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Grzegorz Gorzelak

## The Poverty and Wealth of Regions

(Assumptions, Hypotheses, Examples)

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### **1. Introduction**

The title of this paper (which is an obvious reference to David S. Landes' *opus magnum* [2000]) relates to the fundamental issue of regional development theory, which also has a bearing on regional policies.

Space is slow to change. "Long duration" (Fernand Braudel's term) is an inherent feature of a territorial system. Naturally, the slow pace of spatial change does not imply an absolute petrification of social and economic territorial structures. On the contrary, over the span of long historical periods, we have witnessed many significant transformations, both positive and negative in impact. Some countries and regions prove able to achieve a fast and lasting advancement in the economic hierarchy of the world, while others plunge into relative – and sometimes complete – backwardness.

Before we embark on an investigation of contemporary regional development processes, let us offer a short analysis of two historical examples.

The discovery of the New World and the conquest of South America came as a historic opportunity for Spain. Colonisation brought about two major consequences for its economy: influx of precious metals: gold and later silver, as well as trade with new economic entities across the Atlantic – the colonies.

Only a fraction of revenues from trade and import of gold and silver was invested in the economic development of the country. Their bulk was spent on the upkeep of the royal court and courts of aristocratic families, on the maintenance of the army and the repayment of loans contracted in Germany, Italy and the Netherlands. Even the military effort made by Spain contributed less to the development of the country's armaments industry than was the case in England and Flanders, where the Spanish Army bought its munitions, and the fleet – its men-of-war. Even horses for the army were purchased abroad. On the other hand, the 16th century was an age when architecture flourished and many magnificent palaces and castles were built.

The attitude and beliefs of the Spanish ruling elites, who were traditionally more opposed to economic activity than elsewhere in Europe (possibly excluding Poland) were a stumbling block to a broader utilisation for development purposes of profits derived from trade with the colonies and from production for the colonies. At the same time, investing higher profits (which were also due to increased food prices) in land and architectural constructions did not lead to any improvement of technology in agriculture.

However, even though Spain was the greatest naval, military and commercial power of Europe nearly throughout the entire 16th century, the country remained poor and structurally weak. As a direct consequence, its significance started to deteriorate rapidly since the end of the century, a process which was symbolically started by the crushing British defeat of the Great Spanish Armada in 1588.

According to LANDES (2000, p. 201): "Spain, in other words, became (or stayed) poor because it had too much money. The nations that did the work learned and kept good habits, while seeking new ways to do the job faster and better. The Spanish, on the other hand, indulged their penchant for status, leisure, and enjoyment – what CARLO CIPOLLA calls 'the prevalent hidalgo mentality'". And, further on: "By the time the great bullion inflow had ended in the mid-seventeenth century, the Spanish crown was deep in the debt, with bankruptcies in 1557, 1575 and 1597. The country entered upon a long decline. Reading this story, one might draw a moral: Easy money is bad for you. It represents short-run gain that will be paid for in immediate distortions and later regrets."

The economic development of Poland – a country comparable to Spain in population and size – was rather similar. It was also closely related to the history of geographic discoveries and their consequences for the economy, which might be seen as a contribution for long-term international relations in Europe. The influx of metals from the New World triggered inflation, progressing from the west of Europe eastwards. The differences in prices in Europe were quite significant. If the price level in the Netherlands in the 1540s was assumed as 100, it was 135 in Spain, 120 in Italy, 100 in France, 65 in England, 55 in Germany and 30 in Poland (Kaczyńska; Piesowicz 1977, p. XVI4). In such a situation, export from the East to the West was particularly profitable since the sellers would be rewarded with the "inflation premium", impossible to gain on their own markets.

Poland was able to export agricultural produce, timber, leather and hides. The export of agricultural goods was especially profitable as there were few market-oriented farms and unpaid work of serfs ensured low costs of agricultural production, mainly of grain - the commodity that could easily be transported across large distances. This resulted in the revival of manors owned by the nobility (*szlachta*), extensification of agricultural production at the expense of agrotechnical progress, monopolisation of the economy in rural areas by the nobility, and economic growth, later to be coupled with increased significance of this social class. Increased scope of unpaid labour in the farms and the obligation to get all produce from the farms resulted in the shrinking of domestic demand, which in turn limited the possibilities of urban development. The quality of farming tools deteriorated, poorer crops (already poor by European standards) were obtained, which led to increasing the scope of socage, drudgery.

The surplus of revenues that the nobility obtained from the export of grain (being at the same time exempted from tax and customs duties!) was spent on the purchase of manufactured commodities and luxury goods. None of these products was manufactured in a sufficient quality in Poland, hence the need for import; the former were imported from Western Europe and the latter from the Near East. All profits went to those regions and contributed to the structural conversion and development of modern production sectors.

The 16th century was the peak of Poland's economic, political and military prosperity. The centuries to come witnessed a steady decline of the Republic, unable to face competition. As a result of unexpectedly propitious international situation, after a short period of prosperity and growth, Poland regressed into feudal relations, which at this time in Western Europe were sinking into oblivion. Both Polish economy and culture suffered decline, while the participation of Poland in cultural and scientific exchange with Europe was severely curtailed. Soon thereafter Poland was erased from the map of Europe.

Why, then, are some countries and regions poor and other wealthy? How does it come about that some regions are capable of changing their disadvantageous status, rising from their backward state owing to a long period of steady development while other sink into economic and social degradation and some other remain in a state of inertia, peripherality and poverty? What mechanisms are at work that allow some regions to maintain a strong position in the changing geographical, technological, social and economic circumstances? Are the region's specific features the factor that plays a cardinal role in such dissimilar development trajectories? Or is it the broader context – the national or supra-national factors – that prevails? In other words – are endogenous or exogenous factors that matter the most? Or maybe their specific combinations and mutual relationships? How can an unfavourable combination of factors impeding faster development of backward regions be altered? Can this be done through external assistance, and if so – what form and what volume should such assistance have and how should it be utilised?

The theory of regional development strives to provide answers to the above questions, referring, in doing so, to general development theories formulated for supra-regional systems. Subsequently, the recommendations of theory are put to practical application via regional policy. However, an objective arbiter would have to evaluate its effectiveness as highly unsatisfactory, at least in relation to the goals it sets and the hopes it kindles.

There exist many possible approaches to analysing the poverty and wealth of regions. Some of them apply intricate methods of modelling economic phenomena, making use of various formulas combining factors of production: capital, labour, technological and organisational progress (theories and models of growth in their applications for regional analysis), as well as relationships between outlays and results, i.e. productivity. Other approaches point to the relationships between regions and their environment and imply that it is the volume and profitability of the “export” of goods and services to recipients located beyond a given region that is the determinant of their development (the so-called economic base theory). Some other approaches relate to intraregional linkages between economic entities which – in some cases at least – lead to extraordinary dynamics of development (theories of polarised growth, and recently theories of network relations, including those focusing on clusters of companies). There also exist theories explaining the durability of divisions into rich and poor countries and into rich and poor regions by an imbalance of exchange between highly developed and undeveloped systems (dependence theories, the centre vs. periphery approaches). Apart from that, the supply of production factors in individual regions (including human and social capital as well as material and institutional infrastructure), their location in relation to development centres and the characteristics of their natural environment are sometimes regarded as factors affecting regional development.

All those approaches, inspiring as they may be, frequently tend to be one-sided, and sometimes are too particularised, which impairs their explicatory – and therefore applicatory – potential. Is it at all possible to attempt a generalised outlook on regional development processes, analysing them in a longer, comparative historical perspective? This theoretical proposition, only sketched here given the size of this paper, is an endeavour to present such a generalised and dynamic formulation of the substance and mutual relations between key factors of regional development, such as: broadly understood regional features, the development paradigm and external stimuli.

For the purposes of further reflection, it is not necessary to offer a precise definition of the region. It will suffice to say that this is a territorial system which is a part of a larger whole, usually a state (although some smaller states may be treated as “regions”, e.g. Ireland) – characterised by internal uniformity, both in terms of functionality as well as similarity of socio-economic features. Desirably, regions under analysis should be furnished with some competencies, empowering their authorities to undertake independent actions for the region’s development. This is not a sine qua non requirement, however, since the national authorities frequently make decisions on behalf of the regions or – in the case of regions incorporating several territorial administrative units (e.g. “Eastern Poland”) – power is exercised by several equipollent entities. Thus, we perceive the region as a certain whole that yields to statistical and factographic analysis, and consider the competencies of its authorities as one of the region’s features.

## **2. Theoretical Approach**

In subsequent sections of this paper we will try to expound the theoretical model aimed to offer a comprehensive, dynamic view of the factors and circumstances determining the development of regions (see the diagram at the end of the paper).

## 2.1 The Development Paradigm

There exists a number of formulations of the socio-economic development model (paradigm) and its transformations. Alvin Toffler's model of three waves of social development is one of them. Each of the three waves is characterised by a specific manner of obtaining and expending energy:

1. In the first wave – which lasted from the emergence of settled farming about 5000 BC until the industrial revolution – man used unconverted energy of nature: his own muscles, animal work, river flow, and later – the power of wind. At the same time, man did shape – albeit to a rather limited degree – natural processes, thereby becoming less and less a merely passive user of its resources (hunting and gathering communities did not go beyond this stage). This type of economy could be dubbed agriculture-based economy.
2. In the second wave, the economy was based on the conversion of thermal energy into mechanical energy (either directly or using electric power). This was connected with the capability to combust energy resources generated by nature (wood, coal, oil, gas) and with the possibility to use nuclear energy, also produced from natural resources. Thermal and mechanical energy, to a slight extent supplemented by the forces of nature (water, wind, the harnessing of which means huge investment expenditure and substantial maintenance costs), almost entirely replaced the energy of human and animal muscles. The second wave was an age when industrial economy was in its prime.
3. The third wave is characterised by a gradual retreat from energy expenditure, since information has become one of development factors whose significance is increasing rapidly. The generation, transmission and use of information does not require any significant energy resources or outlays, hence the concept of information, or post-industrial, economy.

The above paradigm could be summarised by the formula: nature – energy – information, that are factors which are drivers of development in consecutive waves. Other, broader approaches to the development stages or models are proposed (cf. e.g. Rostow's systems 1960 or Bell's 1973). Krzysztofek and Szczepański (2002: 36, 37) distinguish the following stages: pre-industrial; quasi-industrial; industrial (modern); post-industrial (post-modern); information (post-modernist). The distinction between the latter two phases is particularly interesting since it highlights the essence of the information economy and the information society. Referring to the typology of development stages proposed by Bell (1973), it can be proved that the post-industrial society is one whose economy is characterised by a dominant share of services, and in which information – understood as a vehicle for communicating knowledge and innovation – does not as yet represent a significant development factor.

Regardless of the usefulness of individual approaches, it should be observed that they all fall within the general typology outlined by Toffler, especially – as he points out – because these phases tend to concur and are not manifested in the actual life of societies in an isolated way (even in a country such as the United States aspects of all the three waves may be found, although it would probably be more difficult in less differentiated societies of the well-developed European countries). Similarly, in each of the models actually existing in the contemporary world there are three co-existing factors: nature, energy, information. What matters, however, is the extent to which the societies make use of them, and their mutual relationships.

Contemporary information economy (post-modernist) is sometimes referred to as knowledge-intensive economy, or even knowledge-based economy. This term is occasionally replaced by an expression even more strongly accentuating the role of knowledge as the crucial development factor – the knowledge-driven economy. According to this terminology, knowledge is increasingly becoming a leading constituent of the new economy or information economy; it is also the key resource of the intellectual enterprise.

However, we should more probably speak about economy driven by innovation, since knowledge means an ability to move in the existing as well as anticipated reality. Knowledge is a static concept, relating to what yields to cognizance through generalised experience gained as a result of the existing practice and an anticipation of the future. It has to be observed, however, that the essence of the new information economy, distinguishing it from the socio-economic models of the past, is change – in the sphere of technology, organisation, marketing, etc. – that is brought about owing to innovation. Innovation means a departure from the existing practice and a desire to gain a competitive advantage due to increased effectiveness of production and distribution, and above all to the launch of a new product.

An extremely important feature of innovation which tends to be overlooked in the studies of the new development paradigm should be particularly emphasised. Innovation creates demand for itself, becoming in this way an essential – crucial – factor in the economy that is confined on the demand side, that is in the market economy. Demand for an innovative product is generated by making people aware of a new need that the innovation is supposed to satisfy, or of a new, much more refined manner of satisfying a need that has already been acknowledged. Very many examples can be quoted here: recording of images: camera, digital camera; recording of movement: movie camera, video camera, digital camera; transmission of sound: telephone, cellular telephone, satellite telephone; transmission of images: television, colour television; recording and retrieving of sound: tape recorder, phonograph, CD-player, digital CD-player. Nonetheless, the most dramatic innovational revolution took place in the sphere of storing, processing and transmitting information, which was possible owing to unprecedented progress in IT technology.

The innovator – that is the entrepreneur (nowadays usually a company or a corporation) launching an invention<sup>1</sup> on the market – may gain a durable competitive advantage since he is not dependent on the demand satisfied by many manufacturers or providers of services and enjoys a quasi-monopolistic position until a competitive innovator arrives on the scene (for a discussion of the threat of competition for companies with a strong market position but lacking sufficient ability for innovation see also: Christiansen 1997).

A characteristic feature of contemporary economy is an acceleration of innovation processes on the one hand, and, on the other – its cumulative utilisation in the process of creating innovation. According to Castells (1997: 32): „What characterizes the current technological revolution is not the centrality of knowledge and information, but the application of such knowledge and information to knowledge generation and information processing/communication devices, in a cumulative feedback loop between innovation and the uses of innovation.” This feedback loop results in strengthening the competitive advantage of the innovator over the manufacturer who is merely capable of manufactur-

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<sup>1</sup> The distinction between the *inventor* and the innovator was made by Joseph Schumpeter, who pointed out that only the innovator alters the mode of production, while an invention becomes an innovation only once it has been marketed (a good example here may be the new form of organising production proposed by F.W. Taylor and its practical application by Henry Ford).

ing products which are situated further on the product life cycle curve. This cycle affects regional development processes, which can be manifested as follows:

1. Innovation may appear only in regions having a substantial potential for innovation, that is in highly developed regions which offer good conditions for academic establishments, for companies capable of transforming an invention into an innovation and for highly qualified personnel.
2. Regions with a relatively high development level may participate in the mass production phase; the newer the product, the more stringent requirements concerning the quality of the production environment. This is true both for the possibility of purchasing a licence and for the more or less lawful reproducing of the production and technological pattern.
3. Regions which are less developed and are characterised by a poor ability to undertake production at a high technological level and therefore compete mainly in prices are under a strong competitive threat on the part of potentially cheaper manufacturers. It should be stressed that only the poor, who accept low pay for labour, stand a chance of winning in this price competition.

As a result of those processes, the segmentation of territorial systems is petrified; in the top segment, innovation is created, which secures high salaries and high profits and allows to maintain a durable competitive advantage, while in the low segment technologically obsolete products are manufactured, which require small capital resources and lowly paid, unqualified labour. We will revisit the issue of segmentation while discussing the competitiveness of regions.

The phenomena and regularities discussed above provided a premise for one of regional development theories which emphasises the role of technological factors in regional development (the so-called technological dualism theory). This approach accentuated the impossibility of dissemination of high technologies and production techniques in undeveloped countries, which was attributed to their limited ability to finance capital-intensive investments, low qualifications of the population and the inevitable links of the majority of the population with the traditional sectors. The technological dualism theory was later generalised and given a regional dimension (cf. Sunkel 1973; Richardson 1984), and was incorporated into the trend of dependence theories.

Suarez-Villa (2000, cf. also Gorzelak 2002, where the suitable diagram was reproduced from the publication in question) is one of the authors discussing the relationships between the ability for innovation and regional development. Fast increase of the innovation potential in the southern states of the USA with parallel decrease of this potential in the northern and north-eastern ones coincided with the dynamics of economic growth in both these groups of regions. The shift from the “frost belt” (north) to the “sun belt” (south) has to a considerable extent been caused by changes in the proportions of the innovation potential of the individual constituent parts of the United States.

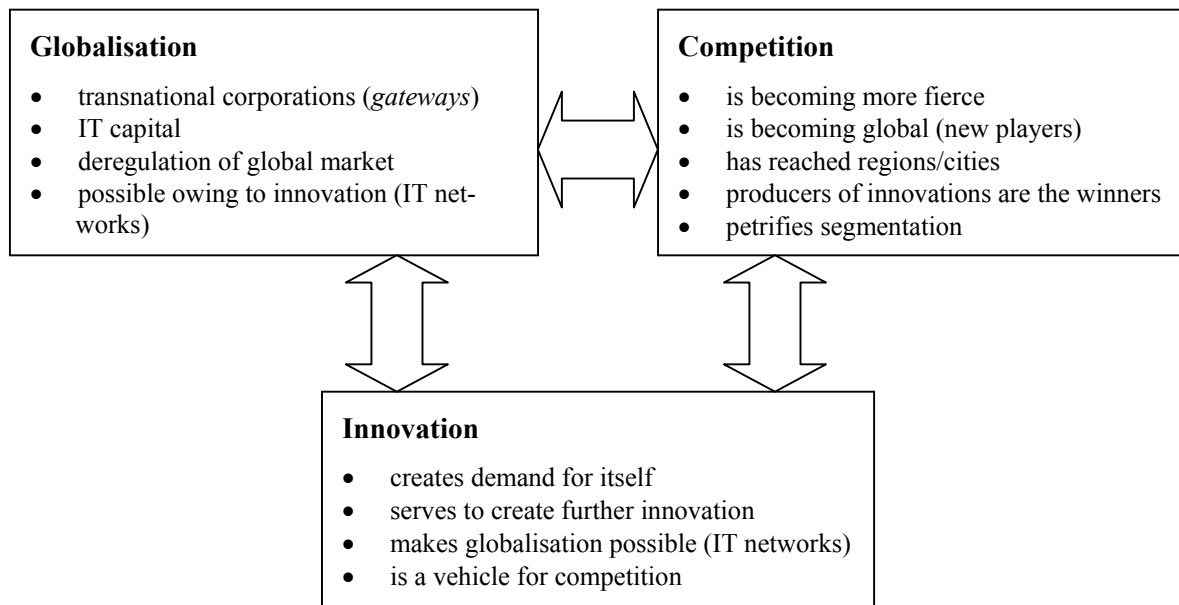
Those processes occur along with globalisation processes. To avoid reiterating obvious truths about globalisation, we will restrict ourselves to an observation concerning only one aspect which is rarely debated and which is related to the new quality of the key actors on the global scene: transnational corporations. Reich (2001) points out that contemporary corporations have stopped being manufacturing entities and instead have become gateways identified with specific names – i.e. trademarks (SONY, General Motors, Philips, Nokia, etc.) connecting two global networks: that of the suppliers and that of the recipients. Corporations organise networks of manufacturers co-operating between themselves and compose their products from goods offered to them by other cor-



porations (majority of cars are furnished with electric equipment bearing the name of Bosch or Delphi, which does not automatically imply that it has been wholly manufactured by those companies since they themselves are arrangers of production networks). On the other side of the gateway, there are the networks of recipients – which include consumers – who are connected with the suppliers via e-commerce networks.

The diagram below, combining three inter-related and closely connected phenomena: globalisation, competition and innovation, offers a summary of our reflection so far.

Figure 1: The triad of the contemporary development model



## 2.2 Location Criteria

It has frequently been pointed out that the development model is determined by the location criteria (see for example Gorzelak; Jałowiecki 2000). Since these issues have already been broadly discussed, we shall only indicate that quantitative location criteria have largely been replaced by qualitative criteria. Among them, qualifications of the labour force, administrative capacity, diversity of the economic structure, reliability of transport and telecommunications infrastructure as well as living conditions<sup>2</sup> can be regarded as key features that a given region or a local system should possess in order to become attractive to the makers of investment decisions. At the other end of the spectrum, those regional features which mattered so much in the resource-intensive economy, such as: numerous, poorly educated labour force (hence mass-scale unemployment in the economy that is developing without generating new jobs – so-called jobless

<sup>2</sup> Last year "The Economist" published a whole page advertisement promoting Austria as a good business location, which was entitled: Mozart. Mountain Lakes and 4-Wheel Drive. Rethinking Your Image of a Great Business Location. Thus, it is no longer the market itself, the highways (they are ubiquitous) or the universities, but the pleasures of life that Austria can offer that are supposed to lure the potential investors.

growth), natural resources<sup>3</sup>, mass transport infrastructure, financial assistance, sectoral specialization, are losing in importance.

Let us consider in more detail the long-term implications of aid offered by the public sector to businesses. Frequently, in the long time span, such aid is hampering competitive ability since the recipient enterprise ignores the need to make constant structural changes and to modernise production. A textbook example may be the case of the car-makers, The Rover's Longbridge car plant in Birmingham, which blackmailed consecutive British governments with threats of staff redundancies, securing in this way state aid (in 1999 the plant generated more losses than the entire Polish coal mining sector for that year!). The sources of the Korean crisis are attributed – among other factors – to too close links between the state and huge business conglomerates (“chebols”), which produced too easy operating conditions, including those concerning contracting foreign loans. Following the devaluation of the Won, those loans turned out to be too huge to repay. Similar reasons – in addition to others – have brought about the slump in the Japanese economy<sup>4</sup>. Unfortunately, in Poland the belief in the strength of financial instruments, such as for example tax reductions, still persists at the local and central levels. Its clear manifestations are the special economic zones which are utterly unprofitable in the majority of cases, cause many difficulties in Poland’s negotiations with the EU and which lead to long-term obligations of the public finance sector towards private capital (cf. Kryńska 2000).

The above is summarily shown in the diagram below, which shows how the Research Triangle in North Carolina (USA) encourages investors to start business activity in this progress-oriented region<sup>5</sup>:

<b>Welcome to the Research Triangle Region!</b>		
<p><b>A great place to live</b></p> <ul style="list-style-type: none"> <li>• Low cost of living.</li> <li>• Exciting college and professional sports.</li> <li>• Two hours from the coast, three hours from the mountains.</li> <li>• Mix of small towns and booming cities.</li> <li>• Great cultural and artistic attractions.</li> </ul>	<p><b>A great place for education</b></p> <ul style="list-style-type: none"> <li>• Excellent primary and secondary private and public schools.</li> <li>• Three major award-winning research universities.</li> <li>• Several outstanding colleges and community colleges.</li> <li>• A great resource for business for both research and training.</li> </ul>	<p><b>A great place for business</b></p> <ul style="list-style-type: none"> <li>• A highly skilled, well-educated workforce.</li> <li>• Excellent labour relations.</li> <li>• Lower business costs.</li> <li>• Plenty of land, office and warehouse space available at a reasonable cost.</li> </ul>

<sup>3</sup> Natural resources can sometimes be a burden (like coal deposits); they can lead to maintaining a resource-intensive direction of development and can hold back efforts to seek ways to enter the knowledge-intensive path of development (for instance, such danger was observed in Canada).

<sup>4</sup> According to "The Economist" (5.-16.11.2002), in a relatively good situation are those Japanese corporations which have never received state aid, and in particular those which are not located in Tokyo or Kyoto, that is far from the political and economic decision centres.

<sup>5</sup> <http://businessleader.com/rtp.html>

The new development pattern is emerging only in some places: in those which are capable of gaining a competitive advantage owing to their ability to create and/or develop innovation or to effect a technological, organisational or product change. This model, which has emerged in a small number of the strongest regions, is spreading and gradually becoming the prevailing paradigm. This is the essence of segmentation which was referred to above: the most innovative regions, this time understood in the territorial (and not corporate) sense. Most innovative regions determine the direction of changes in the development model, thereby ensuring a durable competitive advantage over those regions which constantly have to adjust to the conditions set down by the leaders.

### 2.3 Regional Features

Every region manifests specific features, produced by nature and history. Drawing on Cappelin's concept of distance (cf. Gorzelak 2002), those features might be summarised under the following headings:

#### *Geographical distance:*

- location in the geodesic space: distance from the economic centres of the world, from metropolises, industrial centres, tourist attractions and recreation facilities;
- location in the physical space: climate, topography, natural resources, etc. This is undoubtedly one of the crucial characteristics of any territorial system. According to some (now obsolete) geographical determinism theories, climate is the decisive factor determining the activity of man. It was claimed that hot climate precludes any efficient functioning, which was proved using the examples from Africa. Indeed, the climatic conditions significantly affect the ability to undertake concerted effort (see for example Ryszard Kapuściński's essays "The Ebony" or the introduction to D.S. Landes [2000]). However, the example of Far Eastern Asia suggests that such restrictions may be overcome. Furthermore, technological progress widely popularised air-conditioning, which has become one of the factors permitting the "opening" of many regions – such as the south of the USA – to inward investment and business activity. Additionally, location in the physical space enhances the accessibility of a given territorial system, although as a consequence of progress in covering distances, the significance of the physical space is beginning to overlap with that of the geodesic space (the mountains or the ocean are no obstacle for an airplane).
- transport infrastructure, determining the accessibility of a given area and its openness to the movement of people and goods. Reliability has become a major feature of infrastructure (just-in-time supplies), so as connections with international transport networks<sup>6</sup>;
- telecommunications infrastructure, which is a constituent part of the global telecommunication network. Of particular importance is access to this infrastructure, its universality and its educational role. What also matters is its quality (speed and reliability of data transmission) and dependability, including resistance to potential catastrophes and external disturbances (it could be claimed that computer networks with data of stock exchange, commercial and capital transactions are the most sensitive element of contemporary economy, since their destruction might have far-reaching, critical consequences for the entire global economy).

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<sup>6</sup> As one of Polish composers living in the USA said recently, it is not the country that he lives in that determines his location in the global space but the distance to the nearest international airport.

*Institutional distance:*

- sectoral and branch structure of the economy, particularly the share of the fourth sector (banking services, research and development, tertiary education, professional consulting, etc);
- degree of technological progress, not only relating to the system of manufacturing but also to the sphere of public services (including education; for instance, in Poland only 40 per cent of schools have Internet access, and the share of schools where IT may be taught at a decent level of instruction is even smaller). Technological level affects the qualifications of staff, administrative capability, quality of living conditions, as well as potential for innovation;
- human capital (level of education and skills, motivation to work); it has already been pointed out that contemporarily it is one of the crucial development factors;
- social capital (ability to undertake joint efforts, willingness to cooperate, level of social trust, power mechanisms, etc.), by some researchers (e.g. Putnam 1993; Fukuyama 1995, 1999) regarded as the most important factor;
- institutional structure, both relating to business environment as well as civic society institutions.

Naturally, the features of territorial systems are not set in stone. It has to be indicated, however, that individual features are characterised by a varying propensity for change, since only some of them are dependent on the activity of man, and those which have been determined by nature tend to change extremely slowly. Furthermore, those features are both interrelated and interdependent. For instance, it would be unrealistic to hope that a territorial system (state, region or city) which has poor telecommunication links, with uneducated population engaged in traditional economy sectors will out of a sudden join the world's top league in scientific research.

#### **2.4 Relationships between Regional Features and Location Criteria**

At this point, we reach a crucial moment of the regional development model: the relationships between the region's features and the location criteria prevailing in a given historical period. Reducing the entire range of possible relationships to two extreme ones (which is a justifiable exercise in the formulation of generalised statements) we can distinguish two situations: that of a high congruity between the regional features and the location criteria and that of lack of such congruity (incongruity). Those two extreme types of relationships determine the position of a region in the competitive economic space, which has now become a global space, where innovation is the basis for victory in the competition race.

#### **2.5 Competitiveness of Regions**

The competitiveness of regions is one of the most commonly used concepts relating to both regional development processes and to regional policies. There is virtually no document (such as a regional strategy or a government document concerning regional policy) which would not identify enhancing the competitiveness of regions as one of its aims. It is equally rarely that we can encounter an attempt to define this notion.

Drawing on our earlier analysis (Gorzelał; Jałowicki 2000), we can say that a region is competitive if:

- it creates such conditions for businesses operating in the area that they are in a position to win the competition race; it has been said earlier that a stable competitive advantage can be gained owing to the ability to create innovation;
- the region is capable of winning the competition with other regions to attract investment capital, particularly capital which is invested in ventures with a high innovation level.

It can easily be seen that those two definitions of competitiveness basically mean the same. On the one hand, a region will not attract innovative capital if it fails to ensure good conditions for such capital, and on the other hand, the mere fact of attracting innovative capital will have a positive impact on the business conditions in a given region.

The region's competitiveness depends on the relationships between its features and location criteria implied by a prevailing development model. Only those regions may attain high competitiveness whose features are congruent with those criteria, whereas regions whose features are not congruent with such location criteria can neither attract capital as not being sufficiently attractive nor can they create favourable conditions for the existing businesses.

Competitive regions develop a high ability for endogenous growth. They can modify their features (e.g. through infrastructure projects, improving qualifications of the labour force and attracting top staff by brain drain, development of the scientific and research environment, increase of local revenues, etc) in such a way that they become more and more congruent with the prevailing location criteria. Some of them – the strongest – can modify those criteria through their influence on the transformations of the development model. On the other hand, uncompetitive regions stagnate or slump into recession since the businesses located in such regions suffer problems and close down, the capital withdraws, followed by the wealthy, top qualified staff; in short, the negative feedback mechanism of Myrdal's "circular causality" is triggered, which widens the existing gap in the congruity between the regions' features and the location criteria.

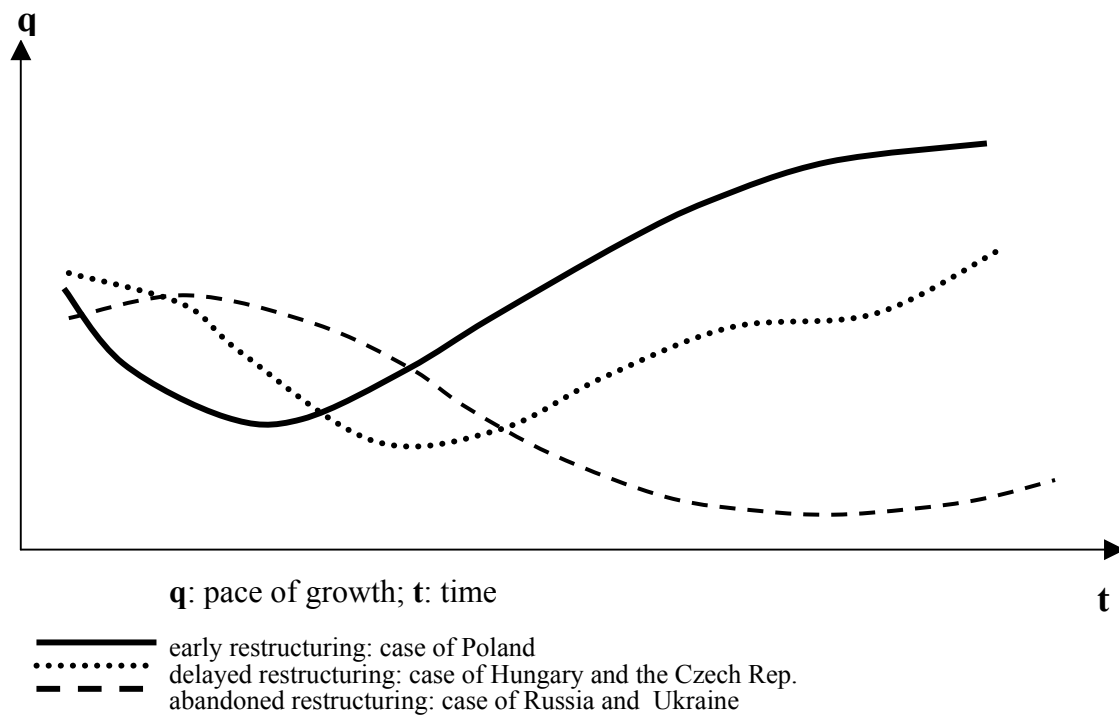
Thus, we deal with a dynamic system characterised by negative feedbacks between individual constituents of the development process. In view of the constantly changing (with very fast changes taking place contemporaneously) development model and the ensuing changes of location criteria, maintaining high competitiveness requires continuous adjustments of the regional features to those criteria. Therefore, it is necessary to undertake steady, unceasing restructuring, which should consist in replacing those elements in the region's structure (its economy or infrastructure) that are ill-adapted to the current – and future – location criteria with new elements, either anticipating or at least keeping up with the requirements of the ever-changing economy.

A significant feature of every structural change is that it is very expensive. Frequently this cost is externalised, pushed out of the system. For instance, if an unprofitable factory is closed down, the costs involved are incurred by the laid-off personnel, and later by the public sector which is forced to pay unemployment benefits and/or social welfare benefits. In addition, restructuring usually produces the desired results after some time elapses, since normally a period for adaptation is required. The essence of restructuring, however, is that it is objectively unavoidable if the region is not to lose the level of competitiveness that it has already attained, and especially if it wants to advance. In the former situation, this need is due to the fact that location criteria tend to change at an increasingly faster pace, and the region has to chase them (in line with the principle: if you are not going forward you are going back) In the latter case, this is caused by the need to "make up for the losses" that occurred in previous periods, as a result of which the restructuring has to be deeper and more thorough.

Forbearing restructuring inevitably leads to the weakening of the competitiveness level, and eventually to stagnation or recession. The social costs will have to be paid anyway, albeit in vain, that is without securing gains in the form of structural changes that could be effected if they were made in an understanding and controlled way.

The trajectories of post-communist countries in the years 1990-2000 shown in the figure below can serve as a perfect example of the regularities discussed. (see Fig. 2)

Figure 2: Trajectories of post-communist countries in the 1990s



The countries which made a conscious effort at the early restructuring stage (such as Poland, Slovenia and Estonia) achieved much better results in the post-1989 period than those countries which were trying to postpone restructuring (Hungary and the Czech Republic) or which were trying to forbear it completely (most of the ex-Soviet republics). The observable current slowdown in the Polish economy might also be partially explained by the fact that the restructuring effort was discontinued in the mid-1990s.

## 2.6 External Intervention

Regions are not wholly enclosed entities. Contrarily, as a result of globalisation processes, the development of telecommunication networks and the progress in transport, they are more strongly tied with the environment, creating systems of networks or through companies which are located in the region and which are themselves elements of larger cooperation networks.

The majority of spatial entities are affected by at least three types of external stimuli:

1. Inflow of inward capital, which is much higher in attractive regions than in those which are uncompetitive. At the same time, innovative capital flows into the regions characterised by highest competitiveness, while capital investing in low or medium

technology spheres flows into regions whose features are not congruent with the prevailing location criteria<sup>7</sup>.

2. In uncompetitive regions, public aid is a financial alternative to investment capital, which frequently is sustained for long periods of time. Such aid is directed to such uncompetitive regions by the state (cf. the “New Deal” scheme, later the Appalachia programme in the USA, aid to the Mezzogiorno in Italy, the “assisted areas” in the United Kingdom, transfers to the “New Länder” in Germany, other regional assistance schemes ), or, to a growing degree in the past 20 years – by the European Union (and its predecessors), which allocates approximately 30 per cent of its budget as aid to poor, stagnating regions.
3. External demand for the products and services of a given region represents the third type of external stimuli. Such demand may appear as a result of the modification of the development paradigm (e.g. coal became a valuable natural resource only after the steam machine had become popular, just as uranium after nuclear energy had been invented, etc.) or as a result of macro-scale changes (for example, as a result of globalisation there appeared demand for the production of traditional goods in cheap countries which until then had remained outside the main currents of global economy); it may also appear as a consequence of political events (as was the case following the 1990 opening of the Polish-German border and acquiring access to the cheaper Polish market by the Germans).

It should be noted that different external stimuli reach individual types of regions. Competitive regions attract innovative capital since, if invested there, it can yield high profits. Uncompetitive regions do not make such promises, and for this reason are in a sense doomed to wait for public aid that steers clear of the better performing regions. Although external demand may appear in the two types of regions, stronger regions have a better capacity to shape and stimulate such demand.

A distinctive feature of the aforementioned beneficial stimuli – which often occur in parallel, for example in Ireland in the 1990s, is that they ought to facilitate and foster development processes owing to the transfer of specific revenues to the region, and also frequently of the know-how and access to external markets. Such factors never occur in uncompetitive regions in a sufficient number, while – in the case of competitive regions – they may additionally foster the development process.

## 2.7 Use of External Impulses

External intervention may be put to various uses. We can differentiate between two contrasting situations:

- utilisation of additional gains obtained as a consequence of external stimuli in order to accelerate the structural change and to secure a better adaptation of the region’s features to the current and future location criteria;
- forbearing structural changes and utilisation of external gains to cover the losses resulting from the growing ill-adaptation of the regional features to the location criteria and the ensuing decline in the region’s competitiveness (which is also bound to affect businesses located in the region).

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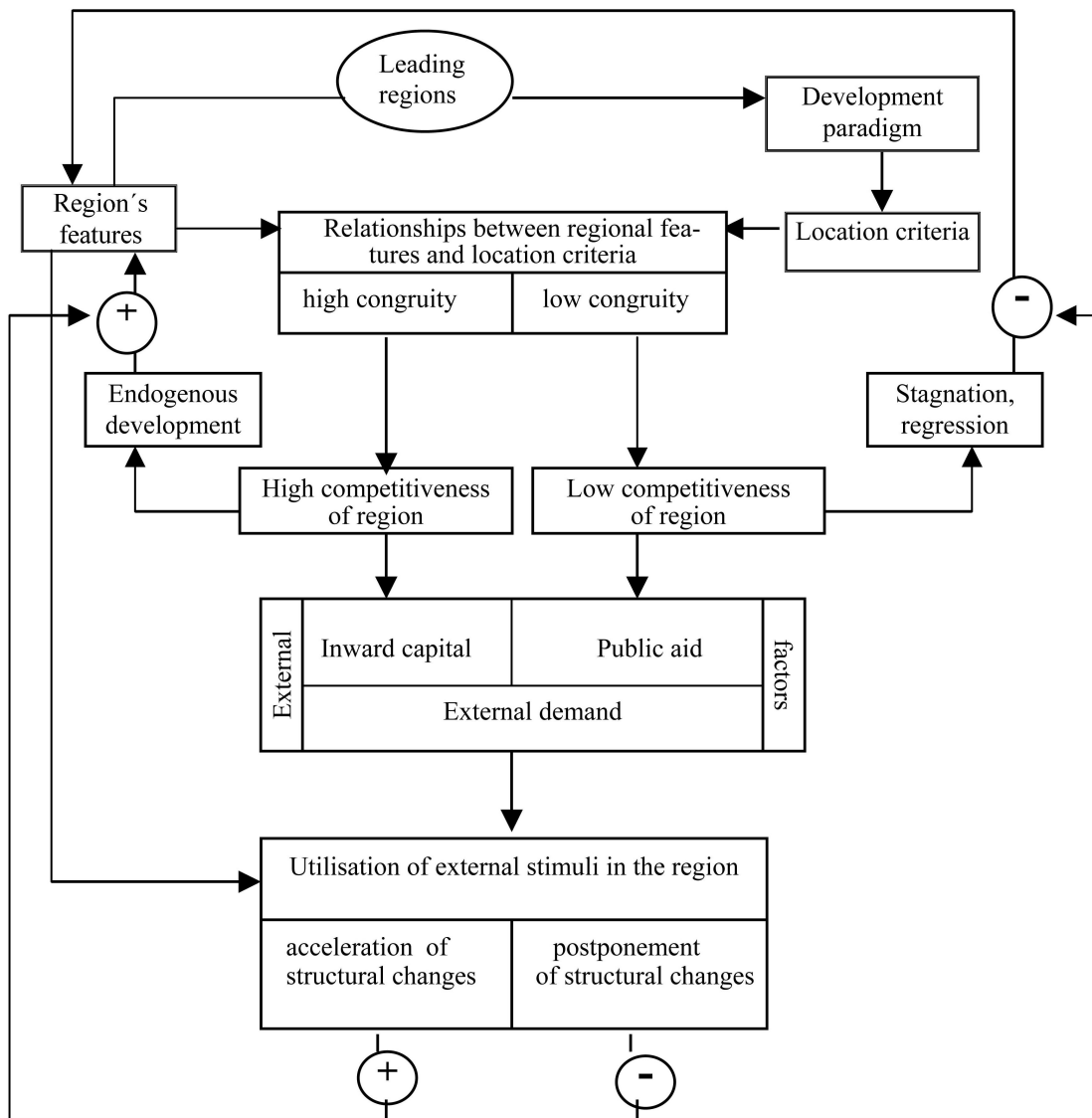
<sup>7</sup> The press reported that Ireland rejected Nissan’s offer to build a car assembling plant in this country arguing that such a plant would have too low innovation level, not ensuring sufficiently desirable stimuli for its local environment. In Poland and other Central European countries, such offer would certainly be most warmly welcome, which well shows the differences in the overall competitiveness of those two systems.

A transitional situation is also possible, where restructuring is limited, and the gains derived from external stimuli are expended to cover the costs of such a limited restructuring exercise.

The manner of utilisation of gains produced by external stimuli depends on the features of the region itself, primarily its human and social capital, which includes political institutions representing the interests of social classes, as well as social and professional groups. In the democratic system, it is required to ensure the society's acceptance of social costs involved in the restructuring process. However, sometimes the political class will not seek such acceptance since the envisaged structural change is against its own interests.

Figure 3 presents the overall model of interrelationships between the location criteria, region's features and its competitiveness, the external factors and regional reaction to them.

Figure 3: Regional development model – a flow diagram



+: positive influence  
 -: negative influence



### 3. Model Situations of Regions and Examples

If we were to list three cardinal factors determining the development of regions, we would point to three variables, which at a given moment are basically independent, at least from the region's perspective: the prevailing development paradigm (and the ensuing location criteria), broadly understood regional features and external stimuli. Naturally, those three independent variables are involved in feedbacks operating on a broader time scale, and the most important one relates to the manner of utilisation of the appearing (sometimes out of a sudden) external stimuli. Importantly, the use of external stimuli depends on the features of the region itself. In the model approach, these relationships explain all the four regional development situations:

1. Strong regions ("the leaders"), maintaining their leading position despite the changes in the development paradigm – such as for example the core of Europe reaching from London to Milan (the so-called blue banana) – are examples of regions that defined the development models in the pre-industrial and industrial era and which, in the knowledge-intensive economy, are strong enough to sustain their high level of competitiveness owing to their endogenous development.

Those regions function within two positive feedbacks (see Figure 3). The internal feedback has a positive impact since the regions are competitive due to the fact that their features are congruent with the location criteria. The strongest regions may even as much as determine those criteria. Owing to the positive external feedback, those regions are also able to utilise positive stimuli in the form of capital inflow (they are attractive for such capital); they may also shape the demand for products manufactured in them, since they are innovative.

2. Traditional industrial regions ("the losers") have lost their competitiveness following the change of the development model (and by this token also the location criteria).

In consequence, their features were quickly proved to be incongruous with those criteria. The resulting stagnation and recession was later overcome in some of those regions (e.g. in the Ruhr Basin) owing to a skilful use of external stimuli. Other regions (e.g. Upper Silesia) utilised such stimuli to postpone the necessary restructuring, as a result of which their situation is difficult even a long time after losing the competitiveness they had in the resource-intensive economy.

Referring to the pattern of the development process we can say that those regions lost the positive internal feedback as a result of the changed location criteria and have become uncompetitive. Nonetheless, some of them experienced strong, beneficial external stimuli (such as public aid to the Ruhr Basin or the construction of the Channel Tunnel in the case of North-Pas-de-Calais) and were able to utilise them in order to change their social and economic structure and not to delay the inevitable restructuring. On the other hand, the Upper Silesia region neither received sufficiently robust external stimuli nor were they focused on initiatives promoting modernisation, due to the attitude of the conservative regional elites.

A very conservative calculation may be made: the current debt of Polish hard coal mines totals approximately PLN 25 billion (it must now be much higher if calculated in current prices); the costs of the restructuring of the coal mining sector incurred so far to approximately PLN 30 billion (with the foregoing reservation concerning prices); the total sum of subsidies to the export of coal is not exactly known (it can be safely assumed that it is 20 million tonnes per year multiplied by 10 dollars per tonne multiplied by 10 years, that is c2 billion US dollars, i.e. PLN 8 billion). Altogether, the coal mining sector absorbed about 60 billion zlotys, which is equivalent to the gross regional product of the former Katowice voivodship in 1998. If we add the losses incurred by other sectors (mainly steel industry) of the region and the subsidies granted, it will turn out that the entire Silesia region received support roughly equivalent to one seventh of the product it contributed to the Polish economy after 1990. Nevertheless, the results of this public aid in the region are minimal.

The post-industrial region of Upper Silesia and the Basin [Zagłębie] calls for two things: a determined pro-restructuring attitude and substantial external assistance. However, no such support is anticipated. The aggregate allocation envisaged in the Integrated Operational Programme for Regional Development as assistance to Polish post-industrial regions is merely EUR 100 million, which is a figure ridiculously insufficient. The document also seems to overlook the fact that regional restructuring means not only a structural change (mainly through bankruptcies) of its major sectors but also very costly investments in infrastructure and redevelopment of post-industrial areas.

Taking into account strong attitudes opposed to change in this already highly uncompetitive region as well as lack of understanding of its objective needs outside the region, it can be anticipated that Upper Silesia will become the main problem region in the enlarged Europe. At the same time, there is reason to believe that appropriate policy decisions will be made only when guided from Brussels.

3. Poorly developed regions which remain underdeveloped for long periods of time – such as for instance the Mezzogiorno, Appalachia, eastern borderlands of some Central European countries) – are locked in two loops of negative feedback: their low competitiveness petrifies their stagnation since their inherent potential is too weak to ensure a high pace of growth, and external stimuli (public aid and external demand) – if any – are either too weak to overcome low competitiveness or are not employed to effect a sufficiently deep structural change<sup>8</sup>.

Underdeveloped regions may stand a chance of overcoming their backwardness only when their competitiveness is increased, for example as a result of changes in the location criteria, and when the effects produced by the generated external demand for their features and resources are used to induce a fast and deep structural change. Even better results might be produced when the backward regions anticipate their future opportunities, as was the case in some southern regions of the USA, when they invested in science, education and international contacts (e.g. the Research Triangle in North Carolina or Greenville in South Carolina, considered to be the town with the most favourable business climate in the United States).

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<sup>8</sup> Discussions with the authorities of Alentejo, the poorest of Portugal's regions, indicated that in 1995 they had only one development strategy: to seek funds in Brussels and Lisbon. Endogenous development opportunities were beyond the sphere of interest of the regional elite. This attitude is shared by some Polish regional elites even though it does not lead anywhere.

Let us look at the development potential of Eastern Poland – an underdeveloped, peripheral region, practically uncompetitive in the European space. This region has no chance to overcome its backwardness on its own since its endogenous potential is very weak and the external demand for its assets poor.

Naturally, assistance ought to be directed to Eastern Poland, but it should definitely have a pro-developmental character, and aim to reduce the peripheralisation of this region through the development of transport links (also within the region), support to business environment and civic society institutions, promotion of education, etc. However, such efforts will not suffice to close the existing gap between Eastern Poland and wealthier regions of the country if the region is not given its historic chance in the form of emerging demand in the post-Soviet republics.

If the countries that emerged after the collapse of the Soviet Union enter the path of speedy and steady development, they will become a very promising market for high transnational corporations. When seeking favourable locations for production targeted at those markets, such corporations might come to the conclusion that eastern Poland – the region of the EU that is most eastbound – is potentially a cheap and well organised area for necessary investments. Therefore, the expected demand in the East would provide a favourable external stimulus for Eastern Poland, and in all probability the only one that the region may hope for.

However, if such a stimulus is to be utilised, the region and its vicinity require actions that will help prepare it for this – uncertain – future opportunity. If such efforts are not made now, this opportunity – when it finally comes – will be embraced by the regions which prove more competitiveness – such as Slovakia or the Baltic republics, which are even now on a higher level of development than Eastern Poland.

4. Finally, there is the not too numerous category of “the winners”, that are those regions which were able to overcome the negative feedback between their features and the location criteria owing to their making skilful use of external opportunities. Such regions include Ireland, southern USA, Bavaria. They had their historic chance as a result of the changes in the location criteria – suddenly they became attractive due to the popularisation of air-conditioning and decline of traditional industrial sectors (southern states of the USA), or due to increased mobility of American capital in Europe, they became an attractive location (Ireland), were able to take over the functions that other regions had lost (moving corporate headquarters of the research sector from Berlin to Munich after World War II), or offered cheaper goods to which the consumers suddenly obtained access (western Poland). This group also includes those Third World countries which were incorporated into global economy mechanisms as a result of globalisation and search of cheaper manufacturers of less technologically advanced products by transnational corporations.

In the early 1990s, as part of the Local Initiatives Programme financed by the European Commission, nine Polish *gminas* [municipalities] received approximately 650 thousand Ecu each for the implementation of their own development strategies. Those funds represented a sizeable share of the *gmina* budgets, ranging between 10 and 80 per cent of their annual revenues (cf. Gorzelak, 2000).

Eight years after the completion of the programme its results in the individual *gminas* were quite varied. Their assessment led to the following conclusion: „only those entities which are well prepared to absorb assistance should be supported, since allocating even substantial sums to local entities where there is no climate conducive to their reception and rational utilisation leads to the squandering of public funds which might be much better utilised elsewhere. It is an illusion to think that substantial assistance may on its own initiate the development process since some local communities and their elites are resistant to such supports, expressed both in the form of money and competent advice”.

#### 4. Conclusions

What then seems to be the key to the development of regions (groups of regions, countries, groups of countries)? Endogenous or exogenous factors? External opportunities or internal mechanisms of their utilisation?

Reflection on the nature of regions leads to the conclusion that both categories of factors: internal and external, are of great significance, even though in different types of regions they may take different combinations.

Strong regions make use of their own potential to determine the external conditions for weaker regions. On the other hand, weaker regions are not able to break free of this vicious circle despite the frequently substantial external aid they receive if they are not given an opportunity in the form of the demand for their potential, which might happen as a result of changes in the location criteria or changes in their competitiveness caused by different circumstances, for instance changes in the geopolitical situation. If those two conditions concur, such underdeveloped regions may join the group of the winners. The losing regions, i.e. those which lost their competitiveness as a result of changed location criteria, may overcome their difficulties provided they receive external assistance and use it to complete a deep structural change.

In a fast-changing, competitive world, no one can be sure of their relatively strong position. All actors are required to manifest an ability to foresee the future and to adapt well ahead to new, forthcoming requirements. This ability is especially needed in underdeveloped regions and in those which have lost their high competitiveness status – not through their fault. Regretfully, in both cases this ability is practically nonexistent. The elites in weak regions mainly look for outward opportunities, primarily in the form of public aid, refusing to acknowledge the need to undertake a deep transformation of the region's own social and economic structures. The elites and populations of the losing regions relive the memories of their past prosperity, which makes them unable to come to terms with the simple fact that if the former wealth is to be restored, the dramatic process of adapting to the new market requirements cannot be avoided.

These regularities explain why regional policy, so far dealing mainly with backward regions which are losing their economic base, is an art both difficult and, more frequently than not, quite ineffective.

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