

te, mada ne bi trebalo potceniti sve veće interesovanje među radnicima, naročito mladima, za demokratsnije oblike organizacije. Ako se, međutim, želi ekspanzija zadružnog sektora samo da bi se on razvio, a ne zbog ekonomskih osobina takvih firmi, možda bi najefikasniji način bio da se pospeši preobraćanje postojećih uspešnih kompanija.

Najvažniji zaključak koji se može izvući jeste opasnost od traženja jednostrane karakterizacije potencijalne uloge zadruga u ekonomiji. Održivosti zadruga i njihova mogućnost stvaranja radnih mesta zavisi od načina kako su zasnovane i ko ih je zasnovao, od sektora proizvodnje i veličine firme, a što je takođe značajno i od specifičnih pravila i propisa same firme.

Uobičajeno gledanje na zadruga kao male, neefikasne i bez perspektive opstanka, zasnovano je na jednoj vrsti merila, no sada postoje mnogi drugi primeri. Istina je da velike zadruga osnovne odozgo, od strane centralnih vlasti, mogu brzo da propadnu, ali preobraćanje srednjih i malih firmi ili stvaranje potpuno novih uz tehničku i finansijsku pomoć centralne agencije i uz pomoć pravila da svi zaposleni moraju biti članovi zadruga, možda imaju veću šansu za opstanak od novih kapitalističkih firmi (vidi Jones i Backus (1977), Perotin (1985)). Zadruga mogu biti naročito privlačne za one koji kreiraju politiku, jer imaju šansu poboljšanja zaposlenosti na jeftiniji način od kapitalističkih firmi, time što će motivisati trud radnika i stvarati uslove za promenljiva primanja i organizovati štednju novca.

Iz ovoga proizilazi da bi pravi način ostvarivanja takve politike bio preko preduzimačke agencije koja podražava zadruga i koja bi stvorila pravila kao uzor u cilju sprečavanja procesa degeneracije. To bi mogla postići svojim sopstvenim finansijskim i bankarskim odeljenjem.

PLANNING IN A WORKER-MANAGED ECONOMY

Claus BISLEV*

1. INTRODUCTION

1.1. The Need for Planning in a Worker-Managed Economy

From the big debate within economic theory on the behaviour of labour-managed firm on a free market (J. Vanek, B. Ward, E. D. Domar, B. Horvat, et. al.) we have plenty of arguments for the necessity of planning in the worker-managed economy. Let us just sum up here that the problem is not that the worker-managed economy as a whole shows a worse behaviour than does its capitalist counterpart. Quite the opposite seems actually to be the case. But a worker-managed market economy would basically show some of the same tendencies of inherent instability as does the capitalist market economy.

From this viewpoint, planning is thus needed in order to protect the worker-managed economic entities against the hazards of the market mechanism. But, politically and sociologically viewed, planning also becomes necessary. In my view, planning should also play the role of securing the position of the working class in a worker-managed society. Planning must therefore be performed in a way which ensures the control of the production process, and the distribution of the values produced to the right hands.

It follows that it should be possible to rule out some planning models, in their pure forms, as adaptable to a worker-managed economy. The "central-command" planning, practised in Yugoslavia shortly after World War II, and for several decades in Eastern European countries, stands in clear contradiction to the goals of workers' management. It disables workers' management at a basic level, and contains all the well-known problems of destruction of information upwards through the hierarchy, leading to inconsistent and often directly harmful planning.

On the other hand, a planning system of capitalist origin, pure indicative planning, also stands in some contradiction to the intentions of workers' management. Sarcastically enough, one could characterize this kind of planning as "manipulative" planning. It is planning based on

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signalizing both ways: signalizing of political priorities and economic possibilities from the central planning authorities, with the basic entities signalizing to the central authority, by the use of the market mechanism alone. To make any sense, the planning authority must be able to come through with its intentions, and different kinds of mechanisms, such as taxing, must be used to "manipulate" the economy in the right direction. One could fear that this system would tend to make workers' management a very formal institution, and that it would tend to give rise to bureaucratic formations spreading around the central planning authority. Furthermore, the system in its pure form is basically relying upon the market mechanism as a reliable source of information in all spheres, which is a rather over-optimistic expectation.

Thus in my view, neither of these systems constitutes an adequate solution to the demands of a planning system in a worker-managed economy. My purpose is to present some idea of a model of planning in a decentralized economy. It is fundamentally necessary to study this problem, in order to have a proper answer to the questions people very naturally have about the functioning of such a system. Why however, look so much at traditional planning systems when it might be possible to develop a quite new one?

2. SEARCHING FOR AN ADEQUATE PLANNING MODEL

2.1. The Yugoslav Planning System (Self-Management Planning)

In trying to find an entirely new planning system, we do not have to search too far. During a stay in Yugoslavia in 1981, I made a special study of the country's planning system. It follows that my knowledge of Yugoslav planning is based on the situation in the first half of 1981, and things may have changed since then, knowing how quickly and how often drastic changes occur in Yugoslavia. Anyway I will be dealing mainly with the Yugoslav planning system in its theoretical form.

The background to the new planning system, introduced in 1976, should in my opinion be seen in the problems arising during the period following the new Constitution of 1963, and the decentralization reform of 1965. The radical decentralization leads to a drastic fall in investment, followed by a fall in employment and rising inflation. Discussions concluded that decentralization in economic life had gone too far and a planning system had to be introduced that would again give society some control over economic development.

The new planning system, self-management planning, is based on two laws from 1976, the Associated Labour Act, and the Federal Law on Planning, and the system was closely related to changes which took place in connection with the new Constitution of 1974. These changes can be summarized in two points: 1) The strengthening of workers' management through the formation of the delegate system and institutional changes in the economy; and 2) the strengthening of the role of the republics, especially in economic policy.

The key terms of self-management planning can be characterized as follows:

- multi-level planning;
- simultaneity in the planning process;
- continuous planning;
- planning based on a holistic, integrated approach.

The solution chosen was to replace the market mechanism within the composite enterprise organization, and to modify the mechanism above enterprise level through a complex system of agreements and contracts. The *self-management agreement* is the form of co-ordination between economic units on a basic level, and *social contracts* are more comprehensive agreements, or just contracts, reached by any composition of partners containing any level of socio-political community (i.e. municipality, republic and federation).

With reference to Figure 1 the first step of the planning process will be to work out draft plans on every level and in each single economic entity. The second step is to exchange these plans between the different levels, so that e.g., the enterprise presents its draft plan to the municipal authorities and to the republic, in return receiving their draft plans.

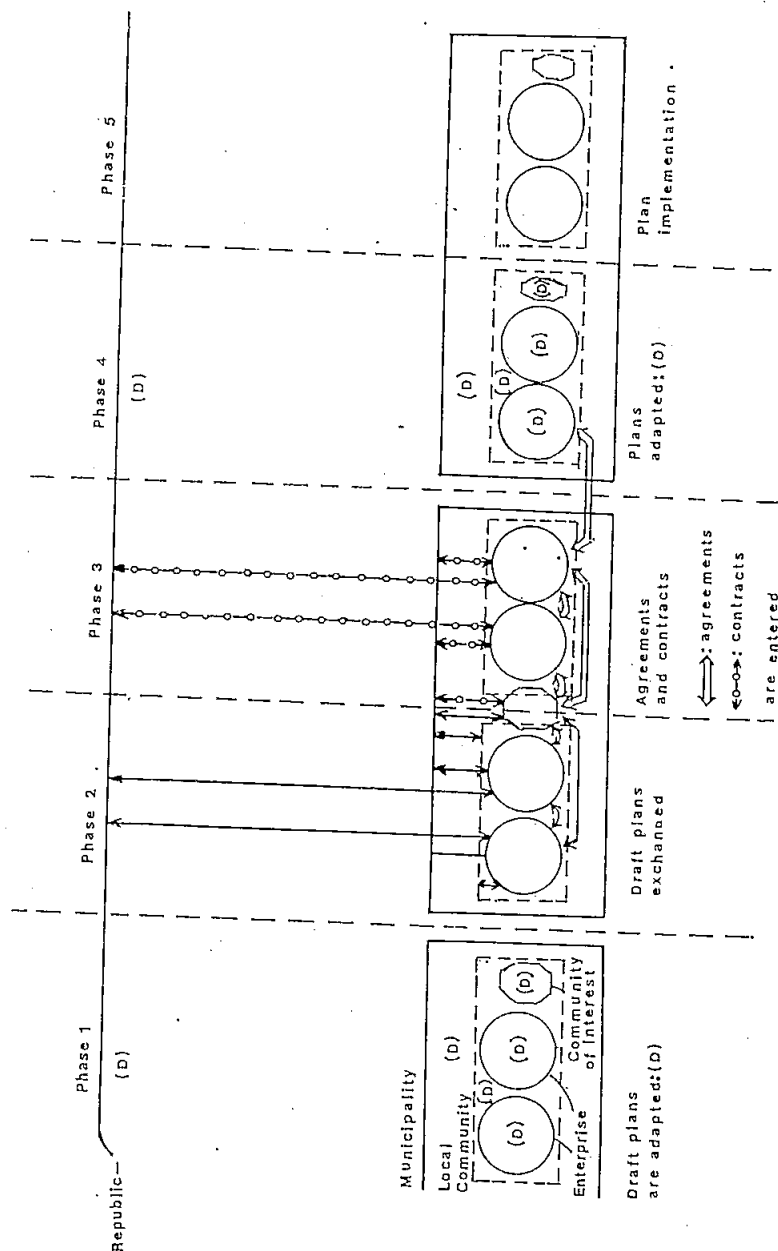
The third step is to enter, on the basis of these draft plans, into self-management agreements and social contracts, as the basic foundations of the plan. For example, the republic and all the enterprises within its area can agree to limit the increase in personal incomes over the next five years, in order to increase investment by a certain proportion. Step four will then be to adapt the final plans, which again is taking place on all levels, in all entities. The final plan will have undergone some changes in the agreement-reaching process described above. The final step will then be to implement the plans.

Planning on different levels is to take place as a process of simultaneity and continuity, which in theory should rule out the problems of planning either from the top down or from the bottom up. This, in turn, demands a lot from the information system in such a planning process, and excludes the cybernetic model known from Soviet planning. In my opinion, an adequate solution to the information problem still waits to be found.

It is evident that such a planning process becomes very complex. The fact that agreement and contract-reaching is carried out from the lowest to the highest level perhaps gives the clearest picture of the complexity of the whole system. In addition several kinds of plans have to be made. The above-described procedure runs for long-term as well as medium-term plans, while the annual plan is a more operative version of the medium term plan.

Which are the means of social control and what is the degree of intervention by society in this system? First of all, one has to take into account a specific feature of Yugoslav society. The fact that Yugoslavia is a self-management society has, of course, implications for the role of state bodies. The attempt to run society with as little state coercion as possible gives to the socio-political communities a certain ambiguity, these communities being instruments of state coercion as well as instru-

Fig. 1: The Planning Process in Yugoslavia



ments and forums of self-management. It follows that the means of control have to be divided into two categories:

- 1) means of control containing elements of state coercion; and
- 2) means of control not containing state coercion.

In the first category is found the legal regulation of the planning process, and the possibilities for the state apparatus to take political measures, such as fiscal policy, monetary policy, price policy, etc. Limited possibilities also exist for the state to intervene directly in actions taken by the units of self-management.

In the second category is found the network of agreements and contracts. The voluntary character of this co-ordination process can of course be doubted, but that is not the point here. In theory, no one can have an agreement or a contract imposed upon him.

It is difficult to evaluate the validity of the means of social control built into this system. It does of course depend on the functioning of the system in real life, i.e., on how far practice departs from theory, but some observations can be made even on the theoretical level. In what follows, I will present some critical views on self-management planning, based mainly on the theoretical approach of an outside observer.

2.2. A Critical View of Yugoslav Planning

My first criticism concerns the system of agreements. In my opinion, it is impossible to imagine this very complex system actually working simultaneously on all levels. To make it work in practice, a dominating direction of the planning process has to be established. Either the entering into agreements has to take place mainly from the bottom up, or mainly from the top down. To run the system from the bottom up would lead to a simple accumulation of plans which, in turn, implies that the planning system would be based actually on market signals only. When the planning process reached the top, preconditions in a dynamic economy would have already changed, and the whole process would have to be repeated.

More likely, the planning process would actually work from the top down, especially seen as a process of decision-making. Decentral plans would then function more or less as information, serving the purpose of planning on higher levels.

In my opinion the reason for the non-feasibility of this system of agreements is to be found in its state of *over-complexity*. This is partly due to the fact that all units — even the smallest and least important — are subject to the demand that they should plan. They are all forced into the same institutional framework — no matter what their economic importance. This in turn leads to a situation where no one will actually see his interest in planning. Planning will be carried out as an activity on paper, but most economic units will continue their operations without respect to their own plans.

The system of agreements suffers from the ambiguity of being both an activity based on the market mechanism and an activity of planning. The complexity of the system, however, would probably lead to the situation where economic units would find it more attractive to base their operations on the market mechanism, rather than on the agreements, the market mechanism being a much simpler mechanism of allocation and regulation on the basic level. From this point of view, there is a danger of creating a system which generates business cycles, known in the traditional market economy, but a system in which the central planning authorities, i.e. the state, do not expect such business cycles to occur, and therefore do not prepare themselves to put the appropriate politico-economical measures into effect.

Another aspect concerns the mass participation intended in the planning process. In general, planning can be viewed as a process containing two separate (although mutually dependent) components, which can be termed *value components* and *technical components*. Value components primarily deal with the goals of the plan, and technical components deal with the means of obtaining the required goals. In Yugoslav planning, however, there is no clear distinction between these two components, and mass participation is thus involved in the whole planning process. This may very easily lead to a situation where rank and file participants become so involved in the technical side of planning, which in quantitative terms is the largest part, that the decision on value components is left to bureaucrats or planners at higher levels.

It is also a question whether mass participation of this kind is always a desirable situation from a democratic point of view. The argument could be, and has been raised, that a certain point is reached where the increase in the number of participants actually leads to a decrease in their influence, because the efficiency of the decision-making process is severely damaged. In my opinion, this simplifies the problem a little, because it is not only the number of participants which influences the decision-making process, the number of decisions to be made also does, or to put it another way, the complexity of the process and the possibility of the participants overlooking not only their own planning process but the planning process in society as a whole. And here we are, perhaps, at the core of the problem of self-management planning as an intended democratic planning system. The question is whether widespread participation at the basic level in turn limits the possibility of democratic discussions on the overall priorities of social planning. Planning cannot be viewed separately from the political system, and later on I will return to this relationship.

A third aspect of the self-management planning system is the question of investment decision. In order to secure an appropriate social control of economic development, a certain amount of the total invest-

ment needs to be centralized, i.e., controlled by society. In the Yugoslav case, however, investment decisions have been radically decentralized, even to the point where central investments to secure a balanced economic development in different parts of the country have been almost abandoned.

In my opinion it is necessary to give society resources which enable interventions in the structure of the economy, especially in a rapidly changing world economy, where large investment decisions reaching beyond the capabilities of individual enterprises, or even beyond the capabilities of whole sectors of the economy, sometimes have to be made.

To leave out such investment projects on a national scale is, in my view, to create a vulnerable economy.

Another aspect of investment decision is the possibility of formation of new enterprises. Both in order to secure the competitive features of this economy, i.e., to rule out the possibility of the formation of oligopolies or monopolies, and in order to create a levelled distribution of the production structure in geographical terms, the formation of new economic entities is a crucial matter in a worker-managed economy. But, how is this to be secured, when planning is based entirely on existing economic units?

This brings us back to the questions of the possibilities of social control and the degree of state intervention in this system. In order to serve effectively as a tool of realizing the sought-after social and economic goals, planning on the level of society must be the framework within which planning and agreement-reaching on lower levels takes place. In the Yugoslav case, however, final plans are made on the basis of agreements reached at all the different levels, i.e. plans are strongly influenced by particularistic interests and as such are not the expression of a more global view.

There is no doubt that many of the intentions behind self-management planning can be agreed upon by all who advocate the model of workers' management. Also, the system of agreements, of which I have been very critical, is, without doubt an extremely democratic institution in its theoretical form. However, the system in short suffers from an over-complexity that cannot be overcome with measures known to us today.

2.3. *The Vague Outlines of a Planning System*

All this leaves us with the problem of designing an appropriate planning system for a worker-managed economy. This is of course no

simple task, and no one has yet found the answer. I will attempt to outline some of the main characteristics which must be borne in mind where considering planning in a decentralized, worker-managed economy. Some of these ideas are described in the book "Den arbejderstyrede økonomi" (The Worker-Managed Economy), published by Aalborg University Centre Press in 1982.

The central question when discussing the "ideal" planning system will always be that of centralization/decentralization, or to put it in another — and only slightly different — way, the question of plan versus market. One could actually boil the whole discussion down to this: planning is needed to offset market failures, and the market to offset planning failures!

The ideal combination of centralization and decentralization will, of course, always depend on the individual situation and cannot be generalized. But it is still possible to make a meaningful statement on the basic preconditions and characteristics of this system.

In many discussions on centralized versus decentralized planning, I find a disappointing tendency to equal centralized with undemocratic, and decentralized with democratic planning. To put it very simply, however, the difference between democratic and undemocratic planning systems can *only* be identified within the political system. It follows that the decisive distinction between bureaucratic central planning, and central planning adaptable to a worker-managed economy, lies in popular control of the central planning authorities.

In my critique of Yugoslav planning, I concluded by claiming the necessity of the national level plan to serve as a framework for agreement-reaching and planning at lower levels. But the essential thing will then be to create a corresponding political system, which, in my view, can only be a directly elected national parliament. Indirect elections in a delegate system like the Yugoslav one, are not able to express, on a national level, the broad social and economic preferences of the whole population. On the other hand, the delegate system has a great deal of advantages which such a society cannot be without. The possibility of controlling and recalling the delegates is one that does not exist in a parliamentary system. Therefore, my vision of the ideal model — and I stress here that we are talking about a model and not about any existing society — would be a political system in a permanent situation of double power. On the one hand, a delegate system with indirect elections and recallable delegates to express directly the fragmentary interests of workers at their work places, and on the other hand, a representative or parliamentary system to express directly broad popular preferences.

Basic Characteristics of a Planning System

GENERAL PRECONDITIONS	POLITICAL SYSTEM	PLANNING SYSTEM
<ul style="list-style-type: none"> — socialized means of production — workers' management (factories run by workers, one man one vote) — autonomous enterprises (i. e. no plan can be imposed on the enterprises) — no labour market (i. e. every man must be secured a job) 	<ul style="list-style-type: none"> — local self-government — parliamentary plus delegatory system 	<p>I. The centre:</p> <ol style="list-style-type: none"> 1) works out the national plan 2) serves as an information pool 3) uses largely indirect measures (which gives planning a parametric character) <p>II. Basic entities:</p> <ol style="list-style-type: none"> 1) procure information 2) reach agreements (on the basis of the national plan) 3) make enterprise plans (only obligatory for enterprises of a certain size)

In this system the market would still play an important role in expressing the consumption preferences of individual consumers, resulting in a broad scale of preferences, and serving as the basis for central planners' as well as enterprises. The market can, of course, be regulated through taxes and some price control, but the essential point is that the mechanism is allowed to operate at micro-level.

The national plan is the result of a democratic national decision, which allows it to be used as the general framework for planning and reaching of agreements at lower levels. The plan will also of course be influenced by information and suggestions from the enterprises, received prior to the adoption of the final plan. It should contain mainly general macroeconomic goals, and goals of medium-term development of the economy. No directives to the productive units can be expressed in the plan. Planning will have a largely parametric character, whereby economic units are apt to take the parameters as exogenous factors, which will influence their behaviour on the market.

The only question now is how to implement this system in — let us say — Denmark. But that is a question far beyond the purpose of this article.

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O PLANIRANJU U SAMOUPRAVNOJ PRIVREDI

Claus BISLEV

R e z i m e

U članku se naglašava potreba za planiranjem u samoupravnom društvu radi zaštite privrednih subjekata od stihijnog delovanja tržišta i radi ovladavanja radnih ljudi procesom proizvodnje.

Nijedan od tradicionalnih sistema planiranja ne može se, međutim, prilagoditi principima radničkog upravljanja. »Centralno direktivno« planiranje i pravo indikativno planiranje jesu centralistički sistemi koji, bilo prisilom bilo manipulacijom, usmeravaju privredne subjekte na način koji može oslabiti njihovu ekonomsku performansu ili može biti zaista protivurečan osnovnim interesima radnika.

Stoga se novi sistem planiranja mora kreirati. Tragajući za takvim sistemom, autor raspravlja o jugoslovenskom samoupravnom planiranju, koje je u teorijskom obliku sasvim nov i revolucionaran sistem, ali koje u pogledu svoje sprovodivosti ima izvesne manjkavosti usled prevelike svoje složenosti.

Opsežna procedura postizanja dogovora čini planiranje u Jugoslaviji veoma složenim procesom i može dovesti do situacije u kojoj će privrednim subjektima biti jednostavnije da svoje akcije zasnivaju na tržišnom mehanizmu i u kojoj će privreda biti izložena cikličnim fluktuacijama, protivu kojih se neće preduzimati odgovarajuće mere, s obzirom da ih centralni organi nisu anticipirali.

Drugi problem se sastoji u tome što vladama republika i federacije nedostaju investiciona sredstva za regionalno uravnoteženje ekonomskog razvoja i formiranje novih proizvodnih jedinica radi očuvanja i jačanja položaja Jugoslavije na svetskom tržištu.

U članku se zagovara princip parametarskog planiranja, kao i jugoslovenski sistem dogovaranja, ali u restringovanom obliku u kome se dogovori na osnovnom nivou postižu na bazi centralnog plana.

Diskutuje se i odnos između sistema planiranja i političkog sistema i dokazuje da sistemu u kome centralni plan predstavlja osnov za decentralizovane planove i dogovore — može pogodovati i delegatski sistem posrednih izbora baš kao i predstavnički sistem. Centralno planiranje može biti demokratsko planiranje pod uslovom da postoji odgovarajući politički sistem.

PRILOG VIŠEKRITERIJUMSKOM RANGIRANJU REGIONA

Radivoj PETROVIĆ*

Sonja STOJANOVIC*

1. U V O D

Rangiranje ekonomskih celina po stepenu razvijenosti intenzivno je proučavan problem o kome je, poslednjih godina, objavljeno mnogo radova i obimnih studija. Problem je interesantan i u teorijskom i u praktičnom smislu. Teoretičari pokazuju interesovanje u traganju za što realnijom i rigoroznijom postavkom problema, kao i u razvoju efikasnih, egzaktnih i aproksimativnih metoda rangiranja. Praktičari, pak, često se sreću sa problemom uravnoteženja nejednako razvijenih ekonomskih celina pa je tada važan zadatak što objektivnije rangirati ekonomske celine po stepenu razvijenosti.

Literatura o utvrđivanju stepena razvijenosti i rangiranju ekonomskih celina pokazuje da je kao ekonomska celina uglavnom posmatrana ekonomija zemlje, odnosno država u celini. Uporedo sa povećanjem broja zemalja koje su postigle visok nivo ekonomske razvijenosti u celini, ali kod kojih postoje i velike razlike u razvijenosti njihovih pojedinih delova, problemi uravnoteženog regionalnog razvoja postaju sve značajniji. Saznanje da je važan uslov za brz i dinamičan razvoj zemlje u celini harmoničan razvoj njenih delova, ima za posledicu da se sve veća pažnja posvećuje problemima utvrđivanja stepena razvijenosti i rangiranja manjih ekonomskih celina — regiona ili oblasti. U te svrhe sve više se počinju koristiti i egzaktna metode višekriterijumske analize i rangiranja.

U ovom radu razmatra se problem rangiranja manjih ekonomskih celina — regiona kao zadatak višekriterijumske klasifikacije elemenata jednog skupa. Elementi skupa su ekonomske celine (u konkretnom primeru regioni u SR Srbiji van teritorija socijalističkih autonomnih pokrajina), a svakom od njih je pridružen izvestan broj kriterijuma,¹ ne

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¹ U ovom radu dosledno se primenjuje termin kriterijum za meru — indikator za poređenje, što je u skladu sa standardnim terminima u teoriji sistema i matematičkoj teoriji optimizacije. Otuda i naziv višekriterijumsko rangiranje. Pored reči kriterijum, u literaturi se može naći i termin atribut, pa shodno tome i višeatributno rangiranje.