td>
<td>Unemployment of persons below 25 years old</td>
<td>1988-1998</td>
</tr>
<tr>
<td>19</td>
<td>Population in settlements larger than 10.000 inhabitants</td>
<td>2000</td>
</tr>
<tr>
<td>20</td>
<td>Share of population living in settlements larger than 10.000 inhabitants</td>
<td>2000</td>
</tr>
<tr>
<td>21</td>
<td>Travel time to the nearest of the 52 important international agglomeration centres in minutes (by road and air)</td>
<td>2000</td>
</tr>
<tr>
<td>22</td>
<td>Travel time to the nearest of the 52 important international agglomeration centres in minutes (by road and rail – planned)</td>
<td>2000</td>
</tr>
<tr>
<td>23</td>
<td>Travel time to the nearest of the 52 important international agglomeration centres in minutes (by road and rail)</td>
<td>2000</td>
</tr>
<tr>
<td>24</td>
<td>Travel time to the nearest of the 52 important international agglomeration centres in minutes (by road)</td>
<td>2000</td>
</tr>
<tr>
<td>25</td>
<td>Travel time to the nearest of the 52 important international agglomeration centres in minutes (joint use of modes - planned)</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Travel time to the nearest of the 52 important international agglomeration centres in minutes (joint use of modes)</td>
<td>2000</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>27</td>
<td>Number of hotels</td>
<td>1997</td>
</tr>
</tbody>
</table>

*Sources: for variables 1-20 and 27-28, Eurostat’s REGIO and GISCO databases (with own calculations in selected variables), for variables 21-26, Lutter and Pütz, 1998*

**Table 21. Classification of EU regions (Disaggregative typology)**

<table>
<thead>
<tr>
<th>Major types of EU regions</th>
<th>Number of regions</th>
<th>CSAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peripheral, lagging, relatively low economic performance, dependent on agriculture</td>
<td>37</td>
<td>Baixo Alentejo</td>
</tr>
<tr>
<td>2 lagging, relatively low economic performance, not dependent on agriculture</td>
<td>52</td>
<td>Cornwall, Lesvos</td>
</tr>
<tr>
<td>3. advancing, relatively low economic performance, dependent on agriculture</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4. advancing, relatively low economic performance, not dependent on agriculture</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>5. lagging, relatively high economic performance, dependent on agriculture</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6. lagging, relatively high economic performance, non-dependent on agriculture</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>7. advancing, relatively high economic performance, dependent on agriculture</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>8. advancing, relatively high economic performance, non-dependent on agriculture</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>9. Semi-peripheral, low competitiveness, low economic performance, dependent on agriculture</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>10. low competitiveness, low economic performance, not dependent on agriculture</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>11. high competitiveness, low economic performance, dependent on agriculture</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>12. high competitiveness, low economic performance, not dependent on agriculture</td>
<td>18</td>
<td>Devon</td>
</tr>
<tr>
<td>13. low competitiveness, high economic performance, dependent on agriculture</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>14. low competitiveness, high economic performance, non-dependent on agriculture</td>
<td>23</td>
<td>Cumbria</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>15.</td>
<td>high competitiveness, high economic performance, dependent on agriculture</td>
<td>9</td>
</tr>
<tr>
<td>16.</td>
<td>high competitiveness, high economic performance, non-dependent on agriculture</td>
<td>68</td>
</tr>
<tr>
<td>17.</td>
<td>Accessible rural, low competitiveness, low economic performance, dependent on agriculture</td>
<td>54</td>
</tr>
<tr>
<td>18.</td>
<td>low competitiveness, low economic performance, non-dependent on agriculture</td>
<td>95</td>
</tr>
<tr>
<td>19.</td>
<td>high competitiveness, low economic performance, dependent on agriculture</td>
<td>11</td>
</tr>
<tr>
<td>20.</td>
<td>high competitiveness, low economic performance, non-dependent on agriculture</td>
<td>49</td>
</tr>
<tr>
<td>21.</td>
<td>low competitiveness, high economic performance, dependent on agriculture</td>
<td>21</td>
</tr>
<tr>
<td>22.</td>
<td>low competitiveness, high economic performance, non-dependent on agriculture</td>
<td>39</td>
</tr>
<tr>
<td>23.</td>
<td>high competitiveness, high economic performance, dependent on agriculture</td>
<td>20</td>
</tr>
<tr>
<td>24.</td>
<td>high competitiveness, high economic performance, non-dependent on agriculture</td>
<td>130</td>
</tr>
<tr>
<td>25.</td>
<td>Urban areas</td>
<td>268</td>
</tr>
</tbody>
</table>
Diagram 19. Peripheral regions of Europe

Diagram showing the peripheral regions of Europe with a legend indicating colors for different levels of peripheral regions.
Diagram 20. Semi-peripheral regions of Europe
Diagram 21. Accessible regions

accessible regions
<table>
<thead>
<tr>
<th>non-accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
<tr>
<td>18</td>
</tr>
<tr>
<td>19</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>24</td>
</tr>
</tbody>
</table>

accessible regions

non-accessible

17
18
19
20
21
22
23
24

200 0 200 400 600 800 Kilometers
Table 22. Indices of Entrepreneurial Characteristics by Case Study Area.

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>K</th>
<th>O</th>
<th>Ba</th>
<th>NW</th>
<th>W</th>
<th>Bi</th>
<th>Z</th>
<th>D</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.54</td>
<td>0.78</td>
<td>0.83</td>
<td>0.72</td>
<td>0.24</td>
<td>0.59</td>
<td>0.40</td>
<td>0.69</td>
<td>0.69</td>
<td>0.84</td>
</tr>
<tr>
<td>2</td>
<td>0.99</td>
<td>0.81</td>
<td>0.92</td>
<td>0.81</td>
<td>1.31</td>
<td>0.87</td>
<td>1.33</td>
<td>0.73</td>
<td>0.92</td>
<td>1.19</td>
</tr>
<tr>
<td>3</td>
<td>1.19</td>
<td>0.87</td>
<td>0.63</td>
<td>1.19</td>
<td>0</td>
<td>0</td>
<td>1.07</td>
<td>1.21</td>
<td>0</td>
<td>1.21</td>
</tr>
<tr>
<td>4</td>
<td>0.99</td>
<td>1.16</td>
<td>1.46</td>
<td>0.90</td>
<td>1</td>
<td>0.68</td>
<td>1.21</td>
<td>0.90</td>
<td>0.96</td>
<td>0.62</td>
</tr>
<tr>
<td>5</td>
<td>1.13</td>
<td>0.89</td>
<td>0.87</td>
<td>0.70</td>
<td>0.41</td>
<td>0.92</td>
<td>0.97</td>
<td>0.72</td>
<td>0.74</td>
<td>0.68</td>
</tr>
<tr>
<td>6</td>
<td>0.98</td>
<td>1.32</td>
<td>0.81</td>
<td>1.99</td>
<td>0.62</td>
<td>0.31</td>
<td>1.1</td>
<td>1.51</td>
<td>0.40</td>
<td>1.26</td>
</tr>
<tr>
<td>7</td>
<td>1.95</td>
<td>1.08</td>
<td>0.47</td>
<td>1.25</td>
<td>1.08</td>
<td>1.36</td>
<td>0.65</td>
<td>2.18</td>
<td>0.93</td>
<td>1.40</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>2.30</td>
<td>2.34</td>
<td>3.68</td>
<td>2.78</td>
<td>1.07</td>
<td>4.04</td>
<td>1.69</td>
<td>1.46</td>
</tr>
<tr>
<td>9</td>
<td>1.06</td>
<td>1.60</td>
<td>0.85</td>
<td>1.56</td>
<td>2.15</td>
<td>1.09</td>
<td>3.39</td>
<td>1.61</td>
<td>1.17</td>
<td>1.53</td>
</tr>
<tr>
<td>10</td>
<td>2.48</td>
<td>1.21</td>
<td>2.11</td>
<td>2.3</td>
<td>4.68</td>
<td>2.83</td>
<td>0</td>
<td>0.81</td>
<td>2.46</td>
<td>2.21</td>
</tr>
<tr>
<td>11</td>
<td>1.61</td>
<td>1.60</td>
<td>1.43</td>
<td>1.88</td>
<td>1</td>
<td>2.11</td>
<td>3.15</td>
<td>1.62</td>
<td>1.88</td>
<td>1.66</td>
</tr>
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<td>12</td>
<td>0.86</td>
<td>0.89</td>
<td>0.90</td>
<td>0.87</td>
<td>0.96</td>
<td>0.91</td>
<td>0.94</td>
<td>0.90</td>
<td>NA</td>
<td>0.95</td>
</tr>
</tbody>
</table>

1=Female  
2=In-migration  
3=Unemployment before start-up  
4=Education before start-up  
5=Manual background  
6=Admin. Background  
7=Managerial background  
8=Profess. Background  
9= University education  
0=Previous enterprise  
11=Parental influence  
12=Age
Table 23. Variables used in constructing the typology of rural entrepreneurs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender = Female</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>In-migration</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Unemployment prior to starting-up</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Education prior to starting-up</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Manual occupation prior to entrepreneurship</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Administrative occupation prior to entrepreneurship</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Managerial occupation prior to entrepreneurship</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Professional occupation prior to entrepreneurship</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Educational level at degree level or above</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Previous involvement in entrepreneurship</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Parents involvement in entrepreneurship</td>
<td>Binary (0=No/1=Yes)</td>
</tr>
<tr>
<td>Age of the entrepreneur</td>
<td>Interval</td>
</tr>
</tbody>
</table>

Table 24. Entrepreneurial Clusters by Case Study Area

<table>
<thead>
<tr>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesvos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>111 Female, admin &amp; professional occupations (35)</td>
<td>112 Male, previously unemployed manual occupations (14)</td>
<td>113 Male, manual occupations (37)</td>
<td>114 Mainly male, straight from education, university q. (28)</td>
<td></td>
</tr>
<tr>
<td>Kilkis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121 Male, unemployed or straight from education, university q. (44)</td>
<td>122 Both genders, in-migrants, manual occupations (53)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oeste</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>211 Mainly male, in-migrants, manual occupations, previous e-</td>
<td>212 Female, in-migrants, administr. Occupations (37)</td>
<td>213 Mainly male, straight from education, previous e-experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>Code</td>
<td>Description</td>
<td></td>
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<td>------------------------------------------------------------------------------</td>
<td></td>
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</tr>
<tr>
<td>Baixo Alentejo</td>
<td>221</td>
<td>Male, straight from education, university q. (31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>222</td>
<td>Mainly male, manual occupations, previous e-experience (46)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>223</td>
<td>Mainly female, administr. Occupations, parental e. (31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwestmecklenburg</td>
<td>311</td>
<td>Male, straight from education &amp; manual occupation (17)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>312</td>
<td>Mainly male, managerial occupations, university q. (18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>313</td>
<td>Male, professional occupations (8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waldshut</td>
<td>321</td>
<td>Managerial occupations (18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>322</td>
<td>Straight from education (14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>323</td>
<td>Professional occupations (14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bialystok</td>
<td>411</td>
<td>Mainly male, straight from education, parental e (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>412</td>
<td>Male, manual occupations (23)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zary</td>
<td>421</td>
<td>Male, manual occupations (15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>422</td>
<td>Mainly female, Unemployed &amp; administr. Occupations (23)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>423</td>
<td>Male, in-migrants, managerial occupations, university q. (13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>424</td>
<td>Mainly male, professional occupations, previous e-experience, parental e. (10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>425</td>
<td>Mainly male, straight from education, university q. (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumbria</td>
<td>521</td>
<td>Mainly female, administr. Occupations (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>522</td>
<td>Mainly male, in-migrants, professional &amp; managerial occupations, university q. (31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>523</td>
<td>Manual occupations (19)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diagram 22. Case Study Areas: The Context

Diagram 23. Incidence of Entrepreneurship by Case Study
Diagram 24. Entrepreneurial Clusters by Case Study Area

Diagram 25. Modelling the Entrepreneurial Environment

Diagram 26. Modelling the Entrepreneur
Diagram 27. Entrepreneurial Behaviour in Context
**PROGRAMMES AND POLICIES TO SUPPORT ENTREPRENEURSHIP**

**Table 25. Germany.**

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Areas supported</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>European Policies</strong></td>
<td>Objective 1: Focus on the development of rural areas. Special measures for the renewal of villages and the re-parrcelling of agricultural land. Focus on improving infrastructure, the construction of new roads and support of farm enterprises, food processing and marketing. Focus on the (re-)training of workforce and employees. Focus on technical measures for environment protection. SME support policies in rural areas: Interreg II for cross-border co-operation by giving loan grants. Community initiatives to support the adaptation of SMEs to the single market by giving grants funded by the EIB and providing subsidies to improve technology transfer and economic conditions of SMEs. Support for the foundation of joint ventures between SMEs in different EU countries. ADAPT Programme providing subsidies to support education and employment conditions in SMEs. 3rd Multi-Annual Programme for SMEs in the EU (until 2000), providing subsidies for improving organisation, financial situation, innovation, training, research and internationalisation of SMEs.</td>
</tr>
<tr>
<td><strong>National Policies</strong></td>
<td>Joint Initiative for the Improvement of Regional Economic Structures (JIRES): Focus on regional labour markets with a certain structural weakness. Assisted areas are largely identical to those supported by the EU SFs. Initiative for the improvement of the structure in agriculture and the protection of the coast (JIASCP): Emphasis on support to strengthen the competitiveness and the efficiency of agriculture, forestry and food industry. Focus on triggering productive investment in assisted areas through grants in order to create/maintain employment in agriculture and related sectors. Consists of measures which support the integration of agriculture into the rural economy, the fostering of sustainable agriculture and the attractiveness of rural areas. Promotes agriculture investments from farm enterprises by giving interest-subsidised loans. Other measures include: compensation payments in LFAs; agri-environmental programmes; programmes for village renewal and re-parrcelling of agricultural land. Support for improvements to production and working conditions in agricultural and forest enterprises. Support for the re-organisation of rural property and the creation of rural areas. Support for non-agricultural income use of agricultural and forestry buildings. Support for construction in cultural heritage and water regulation. Support for improvements to the market structure in the agricultural sector. Support for the protection of the coastline.</td>
</tr>
</tbody>
</table>
| National Policies | SME support policies:  
Supply of venture capital for new businesses.  
Development of technological networks.  
Provision of direct-investment capital to young innovative businesses.  
Provision of subsidies and grants, as well as favourable tax treatment.  
SME support policies in rural areas include:  
SME programmes to support business start-ups.  
Subsidised loans, equity finance and guarantees on behalf of the Federal Government provided by the Deutsche Ausgleichsbank (German Development Bank). Supports business start-ups, environmental protection projects, educational and social programmes, and mobilises venture capital for young high-tech & low-tech companies.  
Innovation programmes to foster entry into new markets and introduction of new products as well as research for new products, production processes and services.  
Investment programmes to support enterprises in technology or emerging markets by providing trade investments or extending loans.  
Improvement of Competitiveness of SMEs and self employment by provision of subsidies to encourage new business formation, improving economic framework and fostering information and education training.  
Programmes for supporting renewable energies by extending subsidies.  
Incentives for improvement of innovation through research and subsidies for the introduction of research results into production. |
|---|---|
| National Policies | SME support policies:  
Support programmes for new enterprises in innovative and technology oriented areas by offering venture capital and shareholding.  
Support programmes to develop consulting and information services in crafts by provision of subsidies. |
| Policies at State Level | Case Study: Länder of Mecklenburg Vorpommern:  
“Landesaufbauprogramm” (Development Plan for the State) is based on six pillars: support for consulting; support for business start-ups; fostering the implementation of new technology; subsidies for the use of renewable energy; approval of consolidation loans; support for export and sales of enterprises.  
Case Study: Baden Württemberg:  
Support is more orientated towards enterprises active in new technologies.  
Range of measures including: venture capital and loan guarantees, interest subsidies, enterprise foundation, sales and export promotion, shareholding facilities and infrastructure support.  
Regional support to support enterprises in a wider regional context. Development programme for rural areas, supporting structural measures in rural areas and infrastructure investment. Investments in employment, infrastructure, housing and the supply of basic goods are supported.  
Support for tourism and tourism infrastructure, including the modernisation, extension and creation of SMEs in hotel and restaurant businesses.  
Support for environmental protection including improvement of emission standards, treatment of industrial and business sewage, and promoting the use of alternative/renewable energy sources. |
Table 26. Greece.

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Areas supported</th>
</tr>
</thead>
</table>
| EU Objective 1       | Sectoral Operational Programmes (SOPs): Support measures for the whole country  
Primary Sector SOP supporting major construction works in agricultural infrastructure and providing incentives to young people to become farmers in rural areas.  
Industry SOP provides grants to new or existing manufacturing and service firms covering infrastructure provision, management methods, subcontracting and networking, innovation and vocational training.  
1994-1999, Industry SOP targeted SMEs and micro firms with additional measures and resources from the EU’s SME Community Initiative.  
2000-2006, SOP SME measures include support for entrepreneurship in special population groups, for handicraft and art units, DME networking, SME sub-contracting, and export activity.  
Tourism SOP involves upgrading and expanding tourist infrastructure.  
Regional Operational Programmes: Applicable at regional (NUT III) level, ROPs are tailor-made programmes targeting specific regions.  
1994-1996, ROPs included measures to support agro-tourism and handicraft enterprises, facilitate access to banking system, promote innovation and subcontracting, and up-grade industrial infrastructures. Also provided start-up support to vulnerable groups of the population. |
| EU Objective 1 (cont’d) | 2000-2006, ROPs include: marketing of quality agricultural produce (grant up to 50% of the eligible cost and up to 100,000 Euros per case); improve social infrastructure in rural areas (grants covering total cost of public projects and up to 60% of private projects); diversification in farm and off-farm activities; support for tourist and handicraft activities (grant up to 60% of the eligible cost); improve competition of agricultural holdings; support for primary manufacturing food industries; support for manufacture and marketing of forestry products; provision of consulting services through intermediary agencies. |
| EU LEADER Initiative | Provides grants for initiatives in rural areas in the fields of leisure and culture, environment and nature conservation, information technology and communications.  
The promotion of rural areas and local products.  
Support for SMEs, particularly support for modernisation investment projects in SMEs producing local food products.  
Upgrading of infrastructure in agro-tourism and training programmes in agrotourism.  
Upgrading of cultural infrastructure. |
| European Social Fund  | EMPLOYMENT (1994-99) promoted entrepreneurship to special groups of the population facing difficulties in the labour market. NOW included support for women wishing to manage SMEs or wishing to become self-employed. It also established an entrepreneurship incubator. HORIZON included support for innovative approaches to work organisation and reducing the labour costs to employers of integrating people with disabilities. INTEGRA provided support to disadvantaged and vulnerable groups. YOUTHSTART provided training and employment opportunities to young people. |
### Incentives Law 2601/98

Manufacturing and Service Firms:
- Influences the investment activities of new firms by providing grants and interest rate subsidies for bank loans.
- Supports existing firms through generous tax reductions and interest rate subsidies.
- Peripheral areas receive up to 40% grants of total investment costs and 40% reduction in loan interest rate.
- Investment projects in high technology, new product and software developments receive up to 25% of total investment costs and reductions in loan rates.

Tourism Businesses:
- Support for the construction of new hotel buildings and the expansion/modernisation of existing hotels. A grant of up to 25% of the investment cost is available in the most peripheral areas.
- Other tourist activities, in Greece, are subsidised with grants of up to 40%: restoration of traditional houses or conversion of existing buildings into hotels; creation of special facilities, including sea therapy centres, health centres, conference facilities, sports and training centres; ski Resorts and marinas.

### Table 27. Poland

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Areas supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Assistance Programmes</td>
<td>A range of programmes including assistance from: EU Phare Programmes; the OECD; FAO; World Bank and international banks. Helped with the establishment of modern project design and delivery methods and institutions (e.g. business incubators, financial and tax counselling services). EU PHARE programme: helped with transition to a market economy and institutional change; supported retraining of farmers, local government and administrative personnel; supported the development of village infrastructure and rural tourism promoted entrepreneurship. World Bank provided 3 loans for the modernisation of the agricultural food industry, for development of agriculture, and the adaptation of agriculture and village.</td>
</tr>
<tr>
<td>Macro-Regional Programmes</td>
<td>The Regional Programme of Economy Restructuring and Counteracting Unemployment in administrative provinces of Northern Poland. The Development Programme of Village and Agriculture in Southern Poland.</td>
</tr>
<tr>
<td>The Agricultural Strategy for Poland</td>
<td>Privatisation of State-owned farms and firms providing technical services for agriculture. Elimination of monopolies and privatisation of companies dealing with food processing and wholesale trade. Restructuring of the co-operative sector. Creation of favourable conditions for development of new firms dealing with food processing, services and trade. Infrastructure development of villages and small towns to encourage SMEs to locate in rural locations (supported through the Cohesive Development Policy of Village and Agriculture) Reform of economic and tax laws.</td>
</tr>
<tr>
<td>Instruments</td>
<td>Areas supported</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Community Initiative LEADER (Establishment of Links between Local Development Activities)</td>
<td>Support to diversification of economic activities (rural tourism, handicrafts, modernization of the private sector – SMEs, neighbourhood services). Adding Value and Marketing of local agricultural, forestry and fishery products (indigenous animal species, national crop varieties, cottage agro-food products, initiatives to produce and market products with high added-value and quality).</td>
</tr>
<tr>
<td>Community Initiative «NOW» Axis (New Opportunities for Women)</td>
<td>Support to training, orientation and introduction of women to the labour market.</td>
</tr>
<tr>
<td>Community Initiative in support of SMEs (Small and Medium Enterprises)</td>
<td>Promotion of company competitiveness in manufacturing, commerce and the services’ sector, as well as building and tourism companies. Support to the development of technological competence in enterprises.</td>
</tr>
<tr>
<td>Local Employment Initiative</td>
<td>Support to small-scale initiatives aiming at creating jobs (up to 5) in all areas or sectors of economic activity.</td>
</tr>
<tr>
<td>PAMAF (Programme to support Agricultural and Forestry Modernization)</td>
<td>Rejuvenation of the entrepreneurial fabric and farm modernization. Creation or modernization of production units.</td>
</tr>
<tr>
<td>RIME (Incentives to Micro-Enterprises)</td>
<td>Support to micro-enterprises and SMEs (manufacturing, selected priority activities in tourism and other services and commerce (only in what concerns job creation).</td>
</tr>
<tr>
<td>SAJE (System of Support to Young Entrepreneurs)</td>
<td>Support to young entrepreneurs (in manufacturing, commerce, tourism, handicrafts, culture &amp; leisure, communication, the environment, services preferentially targeted to enterprises, activities promoting innovation or factors determining competitiveness, such as quality assurance and design).</td>
</tr>
<tr>
<td>Type of policy</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>EU LEADER Programme</td>
<td>LEADER II (1994-1999): Assistance to projects which help promote the economic development of areas covered by Local Development Groups within EU designated Objective 5b areas. LEADER +(2000-2006): LEADER+ aims to involve local communities in developing and testing new approaches to integrated and sustainable development. It focuses on small-scale, innovative projects addressing local rural development issues within the framework of a local development strategy. It follows on from previous LEADER schemes but has some key differences. Most importantly, it is opened up to new areas and is not confined to the new Objective 1 and 2 SF areas.</td>
</tr>
<tr>
<td>EU Objective 5b</td>
<td>Objective 5b (1994-99): This applies to rural areas with a low level of socio-economic development, a high dependency on agricultural employment, low agricultural incomes and population problems. In England six areas were designated to receive assistance. These were: Cornwall and parts of Devon and Somerset; Most of Shropshire and parts of Hereford and Worcester; Parts of Lancashire, North Yorks, Durham, Cumbria and Northumberland; Lincolnshire; The Fens, rural Norfolk and the Waveney Valley; and Staffordshire and Derbyshire. Funding continues until end of 2001</td>
</tr>
<tr>
<td>New EU Objective 2</td>
<td>EU Objective 2 (2000-2006): Objective 5b has now been integrated into the new Objective 2 programme. Eligible rural areas suffer from low population density or high levels of agricultural employment and an average unemployment rate above the EU average or a decline in population. Assistance can be extended to rural areas with an ageing or diminishing agricultural labour force. Areas covered include: Northumberland and County Durham; Rural Derbyshire and Lincolnshire; Rural Lancashire; Norfolk and Waveney; Parts of Devon, Somerset, South Hams and Torridge; Staffordshire, Herefordshire, and South Shropshire; Yorkshire; Parts of Wales and Scotland.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Objective 1</td>
<td>EU Objective 1 (1994-1999): Promotes the development and structural adjustment of regions whose development is lagging behind (GDP per capita of less than 75% of the EU average). In the UK, three regions received assistance: Northern Ireland; Merseyside; Highlands and Islands Enterprise Area. EU Objective 1 (2000-2006): Objective remains the same but incorporates Objective 6. In the UK, Northern Ireland and the Highlands and Islands have transitional Objective 1 funding until 2005. The other Objective 1 regions are: South Yorkshire, West Wales &amp; the Valleys; Cornwall and the Isles of Scilly; and Merseyside.</td>
</tr>
<tr>
<td><strong>The England Rural Development Plan</strong></td>
<td>England Rural Development Plan (2000-2006): This describes how measures under the EU Rural Development Regulation (RDR) will operate in England outside Objective 1 areas but including Objective 2 areas. Measures include the introduction of a new Rural Enterprise Scheme (RES), providing targeted assistance to support the development of more sustainable, enterprising rural economies and communities.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td><strong>The Rural Development Programme</strong></td>
<td>The Rural Development Programme: The RDP promotes economic and social development in England in designated Rural Priority Areas.</td>
</tr>
<tr>
<td><strong>Single Regeneration Budget</strong></td>
<td>Single Regeneration Budget: The SRB provides resources to support regeneration initiatives in England. Its priority is to enhance the quality of life of local people in areas of need by reducing the gap between deprived and other areas and between different groups.</td>
</tr>
<tr>
<td><strong>The Phoenix Fund</strong></td>
<td>The Phoenix Fund: A development fund to promote innovative ways of supporting enterprise in deprived areas.</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>The Coalfields Enterprise Fund</strong></td>
<td>The Coalfields Enterprise Fund: The fund supports SMEs with high growth potential in the English coalfields.</td>
</tr>
<tr>
<td><strong>The Coalfields Regeneration Trust</strong></td>
<td>The Coalfields Regeneration Trust: The trust is an independent grant giving body, which provides grants to community groups, organisations and agencies, for regeneration projects in coalfield areas.</td>
</tr>
<tr>
<td><strong>Food From Britain</strong></td>
<td>Food From Britain: FFB provides specialist business development services primarily for food and drink companies wishing to export. FFB provides funding for a network of regional speciality food groups, together with a range of national trade development services.</td>
</tr>
<tr>
<td><strong>Core Business Support Services</strong></td>
<td>Business Support Services: The Small Business Service provides a range of key business support services to SMEs. These services are provided through 45 SBS franchises. Services are delivered primarily by Personal Business Advisers with specialist counselling services</td>
</tr>
<tr>
<td>Targeted Business Support Services</td>
<td>Targeted Business Support Services: Specialist programmes include: High Growth Start-up Programme; ISI Local Partnership Fund; SMART Scheme.</td>
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</tr>
<tr>
<td>Loan &amp; Equity Finance</td>
<td>Loan &amp; Equity Finance: Includes: The Small Firms Loan Guarantee Scheme; The UK High Technology Fund; Regional Venture Capital Funds.</td>
</tr>
</tbody>
</table>
Table 30. Good Practice Policy Questions

<table>
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<tr>
<th>What Constitutes Good Practice?</th>
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</table>

The identification of good practice policy related to rural enterprise is predicated on some understanding of what constitutes ‘good’ practice and the criteria that might be used in identifying it. This is not easy, since judgements about what is good practice are likely to depend on who is doing the assessment and their reasons for doing it. It is also likely to depend upon various contextual factors, including the particular historical and cultural features of the countries and regions in which the policy has been used. One of the main purposes of policy evaluation is to identify good practice for wider dissemination. However, what is appropriate and works well in one context may not work so well in another, with the implication that the transfer of a given policy from one context where it is proving successful to another context is, by itself, no automatic guarantee of success. This indicates the need to adapt policies to the local circumstances in which they are applied.

Policy Questions

The identification and assessment of ‘good practice’ policies in the various CSAs has tried to address the following questions:

The Initiative

- What is the rationale for the policy?
- How central is generating new enterprises/supporting existing enterprises to the initiative?
- What is offered to businesses by the initiative?
- What are the potential benefits to businesses?
- What is the target group for the policy?
- Describe the size, sectoral, locational, age and gender characteristics of participants
- Who is responsible for delivering the policy?
• How many staff are involved in delivering the programme? What is the background of staff that deal with businesses?

• How is it funded? What is the balance between different sources of funding? To what extent do businesses pay for services received? Is it intended that the initiative becomes self-financing?

Needs of Businesses

• What are the needs of entrepreneurs and potential entrepreneurs in remote/peripheral rural areas?

• In what ways are these distinctive to firms in remote rural areas (compared to more accessible rural areas or urban areas)?

• Is there any difference between expressed needs and latent needs?

• To what extent do needs vary at different stages of developing a business?

Appropriateness of policies

• To what extent is the policy initiative sensitive and appropriate to the distinctive needs of entrepreneurs in rural areas?

• To what extent do these result from being in a remote rural area?

• What data/evidence is available on the needs of the target group?

• What particular barriers/constraints are potential entrepreneurs and existing entrepreneurs facing?

Delivery Issues

• What are the main characteristics of the businesses served by the policy initiative?

• What are the main characteristics of the area in which they are located? How do the characteristics of the area constrain or facilitate delivery issues?
• What specific challenges do these characteristics present from the point of view of delivering effective policy? How are these challenges being addressed?

• How are clients/participants identified? Identify the extent to which clients are proactively sought and identified?

Elements of Good Practice Policy

• Are there aspects of the policy initiative in which you are involved that you would consider ‘good practice’? If so, in what respects? Are these aspects likely to be transferable to other rural areas/contexts?

Evidence of Impact and Effectiveness

• By what criteria is the success of the initiative assessed?

• Are monitoring/evaluation data (qualitative and quantitative) available that would enable us to assess the impact of the policy initiative? Have any modifications been made to the programme as a result of monitoring and evaluation exercises?

• What lasting benefits (if any) do businesses gain from participating in the programme?

Internal Coherence

• What are the specific aims & objectives of the policy initiative? How are these implemented in practice? To what extent have these aims and objectives been achieved?

• Is there any conflict between the different objectives of the initiative (e.g. in the case of initiatives, which have an economic development role as well as a business support role)?

External Coherence

• How does the policy initiative relate to other aspects of the public and private sector business support system?
• What is available to enterprises through the policy initiative that is additional to that which can be obtained elsewhere?

• Is there some overlap and possible confusion with other initiatives aimed at supporting new and existing rural enterprises?

• To what extent does the initiative fill a gap in the support system?

• What network links exist (if any) with other support organisations?

• Sustainability

• To what extent are the benefits of the policy initiative likely to continue once public sector funding ceases?

• Is there an exit/forward strategy for the initiative?
European Commission

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