

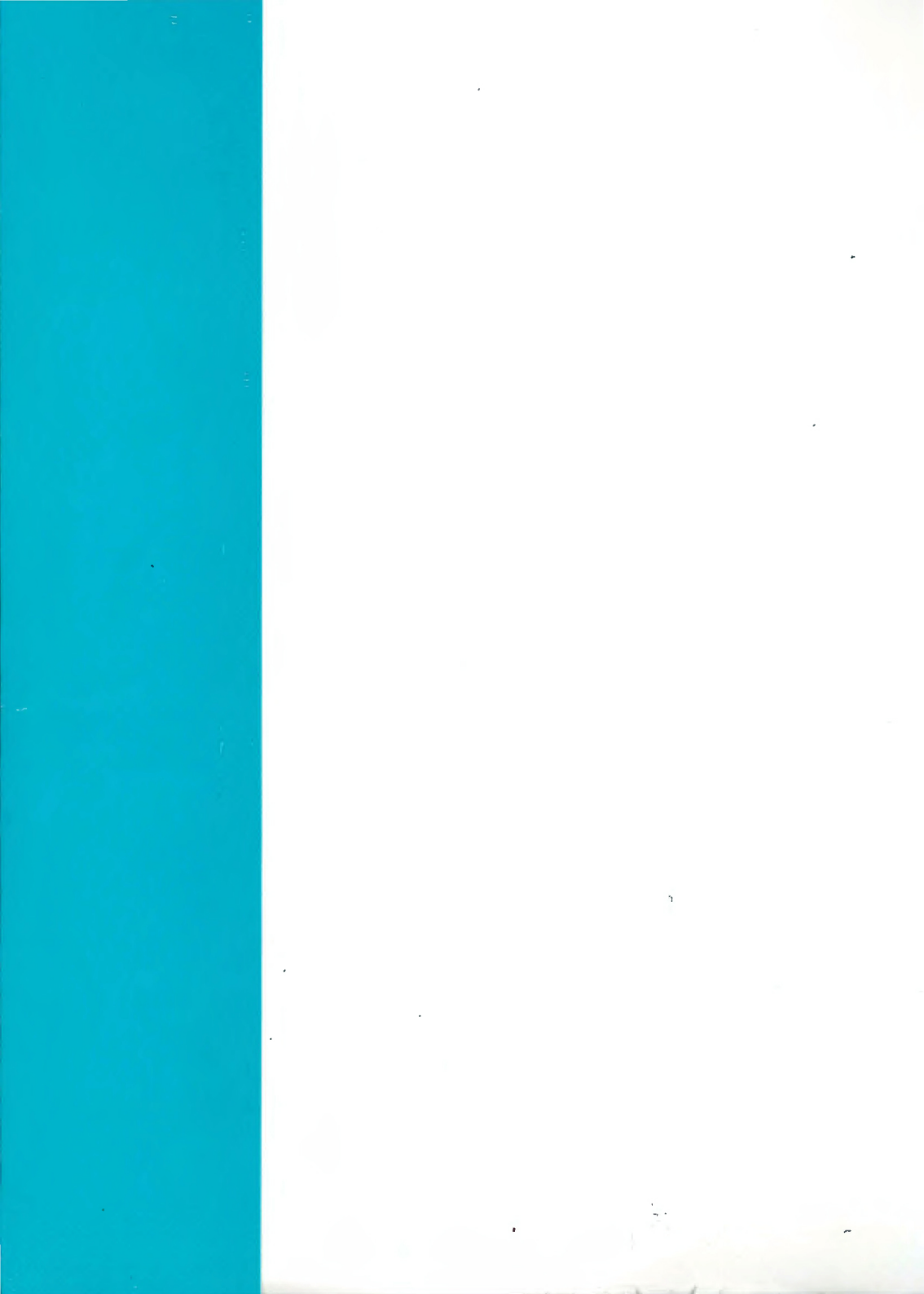
**POLISH ACADEMY OF SCIENCES
SYSTEMS RESEARCH INSTITUTE**

**STRATEGIC
REGIONAL
POLICY**

**A. STRASZAK AND J.W. OWSIŃSKI
EDITORS**

PART I

WARSAW 1985



SYSTEMS RESEARCH INSTITUTE
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STRATEGIC REGIONAL POLICY

Paradigms, Methods, Issues and Case Studies

A. Straszak and J.W. Owsinski
editors

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PART I

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II. REGIONAL POLICIES IN A SYSTEMS CONTEXT

STRATEGIC REGIONAL PLANNING

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The different regional formations - economic, geographic, administrative, etc. can be studied from different points of view. By considering the region as an object of management from a system's point of view, it can be stated that the administrative regional units create a good opportunity not only for scientific studies but for strategy formation as well - by territorial management bodies entering an equal interactive participation with the national and sectoral management.

While in the conditions of strongly centralized management it was reasonable to work out a strategy mainly on the national level, now, when the new economic approach is implemented, the responsibilities of the economic and territorial subdivisions are getting bigger and bigger. The subdivisions become centres which determine the strategic development of the separate sectors of the national economy, and the different territorial units.

In the light of the new principles that are being implemented in our country, it become more and more important to forget the old understanding that production is organized mainly by the sectorial management authorities and the regions are obliged to solve mainly problems related to consumption. Now the territorial authorities which are responsible for the intergated, efficient, and harmonious social and economic development of the territories, have more economic interest. They have also been given more rights and financial independence. They become the only investor on their territories, while their economic responsibility for the end result of their activities is also increased.

When the strategy for the development of the territorial units is worked out, it is necessary to take into consideration the end results from the process of strategy development on the national and on the sectoral levels, assuming that this is done in the form of a dialogue and observing certain rules which are not yet sufficiently well defined. The lack of experience in developing a regional strategy makes it necessary to work out a methodological basis of the strategic regional development.

Our starting theoretical assumption is that strategic planning is a process which aims at developing a strategy for a territorial unit and secures the implementation of the strategy through the cyclic (prepared for every next five years) plans. We consider as strategic decision not only a decision that is implemented during an important, continuous period of time, but also a decision which has a long-term effect on the development of the system.

We consider strategic planning not as just one stage of the process of the usual cyclic planning that precedes the preparation of the five-year plans and is repeated cyclically within the framework of this planning, but as a continuous process which affects all planning activities and is to a certain extent a start for the cyclic planning, and which begins with the appearance of strategic problems in the territorial units. This type of planning must secure the prospectiveness and stability in the development of the region.

Considered from the standpoints of the modern scientific understanding, the strategy covers the overall development of the region. This is also strengthened by the fact that the development goals are interrelated and the means for their fulfilment have to be balanced within the framework of the overall possibilities of the territorial system. But the strategy itself covers only the most important, determining elements in the system's development. These elements determine the "strategic" trends at some moment of time, and are a subject of strategic planning. Thus the overall strategy for regional development can be dealt with as a totality of individual "private" (particular) strategies:

- production structure strategy;
- engineering, production, and social strategy, i.e. strategy of infrastructure development;
- environment protection and development;
- social (including demographic) strategy;
- strategy for development of intellectual resources;
- strategy for improvement of the management system.

In their complexity, the above listed "private" strategies do not give by themselves the general strategy for the development of the region. The problem of their subordination and which kind of strategy should be used as a starting point when the general strategy for the development of territorial unit begins to be worked out, still remains to be solved. Our experience so far shows that this depends to a large extent on the nature of the strategic problems of the region.

The development of different kinds of strategies makes it possible to apply the systems approach in creating the strategy for the development of the region. At the same time, in developing both the private and the general strategy, it is necessary to follow a certain sequence of actions. The sequence is based on structuration of the management process and follows those phase and stages of the management cycle which are of strategic character. Such a system's procedure could contain the following main elements:

- a photograph of the system;
- analysis of external environment;
- comparative analyses and forecasts;
- goal definition;
- development of alternatives for the separate kinds of concrete strategies;
- development of alternative variants for the development of the region;
- selection of variant for strategy implementation.

A different stages of strategy development it is possible to apply different formalized and informal methods and procedures. Therefore it is essential for the efficient course of the process of strategic planning to work out a suitable instrumen-

tarium. We are of the opinion that the instrumentarium for strategic planning is a set of methods and means through which the management subject processes in a purposeful manner information about the trajectory of development of the regional system in its environment with a view creating a strategy or/and making strategic decision.

The most suitable instrumentarium in our opinion would be a set of models and procedures linked so as to form an imitation (simulation) system that would allow considering of various alternatives for development. We consider the contemporary simulation systems as organized sets of models and procedures which assist the normal development of a dialogue, data banks, different software, and also a set of rules for using the very system. Of special importance is the last element, having in mind that the carrying out of the nonformalized procedures in the system relies entirely upon the people. Taking into consideration the fact that usually the expert manager is not a specialist in applying formal methods, it is obviously necessary to have a well developed system of rules that will enable him to communicate in a relatively simple way with the remaining components of the imitation system.

Besides the purely formalized models in the imitation system, the procedures for systems analysis of strategic problems and for selection of variants also deserve attention. They are based on heuristics and are informal procedures which allow evaluation and selection in a development alternative. Of importance are also the procedures which facilitate the work of managers by presenting the final information in a convenient form (tables, charts, etc.). An essential part of the imitation system are these procedures which secure the link between the strategic decisions and their implementation in the cyclic planning.

According to us, the simulation systems fulfill the main requirements for developing an instrumentarium for strategy formation. They cover the object, the environment, and the subject; they allow investigation of the development process, "running" of different choices; and are open to adaptation and development.

Elaboration of an instrumentarium is a time consuming, complicated, and creative work. Once created, however, without ignoring the role of the manager in the process of selecting management decisions, it facilitates significantly the work of the manager. At the same time it places certain requirements for the formation of new properties necessary for the work in conditions of a complicated man-machine procedure.

In order to be feasible application-wise the results obtained with the help of the instrumentarium should be included in a system of documents approved by the management authorities and oriented to analytical results. As a main document for regional strategic planning we propose the "Integrated project for regional development". It reflects the whole complexity of the regional system and has the structure that reflects the relations between the processes in the region. Without overdefining the contents of the project, let us quote some essential parts of the document.

The first part concerns interactions between the national and the regional economy. The interactions are described in various cross-sections:

- the national economic functions of the regional system;
- the national limitations on the territorial development;
- the increased contribution of the region for the regional development.

An essential part of the integrated project is constituted by the studies on the development and fulfilment of the needs of people and provision of conditions for their social fulfilment. These indicators are a basis for both direct motivation for goal oriented actions, and for criteria for evaluation of the level reached in the regional development.

An important place is occupied by the description of the most essential alternatives of the separate private strategies. They cover correspondingly the production structure of the region, the development of a complex system for social services, cultural development, environment development, and development of the system for social management. This part deals with the

research policy of the region, the marketing policy, and the innovation policy. The system in which the region could fulfill its needs is defined.

An inseparable part of the integrated project is the comprehensive programme for regional development. It is worked out on the basis of the proposed main alternative of the general strategy for development of the system, and is oriented to reaching the main goals. It contains justifications of the proposed efficient production structure, provision of sufficient growth of labour productivity and the income of people, cultural development of the region, etc.

Among the documents, an important place is occupied by the so called files of the main problems facing the regional management. They are a suitable form of linking the strategic decisions with the concrete operative management. The files contain definition of the problems, the ways of their solution and the main resources and measures which are necessary for their solution. They are designed first of all for the collective bodies of management.

It is necessary to stress that an organic integrity of the integrated project should be aimed at, and not in the end of the study but already while it is being carried out. This integrity is achieved through the structure of the project (the different parts contain the same elements); through the problem area: through the formation of an integrated data bases; through the adopted approach of basing the evaluation on unified indicators.

Experience shows that the development of a regional strategy without participation of the regional authorities is unrealistic. No strategy can be introduced from outside, and so is with the strategy of the regional management. Where the regional management is interested, the regional strategy is developed much more speedily and efficiently. At the same time it is important to note that in Bulgaria the development of a strategy of the administrative regional units, the regions, is already made an obligatory element in the planning process. The strategy of each sector is based and combined with the national strategy of

territorial development outlined in the General Plan for Allocating the Productive forces in the country and in the General Plan for Territorial Development. The first of these documents outlines the national specialization of the region and suggests creation of territorial production complexes. The second one outlines the regions meant for habitation, recreation, or preservation as a forest or game reserves. It also outlines the engineering infrastructure of the country.

The documents of the national region strategy are developed with active participation of the local authorities and the working people, and an interface between the separate studies is secured, which is very important not only for the general integrated infrastructure, but also for the creation of a general system for complex public services. The latter will contain such a system for fulfilling the needs for service - for example health service - that will correspond to the frequency of appearing of the needs and the possibility for their fulfilment on a high level. This requires that the service system go beyond the frames of the separate regions. The development of regional strategies not only makes the decisions which are optimized from a national point of view more detailed, but also secures closer linking of the concrete strategies with each other. At the same time the strategic planning in the region creates conditions for political and creative involvement of the population and assists the solution of the local problems and the best utilization of the local resources.

DISCUSSIONS

Paper by A. Straszak

Discussion participants: K. Polenske, S. Ikeda, R. Espejo,
A. Straszak.

Main point of discussion was the question of influence exerted by introduction of new technologies ("intelligent production systems emerging from combination of robotics, automation, artificial intelligence and specialized computer applications") on the society in general and on the labour force and its structure in particular. Notwithstanding some analyses which suggest that the net result would be decrease of the higher skill jobs' share, it was indicated that obvious historical trends still point towards more of intellectual work and less of the physical one in the future. This was also the main factor behind the move towards the "information society", as witnessed in the Japanese national/regional plans and schemes, where it is combined with a broader quality-of-life view of regional problems.

Paper by L. Lacko

Discussion participants: R. Bolton, K. Polenske, L. Lacko.

Two questions were taken up, mainly for clarification: the contents of "background activities", which are those not needing big factories or sophisticated equipment and therefore only small input capital, and the notion of responsibility, which refers to local organizations, able to carry greater responsibility, having at their disposal greater financial resources.

Paper by G. Gavrilov and O. Panov

Discussion participants: K. Polenske, R. Espejo, R. Bolton,
L. Lacko, S. Ikeda, G. Gavrilov.

The first question touched concerned the notion of "private strategy" used in the paper. This notion refers to these strategies (substrategies) which are worked out by and for the individual organisms and which could only afterwards be inte-

grated into an overall strategy. Such strategies were said to be the leading ones on the present stage of development in Bulgaria.

Another question concerned participation of local bodies in the planning process. Thus, it turned out that local authorities are interacting in Bulgaria with the central, national level ones through the strategically-oriented dialogue with sectoral organisms, mainly ministries. Formal planning is more concentrated on elaboration of one-year and 5-year plans.

A clarification point was also raised connected with the environmental issues and resources accounted for. Thus, it was stated that over a given territory all strategically important resources are taken into consideration.

The last question concerned similarities and dissimilarities between Hungary and Bulgaria and was answered by L. Lacko. Thus, among similarities in planning for regional dimensions were quoted: care for infrastructure, environment, and recreation and tourism facilities. Dissimilarities were said to mainly reside in planning and management system. For Hungary the double approach of socio-economic and physical planning was quoted.

Paper by R. Domański

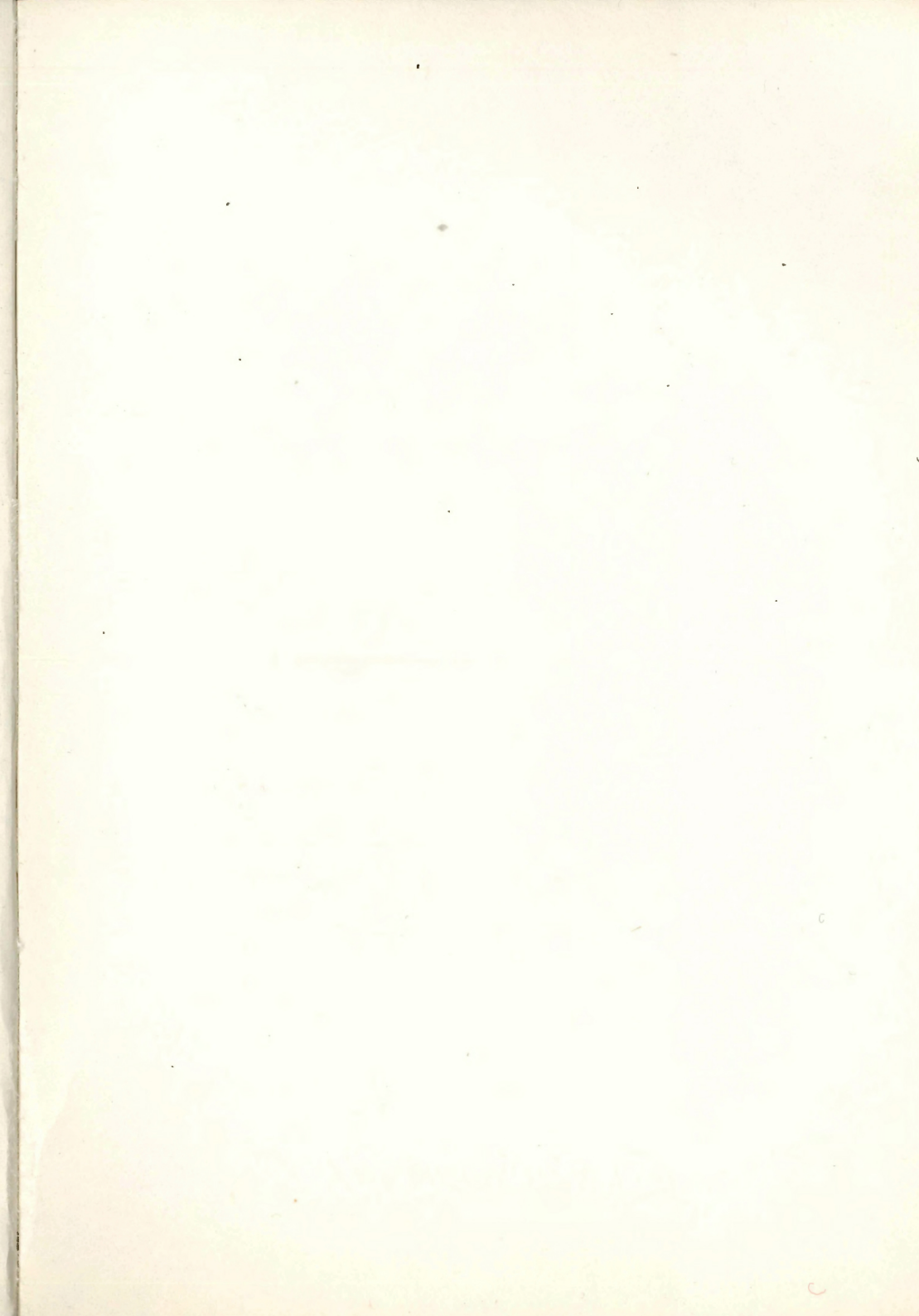
Discussion participants: L. Kajriukstis, U. Loeser, R. Domański.

Two questions were addressed: first, how can such activities as recreation or forestry be incorporated into the model, and second, whether this model can be applied to developing countries, mainly in the Third World, where large urban immigrations are often occurring. The first question was answered by stating that currently the model recognizes such spatial entities as points, lines and circles, and whichever activity can in its spatial aspect be expressed in their terms, can be incorporated in the model. As far as application of the model in developing countries is concerned, it was deemed possible to formulate appropriate mathematical structures in which problems of creation of very large urban centers and local agricultural decline could be accommodated, quite satisfactorily.

Paper by K. Cichocki

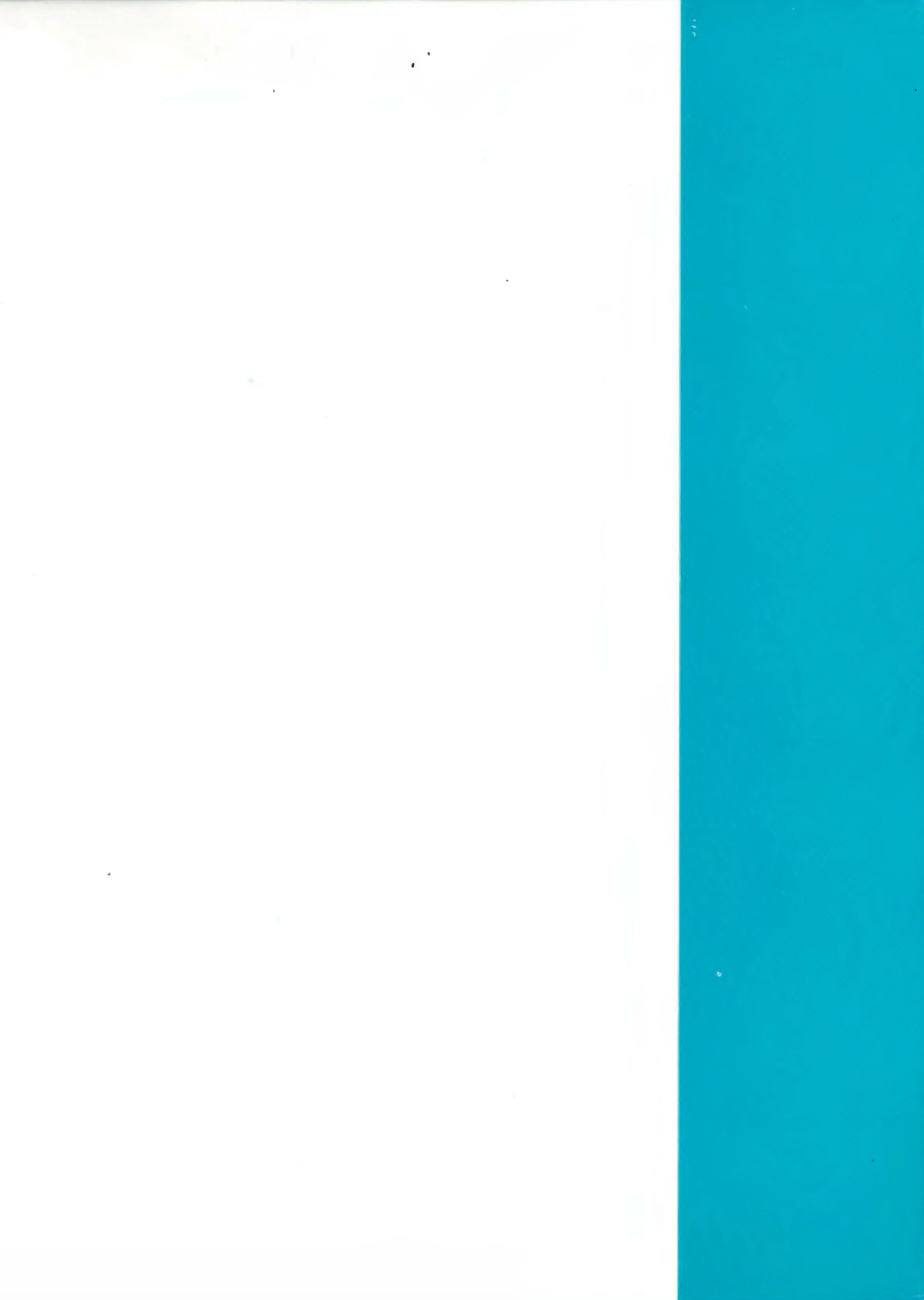
Discussion participants: S. Dresch, K. Cichocki.

Discussion centered around the role of consumption in models considered, insofar as consumption is related to the main object of these models, namely investments. It has turned out that in several runs of the models consumption was used as an element of the vector objective function. A variant envisaged takes monotonic growth of consumption as reference to objective function, with the monotonic growth based both upon official statements and on the estimates provided by analyses made by other research centers in Poland.



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