

## SOME ASPECTS OF PLAN COORDINATION IN YUGOSLAVIA

*Mate BABIC\**)

### INTRODUCTION

The decisions of all economic subjects are interdependent because of the interdependence of economic events and processes. The higher the level of economic development, the higher the degree of interdependence of decisions taken by economic subjects. From this fact results the need to coordinate the decisions of economic subjects.

The coordination of interdependent economic decisions made by economic subjects can be achieved in three ways: 1) by market; 2) by plan, and 3) by combination of market and plan.

The market can efficiently coordinate the interdependent decisions of economic subjects by means of the price mechanism only in the case of perfect competition. Therefore, perfect competition is the necessary condition for the efficient coordination of economic decisions taken by economic subjects in order to maximize social welfare. Taking into account that there is no perfect competition in today's world (or that perfect competition is an exception), the market alone is not able to effectively coordinate the interdependent decisions made by different economic subjects.

The alternative extreme in coordinating the interdependent decisions of economic subjects is the system of total (centralized) planning where all decisions are made in one center, mostly in the central planning bureau. As the shortcomings of this system are well known, I shall not dwell on this subject here. Suffice it to say that such a system of total centralized planning results in the inefficient use of deficitary resources; this in turn, reduces the performance and rate of economic development.

In between these two extremes there is a system of coordinating the interdependent economic decisions of economic subjects by means of a regulated market mechanism. In this system, the main coordinating mechanism is performed by the market. However, because of the above mentioned shortcomings of the market in performing the coordinative function, the market mechanism is supplemented by other mechanisms

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\* Professor of Economics, University of Zagreb

that have the task of eliminating the deficiencies of the market in its role as coordinator of interdependent economic decisions. These supplementary mechanisms by which the market is corrected can be of diverse nature: administrative, cooperative and planned.

Administrative corrections of the market mechanism consist of short-term, ad hoc administrative measures by which the short-term deficiencies in the functioning of the market mechanism are remedied.

Cooperative corrections of the market mechanism consist of a system of short-term corrections in market mechanism functions achieved by agreement of the economic subjects. Self-management agreements and social compacts in Yugoslavia are examples of this system.

Planned corrections of the shortcomings in market mechanism functions represent long-run, systematic regulation of the market in order to meet targets set out in advance. This system of corrections of the market does not exclude the functioning of the market mechanism but only remedies it. Consequently, in this system the market mechanism and the plan are not competitive, but complementary.

In order to ensure complementarity with the market mechanism, the plan in this system of market correction must start with the function of the market mechanism. Only in that way can the plan successfully fulfill its functions: informative, coordinative, regulative and directive. It is extremely important that the plan takes into account the informative function of the market, especially when setting out the targets of the plan.

## 1. THE PROBLEM OF PLAN COORDINATION IN YUGOSLAVIA

The Yugoslav self-management system is characterized by a complementarity between the market mechanism and the plan. Self-management agreements and social compacts are the fundamental forms by which market and plan complementarity is achieved.

Along with the decentralization of the decision-making system in Yugoslavia, the planning system has also been decentralized down to the basic organizations of associated labour (BOAL). Therefore, the plan of the national economy is based on the plans of the BOALs. The number of plans is equal to the number of BOALs. On Dec. 31, 1978 the number of BOALs in Yugoslavia was 19,203. If we add to this the number of working organizations without BOALs, which was 14,269 and the number of working communities and other various communities and associations, we get a total, of 95,210 different subjects of planning in Yugoslavia<sup>1</sup>). That fact causes enormous problems of multilevel planning, where the exchange of information among different subjects of planning is the central problem in the whole process of planning. Thus, the exchange of information is necessary for the achievement of

<sup>1</sup>) Source: Statistički kalendar Jugoslavije (Yugoslav Statistical Calendar), 1980, p. 17.

consistency of the development plan of the national economy and for the coordination of the development plans of individual subjects of planning.

The efficiency of the planning system in self-management socialism depends heavily on the degree of consistency of the interdependent plans of all the subjects — either organizations of associated labour or socio-political communities and their linkage in a united, consistent plan of the national economy.

Planning in Yugoslavia is based on Article 69 of the Constitution. Workers in basic and other organizations of associated labor and working people in self-managing communities of interest, local communities, and other self-managing organizations and communities in which they manage the affairs and means of social reproduction shall have the right and duty — by relying on scientific achievements, appraising of development possibilities, based thereon, and by taking into account economic laws — to adopt independently working and development plans and programs for their organizations and communities, to adjust these plans and programs to each other and to the social plans of the socio-political communities, and — on this basis — to ensure adjustment of relations of overall social reproduction and the guidance of material and social development as a whole, consistent with common interests and aims laid down on a self-management basis<sup>2</sup>).

Due to differences in interests, incomplete information, and the restricted views of individual BOALs, this planning system places high demands on the coordinative function of the planning mechanism. This function is implemented by the self-management integration of the plans of the individual subjects. Only after the coordinative function has been successfully realized can the planning mechanism effectively perform its informative function on the macroeconomic level. The high performance of these two functions is a necessary condition for the successful execution of the regulative and directive functions of the planning system on the macroeconomic level.

Thus, the successful performance of the coordinative and informative functions of the planning system is a prerequisite for the system's overall operations.

Now we come to the problem of finding an adequate analytical apparatus which would enable the self-management planning system to perform these two functions successfully. Such an analytical apparatus should, first of all, give a picture of the productive interdependence of the planning subjects. On the basis of such a picture, each planning subject could identify its own place in the economic structure and its links with other segments of that structure; in doing so, it could more easily coordinate its development plan with the plans of the other subjects.

The I-O model is such an analytical apparatus. That model, quantifying productive interdependences among individual sectors, represents an excellent framework for implementing the informative and coor-

<sup>2</sup>) Ustav SFRJ, čl. 69 (Yugoslav Constitution, Article 69).

directive functions of the plan in the system of self-management socialism. As we stated earlier, the successful implementation of these two functions is a necessary condition for the performance of the two other functions of the plan: regulative and directive.

In the process of planning, the input-output model is combined with other macroeconomic models. The advantage of the I-O model over other models is its capacity to link partial and global analytical views. This enables the simultaneous planning of the interdependent parts of the economic system as well as of the different aspects of the functioning of the whole process of reproduction. In that way, the input-output model gives a complete quantitative picture of productive interdependences in the process of reproduction. Therefore, the input-output model is an indispensable analytical framework for the coordination of development decisions taken by individual planning subjects.

In addition to the discovery of structural imbalances, which is a prerequisite for target consistency and even for the feasibility of individual planned proportions, the input-output model makes it possible to examine the repercussions of plan variants on all the elements of the economic structure while drawing up the plan. In this way, the input-output model helps to reveal fundamental structural problems, first of all in the productive sphere, which could be expected in the planning period. By means of the input-output model we can identify those productive sectors that represent development constraints and question the realization of planned proportions. Also by means of the input-output model we can identify the conditions and vehicles for the elimination of structural imbalance. At the same time, we can determine the implications of changing plans (in order to achieve their coordination) for all the elements of the economic structure.

The broad analytical-informative basis of the input-output model enables each planning subject to identify its own position in the complex of the economic structure and to understand the interdependence of its own position and those of the other subjects in the economic structure of which it is a part. This represents the *conditio sine qua non* of the success of self-management agreements and social compacts, on which the whole system of self-management socialistic planning is based.

We see that the input-output model is a very appropriate analytical framework for the organization of self-management planning. Due to its capacity to give a complete picture of the productive interdependencies of the productive sectors in the national economy, the input-output model is also very suitable for the coordination of the development plans of interdependent productive sectors.

In the following sections of this paper I shall show how the input-output model has been applied in the process of preparing the next five-year plan in Yugoslavia, in identifying reproduction entities, and in the analysis of the import dependency of the Yugoslav economy.

## 2. IDENTIFYING REPRODUCTION ENTITIES BY MEANS OF THE INPUT-OUTPUT MODEL

We define the reproduction entity as the set of productive sectors with the most intensive productive interdependences. Therefore, the coordination of the development plans of individual productive sectors that belong to the same reproduction entity is a necessary condition for fulfilling the plans of all sectors within the same reproduction entity.

The structure of reproduction entities, direct and indirect links between their parts, and the consistency of their plans can all be best analyzed by means of the input-output model. In doing this, the reproduction entity could be disaggregated in accordance with the existing structure of the decision-making process. The links with the environment are formulated by means of the matrix of deliveries and the technological matrix. The formulation of these matrices need not rely exclusively on *ex post* statistical data, but can take into account new projected data and thus include new productive links. In this way, the input-output model can help in solving the problems of pooling labour and resources in order to implement certain joint ventures by different productive sectors.

The degree of intensity of interdependence among the productive sectors determines the degree of necessity to coordinate their plans. Namely, the higher the degree of productive interdependence of sectors, the stronger the need for the coordination of their plans.

Now the planners have the task of identifying the reproduction entity for each productive sector, and of expressing the degree of interdependence among individual sectors within the reproduction entity in order to coordinate their plans. Thus, by identifying reproduction entities it is possible to determine the degree of priority in coordinating the plans for each productive sector. In this way, we can determine for each sector with which sectors it must coordinate plans in order to make its own plan feasible.

On the basis of an input-output table of the Yugoslav economy for 1976, we identified the reproduction entities for each of the 48 productive sectors into which the Yugoslav economy was disaggregated<sup>3</sup>).

The analysis was made from the standpoint of the purpose of deliveries i.e., sales of productive sector products as well as from the standpoint of the structure of the value of the production, i.e., the structure of production costs.

On the basis of the matrix of deliveries and the matrix of technical coefficients, we found out which sectors are joined by intensive productive links, either from the standpoint of their production deliveries or from the standpoint of the structure of their inputs. Those sectors with the most intensive productive links were defined as a reproduction entity. It is the sectors that belong to the same reproduction entity that

<sup>3</sup>) See: M. Babić: »Primjena input-output modela u određivanju reproduktivnih cjelina« (The Application of the Input-Output Model in the Identification of Reproduction Entities), Ekonomski institut Zagreb, 1980.

are most in need of plan coordination. The importance of mutual coordination of development plans within a reproduction entity is especially important for those sectors which produce mainly intermediate goods. They must coordinate their plans very carefully with the plans of the sectors which are the major consumers of their products in intermediate consumption.

For each productive sector we represented the delivery of its production according to type of consumption, either intermediate or final. After that, we classified the buyers of the production of sector  $i$  ( $i=1, 2, \dots, 48$ ) in three groups, according to their share in the purchase of sector  $i$  production. We separated the sectors that buy more than 5 per cent of the total production of sector  $i$ , then those sectors that buy from 1 per cent to 5 per cent of the total production of sector  $i$  and finally those sectors that consume less than 1 per cent of the production of sector  $i$  in their intermediate consumption.

The sectors that buy more than 5 per cent of the total production of sector  $i$  are very important consumers of the products of that sector and so close plan coordination is required amongst this group. This is especially true of the sectors that produce mainly intermediate products. There are 11 sectors whose production is almost entirely consumed in intermediate consumption<sup>4</sup> (in fact, 90 per cent or even more of their production was consumed in this way). These sectors especially need to coordinate their development plans with the plans of those sectors that are the main consumers of their products.

However, we found that the deliveries of the production of the sectors that are predominant producers of intermediate goods are concentrated in a small number of sectors. This fact greatly alleviates the work required to coordinate the plans of these sectors.

For example, 75.2 per cent of the total production of the steel industry is sold for intermediate consumption to five sectors. Therefore, it is very important that the steel industry sector coordinates its plan with the plans of these sectors.

On the basis of the domestic component of the matrix of technical coefficients, we analyzed the structure of the direct productive interdependences of the sectors of the Yugoslav economy. We implicitly assumed that the direct import dependence of sector  $i$  is constant, i.e., that the import of intermediate goods is non-competitive.

We found again that there are some sectors in which the share of domestic intermediate goods in the value of their production is very high. For example, 76.4 per cent of the value of production of the non-ferrous ore industry consists of inputs of domestic intermediate goods. The share of domestic inputs in the value of the steel industry was 73.8 per cent, in the manufacture of non-ferrous metals 69.4 per cent, etc.

<sup>4</sup> These are: coke, production of oil and gas, iron ore, stone and sand industry, housebuilding industry, cattle fodder, used material steel, non-ferrous metals ore, leather and fur industry and paper industry. See: M. Babic: op. cit. p. 21.

These sectors, in particular, need to coordinate their development plans with the plans of those sectors from which they buy material inputs. We found again that the intermediate consumption of domestic inputs is mainly concentrated in a small number of sectors; this makes the problems of coordination of the development plans of the productive sectors easier.

### 3. THE ANALYSIS OF IMPORT DEPENDENCE OF THE YUGOSLAV ECONOMY

In the process of plan preparation, it is necessary to identify and analyze existing structural problems that should be solved in the plan period; this should serve as a basis for forecasting the variants of development possibilities and their implications for all macroeconomic variables. The input-output model is an appropriate analytical framework for this purpose too. It is especially suitable for the identification of those structural problems that could hinder economic development as a whole and to which special attention should be directed.

The majority of developing countries have chronic difficulties in their balance of payments. The reason for this is their wish to accelerate, as much as possible, economic growth by means of industrialization. That results initially in heavy imports of equipment, but very often of intermediate goods as well. Yugoslavia is not an exception to this growth pattern.

The preparation of the development plan is always a motive for a detailed analysis of the balance of payments, and in the search for ways in which it may be improved so that the balance of payments does not become a restrictive factor in economic development. The preparation of the next five-year plan in Yugoslavia provides an additional reason for a detailed analysis of the balance of payments situation and its perspectives.

The present condition of the balance of payments of Yugoslavia is far from being satisfactory. On the contrary, the balance of payments is a serious restriction on economic development. Several factors have caused this situation. Among the most important is the long-run trend of increase of import dependence of the Yugoslav economy coupled with a long-run trend of decreasing competitiveness.

In order to achieve a stronger and more stable shift in this trend, it is necessary to take into account the characteristics of the economy. This would enable the drafting of a long-term development strategy that would encourage a change in the structure of the Yugoslav economy. In turn, this would result in a decrease of its import dependence and in an increase of its export potentials.

The importance of foreign trade for the Yugoslav economy, the magnitude of the foreign trade deficit, and its causes in the period 1970 — 1978 can all be seen in Table I.

Table I. The share of imports, exports and trade balance in the gross material product of Yugoslavia in the period 1970—1978.

	1970	1971	1972	1973	1974	1975	1976	1977	1978	Ø
1. GMP	100	100	100	100	100	100	100	100	100	100
2. Exports of goods	13.3	13.3	15.5	15.8	15.9	13.7	14.0	12.1	10.4	13.8
3. Imports of goods	22.8	23.8	22.4	25.0	31.4	26.0	21.1	22.3	18.7	23.7
4. Exports + Imports	36.1	37.1	37.9	40.8	47.3	39.7	35.1	34.4	29.1	37.5
5. Trade balance	9.5	10.5	6.9	9.2	15.5	12.3	7.1	10.2	8.3	9.9

Source: Statistical Yearbook of Yugoslavia and National Accounts of Yugoslavia — various years

As we can see in Table I, the share of foreign trade in the gross material product of Yugoslavia was high throughout the whole period. It amounted to 37.5 per cent on the average for the entire period 1970—1978. This fact underlines the importance of foreign trade for the Yugoslav economy. The openness of the Yugoslav economy makes it highly vulnerable to all problems in the international economy.

The share of exports in the gross material product was on the average 13.8 per cent in the period 1970—1978. From 1970 to 1974, the share of exports in the GMP increased slightly. After 1974, the share of exports in the GMP decreased steadily from 15.9 per cent in 1974 to only 10.4 per cent in 1978.

The share of imports in the GMP of Yugoslavia amounted to an average of 23.7 percent for the period 1970—1978. This share showed strong fluctuations between 19.7 per cent in 1978 and 31.4 per cent in 1974.

These movements of exports and imports resulted in a relatively, high trade deficit, which averaged 10 per cent of the GMP of Yugoslavia in the period 1970—1978.

As the share of imports in the GMP was double that of exports, improvements on the import side of the trade balance would have a greater impact on improving the trade balance as a whole.

Let us analyze the movements of imports by type of consumption over the same period:

Table II. The structure of imports by type of consumption in Yugoslavia in the period 1970—1978.

Type of consumption	1970	1971	1972	1973	1974	1975	1976	1977	1978	Ø
1. Intermediate consumption	63.2	63.7	63.2	62.3	69.7	65.6	63.8	62.2	63.3	64.2
2. Investments	21.4	21.0	21.3	22.3	17.4	24.5	24.3	25.3	25.6	22.6
3. Productive consumption (1+2)	85.6	84.7	84.5	84.6	87.1	90.1	88.1	87.5	88.9	86.8
4. Non-productive (Private and public) consumption	14.4	15.3	15.5	15.4	12.9	9.9	11.9	12.5	11.1	13.2
5. Total imports	100	100	100	100	100	100	100	100	100	100

Source: Statistical Yearbook of Yugoslavia

Table II shows that the imports earmarked for non-productive consumption, i. e., for private and public consumption, amounted to 13.2 per cent on the average, while the share of imports earmarked for productive consumption (intermediate goods and equipment) was 86.8 per cent of total imports in the period 1970—1978. The imports of intermediate goods figured at 64.2 per cent while the imports of equipment were 22.6 per cent of total average imports.

We see that almost two-thirds of total imports were intermediate goods. The share of intermediate goods in total imports was rather constant in the whole period.

The import of intermediate goods depends on the structure of the economy. Therefore, an analysis of import dependence of the domestic economy is very important for finding ways to improve the trade balance.

We have analyzed the changes in the structure of import dependence of the Yugoslav economy on the basis of input-output tables for the years 1966, 1968, 1970, 1972, 1974 and 1976.

In the following table we show the aggregate indicators of import dependence of the Yugoslav economy:

Table III. Aggregate indicators of import dependence of the Yugoslav economy (by percentage shares).

	1966	1968	1970	1972	1974	1976	Ø
1. The share of imported goods in intermediate consumption	13.1	13.6	17.2	18.6	22.5	14.5	16.6
2. Import content of final production	10.8	11.4	14.5	15.8	19.9	16.7	14.8
3. Total import content of final consumption	18.3	18.8	21.3	21.8	26.5	24.4	21.9

Source: M. Babić: »Analiza tendencija strukture uvozne zavisnosti jugoslovenske privrede« (An analysis of tendencies of the structure of import dependence of the Yugoslav economy), Ekonomski pregled, No. 1—2, 1980, p. 33.

As we can see from Table III, the share of imported goods in the material costs (intermediate consumption) of the Yugoslav economy amounted to an average of 16.6 per cent, in the period 1970—1978. Up to 1974, this share showed a tendency to increase and amounted in that year to 22.5 per cent. This means that more than one fifth of all the material costs of the Yugoslav economy in 1974 was of foreign origin. However, in 1976 the share of imported goods in the production costs of the Yugoslav economy was "only" 14.5 per cent. Therefore, the decrease of the share of imports in the GMP from 1974 to 1976 was mainly the outcome of the decrease of imports of intermediate goods.

The import content of final production, i. e., the ratio of imported intermediate goods to final production (total final demand less total imports), also increased from 1966 to 1974, when it amounted to almost 20 per cent.

The total import content of final demand, i. e., the import of final goods plus the import content of the domestic component of final demand averaged 21.9 per cent of the value of total final demand in Yugoslavia. This share also increased from 1966 to 1974, when it amounted to 26.5 per cent. In other words, total imports amounted to more than one quarter of total final demand in Yugoslavia in 1974.

The import dependence of final demand is the most relevant indicator of the structure of import dependence of the whole economy. Imported intermediate goods are built into the products earmarked for final demand through several phases of production. In this way, imported intermediate goods *in ultima linea* merge with the goods for final demand, although in an indirect way.

In order to analyze the possibilities for the reduction of import dependence and for the substitution of imports, we need to determine the contribution of each component of final demand to the imports. In that way, we can decompose the total import dependence of the national economy into the parts caused by each component of final demand. We have made just such an analysis, the results of which are presented in the following table:

Table IV. Import content of components of final demand in the Yugoslav economy (in the percent value of the component).

Component of final demand	1966	1968	1970	1972	1974	1976	Ø
1. PRIVATE AND PUBLIC CONSUMPTION							
a) Direct import	6.3	5.6	5.7	4.1	3.7	4.5	5.0
b) Import content of domestic production	8.9	9.8	10.4	13.0	16.8	13.3	12.0
c) Total import content	15.2	15.4	16.1	17.1	20.5	17.8	17.0
2. INVESTMENT DEMAND							
a) Direct import	17.0	18.4	19.0	17.1	18.8	17.2	17.9
b) Import content of domestic production	7.7	7.6	9.1	11.4	13.2	12.7	10.3
c) Total import content	24.7	26.0	28.1	28.5	32.0	29.9	28.2
3. EXPORTS							
a) Import content of exports	15.1	16.8	21.8	23.4	27.6	20.5	20.9
4. FINAL DEMAND							
a) Direct import	8.3	8.3	9.0	7.1	8.3	7.7	8.1
b) Import content of domestic production	10.0	10.5	12.3	14.7	18.2	16.7	13.8
c) Total import content	18.3	18.8	21.3	21.8	26.5	24.4	21.9

Table IV shows that the total import content of private and public consumption averaged 17 per cent in the whole period. Meanwhile, direct imports earmarked for private and public consumption amounted to 5

per cent of the total value of these components. The import content of domestic goods earmarked for these components of final demand was 12 per cent. The import content of domestic goods earmarked for private and public consumption increased constantly until 1974, when it amounted to 16.8 per cent of the total value of these components of final demand.

The import content of investment was higher than the import content of the other components of final demand. Its average share in the value of investments was 28.2 per cent in that period. Unlike private and public consumption, direct imports earmarked for investment demand were greater than the import content of domestic goods earmarked for investment. This fact shows that the import of equipment together with the import of intermediate goods strongly influenced the total imports of the Yugoslav economy in the period 1966—1976.

The import content of Yugoslav exports was also rather high. It amounted to 15.1 per cent of the value of exports in 1966 and increased to 27.6 per cent in 1974 and further to 20.5 per cent in 1976. On the average, the import content of Yugoslav exports was 21 per cent and the net foreign exchange earnings of the exports were 79 per cent in that period.

## SUMMARY

Due to the interdependence of economic events and processes, the decisions made by economic subjects are also interdependent.

The coordination of interdependent economic decisions taken by economic subjects can be achieved in three ways: by market; by plan; and by combination of market and plan.

Neither the market nor the plan alone can efficiently perform the coordinative function. The best way of doing this is to combine the market and the plan. This combination consists of the correction of market shortcomings by the plan.

The Yugoslav self-management system is characterized by a complementarity of the market mechanism and the plan. Self-management agreements and social compacts are the fundamental forms by which market and plan complementarity is achieved.

There are about 95,203 different planning subjects in Yugoslavia, of which 19,203 are basic organizations of associated labour. This fact causes serious problems for the coordination of plans with a view toward obtaining a consistent development plan for the Yugoslav economy.

The most appropriate analytical framework for plan coordination is the input-output model. This model, which quantifies the productive interdependences among the productive sectors of the national economy, enables each sector to identify its own position in the economic structure as well as its links with the other elements of that structure. In this way, the input-output model makes the problems of plan coordination easier.



The degree of interdependence of productive sectors determines the degree to which the coordination of their plans is necessary. The set of productive sectors with the most intensive productive interdependence were defined as a reproduction entity. The coordination of the development plans of the individual productive sectors that belong to the same reproduction entity is a necessary condition for the realization of plans within that same reproduction entity.

By means of the input-output model we identified the reproduction entities for each of the 48 productive sectors of the Yugoslav economy. The analysis was made from the standpoint of delivery of the production of each sector as well as from the standpoint of its input structure.

Like all developing countries, Yugoslavia has chronic difficulties with its balance of payments. The balance of payments situation often creates problems in the process of reproduction and even becomes a constraint on economic development.

By means of the input-output model we made an analysis of the structure of import dependence of the Yugoslav economy. The import of intermediate goods, which amounts to two-thirds of total imports, was broken down by the components of final demand.

Received: 5. 9. 1980  
Revised: 14. 10. 1980

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#### NEKI ASPEKTI KOORDINACIJE PLANOVA U JUGOSLAVIJI

Mate BABIĆ

Sažetak

Zbog međuzavisnosti ekonomskih pojava i procesa odluke ekonomskih subjekata su također međuzavisne.

Koordinacija međuzavisnih ekonomskih odluka ekonomskih subjekata može se vršiti na tri temeljna načina: putem tržišta, putem plana i kombinacijom tržišta i plana.

Samo tržište nije u stanju efikasno izvršiti funkciju koordinatora međuzavisnih ekonomskih odluka pojedinih subjekata. Isto tako ni sam plan nije u stanju izvršiti tu funkciju. Najbolji način izvršavanja koordinacije međuzavisnih odluka pojedinih ekonomskih subjekata može se izvršiti kombiniranjem tržišta i plana. Ta se kombinacija sastoji u tome, da se planom korigiraju nedostaci tržišta.

Jugoslovenski samoupravni sistem karakterizira komplementarnost tržišnog i planskog mehanizma. Sistem Društvenih dogovora i Samoupravnih sporazuma predstavljaju polazne metodološke okvire za izvršenje koordinacije međuzavisnih odluka ekonomskih subjekata.

U Jugoslaviji postoji 95 203 različitih subjekata planiranja, od čega su 19 203 osnovne organizacije udruženog rada. Sama ova činjenica uvjetuje ozbiljne probleme koordiniranja planova svih subjekata planiranja u cilju dobivanja jednog, konzistentnog plana privrednog razvoja Jugoslavije.

Najpodesnija analitička aparatura za koordiniranje planova jest analitička aparatura input-otput modela. Taj model kvantificiranjem proizvodnih međuzavisnosti pojedinih proizvodnih sektora na koje je narodna privreda u input-output tabeli raščlanjena, omogućuje svakom sektoru da identificira svoj položaj u okviru cjelokupne ekonomske strukture i svoje veze s različitim elementima te strukture. Na taj način input-output model znatno olakšava probleme koordiniranja međuzavisnih planova pojedinih subjekata planiranja.

Stupanj međuzavisnosti pojedinih proizvodnih sektora određuje i stupanj nužnosti koordiniranja njihovih planova. Skup proizvodnih sektora s najintenzivnijim proizvodnim međuzavisnostima definirali smo kao reprodukcioni cjelinu. Koordinacija planova pojedinih sektora koji pripadaju istoj reprodukcionijskoj cjelini nužno je za realizaciju planova razvoja svih sektora unutar reprodukcione cjeline, a i plana razvoja same reprodukcione cjeline.

Pomoću input-output modela identificirali smo reprodukcione cjeline svakoga od 48 proizvodnih sektora na koje je jugoslovenska privreda u input-output tabeli za 1976. godinu bila raščlanjena. Analizu smo vršili kako sa stajališta namjenske raspodjele, tj. plasmana proizvodnje svakog pojedinog sektora, tako i sa stajališta strukture vrijednosti proizvodnje svakog sektora.

Budući da je stanje u bilanci plaćanja Jugoslavije, slično kao i kod većine zemalja u razvoju, ograničavajući faktor razvoja, to detaljna analiza uvozne zavisnosti predstavlja važni oslonac za uskladjivanje pla-

nova razvoja svih subjekata planiranja u okviru ograničenja koje privrednom razvoju cijele zemlje predstavlja stanje u bilanci plaćanja. U okviru tog ograničenja treba izvršiti i usklađivanje planova razvoja svih subjekata planiranja.

Mi smo pomoću input-output modela izvršili i analizu veličine i strukture uvozne zavisnosti jugoslovenske privrede kako bismo subjektima planiranja u Jugoslaviji što detaljnije prikazali ograničenje koje privrednom razvoju Jugoslavije postavlja stanje u bilanci vanjske trgovine Jugoslavije i u okviru kojega oni trebaju uskladiti svoje razvojne planove.

## PRIVREDNOSISTEMSKE DIMENZIJE DRUŠTVENOG DOGOVARANJA O OSNOVAMA PLANA

Ljubomir MADŽAR\*

### 1. UVODNA RAZMATRANJA

Najveći deo skorašnjih i tekućih mera i akcija koje se preduzimaju na planu dalje izgradnje institucionalne osnove našeg društva inspirisan je nastojanjem da se samoupravni oblici regulisanja i usmeravanja društvenih kretanja prošire i u one oblasti života u kojima nisu postojali, pa da na taj način samoupravljanje postane sveobuhvatan i univerzalan organizacioni princip. Samoupravna regulativa na nivoima iznad nivoa osnovnih organizacija udruženog rada operacionalizovana je velikim delom kroz mehanizme samoupravnog sporazumevanja i društvenog dogovaranja. Dogovori o osnovama društvenih planova zauzimaju u tom kontekstu jedno od ključnih mesta.

Za potpuno razumevanje mehanizma dogovaranja i utvrđivanje pravaca njegovog razvitka od posebnog je značaja činjenica da veliki skup razvojnih problema koji se regulišu dogovaranjem ima jasno izraženu hijerarhijsku strukturu (videti Montias 1976). Ta struktura se ogleda u tome što se pitanja koja valja regulisati mogu svrstati u veći broj slojevito poredanih nivoa, s tim što pri prelasku sa višeg na niže nivoe s jedne strane raste broj pitanja koja se u njih prirodno svrstavaju, a s druge strane opada broj subjekata kojih se odgovarajuća pitanja tiču. Tako će se na najvišem nivou naći veoma mali broj pitanja koja se tiču praktično svih samoupravnih organizacija i njihovih zajednica, kao i drugih društvenih subjekata, uključujući čak i pojedince. Na sledećem nivou naći će se već znatno veći broj pitanja, ali se ona neće tići svim subjektima, nego će moći da se svrstaju u nekoliko grupa, i to tako da se skup pitanja unutar svake grupe odnosi samo na pojedine, iako još uvek široke klase subjekata i odgovarajuće segmente aktivnosti kojima oni upravljaju. Idući tako niz ovu piramidu, doći će se do nivoa koja sadrži vrlo veliki broj pitanja koja su tako strukturirana u (mnogobrojne) grupe da se skup pitanja unutar grupe odnosi samo na relativno mali broj subjekata. Ovako data struktura problema koje valja regulisati dogovornima o osnovama društvenih planova — a isto rezo-

\* Ekonomski fakultet, Beograd i Institut ekonomskih nauka, Beograd