
# DEVELOPMENT STRATEGIES IN THE ALPINE-ADRIATIC REGION

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# PREFACE

*It is my pleasure that, as the Chairman of the Alps–Adria Working Community, I can launch this volume of studies on "Development Strategies in the Alpine–Adriatic Region".*

*It is not incidental that the Science and Technology Cooperation Group of the Economic Committee of our Working Community has included this work in its official publications. The goal of this workshop is to elaborate strategies and training systems, to promote cooperation of institutions, firms and academics, and to transfer technology, so that it can contribute to the success of the Alps–Adria Working Community as well as to the integration of Europe.*

*I am convinced that this volume serves the above goals. Although it is currently aimed at the professional community, it may be a good starting point for activating a broader publicity. This is especially important because the opportunities and information provided by the cooperation within the Alps–Adria Working Community need not only to be seen accurately but also to be available and observable by the citizens of the participating provinces of this regional cooperation.*

*It is our determined goal that, in the 1993/94 period of Chairmanship, the elegant but closed windows of our conference rooms be opened. We wish to complete an increasing number of projects, the effect of which, even if not immediately, reaches individuals, which advance the formation of direct relations between citizens of these regions. An important step on this way is collecting, analyzing, and publishing the experience acquired so far.*

*In the era of the separated Europe it was one of the main goals of the Working Community to be a "bridge" between East and West. It was a bond that tried to create humanistic relations with its own tools, between contradictory ideologies within the region.*

*The political flavor of this "bridge" role has disappeared. Currently it is partly up to us, the members of the Working Community, that the East–West distinction be only a geographical one in the future, to which new forms of cooperation must be revealed. Presently we have to contri-*

*bute to the demolition of the "iron wall" on the road of economic co-operation, to strengthen this way the links among regions.*

*It is the standpoint of the Alps–Adria Working Community that a unified Europe can emerge through the cooperation of regional administrative units smaller than a state. In this situation it is possible, what is more: it is natural, that connections with regions and counties of other countries might be equally important for a region than similar links to other parts of their own countries.*

*This way the Europe of the future will be such a Europe that is united in its multi-colored nature. It will be a continent comfortable to live on; and this will hopefully be advanced by this publication, too.*

*Dr ISTVÁN GYENESEI*
*Chairman of the*
*Alps – Adria Working Community*

# PART ONE

# INTERREGIONAL COOPERATION IN CENTRAL EUROPE

# 1 INTERREGIONAL COOPERATION AND INTERNATIONALISATION OF REGIONAL ECONOMIES IN ALPS-ADRIA

RICCARDO CAPPELLIN

## Introduction

The European Community is currently undergoing a dual process in which there is a "deepening" economic and political integration embodied in the forthcoming Single European Market, the creation of an Economic and Monetary Union and the increasing power of such Community institutions as the European Parliament. At the same time there is a "broadening" process taking place in terms of the geographic framework of the European economic and political integration, given that this represents the internal circle of diverse forms of international cooperation, which in the coming years will be extended to EFTA countries and Eastern Europe.

The growth of interregional cooperation at the international level seems to imply two mutually contrasting processes. The first process is the increasing internationalisation of regional economies. This implies not only increased exports but also greater investment in foreign countries on the part of local firms and an increasing integration of the networks of public and private services, which allow the circulation of goods, capital, people, services and information. The internationalisation process demands a growing transfer of political power from regional institutions to national and European Community institutions. This gradual reduction of local autonomy is often justified with the excuse that many problem areas, for instance that

of the environment, are supraregional by nature and therefore require intervention by national and EC authorities.

The second process concerns the deepening perception by public opinion of the differences that exist between the various regions in an increasing larger area of European integration and of their respective regional identities. This is underlined by the recent explosion of ethnic conflicts in many countries, not only in the Eastern bloc but in Western Europe, too, and by the demands that greater political autonomy be awarded to regional authorities in order to allow greater political participation by the inhabitants of those regions. This process appears to be directly linked to that of the deepening and broadening of European economic and political integration since it implicitly demonstrates the political desire on the part of regional communities to protect and promote their own autonomous role within the greater European arena, free from controls exerted by their own national governments.

This study has been elaborated in order to analyse these problem areas. It indicates that alongside the traditional "regional problems" of economically lagging regions or those of sectorial restructuring regions which are specifically considered by EEC policies, new regional problems are arising and in the future these will require careful attention on the part of national and Comunity institutions. The existence of barriers or obstacles, preventing greater integration between the various regional economies, emphasizes the fact that the creation of the Single European Market or the development of European economic and political integration must become an autonomous objective in regional policies quite separate from economic development, within the context of an European policy of "aménagement du territoire" or of management of the European space.

First of all, a problem of regional studies and policies is to encourage integration between neighbouring regions in different countries in order to attain the critical mass needed for them to be actors within an international economy that is too large for an individual region to compete successfully. This may be of extreme importance for some border regions, such those on the border between the European Community and the countries of Eastern Europe, which may be considered peripheral within the national context, but are central within a larger European perspective and therefore act as a gateway or interface in relations between the different countries.

Secondly, the objective of greater economic integration means that the development of transport and communications networks and more generally material and immaterial infrastructure systems is of vital importance. These constitute modern services for companies and organizations which will be crucial in the design of the structure of the European space.

This study seeks to examine the potential for and obstacles to the development of interregional cooperation. Cooperation between regional authorities must expand alongside the growth of increasingly sharp interregional competition within the great European economic space. It also represents the only effective alternative to bureaucratic coordination of individual regional policies by national and Community authorities. Interregional cooperation illustrates that the development of European integration should not only lead to more powerful European institutions, but also to the growth of federal institutions, which may be compatible with the political autonomy of regional institutions.

## The theoretical bases for interregional cooperation

The growing importance of international and interregional relations and their impact on regional and national economies have obliged individual regional authorities to strengthen their contacts with other regional administrations of the same country and of foreign countries in order to develop specific schemes of interregional cooperation. The capability of regional governments for undertaking projects at first hand is even more important in the development of transnational cooperation schemes because on a national scale the coordination of various regional programmes may be imposed by the national government. In the absence of a supernational authority, coordination of programmes involving regions from different countries can only be achieved if there is an autonomus initiative of the various authorities concerned.

A cooperative approach to relations between regions in different countries constitutes an alternative to the competitive and conflictual approach which in the past has been typical of the relations between border regions (*Maillat*, 1990). These new relations may help toward overcoming those frequent, but often objectively less important, reasons for bilateral conflict. Indeed, closer cooperation between regi-

ons of different countries has often enabled border regions to rediscover for themselves a central geographical position within the greater European context.

Interregional cooperation can also help towards overcoming the purely competitive and conflictual nature typical of relations between central areas of the various countries and border regions, which are often perceived as peripheral in national terms. Finally, it must also be emphasized that interregional cooperation on a transnational basis is not only beneficial to the border regions themselves, but is extremely positive for all regions, above all for the peripheral EEC regions, such as the Mediterranean regions, which only through a more committed cooperation may escape from a situation of comparative isolation.

Interregional cooperation can be justified from a theoretical point of view on a variety of reasons, which are similar to those which, according to recent studies of industrial economics, justify the growth of agreements and other forms of cooperation by firms, particularly at the international level. In particular, the following eight cooperation factors may be indentified. These function both individually, but more often in simultaneous combination.

First, a precondition essential to implement any interregional cooperation scheme is the existence of common cultural values in the regions concerned, given that any form of cooperation can only develop when built on a foundation of mutual knowledge and trust.

Second, the development of interregional alliances is allowed where network economies exist (*Teece*, 1982, 1989; *Cappellin—Nijkamp*, 1990; *Viesti*, 1989), in terms of exchange of information and know-how in common policy areas among the regions concerned. The incentive to cooperate increases as does the number of regions involved, as this allows the access to a greater pool of knowledge and expertise that would have been available within the individual regions. Obviously, this type of cooperation demands that the information exchanged is a kind of "public good" and that its transfer to others does not imply that the original owner will loose it. It is also essential that the transfer of such information does not substantially modify the competitive advantage of one region over others in economic terms. This type of cooperation is particularly important in areas of culture and pre-competitive basic research.

Third, interregional cooperation may derive stimuli from the objective of using common resources jointly and in a coordinated man-

ner. The purpose of this is to avoid the creation of external diseconomies deriving from a one-sided use of these resources. Typical here is the utilization and management of common natural resources such as the sea and common water courses but it could also include joint-ventures in developing common services such as specific transport infrastructure, where interregional cooperation helps avoiding such problems as "free riding" or the free use of services set up by other regions.

A fourth factor, closely connected to that above, is the need to overcome specific size thresholds or to exploit specific economies of scale in the creation of certain public services such as airports, universities and research centres, international fairs, advertising campaigns, etc. Clearly, in order for this factor, and also the previous factor, to be operative, the regions involved must be geographic neighbours, given the need for easy mobility on the part of the potential consumers for these services between the particular regions considered.

The fifth consideration is that interregional cooperation may be necessary because the various regions represent an organic geo-economic basin or because of economies of scope between the instruments of different policy areas. In a territorial context, economies of scope may be seen in the fact that in the management of different services there are significantly complementary relations requiring an integrated approach and a larger planning area than an individual region. This fact is even more important within the context of socio-economic planning and industrial policy where the effectiveness of the particular measures demands that the area concerned have a high level of internal inter-connection or in any case more important than the particular area's relations with other external areas. Where this is the case, a variety of economic policy instruments can be used in order to achieve a series of different but interrelated objectives and spill-over effects may be avoided, which would weaken the effectiveness of those instruments.

The sixth factor for interregional cooperation is to reduce the various "transaction costs", whether material or immaterial, which constitute an obstacle to economic relations between the various regions and to greater economic integration between them (*Cappellin*, 1989a, 1989c). Therefore, another aim of interregional cooperations is to provide information regarding legal systems within the various countries and regions, to remove various artificial barriers, to imple-

ment programmes which may stimulate cooperation between private organisations and firms of the various regions and to create the transport and communication infrastructure so essential to link the economies of the individual regions.

Seventh, interregional cooperation is vital in order to limit or regulate the level of competition between the regions, thereby avoiding economic conflicts and retaliatory measures. One example of this is competitive incentive schemes, designed to attract outside investments or competition between different regions to obtain important national public works or to be selected as the site of major events, such as international exhibitions and sporting events decided by the national government or even at the international level.

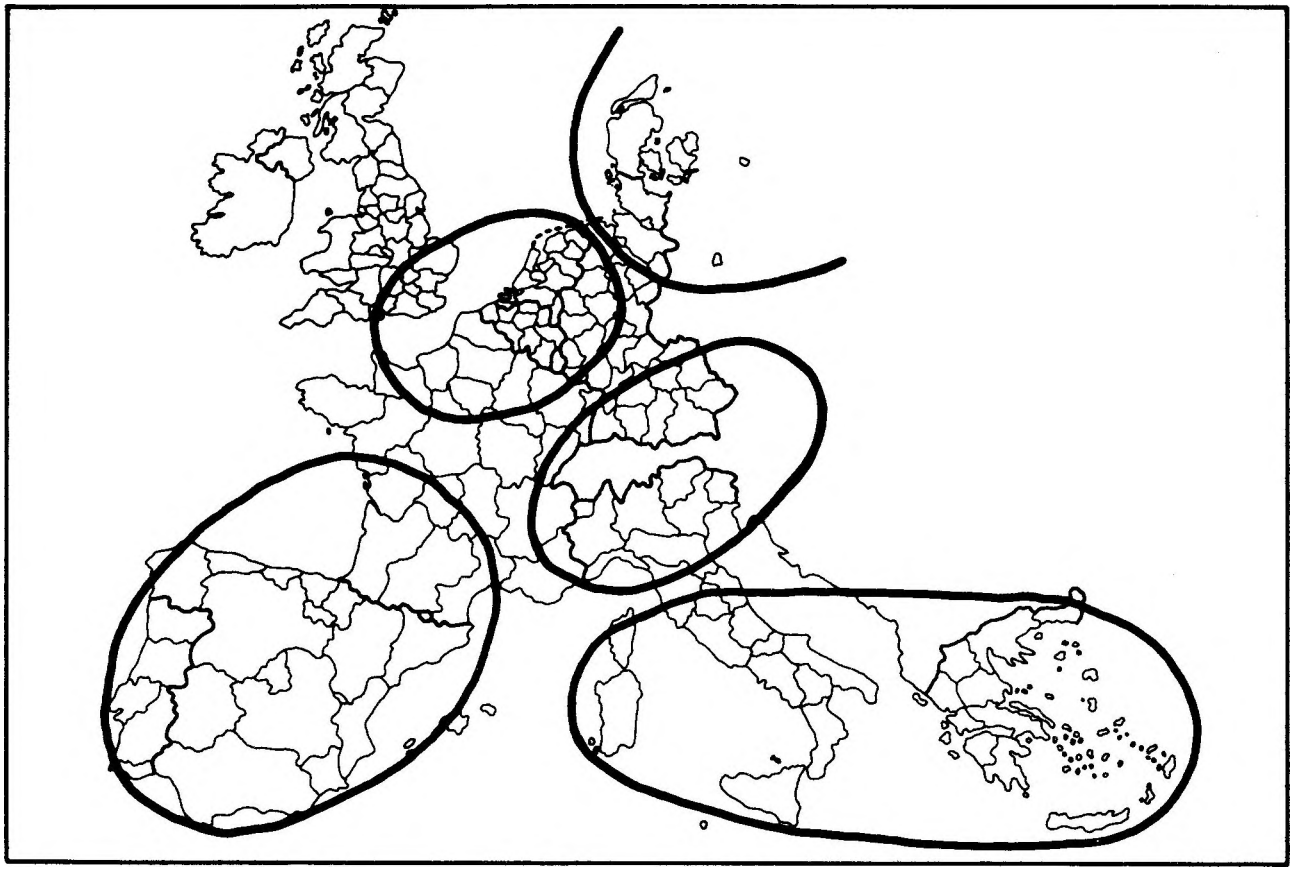
Finally, interregional cooperation is essential if the regions wish to protect and expand their areas of active autonomy, free of interference from national governments or EEC institutions, or if the regions seek to influence decisions taken at these levels. Therefore, an eighth factor that justifies interregional cooperation is to increase the joint bargaining power of the separate regions in their relations with outside organisations (or any "common external enemy"). Thus, cooperation provides a form of support to individual regions in competition with other regions or with other regional alliances on a European scale.

The interrelationship between the various factors comprising a process of interregional cooperation can be seen in *Figure 1.1.* First and foremost, the purpose of interregional cooperation is to achieve a kind of synergy whereby the output generated by cooperation is greater than what the individual regions could achieve on the basis of their own resources alone. Through cooperation, each region can have access more or less freely to the resources of other regions, creating positive synergies from the combined effect of these and its own endogenous resources. These resources are essentially the labour force, technological and organisational know-how, specific production capabilities, priviledged access to specific information circuits or special networks, allied to other factors.

Interregional alliances have a specific time and geographical dimension. They are influenced by the distance between the actual regions considered in that socio-cultural and economic characteristics tend to be more similar between neighbouring regions. This distance factor hampers the accessibility of one region's resources to those of another region; in turn it can be modified by mutual decisions aimed

Figure 1.1

*Urban systems and interregional cooperation in Europe*



at reducing "transaction costs", transport, communication and coordination costs between the individual regions that belong to that alliance.

Secondly, interregional cooperation is a circular cumulative process. The longer an alliance lasts, the greater will be the pool of common resources available to the regions concerned and consequently the range of objectives the regions jointly agree to attain will be wider. Alliances tend to become more stable with the passage of time because the growing reciprocal knowledge and trust between the regions induces them to direct the development of their own resources toward the achievement of jointly agreed objectives and consequently the regions become more closely bound together in a kind of "idiosyncratic relationship" (*Williamson*, 1981).

Every alliance demands a common decision-making process and therefore common procedures and institutions which will continue to identify new common objectives and make decisions on how these are to be achieved. The capacities and resources of the individual regions determine the characteristics of the interregional alliance's decision making structure. However, the jointly made decisions affect over the medium term the allocation of regional resources and encourage a specialisation in complementary areas.

The effectivess and efficiency of a common policy-making structure in an alliance depend on the existence of a common social and political identity. This may be helped by common values and historical tradition, the existence of common productive "know-how" or a similar "industrial environment", the existence of easy access transport and communication routes, close links between the urban centres of the individual regions where headquarter functions are concentrated together with services that manage the circulation of technological and economic information.

The policy-making structure within an interregional alliance may be more or less institutionalised and binding in type, ranging from sporadic agreements on specific topics to permanent coordination through to the harmonisation of respective administrative procedures and to the creation of binding forms such as common public institutions.

An alliance between regions can be compared to a kind of joint investment, or to the setting up of a company or a joint venture given that, as opposed to a commercial exchange, the individual regions are unaware what will be the future return on the resources they ma-

ke accessible to the other regions. They can only make forecasts, by nature provisional, of the benefits they will derive in the future together with the other regions and they have to decide the rules to be followed in allocating those benefits. Within this context, the setting up of interregional alliances requires regional public authorities to adopt an entrepreneurial approach and demand the development of a project design capability aimed at orienting the available resources towards new objectives, which implies a certain margin of risk.

There are a variety of measures that regional authorities may take to develop international relations. However, these measures are often incoherent as a whole both because they apply to widely differing sectors and because they are oriented towards widely differing countries and regions. Hence the need for strategic coordination targeting more clearly defined objectives and calling on different resources.

If the various aspects of international relations within a single region were coordinated, a form of regional "foreign policy" could develop (*Cappellin*, 1990b, 1990c; CNEL, 1990). In brief, this regional "foreign policy" could cover the following policy areas which correspond to the list of reasons described above, whereby interregional cooperation, including regions in different countries, is justified on a purely economic basis:

1) Information exchange between local and regional authorities on:
   - sectorial policies,
   - technologies applied to specific public services,
   - scientific collaboration between local universities,
   - common training courses for public employees, private sectors managers and personnel,
   - cultural and scientific exchange schemes;
2) Joint financing of services and infrastructures:
   - transport infrastructures,
   - communication infrastructures,
   - environmental protection of common water courses and marine areas,
   - economic investment and environmental improvement of urban centres, which represent nodes in international transport networks;
3) Interface activities with the private sector:
   - bilateral business centres — cooperation for regional trade fairs and exhibitions,

— joint business centres with other regions in outside countries,
— common programmes to encourage tourism and investment from other areas of the world;

4) Joint action with national and EEC institutions:
— planning of regional policy measures by national government and EEC,
— implementation of international cooperation schemes promoted by national governments,
— implementation of international cooperation schemes between the EEC and other countries — pressure on national governments to coordinate legislation or integrate their respective measures which may affect border regions;

5) Regulation of competition between local and regional institutions in:
— transport sector — international trade fairs,
— localisation incentives.

From the above it is clear that regional "foreign policy" does not merely imply twinnings with similar institutions in other countries, nor does it mean an undue expansion into the field of national government prerogatives. In fact, regional "foreign policy" demands that a strategic approach be used, implying the following prerequisites (*Cappellin*, 1990d):
— identification of specific priority objectives,
— consultation at the regional level between the various public and private institutions in a particular region,
— concentration of available resources in a restricted number of programmes at the international level,
— gradual yet continous effort.

Foreign policy of regional governments has usually to date been restricted to the field of information. Results attained in this field may on the surface appear negligible in "operative" terms, but nevertheless they represent a development of crucial importance. This is because the gradual development of mutual knowledge and trust between the administrative bodies in the various regions is by nature a slow process. However, it is the fundamental basis for further development because without this essential element, it would be pointless even to consider more ambitious objectives. Furthermore, the "operative" effects of projects undertaken to date cannot be measured immediately given that the exchange of information and expertise has unquestionably led each administration to take a more modern

approach in their policies than if they had remained enclosed in an arrogant parochialism.

The problem to be considered now is how to progress towards more demanding international relations, such as joint financing of infrastructure programmes and common services or the reciprocal coordination in a joint bargaining process with national and EEC authorities.

Regional "foreign policy" needs not necessarily conflict with national governments' own foreign policy except where national governments explicitly aim to prevent the regions from establishing their own relations with other foreign regions and with the European Community itself.

Regional foreign policy must be based on the principle that there is no longer any aspect of the economic and social structure of a region that is not affected by constraints or opportunities deriving from an economic system that is constantly more integrated at the international level. Therefore, the regions, within the context of the policy areas belonging to them must necessarily take into consideration international constraints and opportunities.

From an economic point of view, it seems a natural step to give a legal definition of the specific areas of actions within which regional authorities may operate. However, these areas must be defined in functional terms, stating specific objectives and economic policy tools not within the regional authorities' sphere. There seems instead no economic justification, although there may be one from a strictly political point of view, for constraining interregional cooperation to a specific geographical area.

There appears to be no reason why the regions should have the power to make agreements with other regions of the same country and not with regions in other countries, especially if the latter belong to the European Community. It is an anachronism that at a time when people and firms have greater freedom of movement internationally than ever before and act according to the concept of free competition and cooperation with people and firms in other countries, local and regional institutions are artificially prevented from establishing a basis of cooperation to resolve mutual problems with similar institutions in other countries which are part of the Single European Market. The lack of coordination between local authorities in neighbouring countries inevitably entails conflicts and obstacles or a lack of efficiency in the use of resources. This represents a solid

case of "costs of non Europe", i.e., costs arising from a lack of European integration.

In conclusion, it may be said that regional "foreign policy" has the same overall objective as national foreign policy, i.e., to promote economic and political integration, but it differs from the latter in terms of its specific areas of action and the tools used given that it is only applicable in those areas and it may only use those tools that are the specific prerogative of regional authorities within the context of the legal constituency of a particular country.

## Conditions for creating interregional agreements

In order to identify the factors leading to the creation and development of interregional agreements a series of interviews was conducted with over 50 public institutions, private organisations and interest groups in four regions: Lombardy, Friuli Venezia Giulia, Bavaria and Carinthia (*Cappellin*, 1990d; *Fischer et al.*, 1990; *Funck–Kowalski*, 1990; *Grandinetti–Rullani*, 1990). These regions for more than 12 years actively cooperate in the framework of the "Alps–Adria Working Community" (ISPI 1988; *Cappellin*, 1989d). Therefore the empirical findings of this study confirm the existence of intense historical relationships among the regions of "Mittel Europa". However, they may also help in identifying general problems, which may be relevant for other schemes of interregional cooperation, .

The crucial factors for creating interregional and international agreements are the following.

### *Regional capabilities*

An interregional agreement implies the existence and optimization of specific complementary resources, material and immaterial, typical of the individual regions concerned.

The internationalisation of regional economies and development of various forms of cooperation on an interregional and international scale does not necessarily exclude a policy of regional "endogenous development" (*Cappellin*, 1983, 1990a; *Konsolas*, 1990; *Bianchi*, 1990). Interregional cooperation is based on the fact that regions have different endowments of resources and different characteristics.

The expansion of international relations between regional institutions and the various collective organisations will insure that specific aspects (technological, productive, commercial and also infrastructural, social and environmental factors) of competitive edge inherent to a particular region are utilised to the maximum. Regional culture and identity constitute a unique resource, form the basis of a common social identity, create a sense of mutual belonging and therefore are a source of inspiration, which stimulates the capability to adopt initiatives by the inhabitants of a region in an international framework.

The strong trends toward a cultural uniformity between various countries and regions, as the "global village" image would imply, must not lead us to forget that the real world has always been and most probably will always be characterised by historical differences, variations in culture, terms of references and pattern of industrial development. The individual regions and countries will always be separated by a geographic and social distance. International relations between regional and national governments have the task of ensuring that these distances are overcome and to foster the special or unique role that each region and country can play within an interregional and international context.

The different endowments of resources between the various regions, represented by their respective production „know-how", whether technological or commercial and organisational, which is embodied in the local labour force capacity and ability and represents the results of the knowledge and expertise that has been accumulated in that region, justifies the implementation of different strategies of industrial and international policy on the part of the various institutions. These strategies must be appropriate with respect to the specific characteristics of the particular regions concerned and those of the other regions or countries with which they seek to promote cooperative relationships.

### *Common objectives*

An interregional agreement implies the existence, the constant renegotiation and the operative identification of common objectives. To a large extent, these must entail the use of those economic and territorial factors described above which justify interregional cooperation, such as:

— economies of scale,
— complementary individual resources,
— common natural resources,
— close integration between different socio-economic systems,
— network economies in the circulation of information,
— reduction of uncertainties and reciprocal competition.

The creation of cooperation agreements between regions appears to be even more effective if such agreements do not merely intend to solve problems of internal relations between the regions involved, but also are based on the mutual consent of the regions involved to a common strategy of relations with the areas outside the agreement itself. In fact, external challenges and opportunities increase the bilateral cohesion within an interregional cooperation agreement.

Interregional cooperation ensures the individual regions greater international "visibility", improves their image as perceived by the outside world and strengthens their reputation. It also reinforces their contractual "bargaining power" in their relations with other regions or national and Community institutions.

Cooperation means both that specific objectives may be attained more efficiently and optimum use is made of local resources. It also means that these objectives may be attained more rapidly. Therefore, cooperation gives the regions involved a "lead time" over their counterparts in catching up with more technologically advanced competitors.

### *Obstacles to interregional agreements*

Interregional relations are hindered by the existence of specific "transaction costs". Measures must therefore be taken to reduce the physical, social or technological distances impeding a greater synergy between the regions and to create communication channels, infrastructure and specific legislative procedures, which may differ according to each situation, to govern the agreement and to regulate the relations between the partners of the agreement.

Lack of information regarding potential partners is definitely an obstacle toward the establishment of agreements, although its importance is certainly lower in the case of public institutions and social organisations, which are more visible than small and medium size firms. A more frequent obstacle would appear to be an insufficient

knowledge of respective strategies and capabilities, as this often requires a long period of time.

A significant obstacle is the fact that regional public institutions and social organisation are often only concerned with local problems and are not aware of the usefullness or of the urgent need of a strategy in external relations. This trend appears particularly frequent in Italy where national legislation has always sought to restrict the regions' and local authorities' autonomy and their power for political representation abroad of their inhabitants' interests, while it has restricted their role to a purely administrative function or to the implementation of centrally decided policies.

Here it may be observed that in the case of public institutions as in the case of private firms internationalisation will not develop if it is only driven by the potential for gaining an advantage ("pull factors"), which may be only probable and not effective. On the contrary, internationalisation should be stimulated also by the existence of an urgent need ("push factors") to leave an excessively localistic approach. Perhaps only the fear of losing the consent of some section of public opinion and interest groups may persuade some regional governments to pay greater attention to international problems and to develop policies appropriate to the growing international role of civil society and the production system, supporting this in the face of international competition.

In some instances, above all in the larger and more economically developed regions, one has the impression that while they acknowledge the importance of international relations, regional public institutions and social organisations are insufficiently committed to develop international relations with other neighbouring regions because they are convinced that they are powerful enough to act independently and therefore an alliance with other smaller and less developed regions is not convenient. The belief that they can stand alone against all comers seems a rather myopic view in an increasingly integrated international and European context where an individual region, however large, could never be competitive or play an effective role outside a specific system of alliances.

In some cases, the lack of drive towards new alliances or lack of commitment in the existing interregional alliances derive from a kind of jealous guarding of one regions' autonomous international relations and the fear of having to share these with other far weaker regions. This certainly represents a real problem given that each alliance,

although on the surface based on total equality between its partners, will always have an internal structure that may be more or less hierarchical. An alliance is not the automatic outcome of demand by the region concerned, as an obstacle may lie in the lack of interest by potential partners reflecting the low esteem they have of a region's ability to make some original contribution.

## Continuity and success of an agreement

Many recent contributions to studies of international agreements seem to attribute excessive importance to those factors encouraging or preventing the creation of an agreement. In reality, the creation of an agreement is not a sudden occurrence; it may be compared to a gradual learning process, which takes numerous phases or temporal stages. It seems reductive to distinguish two extreme situations: the lack of any agreement and the existence of an agreement, given that many forms of interregional cooperation, whilst informal in type, may be more functional in operative terms than fully institutionalized forms that have no internal dynamism.

In some instances, it is almost as though there were an inverse correlation between an alliance's level of formalization and its true effectiveness since some agreements seem only to have been made in order to identify "officially" the partner concerned, while the identification of specific common programmes is deferred to some future date. On the contrary, between neighbouring regions which have intense contacts, such as regions of the same country, no formal agreements normally exist.

Often a long period of time is required between an intense mutual exchange of information, enabling the growth of reciprocal knowledge and trust, and the identification and implementation of an actual cooperation programme.

The success and continuity of an agreement depend on many factors:

### *Delays in the effectiveness of an agreement*

Even once an agreement has been signed, it takes a relatively long period of time before it becomes effective. There is an inevitable delay between the passive acquisition of technological information,

services and even financial and productive resources by a region and the time these external inputs are incorporated into the region's own productive organisation and develop synergies with endogenous resources there. The transfer of technologies or planning methods from one region to another may indeed be a long and complex process. This appears even more true in instances of cooperation with regions such as those of Eastern European countries, whose economic and institutional structure differs extensively from that of the EEC regions.

Here, the above mentioned distance between partners in an agreement is a vitally important factor, since the further the regions' cultural or economic structures are from each other, the greater the chance that no proper transfer of expertise will occur or that there will be no capacity to put the transferred knowledge to effective use in the development of the regional economy concerned.

*Development of an agreement in new areas*

It is difficult to quantify the success of an agreement because of the dynamic features which characterize each individual form of cooperation. An "ex ante" evaluation of the costs and benefits will certainly differ from an "ex post" assessment due to the existence of numerous unexpected positive and negative effects. An agreement may initially have one specific objective that during the process may prove of less importance compared with new directions in which the relation may develop. The interregional agreements between firms and institutions examined in this study reveal that the initial motivation behind the contact and cooperation becomes almost irrelevant as justification of a particular agreement, while the true basis of this latter relies in the positive development of bilateral relations over a long period of time.

Consequently, the success of an agreement is not simply defined as the occurrence of initially concerted actions. Certainly, an agreement capable of expanding into new fields over the short term and which is superseded by more complex and extensive agreements is more successful than one which lasts over the long term without undergoing substantial alterations.

Allied to the motives justifying an agreement and the ways in which it develops, one must also consider the reasons for which an agreement cannot be finalized or may even fail. The fact that there

are proven benefits to be gained from making an agreement does not represent sufficient reason for the agreement to be implemented, continued and developed. Often, existing opportunities are not exploited because certain obstacles stand in the way.

*Internal organisational capabilities*

An alliance may fail and be broken off. This may occur not only due to objective and subjective circumstances, whereby there is no point in continuing the alliance. In fact, where institutions and organizations have an insufficient internal organization, an agreement may be broken because of the inability to manage the continuity of the cooperative relationship and to invest in it. The dynamic nature of every cooperative relationship demands continous effort in exchanging information and agreeing on new measures to resolve new problems and attain new objectives. Inevitably, an agreement will cease if its inherent capacity to adjust is insufficient in relation to the dynamism of each partner's internal and external relations.

Even though agreements between public institutions and social organization are broken less frequently than between private firms, nevertheless many international cooperation agreements are basically ineffective for long periods of time because the efforts made to establish the initial contact are not backed up by any specific more demanding action. It would seem clear that the regions seeking to develop an effective regional "foreign policy" have to adapt their own internal structure so that they can not only initiate new contacts, but also gradually cultivate and develop those already in existence.

*Rules and procedures for concertation*

In some instances, the cession or the ineffectiveness of an interregional alliance may be due to a conflict between partners in the allocation of monetary and non-monetary benefits deriving from the alliance. In this isntance, the crucial factor is often the lack of clear rules, periodically reviewed, which define precisely each partner's area of responsibility and their rights. Where no clear rules or procedures for concertation exist, there is greater probability that one partner will seek to take advantage of the other.

All alliances embody the risk that one of the partners will try take advantage of the other, depriving him of some competitive edge or

using the alliance instrumentally in order to obtain some particular advantage in other areas. The problem seems to derive from an inability of one partner to organize its own international relations systematically or to agree with the partner on appropriate changes in the rules of the alliance.

An alliance will only last if it guarantees a "*Pareto* optimum" where all partners are ensured an advantage, which may differ for each partner, compared to the alternative situation of mutual competition.

*Changes in the temporal and geographic perspective*

Often, the failure or ineffectiveness of an alliance may be due to the fact that each partner assigns it a different level of importance or a different time horizon. Some may consider the alliance as a purely tactical initiative, whilst others may see it as strategic. Moreover, as time passes, the importance each partner considers the alliance to have may also change. Consequently, the level of commitment of each side may differ substantially.

Finally, an alliance inevitably implies some restriction on each party's freedom of action although, unlike commercial agreements, it does not contain exclusivity clauses, which would be impossible to implement in the case of public institutions and of other social organisations. Each partner has the problem of compatibility with other alliances to which he belongs and intend to belong in the future. Therefore, one of the reasons why interregional alliances fail or are ineffective is that one of the partners feels at a certain stage that he must have greater freedom of action with other potential actors and he must establish new strategic alliances.

Therefore, it seems that once an external relation strategy based on multiple alliances ("global strategic partnerships") is adopted, it is unlikely that individual regional or local institutions will return to a condition of "splendid isolation".

## A typology of interregional agreements

A strategy aimed at the development of interregional cooperation, which, as mentioned above, can be considered the specific area of a regional "foreign policy", clearly must adequately choose the type of

agreements to be promoted with reference to the participating regions and the objects of the agreements themselves.

*Bilateral or mutilateral agreements*

Often, large schemes for interregional cooperation, such as the "Alpine Working Communities" (Alps–Adria, Arge–Alps and COTRAO), are criticised for their low operative capacity that is attributed to an excessive number of participating regions (more than 15 regions) and some advocate the necessity for more specific agreements of a bilateral nature.

Nevertheless, it is rightly recognised that these two approaches are complementary, given that an interregional working community can represent the political forum for agreeing on general lines and programmes of action, which may then translate into specific projects based on cooperation among a more limited number of regions.

In particular, it seems opportune to point out that the emphasis on a bilateral approach may perhaps suit the resolute attitude and the efficient operative image of certain regional administrations, but it probably would contribute very little to solving the specific problems of overall integration within large European regions, such as those of "Mittel Europa", of the Mediterranean area or also of the Baltic area. A multilateral approach is crucial in order to tackle problems, such as those in the fields of environment, transport, economic development, and culture, and to define the role of these large regions in the European perspective. Interregional cooperation should not be limited to the problems strictly related to border areas, for instance those of border crossings or that of specific linguistic minorities. It should confront the problems of a more fundamental and strategic nature of the individual regions, such as the location of major international transport nodes or programs promoting culture and technology. It is necessary to adopt a less parochial approach and a broader and more explicitly interregional and international framework.

*Exclusive or multiple agreements*

The regions may choose to participate in one or a limited number of interregional agreements or they may participate in a wide range of agreements. Clearly an inevitable competitive relationship between the various agreements or interregional groups will exist neverthe-

less, as indicated above, and it seems impossible in the case of public institutions such as regional government to demand compliance with exclusive clauses.

For example, in the case of the regions of "Mittel Europa" there is a degree of geographical overlapping between various working communities such as the Alps–Adria, the Arge–Alps communities, the recent Working Community of Danube regions, the interregional group of the "Four Engines of Europe" and other more limited cooperation accords existing among particular Italian regions. However, it would be unrealistic to try to merge these interregional associations within a single association or to expect a region to choose to belong only to a single association.

On the other hand, it is obvious that the international role or the competitive advantage of the individual regions not only depends on the respective availability of internal, both material and immaterial, resources, but also on the networks of often overlapping agreements that they have established with other regions.

### *Internal integration or common external initiatives*

Paradoxically, interregional agreements often have their origins in the necessity to resolve specific conflicts between regions of different countries, while formal agreements normally do not exist between regions that normally cooperate, such as those which belong to the same country. In particular, the existence of linguistic minority groups has been an important factor in the development of interregional agreements.

The initial aim of various interregional working communities has been to transform an element of separation into an element of union and to bring interregional dialogue from the sphere of conflicts to that of the development of complementarity between the respective resources, so that objectives could be achieved which would not be possible if tackled by the individual regions on their own.

From this point of view, a further step toward cooperation within these working communities would seem advisable, which consists in extending the areas of cooperation from bilateral relationships towards common external relationships with the European Community, the various national governments and other large European regions. In fact, as the experience of the EEC has demonstrated, favourable attitudes towards integration will increase if the focus shifts

from the harmonization of existing respective policies to cooperation in tackling the new commercial, technological, political and military challenges originating from outside the EEC.

### *Active or passive internationalisation*

According to a neo-mercantilistic approach, public policies aimed at the promotion of internationalisation should only endeavour to reinforce their own trade balance or foreign investments of local firms.

On the contrary, a policy for the promotion of integration or of internationalisation of regional economies should not only promote exports but also imports and should not only reinforce investments abroad but also attract foreign investments to the region in question.

### *Sectorial or territorial agreements*

Interregional alliances can be described on the basis of two different approaches: a functional approach and a territorial approach. A characteristic aspect of the territorial approach is that the scope of such alliances is multisectorial and normally involves a limited number of usually geographically adjacent regions. A functional alliance, instead, often involves a larger number of regions which may even be far apart, but their objective is more restricted and the time scale tends to be shorter.

Functional-type alliances aim to promote cooperation in specific areas between firms in the various regions: these areas include marketing, finance, management training, research and development. Therefore, their purpose is to underpin a process that is already occurring spontaneously, as it is demonstrated by the now daily press reports of new aquisitions, mergers, joint ventures and other forms of agreements between various firms. Territorial alliances are more ambitious in scope and their purpose is to create new forms of cooperation that are intersectoral in nature and aim at involving the various components of a regional economy, including those not normally exposed to international competition. These alliances aim to integrate not merely the various industrial firms, but the entire socio-economic system of the regions involved and even their administrative institutions.

The functional approach aims to create directly new forms of relationship between firms or to modify the existing links and develop

new flows of material and immaterial type between them. The territorial approach instead seeks to achieve the same aim by an indirect route, through the development of the endogenous resources of the single regions and the increase of their ability to establish international relations. In fact, territorial alliances promote closer cooperation between single economic and institutional actors of a particular region in order to reach that critical mass needed to play a role at the international level.

A territorial approach to international cooperation underlines the importance of making optimum use of the various local resources or potential for endogenous development. This should be achieved by means of common integrated programmes among the various regions, aimed at strategic local policy areas such as environmental protection programmes, training, development of technological know-how or cooperation among regional financial institutions. Territorial alliances may also aim at promoting a closer integration of regional economies by reinforcing the supply of services to firms, as services represent infrastructural networks regulating material and immaterial flows between the various regions.

As opposed to functional alliances, territorial alliances imply geographic vicinity of the various regions, given that they are based on the fact that the various private and public actors recognize their common indentity or their belonging to an area that is super-regional and even trans-national, sharing the same values, traditions, culture and languages. Consequently, territorial alliances have a more solid base than functional alliances and can more easily adapt to even radical changes either within or outside the regions involved. They tend to be more stable than functional alliances which do not normally outlive the attainment of their specific objective.

However, sectorial accords may be vital in the cooperation with the regions of Eastern Europe, as these regions must pursue the creation of specific services and the promotion of specific joint ventures especially in the productive activities. These "direct" interventions inevitably bring about an increase of administrative intervention in the economy or a direct entrepreneurial role on the part of the public institutions involved.

On the other hand, at least in the more economically advanced regions in the EEC, all efforts should be directed towards creating new public structures in specific areas, such as the promotion of technology, the formation of professional and managerial skills or environ-

mental protection. In fact, "indirect" interventions aimed at establishing a network of communication channels that could favour the interaction between individuals and private organizations would seem more important, leaving these latter free to define the specific objects of programs of cooperation.

It is a question of acting upon the "transaction costs" which create obstacles to relations on an interregional scale, starting with transport and communication infrastructures, the knowledge of foreign languages and of the respective regulations and the creation of interface centres between the individual economic actors. From this point of view interregional cooperation schemes could make an important contribution towards the completion of the European Single Market, by removing some of the "costs of non Europe" that have impeded up to now the development of trade, technological and cultural relations between the EEC regions and between these latter and the regions of non-EC European countries.

For the above reasons, territorial type alliances are more appropriate than functional alliances for border regions, as in the case with the various "working communities" of the Alpine regions. However, they could also be applied to the development of specific cooperation schemes between regions within the same country, such as the Italian regions of "Mezzogiorno", or between regions that do not share a common land border, such as the Mediterranean regions considered as "Objective 1" regions by the EEC regional policy. In reality, the fact that various regions have already developed effective joint cooperation schemes constitutes a significant impetus for other regions in the European Community to develop similar interregional cooperation schemes, to avoid their remaining isolated.

## The European Community and the Europe of Regions

Contrary to what is widely believed, the globalization of economies does not necessarily involve an unavoidable omologation process of consumer preferences and firm technologies within the framework of a supposed "global village", but it is more likely leading to exploit differences and encourage firms and regional and national economies to specialise in those products in which they have a comparative advantage (*Cappellin*, 1990a). So, on the one hand, each financial operator, private or public organisation and even the various regio-

nal administrations have to adapt their strategies and become more internationalized. The internationalization process is, in fact, basically a "bottom-up" process of transformation of the regional economic and social systems that cannot be controlled on a central basis, but must take into account the varying potential and different strategies of the individual local private and public operators in question.

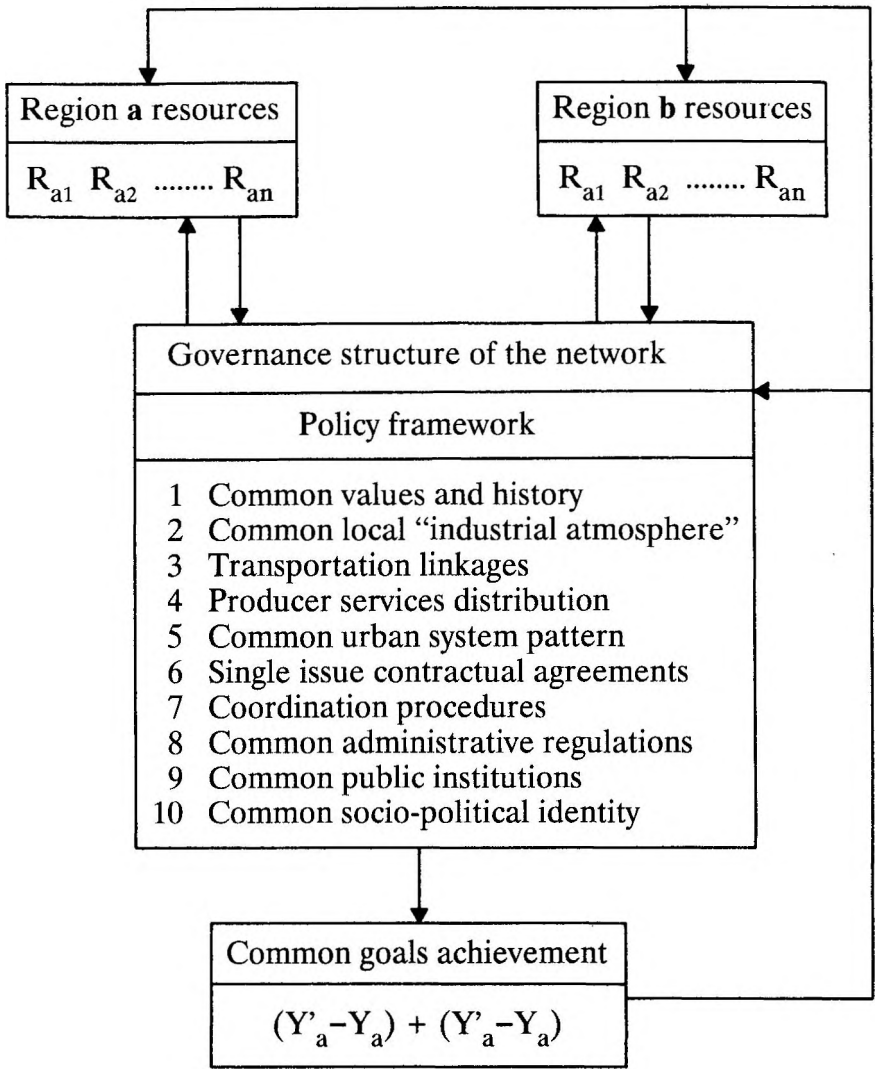
Secondly, the changes in firm organisation in favour of a network structure and the setting up of agreements and alliances on an interregional and international scale is accompanied by the creation of a similar integrated system of flows of goods, services, people and capital (*Cappellin*, 1989b, 1989c). Important interregional and international infrastructure networks are required to allow these flows to develop. Therefore, economic growth and even the territorial systems of the various individual regions are increasingly interdependent and this forces regional administrations to coordinate their own policies with those of other regions belonging to the same country as well as those belonging to foreign countries.

The larger the EEC or the area of European economic integration (regardless of the institutional forms it will take in the future), the greater the differences will be between the individual member states of the Community. In light of this, it would appear necessary to encourage the creation of "regional" (trans-national) cooperation schemes characterised by greater internal cohesion than would be possible on a European continental level. These networks of regions may be designed as indicated in *Figure 1.2* (*Cappellin*, 1989b, 1990d). In fact, it is unlikely that any European federation made up of 23 national States would be able to operate effectively without this kind of intermediate aggregation.

EEC regional policy has until recently not considered the issue of interregional cooperation and has addressed only promoting economic development in specific regions ("Objective 1" regions in particular) (Confindustria 1989; *Molle–Cappellin*, 1988; *Quevit*, 1990; *Vickerman*, 1990). In particular, EEC authorities have not been capable of implementing the indications of the new regional policy regulations, which identify the need for a policy of "amenagement du territoire" at the European level. They seem to exhaust their activity in a detailed series of measures complementary to those already taken by national and regional authorities without being able to identify and tackle regional problems that have a specific European dimension.

Figure 1.2

*The factors of an interregional cooperation*



In light of this, the programme recently set under way by the Commission, defined as the "Interreg initiative" (90/C, 215/04) seems to be quite important (*Cappellin*, 1990d). This programme undoubtedly contains some innovative, positive aspects, for example:

1) the promotion of interregional projects, correcting a parochial tendency on the part of some regional administrations and the generally mono-regional approach of the various actions of the Regional Development Fund,
2) the explicit linking of these interregional projects to the target of completing the European Internal Market,
3) the possibility to include regions on the EEC external borders and not only those on the EEC internal borders,
4) the possibility of financing even the creation of joint institutional and administrative structures aimed at supporting and encouraging interregional cooperation.

Nevertheless, this new programme also has some significant limitations, in addition to the obvious problem of having rather limited financial resources, e.g.:

1) Its application is restricted to IIIrd level regions (equivalent to Italian provinces). This is clearly inadequate in facing the problems, illustrated in this study, that have a typical "regional" dimension, so that this programme does not take into account the need to support the existing cooperation schemes between regional governments;

2) The implementation of this programme has been unduly restricted to the support of bilateral cooperation schemes between neighbouring regions and it has intentionally avoided supporting common programmes among more than two regions, although there are various alliances or "working communities" of border regions in Europe;

3) In the case of interregional projects involving regions on external borders of the EEC, the programme appears clearly illogical as it can only finance the EEC regions and not those of non-EEC countries. Therefore, notwithstanding its definition, the programme is not financing interregional projects but only punctual monoregional ones and it is of little help for the regions on the external border of the EEC;

4) The restriction that projects must be presented by national governments seems contradictory with the aim of the programme at boosting crossborder interregional cooperation. This procedure will inevitably cause delays and important limitations on the various pro-

jects to be considered, since it hinders direct contact between the individual regions of the various countries. These will be forced to cooperate through their respective central authorities, which are, on the other hand, the most important reasons for the existence of national barriers and have a vested interest in maintaining them;

5) The programme overemphasizes the target of economic growth and the aim to compensate supposed negative effects to be created by the completion of the European Internal Market. It pays inadequate attention to the more important problem of encouraging integration and of removing specific local or regional obstacles which are actually hindering economic and social integration into a Single European Market. Regional authorities should be promoted to remove existing physical and artificial barriers and to exploit new opportunities created by the removal of these barriers rather than to tackle often very minor problems created by the removal of the latter.

In conclusion, regions should extend the scope of their cooperation towards the elaboration of a common stance at the various national and international institutions.

In particular, the experience that has been gained in the field of interregional cooperation by the various regions calls for more demanding programmes than just the exchange of information and know-how and for the setting up of a regional "foreign policy" based on specific operative joint projects.

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# 2 COOPERATION OF CENTRAL EUROPEAN REGIONS

GYULA HORVÁTH

## Introduction

During the forthcoming years the space, structure and modernization of the Hungarian economic development will primarily be determined by the cooperation with the dynamically developing countries. Besides developing the market economy, the key aspects of Hungarian development strategy are reintegration into the international division of labour both at the macro- and microeconomic level, and also the overall social adjustment to it. Opportunities for economic growth are mainly linked to the reinforcement of export capability and the utilization of the advantages of the international division of labour. Foreign economic relations should also be based on decentralized forms of participation in international regional integration and the evolution of structural and institutional systems in compliance with it.

Besides the national economic and social-political factors the international, particularly the European, tendencies should be considered. The intended integration with the developed parts of Europe involves adjusting the goals and measures of Hungarian regional policy to European norms. During the last two decades Hungarian regional development policy was considered to be modern even according to international norms and it reflect the recommendations of international organizations. With regard to the institutions of regional development the planned economy dominated, and it entirely lacked the elements that would have linked the development of territory and settlement to the reenforcement of international competitiveness.

The new regional development strategy should take the competition of European regions into consideration. A national programme is needed which is capable of linking Hungarian regions to the international integration, and allows counties and cities (alone or in association) to give their own answers to European market challenges.

Different parts of Hungary have different endowments in formulating their answers to these challenges. It has been almost half of a decade since the Western-Southwestern regions of the country participate in the Central European regional cooperation. This experience provided numerous lessons not only for the formulation of development concepts in the five participating counties but also for other cooperation programmes.

In this paper I sum up the lessons of the operation of the Alps–Adria Working Community by showing the important organizational principles of Central European cooperation with respect to the European regional division of labour. I also discuss the main elements of economic structure that determine regional cooperation, the extremely different organizational framework and the regional political conditions of cooperation.

## Regional challenges of Europe '93

During the 1970s the growth phase of monopolistic accumulation based on mass production was replaced by a period of decentralized economic development built on the strong role of a differentiated market. The role of the raw material intensive industry which was the engine of previous development decreased, and a service sector which is much more mobile in space became the driving force of prosperity. People employed in the service sector exceed those who are employed in primary and secondary industries. Similarly the ratio of people employed in agriculture and also the participation of agriculture production in the economy of certain regions decreased. The new developed economic system did not raise the same regions that were the leading provinces of previous industrializational phases to the vanguard of development. The leading industrial provinces began to decline while previously unknown regions increased their level of development compared to other European regions. For example in 1950, according to GDP per capita, South-East England region (4.), Belgian Wallonia (6.) and French Lotharingia (9.) were leading re-

gions. In 1980 they ranked 35th, the 40th and 28th. In the meantime other regions moved ahead: West-Berlin from 48th position to 5th, Baden-Württemberg from 50th position to 8th, Schleswig-Holstein from 65th position to 25th, and Emilia Romagna from 60th position to 40th. In 1988 the northern and central Italian regions were among the most developed Common Market regions: in Lombardy the GDP per capita was 137.3 per cent of the Common Market average, it was 117.8 per cent in Trentino-Alto Adige (South Tirol), 116.4 per cent in the Veneto region, and 116.1 per cent in Friuli-Venezia Giulia.

From a regional development aspect the consequences of the uniform interior market by 1993 are judged differentiated by the researchers, but it is obvious that it puts the developed regions into a more favourable position, though significant changes of hierarchical order can be expected among them. Besides this the decline of underdeveloped regions and the intensification of regional conflicts should be accounted for. The intensification of conflicts between regions is caused by the pressure of competition all over Europe. Important factors are:

1) the growing insecurity concerning the prices of finished products and production inputs, the changes in manufacturing technologies, the trade policy of economic power states, the development of money markets,
2) increasing competition caused by the growing number of production units, the shortening of the lifetime of production cycles, the acceleration in continuously developing new products,
3) rapid technological development and its regional differentiating effects,
4) organizational changes in the organization sector, in the relation between companies, and in the overall economy,
5) social-political transformation as a result of structural changes, following the steady economic growth and necessary economic measures in order to sustain a relatively high employment level.

Competitiveness was interpreted mostly as a category for company and plant level. It focused on minimizing the costs per product unit through low wages and investment costs, efficient resource supply and management skills. The new development determinants given above, however, cast light on the fact that, particularly in industrial production, the volume and structure of international foreign economic relations express decreasingly the production costs of companies. This is the result of several factors:

a) factors of non-price competition (product quality, product diversity, extension of customer service) are increasing,
b) tariff and non-tariff protection measures are increasing,
c) labour costs within production costs (because of the comprehensive development of automatization) are losing their importance. For this reason large companies emphasize foreign investments, mergers, and acquisitions in their new expansion strategies in order to gain a foothold in growth markets, and they concentrate on the key fields of the economy: research and development, marketing, and market development.

The competitive industrial structure (on a national economic level) is an accepted category in international economic literature. Generally the following elements are considered as the main measures of competitiveness:

— sufficient number of large companies that produce savings in the fields of research and development, marketing, supply and service system, and financing; which could follow the new technology trends and market opportunities, and have a pulling effect on background firms,
— dynamic small- and medium sized companies that show considerable innovative capabilities in products and market opportunities, production processes and marketing forms, and which can become the seeds of future growing industries,
— efficient cooperation between different types of companies.

The integrated unification of resources is an important prerequisite for establishing a competitive industrial structure, and this is the reason for the appreciation of the role of the regional dimension.

We can witness one of the manifestation forms of the intensification of international market competition, the changes can well be seen in the tendency of foreign investments:

1) Direct foreign capital investments are gradually shifting from the export oriented production of simple consumer goods (especially in light industry) to the technologically complicated production sectors (industrial electronics, machine-tools, biotechnology). Investment costs are increasing, thus investors prefer those places. Settlements that offer opportunities for them to serve the regional and international export markets meanwhile obtain entrance to the attractive interior markets of the accepting country;

2) The amount of international cooperation increased greatly in the service sectors (tourism, R&D sector, financial and business sector);

3) The small- and medium sized businesses are vigorously participating in international investments;

4) There is an increasing role of incentives to foreign capital investments. In order to make foreign capital investments attractive many countries accepted liberal investment laws that offer a large spectrum of financial and tax allowances.

But even the most liberal incentives are not capable of competely motivating capital flows. According to international surveys entrepreneurs wishing to invest abroad take different aspects into consideration, they give particular attention among the location factors to:

a) *infrastructure quality* (physical infrastructure is losing its importance, technological, telecommunication and human sector come to the fore since the complexity of production processes and the diversification of marketing require immediate and diverse information, well qualified, technical labour force),
b) *general industrial endowments* (the investor manufacturing mechanical and electronic equipment strongly interested in industrial production and the operating net of related services, the development state of background industry and maintenance capability, the degree of supply of computers and software at the location site),
c) *conditions of entering the market* (besides the market volume of the location, the possibilities to enter into the neighbouring markets: accessibility of other countries' markets, and the existence of necessary informational, organizational and intellectual background for it),
d) *efficiency of licensing administration* (simple procedural mechanisms, quick office work, organizational concentration),
e) *macroeconomic policy* (reliable, stable economic policy, reasonable exchange rate).

The international surveys and business questionnaires put one of the *a), b)* or *c)* factors in one of the first three places. We need to consider them because they are endogenous factors that can be developed and their supply can be organized by the local and regional governments within their own scope, while the other elements of the list are entirely within the scope of the central governments' economic policy.

**Outlines of a new economic power centre in Central Europe**

Analysis of the development paths of the Western European regions shows that by the turn of the century the European gravity centre of economic power will be shifted from the northern French—West German—Benelux—British square to further East, towards southern German, northern Italian, Austrian, and Swiss regions in a way more favourable ti Hungary (*Figure 2.1).* The traditional growth resources of the Northern-Western European economic conglomerations based on metropolis agglomerations are wearing down, while new growth factors play the main role in the Alpine regions' development, where establishing modern structures is less biased by the inertia of the traditional sectorial, organizational and settlement structures. There are no longer significant differences between the economic productivity of the two regional systems, though there are some indices that show the quality advantage of the historical power centres (*Table 2.1*).

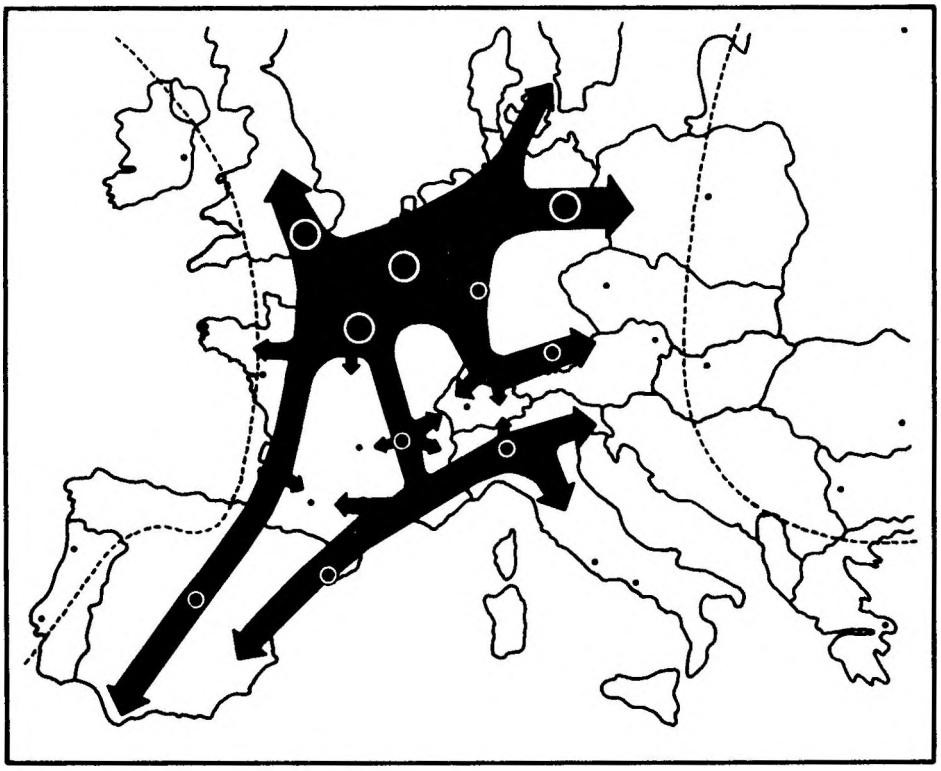
The interior cohesive strength of the two big European regional economic power centres has different structural-political endowments. All parts of the big North-West European regions are in Common Market member countries. In its development it was a determining factor that the large centres (Brussels, The Hague, London, Paris) of the region were national capitals of countries at the same time, where the centres of European organizations and institutions can be found (European Community, European Council, European Investment Bank, etc.) The members of the Central European regional system (being formed) belonged to different political and defence blocks until recently and today they are still members of different international economic organizations. There are only two national capitals (with a moderate role played in the European economy), Vienna and Bern, that are located within its boundaries. Except for Vienna, which has an important role in the national regional division of labour, only Milan is an economic and financial centre; the other large cities in the region only undertake a regional central function, or they play an important national role in some of the sectors (Basel, Munich, Turin, Lyon).

Comprehensive regional organizations did not develop within the traditional European regional conglomeration, since the peak of its development fell at the time of the accomplishment of national state's cooperation at a macro level. The developed form of inter-re-

Figure 2.1

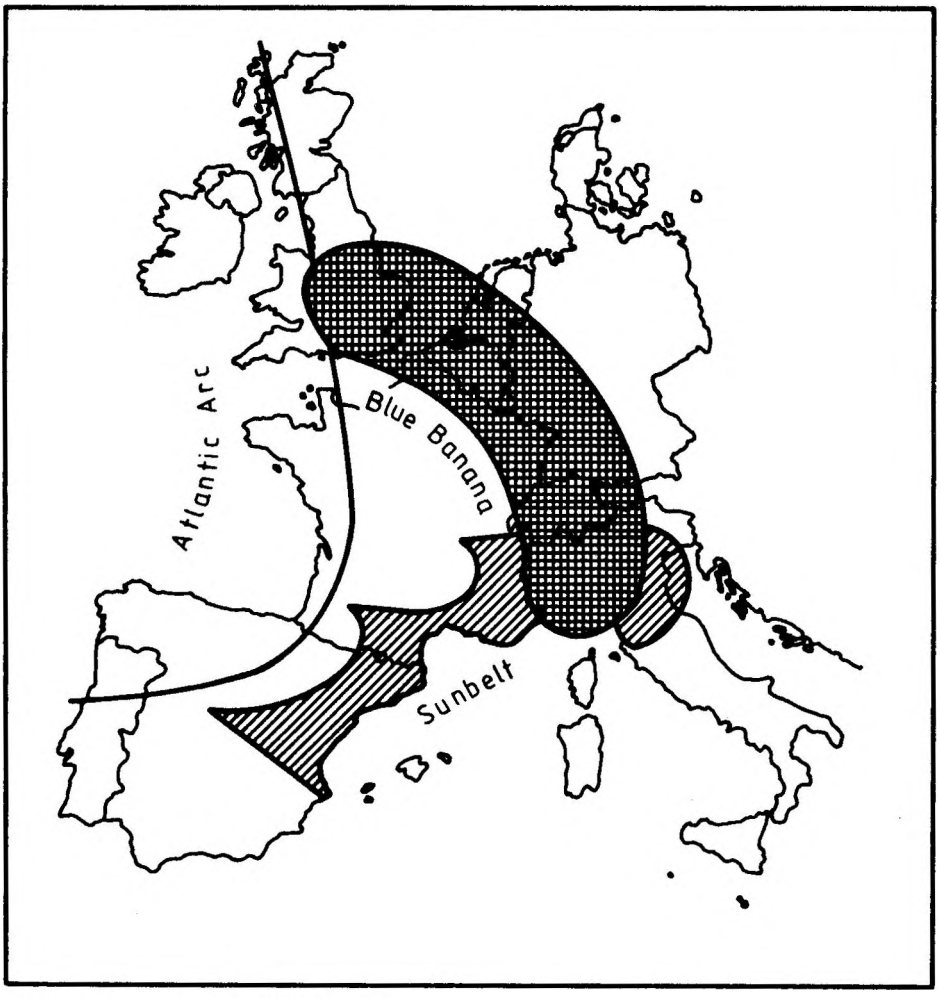
*The force lines of European development*

a) The "Blue Star"



*Source*: Dommergues, 1992. p. 12.

b) The "Blue Banana"




*Source*: Dommergues, 1992. p. 12.

Table 2.1

*The two regional systems in Europe, 1984*

| Characteristics | Alpine Regional System (1) | Western European Metropolitan Area (2) | (1):(2) |
|---|---|---|---|
| Population, millions | 70.33 | 72.71 | 96.7 |
| Value added per capita, thousands ECU | 11.42 | 11.39 | 100.3 |
| Value added, billions ECU | 803.46 | 827.85 | 97.1 |
| Agricultural value added, billions ECU | 26.25 | 16.08 | 163.2 |
| Industrial value added, billions ECU | 320.92 | 288.68 | 111.2 |
| Services value added, billions ECU | 456.28 | 523.09 | 87.2 |
| Employment, millions | 27.87 | 23.05 | 121.0 |
| Employment in industry, millions | 2.13 | 0.76 | 280.6 |
| Employment in agriculture, millions | 11.01 | 9.04 | 121.9 |
| Employment in servises, millions | 14.73 | 13.25 | 111.2 |
| Total productivity, thousands ECU | 28.83 | 35.93 | 80.2 |
| Surface area, thousands $km^2$ | 426.44 | 179.63 | 237.4 |
| Population density, inhabitants/$km^2$ | 165.0 | 405.0 | 40.7 |

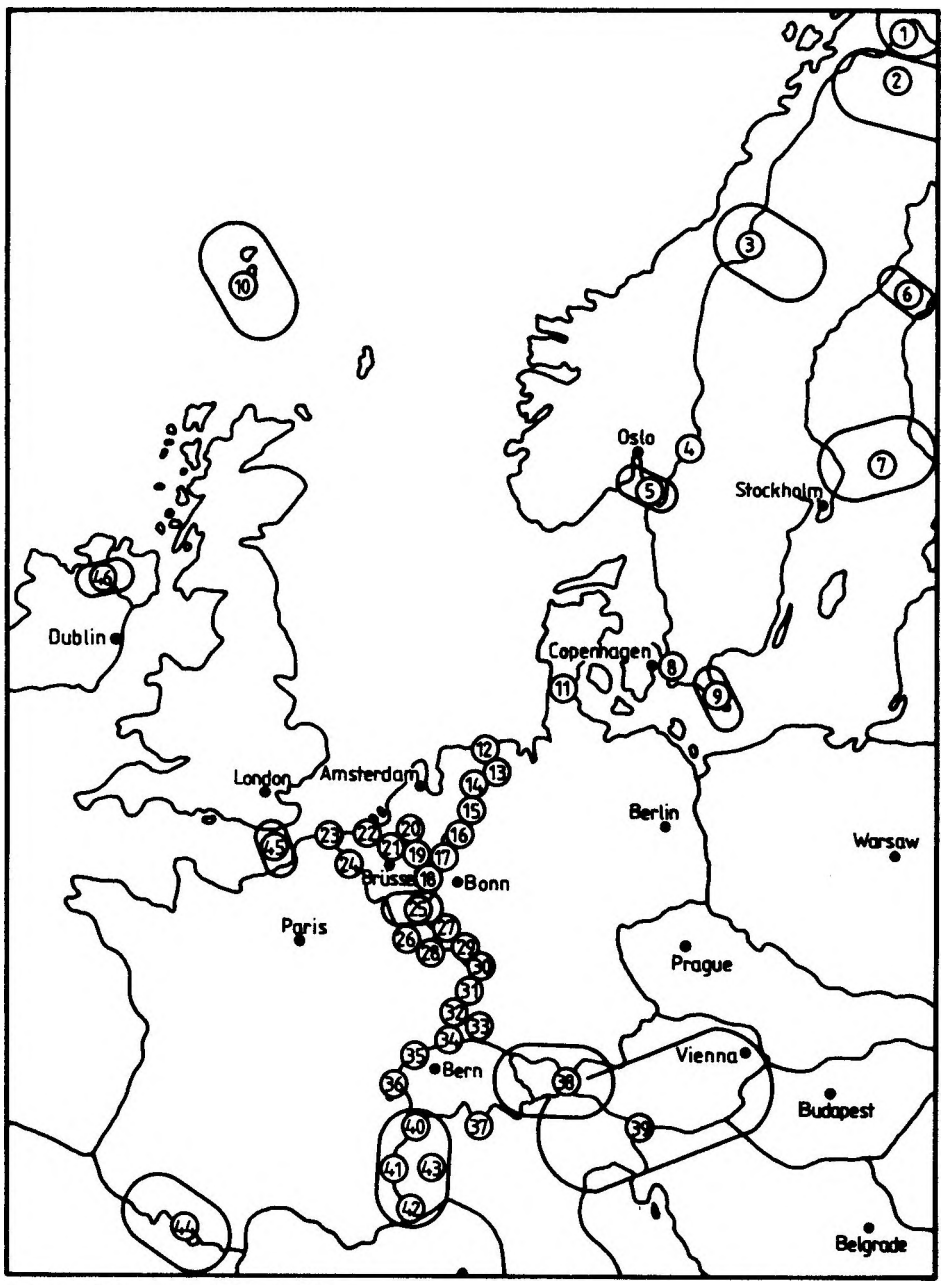
*Source*: Cappellin, R. 1990. p. 15.

gional cooperation in this space is the cooperation between the borderline regions, and it is a loose and informal association of regions struggling with the same kinds of development problems, though remote in space. The Common Market idea puts great emphasis on developing inter-regional relations. The common use of resources belonging to areas inhabited by mixed national minorities with similar historical, cultural and economic characteristics was one of the preferred areas of common policy. During the past 15 years manifold industrial and commercial cooperation has emerged in the West European borderline space, common infrastructural and environmental programmes were born, and the personal and institutional interactions became part of everyday life (*Figure 2.2*).

Inter-regional relations played an important role in strengthening the competitive position of the large Central European region. However, the provinces of the region chose another way of developing re

Figure 2.2

*Transborder regional associations in Europe*




*Source*: Momper, 1991. p. 96

*Key to Figure 2.2*

1=Nordkalotten (N, S, SF); 2=Mitt-Norden (N, S, SF); 3=Kjolen-Nordland-Västerbotten (N, S); 4=ARKO (N,S); 5=Östfold-Nordloga-Bohuslän (N, S); 6=Kvarken (S, F); 7=Skärgardsprojecktet (S, SF); 8=Öresund (DK, S); 9=Bornholm-Sydostra Skane (DK, S); 10=Vestnorden (DK, Fr); 11=Abenra-Flensburg (DK, D); 12=EmsDollart (NL, D); 13=EURIREGIO (NL, D); 14=Rhein-Waal (NL, D); 15=Rhein-Maas-Nord border region (NL, D); 16=Heinsberg-Limburg Working Community (NL, D); 17=Rodaland Working Community (NL, D); 18=Maas-Rhein Euroregion (NL, D, B); 19=Interlimburg Maasland (NL, B); 20=Weert-Noord-Limburg (NL, B); 21=Kemperland (NL, B); 22=BENEGO (NL, B); 23=Nord-Pas-de-Calais (F, B); 24=Lille-Roubaix-Tourcoing (F, B); 25=Eifel and Ardenne European Union (F, B, L, D); 26=Arlon-Longwy-Esch (F, B, L); 27=West-Pfalz Planning Community (D, F); 28=Saar-Lorraine-Luxembourg (D, F, L); 29=Rheinpfalz Planning Community (D, F); 30=Oberrhein-Alsace (F, D); 31=South-Oberrhein-Alsace (F, D); 32=Moyenne Alsace-Breisgau-CIMAB Interest Community (F, D); 33=Hochheim-Bodensee (D, CH); 34=Regio Basiliensis (F, CH, D); 35=Jura (F, CH); 36=Lake Geneva region (F, CH); 37=Ticino (CH, I); 38=Alps Working Community (ARGE Alp) (D, A, I, CH); 39=Alps-Adria Working Community (A, I, D, H, SLO, CRO, CH); 40=Valle d'Aosta-Haute Savoie-Valais (I, F, CH); 41=Franco-Italiana della Alpi (F, I); 42=Alpazur (F, I); 43=West-Alps Cantons and Regions Working Community (CH, F, I); 44=Pyrennees Region Conference (E, F, AND); 45=La Manche-Dover-Calais (GB, F); 46=Ireland (GB, IRL).

gional cooperation. Bilateral cooperation were gradually turned into multilateral international associations. This is how *Euroregio Basiliensis*, cited as a classical example in the literature, and including the French Upper Alsace, the Swiss city and canton of Basel city and, the South German Baden district association (in 1971) were formed. The old French—German conflict was replaced by harmonious economic and cultural cooperation. The three regions are strongly linked as a result of common work in infrastructural development (common airports, express line network, unification of using communication facilities, organizing common training for special university courses, etc.), establishing modern industrial production sectors.

In 1972 the *International Lake of Constance Conference* (its members are six Austrian, Bavarian, and Swiss territories) came into existence, at the same time ten Austrian, Swiss, Bavarian and Italian provinces organized the *Alps Working Community*, the *Alps–Adria Working Community* was formed in 1978, in 1984 the *West-Alps Working Community* (*COTRAO*) was formed by the Italian regions of

Valle d'Aosta, Piedmont and Liguria, the French Provance —Alpes—Côte d'Azur and Rhône—Alpes regions, the Swiss Vaud, Valais and Geneva cantons, and in 1990 the *Working Community of Provinces of Danubian Countries* was organized. The main initiators of these cooperation programmes are the Free State of Bavaria and the Lombardy Region. These two regions found (as a programme) their regional growth centre role in Central European cooperation. Its content is formulated in modernizing the economy, the company structure and the technology, developing the R&D sector, its form is given by the regional cooperation between administrative units.

The two Central European regional cooperating groups (the Alps, and the Alps–Adria) overlap on each other's territory. Bavaria, Ticino, Salzburg and Trentino-Alto Adige (South Tirol) region are members of both organizations (*Figures 2.3 and 2.4*) . The population of the two blocks is almost the same, they have similar economic structures, however the Alps–Adria Working Community covers a substantially larger territory (*Tables 2.2 and 2.3*), and it has marked interior differentiation (caused by the provinces of the eastern periphery).

## The Alps–Adria Working Community

### *The goals of the community*

In 1978, when Europe was still quite divided and the germs of the unified common market idea have just emerged, the representatives of two north-eastern Italian regions (Friuli-Venezia Giulia and Veneto) and four central Austrian provinces (Carinthia, Styria, Upper Austria and Salzburg), and Bavaria, Slovenia and Croatia decided in Venice to form an action association for harmonizing different fields of regional development. In 1981 the Italian region Trentino-Alto Adige, in 1985 Lombardy, in 1987 the Austrian Burgenland joined to it, and between 1986–89 five Hungarian territorial administration units — Győr-Moson-Sopron, Vas, Zala, Somogy and Baranya counties — participated in the work of the interregional organization. With the admission of the Swiss Ticino canton in 1990 the organizational foundation of the Community was accomplished.

Figure 2.3

*The Alps Working Community*

Figure 2.4

*The Alps–Adria Working Community*

Table 2.2

*Characteristics of the Alps Working Community, 1988*

| Member region | Surface area, $km^2$ | Population, 1,000 | Percentage of employees | | |
|---|---|---|---|---|---|
| | | | Agriculture | Industry | Services |
| Baden-Württemberg | 35,751 | 9,619 | 2.7 | 48.2 | 49.1 |
| Bavaria | 70,553 | 11,043 | 6.9 | 41.9 | 51.2 |
| Tirol | 12,647 | 624 | 6.1 | 35.3 | 58.6 |
| Vorarlberg | 2,601 | 342 | 3.4 | 44.8 | 51.8 |
| Salzburg | 7,154 | 468 | 7.1 | 32.5 | 60.4 |
| St Gallen | 1,951 | 420 | 6.7 | 46.7 | 46.6 |
| Graubünden | 7,106 | 169 | 9.2 | 31.4 | 59.4 |
| Ticino | 2,811 | 282 | 3.3 | 39.1 | 57.6 |
| Trentino-South Tirol | 13,620 | 882 | 12.5 | 25.5 | 62.0 |
| Lombardy | 23,856 | 8,886 | 3.5 | 43.3 | 53.2 |
| Total | 178,050 | 32,735 | ... | ... | ... |

*Source*: Arbeitsgemeinschaft Alpenländer. 1990.

Except for the founding regions all member provinces participated as observers in the Community's work for a couple of years.

The task of the Community was formulated by the founding Joint Declaration (Venice, 20 November, 1978) as common informative, professional discussion and harmonization concerning problems falling within the interests of the members. The following areas were emphasized:

- transportation junctions through the Alps,
- traffic at ports,
- energy production and transportation,
- agriculture and forestry,
- economy of water-supplies,
- tourism,
- environment protection and nature conservation,
- landscape planning,
- settlement development,
- cultural relations,
- relations of academic and higher educational institutions.

Table 2.3

*Member regions of the Alps–Adria Working Community, 1988*

| Member region | Surface area | | Population | |
|---|---|---|---|---|
| | 1,000 km$^2$ | Per cent of the country | 1,000 | Per cent of the country |
| Bavaria | 70,553 | 28.4 | 11,043 | 18.1 |
| *German Land* | *70,553* | *28.4* | *11,043* | *18.1* |
| Lombardy | 23,856 | 7.9 | 8,856 | 15.5 |
| Trentino-South Tirol | 13,620 | 4,5 | 882 | 1.5 |
| Friuli-Venezia Giulia | 7,847 | 2.6 | 1,210 | 2.1 |
| Veneto | 18,364 | 6.1 | 4,375 | 7.6 |
| *Italian regions* | *63,687* | *21.1* | *15,353* | *26.7* |
| Upper Austria | 11,980 | 14.3 | 1,270 | 16.8 |
| Burgenland | 3,965 | 4.7 | 270 | 3.6 |
| Styria | 16,387 | 19.5 | 1,187 | 15.7 |
| Salzburg | 7,154 | 8.5 | 442 | 5.9 |
| Carinthia | 9,534 | 11.4 | 536 | 7.1 |
| *Austrian Lands* | *49,020* | *58.4* | *3.705* | *49.1* |
| *Croatia* | *56,538* | *100.0* | *4.672* | *100.0* |
| *Slovenia* | *20,251* | *100.0* | *1.937* | *100.0* |
| Győr-Moson-Sopron | 3,837 | 4.1 | 426 | 4.0 |
| Vas | 3,337 | 3.6 | 227 | 2.1 |
| Zala | 3,784 | 4.1 | 311 | 2.9 |
| Somogy | 6,036 | 6.5 | 349 | 3.3 |
| Baranya | 4,487 | 4.8 | 432 | 4.1 |
| *Hungarian counties* | *21,481* | *23.1* | *1,745* | *16.4* |
| Total | 281,530 | – | 38,455 | – |

*Source*: National yearbooks of statistics. 1988.

The participants declared first in the founding declaration, and later in 1988 in the declaration of the foreign ministers in Millstatt (Austria), that the activity and the programme of the Community corresponded with the provisions of the European Security and Cooperation Conference final declaration, thus it represented European interests. The national governments expressed their willingness to help in promoting and inciting the inter-regional cooperation of the Alps–Adria space. In 1990 the Standpoint of Pentagonale Initiative

given in Venice unambiguously pointed out that the cooperation development of the provinces already interacting needs encouragement.

Thus the political preconditions exist which guarantee that this association could become the integrator between the European Community, EFTA and the regions of Eastern Europe. It needs to be mentioned that the Hexagonale – today the Central European Initiative –, the cooperation between nations covers a larger space than the eighteen regions, but it could increase the efficiency of its activities if the working groups of the Initiative would consider *the cooperation between the regions as the driving force of cooperation, so it would become possible to represent regional interests in the state decision making process.*

### *Core and periphery in the community*

The Italian and the German regions have decisive weight in the Community situated on 280 thousand square kilometers, with 38 million inhabitants. 40 per cent of the population and 42 per cent of the GDP are in Italy, while 29 per cent and 39 per cent on Germany. The Hungarian counties give 4.6 per cent of the population and 2.2 per cent of the GDP (*Figures 2.5 and 2.6*).

There are great differences in the economic productivity and the sectoiral structures of the member provinces. Though the Eastern peripheral provinces are the developed regions of Hungary and former Yugoslavia, their gross regional production indicators per capita reach only one half to one third of the respective Community average. (This statement is the result of an expert estimation, earlier the regional indicators could be determined only roughly.) Remarkable differences are demonstrated by competitiveness and comparativeness of regional economic structures. The sectorial structure of the core regions is characterized by the economic structure of a postindustrial society (the participation of tertiary sectors is close to or exceeds 50 per cent of gross regional products, while in the provinces not yet modernized (even in Burgenland) it is under 40 per cent). The ratio of agricultural production is high in the peripheries (*Figure 2.7*).

The development path of this traditionally rural area is determined by the characteristics of the postindustrial economy: the *service sector*, which is spatially more mobile and sets new siting require

Figure 2.5

*Share of population of the Alps–Adria Working Community by countries*

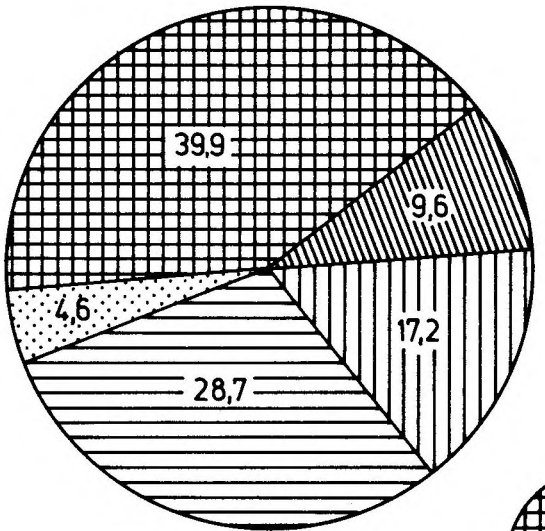
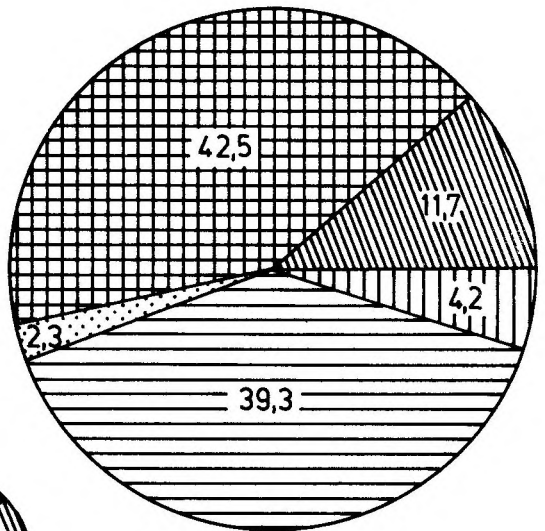
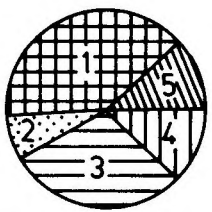



Figure 2.6

*Share of GDP of the Alps–Adria Working Community by countries*

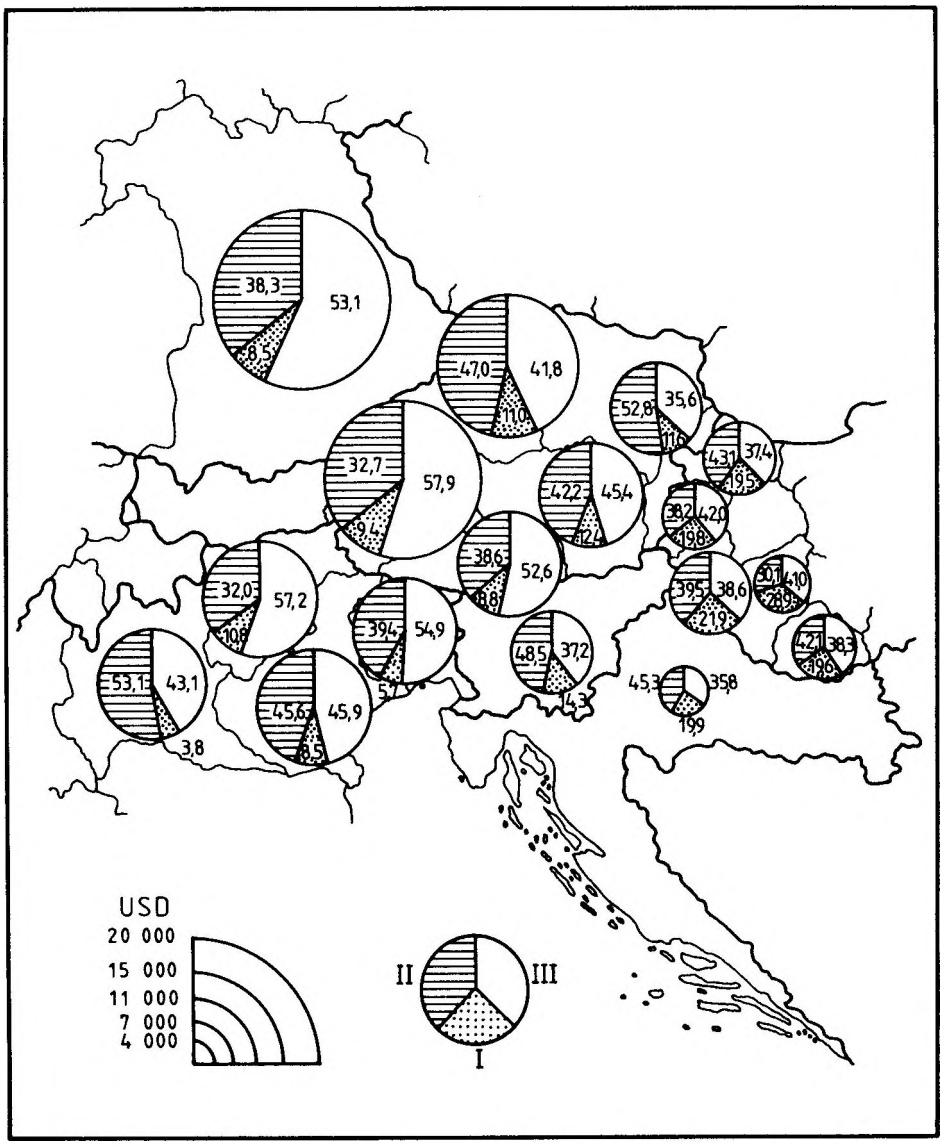



*Key*: 1 = Italy; 2 = Hungary; 3 = Germany; 4 = Former Yugoslavia; 5 = Austria.

Figure 2.7

*Share of employees by sectors in the Alps–Adria member regions, 1988*




*Source*: Calculated by the author on the basis of national yearbooks of statistics.

ments, has become the engine of economic growth. In 1988 in the Alps–Adria Community 49.6 per cent of the employees worked in the tertiary and quaternary sectors, 41 per cent in industry, and 9.4 per cent in agriculture. The eastern peripheral regions, however, still have a traditional economic structure: there is a high ratio of agricultural employees, in a number of regions the weight of industry is decisive, and service sectors are underdeveloped (*Figure 2.8*). The ratio of agricultural employees is the highest in the Hungarian member counties (Somogy: 24.9, Győr-Sopron-Moson: 21.2, Vas: 21.0 per cent) and in Croatia. Since the weight of backward regions is relatively significant (17.5 per cent), the indicators of economic structure of the Community are less favourable than the European Community average.

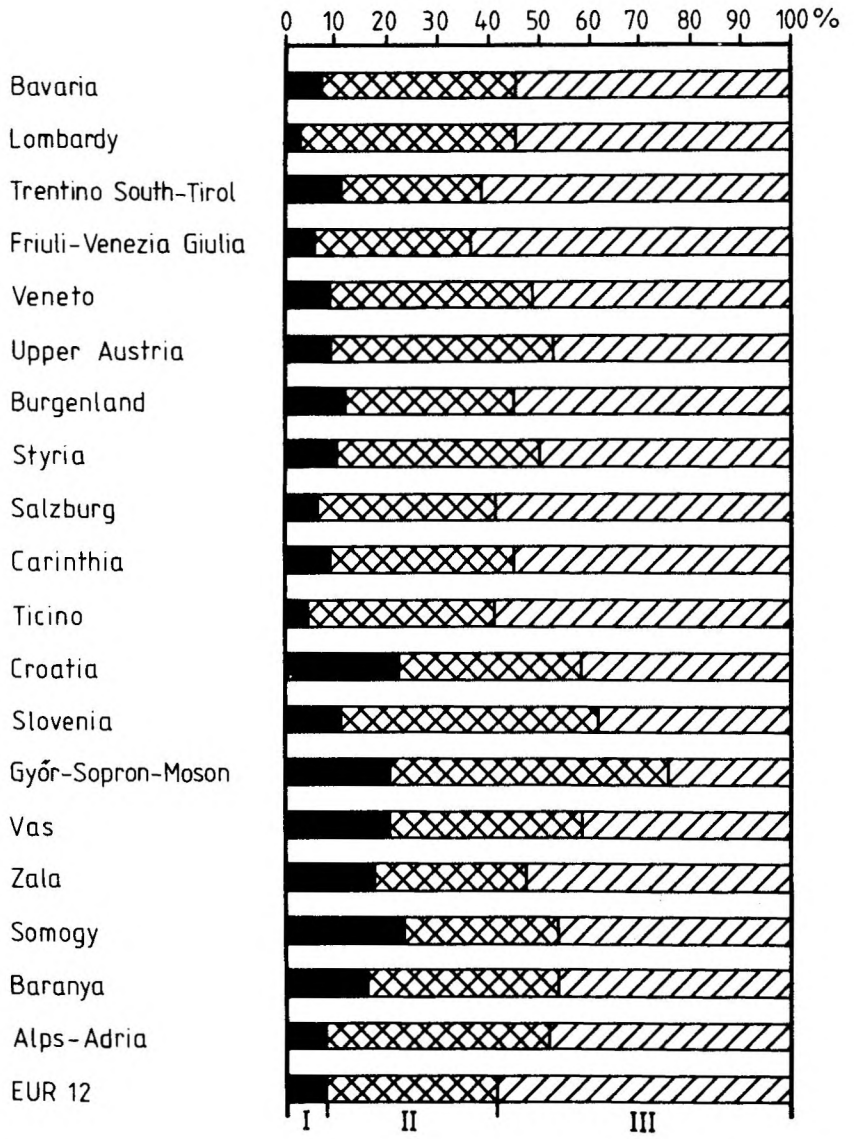
The economically developed regions have modern, complete *physical infrastructure*. The density of the backbone of the road system, the motorway network, is 15.9 km per one thousand square kilometers (the EC average is 13.2 km), leaving only the Hungarian counties and Burgenland without a motorway. The majority of the provinces (with the exception of the Hungarian counties, Trentino-South Tirol, and Burgenland) have been connected to the European air traffic network. In the region 19 airports produce 200 thousand metric tons of freight and 25 million passenger transactions yearly (*Figure 2.9*).

Significant development can be observed in other service sector industries, too. Not only the number of employees is growing in the sector but — more dynamically — the production value as well. This is typical in the Italian Veneto Region where between 1971 and 1983 the employees of the tertiary sectors increased with 30 per cent, and the output with 56 per cent. In the core regions the internal structure of the tertiary sector shows the peculiarities of a modern economy. While in the peripheries the growth industry of services is almost exclusively commerce (and tourism in Croatia and Somogy county), in the core regions financial, research and development, and productive services play an important role. In the five Hungarian counties 1.7 to 3.3 per cent of the employees work in personal and economic services whereas, for example, in the Austrian Lands 6.2 to 13.2 per cent of the labour force is employed only in financial services.

In the 1980s there was a significant reorganization of the interior industrial structure of the core regions: traditional industries fell behind, and production of microelectronics, biotechnology and infor-

Figure 2.8

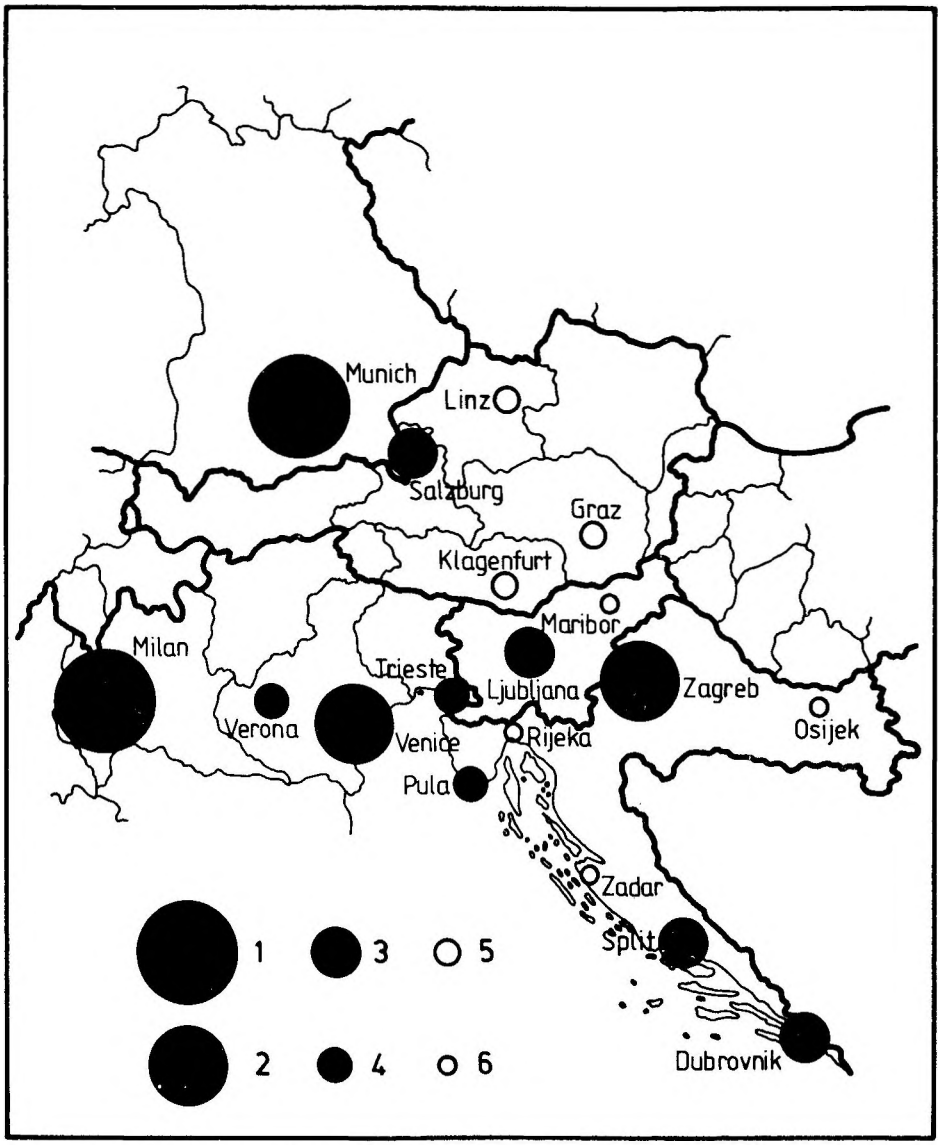
*Share of GDP by sectors in the Alps–Adria member regions, 1989*




*Source*: Horváth, 1991. p. 18.
*Key*: I = Agriculture; II = Industry; III = Services.

Figure 2.9

*Airports in the Alps–Adria Working Community*




*Source:* The data are taken from Secondo rapporto comune sulla pianificazione territoriale. pp. 372–377.

*Key*: Number of passangers in 1988, in thousands; 1 = over 8,000; 2 = 1,000—2,000; 3 = 500—1,000; 4 = 200—500; 5 = 100—200; 6 = less than 100.

mation technology stepped into their places. The traditional clothing industry and the food industry changed from mass production to diversified quality products complying with market demands. The most characteristic example of this is the Benetton company operating in the Veneto region: the small family business grew to become a world company by changing the content of its product and using an entirely new business organizational concept for its manufacturing.

Parallel with the economic restructuring in the western part of the Alps–Adria Community, the *size composition* of the enterprises has changed as well. Although in this area small- and mediumsized companies have been predominant, the change of paradigm of market economies — replacing the Fordism of economic organizations with a decentralized structure and a view that emphasizes differentiated market needs — resulted in a rapid growth of the number of enterprises both in the German, Austrian and Italian regions (*Table 2.4*). Small business firms have dominant positions in the Italian regions: the number of business organizations per one thousand people here is double of that of the other regions. Only Salzburg Land is close to the density of Italian enterprises, where 83.9 per cent of the enterprises operate in the tertiary sector. Despite the large wave of new businesses that emerged in Hungary and the former Yugoslavian territories in the end of the 1980s, the indices of these regions are one tenth to one quarter of the numbers of the core regions.

The operation of the near two million enterprises is supported by an expanded market service institution system: thousands of economic consulting, marketing, engineering development and information service organizations are at the disposal of small businesses, and they are helped by institutions that assist in entering the international market and organizing fairs and expos, and regional professional fairs and exhibitions. (The largest European fairs are held in Milan and Munich, and the expos of Verona, Trieste, Pordenone, Graz, Klagenfurt and Ljubljana also have international importance.)

Similar to the differences shown in economic potential and structural characteristics we can see differences in the other interior components of the economy of the core and the periphery. An example for the quality differences of the integration capability and the modernization can be shown by giving one peculiarity of both, export indicators and R&D data for the two spatial types of the Community (*Tables 2.5 and 2.6*).

Table 2.4

*Enterprises in the Alps–Adria Working Community, 1988*

| Member region | Number of firms | Employees per firm | Firms per 1,000 inhabitants |
|---|---|---|---|
| Bavaria | 390,353 | 13.7 | 35.3 |
| Lombardy | 672,336 | 5.6 | 75.6 |
| Trentino-South Tirol | 65,352 | 5.7 | 73.9 |
| Friuli-Venezia Giulia | 81,554 | 5.6 | 67.6 |
| Veneto | 321,343 | 5.6 | 73.4 |
| Upper Austria | 51,938 | 11.6 | 39.9 |
| Burgenland | 10,527 | 10.9 | 39.5 |
| Styria | 55,073 | 9.5 | 46.6 |
| Salzburg | 33,870 | 6.4 | 72.9 |
| Carinthia | 26,435 | 8.5 | 48.8 |
| Croatia* | 92,932 | 22.3 | 19.9 |
| Slovenia* | 49,798 | 19.7 | 24.9 |
| Győr-Moson-Sopron* | 3,518 | 47.1 | 8.3 |
| Vas* | 1,802 | 60.0 | 6.5 |
| Zala* | 2,576 | 44.5 | 8.4 |
| Somogy* | 2,739 | 40.2 | 8.0 |
| Baranya* | 3,050 | 50.2 | 7.3 |
| Total | 1,865,196 | 9.3 | 47.9 |

*Source*: National yearbooks of statistics. 1988, 1990.
* 1990

The northern Italian regions have great export capacity, they provide near half of the Italian export, while the Hungarian counties provide only ten per cent of the respective national export. The export quantity per employee is double the Hungarian indicator in the Italian member-provinces, though with respect to the participation ratio of export production only slight differences can be registered. A similar ratio can be found in the R&D capacity of the two areas. (Comparing the export indicators we met methodological difficulties because of the contents of the data at our disposal. The Italian data show the total export and that was computed for the active income earners of the regions. In the case of the Hungarian counties we considered only the export activity of industrial companies located in the capitals of the counties, and export falling to one industrial employee. Thus the conclusions drawn from data comparison could only

Table 2.5

*Export potential of Italian regions and Hungarian counties, 1988*

| Region, county | Volume of export, million USD | In per cent of the county | Volume of export per employee, 1,000 USD | Share of the export in the production, per cent |
|---|---|---|---|---|
| Lombardy | 39,875.8 | 31.1 | 10.84 | 38.0 |
| Trentino-South Tirol | 2,128.1 | 1.7 | 5.94 | 24.4 |
| Friuli-Venezia Giulia | 3,637.3 | 2.8 | 8.10 | 21.6 |
| Veneto | 15,280.0 | 11.9 | 8.63 | 34.6 |
| *Italian regions* | *60,921.1* | *47.5* | *9.74* | *34.8* |
| Győr-Moson-Sopron | 568.3 | 5.9 | 8.29 | 31.0 |
| Vas | 79.0 | 0.8 | 2.93 | 21.0 |
| Zala | 88.9 | 0.9 | 2.78 | 12.4 |
| Somogy | 55.8 | 0.6 | 3.75 | 20.7 |
| Baranya | 139.0 | 1.5 | 2.31 | 16.7 |
| *Hungarian counties* | *931.0* | *9.7* | *4.53* | *23.1* |

*Source*: Calculated by the author on the basis of Cappellin, R. 1990.; Annuario Statistico Italiano, 1988.; Hungarian yearbooks of county statistics, 1989.

Table 2.6

*Research & Development in the Italian regions 1985 and Hungarian counties, 1990*

| Region, county | R&D expenditure | | R&D expenditure per inhabitant | |
|---|---|---|---|---|
| | 1,000 USD | In per cent of the country | USD | In per cent of the average ofthe country |
| Lombardy | 900,861.2 | 28.9 | 101.4 | 185.2 |
| Trentino-South Tirol | 14,353.6 | 0.5 | 16.3 | 29.9 |
| Friuli-Venezia Giulia | 42,432.1 | 1.4 | 35.1 | 63.2 |
| Veneto | 81,282.9 | 2.6 | 18.6 | 34.0 |
| *Italian regions* | *1,038,929.8* | *33.4* | *67.7* | *123.8* |
| Győr-Moson-Sopron | 12,628.7 | 2.2 | 29.6 | 54.8 |
| Vas | 423.3 | 0.1 | 1.9 | 3.5 |
| Zala | 1,409.5 | 0.3 | 4.5 | 8.3 |
| Somogy | 955.7 | 0.2 | 2.7 | 5.0 |
| Baranya | 4,865.6 | 0.9 | 11.3 | 20.9 |
| *Hungarian counties* | *20,282.8* | *3.7* | *11.6* | *21.5* |

*Source*: Calculated by the author on the basis of Costa, G.—De Marche, G. 1989.; Tudományos kutatás és fejlesztés. 1991.

be relative. We have to point out that European integration requires drastic changes in the regional statistical information system.)

During the first decade of the Alps–Adria Working Community it primarily arranged the exchange of information, coordination of linear infrastructure (first of all within the triangle of the Italian–Austrian–Slovenian border) and organizing cultural relations. In the past few years, however – partly because of the changes taking place in Eastern Europe, and the capital expansion of the Italian regions – the professional exchange meetings of the economic organizations of the member provinces became regular. Economic cooperation began in 1989–90, in which period the Lombardy regions played the role of the coordinating centre of the Community. Innovational features can be strengthened as a consequence of programmes started in 1990, and their advantages can not only be enjoyed by the economically developed member regions, but the eastern peripheral regions can get ideas for transforming their economic structure, too. For the actual integration, however, adequate *institutions and measures* are needed. One of the cooperation programmes wish to establish the founding of two important institutions, the common regional development fund and a common financial institution that are the prerequisites of developing economic integration. These institutions, on the basis of the EC norms, could promote the eastern regions in joining European integration by partly using the financial resources of the European Community.

### *Development models of core regions*

The new economic policy made a significant impact on regional policy, too. The former consensus between central and regional governments broke up. The traditional means of regional policy (a significant central role in regional development, an incentive system built from the topdown, etc.) lost their economic and political motives, and new regional strategies have been formed.

As opposed to the centrally-managed regional development policy, the fundamental feature of the new models is that, instead of exogenous factors, endogenous endowments gain major significance in the development of regions. Centrally-controlled policy was realized primarily in sectorial development programs. The regional branch offices of central authorities could at most technically coordi-

nate these, but they were inadequate for the mobilization of local resources. The new development policies, however, emphasized local actors, democratic decision procedures, and complex utilization of resources and innovation.

The development models of the core regions of the Alps–Adria Community show a number of individual peculiarities as well as a lot of common characteristics. The major part of the regionally specific characteristics is rooted in the variety of regional policies, and in the social and economic position of the regions within the country.

While the Italian regions are among the most developed territories of the country, Carinthia, Burgenland, and the eastern border zone of Bavaria are relatively less developed areas compared to the average of their own countries, and receive significant government subsidies. The heavy industry areas of Styria and Upper Austria are hit by depression, while in the Rovigo district of the Veneto region the recession in the sugar industry causes the crisis. Naturally, the development of these areas requires individual solutions. Without doubt, however, even these development concepts will not follow the traditional models but have innovative elements emphasized.

The new regional policy generally applied in this region, which may be called the *innovation oriented*, or *local-regional initiative development* model, focuses on establishing and systematic renewal of marketable products, industrial processes and services. Therefore, this model enhances the development of the adaptability of regions. The local and regional decisions are not influenced by central standards any more, but local-regional economic decisions, based on market and economic cycle signals, mobilize in order to produce the performance necessary for the changes. The common goals of these strategies can well be outlined in the following way (*Stöhr, W. B.* 1990):

- search for new development resources and systemization of them, creation of the institutions necessary for the operation of this system,
- building regional, local, and entrepreneurial cooperation networks (the industrial parts of the Italian regions have reached this objective most perfectly, where traditional entrepreneurial cooperation has been combined with breaking down the production process into spatially separated phases),

— institutionalization of information, innovative, and entrepreneurial incentive transfers (industrial parks, business-innovation centres, R&D consortiums),
— organizing local and regional development coalitions of various interest groups, harmonizing rigid local hierarchies, building flexible decision systems,
— transforming the quality of living neighborhoods, their cultural and scientific atmosphere and favorable environmental status into economic growth factors, and the complex settlement supply into capital attraction factors.

Since in these regional communities, the system of norms of cooperation became the motivation force of economic rationality, it may not be accidental that a prefigurement of the new economic cooperation, the Alps–Adria Community, was formed in this area of Europe. The other reason for the trans-boundary regional cooperation is rooted in the political realism induced by this development model, which means the relatively high degree of spatial decentralization of power, and the possibility to join independently to the international regional division of labour. (Naturally, the Central European historical precedents can not be neglected, either.)

## General conclusions of the Working Community

The 15 years long operation of the Alps–Adria Working Community and the work of its expert committees allows to draw some conclusions. Summarizing these experiences is important because they may offer orientation for the regional cooperations being organized in Central Europe. The main conclusions are the following:

1) *The Working Community was built up gradually.* In the first phase of its operation those regions which had previously maintained intensive bilateral relations with each other became members; later member regions were primarily dependent on the intensity of relations with some of the member regions. *An important organizing principle is that only regions with national borders can become members* (which is a principle of all European regional organizations), territories which have no common borderlines with "member states" can not join the working community despite even a strong political pressure (a good example for this is the case of Lower Austria, which

has not been admitted to the Alps–Adria Working Community in spite of the intensive political and economic propaganda).

Finally, the limitation of the number of member regions must be considered, too. The experience of the Alps–Adria Working Community demonstrates that an organization having more than 15 members is harder to operat (with a deeply structured network of committees and working committees). The gradual building of the working community (and the establishment of observer status) is also justified by the fact that in the initial phase the inevitably emerging differences of interests can be harmonized more easily with a smaller number of members, and the coordination mechanisms can be established without greater difficulties.

2) The founder and core regions of the Alps–Adria Working Community organized regional cooperation at a time when their economies had reached the above mentioned development path. *Developing international cooperation became an important element of the internal regional policy of the member regions,* the regions helped in increasing the competitiveness of their business organizations with their own resources, too.

The standards of the European Community aiming at the integration of the internal market were incentives for developing cooperation as well. Uniform customs and tariff regulations and the development of the Western European linear infrastructure in this region meant the strengthening of the intensity of border relations, too. It is a specific motive of the development of this Central European regional cooperation that its members are considered the most dynamically developing regions within their countries, *and that they play an outstanding role in the bilateral foreign trade relations of the countries.* (For example, the Alps–Adria regions of Italy supply 52 percent of Italy's exports to Germany, 58 percent to Austria, and 66 percent to Yugoslavia.)

3) The inter-regional cooperation exceeded the limits of formal relations when the market actors had established their own cooperation networks, the collaboration of various types of marketing organizations had been institutionalized, and they had developed their own space of field of force which did not need administrative coordination any longer. The institutions of the expo and fair cities, chambers of commerce, business, entrepreneurial and technological centres, airports, of the Working Community are in contact with each other on their own today. One of the problems of the integration of

the eastern (Hungarian, Slovenian, and Croatian) regions is that these institutions are either underdeveloped or missing, and while the engines of cooperation are market organizations; in the eastern counties this role is still played by various levels of administrative institutions.

It is, therefore, our conclusion that public administration has *general political and coordination role* in regional cooperation, while the dense network of cooperation can be established by organizations or direct collaboration of market actors.

4) A general task of regional administration is to *represent and defend the interests of this cooperation in front of the central government.* Organizing the Alps–Adria Working Community was not free from conflicts between central and regional interests either. Because of the specific constitutional system the Free State of Bavaria has the widest space of freedom; on the other hand the Italian regions and the Austrian Lands could expand their international cooperation rights only through long lasting constitutional debates which have not yet ended. In the former Yugoslavia even the member Republics had only limited foreign trade autonomy, and in Hungary this question was hardly even raised.

Constitutional debates flared up especially after 1980 when the Council of Europe in Madrid reached an enabling agreement that pointed out the necessity of decentralized organization for transboundary cooperation. This agreement prescribes the freedom of regions to choose the forms of border cooperation on the one hand, and contains guarantees that the central state have a means to inspect and control the maintenance of state sovereignty, on the other. Although the agreement has not obliged the ratifying states to reform their internal legal system, it was an important measure to develop the institutional and legal means of regional cooperation, and therefor these autonomous endeavors of the regions should not be considered anti-constitutional. After the ratification of this agreement further national laws were enacted: the 1987 decree of the Italian Constitutional Court has extended the rules of the basic agreement to regions away from international borders (from the Italian side this has legitimated the Alps–Adria Working Community). In the preparation of the Austrian constitutional reform it has been unanimously formulated that the Lands should be able to sign international agreements concerning issues that are in their authority.

Independently of these legal results, and of the definitely more extended rights, power positions, and financial means of the regional medium-level compared to those of ours, the center-region conflicts of interests are continuously present. In the case of the Alps–Adria Working Community the Italian, Austrian, Yugoslavian, and Hungarian states have endeavored to diminish, rather than to encourage, the rate of development of this Central European integration, especially after the organization of the Pentagonale (Central European) Initiative.

5) In order to that the Hungarian economy be able to integrate, on a regional basis, into Europe *a radical renewal of regional policy and administration* is necessary. Power must be divided among the state, the local governments, and their regional communities in a way such that *the adaptation to modernization centres* should be influenced not only by central norms, but by responding to market signals with autonomous local and regional decisions as well.

*The reform of the regional and administrative structure of the country* is a condition of the realization of an innovative regional development strategy, and of establishing the international regional competitiveness, that cannot be neglected. The current Hungarian counties, because of their economic potential, market size, and extreme weakness of their market organizing power, are not appropriate to fulfill the role of independent fields of action in the international division of labour, or to be equivalent partners of Western European regions. The solution can partly be the organization of a medium level on the representative basis (which can even be the county, but in international relations rather the association of counties).

## Final remarks

My study summarizes the operation principles of Central European regional cooperation, and the experiences of the current integration. The dynamic changes of this part of Central Europe can offer examples to be followed for the participating counties. One of the benefits of participation can be learning and adapting these patterns. In this way the western and south-western counties can go down the path of Western regional development. However, the regional cooperation being organized in other parts of the country and in Eastern Europe must face different types of structural relations, different

power and administrative structures and different political conditions. Therefore the experiences of the Alps-Adria Working Community can be only partially utilized.

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# PART TWO

# REGIONAL AND URBAN DEVELOPMENT STRATEGIES

# 3 THE DEVELOPMENT OF THE LOMBARDY REGION

GIULIANO MUSSATI

## The role of Lombardy in Europe and in Italy

Lombardy has traditionally played an important role in the Italian economy, both as a market and because of the wide range of products and qualitative standing of her production structure (*Rosa*, 1982). Just as well, Lombardy has always been an Italian "window" on Europe, a nodal point for the exchange of ideas, men and goods between Italy and the other European countries (*Pagetti*, 1989).

With the completion of the European Single Common Market Lombardy as well as, more generally, Italy has now to face new competition challenges. In dealing with these new problems, the policy-makers of Lombardy should obviously evaluate the adequacy of the public intervention programmes which had been planned in the past to promote the development of the Region, and single out the changes that are necessary to set in motion the new trends.

The relevance of the Lombard market can be inferred by the size of her population. In fact, with almost 9 million inhabitants, it accounts for about 2.77% of the Community population, with a share that is not overcome by any other Italian region. In Lombardy, the percentage of active population to the total population (60.4%) is slightly lower that the Community average (63.0%) and in Italy is overcome by Emilia Romagna (66.0%) and Marche (65.7%) only. It has therefore a share of active population lower than that of German, French and, especially, British and Danish regions.

Its per capita GNP is higher that the Conununity average and is aligned with the regions of northern Europe and those of the northern, southern and central Italy.

Besides, Lombardy does not show high-density social and economic problems. The Community (CEC, 1987) has elaborated a synthetic index which takes into account the values of the per capita GNP, the GNP per employee, the unemployment rate and the employment development trends. This index may be considered as a parametre of the intensity of the socio-economic problems of each Community region. Being 100 the Community average, Lombardy, with an index equal to 132.6, ranges 143$^{th}$ on a list of 160 regions listed in decreasing order according to the intensity of the problems. In Italy, only Aosta Valley has a still lower intensity of problems and ranges 152$^{th}$.

The analysis of the employment rates per production sector stresses the specificity of Lombardy's production structure with respect to the European and the Italian total ones. In 1987, the regional employment was mainly concentrated in the services sector (52.0%), followed by industry (44.2%), while a fringe share employees (3.8%) was in agriculture. Compared to the European averages (equal respectively to 57.2%, 34.3% and 7.2%) and Italy as a whole, one notices a comparative greater importance of employment in industry (10 per cent points higher than the national data, which in Lombardy amounts to 36.4% of employees against 23.0% of Italy. Always in terms of employment, at the national level the share of agriculture is higher by almost 7 per cent points compared to the regional one.

In the Eighties, the employment regional structure has undergone a deep change, along the lines of the development trends that have characterized all industrialized countries: industry, though keeping to a first-rate role in making up the GNP, has lost a number of employees to the services, whose development seems however to be still limited compared to the peak reached in other European Regions. Likewise trends were shown also by the national production structure, with the difference, compared to Lombardy, that at the national level the industrial basis has always been of lesser importance than other activities.

The central role of Lombardy's manufacturing industry is confirmed, also qualitatively, by the examination of its structure considered on the basis of its technological level (*Table 3.1*). Compared to the national situation, Lombardy shows a specialization in high-tech sectors, with a constant favourable deviation of 4 per cent even though

Table 3.1

*Manufacturing industry composition by technological level of the production* (Industry share over total manufacturing workforce), per cent*

| | Technological level | | | | | |
|---|---|---|---|---|---|---|
| | High | | Intermediate | | Standard | |
| | 1971 | 1981 | 1971 | 1981 | 1971 | 1981 |
| Italy | 13.36 | 12.28 | 20.40 | 21.84 | 66.24 | 65.89 |
| Lombardy | 17.95 | 16.32 | 22.79 | 22.78 | 59.26 | 60.90 |

*Source*: Own computation from ISTAT data.
* According to OCSE classification: "International trade in high technology products: an empirical approach", Paris, 1983.

the slight changes which occurred in the Seventies have shrunk the regional as well as the national share of these sectors compared to the total of manufacture employment. Besides, in the advanced technology sectors (informatics, electronics, telecommunications, aeronautics, scientific instruments, etc.) exports from Lombardy are still at very high levels, accounting for 40% of the national total (*Table 3.2*).

Compared to Italy, Lombardy shows a greater specialization (*Table 3.3*) in "hard" markets, such as investment goods and intermediate goods for the production of final goods; however in the last case (following the national trend), the share of these sectors shows a cut-down with respect to 1971.

The structure of Lombard manufacturing industry, according to the energy content of the production (*Table 3.4*), does not significantly strays away from the national one: besides, in the past decade one notices in both cases an increase in the weight of middle energy-content sectors, and a reduction in high and low intensity ones. This has been obviously due to a process of adjustment to the new reality brought about by oil shocks (*Guerci*, 1982; *Mussati*, 1982).

In the Eighties, the emphasis of the competition among Regions and among private companies has been shifting towards innovation and exploitation of the technological progress (*Ergas*, 1984; *Mussati*, 1986). From this point of view, Lombardy is characterized by a

Table 3.2

*Industry composition of exports, per cent*

| Branch | Lombardy | Italy |
|---|---|---|
| Food products | 2,5 | 4,5 |
| Textile | 8,5 | 8,2 |
| Clothing | 2,2 | 3,3 |
| Leather and footwear | 0,7 | 5,5 |
| Wood and furnitures | 2,0 | 2,0 |
| Iron and steel | 5,5 | 5,0 |
| Non-electric machines | 27,1 | 25,8 |
| Electric machines | 24,8 | 12,3 |
| Transport vehicles | 8,4 | 8,8 |
| Non-metal mineral products | 1,9 | 3,5 |
| Chemicals | 10,4 | 11,6 |
| Paper and paper working | 0,8 | 1,8 |
| Printing and publishing | 1,0 | 0,9 |
| Other manufacturing industry | 4,2 | 6,8 |

*Source*: Own computation from Mediocredito "Indagine sulle imprese manufatturiere", 1984.

Table 3.3

*Manufacturing industry composition by economic destination of goods, per cent*

| | Intermediate goods for production of investiment goods | | Intermediate goods for nixed destination | | Intermediate goods for production of final goods | | Investiment goods | | Final goods | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1971 | 1981 | 1971 | 1981 | 1971 | 1981 | 1971 | 1981 | 1971 | 1981 |
| Italy | 9.88 | 9.62 | 24.62 | 24.72 | 10.52 | 8.34 | 15.16 | 17.33 | 39.82 | 39.99 |
| Lombardy | 5.42 | 6.45 | 27.06 | 28.06 | 12.80 | 10.58 | 18.92 | 19.99 | 35.79 | 34.92 |

*Source*: Own computation from ISTAT data.
* According to ISTAT classification: "Numeri indici della produzione industriale. Metodi e norme. Serie A, n.14", June 1976.

Table 3.4

*Manufacturing industry compositon by energy use**

| | Energy use | | | | | |
|---|---|---|---|---|---|---|
| | High | | Medium | | Low | |
| | 1971 | 1981 | 1971 | 1981 | 1971 | 1981 |
| Italy | 17,73 | 15,16 | 22,74 | 25,85 | 59,53 | 58,99 |
| Lombardy | 16,24 | 14,04 | 25,07 | 28,66 | 58,69 | 57,30 |

*Source:* Own computation from ISTAT data.
* According to the classification used by Tassinari, 1984.

rich endowment of scientific and technological resources. This is proved by the fact that 17% of Italian scientific contributions (25% in the case of biomedicine) published in national reviews and 20% of those published abroad are due to Lombard scientists, however imperfect this index may be.

As far as the innovation effort made by Lombardy-based companies is concerned, it is wortwhile mentioning that 45.7% of Italian expenditure for R&D was borne by Lombard firms (*Table 3.5*); this figure represents an important increase compared to the weight of the region at the beginning of the Eighties (40%). Moreover, one should not forget that even as far as it concerns the patent production, Lombardy has a leading position in the national context, however imperfect the patent number may be as an indicator of innovation output. In fact, over 28% of those (either companies or people) who submit patent requests in Italy are Lombardy-based. Compared to the national total, the rates amount to 30% for companies with a staff of less than 20, 35% for medium-sized companies, 43% for companies with a staff of over 500 employees.

This innovation effort is confirmed also by the increasing commitment in terms of product innovation even by small-sized firms (*Riva*, 1983) and by the high rate of adoption of the most sophisticated automation technologies (*Table 3.6*).

In the Eighties an important contribution to the Lombard innovative activity has been given by the strong development of production services (*Colitti*, 1978), which evolved along two parallel paths, i.e. as a development of tertiary functions within the industrial companies,

Table 3.5

*Resources devoted by firms to experimental R&D by regions, 1985*

| Region | Number of firms engaged in R&D activity | Total expenditure in R&D* | Number of employees | | | |
|---|---|---|---|---|---|---|
| | | | Researchers | Technicians | Others | Total |
| Piedmont | 391 | 1 043,0 | 4 467 | 4 618 | 5 498 | 4 583 |
| Aosta Valley | 3 | 1,7 | 10 | 10 | 3 | 23 |
| Lombardy | 1 017 | 2 316,5 | 10 608 | 10 623 | 7 012 | 28 243 |
| Trentino-South Tirol | 35 | 14,2 | 55 | 157 | 76 | 288 |
| Veneto | 273 | 174,2 | 616 | 1 151 | 910 | 2 677 |
| Friuli-Venezia Giulia | 71 | 102,8 | 565 | 946 | 325 | 1 836 |
| Liguria | 50 | 179,0 | 1 314 | 791 | 302 | 2 407 |
| Emilia Romagna | 311 | 269,1 | 1 298 | 2 218 | 1 162 | 4 678 |
| Tuscany | 122 | 99,1 | 496 | 587 | 425 | 1 508 |
| Umbria | 25 | 15,6 | 65 | 94 | 68 | 227 |
| Marche | 57 | 17,7 | 85 | 180 | 97 | 362 |
| Latium | 95 | 348,8 | 1 772 | 2 219 | 1 091 | 5 082 |
| Abruzzi | 19 | 29,9 | 87 | 142 | 91 | 320 |
| Molise | 3 | 0,7 | 3 | 7 | 1 | 11 |
| Campania | 44 | 428,1 | 1 446 | 1 354 | 258 | 3 058 |
| Apulia | 19 | 4,2 | 20 | 43 | 18 | 81 |
| Basilicata | 2 | 1,2 | 1 | 6 | 63 | 70 |
| Calabria | 3 | 1,3 | 4 | 5 | 4 | 13 |
| Sicily | 12 | 2,2 | 85 | 57 | 45 | 187 |
| Sardinia | 5 | 1,0 | 3 | 12 | 9 | 24 |
| Total | 2 557 | 5 050,3 | 23 000 | 25 220 | 17 458 | 65 678 |
| Lombardy/Italy, % | 39,8 | 45,7 | 46,1 | 42,1 | 40,2 | 43,0 |

*Source*: Own computation from ISTAT, 1988.
* Million Liras.

Table 3.6

*Percentage composition of innovations by type and regions*

| Region | Number of product innovations | Number of process innovation | Product innovations | | | | Process innovations | |
|---|---|---|---|---|---|---|---|---|
| | | | New goods | | | Highly impoved goads | Process related to new goads | Process related to new proc. |
| | | | in the sector | in Italy | at the firm | | | |
| Piedmont | 14,5 | 14,5 | 11,2 | 13,3 | 35,1 | 40,4 | 37,1 | 62,9 |
| Aosta Valley | ... | 0,1 | 13,3 | ... | 73,4 | 13,3 | 66,7 | 33,3 |
| Lombardy | 39,5 | 37,0 | 13,3 | 12,4 | 36,8 | 37,8 | 28,6 | 71,4 |
| Trentino-South Tirol | 1,4 | 1,7 | 16,2 | 4,9 | 29,0 | 49,9 | 30,9 | 69,1 |
| Veneto | 14,0 | 12,7 | 10,7 | 7,2 | 42,7 | 39,4 | 35,0 | 65,0 |
| Friuli-Venezia Giulia | 2,1 | 2,1 | 10,5 | 6,2 | 54,2 | 29,1 | 34,9 | 65,1 |
| Liguria | 1,5 | 1,6 | 4,1 | 8,1 | 39,7 | 48,1 | 20,3 | 79,7 |
| Emilia Romagna | 11,2 | 11,2 | 7,1 | 9,7 | 42,6 | 40,6 | 34,7 | 65,3 |
| Toscany | 4,6 | 6,0 | 9,1 | 7,6 | 45,4 | 37,9 | 29,0 | 71,0 |
| Umbria | 1,1 | 1,4 | 20,4 | 8,0 | 34,5 | 37,1 | 34,7 | 65,3 |
| Marche | 3,4 | 3,1 | 7,6 | 9,0 | 48,6 | 34,8 | 29,6 | 70,4 |
| Latium | 2,6 | 3,1 | 13,5 | 17,4 | 37,8 | 31,3 | 27,0 | 73,0 |
| Abruzzi | 1,7 | 1,4 | 15,0 | 32,4 | 43,7 | 8,9 | 26,4 | 73,6 |
| Molise | 0,1 | 0,2 | ... | 1,5 | 53,6 | 44,9 | 13,4 | 86,6 |
| Campania | 0,9 | 1,4 | 16,4 | 7,5 | 47,9 | 28,2 | 33,4 | 66,6 |
| Apulia | 0,6 | 1,1 | 3,9 | 7,1 | 48,1 | 40,9 | 21,0 | 79,0 |
| Basilicata | 0,1 | 0,1 | 5,3 | 5,3 | 21,4 | 68,0 | 35,6 | 64,4 |
| Calabria | 0,1 | 0,5 | 12,0 | ... | 50,0 | 38,0 | 22,4 | 77,6 |
| Szicily | 0,5 | 0,6 | 12,1 | 7,2 | 53,3 | 27,4 | 29,5 | 70,5 |
| Sardinia | 0,1 | 0,2 | 2,7 | ... | 72,6 | 24,7 | 30,1 | 69,9 |
| Total | 100,0 | 100,0 | 11,3 | 11,2 | 39,5 | 38,0 | 31,4 | 68,6 |

*Forrás*: ISTAT, 1988.

and as a devolopment of autonomous institutions operating on the market. Hence, an increasingly strong interaction has been established between the industrial and the tertiary sectors, which led to an increase in the overall innovation capacity of Lombard production system (*Mussati*, 1990).

This phenomenon is confirmed by the fact that 19.2% of Italian economic operators working in the advanced services are concentrated in Lombardy. For istance, it is estimated that the region comprises 40% of national companies and a half of the employees of the informatics services, 30% of R&D personnel, over 40% of CAD and CAM firms and nearly all of the companies, having research as their primary activity, existing in Italy.

The Lombard economy is characterized by an attitude of large opening towards Italian and foreign regions. However, while in the former case the balance is clearly positive, in the latter one there is a trade gap, which makes Lombardy very sensitive to shocks coming from abroad. In particular, compared to Italy, Lombardy's exports seem specialized in advanced fields such as non-electric machineries, whose weight is almost twice the national figure.

In the Seventies, just as the whole of Italy, the Lombard industrial structure was characterized by a marked increase in the number of local units such as had never been recorded before, with a consequent reduction in their average size (CSC, 1983; *Zanetti*, 1983). A staff of 50 employees represents the critical threshold of growth above which both the local units and the employees decreased. Comparing to the total Lombard manufacturing employment, the weight af companies with less than 50 employees has actually shifted from 36% to 45.8% in the last ten year period (IRER, 1984; *Mussati* et al., 1987).

Till 1987, the Lombard economy has basically followed the same growth path as the national economy, with an average yearly increase in the GNP of about 3%. But in 1988 the economic expansion of Lombardy began to show a 3.9% increase rate in the GNP, i.e. a rate higher that the already high 3.6% recorded on the national level (*Ferri—Leoni*, 1989).

In these years, the production expansion of the region has been supported by the domestic demand, whose most dynamic component was that of fixed gross investmens: their increase was of 5.8% in 1987 and 5.5% in 1988, thus testifying the effort of technological adjustment developed by Lombard companies through the embodied technical progress. Indeed, following the trend of the last years, the inc-

rease in capital assets is still largely oriented towards investments in machines, equipment and transport means, showing a 9.5% growth rate, while the investment growth in constructions is still low (+1%). However, this growth represents a significant, though still limited, trend inversion compared with the negative variations recorded in the previous years, when companies' constantly preferred investments inducing productivity growth of plants rather than those increasing the production capacity (IRER, 1989).

Besides, in 1988 Lombardy showed a strong increase in the value added generated by industry, with a 4.6% expansion rate.

In the past two years, the growth of the regional GNP has been mainly determined by the dynamics of the industrial sector. This seems consistent with the opinion about the restructuring process, started at the end of the Eighties, having entered its final stage, with companies having acquired a new solidity and starting to expand again their productive capacity.

In 1988, the economic expansion which is taking place in Lombardy and its duration have favourably affected the employment market, with a reduction in unemployment rate from 6.5% to 5.5%, and a trend towards full employment in the strongest sectors of the workforce, which resulted in a shortage of skilled manpower. This trend contrasts with that prevailing the national level, where the unemployment rate has reached 12.5% and there is little hope for an improvement in the short run.

The reduction in unemployment in Lombardy is mainly due to the services, where the number of employees has increased by 21.2% from the beginning of the Eighties, compared with a 14.3% shrunk in industry.

The changes in the region's economic structure have taken place within the frame of remarkably advanced financial markets. Lombardy strategic role in the financial sector is confirmed by the high values attained by the share of some indicators with respect to the national total. For istance, 15.2 % of banks that are located in Italy are concentrated in Lombardy, with a number af counters equal to 18.3% of the national total meaning a ratio of 3.2 counters per 10,000 inhabitants against a mean national value of 2.7.

The share of loans of Lombard banks with respect to the national total is equal to 25.8%, while the share of deposits totals 22.8%. Both values are the highest of Italy followed by Latium, whose shares however are less than half the Lombard ones.

Also, the share of loans managed by preferred loans institutions reach the very high figure of 21.6%. In particular, preferred interest rate loans amount to 17.9% and non preferred interest rate loans to 23.3% of the national total.

The particularly favourable position of the Lombardy credit structure in comparison to the other Italian regions is clearly shown by some indicators, such as the following ratios: bank deposits/GNP, bank loans/bank deposits, total credit/GNP. Lombard values of these ratios are amongst the higher ones, thus confirming the existence of a very advanced credit system more advanced than the national one. Bank deposits are preferred to postal deposits, banks supply a high amount of credit, while preferred credit institutions go farther than merely supplying preferred credits.

Furthermore, in Lombardy is located the main center of the Italian Stock Exchange and a large part of the Italian insurance industry. So, we might say that a large part of the Italian financial intermediaires are located around Milan, the capital of Lombardy, or anyway in the region. Keeping in mind the afore-mentioned high quota of producer services (specially referring to R&D services) on the national total, we might conclude that Lombardy is particularly well equipped in order to sustain the development of her industrial structure in a modern fashion, where the interrelations between industry, finance and producer services play a crucial role.

We might add that in Lombardy is located, as we have seen, one of the best part of the Italian scientific system, with some of the top universities of the country and a large part of the leading Italian research centers, public and private alike. This feature is specially relevant in the "new competition" between economic regions (*Mussati—Terracciano*, 1989). With no surprise we find that the Lombard economy is strongly specialized in science-based and specialized-suppliers industries, according to the *Pavitt* taxonomy (*Pavitt*, 1984). Lombard exports, too, are specialized in the same way, at least in comparison with the overall Italian structure of export.

This one is really the comparative advantage enjoyed by Lombardy in comparison with the other Italian and European regions. In other words, an effective "innovation milieu" (*Aydalot*, 1986) is operating locally, polarized especially around Milan and Brescia, allowing to the Lombard firms to exploit some sort of collective learning process.

This favourable property existing in the region is based not only on the existence of a local high-level scientific system, but also on a very strong attitude for cooperation both among firms and between firms, on one side, and local authorities, on the other.

With reference to the cooperation among firms, these are strongly developed, especially as far as small and medium sized firms are concerned. This first phenomenon, which may be interpreted as an example of the "flexible specialization model" (*Brusco*, 1982; *Sabel*, 1982; *Piore–Sabel*, 1984, *Barca*, 1985), is particularly relevant in the "local production systems" (*Garofoli*, 1983), which in Lombardy total 28 areas.

The second phenomenon is more interesting, since implies formal relationships between firms and other economic agents operating in the region, generally with the involvement of the Regional Government, often together with local (or industry-wide, often located in Milan) Manufacturers Associations and/or local Chambers of Commerce, sometimes with national and local banks (as for instance Finlombarda, the regional financial agency, with its subsidiaries operating in the sectors of leasing, financing of start-ups, etc.). These institutions are active in the field of producer services (*Lassini*, 1985), especially in the R&D field, with the notable example of CESTEC. They represent interesting examples of coperation between private and public institutions, which is a crucial factor in modern regional development processes, as some foreign experiences (Massachussetts and Pennsylvania, for example) show convincingly. Actually, new flexible organizational structures capable of building up relations between economic agents and, sometimes, public bodies are very relevant for an effective and evenly spread innovative process. This point has strongly been stressed recently (*Gordon–Kimball*, 1989; GREMI, 1989).

The Lombard Regional Government show a cooperative attitude also at the international level. It is very active, for istance, in Alps–Adria (*Cappellin*, 1988), a grouping of European regions (belonging to Italy, Switzerland, Germany, Austria, Jugoslav, Hungary and clustered around the Alps and the Adriatic Sea), existing from 1978 and fostering interregional cooperation between Eastern and Western Europe, an objective of foremost importance especially in the light of the recent events occurred in the East.

## Experiences of regional development public policies and expected problems

In Italy, the elaboration and implementation of regional industrial policies have traditionally followed two main trends: influencing production localization, on the one hand, and supporting small and medium-sized firms, on the other hand.

Except for special-status regions, Italian regions have limited intervention power on industry and, more generally, on the establishment of regional plans for economic development, which fall within the domain of national authorities. All the same, regions can play an important role in coordinating the local implementation of the plans set up at the national level, in orienting and adapting the beforementioned plans to the different local needs, in order to fully exploit her own resources and to overcome the structural differences that exist in the different areas.

In spite of this restricted autonomy as far as industrial policy is concerned, the Lombard Regional Assembly has issued over the years some laws and built up operational instruments that allowed the Regional Government to efficiently operate on the Lombard industrial system. Objectives focussed, first, only on the territory development and the locational readjustment within the Region (*Lassini*, 1979; *Lassini*, 1982; *Ruffini*, 1984). Later on, at the end of the Seventies-beginning of the Eighties, the Lombard regional policies have been set out to influence the re-localization processes of "central area" companies, by recovering dismissed industrial buildings, and setting up inter-firms cooperative structures or consortia providing produced services (*Lassini*, 1984). Furthermore, since the beginning of the Eighties, the attention focussed on the support to be given to companies' innovative activities, just as happened on the national and European levels.

The first regional law on industrial localization dates back to 1973, and was referred to the creation of equipped industrial zones, with a double goal: promoting, on the one hand, the diffusion-concentration of the new industrial activities in the southern plains of Lombardy, thus avoiding to further congest cities; and developing, on the other hand, the economy of mountain areas, in order to check their demographic decline and progressive reduction in the employment rate.

In the period 1973–79, infrastructures have been created thanks to region's aids in 33 industrial sites located in the peripheral areas where her financing and intermediation activity have permitted to make available industrial lots equipped with primay infrastructures at prices that were much lower than market values. Other incentives were addedd, such as, for istance, prime rate financing for small and medium-sized firms, utilization of counter security funds for medium-run loans, speeding up of procedural times, and interest rate rebates. These terms were agreed on between the Lombard Regional Government and the banks in charge of the Regional Payment Service.

In 1975, pursuant to the law No. 382, regions were recognized by the Italian Government the right to legislate on the matter of industrial areas and to promote the creation of special "industrial consortia". By the regional law No. 7/1979, Lombardy created a financial instrument that permitted a first intervention in this field: actually, the region acquired the opportunity to rationalize the space available for industrial use; to create new infrastuctures for the safeguard of environment; to prevent dereliction or non-utilization of still functional industrial structures; to individuate which inter-boroughs industrial areas still needed incentives in order to make possible the full exploitation of the existing infrastructures; to create services for companies and workers alike that were to be managed through Consortia. The limited financial resources that were then available in the regional budget (7.5 milliard Liras for the triennium 1980–82) and the will to exploit anyway the above mentioned State delegation of power gave to this intervention a somehow experimental character, whose experience proved all the same extremely useful for drawing up the new regional law (Law No. 33/1981).

The experience of these first interventions (equipped areas and industrial consortia) has been positive on the whole, even though there have been obstacles and limits which the regional law No. 33/1981 succeeded in overcoming. This law is quite innovatory with respect to the regional laws issued to support industrial activities.

The law, which is still operative, allows for several intervention forms: from the orientation of localization processes through the equipment of areas for industrial and handicraft activities and the recovering of derelicted production structures, to the establishment of technical inter-firms services producing units.

Since its becoming effective in March 1988, the regional law No. 33/1981 has mobilized a great amount of money, namely the allocations directly provided for by the regional budget, and the whole of investments in individual projects in which also flowed the financial resources of other public and private operators.

Altogether 122 milliard Liras have been allocated by the Lombard Government: 41 for interventions in the field of artisan-firms (staffed with 9 to 32 employees, depending on the branch) and 81 for the other purposes provided for by the law (*Table 3.7*). On the other hand, the global resources of both the public and the private sectors invested in the 490 projects initiated pursuant to the law No. 33 cannot be quantified, even though three times as much money as that invested by the region seems to be a realistic figure. Accordingly, the total investment would amount to 315 billion Liras at the least.

Table 3.7

*Allocations, commitments, number of started and completed projects enacted by Regional Law 33/1981, million Liras*

| Branch | Allocations | Number admitted projects | Commitments | Number started projects | Number completed projects | Total endowments for completed projects |
|---|---|---|---|---|---|---|
| Industry | 81,167 | 231 | 64.500 | 230 | 125 | 31.247 |
| Handicraft | 41,339 | 323 | 34.718 | 260 | 30 | 3.148 |
| Total | 122,507 | 604 | 99.218 | 490 | 155 | 34.395 |

*Source*: Own computation from data: "Stato di attuazione al 31.1.1988 degli interventi regionali attuati in base alla Legge Regionale n. 33 del 3 luglio 1981.

Notwithstanding the progressive and constant reduction in the financial means managed by the performance programmes of the law, the number of projects started up remained high even in the years characterized by scarce available funds from the region. This was due to the financial mechanism of re-utilization of funds left over from non-initiated projects, as well as to the reduction of the per cent share of public contribution as to the total eost of the approved project.

The scarcity of funds available and the experiences, made in the first years of the period in which of the law has been working, have contributed to direct the regional financings towards initiatives that showed a high degree of feasibility, leading in the end to a complete coincidence of approved and initiated projects.

125 out of 230 projects initiated in the industrial sector have been brought to a conclusion, with a total disbursement of 31,247 million Liras. As concerns artisan firms, 41,339 million Liras have been allocated in all for 323 programmes, 260 of which have been concretely set up but only 30 brought to a conclusion.

The interventions in favour of artisans had an important role in all the implementation plans of the law No. 33/1981, so much so that over 50% of the interventions approved till now concern them. Their per cent weight decrease remarkably if one considers the funds theoretically allocated (33% of allocations) and those concretely used (34% of engagements). These data show a remarkable difference in the approach adopted by law-makers in favour of industry and the one adopted in favour of handicraft. While the law does not provide for the start up of equipped industrial areas, the financing of new areas is possible for artisan firms and the relevant funds can be managed by the local councils. In this way, the several localization needs raised by the local councils have fragmented the regional contribution into numberless local initiatives, with a covering that hardly exceeds 50% of global investments.

On the contrary, interventions in the industrial areas led to a concentration of funds in a few "poles" of industrial development that were already in existence at the end of the Seventies. All of the 25 programmes distributed in 16 industrial "poles" have been started and 15 of them already finished.

Among the regional interventions in the productive localization areas, the industrial re-utilization projects have been of special importance in the last years, especially with reference to the recent trends of the production system of Lombardy. Actually, in the second half of the Seventies, the evolution of the industrial structure of the region has been characterized by important processes of production decentralization. This was due on the one hand to companies' retreat from central areas which had become too expensive in terms both of cost of the lots and external diseconomies; and, on the other hand, to the surfacing of critical situations in some industrial sectors, such as iron-metallurgy, electro-mechanics and chemistry. In the Eighties,

the closure of industrial plants has affected the whole of the regional territory. This has been caused by the acceleration of reconversion processes (leading in turn to an acceleration of plants' obsolescence) and by the plants' closure in mountain areas, due to local demographic and employment decline.

Lombardy has been among the first Italian regions to start a specific policy aimed at carrying on industrial re- utilization projects. The regional law No. 33/1981 offers the individual boroughs and the local areas authorities the opportunity of obtaining capital account contributions that may cover up to 50% of the expenses for restructuring works required by the re-establishment of companies.

Since the date of enforcement of this law, 70 projects have been granted aid, even though 16 of them have not started, generally because of the lack of a sufficient number of companies interested in taking them over: in these cases the aids granted have been revoked. In all, the sum allocated to finance the projects initiated amounts to 11,995 million Liras.

The interventions in this field have proved particularly effective in the case of initiatives concerning small plants for which a complete recover of the existing industrial buildings and a rapid conclusion of works has been possible, while recovering greater industrial structures has been much more difficult and required longer finishing times.

An important part of the regional law under examination provides for the promotion of producer services and of a more efficient management of smaller firms. By granting financial incentives, the region has promoted the creation of inter-firms cooperative centers supplying technical, organizational and marketing services.

The projects started and in most cases already carried out amount to 129, with 1,500 companies directly involved and about 4,500 companies utilizing the services supplied. Among the 129 initiatives started up, the projects that prevail are those aiming at the development or consolidation of marketing, especially for penetration in foreign markets. There are 23 cases of inter-firms co-operation in view of the research and development of new products. Lastly, there are 15 centres of product qualification and 30 initiatives of a mainly infrastructural and environmental character. Among the initiatives, the specific-purpose consortia prevail: these may concern marketing strategies for individual companies, establishing permanent commercial offices abroad, quality marks. On the contrary, the services supplied by

multi-industry consortia seems to be of a more standardized and promotional nature.

In the first case, the consortiated companies are not numerous (they rarely exceed 50 units), the membership is subject to restrictions and the financial engagement may be heavy. This is why the relationship between the companies and the consortium is a very close one and the results obtained more satisactory. In the case of research and development projects, the purpose of the consortia may be the co-operative development and marketing of new products, when the concerned companies are small units which have good ideas but facing tight financial constraints or small firms of a specific industry dominated by a big national or foreign group; or it may be the acquisition of new techniques and/or technologies which involve numerous companies belonging to same industry.

The multiplicity of financiable interventions and the flexibility of the procedures for the actual performance are the most innovative aspects of this law, yet at the same time a limiting factor. Since this is not a law setting general guidelines, the prevalence of the innovative aspects depends on the actual management stage, when distorsions may surface that can affect the very objectives of the law. The fragmentation of the initiatives and their poor co- ordination are perhaps the foremost limit of the interventions performed up to now, especially as concerns those in favour of artisans and the creation of business services.

At the beginning of the Eighties, the consciusness (*Lassini—Riva*, 1981) that technological innovation and product quality are the mainspring of industrial development and the key-elements for the competitiveness of the individual firms and economic systems, was promptly reflected by the industrial policy carried on by Lombarddy. With the project innovation, first, and the approval of the regional law No. 34/1985 providing for innovation support in the system of smaller firms, the Lombard Government equipped herself with an operational instrument allowing her to help small firms' technological and productive development.

The law distinguishes between two types of priority intervention, namely:

a) incentives to applied research through allocation grants tied to research contracts with specialized institutions and research centres,

b) incentives to individual innovation projects performed by small and medium-sized firms by means of medium-run preferred loans.

The funds allocated to the first objective amount to 4,300 million Liras, while to the second one they amount to 11,700 as at 1988, to which are to be added 20,000 million Liras made available by some banks.

The approval of the law has been followed by a long preparatory work for its implementation, which led to the definition of guidelines to be followed when chosing the projects to be financed.

First of all inter-industry objectives have been chosed, such as: improvement of product quality and reliability; incentives to the establishment of new innovative firms; completion of environment safeguard projects; optimal use of human capital; promotion of the innovation process in its different stages.

The following industries have been singled out for the regional interventation: measure and control "intelligent" instruments; biotechnologies; bioengineering; robotics; power laser technologies: chemical synthesis and "new materials".

The law No. 34/1985 has been favourably received by smaller sized firms because of the simplicity of the related procedures und of the short times (three months from the date of submission of the request to that of the granting of the financing) required for the final decision, which make the regional law preferable to similar State laws.

From the beginning of 1987 up to March 1989, the financing requests submitted for projects of technological innovation have been 120, 70 of which have been granted financing, for a total amount of 16,550 million Liras. As a whole, the expected investments amount related to these 70 projects totalled 48,175 million Liras. The companies financed are in the segment with employees ranging from 10 to 50, with a turnover not exceeding 5,000 million Liras. The innovation content of the projects consists mainly of the application of micro-electronics and the design of systems for the automation and monitoring of the different production stages.

The rather low number of requests submitted and financed has limited till now the effectiveness of the law as an instrument of orientation and of diffused stimulation of innovation processes in small and medium-sized firms. In order to appreciably affect the Lombard production system to a satisfactory extent, the number of the inter-

ventions should be increased both through a further improvement of management skills and through a reduction in the interest rates on loans (at the present about 7%) to make them more convenient. Changing the laws on the promotion of research contracts between specialized centres and institutions, on one side, and small firms, on the other, would also help, as the latter are excluded from the activities of research- development-application which are the subject-matter of the contract, and would facilitate the activity of design, development and application of the results of the research which the company itself carries on. The implementation of the law has been entrusted, as concerns the evaluation of the technical aspects, to CESTEC, and as far as finance is concerned, to Finlombarda and Federfidi.

Besides the activity connected to the enforcement of the regional law No. 34/1985, CESTEC also plays a foreground role in the management of the innovation policy elaborated by the Region. CESTEC's activities fall under two headings: the direct supply of several services (disseminations of technological information, consultancy, management of pilot-projects, industry and inter-industry technological promotion) and the co-ordination of the activities of public and private operators, on one side, public and private operators and the operations of the instruments employed.

After a rather difficult first stage of self-organization, CESTEC has now reached a good operational standard, even though it should emphasize its role as a service-producing agency capable of competing, with the existing consultancy private companies.

By the regional law 24 April 1989, No. 12, "Regional interventions for the promotion and carrying out of local areas integrated projects", the region promotes and contributes to carrying out local integrated projects, whose aim is the setting up and coordinated management of interventions for the support of production activities, falling under the regional intervention powers, and the related infrastructures and services.

The areas shall be selected according to the following criteria:

- inadeguate availability of services and physical, technological, educational and information infrastructures,
- the possibility of realizing, either in process or in the planning phase, transformations or creations of new infrastructural systems in the involved area,

— particularly severe crisis of some industries, or processes of widespread stagnation and economic decline in the area.

The following types of interventions (whose duration must not exceed three years) will be considered:

a) restoration and renewal of industrial and housing deteriorated sites; transformation and re-adaptation of dismissed production buildings,
b) creation and development of technical infrastructures, including those of the education and information system, of services finalized to the economic development and tchnological innovation,
c) development or establishment of companies or other agencies, providing assistence and consultancy to firms,
d) establishment of information and promotion centres and "information counters" for companies to be used as instruments put to their disposal by the programmes and activities of regional, national or local community public interventions,
e) promoting, coordinating and carrying out, either in the whole or in part, the feasibility plans and the interventi.ons provided for by the law under exam.

The regional contribution must not exceed 50% of the expenses that are considered allowable, neither shall it finance individual activities but only whole integrated projects.

The responsability of setting up and carrying out projects shall be entrusted to consortia of local institutions, mountain communities and individual boroughs, together with the intervention agencies as established by the regional law No. 33/1981.

## Objectives and instruments of the future regional policy

The relevance of the innovation phenomenon in the competitive processes among companies and geographic areas is expected to last also for the next years. The increasing integration of the markets, especially within large regional areas on the world level (in the US with the treaty US—Canada, in Europe with the completion of the European Single Market, etc.) requires a different strategy by companies and a different public policy (*Mussati*, 1989b).

As for Europe, 1993 will imply the definition of a common industrial policy and the need of an harmonization process between the in-

dustrial policies of the different countries and with the Community general principles in this field.

In the case of Lombardy, the characteristics of its production structure and its location which makes her a bridge between Italy and Central-Northern Europe, together with the still accelerating processes of technological progress and market globalization, shall lead regional authorities to operate in such a way as to keep a high level of innovative activity and an efficient and stable presence on foreign markets by Lombard firms, especially the smaller ones which are likely to be the ones to face the stiffest challenges posed by the "new competition". In this way, the Lombard industrial system might remain higly competitive.

On the other hand, without doubts, the gradual implementation of the Single European Act is going to affect the Lombard firms which have in th EEC their main external market.

However, the progressive elimination of customs inspections, the unification of the standards, the liberalization of the capital flows and the reduction in intra-Community taxation differences are considered to be, by most Lombard firms, an opportunity capable of creating new market opportunities and export possibilities. Of course, for the weaker firms or for the firms mainly operating on the domestic market, the consequences of the 1992 deadline cannot but represent a threat to their market positions, unless they adopt a new competition approcah.

Perhaps Lombard companies are still incomplete by aware of the risks that 1992 is going to bring about together with the opportunities. The aspect that seems to be of major concern for some firms is the liberalization of public contracts and orders. The phenomenon is of some consequence for a limited number of firms which had operated till now within a comparatively protected market, thanks to the purchase and supply procedures adopted by the public sector and which are probably not competitive enough by general European standards.

This incomplete awareness of the complexity of the problems inherent in the prospects of the completion of the European Single Market goes together with an inadequate attitude of Lombard public authorities. They still mainly limit themselves to the analysis of the problems and to the design of general action lines, without setting up (with one exception which we shall treat later on) any specific array

of new operational instruments, not to speak of their possibility of affecting in the short term the Lombard production structure.

Of course, the relevance of knowledge as a real factor of production is recognized, but the problem of a quicker gathering and diffusion of informations might find solutions more adeguate than the present ones, even at the regional level. After all, it has been shown (*Brusco—Sabel*, 1981; *Dosi*, 1984; *Amendola—Gaffard*, 1988) that new technologies carry over the need of new forms of organization of research, of production and of the industrial structure, in general, with relevant conseguences also from a spatial point of view.

We can say that also in Lombardy there is a wide range of problems related to the need of an efficient cooperation between scientific insitutions, public and private research centres, production structures and firms supplying producer services, which start being tackled only now, and mainly still at the liaison level.

Another crucial point is related to the investment in "human capital", which is challenging also the education system in a strict sense, but especially the structures of education and vocational guidance, of which a greater availability is required than the existing one together with a greater quality of them. So much so that the acceleration of the technological progress and the continuous appearence of new professional skills requires a remarkable and timely individuation of the suitable educational processes, in order to secure their availability to the production system.

New ways are needed to assure the formation of new specialist skills, the continuity of the labour retraining processes as well as a modern management of mobility. In this field too, in Lombardy the transition to the operational stage is just starting.

It is important to stress that all these elements should be seen within the framework of a system approach if the business environment is not to play the role of a constraint, but the role of a generator of external economies. On the other han, the relevance of the environment goes hand in hand with the growth of tertiary functions and activities relative to the traditional manufacture within the corporate structure. This phenomenon is especially significant when the industrial system is characterized by small-size firms.

In other words, we must figure out a "new industrial policy" also at the regional level. After all, traditional regional policies have been criticized since the beginning of the Eighties (OECD, 1983), while the increasing importance of the local factors in the implementation

of the industrial policy is proved also by the already mentioned need of a greater interaction between firms, research institutes, education system and public service system. Actually, public policy should be system-based, meaning that the industrial policy cannot be independent on other policies (research and education policies, in the first place) that take into consideration and enhance the regional productive vocations.

Specifically as concerns industrial policy, in order to reach the mentioned ends, it is necessary to try develop real "technological districts", besides extending and improving the contents of the project innovation and of the regional law No. 34/1985, aimed to small and medium sized firms.

Operating at the level of the creation of "technological districts" means to permit to the network of firms (that make up traditional district) to appropriate some of the strategic advantages, that characterize the big integrated corporations (especially in the field of commercialization on global markets) and that are particularly important to the purpose of competition in the field of innovative strategies. In the present sutuation, this is the aspect where the comparative disadvantage of smaller-sized companies is the largest. So, it is evident why the development of cooperative relationships between firms, even of different size, needs being helped.

As regards again the development of the supply of producer services, a project of the Lombardy region is worth mentioning, although it has still to be transformed into an operational instrument. The project aims at promoting the development of the corporate functions and structures that carry on an activity of quality control of products: laboratory equipment, training of technicians to be assigned to this task, setting up the quality control procedures made imperative by the new technical regulations of the Community, access to chartered homologation and certification centres, etc.

The promotion of those competitive factors that can allow to face the new competition expected for the next years is in fact of paramount importance, especially for small firms. Among these factors, production quality is rightly mentioned as being essential.

Lombardy should therefore engage to promote and facilitate any technical and organizational measure that allow to actually evaluate and certificate the quality standards attained or to be attained, even on the basis of procedures and institutions capable of imposing themselves (or at least being recognized) at the international level.

In addition to the support directed to small and medium firms which intend to devolp within their own facilities a specific corporate function and structure of quality control, the region's project also provides for:

- incentives to facilitate the supply of services and technical consulting to small firms by CESTEC and the service centres started up for the development of quality systems concerning both small firms and consortia,
- a regional activity specifically aimed at controlling, in the region, the package of initiatives and activities concerning quality certification of products, so as to make easier the access of small and medium size firms to these new services.

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# 4 PROBLEMS AND OPPORTUNITIES FOR FUTURE DEVELOPMENT. NEW PROSPECTS FOR THE VENETO REGION

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## NEC (North-East, Centre) regions in the Italian context: Some reflections on a successful experience

As known, the Italian post-war economy has been interpreted by a classic dualistic model. In particular, the so-called "industrial triangle" (Genoa, Turin, and Milan) has been considered the real engine of the economic and social growth that marked the Italian experience during the period from 1950 until the late 1960s. The industrial and urban development of Piedmont, Lombardy, and Liguria changed definitively the economic structure of the country in less than twenty years (*Graziani*, 1972). Economies of scale and economies of agglomeration, the large size of production plants in order to meet the increasing demand of new mass markets, hierarchical organisation of economic space, and organisation of the industrial system on the basis of the Fordism paradigm, represented the most important elements in the transformation of the north-western Italian economy. In this context, other regions were considered as a "quasi homogeneous" underdeveloped economic space, as far as their industrial growth was concerned. This model began to develop problems in the 1960s, and new patterns of social and economic development were recognized for the first time during the 1970s. In particular, two factors were responsible for this crisis:

1) Facing recession and uncertainty, the large manufacturing structure in north-western Italy has shown its inability react quickly and flexibly to volatile environmental conditions;

2) The dualistic model was now unable to portray the Italian situation: new regions, traditionally considered as subaltern in the Italian growth path, shown an unexpected economic vitality and the capability to accommodate and react properly to the changed economic and social conditions.

The development of SME-based local systems is the Italians' own response to the crisis of the seventies, both in the oldest industrial regions and in other "peripheral" regions. The transformation of world markets has played the most important role in this process. The saturation of mass markets, the increasing specialized and differentiated consumer demand, the instability and uncertainty of environmental conditions have undoubtedly promoted the diffusion, and the widespread success, of the new economic and organisational "flexible specialization" paradigm. Because of its higher capability to respond quickly and flexibly as market conditions change, this paradigm has strongly influenced the restructuring processes in many developed industrial regions.

The successes of SME systems in regions traditionally considered as peripheral can be regarded as the the most distinguishing feature of the Italian experience.

Many authors have systematically investigated the reasons, nature and features of the SME-based industrial development in the so-called "peripherial Italy" or "Third Italy" since the early 1970s (*Bagnasco*, 1977; *Fua'—Zacchia*, 1983; *Bagnasco*, 1988; *Goodmann—Bamford—Saynor*, 1989; *Pyke—Becattini—Sengenberger*, 1990; *Conti—Julien*, 1991).

Summing up, the following are the main characteristics of the "diffuse industrialization" in NEC regions:

1) polycentric territorial organisation, and wide diffusion of urban functions,
2) strong linkages with agricultural activities,
3) economic role of the "extended" family as supplier of services and capital,
4) social role of the "extended" family as economic shock-absorber in periods of crisis, in such a way answering for the need of flexibility in the productive system,

5) collaborative culture, trust and social solidarity, lack of social conflicts, lack of social polarization and high social and professional mobility,
6) large use of the so-called "half-forces" in the "informal" labour market, namely students, elderly persons, housewives,
7) strong productive specialization in traditional sectors (especially in the first phases of the peripherial industrialization),
8) development of interdependent networks of small and medium-size enterprises, which usually subcontract with one another and share common services, in particular the distributive ones,
9) development of a service institution system within an industrial district, in order to assist the entrance into international markets, and in order to offer other services, such as fairs and expos organization, professional qualification, marketing and financial support,
10) lack of formalisation in R&D activities,
11) "learning by doing"-based innovation process, and incremental (or upgrading) innovations.

In order to evaluate this experience in a wider context, some elements worth noting have to be pointed out:

1) As widely recognized, the successful story of SME local systems in the so-called "Third Italy" cannot be entirely interpreted by considering only the crisis of the Fordism paradigm and the recession of the seventies. In particular, political, historical, and cultural elements provided the conditions to enable local systems to compete successfully (*Bagnasco*, 1988; *Trigilia*, 1990; *Michelsons*, 1991). The "diffuse industrialization" in NEC regions can be considered, from several points of view, the result of an "unplanned" process. No regional policies or clear strategies supported the development path in NEC regions.

2) NEC regions reached their industrial maturity in a time in which the strongest Italian areas were moving in other directions, accelerating the de-industrialization trend and trying to assume new functions in information-based activities. Lombardy is a prime example of the above trend. Its large size-based manufacturing system was severely affected in the recession of the 1970s. In order to react to crisis conditions, the most dynamic entreprises have pursued composite restructuring strategies aimed at enhancing the competitiveness of the whole regional system (spatial relocation of labour-intensive activities, both within the national boundaries and abroad, in

particular in the industrializing less developed countries; internationalisation of activities involving foreign direct investments; development of new flexible automatized plants and capital-intensive processes; increasing investments in R&D; organisational decentralization on the basis of collaborative and long-term strategic alliances between innovative enterprises of different sizes). The great development of SME systems in the Lombardy provinces, and the role played by Milan in the provision of strategic services for the whole Po Valley macro-region are the result of this restructuring process. Moreover, thanks to stronger linkages between manufactuting activities, high quality services, and research, the regional central core has reinforced its locational potentials for innovative and floorspace-saving enterprises (*Camagni*, 1992). In this story, the role played by the largest enterprises has been crucial. Their propulsive force has allowed the regional system to overcome the lack of adequate public policies, both on a regional and national scale. Despite the social and economic difficulties Lombardy experienced, its structure has been strongly strenghtened (*Carazzi*, 1988; *Mainardi*, 1988). Thanks to the widespread diffusion of electronic/computer technologies and new forms of organization, the competitiveness of the largest enterprises have increased in recent years. This aspect should be pointed out, especially when considering the problem of future development for local systems.

## An outline of the regional economic structure

Given the purpose of the present contribution, the following aspects of the regional economic structure must be taken into consideration (*Anastasia*, 1985, 1987, 1989; *Brunetti et al.* 1989; *Franchini*, 1990):

a) Despite the smaller weight of the agricultural activities in the value-added formation process (from 6% in 1981 to 5.2% in 1987; *Table 4.1*), these activities continue to play an important role in the regional economic system. The employees number more than 170,000 (9.8% of total regional employment); because of its productivity (one of the highest in the country), Veneto ranks in the first positions with regard to the national production of corn, beet, soya, grapes, apples, and pears. What matters more than the quantitative point of view, is the function of social and economic support these activities have played in the industrial development process since the

Table 4.1

*Value-added (factors of production costs) by sectors, 1981–1987, per cent*

| Year | Agriculture | Industry | Services destined for sale | Services not destined for sale |
|---|---|---|---|---|
| Veneto | | | | |
| 1981 | 6.0 | 39.7 | 43.1 | 11.2 |
| 1986 | 5.3 | 36.1 | 47.7 | 10.9 |
| 1987 | 5.2 | 36.1 | 47.5 | 11.2 |
| North Italy | | | | |
| 1981 | 4.2 | 42.0 | 44.0 | 9.8 |
| 1986 | 3.7 | 37.6 | 49.1 | 9.6 |
| 1987 | 3.6 | 37.8 | 48.6 | 10.0 |
| Italy | | | | |
| 1981 | 5.7 | 36.3 | 45.0 | 12.9 |
| 1986 | 4.7 | 32.4 | 50.1 | 12.8 |
| 1987 | 4.6 | 32.4 | 49.7 | 13.4 |

*Source*: Franchini, 1990.

1960s. In fact, the agricultural sector still represents the basis for the development of a close network of relationships between different economic activities and for the maturing of new entrepreneural roles. The high density of small size family business (more than 215,000, with an average surface of 6 hectares) can be regarded as the engine of the social and economic vitality the region has experienced in recent years;

b) As one can see (*Table 4.2*), the added industrial value produced by the first four regions (Lombardy, Piedmont, Emilia Romagna, and Veneto) represents more than half of the national added industrial value (58%). With respect to the percentage variation of added industrial value, Veneto is third, after Lombardy and Emilia. Vicenza, Padua, and Treviso are responsible for more than 60% of the regional added industrial value. Metal-based products, textiles and clothing, shoes, wood and wooden furniture, hides and leather represent the pivots of the regional manifacturing system. In particular, the wooden furniture sector and the so-called "fashion system" have acted as the most dynamic forces in the regional growth path. Here,

Table 4.2

*Industrial value-added by regions, 1986–1988, million Liras*

| Region | 1986 | 1987 | Change, 1986/1988, % |
|---|---|---|---|
| Lombardy | 79,809.6 | 87,746.4 | 9.9 |
| Piedmont | 33,288.3 | 36,901.6 | 7.9 |
| Emilia Romagna | 27,046.8 | 29,479.9 | 9.0 |
| Veneto | 25,855.3 | 28,102.9 | 8.7 |
| Toscany | 20,317.4 | 20,018.9 | −1.5 |
| Latium | 16,975.4 | 18,246.5 | 7.5 |
| Campania | 14,571.4 | 15,319.8 | 5.1 |
| Sicily | 11,529.6 | 12,191.9 | 5.7 |
| Apulia | 10,178.4 | 10,743.0 | 5.5 |
| Liguria | 7,393.4 | 7,872.9 | 6.5 |
| Marche | 7,314.5 | 7,871.8 | 7.6 |
| Friuli-Venezia Giulia | 6,630.9 | 7,100.3 | 7.1 |
| Abruzzo | 4,613.1 | 4,948.6 | 7.3 |
| Sardinia | 4,508.2 | 4,757.7 | 5.5 |
| Trentino-South Tirol | 4,138.2 | 4,434.6 | 7.2 |
| Calabria | 4,192.6 | 4,387.9 | 5.7 |
| Umbria | 3,905.3 | 4,187.2 | 7.2 |
| Basilicata | 1,510.3 | 1,596.9 | 5.7 |
| Molise | 887.9 | 939.9 | 5.9 |
| Aosta Valley | 676.4 | 711.6 | 5.2 |
| Italy total: | 285,379.0 | 307,096.9 | 7.6 |

*Source*: Franchini, 1990.

several local systems — both monofunctional and polyfunctional — have achieved the best regional performances. The structural and productive flexibility required by market conditions has been assured by vertical and horizontal functional integration, and by an accurate mix of technology, "learning-by-doing"-based incremental (or upgrading) innovations, and handicraft capabilities. Bassano del Grappa (Vicenza, clothing and wooden furniture), Conegliano, Vittorio Veneto, Castelfranco Veneto, Asolo, Montebelluna (Treviso, textiles, shoes, and wooden furniture), Riviera del Brenta (Venice, shoes),

Bovolone and Cerea (Verona, wooden furniture), Schio and Valdagno (Vicenza, textiles and mechanic utensils), Arzignano (Vicenza, hides and leather), represent the most important local systems in the region.

The high number of firms per thousand people in the region — in particular in the provinces of Vicenza, Padua, and Treviso — testifies the role played by the manufacturing sector in the regional economic system (*Table 4.3*);

Table 4.3

*Manufacturing enterprises in Veneto provinces, 1987–1988*

| Provinces | 1987 | | | 1988 | | |
|---|---|---|---|---|---|---|
| | Population | Number of firms | Firms per thousand people | Population | Number of firms | Firms per thousand people |
| Verona | 783,886 | 14,423 | 18 | 786,045 | 14,067 | 18 |
| Vicenza | 738,997 | 16,245 | 22 | 741,244 | 16,308 | 22 |
| Belluno | 215,766 | 3,419 | 16 | 215,024 | 3,379 | 16 |
| Treviso | 733,867 | 15,906 | 22 | 736,403 | 16,270 | 22 |
| Venice | 835,255 | 10,631 | 13 | 833,656 | 10,573 | 13 |
| Padova | 817,196 | 15,712 | 19 | 818,651 | 15,919 | 19 |
| Rovigo | 249,944 | 4,259 | 17 | 249,229 | 4,162 | 17 |
| Veneto total | 4,374,911 | 80,595 | 18 | 4,380,252 | 80,678 | 18 |

*Source*: Franchini, 1990.

c) During the period from 1981 until 1987, the weight of service activities on the regional value-added increased by approximately 4.4% percentage points (*Table 4.1*). *Table 4.1* shows the increasingly smaller role played by both industrial and agricultural activities in the regional economic system, coherently with the long term trend that the most industrialized countries are experiencing in the current period.

As one can see from *Table 4.4*, the weight of these activities on total regional employment is lower than the north Italian average (it is worth noting that the higher national average reflects the strong

Table 4.4

*Employees in tertiary sector, 1987*

| | Number of employees | Per cent of total employment |
|---|---|---|
| Veneto | 905,000 | 51.1 |
| North Italy | 5,753,000 | 53.7 |
| Italy | 11,952,000 | 55.6 |

*Source*: Franchini, 1990.

diffusion of public administration activities in Central and Southern Italy). Considering the evolution of the value-added by classes of tertiary activities during the period 1980–1987 (*Tables 4.5* and *4.6*), it is worth pointing out the positive variation of the category "other services" (5.43%), which collects those commonly defined as productive services, or services for enterprises. Within this group of activities, the role played by organisational, marketing, and management services is steadily increasing. The highest supply of these services is concentrated in provinces that act as leading areas in the regional manufacturing system (such as Vicenza, Verona, Treviso, and Padua). It reflects the growing importance of high-quality services in the search for improving competitiveness and performances of the whole manufacturing system.

With regard to the export-oriented structure of Veneto provinces, Vicenza, Venice, Verona, and Treviso rank in the first positions (*Table 4.7*). The good ranking of the lagunar city reflects the weight

Table 4.5

*Value-added by tertiary activities, 1980, per cent*

| | Commerce | Transport and communication | Credit and insurance services | Other services |
|---|---|---|---|---|
| Veneto | 45.86 | 14.88 | 8.38 | 30.89 |
| North Italy | 43.25 | 15.06 | 11.30 | 30.39 |
| Italy | 42.02 | 16.18 | 10.42 | 31.36 |

*Source*: Franchini, 1990.

Table 4.6

*Value-added by tertiary activities, 1987, per cent*

| | Commerce | Transport and communi-cation | Credit and insurance services | Other services |
|---|---|---|---|---|
| Veneto | 41.60 | 14.37 | 7.71 | 36.32 |
| North Italy | 40.27 | 14.65 | 9.34 | 35.74 |
| Italy | 39.30 | 15.82 | 8.63 | 36.25 |

*Source*: Franchini, 1990.

Table 4.7

*Industrial export by provinces, 1986*

| Provinces | Per cent of industrial export | Italy=100 |
|---|---|---|
| Belluno | 36.2 | 74.9 |
| Padova | 46.1 | 95.1 |
| Rovigo | 19.4 | 40.1 |
| Treviso | 68.0 | 140.5 |
| Venice | 74.5 | 153.7 |
| Verona | 68.5 | 141.5 |
| Vicenza | 87.8 | 181.4 |
| Veneto total | 65.5 | 135.2 |

*Soruce*: Franchini, 1990.

of the chemical, petrochemical, iron and steel production of Porto Marghera MIDA (Maritime Industrial Development Area) on its productive system.

As one can see from *Table 4.8*, the position of the region in providing the so-called "rare services" can be still considered weak. In order to consolidate its good ranking in the national manufacturing system of tomorrow, Veneto will have to reinforce its specialization in these strategic activities over the next years.

Table 4.8

*Number of some rare service enterprises in Lombardy, Veneto and Emilia Romagna, 1989*

| Services | Lombardy | Veneto | Emilia Romagna | Italy | Veneto in per cent of Italy |
|---|---|---|---|---|---|
| Industrial & chemical analysis | 65 | 42 | 61 | 457 | 9.2 |
| Quality tests | 67 | 24 | 17 | 250 | 9.6 |
| Trade-marks consulting | 11 | 0 | 2 | 28 | 0.0 |
| Industrial consulting | 309 | 79 | 123 | 1,160 | 6.8 |
| Designers | 344 | 107 | 95 | 904 | 11.8 |
| Engieering companies | 318 | 45 | 64 | 967 | 4.7 |
| R&D ins. and lab. | 242 | 102 | 108 | 1,528 | 6.7 |
| Vocational quidance centres | 40 | 15 | 25 | 324 | 7.7 |
| Search and sel of personnel | 33 | 8 | 4 | 67 | 11.9 |
| Stockbrokers | 153 | 7 | 12 | 335 | 2.1 |
| Auditing | 67 | 11 | 13 | 176 | 6.2 |
| Insurance consulting | 173 | 104 | 81 | 1,019 | 10.2 |
| Financial inst. | 105 | 30 | 22 | 614 | 4.9 |
| Credits administr. and regaining | 25 | 8 | 8 | 116 | 6.9 |
| Leasing | 430 | 167 | 145 | 1,801 | 9.3 |
| Investment management | 46 | 3 | 13 | 153 | 2.0 |
| Insurance brokers | 33 | 6 | 3 | 87 | 6.9 |
| Factoring | 24 | 10 | 2 | 88 | 11.4 |
| Stock commission agents | 86 | 14 | 6 | 198 | 7.1 |
| Marketing and markets research | 513 | 90 | 88 | 1,225 | 7.3 |
| Advertising agencies | 297 | 33 | 30 | 616 | 5.4 |
| Translators and interpretes | 248 | 61 | 109 | 732 | 8.3 |
| Congress and conference org. and services | 99 | 41 | 40 | 462 | 8.9 |
| Fairs, exibition org. & services | 91 | 8 | 23 | 237 | 3.4 |
| Stands designing and preparation | 236 | 40 | 91 | 547 | 7.4 |

*Source*: Calculated by author on Anastasia, 1989.

### Services, innovation, and regional policies

Market homogenisation, industry globalisation, and firm integration represent the most important long-term trends in our time. Therefore, the reconsolidation of local systems as integrated units of production, and the widespread success of the "flexible specialization" paradigm in small craft communities, such as those in NEC regions, should be evaluated with reference to the above tendencies (*Amin—Robins*, 1991; *Solé—Valls*, 1991).

In order to take control of future development paths across vertical, horizontal, and territorial boundaries, new composite restructuring strategies are being implemented by the most dynamic enterprises on a national and international scale. Nowadays, the spreading of dynamic networks of firms and synergy chains — through the implementation of collaborative approaches and strategic alliances in the fields of design and product quality, rare services, research and innovation — represent the most important driving force underlying the new round of restructuring.

With respect to the European integration process, the competitive position of these developing networks of firms has to be carefully reckoned with. For instance, in the most developed European countries, these developing networks are leading to the flexible institutionalization of synergy spaces between different agents, such as national (and transnational) large companies, innovative small and medium size enterprises, research institutions, and networks of rare services and telecommunications.

Referring to the Veneto situation, regional authorities have now to provide the conditions to enable local systems to react properly to the expected redefinition of the competitive framework. In order to allow the regional local systems to cope with the emerging trends in the new round of restructuring, a higher provision of rare services and adequate innovation-oriented policies are required.

As mentioned before, the weakness of the Veneto region in providing high-quality services is still remarkable. This relative weakness can be explained by drawing attention to the following intertwined elements:

i) Structural features of regional manufacturing development. The great supremacy of family-run firms, the spontaneous flowering of entrepreneural figures, and the strong specialization in traditional sectors represent basic elements in the successful experience of

Veneto. Nevertheless, social and cultural background, and scale problems have not contributed to the development of a high-quality service sector. Many entrepreneurs have almost completely concentrated their attention on the productive sphere until recently. Management and organizational know-how have played a minor role in the regional development path;

ii) Lack of a regional pole in the urban structure capable of acting as an organizational centre for high-quality and strategic services, and nearness to Milan. The indisputable supremacy of Milan in providing high-quality services can be explained by considering its impressive concentration of "quaternary" activities (*Pagetti*, 1991; *Camagni*, 1992);

iii) In contrast to Italian regions, Veneto has suffered relatively less from recession and restructuring processes; the regional structure has not been forced to enhance its specialization in information-based activities in the recent past.

A greater awareness of the importance of these activities in the search for consolidating and improving the competitive position of the regional manufacturing system has arisen widely only recently.

As a result, the provision of high-quality services (in particular, international law consulting, environmental regulation consulting, organisation and logistics, brand position analysis, information processing, industrial engineering, process design and research) is to a great extent assured by Milan. The lack of a local supply of high-quality and strategic services represents a real threat for the further development of the regional local systems, especially when considering the scale problems for the smallest firms. Moreover, the predominance of Milan in providing rare services may threaten the opportunities for a future regional development based on endogenous endowments: the hierarchical logic may supersede the polycentric organisation of many areas, and the risk that these areas play a subordinated role in shaping future economic development is evident.

With reference to the productive sphere, collaborative culture, spatial agglomeration of different activities related to one another, and innovation potentials based on the "learning-by-doing" principle, have been regarded as the key elements to assure the competitive position of manufacturing systems in NEC regions. In particular, the so-called "(*Marshallian*) industrial atmosphere" would have represented the crucial innovative factor in SME systems.

Despite the presence of high tech productive segments, these factors will not be sufficient in future, especially when considering the problem of competition from the NICs. Due to the large wage differentials, competition from the NICs in the most traditional sectors cannot be sustained much longer. The further improvement of quality and technological content of products is becoming a real must in order to establish new market segments.

A recent survey of CNR (Centro Nazionale delle Ricerche) contributes in sheding light on the distribution of innovative manufacturing enterprises (*Table 4.9*). The gap between north-west Italy and other regions is still appreciable. Size and scale problems, structural weaknesses, lack of investments in R&D in the last years (*Table 4.10*), lack of public support, and lack of an adequate formalization of collaborative approaches between the different agents involved (such as enterprises, private and public research institutions, universities, etc.) can be regarded as the main causes of the present situation.

As known, to compare different geographical areas requires some caution, as far as innovation problems are concerned. Moreover, upgrading innovations and lack of formalization of R&D activities have represented a distinguishing feature in SME systems since the first years of the "diffuse industrialization" experience. Nevertheless, it should be noted that the development of information technologies have had enormous repercussions on production methods. As a consequence, the elements that provided the conditions to enable local systems to keep pace with new methods and technologies — such as mutual training, learning by doing, incentive to work, local pool of skills, widespread handicraft capabilities, "industrial atmosphere", and so on — are expected to become less important.

It is interesting to note that on a regional scale we are witnessing a process of concentration of small and medium size enterprises in the most traditional sectors (such as textiles, wooden furniture, hides and leather). In addition, it is the whole SME system on the national scale that is now taking an active role in the restructuring process. About 30% of the total number of acquisitions, mergers, and takeovers realized in Italy during the period 1983–1987 have been realized by enterprises with fewer than 500 employees (*Enrietti*, 1991). This tendency can be interpreted as the attempt to overcome the scale problems that SME systems are now experiencing facing the emerging trends in the global restructuring process. It does not entail

Table 4.9

*Innovative enterprises in Italy*

| Region | Number of enterprises | Per cent | Number of employees | Average size |
|---|---|---|---|---|
| Piedmont | 1,033 | 12.6 | 317,426 | 307.3 |
| Aosta Valley | 6 | 0.1 | 516 | 86.0 |
| Lombardy | 2,932 | 35.6 | 579,975 | 197.8 |
| Liguria | 128 | 1.6 | 82,366 | 643.5 |
| *North-west* | *4,099* | *49.9* | *980,283* | *239.2* |
| Trentino-South Tirol | 111 | 1.4 | 11,878 | 107.0 |
| Veneto | 1,099 | 13.3 | 111,686 | 101.6 |
| Friuli-Venezia Giulia | 228 | 2.8 | 62,072 | 272.2 |
| Emilia Romagna | 939 | 11.4 | 127,652 | 135.9 |
| *North-east* | *2,377* | *28.9* | *313,288* | *131.8* |
| Tuscany | 536 | 6.5 | 61,478 | 114.7 |
| Umbria | 103 | 1.3 | 23,758 | 230.7 |
| Marche | 275 | 3.3 | 20,999 | 76.4 |
| Latium | 279 | 3.4 | 98,747 | 353.9 |
| Molise | 15 | 0.2 | 1,188 | 79.2 |
| Abruzzo | 93 | 1.1 | 16,548 | 177.9 |
| *Centre* | *1,301* | *15.8* | *222,718* | *171.2* |
| Campania | 186 | 2.2 | 45,508 | 244.7 |
| Apulia | 120 | 1.5 | 13,203 | 110.0 |
| Basilicata | 11 | 0.1 | 1,379 | 125.4 |
| Calabria | 22 | 0.3 | 1,459 | 66.3 |
| Sicily | 70 | 0.9 | 6,871 | 99.6 |
| Sardinia | 34 | 0.4 | 3,904 | 114.8 |
| *South and isles* | *443* | *5.4* | *72,424* | *163.5* |
| Italy total | 8,220 | 100.0 | 1,588,713 | 193.3 |

*Source*: Belussi, 1991.

Table 4.10

*R&D investments and personelle in entreprises by regions, 1985*

| Region | Investment million ITL | Per cent | Number of employees | Per cent |
|---|---|---|---|---|
| Piedmont | 753,217 | 26.9 | 13,211 | 24.6 |
| Aosta Valley | 4,959 | 0.2 | 66 | 0.1 |
| Lombardy | 1,101,141 | 39.5 | 21,918 | 40.9 |
| Liguria | 149,647 | 5.4 | 2,254 | 4.2 |
| *North-west* | *2,008,964* | *72.0* | *37,449* | *70.0* |
| Trentino-South Tirol | 6,917 | 0.2 | 146 | 0.2 |
| Veneto | 84,688 | 3.0 | 1,623 | 3.0 |
| Friuli-Venezia Giulia | 38,930 | 1.4 | 984 | 1.8 |
| Emilia Romagna | 109,883 | 3.9 | 2,413 | 4.5 |
| *North-east* | *240,418* | *8.6* | *5,166* | *9.6* |
| Tuscany | 123,403 | 4.4 | 2,605 | 4.8 |
| Umbria | 11,274 | 0.4 | 221 | 0.4 |
| Marche | 5,971 | 0.0 | 157 | 0.2 |
| Lazio | 259,224 | 9.3 | 5,177 | 9.7 |
| *Centre* | *399,872* | *14.3* | *8,160* | *15.2* |
| Abruzzi | 13,002 | 0.4 | 320 | 0.6 |
| Molise | 88 | 0.0 | – | – |
| Campania | 76,709 | 2.7 | 1,474 | 2.7 |
| Apulia | 11,613 | 0.4 | 290 | 0.5 |
| Basilicata | 5,880 | 0.1 | 82 | 0.1 |
| Calabria | 560 | 0.0 | 22 | 0.0 |
| Sicily | 27,803 | 0.8 | 520 | 0.9 |
| Sardinia | 5,387 | 0.1 | 69 | 0.0 |
| *South and isles* | *141,042* | *5.1* | *2,777* | *5.2* |
| Italy total | 2,790,296 | 100.0 | 53,552 | 100.0 |

*Source*: Belussi, 1991.

reproposing the small/large size dispute. As far as innovation problems are concerned, an optimum size cannot be defined in the abstract, and the traditional distinctions between firms of different sizes proves inadequate.

Nowadays, developing the capability to shape a relational space between enterprises of different size represents the crucial factor for local systems in order to innovate products, processes, and market approaches. By refining a space of synergy, languages, and common experience, these collaborative network structures appear to be the best response to the problem of sharing knowledge and risks involved by innovation processes. Moreover, to formalize into an institutional framework collaborative approaches between enterprises and different institutions (universities, local public institutions, development agencies, R&D consortiums, etc.) may enhance the chance for local systems to upgrade their innovation potentials, by processing and producing planning and orientation information.

Today, it is the "global-size" that rules the pace and spreading of innovations (*Zanni*, 1990). From this point of view, it should be noted that the key problem for small enterprises is not that of being small, but of being isolated. Joining these collaborative spaces does not represent a problem of size. Nevertheless, the experience of the north western Italian areas in recent years has clearly shown the crucial role played by the largest enterprises in implementing innovative strategies by means of collaborative approaches. Because of the structural features of the Veneto development, adequate local and regional policies aimed at designing the crucial nodes of synergy spaces can be regarded as the pre-condition to allow the regional local systems to improve their innovation potentials.

In this view, regional and local authorities could contribute to design focal points of new synergy spaces by promoting the establishment of scientific and technological poles, business innovation centres, and public-private market-oriented development agencies.

All the most dynamic Veneto provinces provide for the future establishment of scientific and technological poles in order to promote innovation and support SME local systems. When it comes to evaluating the role of scientific and technological poles, however, two aspects should be pointed out:

1) Despite their increasing consideration as tools of industrial policy, their nature remains to a great extent "conservative": especially locations with very high potentials in terms of information

sources, organisational and market know how, quality and quantity of the information circulating within them, provision of telecommunication facilities, and easy access to central places where strategic activities (such as quaternary activities) are provided, are capable of best meeting their requirements.

Referring to the Veneto situation, the lack of a regional pole within the urban structure capable of providing top-quality services, the lack of strong concentrations of innovation potential, and the regional specialization in traditional sectors, do not militate openly for the successful setting up of these initiatives in the short-run. At this stage, a more coherent approach to the problems of the regional urban development appears to be the first need to be fulfilled in order to make these initiatives feasible. In particular, a greater co-ordination between municipalities is required;

2) The establishment of scientific and technological poles can be regarded as a basic tool in the search for revitalizing rendundant spaces in the oldest industrial cores, characterized by large productive plants and agglomeration of large scale activities, which suffered more from the recession of the 1970s and from the new international division of labour. These initiatives often benefit from adequate financial resources and from the propulsive force of the largest enterprises in the search for improving their competitive position. A regional project worth noting in this field is that of Porto Marghera, the Venetian MIDA.

At least in the short run, more flexible tools — e.g., job creation policies, business innovation centres, and strategic partnerships with the aim of fostering collaboration and co-operation between SME and territorial environment institutions — would appear to be the most efficient answer to the problems local systems are now experiencing. In particular, by providing services, incubator functions, consultation, and organisational support, business innovation centres appear to be best able to meet the most urgent requirements of small and medium size enterprises.

These flexible organizational interfaces may act as focal points of new synergy spaces. Furthermore, the setting up of business innovation centres could enhance the competitive edge of central places in the short run, thus improving their locational potential as business environment for innovative enterprises.

What it is important to underline is the increasing need for a regional strategic approach capable of providing the conditions to

enable local systems to face the problems of innovation. By promoting the development of an adequate supporting space for innovations, territorial environment institutions (such as public authorities, private and public-private associations) can play a fundamental role in enhancing the competitive position of local systems. As far as capital origin, services, orientation information sources, technological and organisational know-how, human resources, and professional training programmes are concerned, new regional policies capable of designing efficient organisational interfaces are required. A prime example of this approach is that of SPRINT (Sistema Prato Innovazione Tecnologica), for the industrial district of Prato, Tuscany (*Conti–Julien*, 1991).

Regional and local authorities, in particular, should play a more active role in promoting strategies aimed at:

i) offering high-quality services to small firms (consortiums, public-private agencies, etc.),
ii) improving quality of the labour market (professional training, new technologies, technical schools, etc.),
iii) establishing new associations among small firms in order to offer organisational and technological support, and promote information exchange.

In order to reinforce the structure of local systems one must develop an adequate organizing capacity. As a consequence, new collaborative approaches between territorial environment institutions and the "business environment" can be regarded as the first condition to be fulfilled. Moreover, operational partnership models should be developed in order to avoid failure. Much depends on quality and efficiency of public policies on the local and regional scale. Competition is not at work only between enterprises of different sizes, or between different systems of enterprises. Competition is now elevated to the level of rivalry between different territorial systems. In this view, quality and efficiency (flexibility, co-ordination, clear goals, clear and quick decision-making process) of regional and local policies are becoming one of the most important factors reinforcing the competitive position of local systems. Social support, market-oriented approaches, and formalization into institutional frameworks of collaborative relationships between enterprises and public authorities help to increase the efficiency of public policies and to augment the strength of local systems.

Finally, it should be noted that, as far as innovation (products, methods, organisation) and rare services are concerned, a more coherent approach to the problems involved by the evolution of the regional urban structure is required.

### Urban systems and regional development

The international restructuring of labour-intensive and large scale activities in the most industrialized urban regions has severely affected the economic and spatial structure of large cities (*Cheshire*, 1989). Moreover, suburbanisation and disurbanisation — with the decline of population, employment, municipal income and urban facilities — contributed in reducing the attractiveness of central cores as business environment in the most industrialized countries during the 1970s (*van den Berg*, 1987). As is widely recognized, the 1980s represented a turning point in urban issues. Expected recovery, urban renewal, new urban centrality, and the need for a more coherent management with the aim of making the revitalization possible, have become some of the most common key-words in recent years.

The long-term trend towards an information society has offered new opportunities for central spaces that still possess the highest concentration of facilities tailored to the requirements of innovative and information-based activities. Although the expected further development of information and telecommunication technologies will reduce the constraint of distance in spatial dynamics, the importance of face-to-face contacts, which usually occur in large cities, is expected to increase. In fact, the growing importance of information technologies in the search for reducing the transactional costs involved in globalisation and the uncertainty of markets, will require more and more highly qualified functions, such as forecasting orientation and co-ordination, and control. Despite the impoverishment of the level and quality of urban facilities that the largest cities experienced in the 1970s, their economic and social potential is still best able to meet the requirements of these activities. In this view, metropolitan regions will act as gateways for international communication, and new global relational spaces will be established. Because of the fact that the image and competitive position of large urban regions is largely determined by their central

towns (in terms of high-quality functions performed), the cores of large agglomerations appear to be again the cornerstones of future development. In evaluating these opportunities for future development, one must take into consideration the integration process between the EEC countries, and the economic, social, and political transformation of Eastern European countries. These tendencies are profoundly changing the framework in which the problem of regional development has to be considered. What we are witnessing is the transformation from an Europe of individual member states into a Europe of regions. Easier access to all European regions will lead to keener competition between enterprises and to new market situations. Moreover, this increasing integration will lead to greater competition between urban regions for the location of people and companies. Because of the interaction of these factors, some urban regions will emerge as winners, and other as losers.

Being competitive for an urban system means first and foremost to be able to anticipate and react efficiently and flexibly to the changing environmental conditions, catching the emerging development opportunities. From this point of view, the following factors can be regarded as the pre-conditions to be competitive:

i) an efficient infrastructure system, in order to reduce congestion and improve accessibility to central spaces,
ii) a high quality of the life (housing, environment, public urban facilities, leisure and recreation, etc.), in order to reverse the selective migration of well-trained and better educated people from the core of large agglomerations, thus enhancing the local labour market potential,
iii) a provision of strategic urban services, in order to improve the locational potential for innovative enterprises, and
iv) a flexible and efficient market-based urban policy.

An urban system may perform many strategic functions: distribution centre, with the provision of high quality logistic and transport services in the intermodal chain; international showroom for products and services; gateway for the spreading of orientation information; organizational centre for innovative activities; crucial node of a high-quality information-telecommunication network; provision of first class cultural services, acting as a privileged node of an international exchange network (*van den Berg—Klaassen—van der Meer*, 1990; *Camagni*, 1991; *van den Borg—Bramezza—Costa*, 1992).

Referring to the urban hierarchy in Europe, only a few cities perform all these functions (London, Paris, and to a minor extent Milan). Nevertheless, other cities will also be able to play an active role in shaping future development not because of their dimension, but because their degree of specialization in one or in a limited number of functions. In particular, their development opportunities will be increasingly dependent on their ability to join (national or international) networks of cities and implement strategic partnerships and cooperation policies. Reorienting the development strategies to the stimulation of those activities for which the urban system can successfully compete in terms of locational environment has therefore become a real must. Consequently, the urban system's own relative position — strengths, weaknesses, opportunities, and threats — should represent the basis of this reorienting strategy.

On the basis of the arguments stated above, we can now consider some aspects of the urban structure of the Veneto region. The polycentric territorial organisation and the wide diffusion of urban functions have undoubtedly represented a key-factor in the regional development path. Nevertheless, facing the emerging trends, to reinforce the regional urban structure at its highest hierarchical level is becoming necessary. It is important to point out that it does not mean a rejection of the polycentric principle that has ruled the regional experience in recent years. On the contrary, it entails the upgrading of urban structure, reinforcing and institutionalizing the complementarity of functions performed by the different urban systems. To foster synergy effects adopting the network logic today represents the best, and the only way to improve the regional competitive position. Moreover, the problem of providing high quality services, and that of enhancing the innovation potential in order to support the regional local systems facing the increasing international competition, may find a solution only by giving the urban system dynamics a metropolitan coherence (*Scaramellini*, 1991). In this context, the future development of the urban systems of Padua, Venice, and Treviso can be regarded as one of the most strategic issues in the regional urban policy (*Costa*, 1991).

With regard to the urban systems (of functional urban regions, FURs) of Venice, Padua, and Treviso, it is worth noting that only about 25 kilometres separate their central towns. Because of the contiguity of their Standard Metropolitan Statistical Areas, and because of the increasing relations within them, the central cores of these ur-

ban systems act as focal points of a developing deconcentrated (or polynuclear) metropolis of around 1.2 million people. The following are some of the most urgent problems on the regional agenda, whose solution can be successfully promoted only by adopting a co-ordinated approach on a metropolitan scale:

a) *The need for greater integration between the Port of Venice and the regional distribution system.* The lack of a co-ordinated approach to the problem represents an important cause for the inability of the port structure to act as gateway for the manufacturing regional system. Moreover, the port has failed to accommodate the changing organizational requirements of the intermodal era, and its position in the transport and distribution chain has been severely affected, thus preventing the region for capitalizing on the enormous locational advantages offered by the North Adriatic Sea site. Because of their higher provision of transport, distribution, and logistic services, the capability of Padua and Verona to play an active role in the intermodal chain has increased.

In particular, Verona has strongly reinforced its competitive position as a distribution centre, by providing high-quality transport, distribution, and logistic services. Because of the quality of functions peformed, this city is now acting as a fundamental gateway to Europe in northern Italy scale;

b) *The need for a high-quality productive service sector, and the need for appropriate innovation-oriented policies.* In particular, the setting up of scientific/technological poles and business innovation centres requires greater co-ordination between the municipalities involved. The present situation of supremacy of Milan in the provision of these activities could be partly overcome in this way. As far as rare services and innovation potential are concerned, the polycentric territorial organization should work as a system more than as a sum of functions performed;

c) *The need for more efficient infrastructure.* Several bottle-necks in the mobility system are now preventing the full exploitation of economic and locational potential. Upgrading railway and highway systems, and developing, where possible, an inland water system, represent basic measures in order to improve accessibility, both inside the developing deconcentrated metropolis and to other metropolitan regions;

d) *The need for a systemic integration of the airports* of Venice and Treviso;

e) *The need for the further development of the higher education system*, by promoting synergy effects between Venice and Padua. Moreover, adequate educational and training policies with the aim of upgrading the quality of local labour markets are required;

f) *The need for improving accessibility between the cores of the urban systems* of Venice, Padua, and Treviso, which are now suffering from increasing commuter flows. These cores have strongly reinforced their roles as centres of employment and services in recent years, pushing out the residential function to the smallest ("green") municipalities of their respective rings. An unfortunate traffic pattern, space-eating traffic provisions, worsening congestion, and steadily increasing deficits of public transport have arisen. As a consequence, not only the living conditions of these cores, but also their locational potential have been severely affected. Because of the complexity of the intra-FUR and inter-FURs relationships, the goal of reorienting the traffic pattern clearly requires new collaborative approaches between the municipalities involved;

g) *The need for improving environmental conditions*. Because of industrial and agricultural discharges, soil and water pollution represents a real problem. In this view, small firms have to face several scale problems in order to introduce new methods capable of reducing pollution. Moreover, the inefficiency of public transport and the large use of private cars are responsible for poor air quality in many cities, in particular during the so-called peak-hours, when commuting traffic is higher. In formal terms environmental pollution is very high on the regional agenda. Nevertheless, in terms of practical policy, neither the public institutions nor the private sector have adequate programmes aimed at promoting environmental control into regional planning and development. Anyway, a greater co-ordination between local municipalities would represent a first step towards the solution of these problems.

Given the main features of the regional urban development in recent years, planning a polycentric metropolitan development could mean not only the best way to face the problems just sketched above, but also the best response to the following strategic issues:

1) The opportunity to give north-east Italy a deconcentrated metropolis capable of supporting — in financial, technological, and political terms — the transformation process that the closest East European contries are nowadays experiencing. Developing a polynuclear metropolis capable of acting as gateway for new collabora-

tive relationships could indeed represent a good opportunity to promote the eastwards strengthening of the South European backbone, the so-called "Nord-du-Sud". From this point of view, to give the urban dynamics of Venice, Padua, and Treviso a metropolitan coherence could contribute in filling the "vacuum" (in terms of strategic functions performed), today existing, along the Milan–Zagreb axis;

2) The problem of the functional requalification of the regional administrative pole, Venice. Despite its economic and social crisis, it still represents a real base resource for future regional development, which today remains utilized below its full potential. With respect to this problem, it is worth briefly pointing out the main economic trends the lagunar city has experienced in recent years, and its main relations with the mainland. As is well known, the development of the so-called MIDAs has distinguished the evolution of many coastal industrial regions in developed countries since the late 1950s, representing one of the most important engines in the spatial organization of economic activities. Oil, petrochemical, metallurgical, shipbuilding, and iron and steel industries played the leading role in the MIDAs of the first generation, during the period 1950–1965. Increasing importance of oil in the world economy, steadily decreasing transportation costs as a consequence of the increasing size of vessels, large size of plants and economies of scale, and the huge upward trend that western countries experienced in the postwar period, were the main factors of success in the coastal industrialization pattern (*Vigarié*, 1981). In this perspective one can properly evaluate the development of Porto Marghera, the Venice MIDA. It has represented a fundamental regional experience in the field of large industrialization, causing the Venetian territory to differ profoundly from the typical development pattern that other areas in the region were experiencing during the same period. In fact, during the years of the impressive growth of Porto Marghera, which shaped the spatial and the economic evolution of Venice and its closer mainland areas, other Veneto provinces, such as Padua, Treviso, and Vicenza showed the first signals of the "diffuse industrialization" experience.

OPEC I policy and economic recession, changing in public attitudes towards coastal areas and the consequent increasing public opposition towards the further expansion of MIDAs, and emergence of the third generation of MIDAs in developing countries have severely affected their nature and functions. Especially for those who

failed to induce expansion in more qualified sectors, thus maintaining their original monofunctional profile, the seventies have undoubtedly represented a turning point. The reorganization of industrial plants with the aim of achieving the highest efficiency, and the relocation of activities in the search for lower labour and energy costs, lesser legislative constraints and higher tolerance to environmental damage, have reduced their role in the most industrialized countries. Referring to the Venice MIDA, the restructuring process has almost halved the number of jobs in less than twenty years. Furthermore, despite the steadily increasing efforts to reduce pollution, and the technological upgrading of production methods, it has not yet come to a conclusion.

The great development of tourism-related activities during the last two decades — especially in the lagunar historic city — strongly contributed to absorbing the economic and social costs of the MIDA crisis. Moreover, we have witnessed an impressive SME-based economic growth in the Venetian mainland territory. In these areas, the great achievement of the typical features of "diffuse industrialization", and the increasing relations with Padua and Treviso (which have in the meantime reinforced their structure as suppliers of productive services for the SME local systems), have stressed the economic isolation of the lagunar historic city from the most dynamic areas of the region.

The following are the main urgent questions the historic city has to face today:

a) *The future of port activities.* In the present situation, the Venetian port is not able to attract high-quality transport and distribution services. Given the increasing qualification of Verona and Padua as distribution nodes, the chances for the Venetian port to act as a gateway for the regional manufacturing system are today dependent on the implementation of more co-ordinated policies between the different authorities involved on a regional scale. Moreover, in order to face the increasing port competition, it is necessary to adopt a market-oriented approach. In this view, the city potential in the field of recreational boating is not fully exploited;

b) *The future of Porto Marghera.* It is now suffering from the lack of a strategic approach capable of designing new development paths on the basis of closer linkages between industry—services—research and innovation. The crisis of the transformation of the base opens new possibilities of movement towards more advanced phases in the

productive cycle. The dyptich port-industry of the first transformation is already defunct, and new routes must be pursued;

c) *The social and economic impacts of tourism*. The great development of tourist activities the historic city has experienced since the 1970s has contributed to the crowding-out of other urban functions, such as residence and services not related to tourism. In the future this problem can represent a real threat for further urban development. A new approach to the touristic development of the city is required in order to reverse the increasing impoverishment of its competitive urban profile;

d) *Environment*. The establishment of oil refineries and oil-related industries in the lagunar edges had various consequences (heavy metals and hydrocarbon pollution, eutrophication, and subsidence). Moreover, the Venice Lagoon collects the industrial and agricultural discharges coming from many mainland areas through rivers and soils. Furthermore, the excavation of deeper shipping channels in order to allow the entering of the largest tankers from the sea has upset the lagunar hydraulic and morphologic balance, exacerbating the negative effects of high tides. These factors encouraged the Italian government to promulgate a special law for Venice in 1973 ("Legge speciale per Venezia"), that provides for the future relocation outside the lagoon boundaries of oil-based port and storage functions;

e) *Congestion of the only access to the historic city from the mainland*. Despite its decreased capability to shape the regional economic development, the lagunar historic city has maintained an important role as a destination for relevant flows of daily commuters, both from inside and outside its urban system, because of the great development of tourism activities and the strong concentration of public administration services. Moreover, the great supremacy of daily excursionists over residential tourists contributes to the worsening of the traffic pattern.

Given the goal of promoting the strategic requalification of Venice within a polynuclear metropolitan framework, the following resources should be carefully reckoned with:

i) its industrial heritage,
ii) its historic heritage,
iii) its image and appeal,
iv) its environmental uniqueness.

In particular, reorienting the development strategies with the aim of giving the city a clear identity as an international cultural centre

and as focal point of "immaterial" production networks represents a great opportunity. In this view, the following are the most important developing projects:

1) The setting up of a scientific/technologic pole in the oldest industrial nucleus of Porto Marghera. It may represent an important step towards the requalification of the local industrial activity (new materials, research and process, clean productions, etc.). The location offers several advantages, such as close ties with the port and commercial infrastructures and their related services, the proximity of the most important nodes of the mobility system (highways, railways, airport), and the strategic position with reference to the dynamic provinces of Padua and Treviso. Fostering collaborative approaches between the different agents involved (enterprises, territorial institutions, universities and research laboratories), it could act as pivot for the development of new research activities in the field of sustainable development, clean productions, and environmental compatibility. Many enterprises now have to face these problems. New services capable of meeting the requirements of these enterprises could be offered. In such a way, the solution of the most urgent environmental problems of the lagunar city would be promoted. At the same time, the real chances for Venice to play an active role in the establishment of national and international networks of high-quality environment-related services — whose market segments are expected to increase — would be also reinforced. Furthermore, by promoting synergy effects with other initiatives on a metropolitan scale, this developing project could contribute to the support of the SME local systems facing the problems of innovation.

2) The setting up of a marine technologies pole in the Venice Arsenal. Nowadays, the Venice Arsenal represents an unrepeatable resource for the future development of the historic city (it is worth noting that its extension is something like a sixth of the historic city total area). Together with the shifting of the economic centre of the city towards the mainland came the abandonment of this complex. Its location is extremely favourable, because of the easy access to the sea and the existence of structures suitable for maritime activities. The problem of how to redevelop these empty spaces is a strategic issue in the search for improving the urban competitive edge. In 1990 an organization for marine technologies was established in Venice, and its headquarters will be located in an area of the Arsenal complex. Its goal is that of developing knowledge and technology in the

following fields: coastal engineering, special marine vehicles, sea biotechnologies, marine and subsea engineering, and environmental technologies. Participating bodies are research institutions, private and public enterprises, and territorial institutions. In particular, the capability of these enterprises to establish a profitable position in these expanding markets will be the crucial element for the success of the organization. The developing pole may act as organizational interface between the different agents involved, in order to promote the further development of technological capabilities. The relations with Ravenna (Emilia Romagna) in the field of offshore structures, the recent efforts to implement an efficient system capable of monitoring the lagunar ecosystem conditions, and the developing project for a regulating system capable of reducing the impacts of the highest tides, can in perspective contribute to upgrading the quality of technologies and services provided by the historic city.

Together with a more efficient management of its historic and cultural heritage, and new approaches to the problems involved by tourism, a greater qualification of the lagunar city in the provision of high-quality environment-related services, can be considered a coherent answer to the increasing need for a strategic approach to urban development. Finally, to reclaim its polluted and damaged lagoon is a real necessity. With respect to this goal, the horizon of the fronts the city must work on is immense. Nevertheless, the lagoon and its minor inland settlements are unique resources needed to enhance the living climate of the city, and its leisure and recreational potential. In this perspective, the planned lagunar parks (environmental clean-up, landscape restoration, new recreational facilities) could upgrade the living conditions for all the inhabitants of the urban region.

In sum, the solution of the most urgent problems the historic city is today experiencing, and its strategic requalification on a metropolitan scale on a the basis of the argument sketched above, would represent the best investment, also in terms of image and appeal, for the developing polynuclear metropolis. By pursuing complementarity of functions performed by the different urban systems, and synergy effects in the production and marketing of common products/services, regional and local authorities could contribute to increasing the capability of the region to play an active role in the new metropolitan framework.

Obviously, planning a polycentric urban development requires a profound administrative reorganization and the development of an adequate organizing capacity. Unfortunately, regional and local authorities have missed a unique chance to promote this administrative reorganization. The Italian government promulgated in 1990 a law that provided for the future redefinition of the administrative organs of some large cities (Law 142/90). Despite its size, Venice was included in this set of cities, testifying to the need for a more coherent approach to its urban development. For different reasons (legal, administrative, and political problems), regional authorities have not taken the opportunity of designing an administrative structure capable of giving the urban dynamics of Venice, Padua, and Treviso a metropolitan coherence. The goal of developing a strategic approach to their future development remains of the highest importance. Local authorities should formulate a dynamic and strategic vision about the problems their urban systems are nowadays experiencing. More co-ordinated and collaborative approaches — and their formalization into institutional frameworks — are required to develop the organizing capacity to solve problems. It undoubtedly represents a challange for local authorities, who find themselves increasingly forced to think on metropolitan scale. Nevertheless, the opportunities for future development are to a great extent dependent upon the ability to develop this new way of thinking.

## Conclusions

Together with other NEC regions, Veneto represents a prime example of a successful pattern of economic and spatial organisation based on local resources, coherently with its historical and geographical peculiarities.

Globalisation of markets, the further expected development of information and telecommunication technologies, the European integration process, and the increasing competition between urban regions represent the driving forces underlying the competitive process in the current period. Today it cannot be said how the above tendencies will affect the competitive position of the regional local systems. Some important elements, however, can be pointed out. A local combination of economic, social, cultural, and institutional arrengements has provided the conditions to enable local systems to com-

pete successfully since the late 1960s. Because of the combined working of the above tendencies, these conditions will be increasingly less important in order to improve the competitive position of local systems. The "unplanned" process is exhausting the propulsive force it has shown in recent years, and new strategic approaches are required. The future competitive position of the regional local systems will be increasingly dependent upon:

i) the provision of rare services,
ii) the implementation of adequate innovation-oriented policies aimed at designing focal points of new synergy spaces,
iii) the development of strategic approaches to the problems of the regional urban dynamics.

In particular, the future competitive positions of local systems will depend more and more on quality of functions performed by central towns. The territorial polycentric organisation, with the wide diffusion of urban functions, has played a basic role in supporting the "diffuse industrialization" experience. Nevertheless, giving the urban dynamics a metropolitan cohesion is essential.

To enhance the attractiveness of large cities as business environments is the pre-condition for future development. In this view, the quality of physical infrastructure, the availability of high-quality urban services and facilities, provision of locational sites tailored to the requirements of innovative enterprises in the most dynamic and high-value sectors, provision of high-quality services complexes, investments in research, quality of labour market, and quality of urban environment are the key-elements in order to assure this region of the ability to compete successfully in the new European metropolitan framework. New strategic market-oriented approaches to the problems of the urban dynamics, and collaboration are required. An adequate organizing capacity must be developed. As a consequence, new relationships with the "business environment" have to be established. In the lack of adequate policies aimed at reinforcing the regional urban structure, the recent successes can easily become a negative heritage for future development.

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# 5 CURRENT PROBLEMS OF REGIONAL DEVELOPMENT OF SLOVENIA

MARJAN RAVBAR—VLADIMIR KLEMENČIČ

## Introduction

The area inhabited by the Slovenians, comprising the territory of the present Republic of Slovenia and the areas on the other side of the borders with Austria, Italy and Hungary, has been a very important politico-geographical, cultural, and economic European transitional area in all historic periods. Of special relevance is its position among four large European landscape units, since the territory inhabited by the Slovenians comprises the Alpine region in the north, the north-Adriatic or north-Mediterranean region in the Southwest, the Dinaric-karstic region in the south, and the Sub-pannonian and Pannonian regions in the Northeast. Ever since the 7th century, the Slovenian nation has fought, on its present ethnic territory, for its very existence, its living space, and its culture against larger Germanic, Romanic, and Slavic nations, and the Finno-Ugric Hungarians. The character of politico-geographic transition, and the intertwining of interests of larger neighbouring nations on the relatively small area have contributed to the gradual constitution of the Slovenian nation into a modern European nation, despite the small population and geographic area (*Klemenčič—Genorio*, 1992).

In contrast to the majority of socialist countries, private economy and private property were partly retained in Slovenia (true, they were deeply subordinate to the ruling ideology) mainly in farming and small trade. Thus, 90% of all arable land remained in private hands; small trade mainly belonged to catering and service activities.

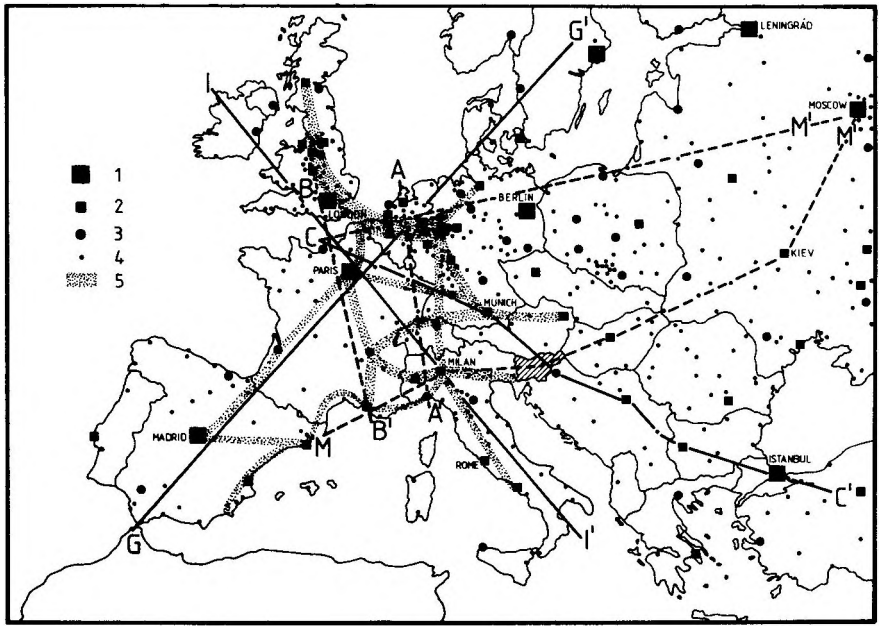
The specific character of the politico-geographical position and the international importance of transit-transport directions (*Figure 5.1*), which both dictated greater flexibility to Slovenia in its socio-economic development than was required from other republics and regions of the former Yugoslavia, was seriously taken into account and a polycentric concept of social and regional-spatial development was introduced, the growth of private sector was accelerated, as well as the gradual and relatively early opening of state borders and subsequently, the increased transport of passengers, goods, information exchange, and circulation of capital. The influential position which Slovenia has had for the last two decades in the formation of the Alps-Adria Working Community, i.e., the community of the regions of Austria, Italy, Hungary, Croatia, South Germany and Slovenia, has also played an important role in the process of opening Slovenia to Europe. Because of these efforts Slovenia was overtaking in its socio-political, economic, and cultural development, as well as in space management and development (in spite of the intertwining of centralism and federalism within the frame of the socialist regime) the other former Yugoslav republics and regions, and also the other former socialist countries of Eastern Europe. The pronounced geo-political position of Slovenia, the territory of which is characterised by an explicit international European and transcontinental transit function, renders possible that the demographic territory of Slovenia becomes even more strongly linked with its central and most developed part in the Ljubljana basin.

## Some characteristics of regional development of Slovenia

Slovenia undoubtedly achieved important results in the fields of economy and social matters during its post-war development, and the structures of economy and population were essentially changed. The population increased almost by half a million during this post-war period. Due to its very dynamic development, Slovenia rapidly changed from a country where 50% of the entire population were farmers and only 16% were employed, into a country of complete employment, and achieved the level of a medium developed industrial country. The percentage of farming population declined to only one twentieth. While the primary sector used to prevail in the structure of the economically active population, later the secondary sector

Figure 5.1

*European macroregional and transcontinental transportation routes*




*Key*: The number of inhabitants in cities of more than 100,000 inhabitants: 1 = more than 5,000,000 inh.; 2 = 1,000,000—5,000,000 inh.; 3 = 500,000—1,000,000 inh.; 4 = 100,000—500,000 inh.; 5 = Main regional and economic axes; A---A' = Antwerpen—Genua; B---B' = Birmingham —Marseille; C—C' = Calais—Istambul—Orient; C---M' = Calais—Moscow; G—G'Gibraltar—Nordcap; I—I' = Ireland—Italy; M---M' = Barcelona—Milan—Moscow.

has gradually assumed the leading role, and parallel to it, particularly for the last few decades, the percentage of tertiary and quaternary sectors has also been increasing. These changes have been typical of the employed population, particularly in the high percentage of employed women, which is among the highest in the world. The industrialisation of Slovenia has not only resulted in an intense increase in the number of the employed population, and subsequently an increase in material production, but also in far-reaching effects on environmental degradation (*Plut,* 1987), and impairment of living conditions, because the measures of prevention and protection have not kept up.

The population of Slovenia was, already at the first post-war census in 1948, rather unevenly distributed. Due to radical socio-economic changes which the Slovenian population has been undergoing for the last four decades, the unevenness of the settling pattern has only become more evident. Thus, some essential spatial rearrangements occurred among the communes and larger areas, as within the borders of individual communes. Migrations from rural areas to towns, and to settlements in general, where new possibilities were opened for employment in non-farming activities, have caused an extremely uneven development of the urban population. An absolutely new, intense immigration flow has been going on particularly for the last two decades, i.e., immigration from other Yugoslav republics, whose people settled in Slovenia temporarily at first, but later settled permanently in ever greater numbers. Thus, after 1961 Slovenia turned from an area of emigration to an immigration area. The number of immigrants per year reached its peak in 1980, when it amounted to 5000 people. The percentage of immigrants almost amounts to one tenth of the total population of Slovenia. During this period, however, the Slovenian population began to move from towns to wider or closer peri-urban areas. Meanwhile, people from other Yugoslav republics have mainly settled in towns.

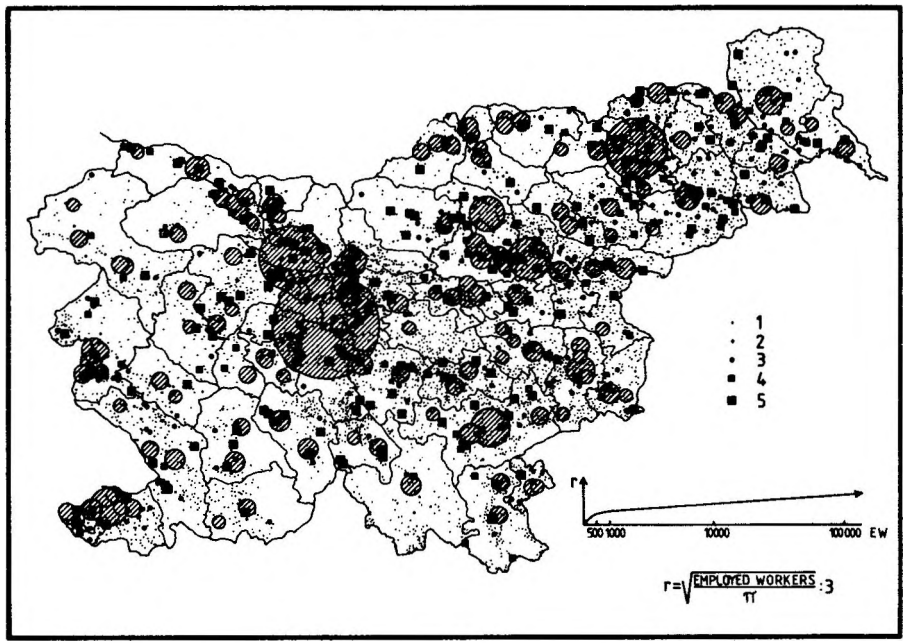
Several new centres have been formed in Slovenia during the post-war period, which have gradually assumed the functions of development centres. To the already existing centres, i.e., Ljubljana, Maribor, Celje, Kranj, and others, some newly formed centres have been added such as Novo Mesto, Nova Gorica, Murska Sobota, and the group of towns Koper–Izola–Piran. These centres became the basis of the polycentric system which has provided the guidelines for the development of the economy, and supplying and service activi-

ties. The development of these new centres has also contributed to a more rapid development of certain larger areas, economically less developed in the past. Greater regional shifts between individual areas were achieved in settlement patterns and economic activities. Particularly since 1970, the regions where the level of development was below average, have, as a rule, undergone faster development than the regions where the level of development was above average. All this has rendered possible a gradual reduction in the differences between individual regions as to the living and working conditions. For the last twenty years the following regions have been undergoing the fastest development: the region along the lower Sava river, the Notranjsko–Kras region, and the regions of Koroško and Dolenjsko; the slowest development has occurred in the regions of central Slovenia, along the central Sava stream, Gorenjsko, and along the Drava river (*Analiza razvojnih možnosti Slovenije,* 1990).

The supporting structure of spatial distribution of industrial production is represented by 70 industrial centres, each of which has more than 1,000 people employed, and thus, providing work for 88% of all people employed in the manufacturing industry. Among these centres, Ljubljana and Maribor are predominant; the former is twice, and the latter three times as big as Kranj which ranks third as to the number of workers employed in the manufacturing industry. Spatially, three industrial basins prevail: the central Slovenian or the Ljubljana basin (27% of employed), the Maribor basin (15%), and the Celje basin (10%), which makes altogether 52% of the workers employed in the manufacturing industry. As to the size, next comes a group of towns in Koroško (4%), followed by individual, smaller industrial centres or groups of smaller centres: Novo Mesto, Nova Gorica, the centres along the central Sava stream, the littoral towns, Koroško, and Jesenice (altogether 18% of workers employed in the manufacturing industry of Slovenia). There is also a series of smaller industrial settlements in Slovenia, which have, on the average, one or two branches of the manufacturing industry each. Their development primarily depended on the available working power and the proximity of natural resources (timber, farming, etc.). In general, workplaces are more evenly distributed, since they occur in 2,206 settlements, which means that every third settlement in Slovenia (i.e. 36.7%) has had at least one working post (*Figure 5.2*). The noticeable

Figure 5.2

*Number of employed workers in settlements*




*Key*: 1 = 0; 2 = 1–9; 3 = 10–49; 4 = 50–99; 5 = 100–500.

expressed dispersion of industrial capacities is, on the one hand, the result of the former dispersion of the manufacturing industry and/or production crafts, and on the other, also the result of conscious efforts for the industrialisation of certain areas which had formerly been almost without a manufacturing industry. It is also true that settlements prevail with less than 30 workplaces in each. There are 1,462 (66.3%) of such settlements, and only 13.6% of all working people in Slovenia are employed there. They are mostly settlements with tertiary and quaternary activities. The settlements with more than 100 workplaces in each number 326; however, more than 67% of working people are employed there. The distribution of workplaces as to individual communes strongly depends on the level of development. It has been typical of less developed communes that the development of workplaces in the manufacturing industry has mostly been concentrated in one industrial centre. Meanwhile, more developed communes have, as a rule, developed several centres with workplaces.

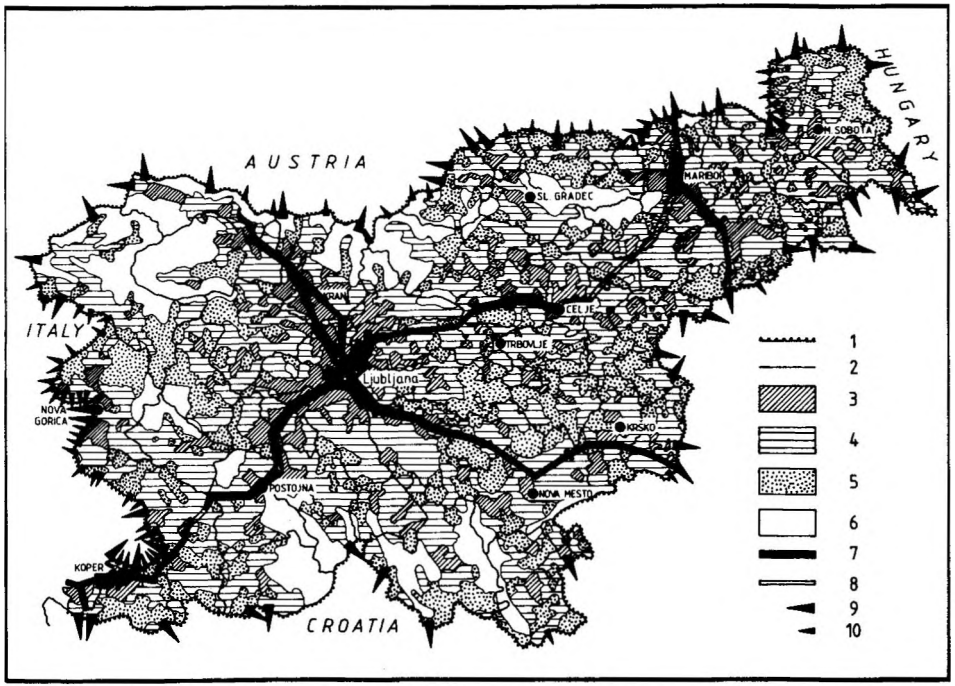
The opening of borders and the polycentric planning of socio-economic development are of particular importance in Slovenia. Such development, the purpose of which was a more or less even regional development, has partly or entirely kept inhabitants from leaving, the demographically endangered areas in the mountainous and karstic regions, and/or regions along the borders through realisation of special programs of accelerated development of these less developed areas, which were showing tendencies of population emigration, a decline in farming, and disintegration of the cultural landscape all until the 1960s. Nevertheless, after more than twenty years of accelerated and better coordinated regional development, and despite the unquestionable facts that development discrepancies have been reduced, areas still exist where the economic and social development is lagging behind. These are primarily areas along the borders, and the geographically closed, mostly mountainous areas. The worst results of under-development are the facts — in spite of social care — that such areas are demographically endangered, agrarian land is abandoned and cultural landscape in general is disintegrated. Through twenty years of investments important results have already been achieved in the development of social activities, and the economic infrastructure has also been improved. But the measures to accelerate the progress of less developed areas have not resulted in a more favourable demographic dynamic so far. In certain

areas, the emigration process and the dying out of population have even become more intense (e.g., the Tolmin region, Suha krajina), which claims for a more comprehensive verifying of the causes for the present situation, particularly the causes which have to be searched for in a too weak diversity of employment possibilities. The development is also hindered by inadequate farming policy since it is not capable of adapting the current farming and land use structures to agricultural areas.

Urbanisation and industrialisation have, so far, gradually formed two areas with explicitly specific development problems. On the one hand, there appear "rather intensely urbanised areas in plains and valleys, the territories of which gradually spread towards the mountains on the margins of economic and population concentration areas"; while, on the other hand, there are "the peripheral areas of the Alpine and subalpine mountainous northwest Slovenia and the Tertiary hills of the northeast and southeast Slovenia, which sink ever more into economic underdevelopment, depopulation, and disintegration of cultural landscape" (*Figure 5.3*) (*Klemenčič,* 1991. p. 29). The pattern of rural settlements is, due to their small size and their distinctive dispersion, nonrational in many aspects, as to the agrarian potential of lands. The differentiation process has been spontaneous so far: depopulation of peripheral, and above all, mountainous villages and minor settlements, and mass concentration of population in peri-urban settlements, within the range of easy access to towns. It is accompanied by dispersed construction of single houses, which is conditioned by free choice purchase of land plots and insufficiently selective town planning policy. Great differences also exist in the field of farming. Thus, it is characteristic, as a rule, that relatively advanced, market oriented farming occurs in the areas of concentrated inhabitation, while in the areas of depopulation, farming is retarded, unpromising, and autarkic (*Klemenčič,* 1981). With the increased number of employed people, the way of living has also changed, not only of urban but also of rural populations (large numbers of commuters, recreation, frequent double jobs, higher degree of education of young people, etc.).

Figure 5.3

*Types of spatial structures in Slovenia*




*Key*: 1 = State border; 2 = Communies' border; 3 = Urbanization areas (number of inhabitants and number of households increased in the periods 1961—1971 and 1971—1981); 4 = Transitional areas (either number of inhabitants or number of households increased in one of the above periods and stagnated or declined in the other one); 5 = Areas of agrarian decline (number of inhabitants and number of households declined in both periods); 6 = Uninhabited areas; 7 = Above 7,500 motor vehicles/24 hrs; 8 = 1,000—7,500 motor vehicles/24 hrs; 9 = international road border crossing; 10 = local road border crossing.

## Spreading urbanization

It was typical of Slovenia that the urbanization level used to be low. Industrialization caused that an accelerated urbanization could be witnessed during the sixties and the seventies (*Vriser,* 1969) when the percentage of urban population gradually increased, from 36.1% in 1961, to 44.6% in 1971, and to 48.9% in 1981. In the year 1991, the urbanization level in Slovenia surpassed one half (50.2%), while parallel to it, the total urban population surpassed one million (1,000,467). Along with the all-over progress, Slovenia has undergone several stages in the development of settling patterns and particularly in the relations between towns and rural areas. The former concentration of population in the centre of the Republic was followed by the concept of polycentric development which promoted the growth of several regional centres. Although partial transfer of functions from individual regional centres to communal centres was already realised in the past decade, fourteen more or less rounded off urban regions have been formed according to our findings (*Ravbar,* 1992a). In that time, urbaniuation has been realised mostly by the marked population migrations from rural areas, and the dynamic development of towns. A comparative analysis of population changes in the towns of Slovenia and their surroundings between the periods 1971—81 and 1981—91 has shown that in the period 1971—81 more than half of Slovenian towns were in the state of absolute concentration, and only six of them in the state defined as absolute deconcentration. After 1981, a shift was already noticed. In the 1990s demographic growth is registered in the peri-urban areas of all Slovenian towns, while the population dynamic in towns, if compared to the previous period, has been reduced by half. The category of absolute concentration now comprises only one third of Slovenian communes; a quarter of them have already reached the stage of absolute deconcentration. The process of deconcentration is most intense in the greatest, as to number, urban agglomeration of Ljubljana, together with its "satellites", such as Domžale, Vrhnika, Grosuplje, Škofja Loka, as well as the agglomerations of Kranj and Tržič, Maribor (together with Ptuj), the littoral towns, Celje, the mining towns by the Sava river, Jesenice, Nova Gorica, and Novo Mesto. Thus, we can justifiably talk about spatial rearrangements of population, which have been caused by suburbanization and are oriented from towns towards their peri-urban areas.

The areas of spatial concentration have gradually been formed in the large area of the Ljubljana basin, urbanized a long time ago, in the Drava–Ptuj plain, in the Celje basin, along the Slovenian–Italian border from Piran to the Goriška Brda plateau, and along the "Slovenian road cross" in general. In other areas, only some smaller areas of concentration can be found (in the form of islands around smaller Slovenian towns). All areas of concentration have mainly developed in plains and wider river valleys. Calculations have provided evidence that in the hinterlands of Slovenian towns rounded off areas have gradually been formed, with a more intense dynamic of population growth than in towns themselves. These "active areas" are not isolated because they are mutually connected, thus forming well defined belts, the so-called "economy-and-transport corridors". Such continuous, town surrounding areas numbered 274 in 1986. The total number of inhabitants living there amounted to 720,176; the population density in these areas was 314.5 inhab./km$^2$, which is five times lower than in towns, and one half of the population density in suburbs; however, it is more than three times above the Slovenian average, and twelve times higher than population density in rural areas and outside areas of concentration in Slovenia. It means that almost two fifths of the Slovenian population live in rural areas, the importance of which, as regards population, has also been increasing in absolute numbers (*Table 5.1*).

The average annual growth of all Slovenian towns after 1981 amounted to 9,350 inhabitants (in the previous decade, it still amounted to 14,640). Thus, the most intense flows have been shifted from town centres to their suburbs and their wider peri-urban areas where the population growth, in the same period, amounted to 14,420, and 16,300 inhabitants annually respectively (in the period before 1981, by one quarter less). The data also reveal the problem of emptying of rural areas, which has been going on in almost four fifths of the Slovenian territory. The result is that only a weak fifth of the Slovenian population still lives there. Its number has annually been reduced by 13,500 inhabitants and it is becoming worse from year to year (in the previous decade, the yearly decline was still fewer than 10,000 inhabitants). The emptying of large areas occurs, as a rule, in the mountainous areas of the Alpine and subalpine

Table 5.1

*Demographic development trends in settlement patterns of Slovenia, 1971—1986*

| Type | Year | Per cent of area | Density, inhab./km$^2$ | Per cent of population | Average annual growth rate | |
|---|---|---|---|---|---|---|
| | | | | | 1971–81 | 1981–86 |
| Town centres | 1971 | 2.6 | 1,094.4 | 36.3 | 2.3 | 1.3 |
| | 1981 | | 1,370.2 | 38.5 | | |
| | 1986 | | 1,458.2 | 39.0 | | |
| Suburbs | 1971 | 1.8 | 390.8 | 8.3 | 3.2 | 2.6 |
| | 1981 | | 536.9 | 10.4 | | |
| | 1986 | | 609.0 | 11.2 | | |
| Peri-urban areas | 1971 | 17.4 | 203.7 | 25.9 | 1.2 | 1.8 |
| | 1981 | | 238.7 | 27.0 | | |
| | 1986 | | 260.9 | 30.3 | | |
| Other rural areas | 1971 | 78.2 | 35.0 | 29.5 | −2.0 | −3.2 |
| | 1981 | | 28.7 | 24.1 | | |
| | 1986 | | 24.5 | 19.5 | | |
| Total | 1986 | 100.0 | 98.0 | 100.0 | 1.1 | 1.0 |

regions, the karst poljes and plateaus, as well as the Tertiary, hilly regions of south, southeast, and northeast Slovenia.

The areas of concentration or constant increase in population — related to suburbanization — comprised 11.2% of the entire inhabited space in 1969 (*Klemenčič,* 1977); this percentage doubled in the next two decades. The percentage of inhabitants living in the areas of concentration increased from 43.3% to 80.5% in that same period. Thus, the analyses of population dynamics have shown that the former centripetal, town-oriented trends have gradually changed into centrifugal trends. The increase in urban population and production units is spreading towards town margins and outer urbanized areas. All this has resulted in the spatial growth of towns and the forming of urban regions. In contrast, trends towards stagnation or even decline have been registered in the great majority of Slovenian towns.

**Suburbanization**

New means of transport, cars in particular, have decisively contributed to population dispersion in the form of "layers" around towns, which can be called "the landscape of waning settling pattern". Peri-urban settlements still have, as a rule, the physiognomy of rural settlements. Such settlements can also be defined as settlements having neither urban character nor urban physiognomy, while people in them live an urban way of life. New social standards have changed living conditions, different transport conditions (and communication technologies in general) have led towards structural changes and new forms of settling patterns, i.e., towards the "adoption of urban ways".

Intense daily connections between towns and suburban and rural areas are also very important for suburbanization. The connectedness is reflected in numerous commuters, flows of supply, and population mobility in residence changing. In such cases, peri-urban areas act as transformation catalysts. Thus, suburbanization represents not only an expansion of a town into its direct surroundings (such processes were known already in the early phases of urbanization) but also, due to selective residence changing of the population from towns, additional and more complex transformation of new settlement structures. The role of peri-urban areas, if compared to town centres, is thus in growth. Experiences show that different types of development of suburbanized areas depend on location, landforms, transport infrastructure, land plot price, trade cycle phases and/or the degree of (non)liberalisation of town planning (non)regulation. The characteristic feature of Slovenian suburbanization is, above all, its expansion into former rural areas. It is defined as the spreading of modern settlements with a lower population density which lie within the range of town influence. The spatial organisation of settlement systems also entirely differs from any traditional suburbs. At the same time, suburbanized areas as well as peri-urban zones (*Aydalot—Garnier,* 1985), cause discontinuity in the rural settlement pattern by imposing the building of residential facilities which are not typical of those areas. Upon assessment, they appear in the surroundings of towns within the distance of 10 to 15 km from town centres.

This phenomenon is closely related to the construction of private houses. This way of residing has spread incredibly over Slovenia

since the end of the 1970s. Almost all housing facilities that have been built outside towns since 1980 are private property. This new form of urbanization has also caused deep changes in the balance of the existing urban and rural settlement structures. Upon approximate calculations, about 1.3 million people in Slovenia lived in single houses in 1990, 300,000 of which lived in towns and more than 550,000 in suburban areas.

The intense development of house construction in the peri-urban areas of Slovenian towns is the result of intense immigration above all, and also of many other factors, particularly economic ones, as well as of socio-psychological motives. The reasons can be found in lower costs when building in private arrangement, and also: in lower prices of land plots at the cost of poorer supply and communal facilities; in the increase of personal income of the population, which enables people to invest in house construction; in the possibilities of expanding into larger residential units; in good transport accessibility and easy access to workplaces and supply centres; in better living conditions; in greater possibilities of pursuing hobbies (gardening, etc.); in general people's preference for living in single houses, which has been confirmed by numerous investigations into public opinion; in the wish for higher standards of living; in the rural origin of the population; etc.

To reside in a single house surrounded by an unpolluted, green environment, near a town into which they daily travel to work — this is the dream of people from the wealthiest countries. 76.6% of the Slovenians wish to live in such a way (in the questionnaire on Slovenian public opinion 15.5% of interviewed people wish to live in single houses, outside towns, 41.2% in small settlements near towns, and 19.9% in small rural settlements of less than 500 inhabitants each) and indeed, we have afforded great residential and spatial luxury. The latter is achieved through invested personal work, breaking the town planning rules, renouncing other qualities of living, and a semi-farmer/semi-worker way of life.

The motivation elements of suburbanization can be divided into the following groups:

— The first group includes safety and a kind of independence, above all in the financial aspect. A great part of the population has decided to build private houses just for themselves, to invest money and escape the town; new residences have been chosen because of reasonable prices and a relative proximity of workplaces;

— The second group concerns the inappropriateness of apartments on the "rental market" (size, price/rent, and quality of the apartment, number of rooms, etc.) especially for families;

— The third group expresses the wish to return to rural areas, searching for harmony with nature, and escaping from the urban environment which is viewed as unkind and hostile.

The typical household usually has some kitchen garden around the house. It is impossible to determine the social status of households in suburban areas since they are very heterogeneous. On the whole, the working class prevails. The manners of such families remain rather introverted. They leave their houses rarely, and they are on so-called "occasional" terms with their neighbours. The age structure of the families is explicitly young (between 30 and 40 years). For all these reasons, an effective policy of suburban space management should take into account such socio-economic differentiation. The inhabitants of suburban areas are much better motorised than the rest of the population. Although it has not been observed that daily travels significantly affect these people, it should be mentioned that negative effects can be relevant, such as increased energy consumption, increased number of road accidents, overcrowded parking zones in towns, the increased use of road infrastructure, and the increased air pollution. These negative effects have been poorly evaluated so far, and it is difficult to specify the share of suburban areas in them. Nevertheless, it can not be denied that anarchic development of single house construction can have dramatic effects in the field of transport. The transport of schoolchildren (secondary school pupils in particular) represents an even more severe problem. Schedules for group transports of working people usually do not match the schedules of schoolchildren. Sometimes additional vehicles are indispensable in solving such problems.

Changes caused by suburbanization are also evident in the cores of the settlements close to towns; a number of former farm houses remain unused because people have been employed in nonagrarian activities, or their functions have changed (lately, above all, into various shopping or catering functions). It has also been noticed that autochthonous residents move to the marginal parts of settlements. The ever increasing transport, the outmoded building material connected with high costs of investments into communal facilities, the lack of modern service activities — all these factors have

intensely diminished the value of the centres of former rural settlements. The number of residents is in increase above all, because of extensive building activities in the marginal areas, while the number of residents in the cores is in decline. Due to intense immigration of allochthonous inhabitants, the sense of belonging to a settlement has also become weaker. The increased percentage of immigrants has brought a different, urban way of life, not only to the immigrants but also to the autochthonous population. Bonds with the land have declined since farming is only an additional source of earning one's livelihood. As to the outlook, fragmentation of land plots is evident, as well as the increased share of the areas overgrown with grass. The described changes have only been intensified by industrial plants and larger craft workshops of more recent origin as a rule (*Ravbar,* 1992a).

The analysis of suburbanization in Slovenia is based on demographic, socio-geographic, economic, and supplying conditions in Slovenian peri-urban areas. An *intense suburbanization* has been registered in those parts where the peri-urban areas had to fulfil the majority of the following conditions: the number of residents increased at least by half during the past fifteen years; the number of residential houses was doubled; the number of immigrants surpassed half of the total population; the percentage of commuters surpassed one fifth of the total population; the migration rate in the period 1981–88 was higher than +50 inhabitants; population density and workplaces together surpassed 500 per km² (500 inh.+ w.p./km²); and the percentage of workplaces in tertiary and quaternary activities was higher than 25%.

*Moderate suburbanization* is defined by indicators, among which those prevail of above average values, such as: the population number increased to over 125% in the period 1971–86; the number of houses increased by half in that same period; the number of immigrants, as a rule, surpassed 40% of the local population; the percentage of commuters surpassed 15%; the migration rate in the period 1981–88 was positive; population density and workplaces together surpassed 300 per km² (300 inh.+w.p./km²); and the percentage of workplaces in the tertiary and quaternary sectors was higher than 10%.

*Weak suburbanization* is defined by a combination of indicators among which there are no high above average; however, values below average prevail, which is indicative of moderate population

growth and increase in the number of houses; the percentage of immigrants was only about 20%; the percentage of commuters was, as a rule, below 15%; the migration rate was balanced; the percentage of workplaces in tertiary and quaternary activities was also low.

Evaluation has shown that intense suburbanization has taken place in a gross quarter, moderate suburbanization in a gross half, and weak suburbanization in one fifth of peri-urban areas of Slovenian towns. Three different areas are very outstanding, since they coincide with natural-geographic and socio-economic conditions (*Figure 5.4*):

1) "Polycentric" urban regions with intensely developed suburbanisation, which are formed through fusion of bigger peri-urban areas. The most expressed, intensely suburbanised areas occur in the Ljubljana basin, in the Drava—Ptuj plain, in the Savinja valley, and in the Slovenian littoral;

2) "Monocentric", intensely suburbanized, yet isolated areas which "radiate" from a single urban centre into its surroundings; e.g., the intense transformation of settlements in the lower Vipava valley under the influences of Nova Gorica and the open border. However, moderate suburbanisation prevails around other Slovenian towns. It is most strongly expressed around Novo Mesto, then around Koroško and Brežice, around the mining towns by the Sava river, Laško, Slovenske Konjice, Slovenska Bistrica, Ravne na Koroškem, Slovenj Gradec, Velenje, Mozirje, Kočevje, Ribnica, Sezana, and Postojna;

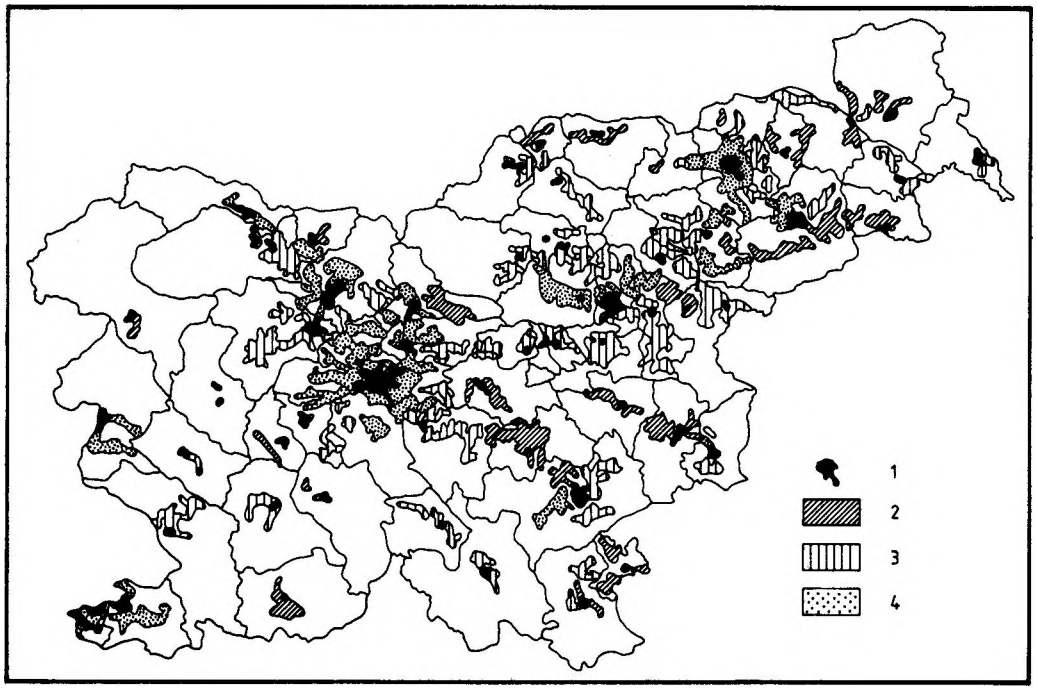
3) Isolated, spatially limited, and weakly suburbanized areas. They occur in their most marked form around small towns in the south (i.e., the "karstic") and northeast Slovenia.

The comparative analysis of peri-urban areas has also raised a question about the real suburbanization of these areas. The justified dilemma about the existence of suburbanization in the above mentioned peri-urban areas is also irrevocably supported, along with other indicators, by the great percentage of autochthonous population, the balanced migration rate after 1981, and a high percentage of households of engaged in farming.

The presented typology has highlighted the dependence of suburbanization upon the size of urban agglomeration(s), and the density of inhabitation in its (their) hinterlands. The average density in the areas of intense suburbanisation amounts to approx. 450 inhab./km$^2$, while it is approx. three times lower in the areas of moderate and weak suburbanisation.

Figure 5.4

*Typology of suburbanization in Slovenia, 1986*




*Key*: 1 = Towns; 2 = Weak suburbanization; 3 = Moderate suburbanization; 4 = Strong suburbanization.

We have registered 167 more or less rounded off suburbanized areas in Slovenia in our research. Suburbanized areas comprise nowadays more than one third of Slovenian settlements and cover one eighth of the territory of Slovenia (262,245 ha; together with towns — 309,264 ha). Almost three quarters of the Slovenian population lives in these areas.

The analysis of migration dynamics after 1981 has also exposed the turning point in the migration directions of population. The majority of Slovenian towns have already shown a negative migration rate in this period. Altogether, it amounted to −9629 inhabitants or −1.2% of net migrations, which points to the process of moving away from towns. Just the opposite trends are registered in the peri-urban areas. Here, the positive migration rate amounted to 28,730 inhabitants.

The number of daily migrants, the so-called commuters, amounted to gross three fifths of all the employed population in Slovenia in 1981. In towns, this share amounted to gross two fifths, while in rural areas, it was even five sixths. In 1981, almost one third of the inhabitants of suburbanized areas travelled daily to work, which was less than from other rural areas, but more than from towns. The share of commuters from peri-urban areas has increased by one third during the last decade. The greatest changes have occurred in the gravitation hinterlands of the towns with the lowest share of commuters which did not surpass one fifth of the population even in the year 1981. These are, as a rule, suburbanized areas in the hinterlands of towns in the northwest and south Slovenia.

One of the typical features of Slovenia is its intense dispersion of settlements. Less than two million people live in six thousand settlements of which only two have more than one hundred thousand residents each. As to the size of settlements, they occur as relatively small towns and numerous villages and hamlets, each with its own deep historic roots. Such settling patterns pose diverse and difficult problems for the rational management of space and its use, also to transport and communal infrastructure as well as to social services, not to mention environmental protection. The development of communications technology, shifts in social structure, and socio-economic development have further modified urban development in the last few decades. Thus, we can discuss nowadays different development types of suburbanization. To generalise, settling processes in suburban areas can be divided into:

— concentric or star-like development,
— linear or longitudinal development,
— deconcentric or dispersed development (*Fischer,* 1978).

The process of suburbanization in the world as well as in our country confirms that suburbanized peri-urban areas have become the areas of transition between towns and rural areas. They are somehow "specialised", so that they are used, above all, as a residing place of the employed people who work in the nearby town (dormitory areas). The claims for (and forcing of) constant increase of new (mostly) residential areas in the peri-urban areas of Slovenian towns are encouraged by the low prices of land plots, an incompetent land policy, and unfinished plan for further development of the settling system which has been uncontrolled and — due to prevalent valley landforms — linear, although it appears in the form of "layers around towns". Evident effects gradually lead to the vanishing (destruction) of ecological values and free areas which "have not been planned for buildings".

Towns have always been closely connected to their non-urban surroundings. It has always been a matter of functional inter-supplementation. Suburbanized areas, which are constantly connected with their town centre, develop under the strong impacts of towns. The changes in rural surroundings are, for the most part, the result of investing money, earned in towns, into the building of residential houses, craft workshops, and/or farm houses (or outbuildings). As to this aspect of the impact of towns, those effects are relevant above all which result from daily migrations. Moving of the urban residents into peri-urban areas is another relevant factor of transformation of suburban environment. Thus, it would be right to emphasise this point the problems of spillover and spatial organisation of infrastructure. It is beyond any doubt that only an urban area that is economically and politically strong can face this new situation.

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# 6 THE BASIC ASPECTS OF REGIONAL DEVELOPMENT IN CROATIA

ZLATAN FRÖHLICH

## Introduction

Over the last thirty years, the importance of regional policy within the general development policy of most European countries has greatly increased. A growing interest in regional policy has been prompted by the tendencies of regional polarisation which have been taking place. The staying power of traditional economic structure and slackening economic activity has perpetuated high unemployment levels in certain regions. This has triggered migrations toward more developed regions, which in itself justifies a redistribution of economic activity towards less developed areas. The basic problems that need to be addressed are:

1) unemployment issues and the consequences of migration,
2) the restructuring of traditional sectors of the economy,
3) measures for resolving some of the problems which go hand-in-hand with urbanization and the concentration of economic potential and population in particular areas, and
4) the maintenance of quality of life and environmental issues.

The experience of some developed countries indicates that any successful regional policy must take into account political, economic, military, social, ecological and other factors.

The basic tenets of regional policy and economic development models are:

1) The development of infrastructure in less developed regions creates conditions for a market-dictated allocation of resources, the easing of interregional conflict and facilitates a gradual increase in

the standard of living; this approach is especially important in rural and backward regions, but it is often hailed as the most effective general approach to development problems and constitutes the basic lever of regional policy;

2) The incorporation of societally-owned firms that are directly controlled by the state into development efforts in the less developed regions;

3) The destimulation of investment in developed regions where a higher level of concentration of economic potential has already been achieved; this is an indirect way of directing investment activity towards the less developed regions;

4) The inclusion of a series of stimulative measures in the regional development model and supporting initiatives for constant innovation of regional policy; with this aim in mind, special funds have to be instated, monetary incentives given and financial sources, which aim to cover the social costs of regional program implementation, have to be found.

## Croatia: spatial characteristics

The Republic of Croatia is a central and a south-east European country. At the same time it is a Pannonian and a Mediterranean country. With a surface area of 56,538 square kilometres it is one of the smaller European countries. The multiple characteristics of its placement in the European landmass have greatly influenced its historical development. One of the consequences of its geographic location is the fact that various regions of Croatia were historically more closely related to areas bordering on Croatia than with each other.

The location of regions in relation to neighbouring regions and the wider European hinterland has accentuated the differences between regions. The region of Slavonia corresponds to the wider Pannonian plain, the Croatian coastal area with other regions in the Adriatic basin, while north-western Croatia has strong ties with neighbouring alpine countries and beyond. There are also lasting ties with regions which were historically a part of Croatia but are now outside its present borders. In the process of regional delimitation, ties with neighbouring regions outside Croatia have to be recognised in order to uphold regional identity.

The dissociation and the diversity of regions is the main spatial characteristic of the Republic of Croatia. Its present area, with its moon-shaped form, is only a part of a larger historical and national entity. Croatia is geographically very diverse and the scale of regional diversity is unusual even for much larger European countries. The regions are, however, mutually complementary and the present borders of the state have emerged out of a complex sequence of historical events and political arbitration.

The Pannonian and Mediterranean regions come together in the Republic of Croatia where they are divided by a narrow mountain range. However the subdivision of the Croatian territory is much more complex.

The specific territorial development of Croatia, with its more then 700 km long inner eastern rim of the half-moon and 1,150 km on the outer western rim, influenced the formation of regional communities and the gravitation centres of the country.

Due to the prevalent natural and geographic characteristics which tend to separate and isolate the various regions, a unifying transport and traffic system is of primary importance. The configuration of the land favours longitudinal rather than transversal lines of communication between regions. More specifically, in northern Croatia optimal natural and geographic conditions prevail for communication lines along the Posavina and Podravina regions and along the coast in the Adriatic region. Transversal connections between the north and south are limited, especially in the Lika region and between the hinterland of Dalmatia and the coast. Such limitations are not often found in northern Croatia.

The given geographic characteristics have shaped the traditional ties between various regions within Croatia, and the present regionalisation efforts must take them into account. In practice, this means that regions cannot be formed across geographic faults since mountains have always kept the communities on the different flanks apart. Likewise Podravina and Posavina cannot both be constituent parts of a single region.

Under present conditions and the specific territorial definition of the Republic of Croatia, the natural and geographic characteristics do not cause any further limitations, but they impose certain criteria for the regional division of the Croatian territory.

## An approach to the territorial division of the Republic of Croatia

### *A historical review*

A modern administrative organisation was inaugurated in the territory of the Republic of Croatia in 1850. Until the end of the 19th Century, four different administrative and social divisions took shape (the commune, the district, the county, and the whole entity of Croatia and Slavonia). These regional entities also had a political-administrative status of a higher order (counties).

After the First World War, first a gradual, and then a radical reorganisation of the territorial organisation of government took place. In the first decade of rule of the Kingdom of Serbs, Croats and Slovenes, counties were simply renamed into regions and when this proved inadequate, the administrative units called banovina were introduced. Their borders did not follow the previous regional units and deviated from the historical borders of the Kingdom of Croatia, Slavonia and Dalmatia. The main purpose of this division was to annihilate any remnants of the original regional territorial administrative organisation of Croatia, to disintegrate the Croatian historical heritage, and to eliminate its Croatian national name.

The post Second World War period was marked by a process of continuous change in the definition of regions, and it continues up to the present.

The first outline of territorial organisation of Croatia took place in 1945 and it was based on the system of the partisan organisation of government. Communes gave way to clusters of national boards which were named districts (kotarevi). When a need arose to introduce regional centres in the organisation of government, the experience and tradition of former Croatian counties was ignored and new regions (oblasti) were formed. Thus in 1949 there were six regions including the Town of Zagreb which was a region in itself. Due to their size, neither the newly formed regions nor the national boards could fulfil the need for rational governing and new solutions were sought. Again, none of the new ideas which were brought forward was based on previous European or Croatian experience.

The political elite in Croatia, as well as in the whole of ex-Yugoslavia, was ideologically indoctrinated and convinced of its avantgarde mission. It thus ignored all the well founded traditional

organisations of government which predated their coming to power in Croatia. National boards were finally discarded in 1952, and communes and municipalities were reintroduced, but the districts and city districts continued to coexist. This territorial division again proved incongruous with rational administration as 86 districts of 1952 could exclusively cater to narrow local social functions.

By 1955, the number of districts was reduced to 27, and this began to resemble the territorial administrative framework of Croatia, but no final solutions were reached. Subsequently, the number of districts was, over a ten year period, reduced to nine and finally 8 (the reasons for ousting Istria from the community of regions is inexplicable). The new regionalisation was presented as a rationalisation of the territorial concept, but in fact it resembled the 1949–1951 framework and not the pre-First World War territorial organisation which featured counties.

In 1968, a political decision was made to abolish districts regardless of past experience and real needs. Within the ideology of direct communal self-government there was simply no room for the polarisation of functions and government organisation on the regional level. It soon became clear that certain services and government functions had to be inaugurated at the regional level, especially regarding the achievement of economic development goals. This prompted the introduction of a new term, the association of communes (zajednica općina) into the theory of socialist self-management. By 1975, 10 associations of communes existed (including the city of Zagreb as an association of communes in its own right). This territorial organisation roughly corresponded to the previous districts before their dissolution in 1967, which shows that, again, no real advance was made towards building a rational and functional system of regional government.

Since 1985, there are only two levels of government: the commune and the republic. When a part of Croatian territory is under occupation by the last European communist regime and a part is under the auspices of UNPROFOR, the conditions are not conducive for defining a new regional structure. Work on the economic, spatial, sociological and other analyses is underway which will back up a future regional division of Croatia. It is expected that the Parliament of the Republic of Croatia will issue an act on the regional organisation of the republic by the end of 1992.

*The basic socio-economic characheristics of macro-regions*

The economic structure and the characteristics of social development differ substantially in the various regions of Croatia. These differences are partly the result of geographic and natural features, the various locational characteristics, historical influences but also due to the unequal allocation of existing resources.

We can identify four macro-regions on the basis of the above mentioned differences: *north-western Croatia, Slavonia and Baranja, the Rijeka region with Istria and Dalmatia.*

The north-western part of Croatia can be said to have an above average concentration of human potential and industry. The same can be said of the Rijeka region with Istria, especially if the population and the size of the region is taken into account. The allocation of human potential has, since the 70s, been relatively stable, which indicates that the tendency of population concentration in North-western Croatia and Rijeka region with Istria has been checked. This stability has, however, been achieved through considerable within-region migration which has greatly disrupted the concentration of population within regions. The share of Slavonia and Baranja in the total population is slowly decreasing, that of Dalmatia is increasing due primarily to natural population increase.

*North-western* Croatia is the gravitational centre of the republic, where most of the development potential has been realised due to its historical and political role as well as its location in the vicinity of the more developed European countries. Certain urban centres, especially Zagreb, have, over a long period, been the leaders in the development of both Croatia as well as the former Yugoslavia. This has resulted in the above average concentration of economic potential in this relatively small area. The processes of urbanization favoured a small number of towns, especially Zagreb, spurned by the substantial differences in their standard of living and that of the surrounding areas. They experienced a huge demographic expansion under conditions of a relatively low level of development of the north-western Croatian region.

The regional development structure of north-western Croatia is very uneven. Industrial capacities are unevenly distributed and there are large differences in the levels of employment and national income in the various regions. These differences have prevailed over a considerable period of time and several regions (Lika, Banija,

Kordun, Hrvatsko Zagorje and Podravina) may be considered insufficiently developed in relation to the Croatian average.

In *Slavonia and Baranja* there are also considerable differences in the level of social and economic development among their constituent regions. The level of development of various communes trails behind the average level of development in Croatia. These communes (Đakovo, Nova Gradiška, Orahovica, Slavonska Požega, Vinkovci and Županja) cover 48% of the area and 40% of the population of Slavonia and Baranja (1981). This part of Slavonia and Baranja stands out considerably from the much more developed regions in the valleys of the Danube and the Drava in this region (Vukovar, Valpovo and Osijek). There is a high negative correlation between the level of development and the number of migrants from an area (most of them work in West European countries) and their number in the less developed sub-regions of Slavonia and Baranja is much higher then in the rest of the region.

Osijek, as the main development centre of Slavonia and Baranja could not contribute greatly to the development of the less developed sub-regions in its wider gravitational area. Its economic structure and its overall economic potential is considerably below that of other macro-regional urban centres in Croatia. Osijek ranks behind Zagreb, Rijeka and even Split, and is the only regional centre that has barely attained the average development of the republic as a whole. This state of affairs is not in line with the previous relative economic importance of this city, its size and its regional functions. A lagging behind in the general development trends is evident. As such it cannot serve its function as a promoter of development of the region as a whole.

The low ranking position of Slavonia and Baranja in comparison with other regions in Croatia necessitates the creation of an effective concept of regional development. The future development of this region needs to be based on the region's plentiful human, natural and economic resources as well as on its favourable location along the main road networks and the valleys of the rivers Drava and the Danube. In view of these advantages, which also include navigable rivers, Slavonia and Baranja should catch up and even surpass the development level of the wider Pannonian and Central European area.

The main development aims of the *Rijeka region*, including Istria, are to exploit the existing resources more efficiently and to attain a

more rational and ecologically more balanced equilibrium with nature. All essential economic and social activities both in the sphere of production and of services, should permanently keep these aims in the forefront of the decision making process. Development aims regarding the economic structure include:

1) more emphasis on the development of transport, trade, tourism and other services with special emphasis on the development of small enterprises in production and services, marine culture and Mediterranean agriculture,
2) the modernisation of existing technology in all production activities (industry, shipbuilding) which have development potential,
3) a gradual phasing out of technologically dated production processes and the introduction of new modern production and service activities,
4) the development of agriculture in areas which are conducive to this type of activity and where demand conditions are favourable; the development of aquaculture and fishing.

Within the framework of regional policy of the Rijeka region and Istria, special attention must be given to the less developed sub-regions. However, this can only be achieved within a dynamic process of restructuring of the entire regional economy. The economic development of the less developed sub-regions can be achieved by dispersing and reallocating production capacities on the basis of European allocation criteria. The emphasis in the planning process for the development of sub-regions should be on the more efficient use of local natural, demographic and production potentials. The main aim is to create conditions for employment creation and to slow down migration of the labour force towards larger urban centres. The development of mountainous regions and islands should receive special attention due to their specific characteristics which require separate analysis.

The economy of *Dalmatia* developed under the same circumstances as the rest of Croatia. The structure of the Dalmatian economy is strongly inclined towards primary industrial production, i.e., heavy industry. Raw material production and processing is the most widespread industrial activity. These industries are big energy consumers but the whole region is deficient in energy and the future of the secondary sector is uncertain. There has been a strong development of the tertiary sector over the last few decades and the impor-

tance of agriculture and fishing is increasing. It must also be mentioned that this region has a higher than average share of exports in relation to Croatia as a whole.

The allocation and development of production capacities over the various sub-regions in Dalmatia is very uneven. In order to stimulate development in the depressed regions such as Zagora and the islands, and prevent further concentration of economic activity in the already congested urban coastal belt, it is necessary to restructure the economy in this region. An additional reason in favour of restructuring is evidence that the threshold between the positive and the negative effects of concentration has already been passed.

In certain parts of Dalmatia, the sole orientation in development has been towards a single economic activity (tourism) which may have a negative effect on further development.

There are no economically exploitable mineral deposits in Dalmatia and they cannot thus be the basis for industrial development. The only exception are findings of nonferrous metals and building materials. Results of prospecting for oil off-shore give some indication that there may be enough oil and gas for economically justifiable exploitation. The hydro-energetic potential of the area is already being fully exploited. The water resources in Dalmatia are unfavourably located and the limitations of their exploitation are being overcome by the construction of regional pipelines. Most of the agricultural potential lies in the karst valleys and along the River Neretva where the climatic factor is exceptionally favourable. The most important development resource of Dalmatia is the sea. The exploitation of this development asset includes the development of shipbuilding, construction of sea ports, fishing, and both coastal and maritime tourism (*Table 6.1*).

A hierarchical differentiation of urban centres in Croatia has been gradual and began to acquire the present form in the 1960s. In 1910, 15% of the population lived in settlements numbering more than 5000 people. By 1931, this share rose to 18% and stayed near that level up to 1953. In 1961, the degree of concentration in settlements of more than 5,000 people reached 30% and accelerated over the following two decades (*Table 6.2*).

In 1991, nearly 50% of the population of the Republic of Croatia lived in settlements numbering more than 5,000. These settlements are a part of the system of urban centres of Croatia and as such they need to carry out certain central functions.

Table 6.1

*Basic macroregional indicators, 1990, per cent*

| Indicator | North-western Croatia | Slavonia and Baranja | Rijeka region and Istria | Dalmatia | Total |
|---|---|---|---|---|---|
| Area | 44.66 | 19.61 | 14.93 | 20.80 | 100.00 |
| Population | 50.23 | 18.85 | 11.75 | 19.17 | 100.00 |
| Employee | | | | | |
| Total | 50.22 | 16.49 | 14.90 | 18.39 | 100.00 |
| Industry and mining | 53.78 | 18.80 | 12.09 | 15.33 | 100.00 |
| GDP | | | | | |
| Total | 50.66 | 15.99 | 15.97 | 17.38 | 100.00 |
| Industry | 55.66 | 16.31 | 13.33 | 14.70 | 100.00 |
| Trade and tourism | 45.34 | 11.66 | 20.73 | 22.27 | 100.00 |

*Source*: Statistical Yearbook of Croatia, 1991.

The concentration of considerable labour as well as demographic potential in urban centres is self-evident. It took only three decades (1969–1991) for the urban population to increase by almost 1.5 million, while the rural population simultaneously decreased by almost 900 thousand.

Changes in the structure of urban systems in the Republic of Croatia have led to the formation of a hierarchical urban structure. This process of development is in the interest of a hierarchically more complex organisation in this region. These changes have also seen the development of regional centres, which justify a decentralisation of economic, administrative and political functions. The delegation of these functions will create conditions for the strengthening of polycentric development of the republic (*Table 6.2*).

The general framework of the territorial organisation of Croatia is defined by the late 1990 Constitution of the Republic of Croatia. The Constitution gives only an outline of this organisation and it needs to be further defined by relevant acts.

The basic formulations on the political and territorial organisation of the Republic of Croatia as they are laid down in the Constitution are:

Table 6.2

*The process of population concentration in the Republic of Croatia in central settlements, 1910–1991*

| Year | Total population | Central settlements | | | |
|---|---|---|---|---|---|
| | | Population | | % share | |
| | | More than 5,000 | More than 25,000 | More than 5,000 | More than 25,000 |
| 1910 | 3,460,584 | 511,674 | 235,001 | 14.79 | 6.79 |
| 1931 | 3,785,455 | 676,174 | 386,295 | 17.86 | 10.20 |
| 1948 | 3,779,858 | 799,519 | 524,360 | 21.15 | 13.87 |
| 1953 | 3,936,022 | 940,500 | 619,806 | 23.89 | 15.75 |
| 1961 | 4,159,696 | 1,232,667 | 889,518 | 29.63 | 21.38 |
| 1971 | 4,426,221 | 1,692,929 | 1,316,202 | 38.25 | 29.76 |
| 1981 | 4,601,469 | 2,087,451 | 1,558,091 | 45.36 | 33.86 |
| 1991 | 4,760,344 | 2,315,173 | 1,763,874 | 48.63 | 37.05 |

*Source*: Regionalizam u ..., p. 42.
*Note*: The data for all years refer to the present territory of the Republic of Croatia.

— Territorial units of local self-government can be communes, districts or towns, as laid down by law;

— Local institutions of government administration can be founded in communes, districts or towns as laid down by law;

— Counties (županija) are territorial and organisational units of social administration and self-government. They are to be delimited by law, though care must be taken that historic, transport and economic factors are taken into account and that units are capable of being natural self-governing entities. It is envisaged that large towns be treated as separate counties in their own right;

— The capital of the Republic of Croatia, Zagreb, is constitutionally defined as a separate and unique territorial and administrative unit, whose internal organisation is defined by a separate act.

It is clear that the Constitution of the Republic of Croatia attaches special importance to the regional organisation of the republic, i.e., the delimitation of counties. Evidence of the significance of counties in the organisation of the government of Croatia is provided by the fact that the parliament consists of a house of delegates as well as a

house of counties with equal representation of all counties. This ensures equal rights of all regional communities in the republic.

According to the opinion of experts, it is expected that the commune will be more of a self-governing and less an administrative territorial unit. Counties, on the other hand would be a home to several government institutions as well as being centres of regional self-government. The Constitution also mentions districts. If this new organisational form is adopted it would require a change of status and territorial standards of the communes. However, the concept of a district may be useful for regions within counties which have been afforded special status, and whose size falls short of the general standard.

It is to be expected that the first stage in the definition of the territorial organisation of the Republic of Croatia will retain the existing standards that define present communes. This standard indicates that a commune encompasses a smaller or larger group of settlements which are connected to a communal centre and which all together make up a spatial and social whole. The introduction of districts as basic units of regionalisation, would entail a change of commune borders since a district extends beyond commune borders. This type of organisation would reduce the commune to a lower territorial level of organisation. The commune would include fewer settlements around a centre much lower on the hierarchical scale, resembling the type of territorial organisation before the Second World War. A county is considered to be a regional unit of government as well as an association of self-governing units.

In line with the newly established political conditions as defined by the 1990 Constitution, the Republic of Croatia should be organised into a modern state. From the point of view of territorial/administrative organisation this entails the inauguration of several levels of territorial/administrative organisation.

Keeping the above mentioned characteristics of the Croatian territory and its tradition in mind, the territorial organisation should be carried out at four different levels as follows:

1) the level of the republic,
2) regional associations,
3) smaller gravitational units, and
4) free associations of citizens.

The standard units within the territorial framework of Croatia should include counties, districts and communes (*Table 6.3*)

Table 6.3

*Foundations for the hierarchical division of the territory of the Republic of Croatia*

| Unit | First alternative | Second alternative |
|---|---|---|
| Republic administration | Republic administration | Republic |
| Regional communities | Counties | Counties |
| Smaller gravitational units | Districts | Communes |
| Citizens' associations | Communes | Local communities |

The present territory of the Republic of Croatia is geographically diverse and most of its constituent regions have a tradition of regionalism.

If all the relevant factors are taken into account — both the historical experience and contemporary constitutional indications — the territory of the Republic of Croatia should be subdivided. The delimitation of smaller gravitational units (these can either be communes or districts) can be based on relative continuity while the delimitation of regional associations has to await certain expert procedures and political decisions. We here take the view that regional units of the Republic of Croatia should be constituted as counties and that the following facts and assumptions have to be taken into account in the process of their delimitation:

— The dominant characteristic of the Republic of Croatia is a spatial and geographic diversity of its constituent parts. Regionalisation can, to a large extent, follow geographical features as it has done in the past. Therefore, geographical factors have to be respected as a firm foundation for the territorial/political organisation of the Republic;

— Regional communities in the Republic should largely be synonymous with gravitational units constituted at various polarisation levels of social functions. This includes centres of economic and social activity with their gravitational regions. Thus an appropriate delimitation has to respect the existing system of town centres and their hierarchical structure. The regional communities must be delimited in such a way that the existing traffic and transport communication networks connect the various regions as well as the gravitational areas with their respective centres;

— The size of regional units in Croatia should be such that optimal interaction between the republican centre and its territorial units is ensured;

— One of the factors which must be included in the criteria for the delimitation of territorial unit size is the preferred average population size of each unit. A high level of equality cannot be sought after here, since the density of population in Croatia is very uneven and the concentration of population in urban agglomerations is relatively high;

— The delimitation of regional communities must take into account the individual regional characteristics and the traditional regional isolation as well as the specific regional individuality of various regions (the cultural and historic characteristics of each region);

— Since the Republic of Croatia is a home to many national minorities and nationalities, care should be taken that in settlements were they constitute a majority, their special interests regarding the location of these regions within the whole political territorial organisation of the Republic are taken into account.

## Concluding remarks

The thesis we put forward in this paper is that the rational organisation of government, self-government and social life in general, entails the institution of three basic levels of territorial organisation. The fourth level of territorial organisation are the direct associations of citizens on all levels.

The structure of government and the corresponding territorial organisation of the Republic of Croatia described above implies a decentralisation of political institutions. It is in line with the general effort to curtail the centralisation of government functions, to minimise the concentration of social functions and economic activities wherever possible. This concept reflects one of the development goals of the republic, i.e., to achieve polycentric development, to uphold regional individualities and to activate development potentials of all parts of the republic.

On the basis of the geographic structure of the Croatian territory, the ties between its local, regional and central parts, and the hierarchy of urban centres, 12 regional communities can be identi-

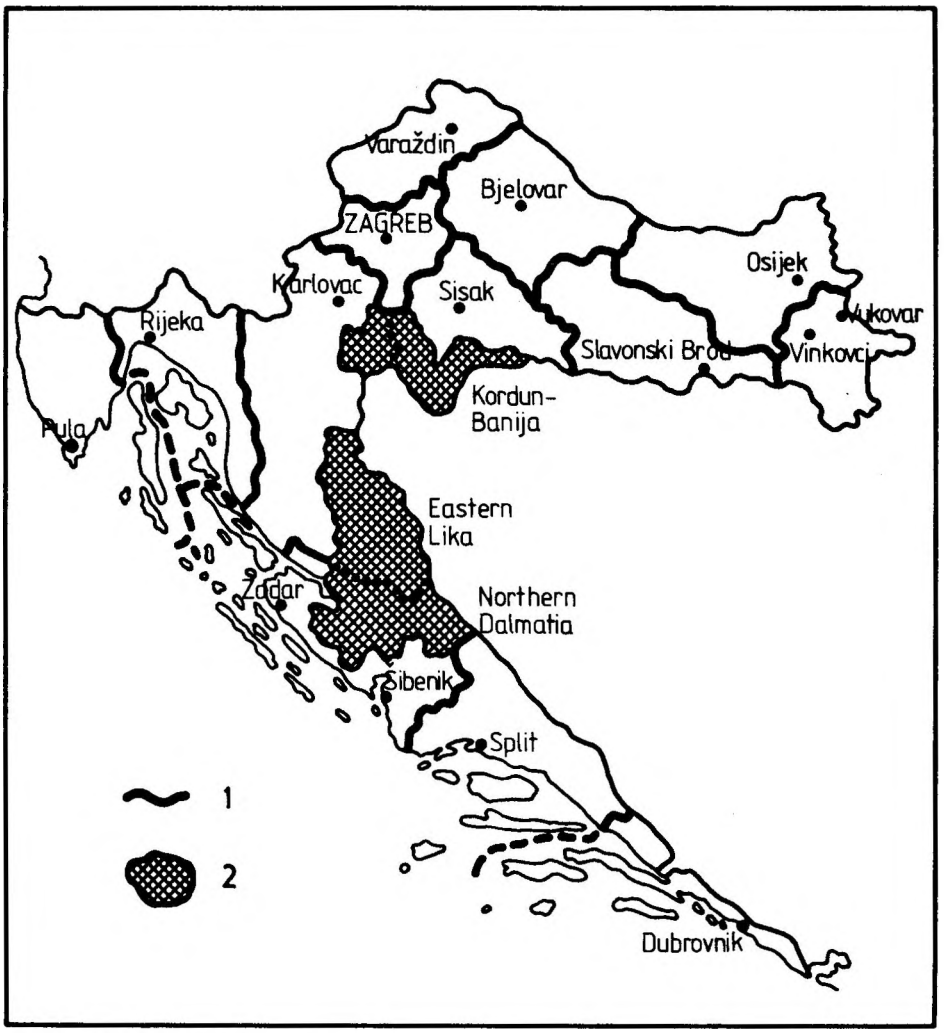
fied excluding the capital, Zagreb (*Figure 6.1*, *Table 6.4*). The regions are not identical in size but they average 4500 km$^2$ and have an average population of 380,000 (1991). Due to the aforementioned specific national structure of the population in certain regions, the possibility of giving them special status should be considered. It is estimated that the area to which this criterion would be applied covers 7000 km$^2$ and a population of 190,000. The institution of regions with special status would reduce the regional communities of Sisak, Karlovac, Zadar and Sibenik. In this case the average size of regional communities would be (under the assumption that they will be organised as counties) about 4,000 km$^2$ with a population of about 300,000.

It is expected that the delimitation process will not be without its problems. Local commitments will be made to one or the other county on the basis of particular interests or advantages which a given delimitation can bring. These tendencies had previously shown up when communes wanted to join richer counties, often in opposition to rational solutions.

The procedure for constituting regional communities into counties, should include argumented discussions, but the decisions should, in the end, be the product of arbitration and they should reflect the common interest. In other words, the Republic of Croatia should be organised in line with verified spatial, economic and political criteria. The main aim is to introduce a hierarchical organisation of efficiently delimited units which will uphold a decentralised system of government and self-government. The basic approach to the question of regionalisation should be positive and it should ensure the polarisation of social and economic functions according to the polycentric principle.

Figure 6.1

*Republic of Croatia — a possible regional structure*




*Source*: Regionalizm u... p. 59.

*Key*: 1 = Regional border; 2 = Regions with special status.

Table 6.4

*Deviations from average territory size from the average population size of various regions or regions with special status in the Republic of Croatia (average = 1.00)*

| Region | Extent of deviation | |
|---|---|---|
| | Area | Population[1] |
| Republic capital[2] Zagreb | 1.00 | 1.00 |
| Regions[3] | | |
| Vukovar–Vinkovci | 0.62 | 0.77 |
| Osijek | 1.36 | 1.37 |
| Varaždin | 0.82 | 1.57 |
| Bjelovar | 1.30 | 1.10 |
| Slavonski Brod | 1.13 | 1.01 |
| Sisak | 0.76 | 0.70 |
| | (1.12) | (0.87) |
| Karlovac | 1.79 | 0.89 |
| | (2.67) | (1.07) |
| Rijeka | 0.88 | 1.04 |
| Pula | 0.85 | 0.72 |
| Zadar–Šibenik | 0.89 | 0.90 |
| | (1.45) | (1.18) |
| Split | 1.14 | 1.56 |
| Dubrovnik | 0.46 | 0.42 |
| All regions | 1.00 | 1.00 |
| *Regions with special status*[4] | | |
| Banija–Kordun | 0.59 | 0.79 |
| East Lika–North Dalmatia | 1.41 | 1.21 |
| All regions with special status | 1.00 | 1.00 |

*Source*: Regionalizam u ... p. 56

1) The population count on the date of the 1991 Census was taken, Dokumentacija 810, RZS of the Republic of Croatia, Zagreb, 1991.

2) The communes Dugo Selo and Zelina have been included in the data for the city of Zagreb.

3) The regions are named after their urban centres. Vukovar and Vinkovci as well as Zadar and Sibenik are in each case both regional centres of their respective regions. The parentheses show correlations for entire regions, i.e., with the inclusion of regions with special status.

4) The region of Banija–Kordun which has special status includes communes of Dvor, Glina, Kostajnica, Vojnic and Vrginmost; the region of East Lika–North Dalmatia includes the communes of Benkovac, Donji Lapac, Gracac, Knin, Obrovac and Titova Korenica.

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# 7 RESTRUCTURING IN A DEPRESSED ZONE AND THE ROLE OF NEW SMALL ENTERPRISES: THE CASE OF BARANYA COUNTY

LÁSZLÓ HRUBI

## Introduction

The socio-economic model that prevailed until recently in Hungary and the other East European countries was characterised by a policy of extensive development focusing on quantitative growth. The structural concentration and central, state control of both the society and the economy was very strong. Consequently the system of political and economic decision-making was also centralised while the production and redistribution of incomes depended on central (state level) distribution. The development policy of this concentrated structure and centralised decision-making system had a unified and strong set of priorities mainly representing macro-level and sectoral interests and paid very little attention to regional expectations and characteristics. This kind of policy quite naturally resulted in a polarised regional structure with advantages accumulating in some areas (primarily in the towns, industrial centres and particularly in the capital) and increasing disadvantages in others (like rural, agrarian areas). It must be pointed out, however, that most of the accumulating advantages were strongly relative, deriving from and serving, at the same time, the prevailing structure and mechanism.

As it turned out later, the existence of the more highly developed areas also depended on a very frail foundation; the key element of our development policy was industrial growth concentrated in some

priority towns or regions which acted as poles, also determining the development of the third sector. As a result, we have several regions in the country with significant industrial bases. At the same time, industrial development in some areas was uneven, one-sided or restricted to a couple of large companies, in this way making the region and the development of industrial potentials too strongly dependent on them. Therefore these "poles" of development are best described by uneven regional structure, exaggerated concentration of capital and organisations, lack of market forces and relations, low adaptiveness to and interest in changes.

The relativity of regional advantages and the seriousness of disadvantages suddenly came to light in the mid-80s; both external and internal factors played a part in the revelation of the socio-economic crisis. This new situation was created by factors like the second wave of the Hungarian economic reform, the enforcement and real operation of market relation (strict monetary policy, the introduction of the new tax system, a more active exchange-rate policy and a series of restrictive measures), as well as the recognition that the change of the economic system was inevitable. When mining, metallurgy and the heavy industry in general got into a crisis, the areas previously acting as "poles" of development suddenly became depressed areas.

The decrease of production could not be avoided and opening new jobs for the unemployed became a dramatic regional and sectoral issue: *sectoral*, because capital and labour should be streamed into new or already efficient sectors, industries and *regional*, because the elimination of loss-producing activities takes place at different rate in the various regions and the mobility of the population is very limited (housing problems, lack of infrastructure in areas that, in principle, could take up more people).

The present study focuses on structural changes in the economy taking as an example *Baranya county* and the determinant region (core area) in it located around the towns *Pécs* and *Komló*.

## Regional economic structure of Baranya county: signs of depression

When giving an overall picture of the economy of Baranya three characteristic sectoral features of the structure can be pointed out:

- the mining industry has a determinant role,
- it is a traditionally agricultural area,

— light industries and food processing are significant beside the mining industry.

With knowledge of the present economic and market conditions these three characteristics themselves make it evident that the economic potential of the area may get into a critical position. If to the above mentioned things we add that the agricultural sector is a dominant economic base in an area where conditions of productivity are unfavourable on the two third of the county's territory, and industry is considerably concentrated in the Pécs—Komló area, which is the "core area" of the county, then we get a relatively precise picture of the problem in the county's economic structure, and the pressing necessity of the structural change.

As a result of prevailing economic policy priorities, plans for regional and urban development have so far regarded Pécs and Komló, as well as the surrounding settlements, that is the conurbation of Pécs as the engine of the county's development, because of concentration of economic resources and income deriving capacity of the productive sectors, and that the diffusion of these productive forces can kick-start the economies of the county's microregions. Economic policy courses in the four decades of socialist development encouraged these efforts, even justified them, insomuch, that the average income of people living here far exceeded the national average. These facts, as well as other statistical data could cause it to be forgotten that there was a danger in the foreseeable future of collapse of the regional development based on the mining industry and declining sectors of world economy and that a well-considered structural change is necessary. This danger, otherwise, was pointed out by researchers in the mid-seventies when they saw the social and economic decline of the depressed areas in Western Europe.

Different indices of the industrial net output also foreshadowed the unfavourable positions of the county's industrial potential. These indices were below the national average. (2.8% of the national income was produced by Baranya county in that time.) The index of industrial development (net output value per person) was 69% of the national average, the index of living labour productivity (net output per industrial employee) was 66%. Among the 19 counties of Hungary Baranya was fifteenth in the first index, in the latter one it became last.

Only the level of industrialisation (rate of industrial employees within the population) exceeded the national average. A misconcep-

tion regarding the condition of regional development is revealed very clearly in the case of the county, that is the industrialisation (as a quantity index) and the state of industrial development (as an index representing quality indices as well) run into one another. Industrialisation was generally used as a development indicator, and in using this structural problems for example were not even revealed.

A claim for reshaping the development track has also been outlined from the structure of industrial net production in each industrial sector. 29% of industrial output came from mining and electric energy industry, 14% from raw material industry (chemical industry and building material industry), also 14% from machine industry, 43% from food processing, light and other industries. At the same time there was a word of warning, namely that the rate of net output in the machine industry was just half the national average, and that the production of food processing and the light industry exceeded the rate of the sectors in the national economy by two third. We get a similarly gloomy picture of the *industrial structure* with regard to the number of employees (*Table 7.1*).

Table 7.1

*The structure of industry in Baranya county by the number of employees, 1980–1990*

| Branches | 1980 | | 1990 | | Change |
|---|---|---|---|---|---|
| | Number of employees | % | Number of employees | % | 1990/1980, % |
| Mining | 21,313 | 29.7 | 13,422 | 25.9 | 63.0 |
| Electric energy industry | 2,418 | 3.4 | 2,432 | 4.7 | 100.6 |
| Metallurgy | 729 | 1.0 | 546 | 1.1 | 74.9 |
| Machine industry | 8,968 | 12.5 | 6,518 | 12.6 | 72.7 |
| Building material industry | 5,463 | 7.6 | 3,979 | 7.7 | 72.8 |
| Chemical industry | 1,437 | 2.0 | 1,625 | 3.1 | 113.1 |
| Light industry | 17,953 | 25.0 | 13,606 | 26.3 | 75.8 |
| Other industries | 3,721 | 5.2 | 260 | 0.5 | 7.0 |
| Food industry | 9,784 | 13.6 | 9,399 | 18.1 | 96.0 |
| Total | 71,786 | 100.0 | 51,787 | 100.0 | 72.1 |

*Source:* Baranya megye statisztikai évkönyve. 1980, 1990.

There was hardly any visible change in the industrial structure of the county in the eighties. Beside the falloff in mining and the coming up of food industry, there was not much of a reorganisation. The industrial structure has essentially been preserved in a condition which was different from the national one and in a less developed one taking the economic and market conditions into account (*Table 7.2*).

The difference itself does not represent a problem of course, since the specialisation of regional economies, adaptation to local circumstances, is a necessity and provides a resource for regional economic growth. The structural problem is characterised by the lack of one or two tracks of adaptation when structures and basic elements survive, despite the fact that the evoking economic and market conditions have already changed or become disadvantageous. With regard to our topic it makes no difference actually whether the cause of it can be found in the centralised economic policy, the simulated market, distorted prices, that is in the characteristics of macro economy as a whole or in the companies' organisational, management or local, in some respect subjective elements. The structural problem, as starting position is a given thing.

Table 7.2

*The structure of industry in Baranya county and in Hungary by the number of employees, 1980–1990, per cent*

| Branches | Baranya county | | Hungary | |
|---|---|---|---|---|
| | 1980 | 1990 | 1980 | 1990 |
| Mining | 30.9 | 25.9 | 7.1 | 6.1 |
| Electric energy industry | 3.3 | 4.7 | 2.2 | 3.4 |
| Metallurgy | 1.1 | 1.1 | 6.0 | 4.9 |
| Machine industry | 11.5 | 12.6 | 32.0 | 32.9 |
| Building material industry | 7.4 | 7.7 | 4.9 | 4.6 |
| Chemical industry | 2.2 | 3.1 | 6.9 | 8.6 |
| Light industry | 28.3 | 26.3 | 25.3 | 22.1 |
| Other industries | 1.4 | 0.5 | 3.4 | 1.9 |
| Food industry | 13.9 | 18.1 | 12.2 | 15.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

*Source:* Baranya megye statisztikai évkönyve. 1980, 1990.

*The industrial structure of Pécs city*, the county centre is not much more advantageous, however, the trends of structural change characteristic of the whole county here are more striking (*Table 7.3*). The significance of the town in the county's employment rate has lessened. Decrease in mining is considerable but its counterpoint is the leap forward of the rate of food processing. Compared on a nationwide scale, the town's industry, however, presents quite a gloomy picture in 1990 as well.

Structural weaknesses of the industry in the county of Baranya are reflected in the development of income producing capacity as well. The profit of the enterprises in the county rose from 1,850 million Ft in 1986 to 2,619 million Ft in 1987, then in 1988 it went down to 1,797 million Ft and even in 1989 it was only 2,117 million Ft calculated at current price. The profit per employee in industry in 1989 is 36,500 Ft, and it is equivalent to 3.4% rate in proportion to net returns.

Table 7.3

*The structure of industry in Pécs city by the number of employees, 1980–1990*

| Branches | Number of employees | | Distribution, per cent | | Percentage in the same of Baranya total | |
|---|---|---|---|---|---|---|
| | 1980 | 1990 | 1980 | 1990 | 1980 | 1990 |
| Mining | 13,133 | 4,260 | 34.2 | 16.9 | 62.6 | 31.7 |
| Electric energy industry | 1,761 | 1,849 | 4.6 | 7.3 | 78.2 | 76.0 |
| Metallurgy | 283 | 191 | 0.8 | 0.7 | 37.0 | 35.0 |
| Machine industry | 4,507 | 3,637 | 11.7 | 14.4 | 57.5 | 55.8 |
| Building material industry | 2,345 | 1,795 | 6.1 | 7.1 | 46.5 | 45.1 |
| Chemical industry | 883 | 1,038 | 2.3 | 4.1 | 61.9 | 63.9 |
| Light industry | 9,340 | 6,456 | 24.3 | 25.6 | 48.7 | 47.5 |
| Other industries | 739 | 170 | 1.9 | 0.7 | 73.8 | 65.4 |
| Food industry | 5,433 | 5,849 | 14.1 | 23.2 | 57.6 | 62.2 |
| Total | 38,424 | 25,245 | 100.0 | 100.0 | 56.6 | 48.8 |

*Source:* Baranya megye statisztikai évkönyve. 1980, 1990.

Finally we must point out that among the factors representing the growth capability of the industry, the background for research and development are rather weak in the county, though they are essential in the secure market diversification to come. 0.96% of active wage-earners in Baranya (1,944 persons) worked in jobs connected with research and development (the national rate is 1.6%). According to R&D inputs Baranya is the twelfth among the 19 counties of Hungary, whereas it is last according to inputs per researcher which is only 25.9% of the national average. The fact that only 4 company research units are registered by research and development statistics from the 81 R&D centres of the county gives food for thought, and at the same time reveals a whole range of things to be done. Characteristic additional fact is that only 4 of the 700 development projects supported by the Central Technical Development Fund and 30 million of the 6 billion Ft financial support were allocated to Baranya in 1991.

It is difficult to show with synthetic indices the economic potential of Baranya's industry on the whole. The position according to value added may be the fixed point to hold on when giving a rough characterisation (*Table 7.4*). The appropriate data for statistics are collated from the companies' balance sheet reports, from the field observed in it, that is reservations must be pointed out mainly in relation to a region. It arises mainly from the fact that performance is sometimes taken into account in another region or can't be revealed. All this is caused by the organisational system of economic units and it happens more often in the case of significant extraterritorial dependence. On the whole statistics underestimate the value added in the county's industry a little yet it is illuminating to survey these sets of data.

It turns out from the table that backwardness of the county's industry is significant even compared to the national average which does not represent a high standard either. It must be mentioned that the industrial structure of Baranya can be described by the dominance of mining, light and food industries, and exactly in these fields the county indices are low or significantly lagged. We firmly believe that — all possible influences of errors taken into account — the data in their trends give a realistic evaluation of the relative situation of the county's industry. Experience proves that the companies which had a characteristic and determinant role in the county's industry

previously are now almost without exception in the state of heavy recession, not rarely of disintegration.

*Agriculture* reveals a more favourable position regarding the county's economic potential. The previously used index of value added per employee was 379,000 Ft in Baranya in 1990, compared to 311,000 Ft of national average.

Table 7.4

*Distribution of the value-added of industry, 1990*

| Branches | Distribution, per cent | | Value-added per employee (thousand Ft) | |
|---|---|---|---|---|
| | Baranya county | Hungary total | Baranya county | Hungary total |
| Mining | 27.2 | 11.9 | 303 | 789 |
| Electric energy industry | 12.2 | 11.8 | 748 | 1,374 |
| Metallurgy | 1.0 | 6.6 | 277 | 533 |
| Machine industry | 9.2 | 24.4 | 211 | 298 |
| Building material industry | 12.3 | 4.3 | 461 | 373 |
| Chemical industry | 7.5 | 16.6 | 686 | 778 |
| Light industry | 16.6 | 13.3 | 182 | 242 |
| Other industries | 0.3 | 1.0 | 154 | 224 |
| Food industry | 13.7 | 10.1 | 217 | 259 |
| Total | 100.0 | 100.0 | 288 | 401 |

*Source:* Baranya megye statisztikai évkönyve. 1990. (Calculation by author)

The average estate value, which reveals the quality of all the large farms' agricultural areas in Baranya is virtually identical with the national figure (18.8, 18.9 respectively), but within it cropland has a county average of 16.4, and the national average is 17.4. There are significant local differences within the county average. For example the productivity of the eastern and the south-eastern parts is distinctly favourable with large farms working efficiently, but the other parts are more or less disadvantageous. The greater part of the Pécs—Komló region belongs to the disadvantageous zone. For example the average index of productivity in the landscape of *Hegyhát*, a large part of Pécs—Komló region, is around 10–12.

It is very difficult to render anything probable in its future, however, agriculture may play only a partial role in the transformation of Baranya's economic structure, in its revitalisation through food processing. If we consider its role restricted to the Pécs—Komló region then we should suppose that it worsens the critical regional situation caused by the industrial structural change and the reduction of mining; because the change in the agricultural organisation and ownership system, the selection made by the market, and the ceasing of forced over-employment all make the region's agricultural supporting base weaker, free labour force, and in the case of certain towns, villages and small zones the lack of attached economic base may occur.

Summing up, the economic structure of Baranya is characterised by an industry which is organically and locally concentrated, obsolete in its sectoral structure, regressive in its activity and profitability and by an agriculture which is still developed and yielding above the average, with relatively favourable resources. However, in the case of the agriculture one the possibility of development — which promotes regional economic stabilisation is — differentiated in regions and exactly the Pécs—Komló zone is one of those where this chance is considerably less.

The region which is directly threatened by depression has approximately 250,000 inhabitants, as we suppose it, and this is more than half of the county's population. In this region — Pécs, Komló and about 50 connected villages — 80% of the county's industrial employees and of gross value of fixed assets, 79% of net value of the industrial machines and equipment are concentrated here, so as to mention only some features. Internal concentration within this core area is of similar extent: 81% of the population, 92% of the industrial employees, 95% of the industrial gross value of fixed assets, 96% of net value of the machines and equipment can be found in Pécs and Komló towns.

Apart from this region, the territory of the county, with the exception of the north-east and eastern parts, is practically covered by underdeveloped rural areas (reaching into the supposed area of depressed zone at some places). A further one seventh of the population (approximately 60,000 people) live here. In order to make the difference clear: only 5% of the industrial employees of Baranya live in these rural zones and 11–12% of the whole gross value of fixed assets can be found here.

The size, structure, efficiency and dynamics of the economy in the Pécs and Komló region cannot fulfil the role of the engine, which it has played in development so far. The majority of reasons causing the economic development to stop short and decline does not differ from the factors which caused the emergence of the depressed areas in the developed countries. It also shows great similarity how general economic policy exerts its effect.

The critical situation of the Pécs—Komló industrial zone and its becoming a depressed area can be explained mainly by sectoral recession. The heavy reduction in the dominant coal and uranium mining cannot be counterbalanced by other structural elements or resources of the region. Moreover, the change of the economic regulatory system, the operativeness of normative regulators — first of all the reduction of export subsidies — as well as — and primarily — the dramatic change of market conditions shake the position of the light industry which is the other pillar of the economic base. Food processing, the third pillar also joins them, there are also negative signs are gathering at present.

This economically declining region — if factors bringing about economic crisis are jointly present already — is less and less capable of the economic restructuring or of lessening the local social and political tension. Economic reduction influences the psychological state of the local communities increasingly, a demographic erosion can be brought about, highly qualified people may transmigrate (it can be detected from certain signs that the rate of professionals among active wage-earners is continuously decreasing), the state of the service sector may get worse. That is, the conditions for introducing modern economy are becoming more and more unfavourable.

The present socio-economic state of the Pécs—Komló region indicates a deepening depression. The income yielding capacity and development hopelessness of the economy marks the beginning stage of the region's decline. However, the classical features of the depression cannot yet be found in the sociological structure of the society or in the infrastructural sectors. That is the very reason why there is a chance in mid-term to prevent deepening of the crisis and high-grade growth of social costs of revitalisation. It can be done by working out an regional adaptation and development strategy as soon as possible and by creating a system of means combined with it.

*Unemployment* more and more serves as some synthetic indicator of regional crises, which are more and more common and wide

spread, and as a counterpoint of it: the spreading of new-type organisations, the intensity of enterprises being established can be an index number of positive reaction to the crisis. These two indicators — not by chance — denote a certain discriminant in the government policy as well, they give criteria according to which areas which are in the worst state and are in need of central intervention most, can be pointed out.

Unemployment is present in Baranya appearing in absolute numbers as well from 1989. However, the presence of a considerable, yet indoors unemployment was foreshadowed previously by the county's economic structure, and by the signs of employers' financial position, liquidity, significant narrowing down of the market. The number of open and registered unemployed people was 960 in the first month of 1990 and it rose to 5,780 by the beginning of 1991. Within it the rate of unskilled and commuting unemployed people was dominant. Redundancy mainly hit the unskilled workers whom the companies had to reimburse travel expenses, so it was a money saving action.

At the same time on the demand side the 2,045 vacancies registered in January 1990 went down to 893 by the first month of 1991. Moreover, demand and supply sides showed great structural differences, as the above mentioned supply of mainly unskilled workers did not suit the companies seeking skilled workers first of all.

Tension accumulated in the production structure and in the employment structure of the county as well. While the number of employees in the production (the 1st and 2nd sectors) decreased and increased in the non-material services, processes leading to the constraint of structural change intensified. These processes were embodied in staff cuts in the first stage.

The fact that the industry of the county has been concentrated in the very region that has become a critical area makes it more difficult to ease the tension, and economic and infrastructural conditions for diversification are insufficient in other zones of the county.

As a consequent upon all these facts the number of employees in the county decreased by 17% in 1991, mainly in industry and building industry, but other sectors have made considerable staff cuts too.

The heavy predominance of supply in the labour force market has also been and being effected negatively by the demographic growth of the labour force, until 1994 about 5,000–6,000 young people will seek for their first job. During the year a rapidly growing unemployment which increases by 1,000–1,500 persons every month was

registered. By the end of 1991 the number of out-of-employment job-seekers multiplied by 3.5 that is 18,003 persons. Among them 15,031 received unemployment benefit or allowance. In April of 1992 the number of out-of-employment job-seekers was about 20,000 person and in October more than 27,000 (23,068 persons received unemployment allowance): the rate of expansion has not reduced (*Table 7.5*).

The rate of unemployment from 2.7% in January 1991 rose to 13.2% by the end of October of 1992 (the national average in December of 1992 was 11.2, that of the provinces 12.6%) which average covers considerable territorial spreading. While it implies 7.5% in

Table 7. 5

*The number of the out-of-employment job-seekers*

| Districts | January 1991 | June 1991 | December 1991 | October 1992 | Rate in October 1992, per cent |
|---|---|---|---|---|---|
| Pécs | 1,737 | 2,358 | 5,478 | 7,757 | 7.5 |
| Komló | 1,301 | 2,002 | 3,602 | 5,394 | 21.7 |
| Mohács | 1,167 | 1,752 | 3,310 | 4,709 | 18.3 |
| Sellye | n.a. | 518 | 1,023 | 1,706 | n.a. |
| Siklós | 905 | 995 | 2,161 | 3,655 | 14.1 |
| Szentlőrinc | n.a. | 369 | 613 | 1,068 | n.a. |
| Szigetvár | 670 | 725 | 1,816 | 2,959 | 24.7 |
| Total | 5,780 | 8,719 | 18,003 | 27,248 | 13.2 |

*Source:* Data by the Job Centre of Baranya county.

Pécs, it implies 14–25% in the towns Komló, Mohács, Szigetvár and in their districts.

The labour force market was burdened with contradictions, which meant regional on one hand and structural troubles on the other hand. Great majority of jobs was offered by employers in Pécs (80–90%), at the same time only 20–40% of job-seekers were inhabitants of Pécs.

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cember of 1992 was 11.2, that of the provinces 12.6%) which average covers considerable territorial spreading. While it implies 7.5% in Pécs, it implies 14–25% in the towns Komló, Mohács, Szigetvár and in their districts.

The labour force market was burdened with contradictions, which meant regional on one hand and structural troubles on the other hand. Great majority of jobs was offered by employers in Pécs (80–90%), at the same time only 20–40% of job-seekers were inhabitants of Pécs.

The change in the unemployment structure is marked by continuous growth of skilled unemployed people, and simultaneously the number of unemployed people with higher education has also increased. About 60% of out-of-employment job-seekers are men, which is more than their share within active wage-earners, 75% belong to the 25–55 age group, the rate under the age of 25 is 22%.

Despite the increasing tension of the labour force market, employment opportunities are "the most favourable" in Pécs. The relatively favourable position may originate in the Pécs-centredness, however there is also a dynamic unemployment growth in the background. The large companies concentrated in the town struggle with severe problems, majority of them have lost their markets, their liquidity is weak. Negotiations with foreign partners are drawn out or do not realise. Privatisation is slow and difficult.

The unemployment rate is 7.5% in Pécs in October 1992. The number of unemployed people is continuously growing. More than one third (38%) of the unemployed are skilled workers and one third are professionals. 68% of the reported job vacancies are in Pécs.

Depression effects concerning the county are concentrated in the Komló region. Employment opportunities for those who have become unemployed because of staff cuts have narrowed down, the period of time when they wait for employment has increased. Employment of unskilled women implies a special problem here.

The unemployment rate of Komló is 5.9% in January 1991, number of unemployed people is 1,301; 21.7% in October 1992, 5,394 men which shows a 4.15 fold growth. Only 13% of the reported job vacancies in the county is in Komló and its district. But this means so few in absolute numbers that we cannot speak about job supply. Only 5 jobs can be offered to 100 unemployed people.

To sum it up, we can state that the heavy unemployment which is already pressing at the moment — and is bearing social tension — is

growing on in Baranya, too. Resulting from the regionally different effects of the processes which foster the growth of unemployment (industrial bankruptcies, restructuring of agriculture, etc.), the prognostic concerning the county in 1993 shows hardly any modification in the structure. The nearly 30% share of Pécs in the number of unemployed will remain, the 20% share of Komló and its district will increase a bit, but supposedly in a way that the unemployment in the district increases more than in Komló town.

The reduction of labour force supply, its tolerable extent can be achieved only by job creation based on well-considered conception. Only in this case the means of employment can help this process to be implemented and realised. The county's Employment Fund is not capable of doing this properly. The claims for the deconcentrated fund in 1991 and 1992 — especially in job creating investments, retraining and retirements with waiving of the age-limit — far exceeded the possibilities.

Significant worsening in the condition of the labour force market can be revealed in other indices as well. Another index of the social situation is the *income positions of the population*. It is a well-known fact that with regard to property and income Baranya — due mainly to the mining industry — was one of the regions in the country where people were better off reaching back for several decades. This better position seems to disappear according to income and tax statistics for 1990 and 1991. The revealed taxable income per person is 156,000 Ft in Baranya, and the national average is 165,000 Ft in 1990. With regard to the size of the specific income tax this means the following: compared to the national average of 12,000 Ft of income tax per person, and to the provincial average of 9,600 Ft, Baranya's index is 11,000 Ft. Average specific tax bases of Pécs and Komló are better (181,000, 158,000 Ft respectively) than the county average. In 1991 the same data are: 191,000 Ft in Baranya, 205,000 Ft of the national average, the difference is increasing.

According to the *formation of new businesses* and the spreading of enterprises, the county of Baranya is around the national average, or a bit above the provincial average. Of course Pécs plays a determinant role in this respect: according to the data given in the firm bulletin one (0.94) person from about a hundred founds a new enterprise. The town average in Baranya is 86 persons from 10,000. Moreover, the villages belonging to the district of Pécs have an average enterprise-density index which exceeds the index of other towns of Ba-

ranya. This means that Pécs and its district — following a model of concentrated and hierarchical spreading (diffusion) — produce the position of Baranya in the spreading of enterprises. The counterpoint is, unfortunately, Komló. According to the situation at the end of 1991, Komló is the 39th among the 176 Hungarian towns in its population, whereas:

- it is the 70th according to the number of new enterprises,
- it is the 122nd according to the density of new enterprises (number of new enterprises per 10,000 inhabitants),
- it is the 122nd according to its growth rate of new enterprises in 1991.

Almost each of the data proves the very disadvantageous position of Komló when compared to both the national and the county state, especially to Pécs in the field of economic revival and transformation of organisation.

If we consider the reaction to crisis according to the spreading and frequency of new organisations, then we must state that Pécs and its district are in an advantageous, the town of Komló and its district are in quite a disadvantageous position. Because of the economic structure and the development of the economic base, the whole of the Pécs—Komló region suffers from depression crisis, which would need regional policy intervention. This region is surrounded by a large underdeveloped rural zone, which together with the depressed core implies the very imminent chance of turning into a socially and economically critical region if it does not get support. It would be much more difficult and the costs would be much higher if it was handled later.

Development level of Baranya county's economy on the whole is still in mean position in the order of the counties of Hungary (*Table 7.6).* The former development advantages of this region in Hungary seem to be lost.

### A change in the function of the regional development

In relation to the development of depressed zones the most uncertain point of regional (county) policy, or rather strategy is in a paradoxical way just the county level, the role and possibilities, system of instruments of the counties. This uncertainty emerges not so much in formulating the tasks and the requirements of the responsibility, but

Table 7.6 *Some characteristic features of the counties in Hungary, 1991*

| Counties | Density of new businesses[a)] | Proportion of enterprises with foreign capital, per cent | Income to personal taxation per people, 1,000 Ft | Unemployment rate, per cent, July 1992 | Complex index[b)] |
|---|---|---|---|---|---|
| Budapest | 120.04 | 26.84 | 125.13 | 4.9 | 3.14572 |
| Győr-Moson-Sopron | 59.33 | 24.19 | 81.30 | 7.4 | 0.98477 |
| Vas | 37.29 | 24.27 | 81.73 | 7.8 | 0.64739 |
| Komárom-Esztergom | 67.57 | 16.43 | 89.16 | 12.6 | 0.48983 |
| Pest | 56.78 | 16.79 | 81.68 | 8.6 | 0.47537 |
| Zala | 59.14 | 14.64 | 79.23 | 8.1 | 0.37797 |
| Veszprém | 49.04 | 18.06 | 84.88 | 10.3 | 0.37768 |
| Fejér | 57.20 | 12.50 | 91.18 | 11.2 | 0.27317 |
| Somogy | 53.61 | 14.66 | 71.34 | 8.7 | 0.08403 |
| Csongrád | 41.06 | 16.63 | 79.36 | 10.3 | 0.06444 |
| *Baranya* | *52.67* | *16.35* | *77.01* | *11.8* | *0.06105* |
| Bács-Kiskun | 52.63 | 17.08 | 67.22 | 14.1 | −0.27807 |
| Tolna | 39.97 | 13.37 | 77.81 | 12.5 | −0.31623 |
| Hajdú-Bihar | 41.68 | 10.80 | 71.39 | 11.5 | −0.49599 |
| Heves | 38.31[c)] | 11.62 | 70.01 | 13.6 | −0.68288 |
| Jász-Nagykun-Szolnok | 37.00 | 10.12 | 73.97 | 15.1 | −0.80256 |
| Nógrád | 50.06 | 10.38 | 71.88 | 17.7 | −0.82933 |
| Békés | 33.80 | 10.68 | 68.91 | 13.7 | −0.82948 |
| Borsod-Abaúj-Zemplén | 43.47 | 8.26 | 72.34 | 18.2 | −1.06438 |
| Szabolcs-Szatmár | 31.68 | 7.60 | 57.73 | 19.5 | −1.68312 |
| Hungary average | 61.20 | 19.70 | 84.90 | 10.1 | 0.00000 |

*Source*: Nemes Nagy, 1992.
*Note*: a—Number of new businesses per 10,000 inhabitants; b—Estimated factor scores of a factor analyses with the four eindeces (78.2% of variation explained by principal companenet); c—Estimated value.

when in connection with certain groups of questions the issues of the theoretical degree of freedom of regional decision-making come up and the extent to which it may be reduced by the available system of instruments. The other side of the question is the nature of the division of labour between the national, local (urban) and county levels of the regional policy and strategy.

In the emergence of the regional crises — that is, of the problem of the economically underdeveloped areas and the depressed zones — the macroeconomic processes and the central decisions played a decisive role to such an extent that the accumulation of the regional tensions have grown beyond the present framework of the regional administration by far by today.

The consequence of the absurdity and confusion of the existing situation is that in the solution of these territorial problems it is precisely the local and county levels which have the narrowest autonomy of movement and decision-making within the present institutional and regulating framework. Today it is simply impossible to develop specific areas and remove them from the deadlock without the decisions taken at the central government level. It is obvious that the phenomenon well-known from the past (namely the dependence of local action on central decisions) may recall echoes of past solutions in a lot of people, strengthening further the myth of the omnipotence of central intervention and injections. At the same time it can be seen that today the central administration, the "state" may undertake only to moderate the regional crises which are mainly of social character, it can manage crises only on the short term.

The tasks of developing and restructuring the depression zones will be faced decisively by the local and county level administration (the local governments) on the long term. The central state subsidies may be directed at achieving the socio-political moderation of the short-term tensions and indirectly at creating the framework and system of instruments in which the scope of movement of the local and county levels required for solving the tasks comes into being. Central government investments will not get a role in the structural changes of the depressed zones because there will be hardly any. But the local and county administration has to dispose of the incentive, supporting and regulative (in a word influencing) possibilities of the economic sphere, that is competence based on actual economic bases — according to the division of labour formed in the process of development — by means of which the restructuring of a region

becomes possible on the regional level. There is no time and sufficient resources to leave everything to the economic automatisms nowadays, on the one hand, because these automatisms first should become comprehensive and consistent, on the other hand, because the existing critical situation would lead to losses aggravated by the regional differences, which would be inequitable and unfair with respect to the citizens of the adversely affected zones as well.

The transformation of the institutional framework, the system of tasks and instruments of the local and county administration is most likely underway owing to the reforms ripening these days, although in a form which can be predicted with difficulty for the time being.

From the aspect of active local (self-government) influencing the local-regional economy the basic elements of a regional "self-government-friendly" future concept might be outlined by way of a model as follows:

- property of communities (local governments), interestedness in the management of resources and property at the same time,
- real managing-enterprising possibility and ability for the local government ("economic local government"),
- independent regional economic regulation which is in accordance with the responsibility of the local-regional policy (e.g. within limits possibilities to reduce or increase all kinds of taxes which bring in revenues,
- a regional system of banks and financial institutions (which greatly differs from the current system of commercial banks) including the varied system of funds and foundations, associations, partnerships, etc.,
- regional business and information infrastructure with the complete abolishing of state monopoly.

Economic development, the appearance of new structural units would be greatly promoted by business infrastructure providing services (at the start on a non-profit but later inevitably on a business venture basis). This palette might be further coloured by various social-civil organisations, development societies, foundations and funds (private or communal, domestic as well as foreign), associations, confederations etc., that is everything which has proved useful elsewhere in the world in the recovery of regions having faced a similar situation.

Furthermore, the international relationships or informal links of the county and its settlements might also become a useful means, whether by resorting to exchange of experience or cooperation in specific fields.

A separate issue is represented by the regional system of banks and financial institutions. The currently existing commercial bank branches are not able to finance the local-regional business ventures because they are not interested in doing so and this is a grave obstacle. The establishment of a regional development-investment bank in the field of financing regional business ventures seems to be expedient in the long run. The demand for business venture funds having been created within the framework of the regional administration shows that there is a significant gap in the field of financing.

Another argument for the establishment of an independent development-investment bank is the fact that the system of the necessary preferences and subsidies would function within a clear, inspectable but normal banking framework, with guarantees of return which are not provided by the institutional framework of administration and management despite the best of intentions.

The different formations of subsidies and subventions should not be concentrated by all means, but rather they should be transformed into transactions resting on uniform economic-financial bases in their functioning, the requirements and guarantees of utilisation, or be diverted in this direction. In all probability calling for tenders, awarding and rational utilisation would work more efficiently in such a system. In an optimal case a regional bank should be comprised of a great number of independent joint ventures and major responsible organisations or institutions directly interested in the territorial-regional development becoming be participants as part-owners depending on their financial possibilities.

Restructuring, business and entrepreneurial actions having become necessary in the depression zones can be implemented by providing peculiar regional subsidies and preferences as mentioned above. This is a sphere which can take shape within the existing system only and exclusively through central state decisions, albeit the available information and interestedness at the regional-local level are greater. Most of these decisions are related to regulation and are, therefore, elements suitable for becoming objects of decentralisation in the field of the formerly mentioned regional competence and regulation.

Concerning the instruments, functions of the restructuring and development of the depression zones, so far we have spoken mostly about the possible forms without taking into account the addressees, although the division of labour between the concerned levels of administration is of great importance.

The typically disproportionate role of the central (state) level obviously has to be reduced today. At the same time it should be considered, under what conditions of labour division between the regional and local (settlement) levels should decentralisation and the development of the depression zones take place in the course of restructuring and crisis management.

Two factors have to be mentioned here because of their possible importance:

— In the foreseeable future rapid progress towards a regional and local government is highly probable owing to the trend of the self-governing character of the local-regional administration: interestedness, information, decision-making ability and competence are shifted to the level of settlements, being concentrated there with the necessary instruments;

— In the developing-restructuring process of the depression zone, the core region of Baranya county — as we have repeatedly referred to it — Pécs and Komló, but Pécs in particular, will play a key role.

Unlike in the case of the economically backward areas, where weaker structuring, the atomisation of the natural, artificial and development endowments do not allow for radical decentralisation and the role of the county (regional) administration will continue to be of primary importance, in the management of the depression zones the majority of the development tasks and means should be gradually taken over by the local governments of the settlements concerned. The point at issue is not the withdrawal of the regional level because it would be impossible on account of the impacts and relationships of the regions, but it is the reduction of its role in the form of such an efficient cooperation between the towns and the county where the development programmes affecting the towns — and presumably the majority of the programmes will be like that — will become the task, responsibility and possibility of the local (town) governments. The existing and new competencies, decision-making licences, material-financial means which have been or will be decentralised should be assigned accordingly. We are convinced that concerning the possible ways of the development of the depression zones as well as the

methods and tasks of restructuring, a division of labour in this manner might release further energies for organisation, development and management. It would harmonise better with the nature of the expectable processes, creating more direct relations of interestedness, in brief, it would create a complex, more favourable situation and mainly a fair chance to recover from the crises.

## Restructuring: encouragement and initiation of new businesses and local development

The entrepreneur and entrepreneurship are treated in a very simplistic way in the interpretation of today's conceptions according to which business ventures are motivated by advantages and possibilities which can be expressed exclusively in terms of money. Reality, however, is much more varied than that. The complex phenomenon of business ventures has also sociological, psychological and cultural linkage points.

Why does not the entrepreneur type turn up in a particular context? The explanatory force of limited capital supply and access to information is significant. Outstanding importance may be owed to information on account of the fact that joining the information stream of the world or a country has become a decisive factor of development. The pressure of accelerated decision-making may condemn to backwardness regions which are unable to get reliable information quickly enough. We can say that the costs of obtaining information are infinitely much higher in the regions driven to the periphery or being in a state of crisis than those in the centres. Therefore, it is impossible to interpret their competitive situation as a rule. The task facing the local governments is obvious. They should function as local development organisations in the capacity of a peculiar catalyzer enabling the population to become familiar with the economic and social processes of the world, that is, they should create the essential conditions by spreading innovation, since the building out of information systems is hardly conceivable on an individual basis. Inasmuch as it is conceivable, then the use of the obtained information will be individual as well. This, however, cannot bring about a solution either on the local or regional level.

The other limit is represented by the supply with capital. At this point, however, we have to give a more differentiated wording. We

do not have the human capital but rather other factors in mind. It is undeniable that in launching or continuing businesses the majority of the capital injections are utilised with low efficiency. This applies to nearly all the countries. The fault generally lies with the exaggerated extent of the physical capital investments of the small businesses. That is to say, in the beginning the majority of the small businessmen come up with a relatively low demand for capital, mainly in the form of working capital. Money or buildings are not a great help to them by all means. In addition to the working capital, however, assistance in the administration of the business and consultation would also be required. Similar is the case with obtaining the necessary management practice and marketing knowledge. Apparently, besides the small venture capital the local power or the local government is able to carry on an effective development policy if the providing of the indirectly indispensable business background (infrastructure) is recognised and ensured.

In our days the encouragement of businesses cannot be confined to the traditional form of capital aid any more. A local government aiming at achieving success regards as its task also the creation of institutions which are related to the business infrastructure in the widest sense. This does not imply merely some kind of physical background, but also human and informational conditions.

Since local development regards chiefly the population as the final resource of economic development and growth, this policy should rely on internal persons, groups and activities. This also results in the shifting of the main points of this policy as compared to the traditional regional policy. While the latter is mainly directed at large organisations and physical capital, the former should target the businessmen of small organisations and the human factor. It is inevitable that the system of means of the policy should be changed.

The solution of this issue is not so simple as it might appear at first sight because the changes are directed emphatically at the spheres of social existence outside the economy. That is, they affect an area in the influencing of which our experience is insufficient. It is not enough to ensure the conditions of development (access to information, promoting the qualifications of people) if the motivation required for the launching of businesses does not appear in the population. On the other hand, motivation may emerge as a result of the transformation of the skills, values and way of thinking.

A perceptible contradiction emerges if we examine this from the side of the state. The state grants may rarely aim at changing the behaviour of the population, at creating entrepreneurial spirit. This is so because it might have an impact only on the long term and through the formation of complicated relations. Consequently, the regional aid programmes which take into consideration quickly tangible results, may assign only the role of transmission, "distribution" to the organisations of local development. The short-term interestedness may bring about only short-term resolutions to the problems. The errors of the conception supporting the up-bottom approach may be eliminated by the local development activity feeding on local roots.

We must not conceal, however, that the advantages of the conception based upon local development are its disadvantages at once. The long term means uncertainty, it can be measured less satisfactorily by the traditional economic indicators than the short term.

The objectives, instruments and evaluation possibilities of the local development policy are summarised in a comprehensive table (*Table 7.7*).

The three columns of *Table 7.7* set increasingly complex aims for local development that are far away from immediate profitability. The relations in Column 1 are definitely close to the logic of the systems generally functioning at present. Column 2 already represents components of a new approach. It does not set the granting of financial aids as an objective, but aims at establishing a contact with the whole population by means of which entrepreneurial motivation may be created in the most suitable persons. In nearly all the countries this group is characterised as a rule by the fact that it has suitable organisations, but only at the national level, while the regional or local dimension rarely appears in their functioning. Column 3 sets the most abstract and ambitious goals. At the same time its system of means and feedback mechanism cannot be considered to be elaborated in the least.

Table 7.7

*Tasks and spheres of activities of local development policy*

| | 1 Foundation | 2 Information | 3 Stimulation |
|---|---|---|---|
| TARGET GROUP (Direct beneficiary) | Small business | Population in the wide sense | Social groups |
| MAIN OBSTACLE | Scarcity of capital | Lack of information, difficult access | Inability of region to organise itself, generating entrepreneurs |
| PRIORITIES | 1 Financing<br>2 Information, training<br>3 Organising and organisation | 1 Information, training<br>2 Organising and organisation<br>3 Financing | 1 Organising and organisation<br>2 Information and training |
| MEANS OF IMPLEMENTATION | Quasi-banks<br>Loans<br>Aids | Professional training<br>Grants, modern technologies in information transfer | Local development organisations |
| EVALUATION CRITERION | Planned profitability | Internal criterion of the supply with services | Heterogeneous criteria for generating long-term growth potential |

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# 8 THE TRANSITION TO THE NEW URBAN QUALITY: THE CASE OF TRENTO

MARIA ROSA ARNOLDI

## The new competitive dimension of the medium-sized city

Debate on the spatial diffusion of the process of development has highlighted a particular phenomenon: although the development potential of individual cities depends on trends in the classical exogenous determinants (population growth, technological development, government economic-financial policy, the international division of the labour market, the availability and costs of production factors), they are largely influenced by local-regional factors (geographical position, economic structure, infrastructure, labour market, public resources) (*Cappellin*, 1986).

More specifically, the degree of flexibility in the adoption of new technologies and appropriate policies at the local level seems to be decisive. *Lakshmanan* (1987) states that technological innovation and institutional innovation interact with each other and aid the process of technological change.

In new patterns of territorial development, the changed role of the urban agglomeration tends to enhance the innovative capacity of medium-sized cities (*Maleckij,* 1985). The new competitive dimension of these cities is the result of the multiplier effect of appropriate choices in the use of new technological *filie'res*. The new hierarchical levels belong to centres able to attune themselves to "the permanent revolution of technologies" and to seize the opportunities offered by a constantly expanding horizon of possible choices (*AA.VV.* 1988).

The changed synchrony of evolutionary rhythms — technological, economic, institutional (*Di Bernardo—Rullani,* 1986) — fashions spe-

cific evolutionary patterns within individual centres. *Kamann* and *Nijkamp* (1988) have described how the city evolves with different stages of development and in different directions, exhibiting dynamic patterns of the specialization of roles defined by the degree and the quality of their connections with national and international systems. The strategic variable becomes the decision-making competence of innovative subjects "which help to mobilize new local resources and solicit action by other key social actors" (*Borlenghi,* 1986).

In both the productive and socio-political systems, there are destabilizing subjects that are able to orient the trajectories of transformation: the remodelling of the economic system takes material form in a certain kind of urban development and, therefore, in a new configuration of the city.

The competitive performance of a centre thus depends on such determinants as the capacity of the sphere of destabilizing subjects and the degree of connection in the communicative network (*Kamann—Nijkamp,* 1988); although one should also consider the conditioning exerted by the set of pre-existing circumstances that gave a particular socio-political context its specific functional form.

Although, as *Kamann* and *Nijkamp* point out, the attractive potential of a city is defined by the efficiency of the physical network, and by the formal/informal network of its actors, in medium-sized cities the features and qualities of the relational context are affected by the local setting. The centre's degree of nodality defines that resilience (as the capacity to respond to change) which expresses the adequacy of the "reduction" of innovative inputs to the local context.

The physiognomy of each individual evolutionary dimension is displayed by that "structure elaborated in a specific form to promote transformation", which *Zeleny* called the "technology support network", the outcome of the planning action of various subjects (*Borlenghi,* 1987) which embodies the reception-transmission capacity of the productive and political systems and influences socio-spatial organization. This is a structure that coagulates modifications in the combination of the factors and the skills utilized in conversion into technological change, and which can have positive, but also negative, effects on the city's development. The city can evolve towards development but also towards stagnation and obsolescence.

The individuality of growth paths and the lack of theoretical knowledge on the subject hamper the search for analogies and the

interpretation of the new networks that tie the complex picture of peripheral transition together.

The central concept in analysis of technological change is "understanding the firm in its local and regional context, and ascertaining which conditions external to the firm are necessary for the creation of new firms and the adoption of innovations by those that already exist" (*Aydalot,* 1988). The Debate centres essentially on the terms humus quality/implant quality, while analysis focuses on the direction imposed on the adaptation of the productive structure, insofar as it makes explicit the relationship between firm and city.

When explored from this perspective, the city reveals, in terms of evolutionary congruence:

technological change ⟶ industrial system⟶ responsiveness of the city

and enables identification of typologies for a geography that defines the emergence of new socio-spatial entities.

The adequacy and the features of the responsiveness of the local environment to the innovative firm therefore structure the directions in which the specialization of medium-sized cities moves. The extent of such specialization — and the extent to which it is made evident by forms of functional restructuring — depends on the skills of the actors best able to conciliate the local context with new forms of strategic behaviour.

From this perspective, therefore, the identification of destabilizing subjects and their reference-communicative contexts entails the analysis of planning in terms of the interdependencies that activate new economic and urban dynamics.

Within this theoretical framework, the aim of the present study is to examine the competitive potential of a medium-sized city. The congruence between the local environment and the innovative firm is construed on the basis of the following parameters:

— firms/destabilizing subjects in industrial and socio-economic contexts,

— the information networks of the two systems.

The empirical evidence considered has been gathered in the province of Trento, a city in the Italian Alps which, as regards "new urban qualities", enjoys specific advantages (financial resources and flexibility in the implementation of specific policies provided by its special statute of autonomy, a university, laboratories, research institutes, good infrastructure, a high quality of life and residential

desirability and, not least, its geographical position), although it is a city also subject to a number of specific constraints (deriving from the pre-existing features of a socio-cultural context characterized by traditional mechanisms and by markedly individualistic behavioural patterns resistant to innovation).

## The firm and technological change: the results of the survey

The first part of the survey examined innovative behaviour in the industrial sphere and sought to identify the more generalizable features of both peripheral innovation and the quality of responses by the urban environment. The firms revealed by the survey as being in line with new competitive standards are the still-developing backbone of this urban structure; a structure which is in its infancy, yet becoming solidly established, and markedly influenced by the various kinds of incentive offered by the province's particular competences. The passage from a "generic" industrial policy (during the 1970s) to a "targeted" policy (during the 1980s: the context-specific introduction of innovations) brought this peripheral structure. The specialization of certain branches brought about a certain improvement in overall competitive performance.

The kind of growth achieved by Trentino industry (which, because of the manner in which exogenous industrialization was implanted, is decontextualized with exogenous industrialization was implanted, is decontextualized with respect to the environment in which firms operate (*Goglio,* 1987) has influenced the decision-making behaviour of this "elite" of firms, which grew by imposing autonomously (microcosm reality) their entry into national and supranational circuits.

### *Periphery and innovative processes*

In general, the survey revealed a city geared towards the new goals pursued by the most advanced developing economies (polarization in the control of information, and the tendency for production costs to condense in expenditure on studies and equipment upstream of productive processes) (*Passet,* 1987). More specifically, the survey showed Trento's similarity to the national context as regards the essential mechanisms which bring about innovation (temporary monopolies, technological opportunities and profitability levels), the

substantial correlation between rates of industrial innovation and recourse to public financing, and the determinants of innovative processes (strategic position in the market and the definition of new competitive relationships) (*Colombo—Mariotti,* 1987).

The most salient feature of all the firms surveyed was their re-organization of production factors. Although production was the most widely activated function, innovations in process, product and organization were introduced in a way that connected functional areas transversely and strengthened the linkages among them.

The new technologies of automation and information processing have been exploited to give greater flexibility to the productive process; a flexibility which can be readily extended by incorporating new elements into a modular framework. The overall pattern can be described in terms of the level of integration achieved (*Camagni,* 1987): a first group of firms which used new technologies in replacement of, or application to, specific machines was followed by other firms whose application strategy encompassed the productive process as a whole, and then by yet others which concentrated on more continuous specialization (robotization) as part of a global integration programme aimed at creating synergies among design, strategic planning, marketing and production.

The survey confirmed *Cappellin*'s (1986) finding that a peripheral location plays the most significant role in activating the dynamism required for choice strategies and a greater readiness to undertake the investments necessary to raise technological levels. In all the firms examined, innovation was not only systematic (and marked by increasing intensity and speed) but anticipatory as well.

A second salient feature of innovative processes was a specific form of customization: that is, "the tendency for competitive processes to be based increasingly less on price and increasingly more on differentiation of the product and its adaptation to specific customer requirements" (*Cappellin,* 1986.). Peripheral location generates extremely flexible kinds of behaviour and induces firms to respond to the mutable and diversitied nature of new needs by collaborating, sometimes very closely, in the search for new market niches.

"Producing for specific needs" has proved to be the key to new competitiveness in the area. This iposes two specific requirements: the search for quality, and the capacity to define demand and to meet its requirements as closely as possible.

All these features have led to a situation where "the widespread application of new information and electronic technologies ... has brought innovations which have integrated smoothly with endogenous factors" (*Colombo— Mariotti,* 1987): such are the most generalizable features of these innovative processes.

The forms and levels of this integration between new technologies and endogenous factors have evolved into a particular pattern of innovative behaviour which applies (in the sense of *ad hoc* adaptation) new technologies to the dirrerent pahses and components of the productive process (new processes, materials, packaging) to create individual, non-reproducible finished products. Learning by doing articulates itself into the extreme flexibility with which such applications are matched to customer requirements. This modernization of artisan specialization is the outcome of vrious factors, predominant among which are the strategic decisions taken by the entrepreneur and the experience and skill of a handful of technicians.

Innovation takes concrete form in the personalized assembly of often redesigned, and increasingly more sophisticated, components.

This therefore indicates that peripheral areas are able to overcome their disadvantage — with respect to central areas — of less direct access to the physical and material resources earmarked for innovation because they are able to "imitate more rapidly" (*Belussi,* 1985).

In brief, the periphery (to which should be added microcosm reality, that is, restricted opportunities to benefit from integration) has been able to rationalize the flow of information, to give greater specificity to decisions concerning research on new technologies and their application, and to impose a clearer definition of new competence and a more rational definition of the mix of production factors.

This process has been accompanied by the decisive importance attributed to the quality of functional responses, so that not only is "the best sought elsewhere" (*Camagni,* 1984, 1986) but "the best is sought wherever it exists".

### *Information networks and the geography of specialized services*

The development of more efficient networks to stimulate innovative behaviour in firms has yielded interesting results which can be translated, at the territorial level, into the importance of the relational pattern between the periphery and new strategic centres.

First of all, firms can draw on specific extra-provincial networks for the information they need to enhance their competitiveness.

These information channels operate within contexts that possess the following features:

— *An information context* endowed with greater stability with a substantially regular rate of utilization and structured into differentiated circuits with delimitable characteristics. The general reference circuit articulates into poles constituted by large national and international centres consisting of trade fairs, the editorial offices of specialized journals and, sometimes, by industrial associations. Centres may display a pattern of centre/global utilization (defined by the naifold concentration of access to innovative information). They may also perform a more specific role as centre/clearing-stations for more wide-ranging contacts. Or they may be chaaracterized as centre/sectoral specialization, sometimes relative to individual phases of the productive process. There is also a high degree of stability in the information context directly based on the demand and supply networks. In this case, great importance is attributed to the producers' representatives who, in various guises, personify strategic information (for example, information about machine tools, in which case the value of the flows correlates with the rank of the firm: "all the information that I consider important must arrive on this desk"). A more substantial phenomenon on the supply side is the retroactive activation of new chains of distribution, as priority channels designed to establish increasingly closer contacts with customers. This information channel exerts a decisive influence on the competitive potential of the firm, which increasingly seeks to obtain feedback on its operations;

— rapidly and in close connection with the productive process;

— from its sales network.

The need to define/anticipate the requirements of demand gives rise to: a fluid information context, utilized *ad hoc,* which also defines the features of the new external functions, that is, skills required to interpret the market, skills today more frequently possessed by individuals than by service companies. This is a context characterized by qualitatively sophisticated, unstructured information based on highly porfessional human capital which is difficult to reproduce. Persons possessing these new skills are indispensable to firms wishing to gain access to foreign markets — to such an extent that the lack of such personnel is an effective barrier to entry in

some of them. These key individuals must be eclectic in their approach, they must indicate the most appropriate courses of action, they must generate a hetereogeneous mix of information, and they must take strategic decisions.

One of their duties is to verify whether — for foreign markets — the firm's product matches sthe market, and they must recommend adjustments if it does not. Marketing a particular product often requires the use of specialized services on the spot (for example, advertising).

I pass now to examination of circuits of geographical interaction. The search for the skills required by the new externalizations/internalizations has given rise to circuits which are often specific in their functional range. Examination of the sample studied by the survey shows that the most generalizable pattern is one of overlapping levels of dirrering degrees of complexity.

There is a first amorphous, multifunctional circuit which corresponds, within Italy, to the major poles of Milan and Turin and, internationally, to London and Paris. This circuit directly involves all the functional areas of the firm, and gives equal weight to the opportunities provided by the concentration of agents, representatives, industrial associations, and by access to new products, materials, technologies, R&D laboratories and specialized consultancy services that enhance the organizational performance of the firm. London and Paris agglomerate this opportunity at an international level. In the Italian metropolitan area, Turin gives greater emphasis to research, while Milan acts as the "referent for multiplicity". Interviewes reported this city as their organizational and/or commercial headquarters there) and as almost the only source of specialized services in marketing and sorfware production. Advanced services regarded Rome as providing useful access to th political and administrative hierarchy.

Outside this circuit there extends a more functionally specific network, with nodes often characterized by sectoral specializations. Finally, a third, fragmented circuit comprieses interactions among a grid pattern of centres, which often concentrate on specific components in the productive process.

The "geography of specialized services" in this case refers mainly to the productive process, and maps a structure that in Italy articulates along the axis Turin–Milan–Brescia–Varese–Bergamo, wiht two robust offshoots in the Veneto (Padua, Vicenza, Bassano) and Emilia regions (Bologna, Reggio Emilia, Piacenza).

Brescia specializes in machine fitting, Veneto in the adaptation of components, Emilia (Piacenza) in the special applicaation of information technology. Notable for their exceptional sectoral concentrations of services are the various areas that specialize in textiles (Biella, Schio, Valdagno, Prato), furniture (Brianza) and fashion (Florence).

The predominant position in Italy's international configuration is occupied by strategic poles for the purchase of machinery and specialized R&D skills, of which those that were mostly frequently mentioned are located in Germany (Ruhr, Munich, Frankfurt, Stuttgart, Düsseldorf, Hannover), followed by the USA (Cleveland, Boston, New York, Chicago), Great Britain (London, Birmingham), as well as strategic centres for new applications of electronic technology (Kyoto, Silicon Valley) and Sweden and Canada for building/infrastructuring equipment. Switzerland (Basel, Geneva, Zürich) was cited as providing access to R&D in the building sector.

Firms reported with significant frequency that innovations are surveyed and selected by utilizing the international circuit. The "idea" is then adaapted in the specialized national centres, which offer lower costs and greater reliability in terms of assistance (further research activities are sometimes combined with experimentation). This process took place directly, short-circuiting the main Italian metropolises.

*Support networks and constraints on the innovative process*

According to the interviewees, the relationship between firm and city — that is, the functional response of the latter — displays the following features:

— The principal function of the urban environment is to provide financing. Trento plays a decisive role in stimulating innovation because of the substantial opportunities for financing that it offers. As well as the incentives envisaged by Law 4, the opportunities offered by *Mediocredito* and *Confidi* are widely used. The new provisions of industrial policy, especially the meticulous monitoring of incentive schemes, are judged positively;

— Trento almost entirely absorbs demand for services, providing fiscal, administrative and legal consultation. It is also the source of more specialized services, notably information processing and personnel recruitment. Services more closely associated with the

productive process tend to be the straightforward ones of machine fitting and meintenance (closely connected with the individual firm);

— An increasing tendency to use new research structures is reported. IRST and the university are regarded as potentially destabilizing, many firms having undertaken long-term collaboration with the university;

— The city is bereft of specialized services. As regards R&D in particular, it is under-endowed "with respect to that threshold of investment only by surpassing which is it possible for scientific and technological research to achieve approciable results ... and trigger positive effects of cumulation" (*Demarie,* 1986). In any case, this lack of specialized services is regarded as obvious and inevitable: as we have seen, the microcosm reality has developed its own individual strategies of utilization;

— Of considerable importance in the city is a specific kind of advanced service involving the processing and adaptation of specialized services performed in various spheres. This has led to the growth of a specialized segment of companies which support this "assembled tertiary sector" (Oikos, 1985) documents the substantial increase in the number of printers, offset printers and data processors).

As regards vocational training, the influence of the city is evidenced by the practically universalparticipation of firms in schemes promoted by the *Agenzia del Lavoro* (where the provincial administration subsidizes some of the employer's costs). The vocational training institutes are also reported as providing good work preparation for the rank-andfile labour force. On the other hand, a major constraint cited by interviewees was the shortage of technicians, middle managers and executives (local management is recruited from Bolzano, Verona and Milan).

Other reported constraints on the productive process were the lack of a relational model, the sluggishness of the social and institutional structure, with its traditional mechanisms and fragmented behavioural patterns oriented towards indivudualism, and poor integration among the various social components. An excessive overlapping of functions at the administrative level and the multiplicity of decisional and interest centres results in bureaucratic delays and complications (*Delai,* 1978).

Also reported was the vagueness of the role envisaged for industry by local economic policy, and the lack of social acceptance of the

firm as a phenomenon and of the culture intrinsic to it (*Goglio,* 1987).

## Responses by the city

### *Functional redesign and urban quality*

The second part of the survey examined the city's responses in terms of the destabilizing potential of the pursuit of "new qualities". The opinions of qualified informants in the socio-economic sphere were sought in order to establich — in broad outline — the directions of urban development by means of analysis of measures and projects designed to alter the city's functional structure. According to the planners, the upgrading of the city should change its well-known role of mediator into one of an agglomeration of services selected for the location of high-tech industries, business and tourism; the whole enhanced by an urban renewal programme which gives Trento "an image able to compete with the most beautiful European cities of a similar size" (by means of the targeted use of its historical and environmental reaources).

Hitherto the growht of the city has followed the typucal pattern of the periphery, influenced by the administrative rank of the province.

The industrialzation of the 1960s was accompanied by a conspicuous process of urbanization (in the twenty years between 1961 and 1981 the city's housing stock grew from 21,307 to 37,409 dwellings), with major infrastructure projects and functional evolution. As a result of this growth Trento has become a leading city that extends its influence over the whole province (between 1971 and 1981 its status changed from regional city to metropolitan city (*Landini,* 1983).

The tertiary sector is characterized by large numbers of consumer and administration services, and above all by an extensive credit sector. The advanced tertiary sector is either underdeveloped (university, laboratories, specialized research institutes).

The directions in which tertiarization is moving display the following pattern:

- the geographical concentration of tertiary activities in the provincial capital (in particular, the productive tertiary sector, which outstrips even public administration),
- the specialization of the city centre as a provider of "contact potential" (*Mandeville,* 1983) for the productive and private tertiary sectors,
- the concentration of functions (finance, commerce, tourism services, public offices) in areas immediately adjacent to the city centre (*Bocchi,* 1985),
- the core role of the new expansive dynamics of the routine functions of public administration and public offices, and also of the new specializations (shopping centres, business parks).

*Planning initiatives*

Local planning initiatives (*Table 8.1*) can be summarized as follows:

— An overhaul of the *productive system* (reindustrialization projects, implementation of the Industrial Policy Plan, services to firms). Efforts to develop the city's specialized role as a science park absorb most of the financing provided by the government for the revitalization of the overall economic system (three hundred billion lire for the three-year period 1988–90). Alongside modernization of the ecisting productive structure, the new model envisages growth driven by units with high R&D content, with a system of world-market-oriented interdependencies, in harmony with the low-key initiatives promoted by IRST (the new *Istituto per la Ricerca Scientifica e Tecnologica*) with high value added and compatibility with the environment;

— *Environment*. The new strategic role assigned to environmental protection policy is the principal component in the mix of factors structuring the new development model. The provincial administration specifies the criteria for the protection and enhancement of cultural and environmental assets: these are non-reproducible and, if suitably enhanced, an indisputable factor of attraction. The local authorities have undertaken a complex and articulated set of initiatives (ranging from an information system for situations of risk to a cluster of sub-projects for water purification and rubbish disposal);

Table 8.1

*Projects in the Trento area*

| Project | Amount, billion Liras | Subject | Function |
|---|---|---|---|
| Services to firms using | 6.9 | Provincia Autonomia | promotion the advenced tertiary sector |
| Reindustrialization | 150 | Provincia Autonomia | renewal of the productive base |
| Implementation of the Piano and di Politica Industriale | 184 | Provincia Autonomia | consolidation upgrading of industry |
| Landscape safety | 142 | Provincia Autonoma, town councils | environmental protection |
| Water purification | 78 | Provincia Autonoma, town councils | environmental protection |
| Rubbish disposal | 49 | Provincia Autonoma | environmental protection |
| SPOT (Servizi Promozione Offerta Trenian) | 2 | Enti di promozione | organizing trade fairs |
| Centro Commerciale | 10 | CCIAA, city council, Unione | commercial services |
| University buildings | 17.5 | Provincia Autonoma, the state | new faculties |
| Interporto | 200 | Societa' interporto | freight depot |
| Infrastructure for the Interporto | 64 | Provincia Autonoma | motorway link |
| Provincial road system | 75 | Provincia Autonoma, ANAS | development of the urban grid |
| Sports centre promotion | 22 | City council | sports |
| City centre, Teatro Sociale, etc. | 30 | City council | image |
| Centro Santa Chiara | 1.5 | Ente di gestione, Provincia Autonoma, city council | promoting the arts |
| Polo ottico | 10 | SIP | telephone network |

— *The plan for city centre and urban renewal.* The planning area that most directly addresses urban restructuring is a well-defined project framed by the *Indirizzi Programmatici* (Planning Guidelines) laid down by the new *Piano Regolatore* (Town-Planning Scheme). The chief targets are the saafeguarding and recorvery of the environment, the housing stock and local cultural heritage;

— *Initiatives designed to enhance the "promotional impact" of the city centre* (*Bocchi,* 1985) are accompanied, in adjacent areas, by others aimed at restoring the urban fabric (the University's humanities complex, the design of four strategic areas with which to reintegrate social space) and the conversion of the run-down industrial areas to the north of the city into tertiary activies. Belonging to the cultural-leisure sphere are projects for two sports centres in the north and south of the city and the new *Centro Culturale Santa Chiara.* This latter has a specific role to play in the city's cultural life and in its image enhancement (the arts centre's board of control is responsible for deciding its cultural policy and day-to-day management, and for promoting its activites);

— *Infrastructure*: Interporto, Centro Commerciale, SPOT. Alongside school buuilding and the development of the province's road system, most investment in infrastructures is absorded by the *Centro Commerciale* (a complex providing specialized services to the commercial sector), SPOT (an agency promoting the province's products and services) and, especially, the *Interporto* freight depot, which exploits Trento's key geographical position at the crossroads between the Brenner pass and the highways leading to Lombardy and Veneto. The aim of the project is to give Trento a specialized role in coordinating flows, and to encourage the growth of the advanced tertiary sector (the upgrading of freight distribution networks and the development of new ones);

— *Information transfer systems.* Planning of the communicat- ions infrastructure envisages a crucial role for the information network constituted by the Sip telephone system. Trento has one of the highest penetration indices in Italy and its communications system has recentrly been further improved by the introduction of an optical fiber network. More generally, the *Progetto Comunicazione* provides for the creation of a unitary (in its managerial philosophy) and integrated (i.e., modulated according to economic, social and geographical objectives) communication system which, by unifying the infor-

mation transfer complex, should facilitate objective analysis of the province's socio-economic conditions.

### *Planning areas*

Socio-cultural changes have triggered new dynamics in the economic system. Engendered by the need to respond to the crisis of the early 1980s, and in part by the Stava tragedy (which imposed the environment as an economic good), these have led to the diversification of economic planning objectives. In parallel, the greater articulation of ideological/political/administratvie circuits has upset the traditional balance dominated by the provincial administration's overriding role: the "subjects" involved are now more numerous, and their bargaining power has also changed.

The presence of new subjects, both private and in the public administration itself, has giver tighter integration to the various area of planning acitivity. The "single system" ragulated by the provincial administration divides into a set of subsystems, each of which operates according to an autonomous logic defined by the formal/informal relationships among new actors (representing pressure groups of various kinds) who intervene with diverse objectives and unclear motives.

Analysis of the survey findings yields the following picture of city planning decisions:

a) The influence on planning exerted by the province, which, with its wide range of competence and ample resources, "was and is powerfully present" (*Delai,* 1987). This power has had a powerful impact (even physically) on the growth of the dity and its financial, economic and political dynamics. The constant recourse to public funding — both solicited and criticised — has created a vicious circle of financial overbudgeting. The behaviour of the public administration suffers from the inertia of the bureaucratic apparatus, where a major factor is the legacy of "Habsburgian" lip service: that is, formally correct behaviour, although generally no more than that, designed to maintain equlibria rather than to crate new ones;

b) The planning power of new actors. Those institutions regarded by informants as endowed with an interactive potential able to influence the direction of the city's specialization are:

— IRST and University: these were decribed as playing a leading role in the activation of the new dynamics. The majority of in-

terviewees concentrated on their potential as key components in the present process of evolution. The University was seen as an active agent in linking the city to international circuits, and as "having managed to insert itself into the now emerging pattern". IRST was regarded as a "fast moving summit", with objective difficulties in technology transfer to the urban context;

- Industry associations and trade unions. With this group, which in fact constitutes the local decision-making sphere, destablizing agents were the *Associalzione Industriali,* the new *Unione commercio Turismo e Attivita' di Servizio and SEAC* — the largest advanced tertiary company in the city and operating on an international scale;
- The city council and the Chamber of Commerce have taken on specific roles, the one engaged in interpreting the new dynamics affecting the city, the other carrying out its well-established function of activating or interacting with local decision-making circuits;
- Cooperatives were described both in tradicional terms and as able to influence the agglomerative potencital of the base decision-making circuits. Their degree of penetration in the socio-cultural fabric assigns a paticular function to cooperatives in the modernization of traditional components;
- The group of new provincial bodies: Tecnofin, Informatica Trentina, Agenzia del Lavoro;
- The group comprising large-scale private engineering, building, and infrastructure companies;
- ITC (*Istituto Trentino di Cultura*), regarded as the principal catalyst of the city's public cultural provision. Responsible for the creation of the university, as well as IRST it has generated CIRM, ISIG, ISR;
- The credit system is dominated by the *Casse Rurali,* which have close links with the cooperatives. The destabilizing role of the sector is correlated with the area's high rate of accumulation (with a lending/deposits ratio of 45 per cent, well above the national average).

These assessments show that the city's decision-making framework is influenced by settlement mechanisms operating at a sub-systemic level, and that it is therefore the outcome of composite plan-

ning — which, howerer, is established in broad outline by public administration.

The general impression is of an emerging pattern of growth, favoured by the city's financial resources and by the vitality of new actors, but penalized by the poor integration of the local network and by the inertia of the social and institutional structure. The flexibility/resources potential which, in this area, caharacterizes "institutional innovation" is counteracted by the pervasiveness of the apparatus itself. Above all, efforts to target general projects at individual sectors have led to the fragmentation of initiatives which, although implemented on an adequate knowledge base, are pursued more formally than concretely. The difficulty of coordinating responsibilities has also given rise to projects restricted to individual local authorities; a problem aggravated by the overlapping of numerous agencies which intervene with their own specific logics ("projects and mini-projects"). The question of the city-system's resilience therefore depends of the innovative behaviour of the public administration — that is, on whether it will be able to undertake global projects utilizing the entire array of instruments available and whether it will be able to regulate their use. This is made more difficult by the need to link with planning at the borough or district level ("There are three levels of government for the inhabitants of a neighbourhood in Milan").

### *Socio-economic context: information network*

Analysis — necessarily only summary and indicative — of information networks shows that subjects in the socio-economic sphere are generally less dynamic than firms. There is a lack of vitality in the search for the new services and professional akills that can give a city a competitive edge. The features of the information context are the following:

— As regards the physical network, the only large-scale users of data processing services are banks, the provincial administration, the city council, the university, IRST, and the Chamber of Commerce;

— The dominance of "corporate" circuits. The Chamber of Commerce, banks and industry associations account for most information and operate on an international scale through the networks organized by their head offices (in Milan or Rome). The coporation also filters, edits and distributes specialized information. The search

for specific skills mostly concerns personnel training and software. Milan, which together with Turin distributes financial information, is the principal point of reference.

Access to information for subjects in the public administration is largely restricted to the national context (in particular, town planning consultancy by the universities of Milan, Bologna, Florence and Venice). The international context diversifies and becomes more complex and less easy to describe according to the type of competence required by the individual local authority or agency (for example, for the environmental protection project, the *Assessorato all'Ambiente* and the *Agenzia del Lavoro* drew on various services from New York, Los Angeles, Vienna, Lyon and Marseilles).

Complex and impossible to describe without specific study are the networks of ITC-IRST-University, in constant communication with the major international centres of culture and research. Finally, there was almost invariable reference (in particular by informants in the advenced tertiary sector) to Munich and Amsterdam as sources of information technology, while Brussels was the principal source of organizational information.

## The sophisticated city: which communicative context to integrate strategic innovation and typically local networks?

Analysis of the two reference contexts has made it clear that:

— The industrial system has, independently and in specific form, adapted to technological change by developing a particular pattern of integration between innovative components and endogenous factors; equally independently, it has joined the new national and international strategic circuits. Locally, there has been little linkage between firms and town planners;

— The city has now reached the stage at which it is a ciable competitor in international markets, although it does not (except embryonically and in a few cases) manifest specific networks. As regards local integration, the city lacks a "strong" communicative context able to interpret/select new information inputs and systematically incorporate them into a complex local reality.

Comparison between the two contexts hihlights the evolving profile of the city: a lack of cohesiveness between the two systems, as the legacy of a model of industrialization imposed from outside and not

assimilated by local economic structure: "the whole is not a system; inter-subject networks do not communicate" (*Borlenghi,* 1987). Juxtaposition of the two contexts reveals, first, that the city's competitive performance is influenced by planning incoherence caused by a structure unable to activate new dynamics under the weight of pre-existent factors and the pervasiveness of the bureaucracy; second, the emergence of a pattern which has independently developed resistance to technological change.

From this point of view, analysis of the interactions between firm and city defines the dedate on the influence of the sector on the city's evolution and its effect on local forms of innovation. Recent studies have emphasised two aspects: (a) the sector's key position in the dynamics of urban development (the recent growth of the services sector does not seem to have endowed it with a structure such that it can become an "alternative fulcrum") (*Senn,* 1987), and (b) the need for measures which give evolutionary coherence to the industrial system/advanced tertiary sector/new industrialization, thereby averting the danger of the "local autonomization of the evolution of the productive apparatus and the consequent marginalization of the city" (Oikos, 1985).

Interpretation of the variables influencing this technological change show that the pattern of integration is defined by the qualitative weight of a local relational context which links the financial resources and the innovative behaviour of the public administration and the new research institutes, on the one hand, and with a productive system undergoing reconstruction on the other, backed by an inadequate system of services to firms.

This is that specific local network, understood as an original structure, defined by the forms of the collective organization in which various institutions (research laboratories, firms, local authorities) contribute to the emergence of firms using new technologies (*Maillat,* 1988). The question is whether the local relational context constitutes such a structure — also because the instrumentation with which to describe its features has been shown to be lacking (*Kamann—Nijkamp,* 1988), and because of the influence of the "latent" network ("represented by the acquired organizational ability of the collectivity" (*Johannissohn*, quoted ibid.), which is "rarely visualized and of strategic value for relations connected with dominance and performance" (as opposed to the manifest network visualized and influenced by th latent network)" (*ibid*).

From the interrelationships revealed by the survey it is possible to identify the compenents that are moving towards integration: the potentially agglomerative, destabiling subjects. There is a lack of a network that defines whether and how it will be possible to reinforce the productive system's ability to adopt new technologies. Although the deterıninants of urban upgrading include a new physiognomy for the industrial system (characterized by units embodying high levels of software, service, value addeb and oriented towards specific market niches), there is an obvious need for analysis which defines the ways in which innovation is assimilated locally (the attitude of the city to the birth of new firms) and the interrelationships that should be activated in order to exploit local potential for innovation. The organizational elements of the network to be encouraged can be drawn from the experience of firms that have been able to attune the system of local resources to national/international networks (the quality of the nexuses that these firms have utilized to mediate the two contexts).

There is a perhaps not random similarity between the features of innovative behaviour displayed by industry and those required by the city and described, for example, in the development model set out in *Meeting per lo Sviluppo* (*Delai,* 1987): the careful search for new niches, customization, high product quality attuned to the specific features of the environment.

I agree with *Mandeville* (1987) that the opportunities provided by new traffic and communications systems require medium-sized cities to adopt new forms of competitive behaviour. These, compared to large cities, can overcome the disadvantages deriving from their more restricted access to resources by exploiting local potential in terms of the processing of specific streams of strategic information.

The accentuation of the nodality of medium-sized cities derives largely from the productive potential of the specific local network, as an interweaving pattern of relationships which constitutes the personality of the system. This network subsumes the city's ability to generate innovation, and it is in constant ferment as it draws from international segmented markets (*Lacour,* 1988) those components what best enhance local potential.

The characteristic features of the new competitive personality of the medium-sized city therefore render it, unequivocally, a "sophisticated city".

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## PART THREE

# INNOVATION-ORIENTED POLICIES AND INITIATIVES

# 9 INNOVATIVE BEHAVIOUR AND REGIONAL COMPETITIVENESS

MICHAEL STEINER

## Introduction

The 1980s marked, as an almost paradoxical result of an enforced internationalization of the European economy, the reemergence of regions as economic entities and as promoters of economic development (*Schmandt—Wilson*, 1990; *Steiner*, 1990a). For a long while regions were — both economically and politically — considered to be an irrelevant entity, just more or less developed parts of an eminent national economy. This theoretical negligence of regions as economies sui generis was to an important degree due to the dominance of macroeconomics in the 1960ss and 1970s. With the reemergence of a microeconomic perspective many of the structural problems of regions found a new interpretation.

There were other reasons supporting this new perspective: profound changes in the national and international economy, new needs for political, economic and cultural identity on different levels (*Koren*, 1985), new technological developments (*Gordon*, 1989). New identities bring about new challenges and responsibilities: regions no longer can rely exclusively on national policies; economic competition becomes more and more a competition between regions. And this competition takes up new forms and new dimensions.

Adaptability and flexibility are essential criteria for regional economies to survive. But adaptability does not mean that a region has to follow a one-dimensional path of economic development: it rather means to approach new challenges in a new way. There is no particular form of regional potential and economic behaviour warranting

economic success. Different kinds of adaptive potentials — of urban centers, rural spaces, industrial areas — reacted in each case differently to economic changes. Due to their different characteristics regions are competitors; their advantage is their "structural competitiveness" as an expression of substantial differences in the institutional framework, in their economic conduct, and in their specific potential.

In this paper we will consider as a special criterion for competitiveness the ability to participate successfully in the process of the search for new products, processes and markets vis ů vis national and international competitors. Starting with a short conceptual framework we will present some empirical results comparing international data on innovation on the regional level. The aim of this analysis is — beyond a description of the different dimensions of innovative activities in different regions and nations — to find out how regions differ within nations, to what degree national differences dominate regional ones and how specific types of regions (centres, old industrial areas, peripheral regions) are similar even across national borders.

## Theoretical considerations

We take the varying capability to produce a behaviour necessary for economic survival as a starting point in order to define differences between regional economies: regional types can be derived from the different potentials for adjustment. The different adjustment performances may be put in relation to different functions of the market: besides the allocative function there is also a creative one. In its creative function the market is an instrument for transmitting incentives for economic change. Both functions imply a different behaviour of economic agents: they may behave in a creative, entrepreneurial way or in an adaptive way reacting to a given situation determined by the parameters of price and quantity.

These different behaviours represent different ways of adjustment which need specific factors of production and locational preconditions, and which use different technologies. "Adaptable" regions are dominated by firms which are able to create markets, which are creative in the above sense. "Adapted" regions are dominated by firms which have to pay attention to locational costs, and which reveal a more allocative behaviour. Apart from these two there is also the

phenomenon of an insufficient performance of adjustment: "nonadapted" regions stagnate, their firms have lost their capacity to survive, these firms were too stable.

These forms of economic behaviour are not exclusive. They follow a temporal sequence: the spatial consequences are a part of such an evolutionary sequence following a technology life cycle. Each stage of the cycle is dominated by a specific economic behaviour depending on the age of the dominant products of a firm, of the age of production processes, of the age of the firm. In the early stage, firms are not limited in regard to their location decision. In the early stages of growth, the combination of super profits and of imperfect competition (because of existing limits to capital mobility and because of price inelastic demand) allows for successful development without consideration of regional differences in location costs. This is the consequence of the specific decision-making behaviour of these firms: they are "adaptable", i.e., they are either innovators themselves or quickly adopt innovations, they decide to start production soon after a major innovation. In later stages this behaviour changes: firms become "adaptive", they adjust to their economic and regional environment. Their behaviour becomes "locationally decisive" in the sense that they consider differences in locational costs.

Both forms of entrepreneurial behaviour, the adaptable and the adaptive, thus follow a temporal sequence: the spatial consequences are part of an evolutionary process. Yet the basic freedom of location in the early phase is restricted in real space and in real time: the resources that are necessary for adaptable behaviour cannot be attracted everywhere. From this there results an interrelationship between the locational needs of innovating firms and the manifold factors of production that are necessary for adaptable behaviour. On the other hand, the distribution of regional supplies of such factors is not independent of the distribution of such firms, the location and the situation of many factors can be influenced by the decisions of firms in their innovative stage.

These specific behaviours therefore demand certain economic environments endowed with special factors, i.e., there is a correspondence between the supply of special factors and the adaptive potential. This behaviour has various aspects and dimensions: a changing form of managerial conduct (*Heuss*, 1965; *Suarez-Villa*, 1984), of different forms of qualifications of the workforce (*Seninger*, 1985), and therefore of their conduct (*Kubin—Steiner*, 1992), of technology

(*Mueller—Tilton*, 1969; *Tilton*, 1971) and, of course, of the innovative behaviour.

This innovative behaviour is interrelated with other dimensions of economic conduct and changes in the course of an evolutionary cycle. In the early stage it has fundamental consequences for product quality and production costs. In the later phase a reduction of technical progress takes place (*Burns*, 1934). In contrast to the early phase where innovations may be bought from the outside, where external knowledge — often from quite different sectors — is an important source, innovations in the later stages are internal or result from firms that are in the same market. These innovations represent small modifications. In later phases both the rate of technical progress diminishes and the source of knowledge changes (this also presents higher barriers for entry, *Gort—Klepper*, 1982).

Yet the origin of technical progress and of innovation stems from many factors and can hardly be influenced in a direct way: to a large extent it still resembles a "black box" (*Rosenberg*, 1982). Simple models of innovation are appealing and easy to understand, but misleading (*Malecki*, 1990). Such a "linear" model of the innovation starts with the conventional knowledge of science presenting the base for research and technology oriented development policy. Accordingly there is a sequence starting with research, continuing with product and process development to production and from there to marketing and sales. In the regional context this linear sequence would mean that wherever research and development are carried out, production also takes place and therefore creates jobs and economic growth. According to this model there are clear economic consequences: an increasing volume of research and development is followed by a proportionate increase in innovation and technical progress. Consequently economic policy has to aim at advancing this research and development, but it must take care to achieve the right combination of basic and applied research. Since basic research is the origin of basic ideas for innovation, basic research also is a necessary realm of economic policy.

Since *Schumpeter* we know that innovations are a complex field, hard to realize and of course harder to promote. Innovation and technical progress consists of an interplay of changes in product, technology, organization and markets. Recent research and theoretical and empirical knowledge point out that instead of linearity a multitude of activities influences the innovative process, with various ra-

tes of progress between industries, with multiple interdependences, feedbacks, and "jumps".

Some new developments in the logic of production additionally alter the preconditions of innovation and cause further doubts for a linear interpretation (*Gordon*, 1989):

— The traditional choice between entrepreneurism and large hierarchically-structured firms cannot be maintained anymore, because R&D cost are escalating well beyond the capabilities of firms and the knowledge in a firm is marked by a high level of specificity impeding a firms's future learning capabilities and knowledge transfer;

— This approach is increased by the fact that innovative skill and information are increasingly non-cumulative, heterogeneous and strain internal capabilities;

— Problems in the process of internal technology production normally stimulate application-specific scientific research rather than the reverse process in which technological applications issue directly from basic scientific research;

— The diversification of demand exacerbates the problem by necessitating frequent production reorganization, imposing difficult considerations between commitment to existing investments on the one hand and flexibility of response on the other;

— Shorter product life-cycles force firms to enter all markets simultaneously, yet few firms independently control this kind of global distribution capacity or possess a range of such specialized market knowledge;

— The historical boundaries between industries alter or dissolve, the same is true between high technology and traditional sectors;

— Technological change neither favours necessarily small or large firms, nor does market differentiation automatically eliminate economies of scale in finance, design or marketing.

The uncertainty concerning the more precise causal connections between innovation and economic development, the "black-box" nature of innovation and technical progress, should not obscure the fact that these two factors are closely connected and that knowledge of innovative activities is able to give a regional economy essential information on its weak and strong points. Innovative activities are not only basic research and production of high-technological know-how; but they also have manifold dimensions. Innovative activities defined in this wide scale — and this will be the basic approach of the

empirical part of this paper — influence without doubt the international competitiveness and thereby the economic future of a region. As it is the case for the product cycle in general where we know about its weaknesses but nevertheless use it as an interpretative framework with extensions and alterations (*Markusen*, 1985; *Storper*, 1986; *Scott—Storper*, 1987; *Steiner*, 1990b), "elements of this linear model remain appropriate for understanding the dynamic nature of technology within economic activity" (*Malecki*, 1990. p. 102.).

Below we will take a closer empirical look at regional differences in innovative activity, paying special attention to the similarity of regional types across national borders. These types are interpreted in our theoretical context as having different forms of adjustment: centres as "adaptable" regions with 'creative' behaviour, peripheries as "adapted" regions dominated by firms with allocative behaviour and old industrial areas as regions with an insufficient performance of adjustment. Our concern is how far their differing forms of adjustment are reflected in different expressions of innovative behaviour.

## Empirical analysis of regional dirrerences in innovative behaviour

### *Data base*

The present analysis is based on the Technology and Innovation Test (TIT) of the Austrian Institute for Economic Research, the equivalent test of the Institute for Economic Research (IFO), Munich, and a similar test of the Istituto Centrale di Statistica (ISTAT), Rome.

The technology and innovation test is founded on a firm-oriented approach, i.e., its main research object is the firm with its different innovative characteristics (in contrast to an innovation-oriented approach aiming at a technological evaluation of innovations). Therefore it is easier to analyse individual characteristics of firms favouring and preventing innovations and to draw conclusions about the economic framework involving them.

Another essential point concerning the regional perspective is the fact that the principles of local firms (and not of national enterprises) were evaluated; that means that the local unit "firm" (and not the legal unit "enterprise") was analysed — this is of great

importance even when just looking at innovative activities, as enterprises often carry out innovations at only one location. Without this differentiation problems of the correct regional attribution could arise.

The data were obtained through questionnaire sent out to industrial firms and completed by additional information by telephone. They are marked by a special character: they are not objective facts, but the firms' own assessments of their activities; consequently they are above all self-descriptions. According to the kind of formulation of the questions they have a more objective (e.g., rate of expenses for innovations, quantity of employees in research and development, quantity of patents) or a more subjective character (factors of market position, life cycle phase of products, evaluation of obstacles and impulses) when interpreting the analysed questionnaires one has to be aware of this subjective core.

The term "innovation" is interpretated in a complex way and includes different kinds of innovations as well as many-sided activities leading to innovations. Included are "radical" (in the sense of introduction of new products) as well as "marginal" innovations, such as small improvements in process engineering; also innovations improving design, construction and organisation up to changes in the office.

The Technology and Innovation Test of Austria was carried out in 1985. As this is the only year such a test had been conducted (and therefore no further test is available at the moment), it representsg the only indication for such a study. Consequently it is a snapshot and does not allow for a dynamic comparison over the course of time. Due to regionalization, however, it is possible to compare different regions and the Austrian average.

As a first step regions are interpreted on the provincial level: for a number of Austrian provinces — Styria, Carinthia, the western provinces (Vorarlberg, Tirol and Salzburg) — a special evaluation of the TIT has been made.

As a second step special types of regions — centres, old industrial areas, peripheral regions or, in our theoretical context, adaptive, adapted and stagnant regions — are analysed and compared across national borders.

For the regional types of Austria, a special evaluation of the TIT by *Tödtling* (1990) was used. The regional data for Germany — a special evaluation of the Ifo-test — cover a medium-sized centre (Biele-

feld), an 'old industrial area' (Duisburg, Essen, Bochum) and a rural, peripheral area (Oberland Allgäu).

### *Differences between provinces and nations*

#### *a) Quota of firms with innovative activities*

In defining "innovation" we consider firms as innovative if in the year under review they carried out either product and/or process innovations representing from their point of view:

— innovations essential improvements concerning products (product innovations) or

— innovations resp. essential improvements concerning production and process engineering (process innovations).

Innovative activities contain all activities necessary for the development of innovations. Therefore objective as well as subjective innovations are taken under consideration. Objective innovations are changes and essential improvements if they represent a change or improvement for the market. Subjective innovations are changes or improvements only for the firm in question, because other firms already entered the market with these innovations (product innovation) resp. apply them in their production (process innovation).

Looking at national differences first, we see that the highest level of innovative activities is in Germany, followed by Italy (here this indicator is for the period 1981–1985, and — unlike the other countries — only introduced innovations are included. Within Austria we see substantial differences: from Styria (50%) to the west of Austria (60%) to Carinthia (67%) (*Figure 9.1*).

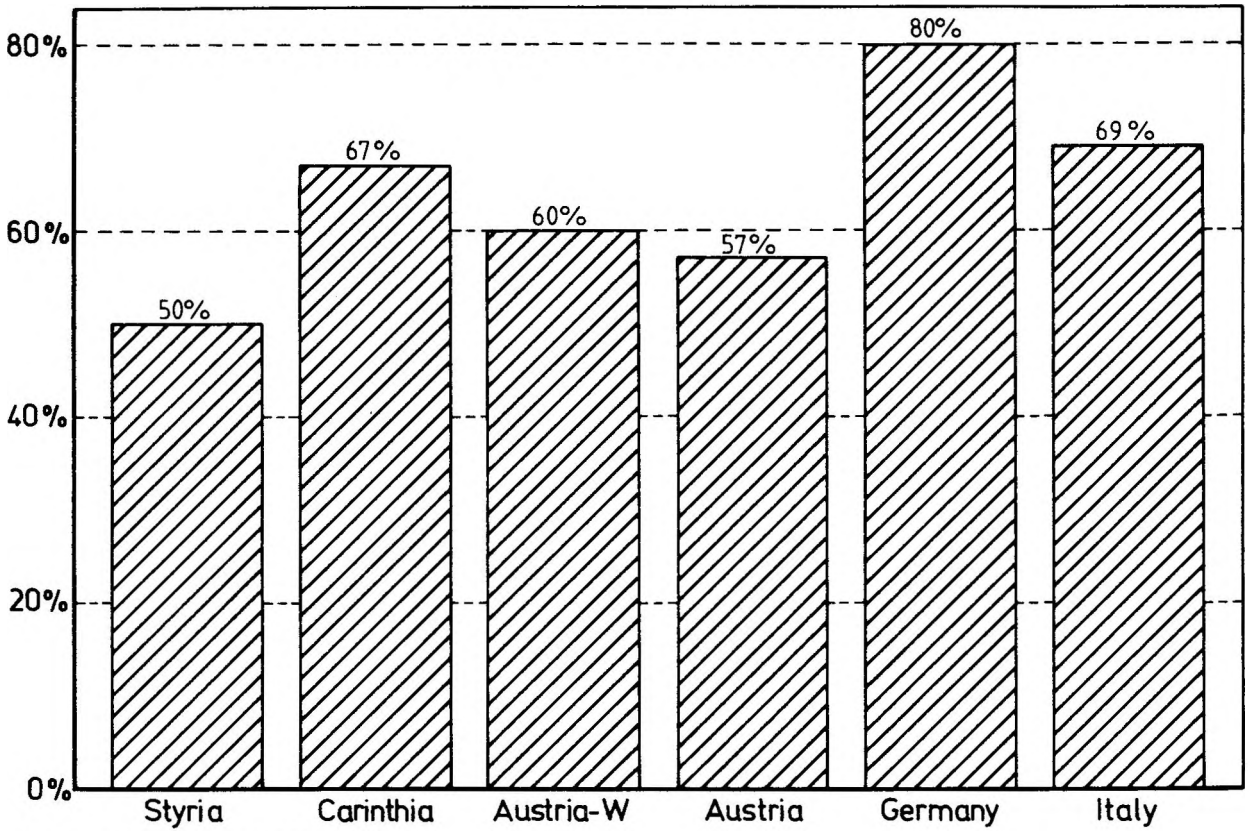
"Innovative activities" is a very rough indicator: it gives us no information about the outcome and the structure of these activities.

#### *b) Product and process innovations*

In the outcome we distinguish between product and process innovations: product innovations are oriented towards new markets (needs) and/or are essentially different concerning the technology used for production up to now.

Figure 9.1

*Percentage of firms with innovative activities*




*Source*: WIFO; IFO; ISTAT.

Process innovations contain changes or important innovations in production engineering and the computerization in office and administration.

In all cases we see a dominance of product over process innovations; the main difference lies in the product innovation with simultaneous process innovation ("with a new technology"), innovations which sometimes are considered as "radical" and as a especially important outcome (*Table 9.1*).

Table 9.1

*Product—process—product and process innovations, in percentage of all firms*

| | Product innovations | Process innovations | Product and process innovations |
|---|---|---|---|
| Styria | 47,8 | 42,0 | 57,6 |
| Carinthia | 64,3 | 38,8 | 41,7 |
| Austria/W | 51,6 | 41,6 | 33,4 |
| Austria | 53,2 | 44,9 | 36,9 |
| G (Bavaria) | 61,5 | 54,1 | 33,4 |
| Italy | 49,0 | 46,2 | – |

*Source*: WIFO; IFO; ISTAT.

### *d) Patent applications*

The TIT, based on a questionnaire contains of course strong elements of a subjective assessment. This subjective element can be reduced by using the indicator "patent applications". We can regard this indicator as an "objectification" even if we bear in mind that applications are effected only for a small part of innovations. The reasons are various: because of observance of secrecy, of too little protection, due to the limited possibility especially for small and middle sized firms to detect and prove patent infringements.

But this factor is an objectifying indicator insofar as patented innovations are tested by experts in regard to their innovative (novel) character. With regard to international competitiveness the distinction between applications at home and abroad may intensify objectification. It is, moreover, an indication of whether firms are prepared to enter international markets with their innovations.

Here we clearly see strong national differences (only data for Bavaria were so far available). Yet, looking at the percentage of international patents we notice essential differences between Austrian regions — Carinthia has a very low percentage (*Figures 9.2 and 9.3*).

### *d) Innovation targets*

Innovators — above all product innovators — on principle can follow two strategies differing in their relevance for market and product. Proceeding on the assumption that every product grows old and gets pushed out of the market, firms always have to be anxious to put new products on the market. They can produce either follow-up products (defensive strategy) or expand their product range (offensive strategy). Such a differentiation also is possible in regard to market strategy: firms may concentrate on preservation of market share (defensive strategy) or try to open up new markets (offensive strategy).

Regarding the importance of the objectives of innovations in general we see a rather international and interregional uniformity: enlarging the range of products has priority everywhere, with differences in the level, followed (with slight differences in order) by a lowering of labour costs, of improving flexibility; certainly not very important (again everywhere) is a reduction of environmental damage (*Table 9.2*).

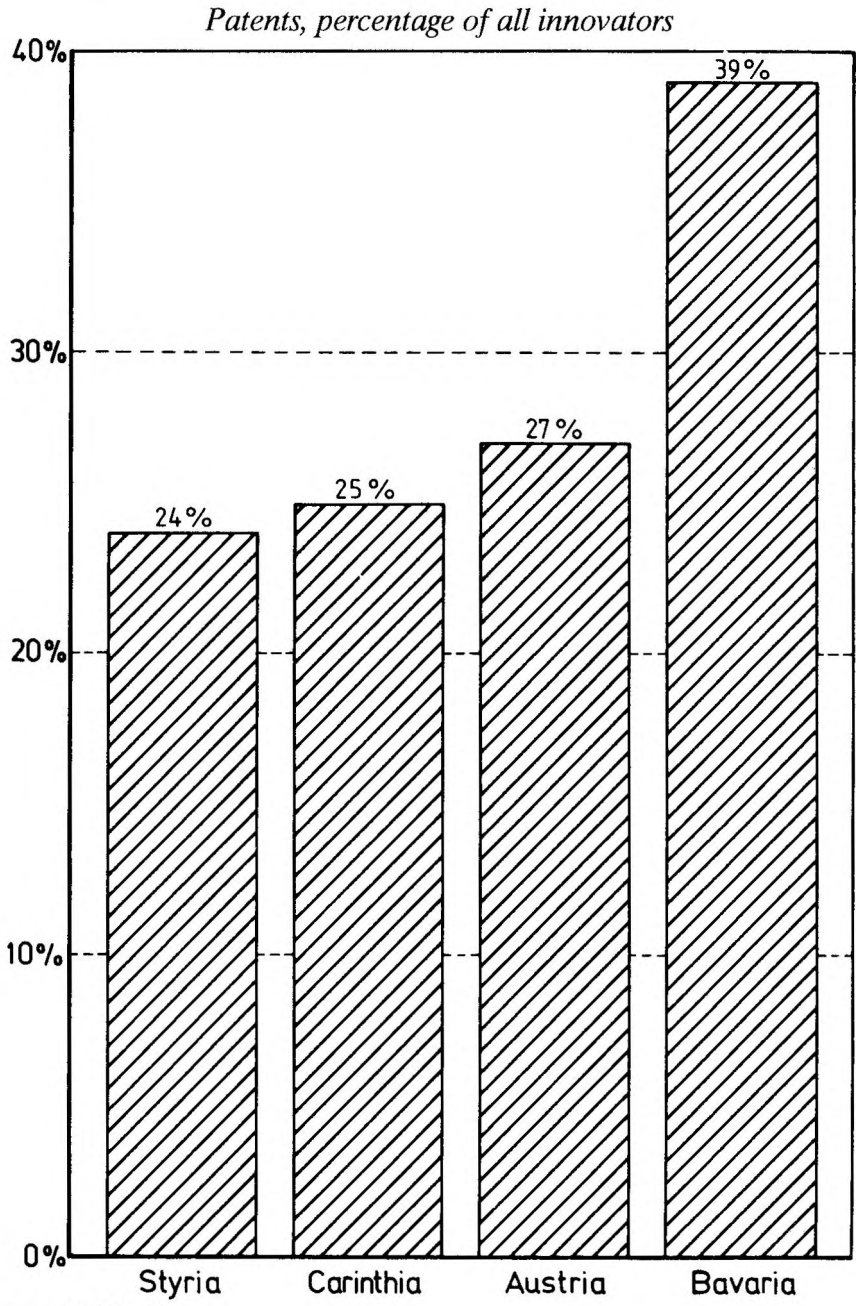
There is also a strong dominance of an offensive product strategy, whereas this offensive market strategy is slightly stronger in Germany.

Process innovators mainly aim at an increase of flexibility in production and a decrease of production costs. Except in the case of labour costs the latter is of minor importance.

### *e) Innovation expenditures*

Beyond the output indicators and the general indicator "innovation activities" the level and structure of expenses for innovations picture more precisely the manner of these activities. According to a "linear" model of technical progress research and development expenditures are an important and initial precondition for the dynamism of an economy. In many cases efforts in R&D are considered as the criteria to maintain competitiveness. The above-mentioned "non-

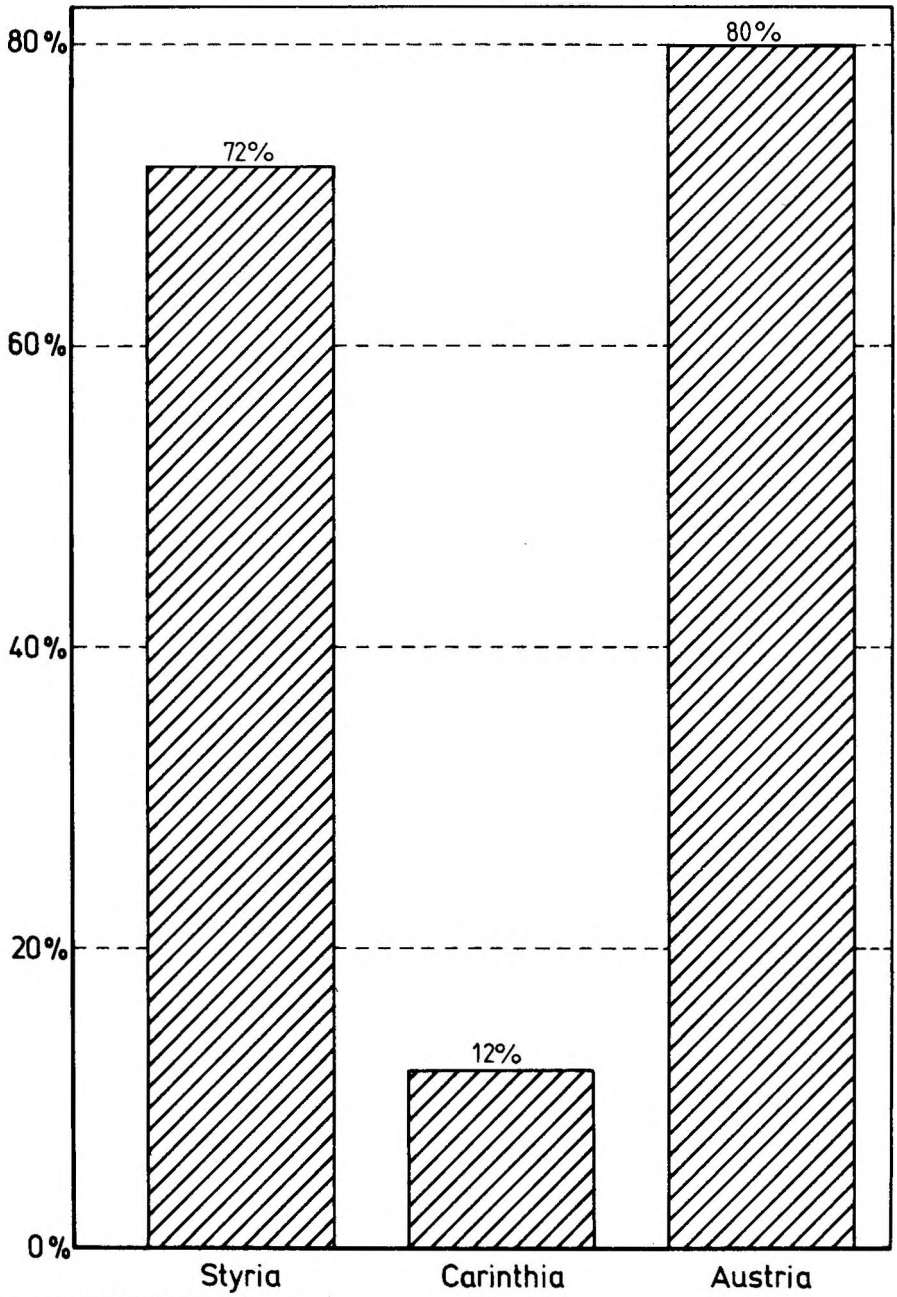
Figure 9.2




*Source*: WIFO; IFO.

Figure 9.3

*Patents in other countries, per cent of all innovators with patents*




*Source*: WIFO; IFO.

Table 9.2

*Targets of innovations*

| Targets | Styria | | Carinthia | | A/W | | Austria | | Germany | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Per cent | Rank | Per cent | Rank | Per cent | Rank | Per cent | Rank | Per cent | Rank |
| Staying in the market | 48.6 | 3 | 53.0 | 6 | 43,2 | 5 | 48.2 | 4 | 59.4 | 6 |
| Gaining new markets: | | | | | 52,2 | 2 | | | | |
| — international | 45.7 | 5 | 42.3 | 8 | | | 38.2 | 8 | 60.3 | 5 |
| — new clients | 42.9 | 6 | 65.4 | 3 | | | 47.4 | 5 | 65.7 | 3 |
| Creating follow-up products | 42.9 | 6 | 42.3 | 8 | 44.3 | 4 | 45.2 | 6 | 56.6 | 7 |
| Eniarging range | | | | | 73.9 | 1 | | | | |
| — within main line | 71.4 | 1 | 76.9 | 1 | | | 74.1 | 1 | 92.8 | 1 |
| — outside main line of production | 24.3 | 13 | 7.7 | 12 | | | 14.0 | 13 | 15..9 | 13 |
| Improving flexibility of production | 55.9 | 2 | 73.3 | 2 | 42.9 | 6 | 57.6 | 2 | 65.6 | 4 |
| Reducing production costs: | | | | | | | | | | |
| — reducing wage costs | 47.1 | 4 | 60.0 | 4 | 49.0 | 3 | 56.7 | 3 | 84.0 | 2 |
| — lowering use of material | 17.7 | 12 | 40.0 | 10 | | | 27.6 | 11 | 39.2 | 10 |
| — lowering use of energy | 32.4 | 10 | 26.7 | 11 | | | 27.6 | 11 | 24.2 | 12 |
| — reducing production of damaged goods | 35.3 | 9 | 60.0 | 4 | | | 40.0 | 7 | 50.0 | 8 |
| Improving working conditions | 41.2 | 8 | 53.3 | 7 | 22.1 | 9 | 37.6 | 9 | 40.9 | 9 |
| Reducing environmental damages | 26.5 | 11 | 26.7 | | 19.5 | 19 | 20.0 | 10 | 24.6 | 11 |

*Source*: WIFO; IFO.

linearity" of technical progress, even a rather more generally interpreted linearity, refer to the fact that activities in R&D are a necessary but not sufficient condition for the innovative dynamism of a regional economy. This knowledge can to some extent be bought from external sources or be transferred; but above all it is necessary to realize and to convert the knowledge into marketable products. These facts require further expenses which are ignored or underestimated in many cases (this is one of the reasons why this study is based on a wide definition of the term "innovation").

So "innovation expenses" include by the definition of TIT not only internal and external expenses for R&D, but also expenses for construction and design, patents, licences and expenses for production and sales preparation. In addition expenses for process innovations in production and office are contained. Innovation expenses include completed, current and interrupted innovation projects.

The innovation quota — the proportion of innovation expenditures in total sales of the reporting firms — shows only minor differences, both between nations and regions (*Figure 9.4*).

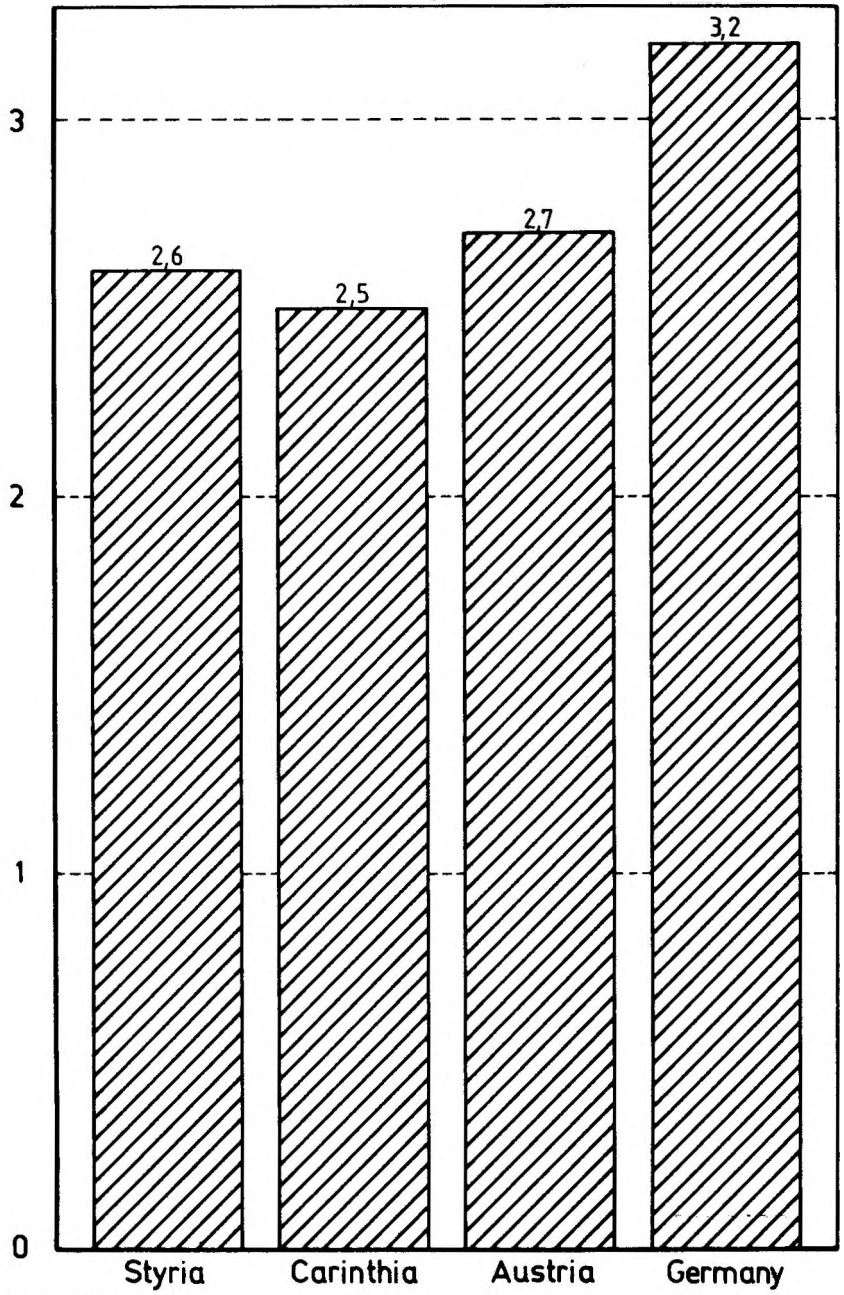
Great importance is usually attributed to the proportion of R&D, because it represents the knowledge basis for innovations. In most cases this is the largest position with only slight deviations between nations and regions. These are — together with construction — typical expenses for early stages of the product cycles. Differences reside mainly in the weight of expenditures for construction and design and in process innovations (*Table 9.3*). But as soon as we look not at the structure but at the level of R&D expenditures we see pronounced regional differences (at least in Austria): both the R&D-coefficient and the quota of employees in R&D differ widely (*Figure 9.5*).

### *f) Innovation impulses and obstacles*

Why are innovations undertaken and why not? Differences have to be expected not only in regard to the kind and extent of innovations, but also in regard to the way innovations happen. This refers to the origin of innovation impulses, in particular the kind and importance of internal and external sources, various reasons for the non-performance of innovations, and also to different kinds of public subsidies.

Figure 9.4

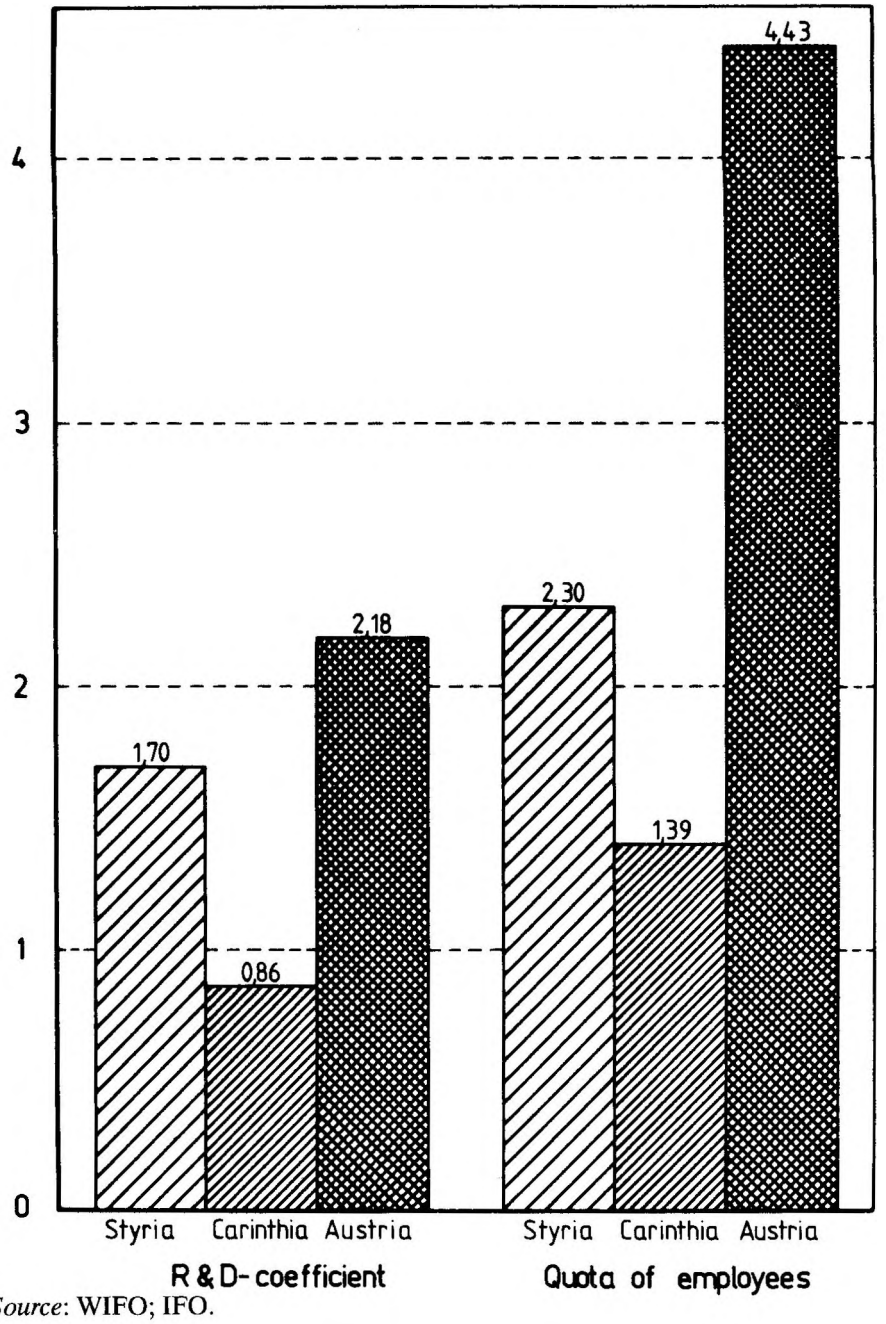
*Innovation quota of all reporting firms*




*Source*: WIFO; IFO.

Figure 9.5

*R&D confficient, quota of employees in R&D*




*Source*: WIFO; IFO.

Table 9.3

*Structure of innovation expenditure, per cent*

| | Styria | Carinthia | A/W | Austria | Germany | Italy |
|---|---|---|---|---|---|---|
| R&D | 26.9 | 34.4 | 29.4 | 29.5 | 24.0 | 16.3 |
| Construction, design | 8.0 | 23.2 | 15.9 | 15.1 | 21.9 | 42.1 |
| Patents and licences | 2.0 | 3.3 | 3.1 | 3.0 | 2.4 | 8.6 |
| Product preparation for product innovations | 19.6 | 15.0 | 18.0 | 17.8 | 20.2 | – |
| Producess innovations | 39.5 | 19.5 | 25.9 | 30.1 | 26.4 | – |
| Marketing preparation | 4.0 | 7.7 | 4.6 | 5.1 | – | – |

*Source*: WIFO; IFO; ISTAT.

There is an astonishing similarity in the order of importance: marketing, management and then clients are by far the most frequently quoted factors (*Table 9.4*).

In general, incentives for innovative activities may originate from inside the firm or from the outside. Considering the weight of the factors there is a slight dominance of internal impulses.

Regarding the barriers for innovations we again have a very similar order (*Table 9.5*): a strong exception is the factor "own capital" which is of less importance in Germany. In Germany the insecurity of markets seems to be a greater problem — perhaps the protected sector is larger in Austria and causes less headache (and fewer barriers to innovation). Regional differences within Austria are minor.

*Differences between regional types*

In this section we compare differences between three types of regions: centres (or in our theoretical connotation adaptable regions) which usually are considered as the origin of innovative activities, old industrial (stagnating) areas, and peripheral (adapted) regions.

This comparison is undertaken from several perspectives (as far as the set of data permits a comparison on such a low level of regional units): how different are these regional types within a nation, how homogeneous are they compared with each other, i. e., how similar

Table 9.4

*Innovation impulses*

| Innovations | Styria | | Carinthia | | A/W | Austria | | Germany | |
|---|---|---|---|---|---|---|---|---|---|
| | Per cent | Rank | Per cent | Rank | Per cent | Per cent | Rank | Per cent | Rank |
| R&D | 37.8 | 4 | 44.4 | 3 | 33.7 | 40.2 | 5 | 47.4 | 4 |
| Marketing | 51.1 | 1 | 59.3 | 1 | 69.2 | 55.0 | 2 | 59.9 | 1 |
| Production | 35.6 | 5 | 25.9 | 8 | 41.5 | 32.0 | 6 | 30.7 | 6 |
| Management | 44.4 | 2 | 59.3 | 1 | 57.9 | 55.3 | 1 | 58.8 | 2 |
| Firm-internal suggestions | 4.4 | 13 | 3.7 | | 8.6 | 7.9 | 12 | 6.9 | 12 |
| Patents | 2.2 | 15 | 3.7 | 11 | 6.0 | 5.1 | 15 | 4.4 | 15 |
| Science | 11.1 | 10 | 3.7 | | 6.6 | 8.9 | 11 | 6.1 | 13 |
| Legislation | 4.4 | 13 | – | | 5.9 | 5.8 | 14 | 5.3 | 14 |
| Literature | 22.2 | 3 | 40.7 | 4 | 40.6 | 47.1 | 3 | 58.0 | 3 |
| Suppliers | 13.3 | 9 | 11.1 | 10 | 10.3 | 12.7 | 10 | 14.0 | 10 |
| Mother-daughter firm | 11.1 | 10 | 37.0 | 5 | 21.2 | 22.7 | 8 | 15.1 | 8 |
| Fairs, congresses | 20.0 | 8 | 29.6 | 7 | 26.1 | 26.1 | 7 | 27.2 | 7 |
| Competors | 35.6 | 5 | 37.0 | 5 | 54.6 | 41.9 | 4 | 41.3 | 5 |
| Public R&D-supporting | 8.9 | 12 | 18.5 | 9 | 7.1 | 7.5 | 13 | 12.0 | 11 |

*Source*: WIFO; IFO.

Table 9.5

*Barriers for innovations*

| | Styria | | Carinthia | | A/W | | Austria | | Germany | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Per cent | Rank | Per cent | Rank | Per cent | Rank | Per cent | Rank | Per cent | Rank |
| Own capital | 51.2 | 1 | 53.8 | 1 | 50.6 | 1 | 46.0 | 1 | 28.0 | 4 |
| Outside capital | 9.8 | 7 | 7.7 | | 8.9 | 7 | 11.0 | 9 | 4.5 | 11 |
| Yield of prod.inn. too small: | | | | | | | | | | |
| — inn. expenditure too high | 24.4 | 3 | 34.6 | 2 | 42.3 | 2 | 31.0 | 3 | 29.5 | 2 |
| — pay-off period too long | 9.8 | 7 | 11.5 | | 7.4 | 9 | 15.0 | 7 | 22.8 | 5 |
| — market developm. insecure | 36.6 | 2 | 34.6 | 2 | 25.6 | 4 | 36.0 | 2 | 48.2 | 1 |
| Organizational problems | 14.6 | 5 | 7.7 | | 21.3 | 5 | 17.0 | 5 | 13.6 | 7 |
| Regulations | 4.9 | 11 | 11.5 | 7 | – | | – | | 0.8 | 12 |
| Qualification of workforce: | | | | | | | | | | |
| — R&D | 19.5 | 4 | 15.4 | 5 | 27.2 | 3 | 21.0 | 4 | 28.4 | 3 |
| — production | 9.8 | 7 | 15.4 | | 15.2 | 6 | 12.0 | 8 | 14.3 | 6 |
| — marketing | 7.3 | 10 | 7.7 | | 8.1 | 8 | 9.0 | 10 | 5.0 | 10 |
| Lacking information on external know-how | 2.4 | 12 | 7.7 | | – | | 9.0 | 10 | 5.0 | 10 |
| Realization probl. of techn. know-how in marketable prod. | 12.2 | 6 | 19.2 | 4 | – | | 17.0 | 5 | 13.4 | 8 |

*Source*: WIFO, IFO.

are the types of one province (e. g. Styria) to the equivalent regions of the whole of Austria, and how much do these types differ etween nations (in this case: Austria and Germany).

*Innovative activities* presumably are the highest in centres, lowest in the periphery. Our case study reveals that this presumption prevails only for the particular German regions. In Austria as a whole, the periphery concentrates more on such activities than do old industrial areas. In Styria, the situation is totally reversed: the periphery has the highest level of activities (*Figure 9.6*).

Seen from another perspective, there are distinct differences between nations for the same type of regions (*Figure 9.7*). Regarding the input, we see — surprisingly — that in terms of *innovation quota* the periphery is far ahead of the other regions (at least within Austria — *Figure 9.8*), but that even within this type there are substantial differences — the Styrian periphery has a large advantage (which is minor for the other types — *Figure 9.9*).

The *structure of expenditure* reveals a dominance of R&D expenditures in centres, of process innovations in OIA. Those indicators also reveal that the periphery is strong in product innovations. In general, differences between regions are more pronounced in Austria than in Germany (*Table 9.6*).

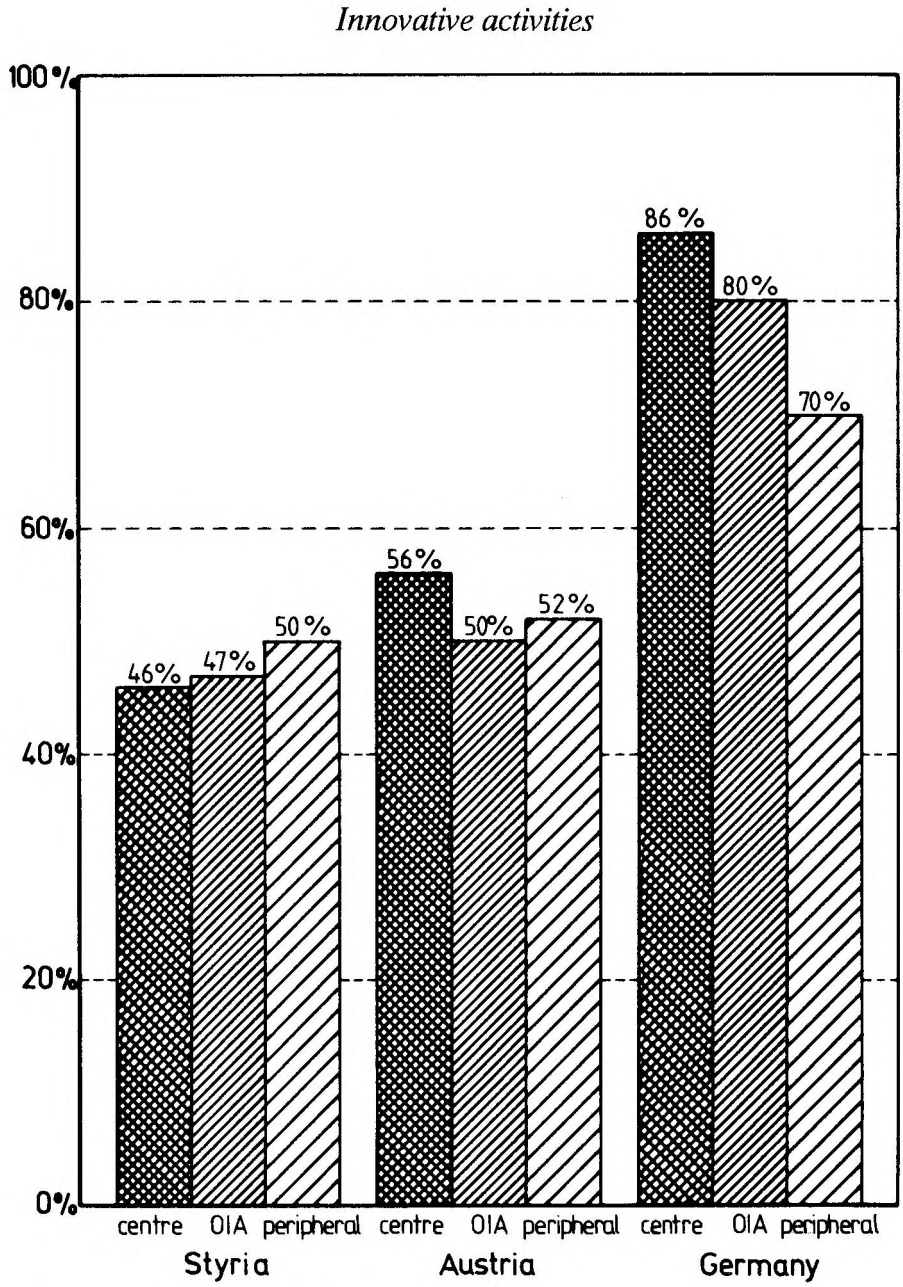
The *targets* of innovative activities (which because of the weak statistical reliability can only be taken as a tendency and which are reported without tables) show in their tendency a dominance of an offensive strategy both in centres and peripheries, a defensive one (not surprisingly) in OIA both in Austria and Germany.

Both *impulses* and *barriers* (again statistically rather weak) show regional similarities in the ordering across national borders (with the strongest differences existing in OIA). The dominant barrier in the periphery is the insecure market situation, internal impulses dominate the external ones.

## Final remarks

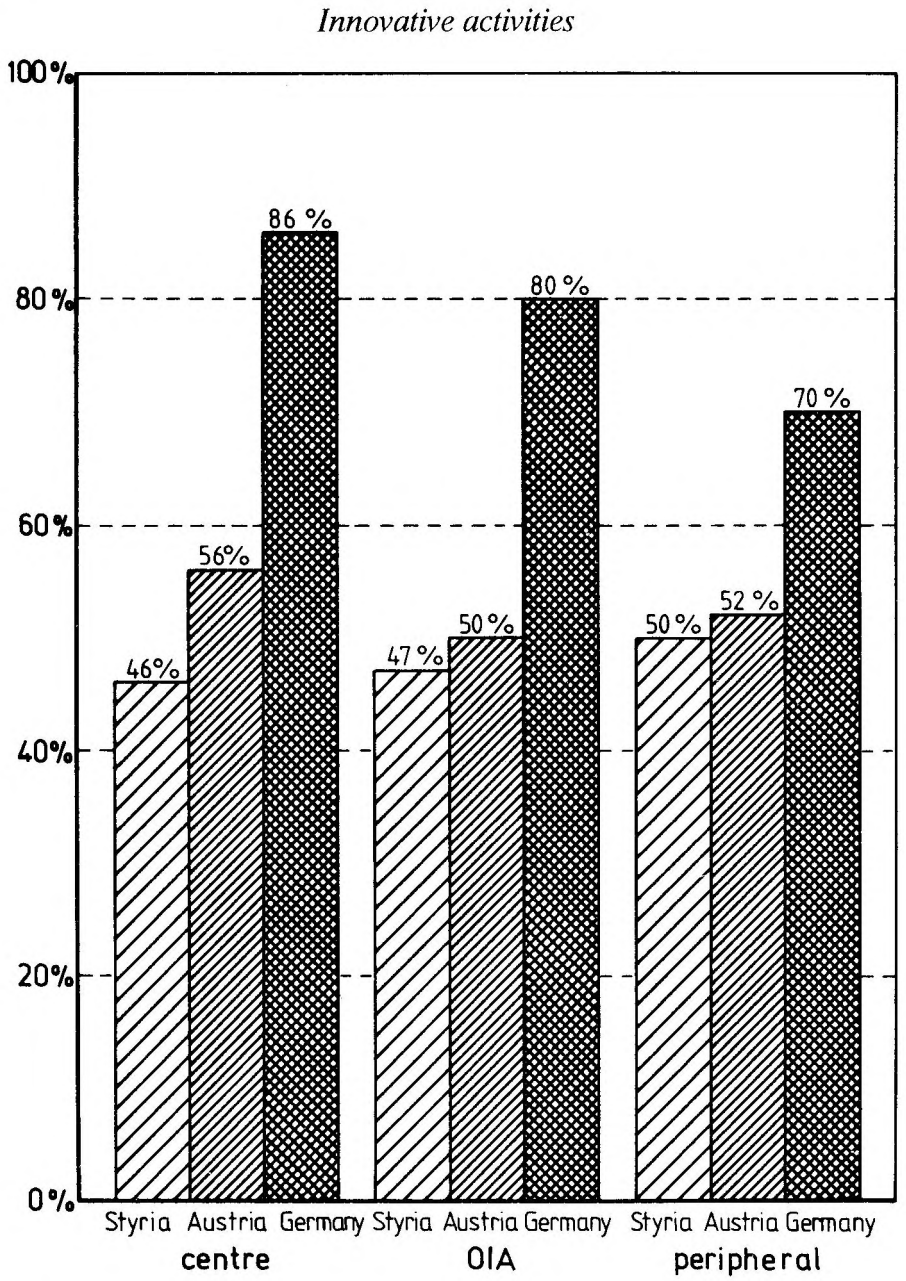
The non-linearity of technical progress opens new chances for regions lacking scientific and high-technological research institutions. They have the chance as "cross-entering" entrepreneurs to acquire technological know-how, to let technology be transferred to them, to wait as potential imitators for the economic success of innovations;

Figure 9.6



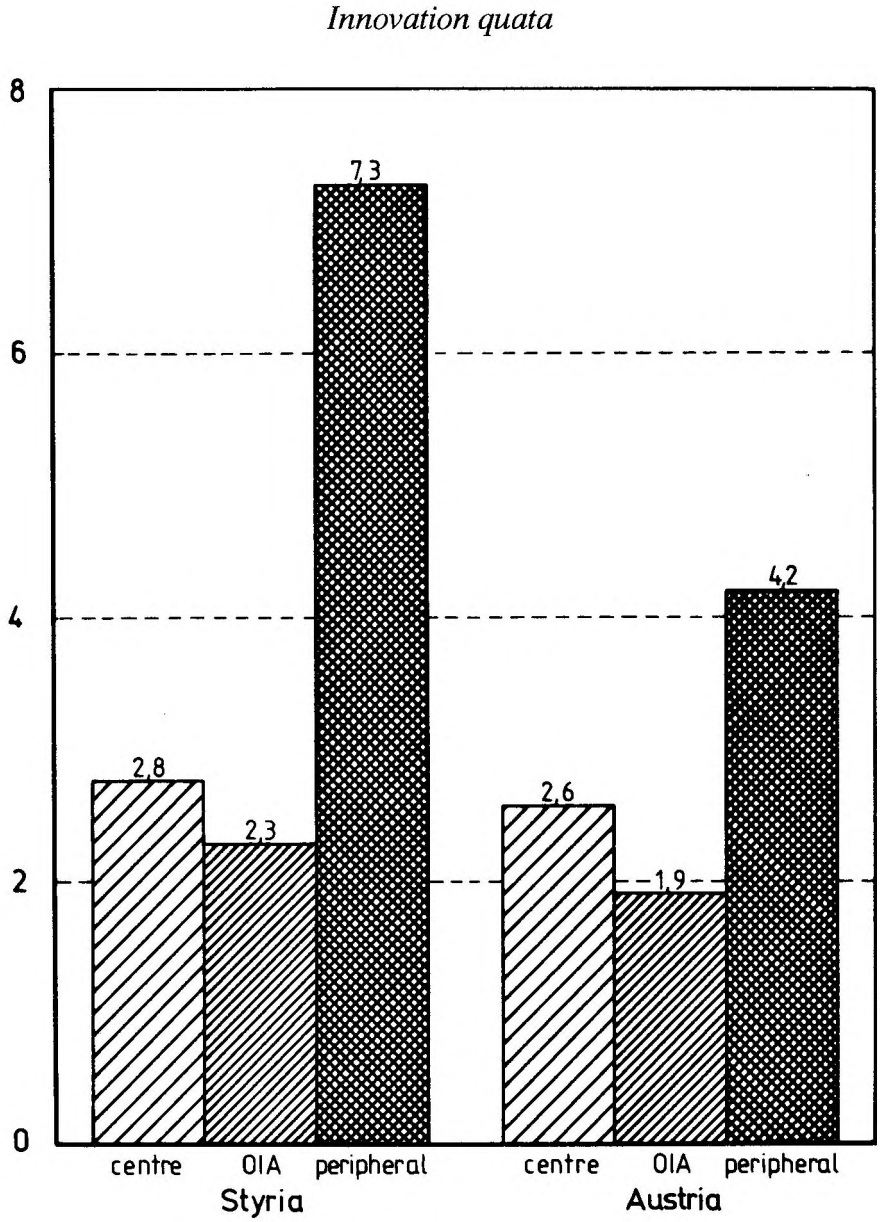

*Source*: WIFO; IFO; Tödtling, 1990.

Figure 9.7




*Source*: WIFO; IFO; Tödtling, 1990.

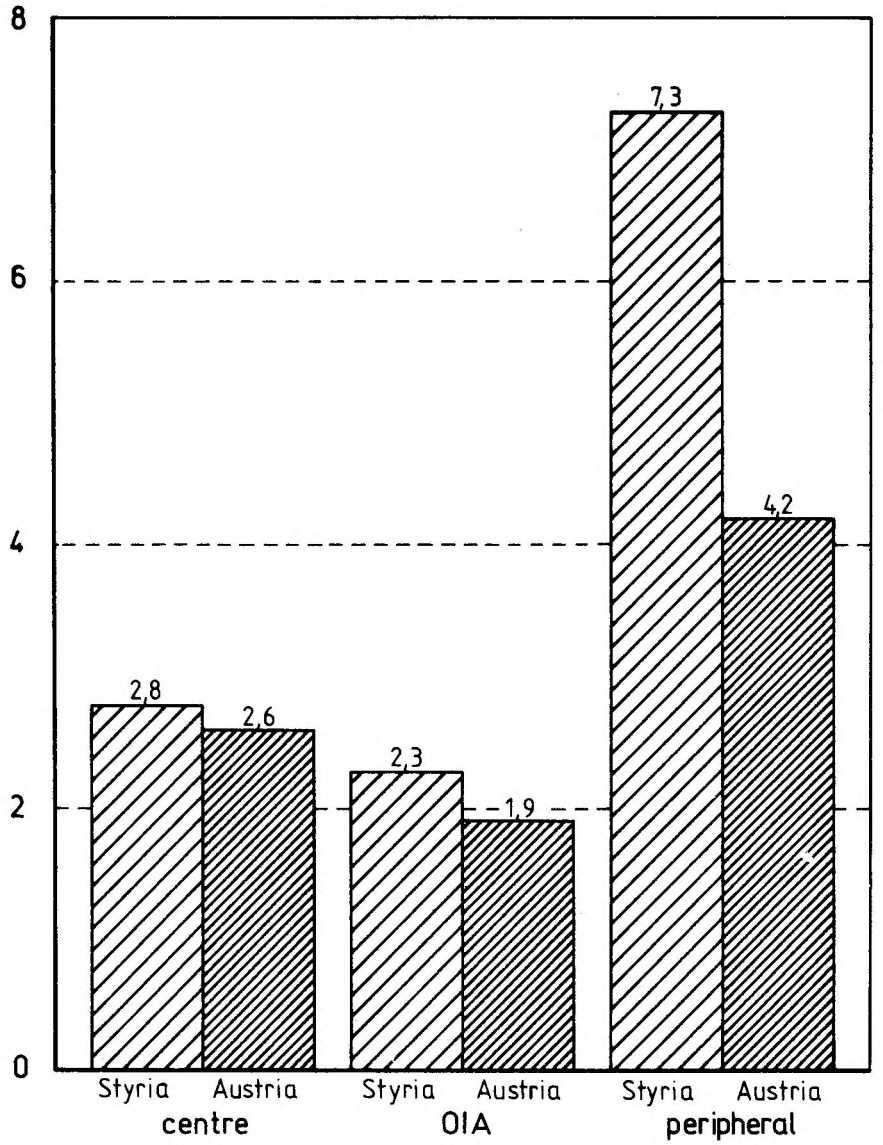
Figure 9.8




*Source*: WIFO; IFO; Tödtling, 1990.

Figure 9.9

*Innovation quata*




*Source*: WIFO; IFO; Tödtling, 1990.

Table 9.6

*Structure of expenditure by regions, per cent*

| Innovations | Styria | | | Austria | | | Germany | | |
|---|---|---|---|---|---|---|---|---|---|
| | Centre | OIA | Peri-phery | Centre | OIA | Peri-phery | Centre | OIA | Peri-phery |
| R&D | 27.7 | 11.8 | 15.0 | 30.3 | 14.0 | 9.4 | 25.9 | 19.7 | 20.3 |
| Constructions, design | 10.1 | 2.9 | 4.8 | 18.7 | 10.3 | 3.2 | 25.7 | 24.6 | 19.2 |
| Patents, licences | 1.8 | 0.2 | 4.0 | 7.4 | 1.0 | 5.3 | 6.4 | 1.6 | 3.7 |
| Production, preparation for product inn. | 8.8 | 20.3 | 66.3 | 14.0 | 32.9 | 60.9 | 18.3 | 17.7 | 37.0 |
| Process inn. | 46.9 | 61.6 | 7.5 | 25.4 | 34.5 | 17.7 | 20.4 | 28.8 | 18.1 |
| Marketing preparation | 4.7 | 3.2 | 2.5 | 4.2 | 7.4 | 3.5 | 3.3 | 7.6 | 1.7 |

*Source*: WIFO; IFO; Tödtling, 1990.

innovations coming up in a certain region do not automatically lead to economic prosperity in this region. There is no simple one-way causality between research and technology and regional development. Instead there exists a strong interdependent relationship: a positive regional economic development also supports the development of technical progress and brings about room for innovation. The empirical analysis shows tentatively that this chance might be realized by (at least some) peripheral regions. They reveal surprisingly strong innovative activities, both in output and input.

There exist nevertheless strong and systematic differences between regions. These differences have a common structure as long as homogeneous regions — i.e., regional types — are taken as units. These differences even prevail if compositions beyond national borders are undertaken — not in the level, but in the relative structures of innovative activities.

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# 10 THE INNOVATION-ACTIVE ENVIRONMENT IN THE GYŐR-MOSON-SOPRON COUNTY

JÁNOS RECHNITZER

## The spatial process and environment of innovation

Today in Hungary a regional perception, or "regionalism", has developed. The reasons for this regeneration are many. The prime example of this mentality is shown by the efforts to become a part of a European region as a requirement for entering the European co-operation.

In Hungary the political changes have made possible the regeneration of society and settlements. The disparity between the various regions is being restructured. There is a revival of inter-dependence between regional and geographical units, cultures and religions. The intellectual, institutional and even the financial circumstances are under development.

With the birth of new self-government, settlements are being re-invigorated. The settlements are still in the process of finding their own image, function and connections, but nevertheless the factors of regional structural development.

In the political and scientific world, as well as in the mass media, regions have not been clearly defined. The definition in quite complex, since almost every scientific field and doctrine has its own specific definition and conception. Therefore, we can speak of an endless list of regions — geographic, ecologic, historic, economic, cultural, social, ethnic and so on. The only thing these have in common is that on the one hand they all describe the region in a

geographic sense: it can be defined as a specific area with borders. On the other hand, every definition emphasizes common characteristics or differentiation.

But we must not exclude the fact that spatial dimensions make connections possible, provide some sort of cohesive attraction and at the same time there is a certain amount of specialization (the division of functions) that will not generate elsewhere or not to the same effect.

Therefore, our definition of the region is a series of accuracies that interact and connect and are confirmable within a geographic space.

Comprehensive changes are taking place in Hungary both in the economy and in society. The market economy is expanding dynamically. New ideas are appearing in all walks of life, but at the same time the negative effects of the previous economic and social system is still found and must be dealt with.

The various regions react and conform to the changes in different ways. According to our study the way in which a region responds to these overall economic and social changes can be described by their innovation environment. This environment is defined by the economic participants in the area (branches of economy, the number and field of new enterprises, the existence of foreign capital, the quality of the labour force), the conditions of the network of settlements (transport and communication links, the infrastructure, institutes, etc.) and the social-cultural fundamentals (education standards, cultural-historical tradition, civil scale of values, etc.).

Today it is not a simple task to analyze the environment of innovation. The information gained from previous studies concentrated on extensive growth and is suitable for such changes only. The given regions should be reviewed by characteristics based on innovation, the path of changes, such factors as the growth of enterprises, the appearance of joint ventures and new products, the expansion of new forms of communication. These together express the environment and character of innovation. In this paper we attempt to show what spatial changes have occurred in the northwest Trans-Danubian region, and in what way these represent regional characteristics.

### Configuration of the Upper–Trans-Danubian Region[1]

The innovation zones are the following. The M1 Motorway, the area of the Szigetköz — up to the town of Komárom —, the Balaton Plateau and the area of Székesfehérvár is a zone where innovations are concentrated (*Figure 10.1*). Typical of these regions, and intense form of interaction can be seen, synergetic effects have begun. There are a large number of enterprises generating others. At the same time we can find local-regional elements emerging, which attract further economic units and induce product-activation and development.

The potential innovation zones are situated along the North Trans-Danubian boundary district and the Danube from the town of Tata up to the agglomeration limits of Budapest. In these areas the fundamentals are under evaluation. With the opening of the frontiers the previous multilateral cooperation has new opportunities. Furthermore, they possess local and micro regional resources that can be used and utilized to revive tourism, natural environment and town functions in the smaller region of North Trans-Danubia. In these regions there is a significant amount of production infrastructure, the settlement network is fairly well equipped, transport connections are good and the regional influence of the town of Győr and the country's economic center, Budapest is considerable.

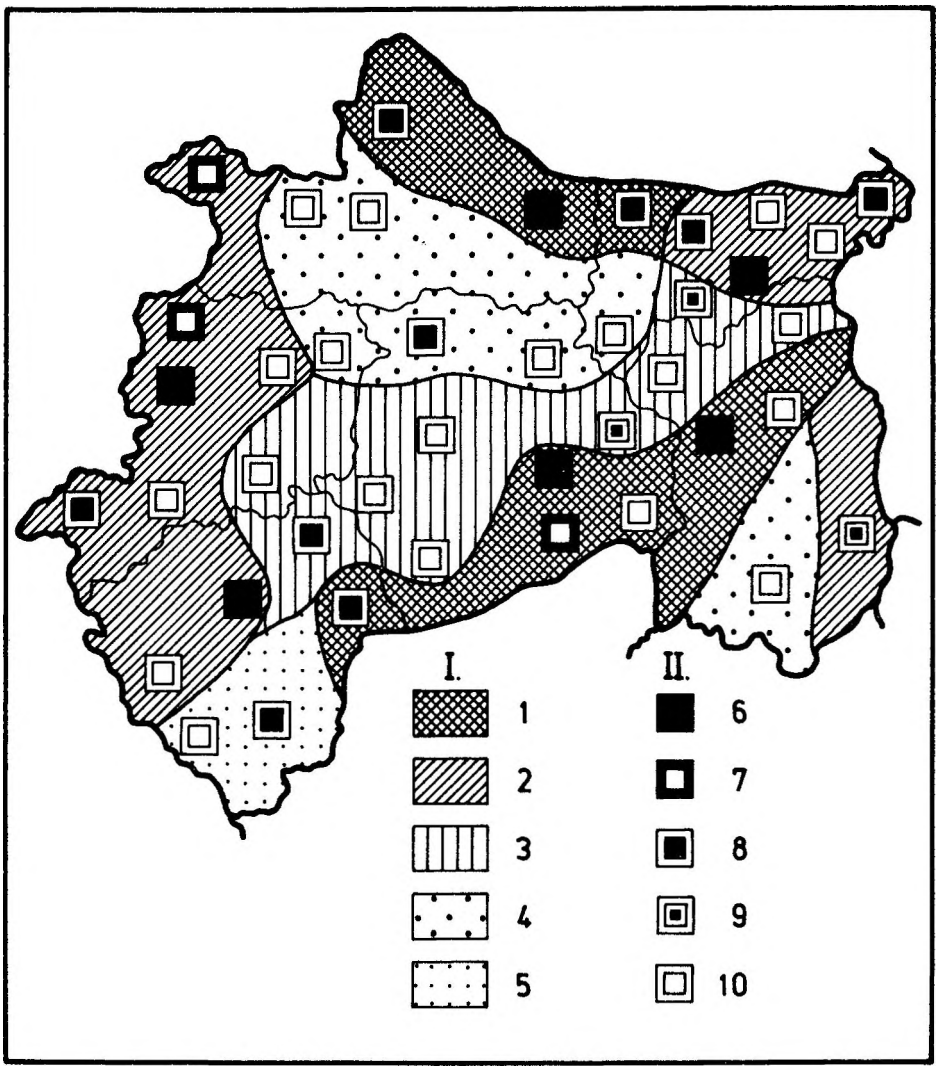
The potential innovation zones have good opportunities to revive the economic environment. They supply favorable conditions, both local and regional, but at the same time it could lead to the deepening of contradiction or tension between the sectors and settlement networks (e.g. quality of the environment, migration of skilled workers, etc.).

The Bakony-Vértes region is undergoing a crisis. This district has accumulated a considerable heavy industry potential which still has a determinative influence on the economy of Hungary. With the changes in production and economic environment these regions are an industrial crisis area. The activities of the settlements and their inhabitants were strongly based on the heavy industry, therefore with the decline of economic organizations the region is now crisis-stricken.

[1] The Upper Trans-Danubian region is a geographic area consisting of six counties. Three of these: Győr-Moson-Sopron, Vas and Zala are members of the Alps–Adria Working Community. The other three counties are Veszprém, Komárom-Esztergom and Fejér.

Figure 10.1

*Spatial structure of Upper Trans-Danubia according to innovation character*




*Key*: I = Innovation types of spatial structure: 1 = Innovation zones; 2 = Potential innovation zone; 3 = Crisis area; 4 = Inner periphery; 5 = Outher periphery; II = Innovation types of town network: 6 = Potential innovation centres; 7 = Special (touristic) centres; 8 = Preparing towns; 9 = Towns fallen back; 10 = Passive, immobile towns.

The inner periphery — the Rábaköz, the Marcal Basin, the region around Zirc and Kisbér, and the effected part of the Mezőföld — varies from the crisis regions because it lies further from larger towns and during the course of history have always been in a transitional position, lacking functions or having only a single function (agriculture mostly, or industrial company seats). The small towns of the periphery could never fulfil their role so the influence of the larger centers was always dominant in the organization of the microregion.

The inner periphery of Upper Trans-Danubia has an adequate agricultural foundation, though in this sector the restructuring and transformation has only just begun and it is presumable that this region will gradually become a crisis area.

The Zala Hills are part of the outer periphery where the frontier position does not induce revival but rather represents a source of conflicts. Periphery characteristics can be found in the fundamentals of the settlements. There are no real centers, the existing ones scanty. The region is far from economic centers but international cooperation their role can be changed or modified.

The Upper Trans-Danubian towns have been characterized based on their position in the town network of the country.

The county seats are the potential centers of innovation. During the past decades a high level of acceptance of innovation has developed in these centers due to the regional development policies, which have been critiqued by many, but nevertheless providing present potential. The region is well-equipped with a network of cities in an intermediate position ready to activate innovations and generate significant roles in the area. Of course, there are differences between the appearance of innovations, their diffusion, and in their synergetic effects.

In some cities (every county seat has a city-ranked self-government, including Sopron and Nagykanizsa) the changes in activity and the market of traditional industrial bases have just begun (Győr, Sopron, Szombathely) are presently in progress (Székesfehérvár, Veszprém, Zalaegerszeg, Nagykanizsa) or have subsided (Tatabánya).

The centers are developing and reviving in a faster way due to their infrastructure, connections and regional functions, even if the intensity varies from city to city. The competition for the new regional roles has begun in a quiet way (e.g. organizing of university centers, business federations, acceptance of the quaternary role).

Special innovation centers (Sopron, Kőszeg, Siófok) have withdrawn from the above mentioned group. These are fundamental tourist centers within the larger region but they need to accumulate sufficient resources and adapt to continuous changes to become determinant points in the meso- or microregion.

There is a group of settlements which are "preparing". This group consists of towns that are now secondary centers but developed in a rather restrained fashion. Contrary to all discrimination and their disadvantageous position, they have been able to supply enough energy to start revival and are closing in.

When revealing the regional functions of the town networks we must take into account that in certain cases these can be the mediums of revival in microregions (for example Pápa, Keszthely, Nagykanizsa, Tata, Esztergom) and in other smaller settlements (Szentgotthárd, Zalaszentgrót, Komárom).

The so-called "socialist" towns are a group which has fallen behind, due to the one-sided economic structure (heavy industry, mining) plus their restricted role and reception.

Finally, the small town network has not made progress towards the admission and spreading of innovation. The "created" towns of the 1980's were more a gift from the regional-county authorities, rather than an acknowledgment of town functions. The large and medium-sized centers of the region actually drew away all functions from small towns. As a result the settlements remained in the background and fell behind where innovation reception is concerned.

The Upper Trans-Danubian region is therefore greatly divided. The economic region characteristics are recognizable only in a limited number of mesoregions. The existing disparity will not cease but will grow in the future.

Certain region models have developed irrespective of the county administration boundaries, so it is essential for the meso and microregions to consider coordinating their efforts to develop and to stimulate local and regional resources. Furthermore, it is necessary that the whole region together with its connecting units be methodically studied. The economic results should be analyzed continuously, and the results be made known. Comparison of settlements should be made and the observations published. The number of participants in the economy is ever widening. Among these we find households, entrepreneurs, state companies, the va-

rious settlements themselves, a large number of government programmes, foreign investors, and the list could be continued.

The many, and in most cases basically opposite, endeavors can only become successful if they are coordinated and joined. The only possible level where this can be achieved is the platform of the county self-governments. The drawn up county and micro regional development programmes are connected to and build on each other. Finally, the county self-governments have command of the decentralized resources for the completion of their development goals. Therefore it is necessary to strengthen the county authorities in order to generate the economic progress already under way.

This is the only institution that can provide scope for settlement cooperation and the development of microregions. This naturally demands connections with larger regions and joint development programmes.

## The Győr-Moson-Sopron county as one of the recipients and mediums of innovation in Hungary

The area of the county is over 4,000 km$^2$. The population is near 425,000; 56% of the population lives in 5 towns: 130,000 in the county seat of Győr, 55,000 in Sopron, 30,000 in Mosonmagyaróvár and in the two small towns of Csorna and Kapuvár 11,000 and 12,000, respectively.

The county has always been considered the western gate of Hungary, not only in the past but also presently and has been an important recipient and medium of innovation. The educational level of the population is higher than the Hungarian average. The civic traditions survived more strongly than in other parts of the country, during socialist rule.

Due to these facts the region was a favoured area for investment in the previous economic era. For the past 30–40 years the region has had a machine industry, a textile industry and a food production industry of international renown. The agricultural sector has also been famous. These economic bases brought the necessary development of the settlements and provision of infrastructure.

The planned economy of the socialist state only started to look out for the region and develop the settlements from the 1970's. This attention was represented by housing programmes and a minimum of

infrastructural development but was constricted to cities, beginning with Győr and continuing at the end of the 1970's to Sopron, and in a more moderate form in Mosonmagyaróvár.

The smalls towns shared what was left from the settlement development resources, while villages were left to fend for themselves. Their only development resources provided by agricultural co-operatives and households. This resulted in great disparity within the settlement network. Sewerage was a privilege enjoyed by cities and few settlements, the telephone communication system was scanty, the road networks of bad quality and overloaded. Contrary to this large amounts were invested in the state-socialist planning schemes for schools and public health networks together with social infrastructure. Corresponding to the characteristics of the socialist economy policy the latter investments were not designed to be economical, and in result many institutes require huge expenditure in the market economy of today. This badly effects self-governments.

The political and economic changes of 1990 were not unforeseen in the county and were not unexpected by the economy or the population. In the last third of the 1980's the economic units with international relationships had already begun the restructuring of ownership, partly with the aid of foreign capital and partly by dividing the previous multiorganizations thus preparing them for privatization. With the opening of the frontier in 1989 the population of the country was keen on travel and those living near the borders acquired information very swiftly and many trade enterprises were organized to forward goods.

### *The active economy*

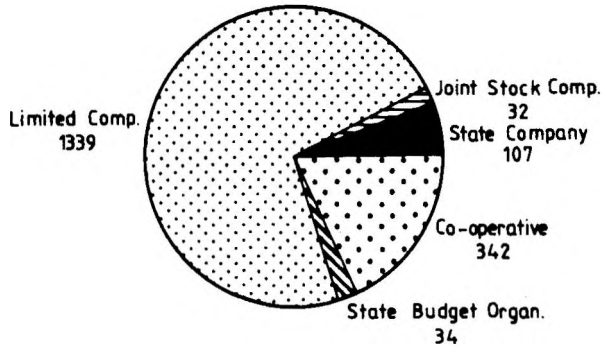
The previous significant state ownership began to disintegrate in the county and the private sector started its breakthrough *Figure 10.2* shows the capital needs of economic units and describes the economy of the county on the basis of ownership.

It is evident that the number of state owned companies has fallen and the majority non consists of limited companies, privately owned with an investment of the minimum of 1 million forints in initial capital. The number of joint stock companies is relatively small, because the large state companies are still under reorganization and private investors or entrepreneurs are still not strong enough to establish enterprises exceeding 10 million forints. Particular forms of

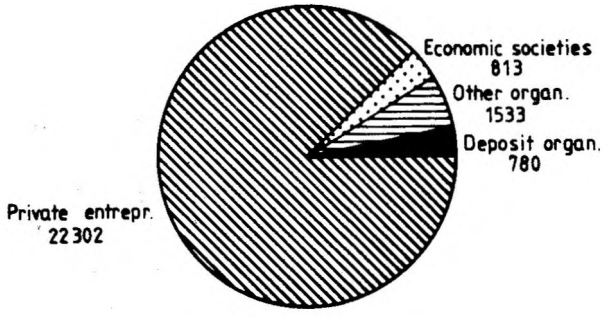
Figure 10.2

*Economic structure of Győr-Moson-Sopron county*

a) Capital-intensive organizations




b) Non-capital-intensive organizations



enterprise are those we list as non capital-intensive. These are private(one-owner) or group enterprises. They do not require initial capital and are found mostly in the commercial and service sectors. Private enterprises in trades, retail and services are popular. Most of these are one-man businesses. If we look at *Figure 10.3* we can see that capital-intensive enterprises are concentrated in commerce, industry and services. The services cater to personal and economic needs.

The previous economic structure has more or less survived the changes, for in the branches of light industry, food production and the machine industry many organizations have been formed. Trade has developed because of the favourable geographic situation. In the county more than 600 new enterprises have been established, 11% of which specialize in foreign trade.

*Figure 10.4* shows the capital-intensive organizations' turnover. According to this, from 1988 onwards the state sector held its leading place but from 1990 the dynamic development ended. This can be explained by the general recession, the loss of Eastern European markets and partly by the speed of privatization, for many major companies have been sold, the turnover of which appears among the economic organizations.

The turnover of the economic organizations has boomed from one year to the next. For example from 1988 to 1991 the turnover became twelve times larger.

The private enterprises are also growing with similar speed. In the examined period the turnover has exceeded three times its size. More and more private enterprises are being established in the economy. The private sector represents 27.8% of the economic organizations, co-operatives provide 11.7%, and entrepreneurs 7.3% of the county's share of the markets, which is 47% altogether, this figure reached in 1991, whereas in 1988 it was 20.8%. This indicates the private sector has won a main share of the market in the county and that the state sector is reducing in size, proving privatization is strong and dynamic at present.

Figure 10.3

*Share of economic organizations in Győr-Moson-Sopron county*

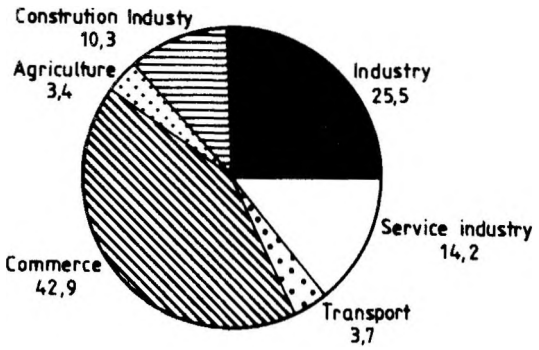
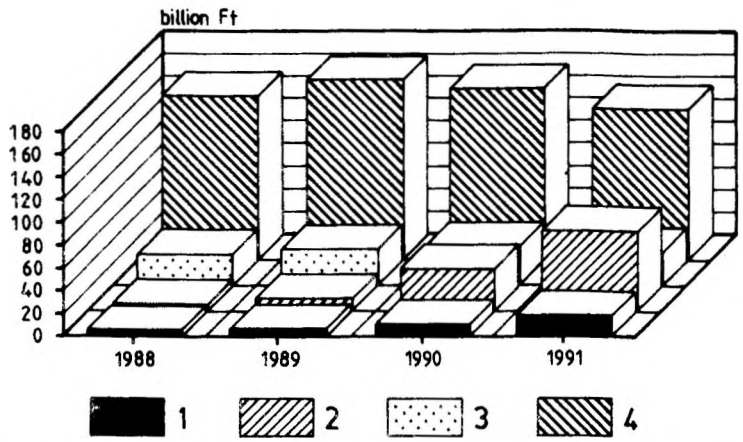



Figure 10.4

*Business turnover according to ownership forms in Győr-Moson-Sopron county*




*Key*: 1 = Private enterprises; 2 = Economic organizations; 3 = Co-operatives; 4 = State companies.

*Source*: Páli, 1992.

### *The presence of foreign capital*[2]

Joint ventures incorporating foreign capital have a leading role in the privatization of the economy.

Győr-Moson-Sopron County has a sophisticated place in the import of capital. After Budapest the largest number of organizations investing foreign capital are found here. In 1988 around 4.5–5%, by the end of 1989 6.3–9.3%, and by the end of 1990 12,6% of all joint ventures in Hungary were established in Győr-Moson-Sopron county. One out of eight foreign investors have opted to invest in this region. Today (end of 1992) this figure has changed to one out of ten.[3]

Austrian capital shows the largest interest towards the county (60.8% of all organizations), followed by German entrepreneurs (22.1%). Third is Switzerland (4.9%), Italy (1.8%) and Sweden (1.5%) are also represented. The remaining enterprises are shared by 21 countries.

It is important to state that 27.3% of all joint ventures are fully owned by foreigners, but these are mainly non capital-intensive units (joint stock companies: 82.4%) and only a small proportion is capital-intensive (limited companies 13.2%). The foundation capital of joint ventures is 14.7 billion forints, Hungarian shares representing 55.7%, the larger part of which is non-monetary assets.

The foreign capital coming into the country represents 42.3% of the foundation capital, which is the equivalent of 6.3 billion forints direct capital import. The diagram shows that the Austrians are the largest capital exporters, for 61.9% of all foreign capital arrives from there. Germany is ranked second with 23.6% and is third place we find The Netherlands at 7.3%, with few but concentrated investments. Although Italy and Sweden provide funds for a large proportion of enterprises their capital export together does not quite reach 0.4%. Another 29 countries contribute with an amount of 4.2% of capital.

As we can see, the county attracts much capital. Entrepreneurs from many countries seek investment opportunities here and pro-

[2] Sources for this chapter in Páll, 1992.

[3] "Wirtschafts Woche" (1992) compared the outstanding countries of the Eastern European region according to how they have received foreign capital. On their list Győr-Moson-Sopron county was placed first and won the title of "The Most Favorable Investment Region".

pose investments. Austrian and German participation with capital in the economy is and will remain significant.

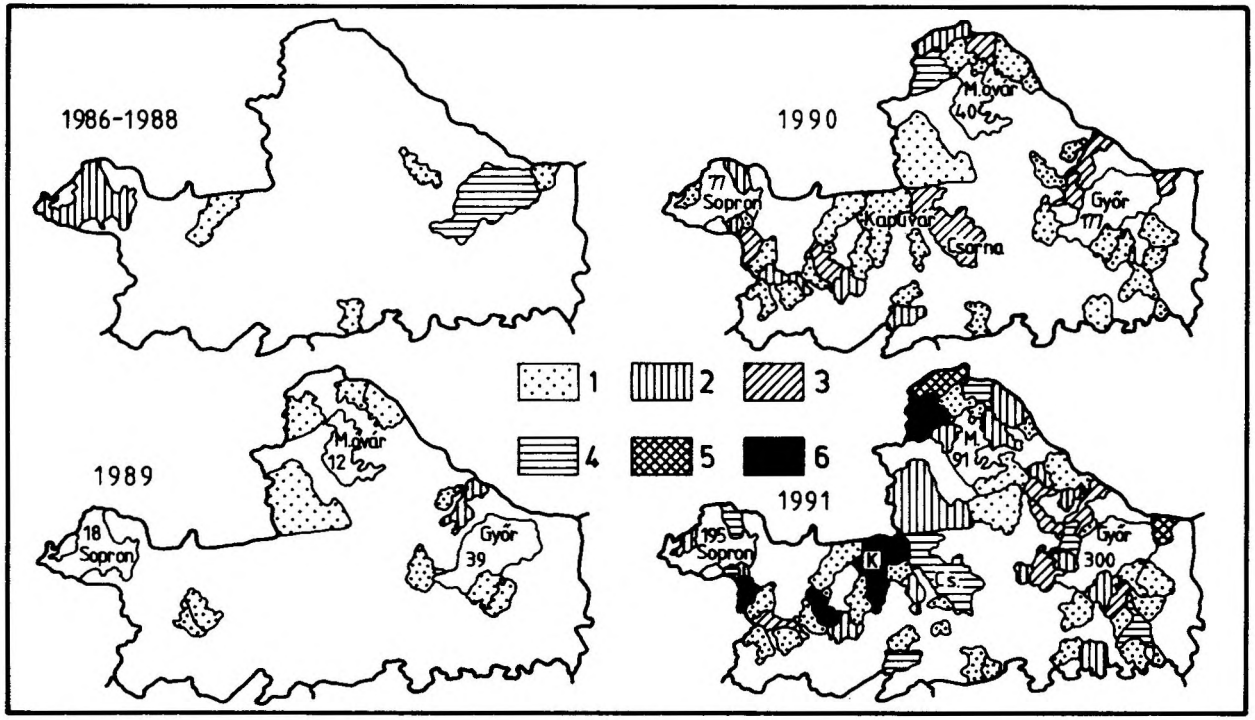
It is also important to take a look at which settlements the foreign investors prefer, since this would show the economy-active regions and the trend of renewal.

*Figure 10.5* shows the growth of joint ventures according to the distribution to towns and other settlements. We can also see which direction growth is following. 40.7% of all joint ventures are situated in Győr. According to the economic potential, Mosonmagyaróvár should be in second place, but here we find Sopron with 26.5% of all non capital-intensive enterprises, trade and services dominating due to cross-border cooperation. If we study the capital-intensive side, then Mosonmagyaróvár is in second place. In two small towns, Csorna and Kapuvár the presence of foreign capital is not significant, but in the rural areas around these towns foreign businesses have established premises (19.1%). The spatial flow shows the degree of economic activity. In rural areas joint ventures have first appeared along the Austrian-Hungarian border (Hegyeshalom, Rajka) and these have a spectacular path towards those settlements with adequate infrastructure, possibilities for suitable sites, good transport and communication links. Based on these facts, the Szigetköz, the M1 Motorway, and the agglomeration in the northern and southern zones of Győr have accumulated many joint-ventures in the region. The same can be said for the agglomerations of Sopron, especially Nagycenk and Fertőd. Finally, we must speak of which branches of industry joint-ventures prefer and in what proportion of turnover do these represent in the country. The main national trends can be found in the distribution of branches of industry. The ratio of industry and trade are dominant. In the county, corresponding to the structure of the economy, industrial enterprises show the highest figure. (In 1991 the national proportion was 26.8%, while in the county the figure was 30.7%.)

The distribution of the 26.8% between branches shows that the joint-ventures have been established in the machine industry, the light industry and in food-production. Enterprises with trade activities is high (1988. 34.1%, 1991. 39.0%) and services show a

Figure 10.5

*Spread of joint ventures in Győr-Moson-Sopron county, 1985–1991*




*Source:* Páll, 1992.
*Note*: 1–6 = Number of organizations.

dynamic rise (1988: 4.9%, 1991:14.8%). The construction/building industry has also grown (1988: 2.4%, 1991: 8.7%).

Joint ventures are producing a large proportion of the business turnover in the county. It is confirmed that while the returns of Hungarian enterprises has declined, the turnover of foreign joint ventures has risen in 1991. In this year the turnover of these joint ventures was 34 billion forints, which was 15% of the total economy turnover in the county.

The distribution of the total turnover was the following: industry 18.1%, construction industry 29.1%, agriculture 0.1%, transport 7.1%, trade 18.1%, and services 13.0%. Foreign capital is important for the economy of the county since this brings widening of the markets. This is not only due to competitiveness but also a result of market take-over and the strengthening of market positions. All this can only be achieved in an active county economy with extremely favourable production conditions (capital supply, relatively modern implements, qualified labour, developed market connections, etc.). Győr-Moson-Sopron county offers favorable conditions for companies and entrepreneurs.

### *Unemployment*

The restructuring of the Hungarian economy necessarily involves restriction of the previous full-employment or "over-employment". Unemployment is a new phenomenon, the what extent they are capable of adapting within the reformed market conditions. The geographical region of the east-west is the most effected with unemployment. From this we see that Győr-Moson-Sopron county is in a favourable situation. During the past two years the figures for unemployment are the lowest besides Budapest. The number of unemployed is just over 17,000, and represents an average of 7.6%. The future does not seem so pleasant, for the number of available jobs (456 registered in September, 1992) is only 2% of all openings nationwide and three-forths of these jobs are for blue-collar workers. Another characteristic of unemployment in Hungary is the high proportion of the unemployed male population. In Győr-Moson-Sopron county this is 38%, below the national average. A characteristic of the county is that since the population is better educated than the average, the number of unemployed intellectuals

exceeds the national average of 17%, this being 21% in the county. This fact must be supplemented by adding that this is only seen as the beginning of a process.

Six labour markets are found in the county, of 178 in the country. These provide service to many settlements, all in a more advantageous position. The six regions cover the 40 most favoured districts. The unemployment rate, based on the number of the active working population — with the exception of Beled labour district — shows a figure below 10%. This figure, Sopron included, was higher in the whole country by the end of 1992.

If we investigate the number of unemployed and the development of enterprises in the whole country it is evident that the country is much divided and there are great differences between microregions. We can further conclude, that the establishment of new enterprises and the jobs provided here are restricted to the cities. Győr-Moson-Sopron county can be counted among these. In Sopron and its district the activity of enterprises is significant, and unemployment low, while in the agricultural regions such as the Rábaköz, where enterprises only appear in small numbers, unemployment is around the average. In the region of Győr and Mosonmagyaróvár unemployment is registered at an average level, rather more reflecting the average of cities.

## County development policy — main objectives and mediums

Győr-Moson-Sopron county is one of the active and changing regions of Hungary, where the participants in the economy are distinctive and their effects are spectacular. This is due to many foreign enterprises and the high rate of capital investment in the county, and the dynamic spread of enterprises. Unemployment has reached the region, micro regional differences can be seen mainly in the agricultural areas where there are conflicts connected to unemployment, but the proportions and pace are below the national average. The economy adapts to changes and innovations, which are mediums of reform help progress and acceptance.

The county self-government recognizes that the activated economy must have the conditions which support the establishing of enterprises and that these conditions will help improve the lifestyle of the population. The county regional development policy enforces

the targets and provides aid to achieve them, even though they have only limited means. The local authorities, first of all, sponsor the underdeveloped infrastructure improvement programmes. The major objective being the improvement of the sewerage and draining system and the modernization of the telephone communication system. Besides financial aid, the local authorities also support the infrastructural cooperation between microregions, coordinate the plans for development, prepare proposals for national target projects and help to decide upon the most suitable technology and contractors.

On the second level, the self-government subsidizes the running of regional and county institutes, supplementing the state normatives where possible. Among these are some institutes that receive no state funds at all but their activities are essential for the county because of their activities or functions in certain areas, (e.g. the County Tourism Office, set up at the end of 1992). The county draws up funds for certain regional activities, movements and organizations. These funds concentrate around two themes. The first is the protection of human resources, which is widely sponsored. The local authorities wisely recognized that activating of human capital is a significant part of regional development. Human resources need to be renewed, their capability of movement extended. In this county the higher standard of education in the population, and the qualification of the labour force have always been a vehicle of development. This efficiency is acknowledged throughout Hungary. The educational and cultural institutes are versatile. All this is a base of economic development in the region. Therefore, human resources should be supported from the various funds available and they must be protected from the growing market effects.

The other objective is regional and settlement development, the protection of the environment and culture of settlements, rehabilitation, protection of the national heritage and the setting up of projects aimed at development and restructuring of various regions. The funds are only a supplement to the resources provided by the self-government but every year they help numerous local projects to be achieved. Here we must also mention that the County Town Assembly of Győr, together with the self-governments of other settlements and economic organizations have founded the Kisalföld Enterprise Development Fund in 1992. This fund has a microregion network — supporting the PHARE Programme — and aims to

support small and medium enterprises that can be integrated into regional development. The Fund provides counseling for the enterprises, helps with information and organizes connections. The Fund is in the process of working out its business plan and concepts, setting up the organizational structure. The Fund will be an important cornerstone in the organizing of the economy in the county, the spread of enterprises and in the managing of revival in microregion development programmes.

The county self-government has widespread international relationships, ranging from the many years of cooperation with neighbouring countries to membership in the Alps–Adria Working Community, the Danube Regional Community and the Assembly of European Regions. It is an active member of these organizations. The self-government of the county helps organize and supports international relation of settlements and enterprises.

It is essential in the present situation to work out medium and long distance regional development plans for the county. These plans should outline the paths of progress up until the end of the century. The concept must outline the main development courses for the microregions of the county, the mediums and institutes needed to revive the county as a whole and its settlements as sections.

In the coming period the self-government system in Hungary, including the county governments will be revised and revaluated in connection to its standing and legal rights.

In some regional functions the coordinative relations should be reconsidered regarding the settlement and county self-governments, while in other matters decentralization is the objective in regional development to provide the county with more mediums and resources on their own level. The new Regional Development Act, now under legislation, must define the county local authorities as those responsible for regional development. The new act will provide the legal and institutional background. This must go through if European regionalism, as an important step towards integration, is not considered as an unfounded illusion.

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# 11 CHALLENGES TO REGIONAL POLICY IN A UNITED EUROPE: BADEN-WÜRTTEMBERG IN THE 1990s

ROLF H. FUNCK—JAN S. KOWALSKI

## Introduction

The traditional status of Baden-Württemberg as rather centrally positioned location for the manufacturing and service industries in Germany has been seriously affected by the unification of Germany on October 3, 1990, and will have to be redefined for the period after the establishment of the Single European Market on January 1, 1993, and the upcoming opening of economic links with Eastern European countries.

In this paper we address the main issues facing the region and try to at least sketch the possible policy responses which are considered by the state and local authorities to meet the challenges posed by the changed development framework. After a brief presentation of the main geographical, demographical, economic and political facets of the region we shall characterise the social-economic philosophy underlying the policy of the state government in the past ten decades. The design and functioning of the most important elements of this policy, namely programmes for support of R&D, technology transfer and the establishment of new enterprises are then presented. A discussion of the necessary changes in these policies in view of the new developments in Europe completes the paper.

## The State of Baden Württemberg since 1952

The Sate of Baden-Württemberg was created in 1952 through unification of the earlier existing States of Baden, Württemberg-Baden and Württemberg-Hohenzollern. The capital is Stuttgart. With 35,751 km$^2$ and with about 9.5 million inhabitants Baden-Württemberg is the third largest Federal State of Germany, both with respect to area and to population. The population density of the state is above the German average as is its share of the foreign population (*Tables 11.1 and 11.2*).

### *Economic development*

During the last decade the State of Baden-Württemberg recorded, alongside Bavaria, the highest growth rates of economic indicators among the West German states. The economic structure of the state, its production and employment, are above average, dominated by manufacturing (more than 47% of employment as compared to the Federal average of 40% in 1989). Sectorally, branches that are of special significance for the Baden-Württemberg economy include machinery, electrotechnical products and car-production as well as activities related to vehicle production by forward and backward linkages (*Tables 11.3 and 11.4*).

Small and medium enterprises traditionally formed the backbone of the industrial structure of the state. In the last decade structural changes have taken place which led to the increased significance of high-technology firms and innovation-rich activities, based mostly on microelectronics and telecommunications techniques. This technology and innovation "bias" has also been emphasized in economic policy programs on the macro level in the state and in programs for support of enterprises and promotion of the establishment of new enterprises. The overall share of manufacturing in employment and creation of social products stagnated in the last decade, whereas that of the service activities sector increased. Nevertheless the share of employment in services remains under the level commonly associated with "post-industrial" societies. Also, despite the increase of the share of other activities in manufacturing, the state economy is too dependent on the automotive industry.

Table 11.1

*Baden-Württemberg in the context of a unified Germany, 1989*

| States | Surface area | | Population | | |
|---|---|---|---|---|---|
| | $km^2$ | per cent | '000 | per cent | per $km^2$ |
| FRG | 356,957 | 100.0 | 79,113 | 100.0 | 222 |
| Baden-Württemberg | 35,751 | 10.1 | 9,619 | 12.2 | 269 |
| Bayern | 70,554 | 19.8 | 11,221 | 14.2 | 159 |
| Berlin | 883 | 0.2 | 3,410 | 4.3 | 3,862 |
| Brandenburg | 29,060 | 8.1 | 2,641 | 3.3 | 91 |
| Bremen | 404 | 0.1 | 674 | 0.9 | 1,668 |
| Hamburg | 755 | 0.2 | 1,626 | 2.1 | 2,154 |
| Hessen | 21,114 | 5.9 | 5,661 | 7.2 | 268 |
| Mecklenburg-Vorpommern | 23,835 | 6.7 | 1,964 | 2.5 | 82 |
| Niedersachsen | 47,349 | 13.3 | 7,238 | 9.2 | 153 |
| Nordrhein-Westfalen | 34,068 | 9.5 | 17,104 | 21.6 | 502 |
| Rheinland-Pfalz | 19,849 | 5.6 | 3,702 | 4.7 | 186 |
| Saarland | 2,570 | 0.7 | 1,065 | 1.3 | 414 |
| Sachsen | 18,338 | 5.1 | 4,901 | 6.2 | 267 |
| Sachsen-Anhalt | 20,444 | 5.7 | 2,965 | 3.7 | 145 |
| Schleswig-Holstein | 15,730 | 4.4 | 2,595 | 3.3 | 165 |
| Thüringen | 16,251 | 4.6 | 2,684 | 3.4 | 165 |
| "Old" FRG | 248,144 | 69.7 | 62,636 | 79.2 | 252 |
| "Old" GDR | 107,928 | 30.3 | 16,434 | 20.8 | 152 |

*Source*: Statistisches Jahrbuch für die BRD 1991.

Table 11.2

*Large cities in Baden-Württemberg, 1980–1989*

| Cities | Population | |
|---|---|---|
| | 1980 | 1989 |
| Freiburg | 174,121 | 183,979 |
| Heidelberg | 128,773 | 131,429 |
| Heilbronn | 111,426 | 112,279 |
| Karlsruhe | 271,417 | 265,100 |
| Mannheim | 303,247 | 300,468 |
| Pforzheim | 106,677 | 108,887 |
| Stuttgart | 581,989 | 562,658 |
| Ulm | 99,560 | 106,508 |

*Source:* Statistisches Jahrbuch Deutscher Gemeinden. 1980, 1989.

Table 11.3

*Employment in economic sectors in Baden-Württemberg, 1986–1988, '000*

| Sectors | 1986 | 1988 |
|---|---|---|
| Agriculture and forestry | 201,9 | 184,6 |
| Manufacturing | 1969,9 | 2112,9 |
| Trade and transportation | 700,9 | 655,2 |
| Other economic activities | 1463,6 | 1462,2 |

*Source*: Statistisches Taschenbuch. 1988, 1989.

Table 11.4

*Gross value-added in Baden-Württemberg by sectors, 1980–1990*

| Sectors | 1980 | | 1985 | | 1990 | |
|---|---|---|---|---|---|---|
| | Million DM | Per cent | Million DM | Per cent | Million DM | Per cent |
| Agriculture, forestry and fishery | 4,114 | 1.8 | 4,236 | 1.5 | 6,250 | 1.6 |
| Manufacturing | 115,712 | 51.8 | 137,995 | 48.7 | 178,293 | 47.0 |
| Trade and transportation | 28,956 | 13.0 | 36,934 | 13.0 | 48,470 | 12.8 |
| Services | 47,344 | 21.2 | 70,633 | 24.9 | 104,580 | 27.6 |
| Public sector, private house-holds | 27,361 | 12.2 | 33,693 | 11.9 | 41,713 | 11.0 |
| Total | 223,487 | 100.0 | 283,491 | 100.0 | 379,306 | 100.0 |

*Source:* Statistisches Taschenbuch. 1990, 1991.

Baden-Württemberg recorded the lowest unemployment levels of all the German states (4.1% as compared with 7.2% for the "old" FRG in 1990) and above average GDP per capita levels. It belongs to the export-intensive areas of Germany, and is also connected to the European and world economy via considerable capital flows.

Recently certain strains in the state economy became visible due to the overall slow-down of growth in the German and in the European economy. The strong specialisation of the regional economy in machinery building, especially in car manufacturing, aggravates the crisis. The latest available statistics for 1992 show an unemployment level of about 6%. However, for reasons which will be elaborated below, it can be expected that the high flexibility of the regional economy will help to overcome these structural strains in the medium to long-term perspective.

### *The geographic, social and political setting*

Baden-Württemberg occupies the south-western part of Germany. To the south it shares a border with Switzerland, a large part of it following the natural divides of Lake Constance (Bodensee) and the Rhine River. The western fringe of the state, which also follows the

Rhine, separates the state from the French province of Alsace and from the Federal State of Rhine-Palatinate. To the north the neighbour of the State of Baden-Württemberg is the State of Hesse and the eastern border separates it from the Free State of Bavaria. The distance from the state capital, Stuttgart, to Amsterdam is 650 km, to Stockholm 1,530 km, to Rome 1,060 km, to Vienna 615 km.

The state is covered by a well developed network of motorways, roads and railways, and it is also easy accessible by air. Research and educational facilities are among the best in the world, providing for a technologically stimulating environment and a diversified labour market.

Politically and socially Baden-Württemberg can be described as a stable and moderately conservative society. Till the last state elections in April 1992 the Christian-Democratic Party held an absolute majority in the State Parliament (Landtag) in the last decade. Since the foundation of the State of Baden-Württemberg in 1953 all the Prime Ministers of the state belonged to this party.

The Free Democratic Party recorded election results above the West German average, the Social Democratic Party below. The Green Party also recorded increasing support within the last decade, up to the end of the 1980s, when it started to lose votes throughout the whole Federal Republic of Germany.

The last elections resulted in the loss of the absolute majority by the Christian Democratic Party, which was forced to enter a coalition with the Social Democrats. A disquieting new phenomenon is the increasing support for the rightist Republican Party, which was able to enter the state parliament for the first time after an electoral campaign focusing on the issues connected with the inflow of foreign refugees and immigrants of German ethnic origin from Eastern Europe.

The overall political and social attitudes toward business, be it local, national or foreign, are predominantly positive. The reigning philosophy with respect to the economic system and economic policy, while being basically market-oriented, recognizes the essential role of the state institutions and legislation in supporting and channelling structural and technological change and in provision of a framework ensuring effective competition.

*Economic philosophy and strategy in Baden-Württemberg*

An important factor in the economic development of the state was the *long-term strategy of structural adjustments* and support policy conducted by the state government. This policy emphasized research, support of industrial innovations and implementation of technological change. Networks of innovation advisory centres, technology information centres, high-technology firm "incubators" and support for the establishment of new high-technology enterprises all formed elements of the economic development strategies of the state government.

The basic underlying philosophy relied strongly on free market economy concepts, integrating into these concepts the necessity of provision by the state of the legislative framework and control, eliminating some of the excesses and weaknesses of the pure laisse-faire market system. The precepts of this approach are rooted in the concepts of the socially responsible market economy connected, among other, with the names of *Walter Eucken* and *Ludwig Erhard* , who left a strong imprint on the overall organization of the West German economy after World War II. The Baden-Württemberg "speciality" in the last few decades was an emphasis on the active role of the state government in the establishment of foreign economic contacts relevant for industry, as well as its propulsive efforts aimed at implementing structural economic change. The media sometimes labeled this approach "*neo-mercantilistic*" (*Funck — Kowalski*, 1993).

The main declared aim of the economic strategy of Baden-Württemberg is to help the state economy in the implementation of the necessary adjustments, by introduction and application of new technologies, by solving environmental challenges posed by economic growth, and to help create new work places and secure existing ones. The role of favourable conditions for private investment is emphasised within this context.

The state government recognizes that the structural policy and support measures can only play a supplementary role. The market forces should decide about the quantitative and qualitative levels and structures of the regional product. The state provides only a certain framework for the interplay of these market forces and tries to eliminate obvious cases of market failures as well as deviations moving the economic system away from the competitive framework.

The concrete fields of action by the Baden-Württemberg government concentrate on the problems of:

- structural and ethnological change,
- support and help by problem solving in small and medium firms,
- measures to support certain lagging areas.

The main directions of support to enterprises in Baden-Württemberg are as follows (*Funck—Kowalski—Zienkowski*, 1993):

- establishment of new enterprises and strengthening of the existing ones,
- amelioration of the competitiveness of the enterprises,
- support for firms in certain problem areas, i.e regional support, especially in the field of infrastructure facilities,
- research and development, implementation of technological change,
- support of environment protection measures,
- support of energy-saving measures,
- support of investment projects in the area of the former German Democratic Republic, particularly with respect to the State of Sachsen, where a contact office of the State of Baden-Württemberg run by the Society for International Economic Cooperation has been opened,
- support for export-oriented projects,
- support for management consulting,
- special programmes for refugees of German origin immigrating from abroad, for creation of new workplaces, for creation of apprenticeship places, support of projects in the developing countries,
- support of activities in the tourist sector.

In most of the above enumerated support programmes the fostering of small and medium enterprises is specially emphasized, giving this type of enterprise as a rule an easier access to the funds distributed by these programmes.

The support is in most programmes assigned in the form of low-interest loans or grants for a part of the project costs and in the form of state guarantees for credits taken by enterprises. Also technical

assistance or help in accounting, marketing, or in general on the business side of the enterprise may be provided.

For example someone wishing to establish a high-technology (e.g. micro-electronics) enterprise in Baden-Württemberg has the possibility to obtain a 1 million DM low interest loan, apart from that certain percentages of costs for modern machinery, development of new products and processes and hiring of research and development personnel can be claimed through various programmes. Also, it may be possible to obtain business premises in one of the numerous technology centers or technology plants established in the major urban centers of the state. As a rule it is also possible to obtain state guarantees for additional credits and purchases necessary for the functioning of the enterprise, as well as low cost or free advice and information on technology and potential cooperation partners.

The general principles which should be observed when applying for support programmes in Baden-Württemberg can be summarized as follows:

1) The project in question (new establishment, investment into new machines, or hiring of research personnel, etc. should not be started before the application has been made;
2) The financing of the whole project should be assured. As a rule the programmes provide only partial financing. The applicant should be able to document the sources for financing of the rest of the project;
3) As a rule it is expected that the applicant covers, a certain not exactly specified part of the project from his own capital;
4) In the case of loans, the loan-application forms should be presented to the organisations responsible for various programmes through the home bank of the applicant;
5) The applicant is obliged to use the public funds that he received for the purpose to which they have been assigned, and he must be able to document it;
6) There is no legal obligation on the part of various institutions responsible for the administration of the support programmes to provide funds to the applicant;
7) The project must as a rule be implemented in Baden-Württemberg (exception: programme for support of investment in Sachsen and for the support of research and development);

8) As a rule the rate of interest remains constant for the duration of the loan;
9) Subsidies can be either taxed as revenues or deducted from the write-off basis (Abschreibungsbemessungsgrundlage).

The total number and scope of all available programmes for enterprises and establishment of new enterprises in Baden-Württemberg is a large one; there is some overlap and some possibility of taking advantage of several programmes simultaneously.

The main institutions responsible for assignment of money, coordination and evaluation of the programmes on the central level of Baden-Württemberg are:

a) The Office of the Government Representative for Technology Transfer (Regierungsbeauftragter für Technologietransfer Baden-Württemberg). He is co-responsible for the decisions of the state government, which affect applied research, technology transfer and innovative ability of medium enterprises;
b) The Steinbeis Foundation for Economic Promotion (Steinbeis Stiftung für Wirtschaftsförderung) of which the Government Representative for Technology Transfer is a President, charged with the task of assisting the medium and smaller enterprises with technology problems and to help them in development of concrete technological solutions. Both of these institutions are located in the so-called "House of Business"(Haus der Wirtschaft) in central Stuttgart, where many other institutions connected with economic promotion in Baden-Württemberg are also situated;
c) The Baden-Württemberg Branch of the Board for the Rationalisation of the German Economy (Landesgruppe Baden-Württemberg des Rationalisierungskuratoriums der Deutschen Wirtschaft e.V.).

The activities of these bodies focus on the promotion of the practice relevant directly applicable research projects from the research institutions (universities or professional colleges) to the enterprises, especially to the medium and smaller ones. The overall approach is very "business oriented". For example, the interested enterprises can apply to the Steinbeis Foundation with concrete issues and technical problems to be solved with respect to their products or production processes. The Foundation will then look for a relevant research institute, in most cases connected with the professional college, organize a scientific project to help the enterprise and finance it, at least in

part. An additional effect of such projects is often the transfer of the scientific personnel, especially of younger researchers without university tenure, from their institutes to the enterprises after or during completion of the projects. The university staff are attracted to these projects not only by the prospect of research funds, but also because it is possible to reduce the teaching load somewhat, during the project completion.

Apart from these central institutions a network of technology and innovation advisory centres, research institutions with technology transfer units, and technology parks supplements the technology technology, development and transfer system of the state.

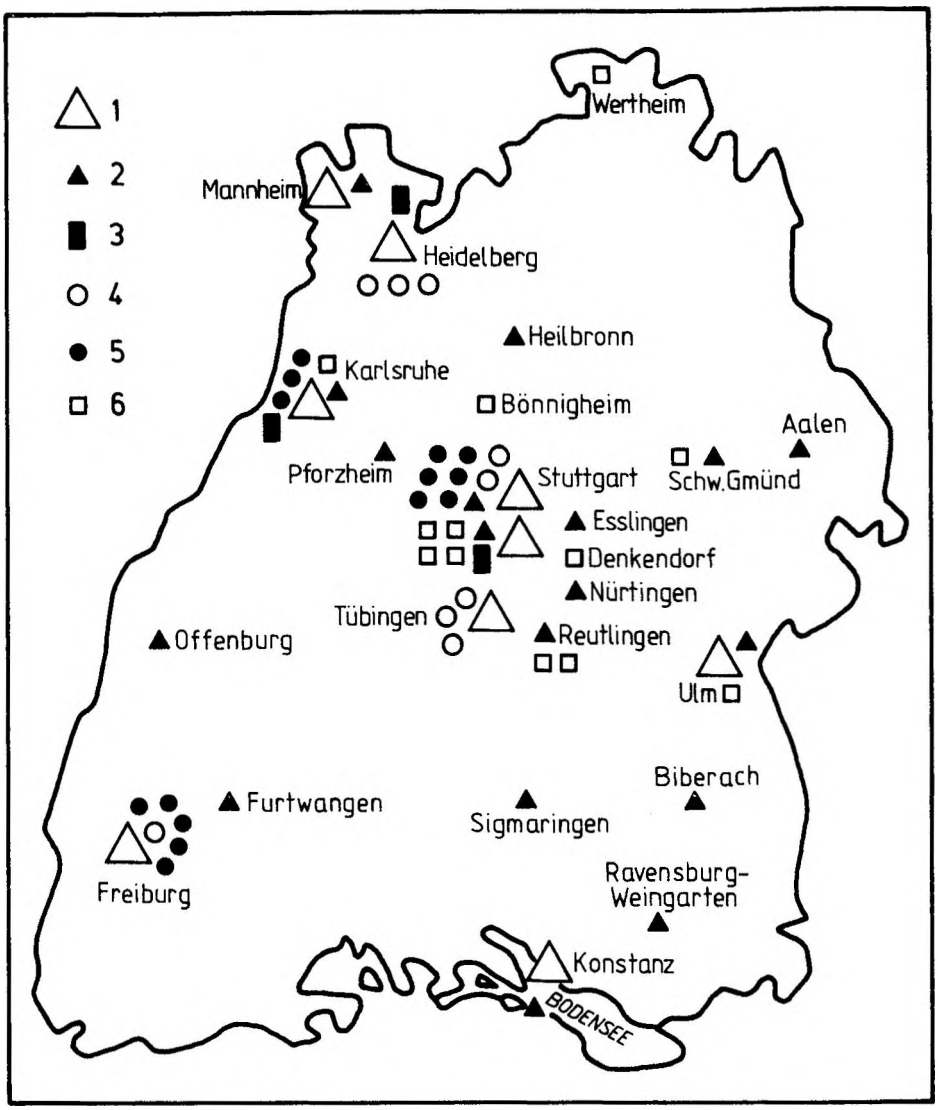
Innovation advisory units are attached to many of the local Chambers of Industry and Commerce. Also the Handicraft Chambers (Handwerkskammer) in many cities run innovation advising units. Eleven institutes belonging to the Fraunhofer Society and some of the technically-oriented universities established technology transfer centres aimed at facilitating the flow of technological innovation from research to enterprises or to promote the establishment of new enterprises by the university staff. Finally, presently ten technology centres or parks in mostly larger cities provide not only business premises for technology-oriented enterprises, but also advisory activities, especially in the field of support programs, accounting, marketing, etc. (*Figure 11.1*).

## Baden-Württemberg in the new Europe

The economically strongest regions of the state, situated along the Rhine and Neckar rivers, have, for decades, formed a major part of the European "Blue Banana", the economic stronghold extending from metropolitan London (on the river Thames) through the Randstadt Holland with Amsterdam and Rotterdam on the mouth of the river Rhine, along the Rhine valley to Basle, and across the Swiss Alpine lake areas to Milan and Torino in the Po valley. The high income levels of these areas are, among other structural determinants, based on the accessibility potential of their locations, that is, the number of residents (or the amounts of localised demand) accessible within a given time span — say of four hours — by public or private means of transportation. With the unification of Germany, the pole of maximum accessibility has moved to the north and east — from

Figure 11.1

*Research infrastructure in Germany*




*Key*: 1 = Universities; 2 = Professional colleges; 3 = Large research centres; 4 = Max-Planck institutes; 5 = Institutes and facilities of the Fraunhofer-Gesellschaft; 6 = Special public facilites for applied research.

somewhere between Mannheim and Frankfurt to somewhere in northern Hesse, north of Kassel. And this centre of gravitation will, in the future, move further to the east in the medium to long run, probably close to Berlin, as the traffic and communication links between eastern and western Germany, and to Poland, Czechoslovakia, and the CIS republics, will be completed or improved: the "Blue Banana" will blow up into a Blue-Green "Half Moon".

Currently in Germany, unification has brought forward new perspectives for social an economic development. The evolving of new opportunities in the eastern states complemented by expectations of increased perspectives for economic growth in those parts of the West that are closest to the new states: Schleswig-Holstein, Lower Saxony, Hesse and Bavaria. Baden-Württemberg, however, is among those old states where fears of having been moved to a new periphery in Germany are experienced. This fear is based not only on the changes in economic distance as mentioned, but also on the fact that Baden-Württemberg:

a) does not participate in any degree worth mentioning in the transport project "German Unity" (Verkehrsprojekte Deutsche Einheit), a 5 year, 59 billion DM programme set out for the financing of massive infrastructure investments intended to remove the bottlenecks in the major transport corridors linking the major centers of economic activity in east and west Germany;
b) is not an area where the "Acceleration Bill" (Beschleunigungsgesetz) will apply, if it is passed in its current version, that is, as a set of regulations intended to reduce the planning period for public investments, in particular in the field of transport and communications infrastructure in the new states and for the project "German Unity" from an average of more than ten years, as is usual in the old states, to an average of less than five years;
c) lost the status of eligibility for inclusion of some of her back ward or formerly peripheral regions under the Bund-Lands programme "Improvement of Regional Economic Structure" (Gemeinschaftsaufgabe Verbesserung der regionalen Wirtschaftsstruktur), since after German unity only regions within the new states are eligible for federal co-financing under this programme;

d) as one of the two high-income states (together with Bavaria) has to contribute heavily in the fiscal redistribution between states (horizontaler Finanzausgleich) in order to alleviate the fiscal per capita burden in some of the less taxable states (e. g., Saarland, Schleswig-Holstein), and in the new states, in particular under the auspices of the "German Unity Fund" (Fonds Deutsche Einheit).

These changes in the fiscal position of the State of Baden-Württemberg, in addition, reduce her capacity for the financing of new investments, and investment contributions to municipalities, in all fields of public activity — transport infrastructure on the state level, public transit, research, education, health, culture, etc. —, a situation which is particularly painfully felt under the coalition agreement of the new state government of 1992. Under this agreement, the state government has announced a levy of an additional annual DM 200 million on municipalities as their annual contribution to the financing of German unity.

It would, however, be one-sided to restrict the future view for Baden-Württemberg to its position within Germany. If we extend the view to Europe as a whole, considering Baden-Württemberg as part of the periphery would be totally wrong. On the contrary: this state contains important nodal points of central European North-South and East-West axes. As a result of the processes of European political and economic integration the East-West connections to France, Spain and Portugal, and to Poland, Hungary, and the CSFR will increase in importance.

*Paolo Cecchini*, in his 1988 Report to the Commission of the European Community, has estimated the growth potential of European economies, as a result of the creation of the European Single Market, at 4.5 to 7.5% of GNP; the so-called *Baldwin* Report provides an even higher estimation of the potential advantages of the completion of European integration. The opening of East-West connections might very well increase these expectations, assuming that the economic and political disturbances related to the transformation processes in Eastern Europe can be controlled. In these developments, Baden-Württemberg can assume a leading role.

Basically this expectation is due to the well established fact that the removal of barriers to the movement of goods and production factors is beneficial to all parties involved, and that regional disadvantages are of fractional importance only, if social and economic

flexibility is sufficient to allow swift structural adaptation to the new situation. For the State of Baden-Württemberg which is among the technologically and economically leading regions in Europe, this transformation should not pose difficult problems. Recent studies on the future regional development in Europe consequently count two regions on the borderline between Baden-Württemberg and the Alsace, the Karlsruhe and the Kehl–Strasbourg regions, among the major winners of the economic change in Europe.

One condition necessary for that result to occur is, however, a continued and environmentally acceptable expansion and improvement of the European transport and communication networks which provide for the areas in question, the capacity to manage the highly increased mobility of passenger, goods and information flows. Producer services — consulting, management planning, marketing, financial services, research and development, etc. — implicate a high degree of interpersonal information exchange (*Funck — Kowalski*, 1984, *Kowalski*, 1982). Although the rapid improvement in telecommunication provides efficient information links, personal face-to-face contacts are still highly important in these fields of activity. In a state like Baden-Württemberg, where leadership in technology development and export of producer services are of major importance for future growth, easy access to high-speed transportation networks is of vital importance.

Of particular interest for Baden-Württemberg are the following projects:

- the high-speed rail (TGV–ICE) connection from Paris via Strasbourg–Karlsruhe to Stuttgart and Munich and via Sarrebruck–Mannheim and again to Stuttgart and Frankfurt,
- a high-speed rail (ICE) connection from Stuttgart to Nuremberg with continuing links to Prague, Leipzig–Dresden and Berlin,
- improvements for high-speed rail use of the Rhine valley railway line south of Karlsruhe to Basle and, using the future NEAT base tunnel across the Gotthard, to Milan, and
- a high-speed rail connection between Stuttgart and Ulm and the Lake Constance area to be connected with the future NEAT base tunnel Chur to Gotthard, the so-called Y-project.

Baden-Württemberg has one international airport, Stuttgart. Here, unused capacity in the range of 30% is still available; in addition, take off and landing facilities are currently extended for reasons

of traffic safety, and new passenger terminal has been put into operation as of 1991. For locations around Lake Constance, the Friedrichshafen regional airport, and Zürich International provide attractive air connections. For most cities in the upper Rhine valley, the international airports of Frankfurt, Strasbourg and Basle Mulhouse are interesting alternatives to Stuttgart airport. For Karlsruhe, e.g., Stuttgart, Frankfurt, and Strasbourg are all in the same time distance of about one hour and a quarter. Given this fact, the current discussions on the question of whether the former Canadian military airfields in Söllingen or Lahr — both located between Karlsruhe and Freiburg in the Rhine valley — can be transformed for civilian use, loses much of its importance.

As long as the present frame conditions for production of transport services remain unchanged — in particular with regard to the presently non-existent internalization of external environmental damage caused by automobile exhaust through an appropriate increase in automobile or gasoline taxes, and of traffic congestion costs through a system of differentiated road pricing — additional investment in the highway network is also necessary. Recent forecasts, based on the assumption that frame conditions will remain constant, predict an increase of 40% in passenger traffic on highways until the year 2010, and of more than 100% in road hauling. Improvements in road management alone will not be sufficient to effectively deal with such developments.

The main focus of road investment policy is the highly congested Autobahn connections between Strasbourg, Karlsruhe, Stuttgart and Munich, and between Mannheim, Heilbronn and Stuttgart. In addition, there is of course a large number of highway links, by-pass roads, and other necessary improvements of the network in the planning stage or under consideration for future realization. it might be damaging to the economic expectations of the state if these investments were to be delayed for too long for reasons related to the deviation of investment funds to the new states, as mentioned above. In fact, the state government is currently discussing the possibility of introducing into the state legislature an Acceleration Bill with features similar to those of the federal bill mentioned earlier.

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# 12 TERMS OF AN ALPINE-ADRIATIC TECHNOLOGICAL POLICY

KLAUS ZERBS

The goals of the Alps-Adria Working Community have been formulated rather loosely . The member countries laid down in their "Joint Declaration" that the task of the Community lies in "dealing with and coordinating matters of interest to its members jointly, informatively, and professionally." Among the points that are to be "particularly dealt with", there are also "contacts to scientific institutions." Federal government representatives stressed in the Millstatt Declaration of June 4, 1988, that Alps-Adria "regional cooperation on economic, scientific, cultural, and other levels exhibits a significant contribution to strengthening mutual trust and understanding and promoting cooperation and friendship among peoples".

## Formulating goals: a necessity

Economically usable research results, new technologies, technological training and continuing education are amongst the most important development and growth factors in the economy. Technological policy is therefore considered to be one of the central areas of economic policy. The Alps-Adria Working Community is confronted with the basic question of whether technological policy extending beyond coordination, contact and regional cooperation is politically desirable.

Developing a technological policy in the Alps–Adria Working Community has thus far proceeded without inhibition. In its

chairmanship of the association, Upper Austria even promoted technological policy organisationally and financially. One should not always interpret technological policy as a bundle of central measures. Even a "bottom-up" approach, such as in EUREKA, may serve to attain technological policy goals. This method alone is currently feasible for the association.

A further fundamental question concerns whether a consistent technological policy can be efficiently carried out in a community of economically and infrastructurally diverse regions such as those in the Alpine-Adriatic area (*Horváth*, 1992). The community has always played a bridging function; it would be surprising if this inherent function, particularly in the area of technological policy, were not exercised. Even the EC, the European model for consistent technological policy, cannot base its policy on similar levels of member country development.

Moreover, the Alps–Adria Working Committee for Scientific and Technological Cooperation has experienced that the member regions have either expressed their desire for a common technological policy or at least participated in it. One should not underestimate the well-developed scientific infrastructure available in all member countries, therefore providing a sound platform for technological policy.

It can thus be firmly stated that technolgogical policy in the Alps–Adria Working Community is essential and indeed possible, if the commitment to cooperation is taken seriously. It would be of great help to the actors in this field if the leading organs of the community were to formulate Alpine-Adriatic technological policy goals in more detail and with more obligations.

## Available potential

The complexities of technological policy still lead to difficulties in practice. Even the technological policy carried out by the EC is not considered to suffice entirely. Under no circumstances can a technological policy be conducted in isolation. It demands that complementary measures be taken under the framework of an efficient infrastructure, for example in financing, consulting, legal advice, and quality policy.

The chambers of commerce in most European countries, for instance, have been assuming or at least organizing most of the

above-mentioned functions for some time now. The obvious move for the Alpine-Adriatic region in conducting its technological policy would be to utilize this potential. There are annual meetings of chamber of commerce presidents, and a working group for technology under the direction of the Chamber of Commerce Association of Friuli-Venezia Giulia. The support provided for the Alps–Adria Working Committee for Scientific and Technological Cooperation, e.g., by the Carinthian, Lombardy, Stryian, and Upper Austrian Chambers of Commerce, is yet a further indication of such activities in the Alpine-Adriatic technological field.

Measured by the superb capacity of the chambers of commerce, their level of participation has, to say the least, been meager. No clear goals have been set here, either. Strengthened support of the Alpine-Adriatic technological policy by the chambers of commerce is urgently desired and needed. This would mean that a particular effort be taken on organisational, personnel, and financial levels.

## Methodological questions

The methods of technological policy are anything else but well-seasoned. A prerequisite of success in this field is to strengthen demand-oriented policy. The business community bases its actions on use and problem-oriented strategies. It always expects a solution to current problems; supply-oriented technology transfer finds no resonance with it (*Blumberger–Kaak*, 1992).

Thus, one of the major still unfulfilled tasks of technological policy is to integrate companies. The Working Committee for Scientific and Technological Cooperation has recently made some progress in this respect, namely by publishing a product- and company-oriented bulletin, "$A^2$ – Science and Technology in the Alpine–Adriatic Region", as well as sponsoring several events especially for small and medium-sized companies. Company-oriented technological policy in the Alpine–Adriatic region still leaves room, however, for considerable improvement.

A second methodological problem of technology transfer lies in the misconception of its essence. Technology transfer is absolutely not a linear process, such as from a research institute to a neighbouring science park. Innovations usually surface out of a combination of several disciplines (*Aubert*, 1992). Besides, there is an

indisputable need for tecnology transfer to be continually internationalized. Only institutionally, professionally, and multi-regionally networked centre can provide an appropriate infra-structure for technology transfer. All recent recommendations in this field have been in line with this methodological approach (*van Dierdonck–Dabackere* et al., 1992).

The Alpine-Adriatic technological policy should align itself with these principles. If the member regions of the association intend to conduct an effective common technological policy, access to net-worked centers will be mandatory. This will not necessitate expensive organisational ventures. There have been several rep-resentatives of international institutions explicitly active in technology transfer sent to the Working Committee for Scientific and Technological Cooperation, e.g., from Technova Graz, the International Centre for Theoretical Physics, (ICTP), Trieste, and Istituto per la Ricera Scientifica e Technologica (IRST), Trento. ICTP director, Prof. *Abdus Salam*, has formally mandated the ICTO's support for an Alpine-Adriatic center for worldwide research contacts (*Salam*, 1992). If one includes the infrastructure of the chambers of commerce, then the Association will be able to fall back on numerous productive centres.

## Agenda and management

When in agreement on the principles and methods of Alpine-Adriatic technological policy, one is still faced with the task of conducting down-to-earth technology mangement. The Working Committee for Scientific and Technological Cooperation has also gathered experience in this field. It profited greatly from founding five expert groups encompassing remote sensing, solar energy, quality policy, cooperation between technology centers, and im-munology. These groups have worked intensively, and achieved concrete results. If one adds the publication of "$A^2$", one sees that the Working Committee brought forth six focal points of activity in 1991 and 1992. This can serve as a model for future Alpine–Adriatic technological policy.

In practical matters there have often been complaints about the lack of funds for Alpine–Adriatic research projects. Though in some cases the Working Committee did utilize funding opportunities from

the member regions and the EC, there were frequent difficulties in persuading internationally reputable researchers to cooperate with very little hope for Alpine–Adriatic funding. The technology scene in the Alpine–Adriatic region would encounter a significant upswing if funds were appropriated for cooperative research. This also would be of great value for cooperating with the EC.

Finally, an extended Alpine–Adriatic technological policy warrants professional management. It is not constructive to add a burden to fulltime employees somewhere else. Even if the present centres can provide assistance, it will still be necessary to facilitate a coordinating Alpine–Adriatic technology bureau incorporating fulltime management, adequate investments in an information system, and a sufficient budget for utility costs. This bureau would be able to establish a network of contact persons in the Alpine–Adriatic region, as well as provide representation to the EC.

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# 13 REGIONAL AND LOCATIONAL MARKETING: A NEW CONCEPT IN REGIONAL STRUCTURAL POLICY

JÖRG MAIER–WOLFGANG WEBER

## General introduction

### *A new concept?*

What lies behind the campaign launched by the city of Hamburg, which for the past 4 years has been running an advertising campaign under the title "Unternehmen Hamburg"? Or that launched by the former olympic village Garmisch-Partenkirchen with its general tourism policy, aimed at putting together a new overall development strategy; or the administrative district of Kronach and its expansive marketing strategy of holding exhibitions in Hamburg and Prague; or Kronach's initiative group "Cranach-Club" or the Kassel area with its "Pro Nordhessen" campaign, aimed at producing a common economic, administrative and planning policy for the area?

The cuts in public funds for cities and local authorities, the reduction of development areas at EC level, a new concept by the European Community in the field of regional policy combined with the increasing competition between regions and large cities result in an overhaul in regional structural policy. The concept of regianal and locational marketing is both a way of thinking and a guideline for action.

*Marketing and regional policy*

There are two conflicting factors in the discussion concerning non-profit marketing. On the one hand, traditional government administration stresses the necessity of institutional and/or material marketing in regional and structural policy. However, in other political fields this is disputed, and the proponents of a market economy see the possibility of deregulating structural and political fields. Marketing as the method of exchanging products between supplier and consumer, goes way beyond sales promotion and advertising. Non-profit marketing means that non-profit organisations such as towns/municipalities, local administrations or professional associations try to establish their services and/or products on a previously defined market, and according to specific target groups. This can by no means be taken for granted by semi-state bodies and many public organisations.

As fas as regional policy is concerned, three questions beg discussion:

— Which concepts are particularly applicable to the marketing of public goods including the field of regional policy? Which market and which market forces exist?

— Which empirical methods exist in the field of marketing? Which basic conditions and prerequisites must be satisfied?

— What are the consequences for the region in terms of regional marketing and political representation?

## The concept of marketing in the field of regional policy

*Different concepts*

Based on the before-mentioned basic conditions, the development of a specific regional marketing-mix must be discussed. The market for regional policy is characterised as follows:

— On the supply side, the need for a definition of a regional product or its description and market orientated evaluation exists;

— On the demand side, up to three types of demand exist: a negative demand (a large percentage of the consumers have a negative attitude towards the product or service) a lack of demand (potential customers fail to recognise the value of a product, for

example in regional policy) and finally, a latent demand (a large number of customers request products that cannot be supplied due to, for example, a lack of qualified workers in rural areas).

The basic idea behind regional and locational marketing must therefore be to introduce a new way of thinking not only in administration, planning and politics but also in private firms. This should encourage a move beyond their own interests, and stress the positive aspects of the region. Weaknesses should be challenged and eliminated, and strategies and concrete measures for the region should be developed — and most important — implemented.

### *The stages of marketing*

A regional marketing concept comprises five basic stages:

*Definition of the market and ensuing market research*

Although non-profit organisations are not subject to any direct institutional or material competition, a market for their goods and products, in terms of a definable group of persons — and/or organisations exists. Based on this information, an analysis of both the needs of existing and potential customer groups as well as an analysis of the structure (strengths and weaknesses) of the regional supply is necessary.

*Product definition*

Based on the concept of public goods, characterised as follows:

— non-profit orientation,
— no direct demand,
— flexible production and yield conditions,
— limited competition,
— non-dependence on demand.

The products have to be defined to fit into the existing market situation. Depending on the situation, this could involve locational marketing, structural marketing or image marketing.

*Target group policy and market segmentation*

The third stage comprises the location and definition of the target groups. The task of market segmentation is to select homogeneous groups from the available heterogeneous demand. Based on individual group characteristics, a suitable marketing-mix can be developed.

*Price policy*

The nature of public goods demands special treatment in terms of price policy. Depending on the political aims, the services are carried out free of charge or subject to minimum cost coverage.

*Communication policy*

The task of communication policy is to market the goods to existing and potential customers and/or to raise awareness of the goods. Communication policy comprises advertising (e.g. brochures), public relations (e.g. trade fairs) and sales promotion.

*Distribution policy*

The final step comprises distribution policy, which is of minimum relevance for most public goods. The aim of public goods marketing is to create sufficient demand for those goods which would not or could not be produced in the private sector.

## Procedures for regional and locational marketing

### *Prerequisites*

The basis of locational marketing and therefore of an active and progressive economic policy is an overall development strategy for the region as an economic and residential location.

In addition to economic development, the various parties contribute one or more aspects to the product i.e. the region/area. Cooperation should therefore exist between those interested and those willing to take action in the area/region. This ensures a common product description of the region/area, the establishment of the aims for "product development" as well as the selection of target groups. Moreover, early cooperation between parties facilitates the later move towards coordinated strategies, e.g. in the area of public–private–partnership models.

Once the prerequisites have been satisfied, the next step is to develop the basic plan. The strengths and weaknesses of the region should be identified in a detailed situation analysis, and the opportunities and risks stemming from environmental factors be evaluated. An important factor in the establishment of competitive advantages and disadvantages is the use of image structure analysis. Of key importance in the validity of such image studies/analyses is

their differentiation according to target groups and to personal and external image criteria.

Closely linked to situation analysis is the subsequent setting of aims for regional development and therefore for the product.The aims of regional development should not prevent local inhabitants from actively participating, but should involve them in the planning of future regional development goals, even if this is difficult to achieve. The goals set should be extensive and ambitious but nonetheless realistic, taking the possibilities and future potential into consideration. If these plans for the future are to become reality, the parties involved should have a common understanding of the goals, comprising *Meffert*'s three basic elements, namely:

- historic power,
- present strengths,
- future social trends.

So that these "visions" can become reality, concrete aims for the development of the economic area, i.e. the product, have to be established. Implementation possibilities should be clearly marked. Marketing aims should be drawn from the economic aims and directed towards the specific target groups. Possible marketing aims for locational marketing are:

- increased public awareness of the economic area,
- improved competitive position in the case of new firms,
- increased acceptance and promotion of additional economic engagement in the area.

### *Aiming at target groups*

After target groups have been selected, the general marketing aims to be used as a basis for marketing strategies and the implementation of the marketing process can be determined. The heterogeneous target sector, "economy", must be more carefully defined before work begins. This sector is of prime importance for the promotion of economic development. Market segmentation should be carried out. This involves segmenting the entire market into homogeneous sectors ("market segments") according to existing and potential customers. This should be carried out using relevant criteria. Once this has been completed, work may begin on the selected market segments ("target groups", e.g. new firms).

Possible target groups include industrial and trade enterprises interested in setting up new plants in the area, local firms and retail industry and qualified workers. The target groups therefore have to be defined and limited, according to specific criteria (e.g. branches, "customer problems"). Other target groups could be classified according to capital spending decisions involving the municipalities, management consultants, tax consultants, auditors and company banks. It is not necessary for the target groups to be complementary. Clear priorities should be set when choosing target groups.

As far as domestic marketing is concerned, a sample target group could be "existing companies". The following strategy can be applied:

*a) Situation*

Of prime importance for a given area are its companies and the needs of these companies must be taken into consideration in the planning stage. These target groups generally have all the major disadvantages associated with a peripheral economic area. The first disadvantage is poor access to the transport network, resulting in difficulties in acquiring qualified workers and executives. The unattractiveness of the area also plays a role. According to studies a large proportion of the companies have, however, managed to compensate for the locational disadvantages by implementing innovative measures.

*b) Aims/Strategy*

Any changes that may be made to the product offered in the selected economic area are of paramount importance. The aim of the exercise should be to actively involve the companies in the creation of an image profile. The strategic principle of "communication and cooperation" should be used in this respect, so as to increase the companies' committment to regional development. The company culture should be promoted through innovative policy-making. They can furthermore promote "their" area at trade fairs. The quality of the regional industry is thus synonymous with the quality of the area.

### *Marketing-mix*

The fundamental attitude towards partners in the market and the long-term market strategies (target groups, competitors, measures) is

closely linked to product definition, target group selection and marketing aims. The basic strategic concept determines the general policy and therefore the framework for the implementation of marketing instruments.

The strategic impulse should act as a guideline in the setting of medium and long-term preferences for the product, i.e. the economic area, and in the development of economic and political plans which aim to increase the value of the product both for the economy and the population. The image profile is of increasing importance as can be seen from the efforts of many companies to optimize the infrastructure, to increase investment in the arts (in regional marketing terms one could refer to the market segments "arts"), or the trend towards making inner urban areas more attractive. A fundamental aspect of these measures is that they be credible and display the fundamental ideas incorporated in locational marketing. For this to be successful a corporate identity, i.e. a community identity has to be created. This has three basic elements:

*a) Corporate design*

This involves a well-thought out and consistent system of "marking" the economic area using logos, slogans or particular colour-coding (in the short term). Long term plans, although more difficult to realise, could include building design as well as landscape and town planning;

*b) Corporate communications*

This involves the coordination of all relevant public relations efforts in the economic area. In the medium- and long-term this also involves coordinating all private efforts in public relations, i.e. advertising and organised events (functions, exhibitions and seminars);

*c) Corporate culture*

This involves defining the way of thinking and the typical traditions and customs of the regional culture. Long-term organisations, societies and clubs promoting this culture should be encouraged.

As far as product and communication policy is concerned, the following statements can be made:

– The administrative policies should be in line with the needs of the companies, in so far as no adverse effects are produced, e.g. by creating a public office for the economic area within the administration. It is essential that the adminstration actively support

the companies and is able to take early action to prevent certain developments. An important aid is for example a register of industrial areas and an appropriate planning permission policy. So as to improve the efficiency of the administrative staff, practical work experience in companies could be introduced;

— The authority for further education could ensure that the required number of qualified workers is „produced". Within the framework of its educational marketing policy, the authority should work on exploiting the potential of young people (and in particular young women) who, so far, have not acquired any professional qualificatians;

— If the local economy is to maintain and improve its competitiveness, the all-important information process should be improved by setting up and expanding the necessary infrastructure and relevant services. Furtheremore, the possibility of setting up industrial estates, trade estates, manual labour enterprises and enterprise zones must be evaluated. This will be discussed in the following section as an aspect of modern local economic policy;

— The companies are required to actively participate in the organisation of the employment market. This begins with providing attractive training courses and jobs, offering internships for students and school-leavers, and developing a personnel development plan. All these factors influence the employment market and result in higher motivation on the part of the employees to participate in further training;

— Of course, the countryside alone cannot keep qualified workers in the area. Other factors have to be promoted, including leisure activities, arts and attractive shopping facilities.

As far as communication policy is concerned, the following should be included:

— setting up a public office for industry in the administration,
— introducing an information service to be used by both administration and industry as a discussion point for such matters as current problems and regional development,
— setting up an office for "economic and administrative organisation" with a suitable information policy.

How could these ideas be implemented in a modern local economic policy ?

## Strategies in local economic policy

### *The basics of local economic policy*

The aim of local economic development is based on the community's committment to look after the needs of its members. This can be seen as the sum of all communal measures to promote the local economy with a view to creating the best possible socio-economic living conditions.

In the past local economic development was sectoral in nature. Nowadays a new understanding of local economic development has come to light. This can be seen in an extension of tasks in line with a broader economic policy. Within this framework account should be taken of as many social and economic fields as possible. The maintenance of existing companies, the promotion of company expansion, financial incentives for the setting up of new companies, and the generation of a positive economic and investment climate are all important. In this context, an increased awareness within the local administration of the needto expand the services' sector for the citizens and industry is necessary. The strategies for company maintenance and the financial incentives for the setting up of new companies are closely linked to the increased awareness of the value of small and medium-sized companies for regional and local development.

### *New and traditional concepts in local economic policy*

A wide range of concepts exist for the implementation of the proposed tasks of local economic policy, covering both traditianal and modern approaches to economic development. The traditional theory of local economic policy include tax and wages policy, infrastructure policy, real estate policy in the field of local planning, construction policy including planning permission, advertising for the area and the placing of orders with local companies.

Apart from considerations regarding fair competition, the problem arises that practically all municipalities and towns apply the same stringent concepts. Local economic policy should therefore base the organisation of competition in the area on the marketing philosophy described earlier. Thus modern market-oriented in-

dustrial policy can be divided into concepts of local product, price and distribution and communication policy. Together they form an effective marketing-mix. It is thus the so-called flexible locational factors which influence company decision-making concerning investment. These factors can be grouped under the concept of local standards of living, i.e. the economic situation. The following strategies of modern industrial policy can be mentioned:

- active monitoring of development processes within companies,
- development of information systems (e.g. company data, land register, monitoring) as an early warning system,
- coordination and cooperation to encourage responsibility sharing,
- dynamic maintenance of the status-quo,
- plans to develop the area through construction planning,
- flexible real estate policy, and
- elaboration of solutions according to the size of the cities, e.g. in the form of local strategy reports.

A clear indication of this new local proposal policy, centred on the progressive strategies regarding economic maintenance and the promotion of new companies, is the establishment of industrial and trade estates, manual labour enterprises and enterprise zones. Their different characteristics and contents will be described in the following section.

### *Local economic policy in the field of trade policy, using the example of industrial estates, trade estates, manual labour enterprises and enterprise zones*

The first example, namely industrial estates, is not to be limited to industry. Rather since industrial estates often comprise manual labour or service enterprises (e.g. often in the retail industry), they are often called trade estates. Trade estates are therefore enclosed areas, equipped with public amenities supplied by either a municipal or private enterprise. They primarily comprise small- and medium-sized firms from the various branches of industry. They were originally created to generate employment, however were later incorporated into the realm of town planning and urban and regional policy. This was done with a view to transplanting enterprises from the town centre into the newly created industrial estates. These

industrial estates must cover at least 10 hectares, however the average size is between 50 and 150 hectares. It should be noted that the retail and wholesale sectors generally occupy a large proportion of trade estates (in the EURO trade park in Munich, they comprise two-thirds, *Figure 13.1*).

What advantages are offered by estates which concentrate primarily on manual labour and work-shop enterprises? In the past few years towns and cities have made increasing use of manual labour enterprises. The primary aim of this policy is to give small firms a chance to set up new enterprises in underdeveloped urban areas or in the vicinity of those areas in the process of being redeveloped. At the same time the interests of the citizens are being served. A typical example is having several independent firms operating in one building. The size of manual labour enterprises varies from 1,400 $m^2$ and 30,000 $m^2$ (the enterprise in the town of Augsburg has a working area of 18,300 $m^2$). The number of participating enterprises varies from 3 to 60, with between 2 and 20 workers per enterprise. Manual labour enterprises can therefore be seen as a means of maintaining the local medium-sized enterprises or of encouraging the setting up of new ones.

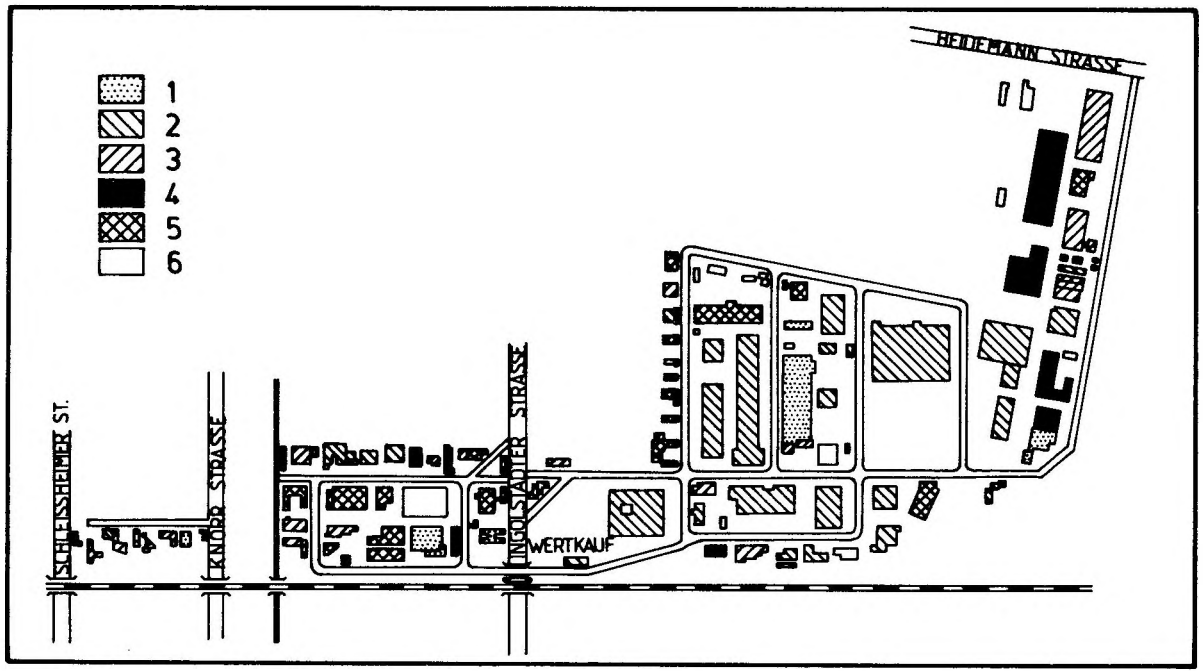
The third example i.e. enterprise zones or free enterprise zones, was first found in Europe in Great Britain at the beginning of the 1980's following the example set by similar enterprises in South East Asia (e.g. Hong Kong). The aim was to reduce government intervention in industry in times of dire economic and structural problems. This was a new direction in economic policy and simultaneously examined the effects of limiting public intervention (on a small scale) in the economy. Initially 11 areas were labelled enterprise zones, and a year later further zones were in the pipeline (*Figure 13.2*).

The following advantages are offered by enterprise zones, for a period not exceeding 10 years:

- exemption from development land tax,
- exemption from municipal taxes for trade and industrial plants,
- 100% write-off possibility for investment in trade and industrial buildings,
- less stringent customs regulations,
- exemption from Industrial Development Certificate requirement, i.e. operating-permit,

Figure 13.1

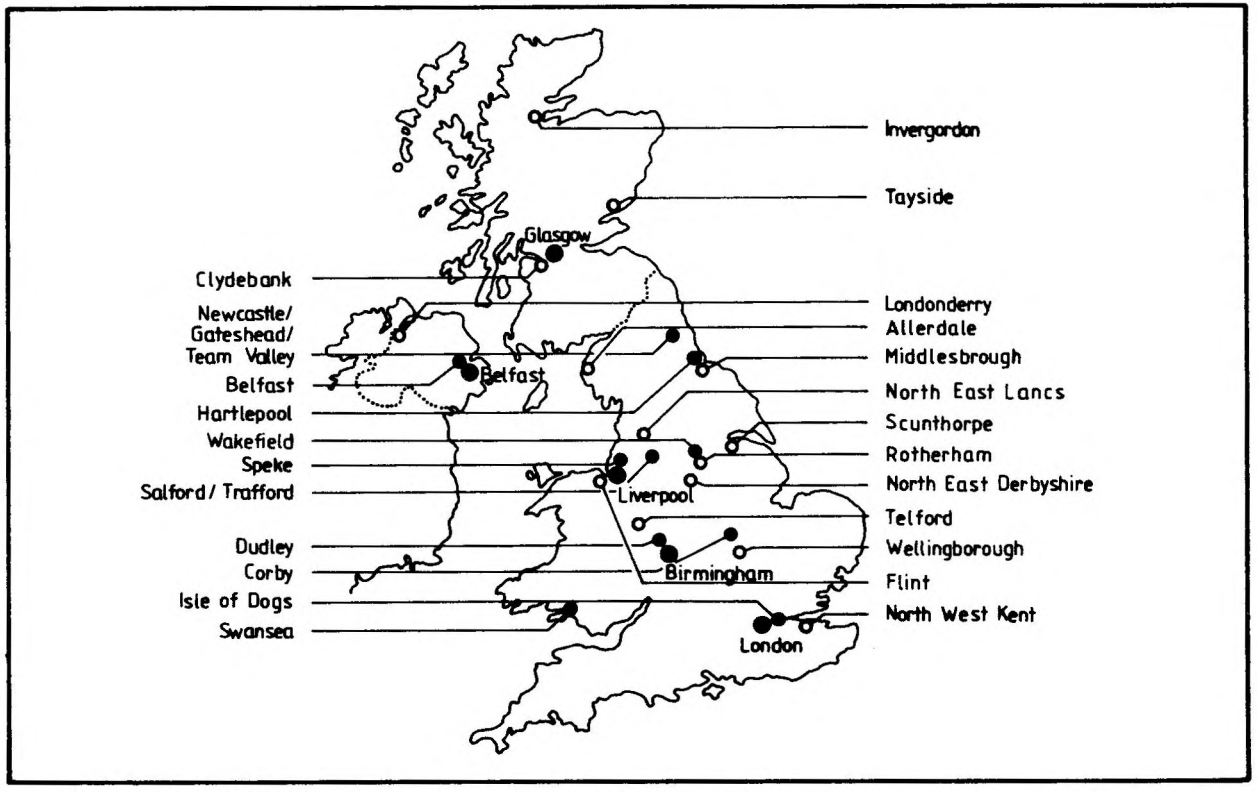
*Branch-structure of the enterprises located within the EURO-industrial-estate Munich-North, 1988*




*Key*: 1 = Industry; 2 = Trade; 3 = Services; 4 = Industry and trade; 5 = Trade and services; 6 = Other activities.
*Source*: Designed by the author.

Figure 13.2

*Enterprise-zones in Great Britain*




*Source*: Tank, 1988.

— exemption from the levy for the creation of apprentice training places and the supply of information to the Industrial Training Boards,
— simplification of the planning procedures with respect to building specifications and the faster processing of planning permission applications,
— reduction of the supply of information regulation for administrative and statistic purposes at government level.

Enterprise zones have succeeded in encouraging new industries. However, they did not result in sufficient diversificiation in existing industrial areas, as many small changes have taken place within these areas, without any significant alteration. The number of new jobs created was, on the whole, limited. On the other hand, this strategy proves that regional and local economic policy is dependent on the creation and realisation of innovative ideas and measures.

## Conclusions

It remains to be stated that local regional marketing and local economic policy cannot replace political decision-making at regional level. Local and regional marketing as well as trade policy aim to increase the attractiveness of towns and regions both for the population and the economy, and to compensate for existing deficits.

Instead of regional complaints, which often get stuck at a regional level, the vision of future developments should play a more important. role towards the implementation of the second theory, namely conceptional ideas, philosophies and goals. If regional marketing is to be successful, the needs of the target groups must be taken into consideration. These must play a more important role than the perfecting of marketing techniques. Five problem areas must be mentioned concerning the development of an economic area:

— Of fundamental importance for the realisation of the manifold requirements within local and regional marketing is the necessity of convincing the members of the municipal/regional organisations of the marketing of economic development;

— The recognition of market signals through municipal and regional market research and analysis also plays an important role. Due to changes in behaviour and structures the future requirements have to be ascertained in advance;

— The validity of an economic area is to be established (company philosophy) with particular reference to future development. This forms the basis of later marketing aims and strategies specifically designed to position the economic area within its competitive environment;

— During the marketing and planning process all conflicting interests have to be settled so that priorities can be established. These enable clearly defined exploitation of the market;

— The market and competition strategies are notably long-term. Thus the long-term support of regional and local enterprises must be ensured.

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# PART FOUR

# TOURISM AS A NEW SECTOR OF DEVELOPMENT

# 14 TOURISM STRATEGIES AND TRANSFORMATION IN SOMOGY COUNTY

GABRIELLA SOMOGYI KRAFT

## Introduction

Somogy county has always played an important role in Hungary's international and domestic tourism because of Lake Balaton (hereinafter: Balaton). By building the "Southern-Railway" in 1861 between Buda and Trieste, the lake resort, abundant in natural beauty, became accessible for a relatively low price, where the bathing holidays gradually took over. By 1870 Siófok was considered a holiday resort, and by the last decade of the century ten settlements became holiday resorts on the southern shore of the lake.

The peace treaties of Trianon resulted in the strengthening of tourism in this region, because the holiday resorts favoured by the Hungarian aristocracy and bourgeoisie (Adriatic see, Upper Hungary, Alps) fell beyond the boundary of Hungary. Thus attention was given to those holiday resorts, including Balaton and its southern shore, that were accessible without any administrative difficulty.

By the end of the 1930s more than 30,000 tourist beds were in 32 holiday settlements (20 on the sout shore). The number of guests was close to a hundred thousand, though the number of foreigners did not reach even 13 thousand.

Contemporary records tell significantly less about tourism in the other parts of the county. The "Book of Travellers" published in 1940 mentioned Barcs and Nagyatád as organized settlements suitable for holidays. Since then the regional distribution of the county's

tourism has been characterized by this condition, though there were several initiatives that tried to change it.

## The situation concerning tourism in Somogy county

In light of the data on the turnover of commercial accommodation, Somogy county was the most important tourist area after Budapest in Hungary in 1991. (The Central Statistic Office only collects data on commercial accommodation, the data on private accommodation, and the accommodation owned by trade-unions are not available. This fact should be considered in the analysis.)

Six per cent of domestic and foreign tourists were given accommodation in 19 per cent of Hungarian commercial accommodation. They altogether accounted for 12 per cent of the overnight stays in the county. Statistical analysis shows that during the last years the county has gradually been driven back compared to other counties in the competition for overnight stays and indirectly for earnings generated in tourism (*Figure 14.1*).

The reasons behind this are found in the inadequate structure of accommodation caused by a weak policy on tourism development, the insufficiency of marketing activity and the extreme regional and time concentration of tourism within the county, and the continued neglect of environmental protection.

During the past few decades tourism was characterized by satisfying the demand of mass tourism. Thus in 1991 the proportion of hotel beds in registered commercial accommodations was 7.6 per cent, which is very low in comparison to the 21.4 per cent (it is 16.7 per cent without Budapest) national proportion. Accordingly the proportion of camping sites and guest house beds is far above the national average of 42.8 per cent (*Figure 14.2*). Only 8.9 per cent of the beds in hotels were available for the guests all year long (according to official statistical data) and none could be found at Balaton.

The above shows that only 8.9 per cent of the registered hotel beds can be found in settlements other than the ones around Balaton. Additionally 8.4 per cent of the camping sites, 4.3 per cent of the beds in guest houses and 16 per cent of the beds in bread-and-breakfast and weekend houses are available for those tourists who wish to

Figure 14.1

*Share of Somogy county in tourism in Hungary*

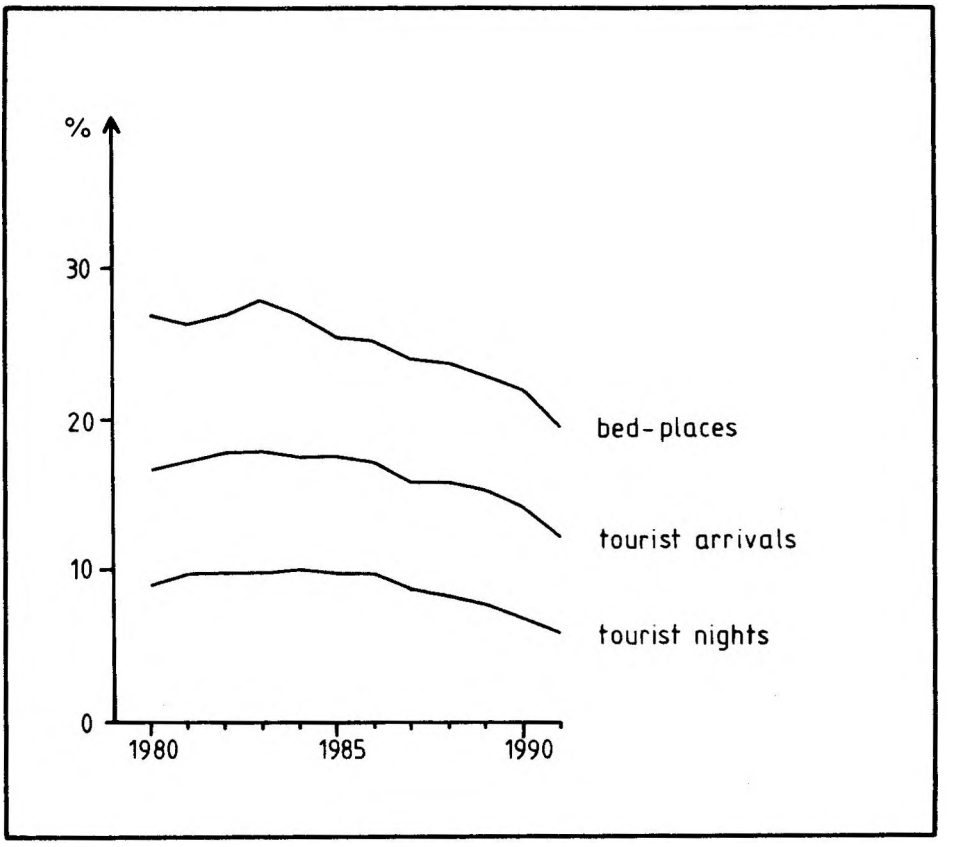
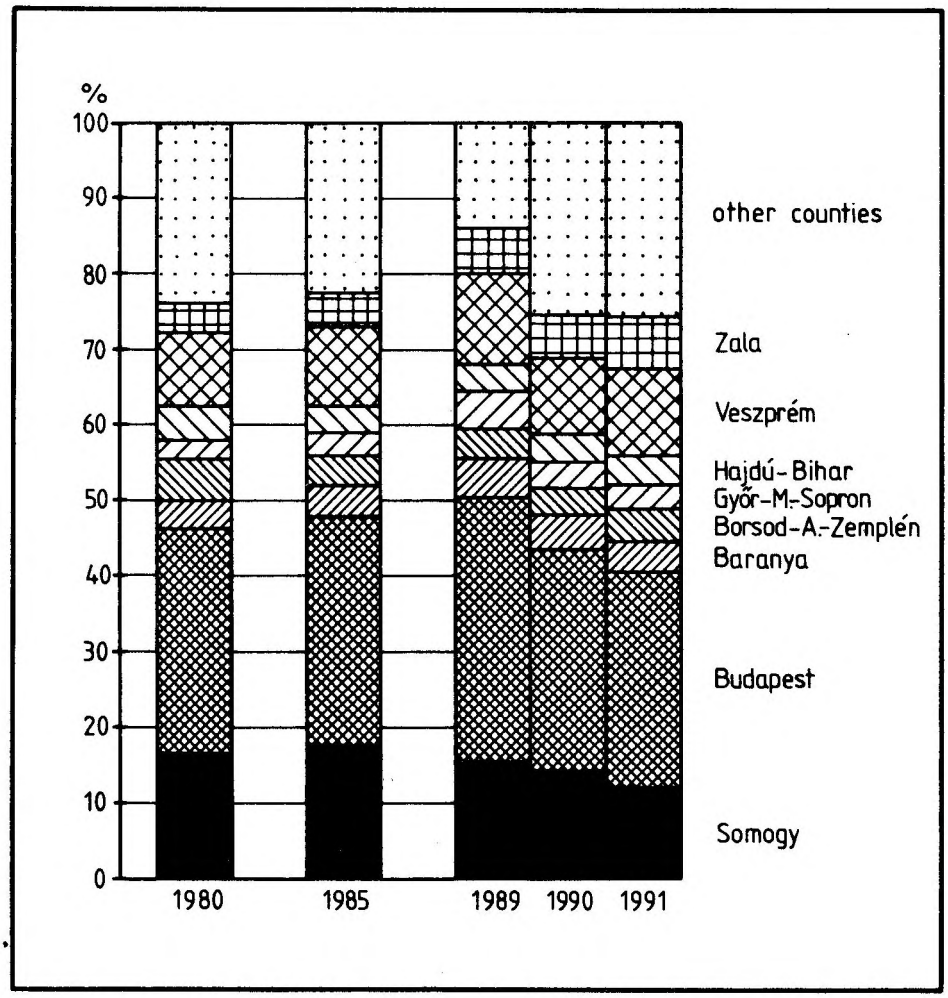


Figure 14.2

*Regional breakdown of international and domestic tourist nights in Hungary*



spend their holiday at a place other than the lake shore. The regional concentration of commercial accommodation is extremely high (*Figure 14.3*), 93.4 per cent of the county's supply is concentrated in the settlements at the lake shore. This picture is further supported by the similar regional distribution of vacation accommodation (official statistics have not given data on it since 1986) of which commercial utilization has greatly increased during the last several years.

During the last few years several modern, high standard, hotel-like accommodations and establishments were built by revitalized private entrepreneurial activities in the county (*Figure 14.3*). A considerable proportion of these do not increase the supply of shoreside settlements, because they are built beside the transit roads or close to the attractions of the inner areas.

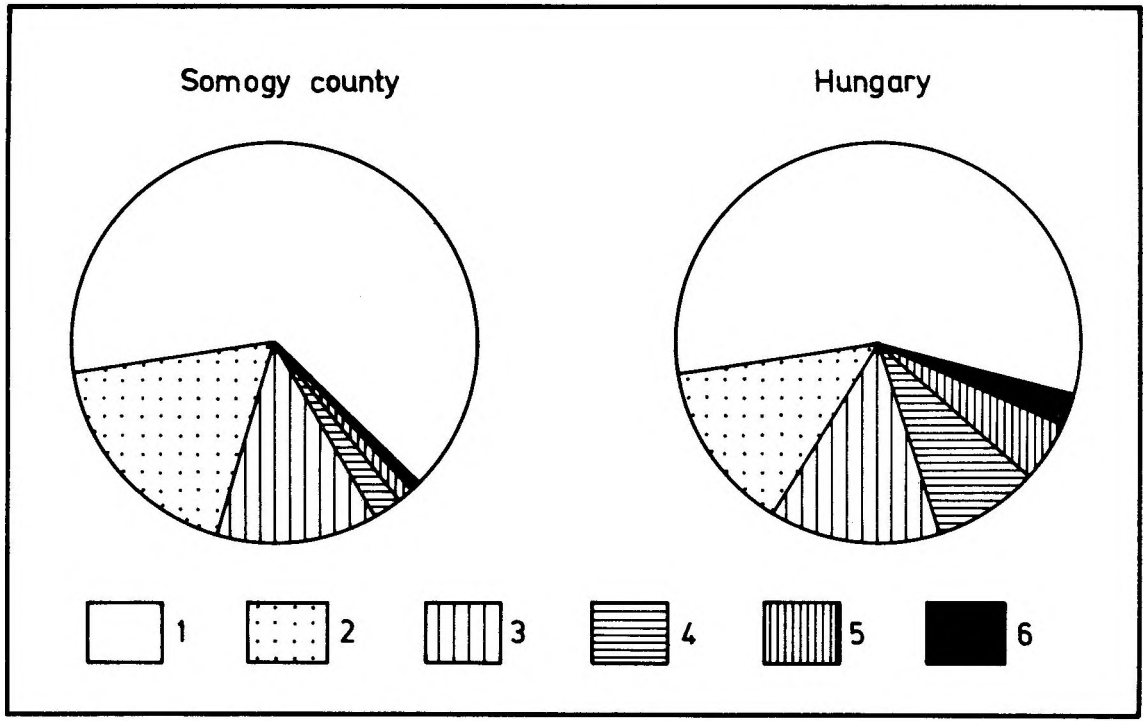
The uneven regional distribution of tourism follows the regional over-concentration of accommodation. The participation of shoreside settlements in overnight stays at registered commercial accommodations has always been above 90 per cent during the last twenty years. As a result of recent socio-economic changes this ratio has been changed, even if only slowly, in favour of the inner settlements (in 1988 96.4 per cent of the overnight stays were at the shoreside settlements of Balaton, while in 1991 the figure was "only" 92.1 per cent).

Among the problems of tourism in the county the extreme seasonal fluctuation should be mentioned (*Figure 14.4*). In 1991, as happened in the previous years, 62.5 per cent of tourists arrived in the months of July and August, and spent 70.9 per cent of the overnights there. 86.7 per cent of the visitors travelled there during the summer season (June–September) and 93.2 per cent of the overnights were realized during that period. This kind of time concentration of tourist flows makes it very difficult to plan capacity, to use it efficiently, to make the needed work force available and to solve their employment problems after the season.

With respect to the county's economy the radical decrease in the number of tourists and overnight stays at commercial accommodations as an unfavourable phenomenon has coupled with the strong regional and time concentration lately (*Figure 14.5*).

Figure 14.3

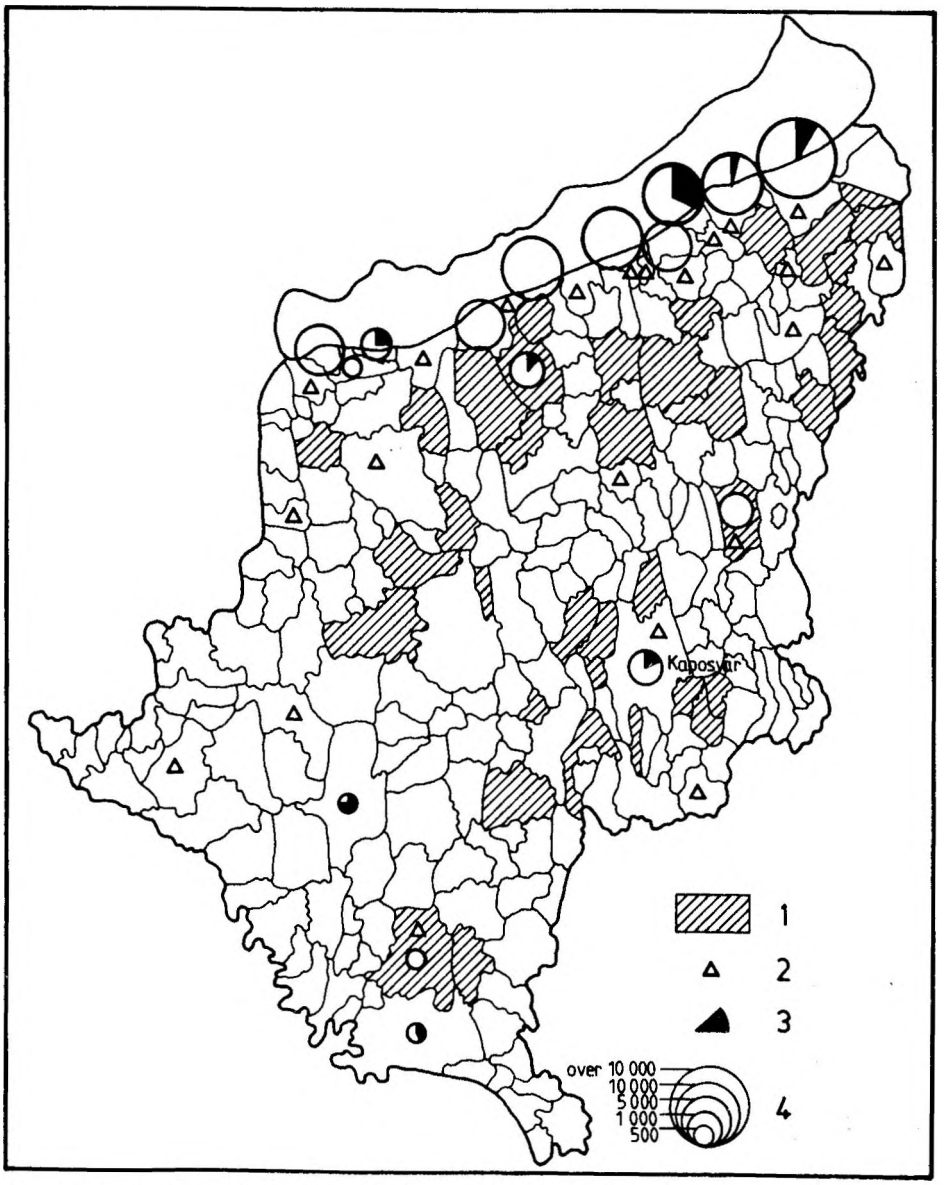
*Structure of accommodation, 1991*




*Key*: 1 = Non organized private room service; 2 = Organized private room service; 3 = Camping sites; 4 = Hotels; 5 = Other public bed places; 6 = Other private bed places.
*Source*: Yearbook of Tourism, 1991.

Figure 14.4

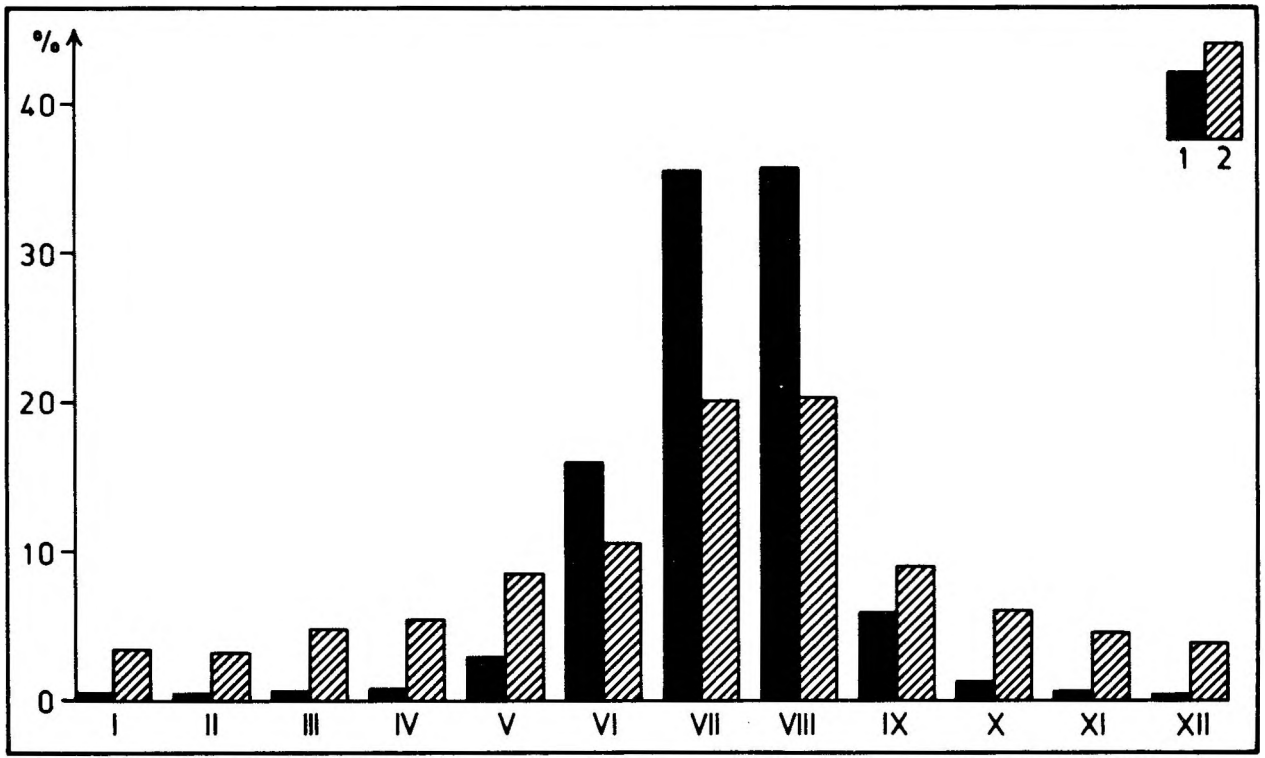
*Accommodation in Somogy county*




*Key*: 1 = Beds in rural tourism; 2 = Non registered private hotels, boarding-houses; 3 = Share of hotel bed capacity; 4 = Total number of registered bed capacity.

Figure 14.5

*Seasonal fluctuation in domestic and international tourism (on the basis of overnight stays), 1991*




*Key*: 1 = Somogy county; 2 = Hungary.

The reason for this can be partly in found that, despite the efforts of previous years, a spectacular improvement in the water quality in Balaton has not been reached, and partly in that there was not a break through in the supply structure of the tourist service base, though positive signs have already appeared (modern boarding houses, leisure centres, restaurants, and information offices had been built during the previous years). The tourists' image of the county has not yet been created or at least has not got across to people. Until now only Balaton is known to foreigners and not Somogy County apart from some exceptions.

The political and socio-economic changes are also responsible for the decline in tourist flows; this not only resulted in the decrease of foreign but also domestic effective demand. Compared to the "peak year" of 1984, in 1991 the number of domestic tourists fell behind with 68.1 per cent, the number of domestic overnight stays with 77.1 per cent, the number of foreign tourists with 47.5 per cent and the number of foreign overnight stays with 46.1 per cent. The decline in turnover was the highest in the years 1990–1991, the estimated data for 1992 show a slowdown in this period (*Figure 14.6*).

The freed recreational accommodations, though providing less qualitative services, and the directly utilized (without the participation of a tourist operator or others) accommodations lure away tourists by their low prices, thus reinforcing the above-mentioned process.

The international tourism of the county is characterized by the domination of German tourists, despite that a strong decline in the number of German tourists was predicted following the reunification of the two states. This conceals the danger of too much dependence on the demand of one country. At the same time the vacation tourism of former communist countries decreased significantly (*Figure 14.7*).

## The future

During the last several years, in order to survive and to develop, the county was forced to change its tourism strategy. In addition there was a general restructuring compulsion caused by the changes taking place in Hungary, in which tourism will play an important role in So

Figure 14.6

*Overnight stays in Hungary and in Somogy county, 1975–1991*

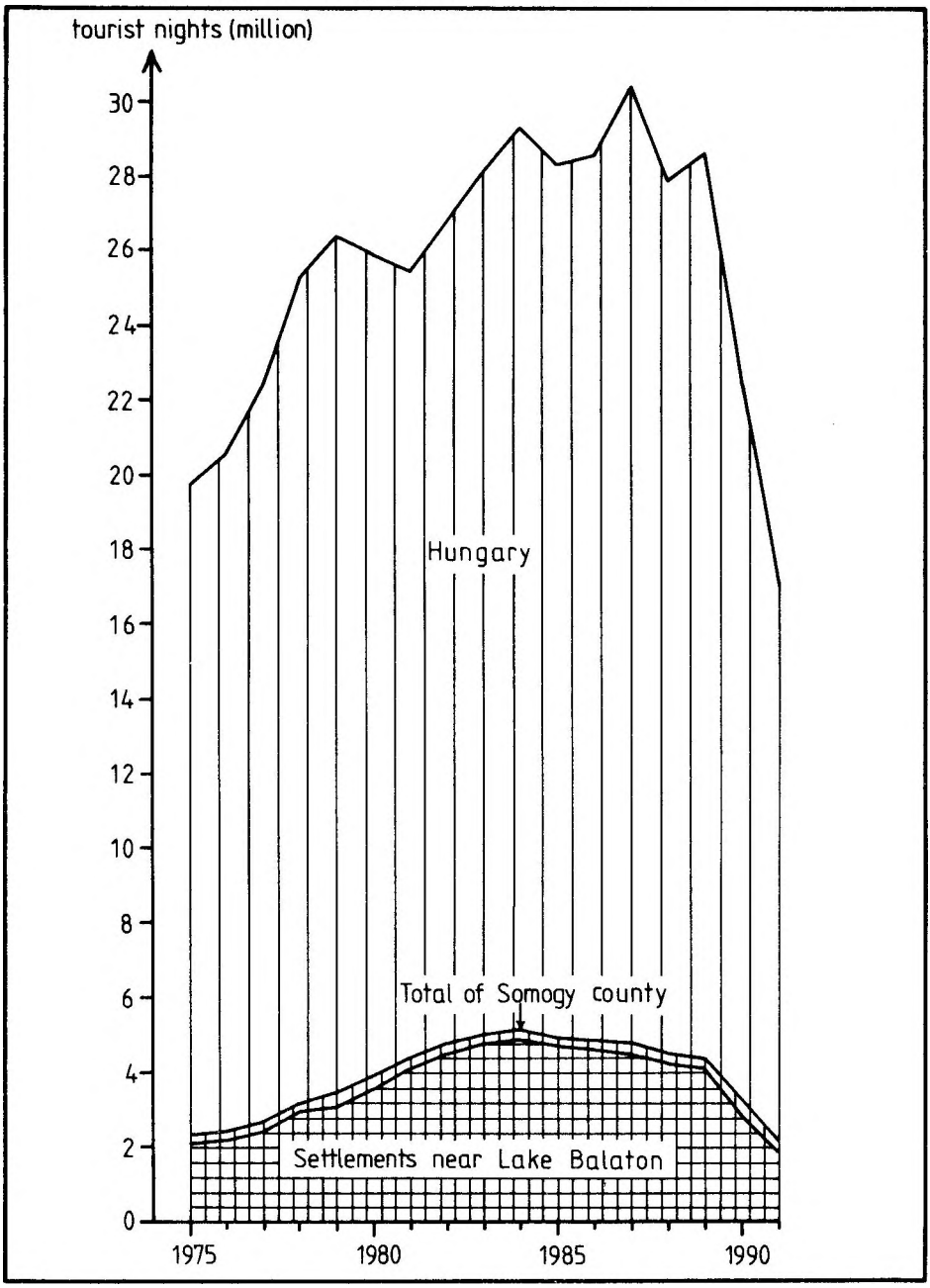
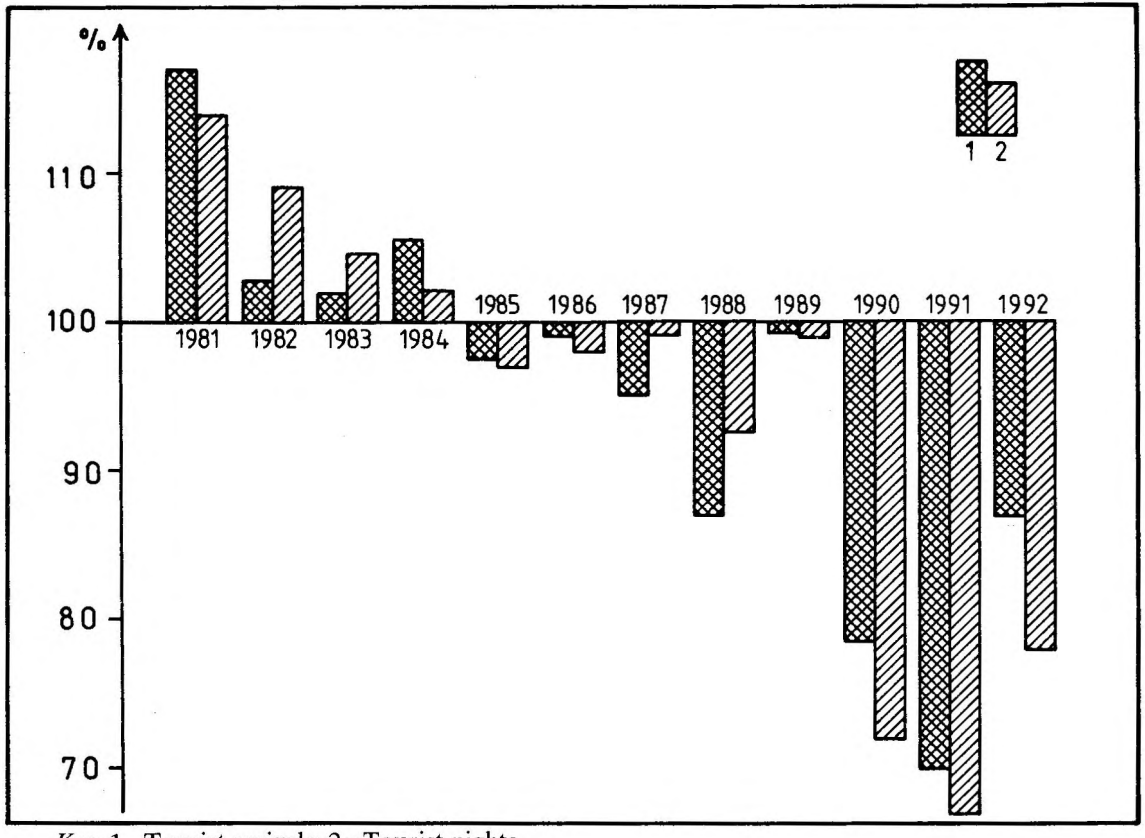


Figure 14.7

*Annual growth rate of tourism in Somogy county, 1981–1992, per cent*




*Key*: 1 = Tourist arrivals; 2 = Tourist nights.

mogy according to the predictions. What kind of potential can the county rely on?

### *Natural endowments*

The county's natural endowments are excellent from the aspect of establishing several different forms of tourism.

The configuration of its terrain is varied and diversified. As there are no great altitude differences in the relief, there are no great barriers to the development of technical infrastructure. At the same time the county is rich in scenic beauty and has excellent opportunities for hiking is the gentle slopes of its hills.

Given its geology the county has a relatively large supply of artesian water, a significant proportion is thermal water, and because of the high salt content it can be used either as medicinal or mineral water (*Figure 14.8*).

The county's almost fifty thermal springs supply only 12 hot spas. The other wells are closed, waiting for foreign and domestic capital to finance their operation.

The thermal springs have varied mineral compositions:

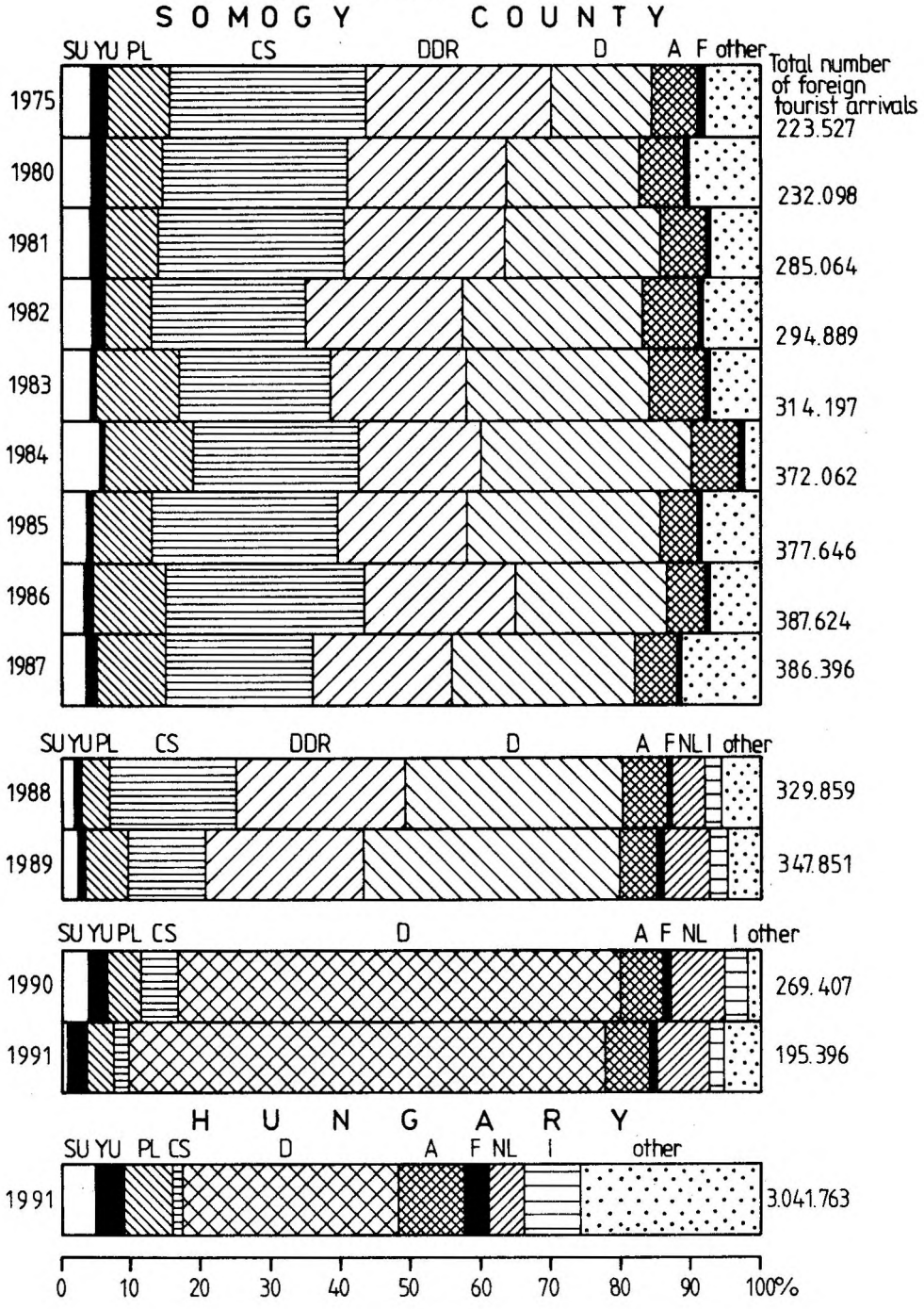
- alkali-hydrogen carbonates are in the thermal springs of Babócsa, Szulok, Nagyatád, Tarany, Nagyberény, Buzsák,
- alkali-chlorides, hydrogen carbonates, and sulphur are the components of the mineral waters in Csokonyavisontán,
- sodium-chloride, and hydrogen carbonates were found in the thermal spring of Gálosfa,
- alkali-chlorides are in the waters of Kaposvár,
- iodine-bromine mineral water is in Táska and Igal,
- and just thermal springs can be found in several other settlements.

All of these make it possible to pursue a wide range of medical and rehabilitating activities based on the mineral water reservoirs. Thus there is a way to cure locomotor diseases, arthropathy, circulatory disturbances, gynaecological complaints, catarrhs, inflammations, for accident after-treatment and rehabilitation, and also for the fashionable recreation, active prevention and health maintenance.

Today only the well-known spas in Igal, Csokonyavisonta, Nagyatád and Kaposvár can receive guests in great numbers all year long.

Figure 14.8

*Share of arrivals by source area, 1975–1991*



The thermal spas in Csisztapuszta (Buzsák) and Szulok have a good international reputation, though they have small capacity. The best means for changing the regional structure of the county's tourism is through the more effective use of these natural resources in the future. In that respect the importance of thermal wells in Gálosfa, Marcali, Som, Táska, Somogyszentpál, Sávoly, and Somogysámson needs to be emphasized.

Expanding the services of the already operating spas can lead to the increase of their turnover, utilization, and profitability, and it also would contribute to the regional diversification of tourism.

Among the hydrographic endowments the surface waters should be mentioned. They provide opportunities for bathing, water sports and fishing. The gravel-pit lakes around Balaton and along the Dráva, the Dráva itself and its branches, and the artificial lakes of which the most famous and popular is the one near the county town, are becoming increasingly visited. In 1990, 61 fish-ponds networks were registere — they comprised 490 ponds, belonging to 57 settlements — the potential for a future tourism is there.

Besides fishing, another segment of the tourist industry attracting particularly wealthy tourists is hunting. The potential of the county in that regard is very good. There are 40 organizations (36 hunters' associations, the Somogy Woods and Forestry Farms, the State Farms of Southern Somogy and Balatonnagyberek, and the Forestry in Kaszópuszta) managing hunting on the 612 hectares hunting ground. Modern well-equipped hunting lodges are waiting for foreign tourists in the beautiful environs of Ali-rét, Kardosfa, Ágneslak, Nagysallér, Rinyatamási, and Kaszópuszta. Germans are interested in larger game, while Italians prefer small game.

With respect to the quality and weight of antlers the stock of deer is better in Inner Somogy than in the northern part of the county, due to better conditions. The hunting season is from 1 September to 30 October, and defective stags may be hunted until 30 January of the following year. Since it is less expensive it attracts mostly Austrian hunters.

Besides red deer the fallow deer is playing an increasingly important role in hunting. In Hungary, after the Game Farm of Gyula, Inner Somogy has the second largest stock of fallow deer. The fully grown fallow stag may be hunted from 1 October to 31 December.

The moufflon naturalized not long ago may be hunted from 1 September to 31 January.

A popular hunting event in winter months is the boar-hunting. Four thousand wild boar are shot yearly.

In the county the State Farm of Balatonnagyberek has a good hunting ground for small game. The steady growth in the stock of pheasants and mallards is the result of artificial breeding.

The presence of ample natural protected space extended on a large area is a unique endowment for the development of tourism in Somogy County. "Green" tourism is gaining more importance in international tourist demand thus a further appreciation of these attractions can be expected. In the county 23,707.3 hectares are protected, 98 percent of this is national nature reserve, the remaining 2 per cent is a local nature reserve and conservation area (*Figure 14.8*). Business tourism and recreation activities, the education of the young concerning environment and nature protection, the demand of hikers and nature lovers can be satisfactorily served by the Primeval Juniper Groves of Barcs, the Local Nature Reserve of Zselic, the Local Nature Reserve of Boronka, the White-Water National Nature Reserve of Nagyberek, the Kis-Balaton, and the Basakert of Babocsa. These areas with their protected fauna and flora, and the well situated bird-watching places are capable of attracting visitors.

Among the local conservation areas the popularity of the castle parks (24.3 per cent of the local conservation areas) will probably increase in the future.

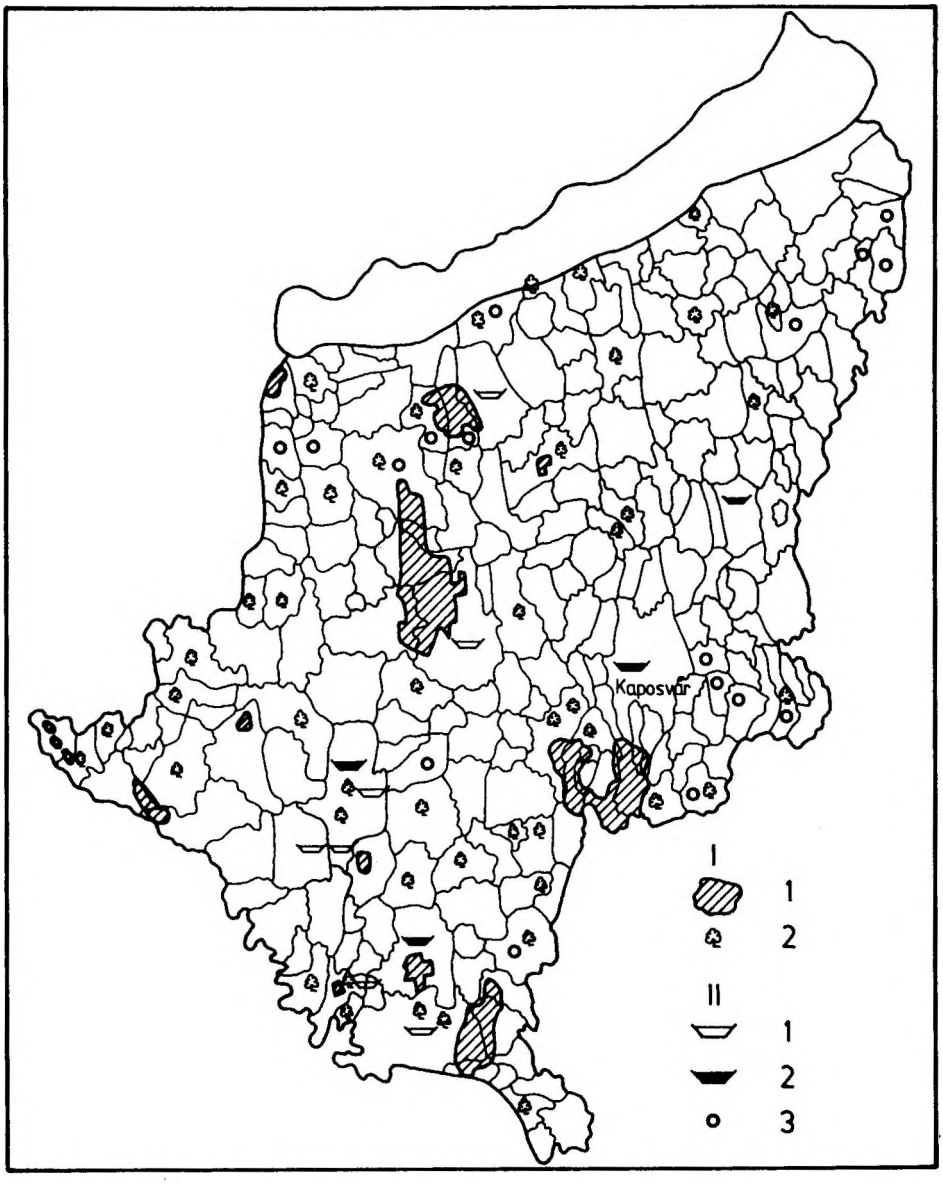
### *Cultural endowments*

A large proportion of the castles and manor houses were built in the XVIII-XIX centuries. Some of them serve new functions after reuse. Thus a hotel is operating in the Festetics Castle of Gálosfa, and a guesthouse in the Sárközy Castle of Kisasszond. Museums were established in 12 castles, among the most popular are the museums in memory of Mihály Zichy in Zala, and of Kunffy in Somogytúr, and the vine museum in Gaál Castle of Szőlősgyörök.

There are 56 castles under protection and 101 castles and manor houses that are not protected (*Figure 14.9*); several of them are suitable for tourist utilization. Attention should be drawn to the

Figure 14.9

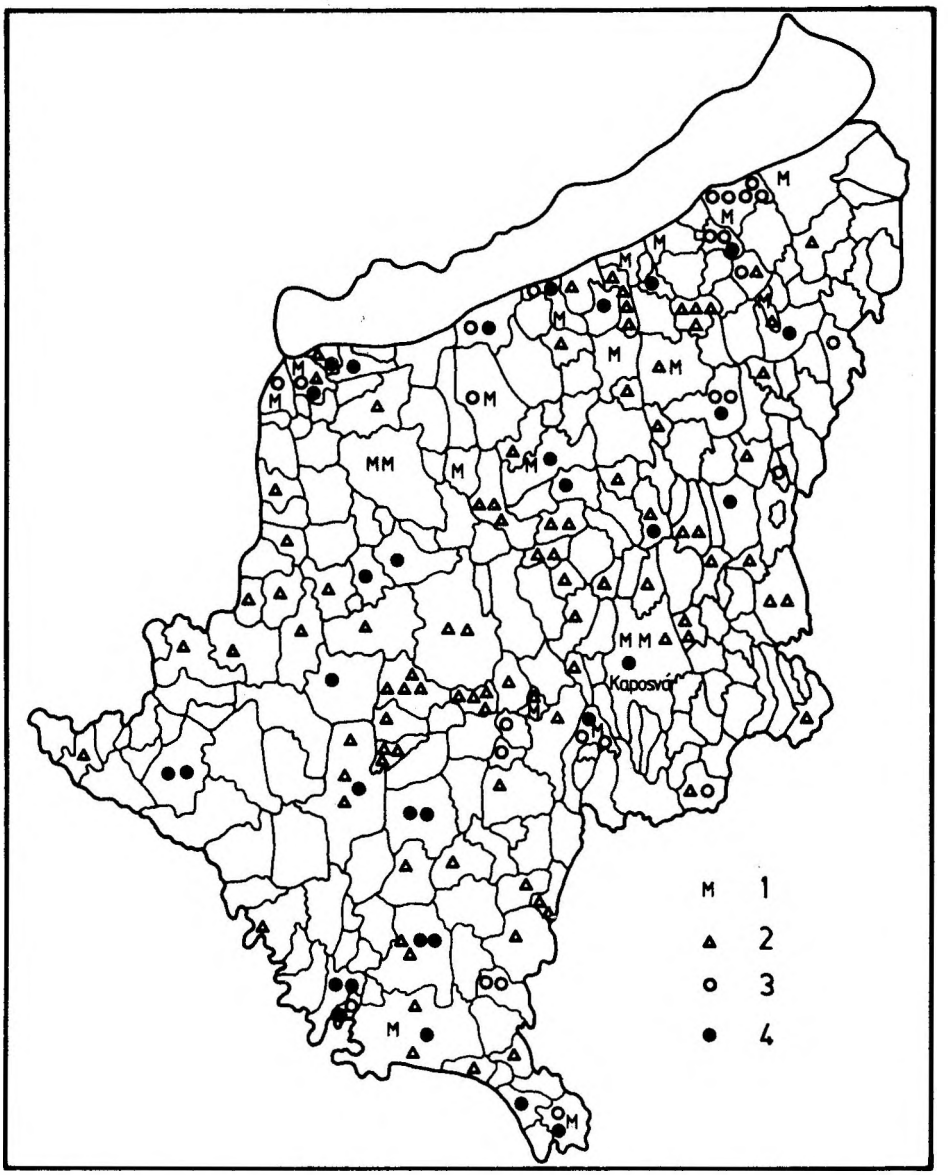
*Potential natural attractions in Somogy county*




*Key*: I = Nature conservation: 1 = Protected areas of national importance; 2 = Protected areas of local inportance; II = Thermal tourism potencial: 1 = Thermal spas; 2 = Recognized health spas; 3 = Unused thermal springs.

Figure 14.10

*Potential cultural attractions in Somogy county*




*Key*: 1 = Museums; 2 = Mansions, manors; 3 = Folk monuments; 4 = Important monuments.

county's most beautiful Baroque castle in Felsôbogát, a building of historic value.

The neoclassical building of the Jankovich Castle of Alsobogát with farm buildings is located hardly 2 km from the above-mentioned castle, there are also a chapel and fishing ponds nearby. In 1989 Kaposterv made a plan for its utilization that was endorsed by the National Inspectorate of Historic Buildings. According to the plan the castle would become a hotel of high standard and a tourist centre. Capital is needed for its realization.

The Festetics Castle of Kisgyalán-Gázlópuszta is in a similar situation, it is planned to become a research centre and accommodation for tourists with opportunities for riding will be developed.

According to the plans the Jankovich Castle of Somogygeszt would operate as a rest house, a post-graduate school and a recreational centre, if investors are found for the realization of the plans. Since the Széchenyi Castle of Somogytarnóca built in an eclectic style is in the vicinity of Csokonyavisonta, it almost cries for exclusive tourist utilization.

There are attractive cultural values that are not yet very well-known among tourists such as the Benedictine Abbey of Somogyvár, the Benedictine Abbey of Zselicszentjakab, the "Village Chapel" of Buzsák, the medieval church of Telek, the Franciscan Friary and Church of Segesd, the Cemetery Chapel of Mernye, and the Fehérkô Castle of Kerek.

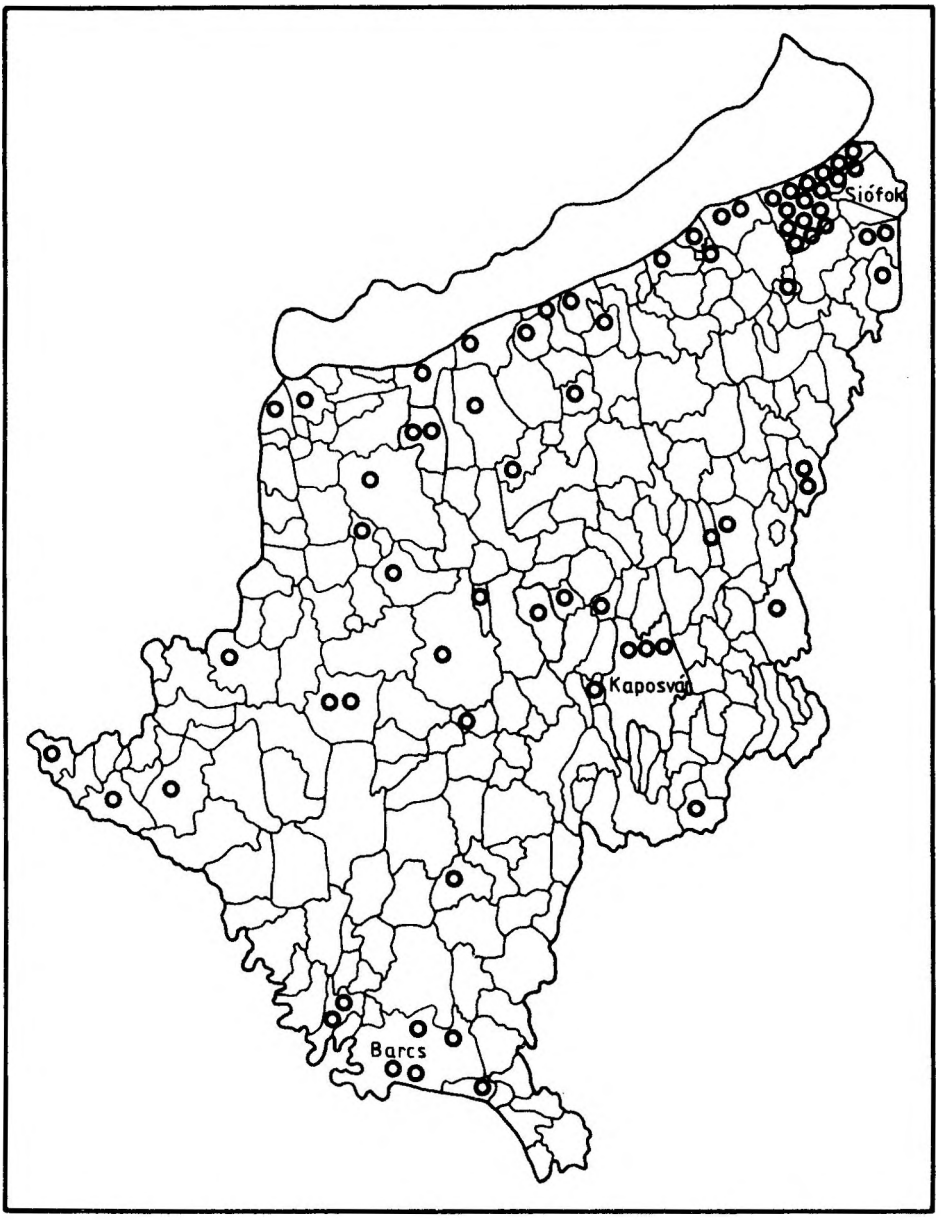
The relics of folk architecture are preserved in several settlements. With their accumulated presence and some organized programs they appear on the market as attractive factors (*Figure 14.10*). The Farm House Museum of Szántódpuszta and the Village Museum of Szenna give a good example of this, and many tourists come to see it regularly.

The county has famous places of pilgrimage, and their popularity has grown since the change of regime (there are twelve events in Andocs, four events in Segesd, one each in Berzence and Őrtilos).

Though the popularity of museums and country museums has threateningly decreased, their attractive touristic character should not be forgotten, they should be kept in mind as good supplementary programs.

Figure 14.11

*Number of tourism development projects in Somogy county*



*Other attractive factors*

Cultural and sports events are drawing more tourists even from abroad: off road in Somogybabod, motocross and autocross in Cserénfa, the triathlon championship in Nagyatád, the yearly organized cross-Balaton swimming championship, the more frequently organized riding demonstrations, the meetings of gliders and hot air balloons.

Among the cultural events the Philip Jones International Brass-Band Festival and Music Camp of Barcs, the events organized by the Wood Sculpture Art Centre in Nagyatád, and in order to prolong the season the Balaton Autumn Program Series are the most famous.

All of these endowments make it possible for the county to offer more diverse attractions to tourists through wider utilization, thus placing the county's tourism on a more stable base, ensuring a gradual increase in revenues, and a more even time and regional distribution of it.

*The self-development of tourism and the future*

This realization is not a new one: the documents of the county council verifies that tourism was on the agenda several times in the 1980s. The council's decisions, laid down the most important objectives of developing tourism. From the resolution of the executive committee (142/1983/XI.8.) the following conceptions are cited here as examples:

- the wide-spread prevalence of the new entrepreneurial forms and the development of private trade have to be promoted,
- the big agricultural farms operating in the region have to be drawn in to increase the opportunities for entertainment and sport,
- the program offering has to be reexamined and improved with respect to demands and economic aspects.

A modification of the regional structure of tourism came up in the 1980s. In 1988 the county council dealt with the problem of the tourist development of Inner Somogy from time to time. In the council resolution (13/1988/III.22.) the following is listed among the tasks related to developing the county's economy: "For the utilization of the county's endowments regarding tourism (particularly of Inner Somogy) the attracting of foreign capital should be encouraged

on an entrepreneurial basis. We shall create the conditions for the county's financial participation in the enterprises."

From these ideas almost nothing was realized in the 1980s, but following the change of regime it came to the front again for the challenge of the new market conditions. Various actors with different legal status appeared on the stage of developing, organizing and managing tourism. (According to the survey made with the assistance of the French consulting firm, BDPA–SCETAGRI the greatest number enterprises was launched in agriculture and the tourist industry in the county in 1990–1991.)

The ascendancy of small enterprises in tourism were promoted by several factors. On the one hand, the notion of tourism as an economic activity was familiar to the county's population and thus for the entrepreneurs as well.

On the other hand, following the change of regime, and despite the declarations of governmental organizations about tourism being a "leading industry", the budgetary promotions for its development were considerably curtailed.

This unfavourably affected the holiday resorts, (Balaton especially) and the realization of their development (mainly infrastructural projects), but at the same time it left plenty of opportunities for private capital.

It is noteworthy that the regional distribution of enterprises was and is diffused in the county. Some examples:

— Between 1990–1992 farmers from 37 settlements asked for registration in the catalogue of the Hungarian Associations of Village and Farm Inns, thus they officially declared their intention to join village tourism;

— As a result of a private initiative a recreational village is forming at Bánya (Zselic), which is part of Bárdudvarnok. The supply of public utilities is financed by resources won on tenders, and the 10.5 km of cycle track have already been constructed;

— Modern guest houses have been built in Nagyberény, Szólád, Marcali, Polány, Csákány, Köröshegy, Csokonyavisonta, Lulla, all of them are run by private entrepreneurs;

— Opportunities for sports and entertainment (primarily riding) have been created in Török, Várda, Kaposmérő, Ordacsehi, etc.;

The promotion of enterprises was assisted by subsidies, and credit allowances. The most important of these were:

- the tender for promoting village tourism announced by the Ministry of Industry and Commerce in December 1991,
- according to the invitation of tenders under the Government Decree on the Promotion of Serving the Regional Development of Backward Areas and the Increase of Employment (97/1992/VI.16.) 126 villages in Somogy could ask for promotions for the development of village tourism,
- through the credit program administered by the Foundation of the Entrepreneurial Centre of the County of Somogy through the PHARE-program, several tourist enterprises were granted financial support, such as the plan to use the army base of Marcali for tourism, the alteration of a farmer's house into a pottery, the establishment of village tourism in Karád, Kaposhomok, Újvárfalva, Bánya and Patca, and the development of a bathing and holiday village in Csokonyavisonta.

A part of the so-called micro-credits distributed under the supervision of the Entrepreneurial Centre helped to create the conditions for receiving tourists in the villages.

The local governments that were left alone by the government tried to help the development of tourism in their own ways. Most of them favoured local entrepreneurs, those who could be expected to plan for the long-run, thus making their prices in compliance with the quality level of services.

In order to effectively use the developing potential of private enterprises it became necessary to formulate the county's tourist strategy and to set up an organization that is responsible for regional coordination. These two important steps were done in 1992.

As it is stipulated in the paragraph 66 of the Act on the Scope of Authority (1991. XX.) the General Assembly of Somogy county established the Tourist Office of Somogy county. Its duties include:

- to harmonize the regional and national interests of tourism,
- to discover, to display and to propagate tourist values,
- to give an opinion on the development concept of holiday districts of high priority,
- to harmonize local developments,
- to analyze the tendencies regarding the region's tourism,
- to harmonize the promotion activities between the organizations operating in the county or having an interest in the county's tourism,

- to participate in organizing the county's cultural events, and their utilization,
- to prepare a proposal on the objectives of further developing tourism.

In the business plan of the Entrepreneurial Centre of Somogy county, formed with the support of the PHARE program, the formulation of a tourist development strategy for the long-run regarding the Somogy county was stipulated as an obligation. For this purpose the centre called for an international tender, which was won by the Italian SOMEA consulting firm.

The conceptual aspects of the tender were as follows:

1) *The analysis of the existing endowments*
- the use of the existing and discovered tourist values and surveying the potential ones,
- to survey the existing receiving capacity, and its evaluation,
- to "itemize" and analyze the economic, legal and social barriers of tourist development.

2) *Marketing*
- to analyze the applied market-influencing means, the effectiveness of the county's invitation promotion, and its the international marketing,
- to analyze international tourist relations,
- the main features of the county's general marketing plan, within it the segmentation of the market, and its relationship to the elements of supply.

3) *Enterprise development and organization*
- the program ensuring enterprise organization and vitalization through micro-credits,
- the tasks of the county government in order to encourage enterprises, the determination of the organizational framework of the county's task in tourism,
- the way in which spending per tourist can be increased,
- the proposed method to prolong seasons,
- the increase of the efficiency of thermal tourism,
- the program for education regarding county tourism.

4) *To point out the development potentials (projects)*

This chapter has to draw up actual projects for domestic and foreign investors, with criteria needed for making decisions.

In accordance with the tender the study took all the endowments (potentials and attractions) and the existing barriers of tourist deve-

lopment into consideration, and it drew attention to the importance of tourist marketing and the work to be done.

With respect to developing tourism the following objectives were listed among the most important ones:

- the establishment of high quality accommodations in compliance with the international market expectations in the inner areas,
- the establishemnt of four, and five star accommodation offering high quality services on the shore of the lake (may be accomplished by reconstructing the existing ones),
- based on the existing possibilities to build new facilities offering various opportunities for sport and entertainment,
- the improvement of the quality of direct and indirect tourist services, and the evaluation of the related demand for education and training,
- the improvement of the technical facilities of organizations with an interest in tourism,
- the promotion of the growth of thermal and cure tourism,
- the creation of the conditions for the continuous training of local partners in tourism,
- the supervision of promotional material and its revision,
- the creation of a credit system for promoting small tourist enterprises.

The SOMEA consulting firm recommended to do the county's tourist development in two steps:

- with respect to the tourist infrastructure and transportation to eliminate the existing barriers and institution forcing factors within a year,
- in the short run (within five years) to advertise the county as a receiving area, to improve the infrastructure to a level complying with market expectations, to enhance the quantity and quality of the accommodation in inner areas, to introduce new services (credit card acceptance), to preserve and protect the local communities, their traditions and folk art from the negative influences of international tourism.

In order to find the most effective way to bring in private capital they collected and evaluated the tourist projects existing in the county (*Figure 14.11*). As it is shown by their regional distribution, the idea of pursuing long-term profitable economic activity does not come up only in relation to the Balaton, as the 74 projects came from

47 settlements (the figures are with respect to the region of Barcs: 7, Balatonföldvár: 31, Marcali: 10, Tab 3, Nagyatád: 3, Csurgó: 4, Kaposvár: 15).

The county government together with the local governments of the settlements discussed the tourism strategy, and called on everyone to raise funding for it.

I believe that the natural, historical and cultural attractions, the intellectual potential, the traditions and experiences can make tourism play a leading role in the economic restructuring of Somogy county and to contribute to a regional development that is healthier and less concentrated. The activity of the Somogy County Entrepreneurial Centre and the Somogy County Tourist Office means a guaranty for the renewal of tourism, its move to the right direction, and the guided involvement of private capital, local communities, and local governments. There is a need for that since in 1993-94 the Somogy county will have the chairmanship of the Alps-Adria Working Community. This fact will draw the attention of a considerable part of Europe to the county, thus creating an opportunity to revitalize business activities regarding tourism.

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