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PLANNING IN YUGOSLAVIA*

Ьу

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What I am about to tell you should not be interpreted as an attempt at generalisation, either implied or otherwise, unless I say so explicitly. The case of Yugoslavia is a very special one. The Yugoslav economy is not a mixed economy as most of the economies in the West are, yet it has been planned in a very different way from the Socialist economies in Europe. Taking these facts into account, Yugoslavia is really a very specific case, with not much ground for generalisation, so far as the historical forms of organisation are concerned. There is some possibility for generalisation as far as the logic of the economic process is concerned.

I. Historical Background

To supply you briefly with the historical background for what has happened in Yugoslavia, I may tell you that the course of development may be divided into two very different periods. The first one immediately after the war was characterised by strict centralisation. The second one, around 1951–52, is a period of decentralisation. These are historical facts. At the time when we were embarking on these economic policies, we were not aware that this is one of these few generalisation that one may make about economic development of under-developed countries. If you have a country which got its independence

^{*} Edited from a recorded talk.

after a national liberation war, as was our case, or after say ceasing to be a colonial country, or after a social revolution, or any other substantial break with its own past stagnant history, the first thing you have to do is to mobilise under central control all the human and other resources in the country. There is no other way of exercising the "big push" you need at the beginning. But as soon as you have achieved strict and efficient centralisation, you have to start decentralising, because centralisation tends to produce bureaucracy and breaks in economic efficiency, not to speak of the political dangers it brings with it. We have learned this lesson quite unintentionally. Just when you think you have achieved your final goal of a neat, centrally organised economy, you must start a reverse process, to destroy what you have just achieved, if you wish to preserve economic efficiency for some longer time.

What I have described in general terms really happened in Yugoslavia. After three years of trying to copy the Soviet system at that time, we realised that there are all sorts of deficiencies in this system. We tried to reconsider our whole economic thinking and philosophy in the country, not only economic but social as well. We came to the definite conclusion that centralisation is a necessary but a very short and temporary phase in economic development of an under-developed country, and that you should get-rid of centralisation as soon as you can.

In 1950 we introduced the first of the big inventions in our system. This was the Workers' Councils. In 1951 we invented a second one, which we called "planning by global proportions" — not planning every single thing, but trying to envisage and achieve a certain structure of the economy, for instance the division of national income between consumption into personal consumption and collective consumption, the structure of investment and so on. There are a few such proportions which we thought were essential for economic development, and these should be kept firmly in the hands of the Planning Authorities. All other things should be left completely to the free initiative of the economic agents who have to carry out the economic policy. Since 1952 this policy has been pursued, but we are still in the period when the decentralisation drive has not been finished.

II. Planning as Co-ordination of Economic Activities

So much about the historical background. The next point I want to discuss is the fundamental economic problem of co-ordination of economic activities. Here I wish to point out that two primitive views are still widely held. The first one is that central planning is the most efficient way of achieving this co-ordination. You simply give orders to all producing units in the country, you calculate on paper who has to produce what, and who has to supply whom, and through corresponding orders by the administrative machinery you achieve the production and distribution of economic goods. It has turned out that this is not at all the most efficient way, the administrative difficulties become so great, and the loss of initiative of those who are on the spot, those who have to carry out the directives, is so great that strict centralisation defeats its purpose. The stricter it is, the less efficient it is.

The opposite primitive view, also held by many people — and many learned economists — is the one which can be traced back to the period of liberal capitalism: "Let every firm do what it thinks best, to its own purpose. They are the people who know what is really best. They are motivated to do it in the best way, and let the Government not interfere in the process of work." This naive view is based on the observation that there is a certain degree of rational behaviour within a firm. However, the rational behaviour of individual firms, when aggregated into the national economy, may become very irrational indeed, as the slumps and economic crises have shown.

"With the first approach, on the other hand, you may have the other extreme, a very rational behaviour of the central planning agencies and very irrational behaviour on the spot. The obvious solution to this problem is to discard both extremes and try to strike a balance, reasoning in a similar way, as when solving linear programmes. You have your constraints and you are trying to strike your optimum, and this is the sort of thing we were trying to do.

I may use this opportunity to call attention to the question raised by Mr. Paranjape, and by Mr. Miyazaki in their papers, namely that in Japan there is no planning, and in India there is no planning which can be considered as such. I believe that we are now in the period where these sort of approaches

are no longer valid. We can, on the basis of historical experience, say that there is no one kind of planning, for instance, the centralised planning. You may do planning very many ways. The problem is to find out the most appropriate way of planning for any particular country. There is no single way, that is clear. There is no unique way for any one country, because you change your planning approach as you grow, as you develop your administrative apparatus and so on. So the Japanese planning, the indicative planning in France and the global proportion planning in Yugoslavia are really planning procedures. They are different, but they are also similar. They show a very different approach of the present day economist, as compared with those of the 19th century, when the market was considered to be the planning mechanism, and not the conscious intervention of one sort or the other into the economic process.

III. The Distinction Between Short-Run and Long-Run Planning

Now, after raising this question of economic co-ordination, which seems to be the fundamental one, I wish also to recall an old distinction by Marshall. It is not just a textbook distinction, but is very valid I believe in economic planning, and that is the distinction between long and short—run. I believe this to be the clue to the present practice of planning in Yugoslavia.

In the short—run, assuming we have an equilibrium situation, the capacity of producing units is given. If that is so, there is no need for a central planning agency to interfere into their business. Let them do what they think best for their interests. What does this mean? The quality of goods, the assortment of goods, the regional and local distribution of goods, all these things should be left to the discretion of the firms. They should be completely independent in this respect. In other words, in the short—run let's have the market as the planning mechanism, because it is the most efficient, given these conditions. How, even in the short—run, of course, you do not have perfect equilibrium and you do not have perfectly working market forces, you have imperfections here and there, difficulties with the money supply, temporary shortages: foreign trade problems, and so on. In a way you have to interfere, but the way you

interfere is really a classical way, by using such instruments as interest rates, or price controls, fiscal and monetary policy — nothing specific to planned economies. This is one of the things which confuses many people, because when they note these things they say, "Well, that has nothing to do with planning, every modern industrial state does that!" So it does, and that is really a fact of our times — that every modern industrial state has to plan in one way or the other, more or less efficiently. This is the short—run stituation, and there is nothing particularly new or striking about it.

What is really important, and what brings new moments into the whole problem, is the long—run equilibrium. In the long—run capacity changes and you have in some way to make sure that these capacity changes will be synchronised, both in time and structurally, and that you have the right amount of investment. This is a thing which cannot be done by a market economy. I think most economists nowadays agree on that. The market economy cannot achieve this itself by its own operations. You have to establish a new institutional framework, which would enable you to get your long—run equilibrium with an optimal investment policy.

IV. The Yugoslav Institutional Set-up

Now I come to the Yugoslav institutional set—up, to the ways in which we tried to cope with this sort of situation. First of all, productive capital is socially owned. Next, our enterprises are administratively completely independent. They make their own production plans, they have their own pricing policy, they have their own wage policy. I am not quite sure that it is good, but wages are less controlled in Yugoslavia than in any western country. The trade unions cannot ask for uniform wages in the country, it is within the jurisdiction of the individual Workers' Councils to set up the wage differentials at the level of individual firms. Also, up until now we have an important private sector in agriculture and handicrafts, because these are the sectors where the small owners are predominant, and small owners cannot, by definition, exploit other people's labour.

This is the producing basis of the country. Then we have banks, which

exercise two roles. The first one is the ordinary banking role; they collect idle money and they give loans, and they try to place their monetary resources in those places where the interest is greatest. Apart from that, banks administer the so-called General Investment Fund. From this, projects are financed which are considered to be the key projects from the point of view of economic development of the country. They may be the key projects in terms of infrastructure, or in terms of some industries lagging behind others. Wherever you have to intervene in such a way as to fill a gap, this is the field where the General Investment Fund has to intervene.

Next, the enterprises are able to combine into all sorts of associations, from fusion, complete integration, to very loose associations. It is obligatory for them to be members of the Economic Chamber. All this has one single purpose, to enable the enterprises to do planning for themselves. They produce all sorts of schemes, which are not necessarily in formal agreement with 5-Year Plans or 7-Year Plans, etc., but which are taken very seriously into consideration when the Federal Planning Bureau works on a plan, and when the Government and the Parliament have to decide on a new plan. Thus there is a possibility for the business sector to do as much planning as possible without any intervention from outside; and they really use this possibility and do quite a lot of planning for themselves.

We also have a Planning Bureau which has no administrative powers. It cannot issue any orders cannot ask anyone in the country to do anything. It is a purely professional body at the disposal of the Government and the Economic Ministries, where the most experienced economic and engineering experts are assembled. According to directives of the Government, and on the basis of their knowledge and experience, they produce annual, 5-Year and longer term plans. These plans are then widely discussed, and not just discussed; in the process of producing plans the cooperation of very many people outside the Planning Bureau is sought. I haven't counted how many people are taking part in the 7-Year Plan which is now being elaborated. I know that we have about 10 groups around the Collegium of the Planning Bureau, which itself has about 150 people. These 10 groups have about 400 experts from all

parts of the country. Apart from these, trade unions, the economic chamber, the associations, various institutes, even universities take part in discussing and preparing plans, and also particular problems connected with the new medium-term plans.

Finally, to complete this institutional structure, I would mention that our Parliament is also somewhat different from the traditional sort of Parliaments. We do not have just one House, but five Houses. All houses have equal rights, and each Bill has to be passed by 2 houses — the political house, and one of the four professional houses. One of these four is the economic house, where the business people elect their own representatives, and this house is responsible for all economic matters. This means Parliament cannot pass any low on which the political house, "The Council of producers" as we call it does not agree.

V. Two Common Criticisms

It has been argued, that if you have a system of Workers Councils and independent management, what workers would first do would be to consume everything they earn, and that this would ruin the investment possibilities of the country, This argument proves to be completely wrong. What really happened was that Workers Councils not only did not distribute everything into wages, but tended to push the investment further than the economic plans envisaged. Our real danger in the last 5 or 6 years was not the lack of investment, but over -investment, which was causing continual troubles of inflation. Why this is so, is easy to explain, There are all sorts of pressures which produce this final result, leading the Workers' Councils to invest as much as possible. First of all, if the enterprise wishes to get money for anything it needs - houses for workers, or for new constructions and modernisation - or simply to finance inventories - it goes to the bank. The bank will have to evaluate their economic position. Those enterprises which could show that they invest a lot into extending capacity, modernising technological processes etc. are likely to get money more easily than those which are more stagnant. That is one of the incentives to invest. The next one is that if they don't invest, somebody else might invest,

and they would be lagging behind, which means that their wages wouldn't increase as fast as the wages of their neighbours. The next one is a detail of our de centralisation policy; every little district has a particular interest in its own industries. People like to see output in their own territory increasing as fast as possible. Of course, the community shares in the profits of the enterprises situated in their territory. If a factory is situated in one district and the headquarters in the next, the taxes and everything else is paid where the output is produced. All these local authorities exert tremendous pressure on the producers on their territory to invest as much as they can, because this would mean additional means for the local budget. Also, there is a system of when you ask for money you have to participate with your own means. So the more you use your own means, the more money from outside this little district you can attract for new investments on your local territory. All this, in a way, creates tremendous competition for investment resources, and we really have a chronic over—investment situation.

The second important criticism against this system was that if you leave the workers the possibility of deciding on a wage differential - not only on how much should be distributed in wages, how much goes into investment funds, but also what should be the wage scale - what they do then will be a great egalitarian pressure. They would ask that a worker should have the same salary as an unskilled worker, and that this would eliminate inducements to work harder. In fact, unwillingly, we made an experiment two years ago, when enterprises got complete independence in deciding their wage policy. The immediate result was not to close the wage gap but to widen it to such an extent that trade unions had to intervene and set up a commission. I give you an example, Before that, the gap between the wage of an unskilled worker and a director of medium-sized industrial enterprise, of say 3,000 to 5,000 workers, was about 1 to 7. If you take into account children's allowances, it may be reduced to one to five, one to four. After the Workers' Councils got the right to decide on this span, it was increased in the course of six months to almost one to twenty. This was considered to be quite intolerable in the social system we have, and we had to intervene. The spread has now been brought back to something between 1 to 7 to 1 to 10.

These two main criticisms against the system which I have just described, have been disproved not been disproved, not only theoretically but in practice. The problems of the system really lie elsewhere.

VI. The Planning System is Still in a Process of Development

We are very far from claiming to have solved all problems, or even to have produced a closed system. There are many open ends and many unsolved problems. The whole system is still unfinished and in the process of refinement. Just as an illustration, in the last six years we have tried to produce a law on planning, in fact the Planning Bureau was asked by the Government to produce it, but without success. The law which is still formally in existence, and which was passed in 1952, has as much to do with the planning now, as for instance the laws of Henry VIII in England have to do with the present situation. Yet neither have been repealed. We simply could not produce a new one because many things had still to be settled. Therefore, I do not want to claim that the system has been formalised in such a way as to ensure consistency of either institutions or economic policies. But main institutions - described above - and the general logic of the system stand firmly. And if you look at the table I produced in the appended extract from one of my papers, you will see the rate of growth has been a very high one up to now. The 7-Year Plan envisages more or less the extrapolation of the present rate of growth, so we will have a period of almost two decades, 1952-1970, with a rate of growth of about 10 per cent, providing of course that the planners prove to be right in their predictions for the next 7 years. This means that in the next decade Yugoslavia will reach more or less the present per capita output of the Western European countries. And that may be also considered as an indication for judging the efficiency of the system.

Annex

SOME COMPARISONS OF THE GROWTH RATES IN THE LAST DECADE*

by Branko Hor vat

The postwar economic development of Yugoslavia may be conveniently broken down into three periods: prior to 1952, 1952–1960 and 1961–1962. The first period was characterised by full recovery of war damages, deeply going social changes and great losses of the economy due to a severe economic blocade. The second period is a period of fast and uniform growth, with a slight acceleration of growth in the second half of that period. In the beginning of 1961, a sudden slackening of growth took place, the rate of growth was halved and continued to be so low until the second half of 1962, when a movement fowards earlier growth trends became apparent. The reasons for the 1961–1962 cycle are very specific and will be mentioned later. Thus, only the eight—year period 1952–1960 may be considered sufficiently characteristic for a study of the growth rate of Yugoslav economy.

It will be of some interest to start our inquiry by compiling a table of comparative growth rates for those countries which experienced fastest growth in the period 1952-1960.

If we had data for all countries, one or two more countries would possibly be included in the table below. Accordingly, the general picture would not change substantially. However, it is difficult to say what the figures quoted mean precisely. No standardization of data could be attempted here.

The table compiled exposes the fallacy of the fallacy of the time-honoured views that fast growth is characteristic of backward, economically undeveloped countries. In fact, no really backward country appears on the list of the fastest growing economies, and even if we had more adequate data, no more than one or two such countries would be included. On the other hand highly industrialized countries, varying in size and resource endowments such as Czechoslovakia, Germany, the Soviet Union, Japan, Austria, — are included in the list. The table also indicates some reasons for rapid growth. Out of thirteen countries, eight (Israel included) have a type of economic organisation which might be labelled "planning". Now, it is possible that some of the growth rates are inflated, some of them even seriously inflated. Still, this would only change the order of the countries listed according to growth rates, and would not change,

GROWTH RATES OF THE FASTEST GROWING COUNTRIES IN THE PERIOD 1952—1960

In percentages

,	PER CAPITA PRODUCT	INDUSTRIAL OUTPUT	AGRICULTURAL OUTPUT
Yugoslavia Bulgaria Soviet Union Japan	8.8 8.1 8.0 7.8	13.4 14.0 10.9 15.4	6.1 a) 5.5 5.9 3.6 b)
Rumania Israel	7.4 6.9 ^{c)}	11.2 9.7	4 8 10.6 b) 2.6
Czechoslovakia Austria Western Germany	5.9 5.8	7.0 8.9	3.1 b) 1.4 b) 6.8 b)
Greece Italy Hungary	5.7 5.6 5.6	8.6 8.9 6.7 11.2	3.9 ^{b)} 4 7 3.1
Poland	5.5	11 2	0.1

- a) On the basis of two-year averages: 1952-53 and 1960-61
- b) The base year is 1952-53, the final year is 1959-60
- c) Period 1952-59.

Sources and notes:

Per capita product is either gross national product or national income; in some cases material production definition in others S.N.A definition of national product is used. The data for per capita product are taken; for Yugoslavia from Statisticki godisnjak Jugoslavije 1962 pp. 54 and 93; for the Soviet Union from Narodnoe hozjajstvo

^{*} An Extract from the paper presented to the Eighth General Conference of the International Association for Research in Income and Wealth, Greece, June 1963.

SSSR v 1960 godu; pp. 60 and 102; for other countries from U.N. Statistical Yearbook 1961, pp. 488.

The data on industrial product are taken from U.N. Statistical Yearbooks 1960 and 1961, pp. 60, 78-88, and pp. 60, 70-80. The data on agricultural output are taken; for the Soviet Union from Narodnoe hozjajstvo SSSR v 1960 godu; for Bulgaria from Statisticeski godisnik 1961, p. 170; for Poland from Rocznyk statistyczny 1961, p. 259; for Czechoslovakia from Statisticka rocenka 1961, p. 230; for Hungary from Statisztikai evkenyv 1961, p. 133; for other countries from U.N. Statistical Yearbooks 1959, 1960 and 1961, p. 84, 90 and 82.

at least not substantially, the list itself. In other words, it is not likely that any of the countries included would have to be dropped out. Also, the fact that the national product statistics for the country that heads the list meet international standards in this field — suggests that per capita growth rates (around 9 per cent) are not a fake but a real fact or a real posibility.

There can be little doubt that planning should be considered as one of the most important factors of rapid growth. The explanation of why it is so is a rather simple one. Planning shifts the marginal efficiency of investment curve upwards and thus increases the accumulation possibilities of the economy in question.* Adam Smith's Invisible Hand may be considered also as a sort of Planning Bureau, and the market it directs is certainly a kind of planning mechanism. But the market works rather crudely and mostly ex post. If then we introduce ex ante coordination of business activities and beforehand on the paper eliminate all those wasteful decisions which would in practice be eliminated by the market — we get planning. Market supplemented by an ex ante coordination seems to be the device for lifting the rate of growth to levels which had at one time been considered impossible.

SUMMARY OF THE DISCUSSION

In discussion of Mr. Horvat's paper, interest was expressed in the manner in which investment funds are actually allocated. More generally, there was interest in the degree to which the central authorities exercise control over individual managers. Questions were also raised regarding the control of the foreign trade sector. It was asked what the precise role was of small enterprises and big enterprises. A fundamental question raised was whether there was any need for planning if the rate of growth is as high as it is in Yugoslavia. If was suggested by one participant that the need for planning varies with the phase of economic development; it was suggested that planning is needed in order to launch a process of economic growth, and may be needed again in advanced economies approaching maturity and stagnation. In between — and Yugoslavia is in between, it was suggested — planning may be of lesser importance.

Questions were also raised regarding the comparison of plans with actual results. There was interest in the self-financing of enterprises and the degree of freedom accorded to enterprises in the reinvestment of their own profits. In this connection too there was much interest in the role of the workers' councils. In praticular, given the role of the workers' councils in determining wage rates, and so the distribution of profits between current income and expansion of capacity, how did the new industrial workers acquire sufficient discipline to permit profit accumulation? What prevented workers' councils from "profiteering"? It was suggested that there might be indirect pressures on the workers' councils even though they seemed nominally rather free.

Questions were also raised as to the method by which individual projects were screened by the central authorities. With regard to the economic fluctuations noted in the Yugoslav economy, the question was raised whether the decline in growth rates could be regarded as an efficiency crisis rather than as a genuine slump.

Is his reply, Dr. Horvat dealt first with the question of allocation of investment funds. The prupose of the Federal Planning Bureau and of the

^{*} For a detailed theoretical analysis of this statement see B. Horvat. Ekonomska teroily planske privrede (The Economic Theory of Planned Economy), Kultura, Beograd, 1961.

Republican Planning Bureau is to watch very closely the behaviour of the economy, especially the structural changes, to report as soon as possible on potential disequilibrium, and to suggest the measures which should be taken. If has been found that with about one—third of total investment being controlled centrally, there is complete and extremely efficient control over the timing, the structure and the amount of investment.

If you central investment funds, which may be financed, let us say, with interest paid on loans and purchase taxes, as is the case in Yugoslavia, comprise just one—third of total investment, everything else being controlled by individual enterprises, local authorities, housing societies etc., the central government will have effective control over investment. There is no need to control investment in individual industries, because they adapt themselves to all the necessary requirements of the situation, within a lag of a few months.

Investment programmes are never started from scratch; you are always somewhere in the middle. There are some obligations to carry out from last year, and the structure created by finishing the project this year compels certain new investments next year. The space for manoeuvring is not too wide, and restricts the freedom of individual industries, i.e. is restricted by the overall economic situation.

As in other countries, Japan for instance, the mere fact that there is a plan in which the producers believe assures its execution.

Dr. Horvat turned next to the question of export and import and their integration with the plan as in any developing country, in the first phase there is a foreign trade deficit, and even a tendency for the deficit to increase. Foreign trade expands at a higher rate than total output, and even at a higher rate than industrial output, which in turn develops somewhat faster than the total G.N.P. After a time a sort of dynamic equilibrium is reached when the foreign trade deficit begins to decrease, relatively if not absolutely. The rate of growth of growth of foreign trade stands still after reaching a peak, and then begins to turn down and to approach the trend of output as a whole. Yugoslavia at the moment is in the phase where the foreign trade deficit has gradually begun to decrease, but where a foreign trade rate of growth is still higher than both total

and industrial output. These things have been taken into account, and just to give some comfort to our Japanese friends, this is an area of planning where we have made systematic errors. Our planners always envisage higher rates of growth of exports and imports than are really achieved.

Dr. Horvat next discussed the possibility that the management of the Yugoslav firm might misuse its power, in the same way as the management of a private corporation, making decisions against the will of the shareholders. There is a big difference, he said, since the shareholders of Yugoslav firm live in the firm and know what is happening. Also shareholders are relatively few, at most several thousand, usually 1,000–2,000. Whereas shareholders of a big corporation are so numerous that they cannot be assembled. A third difference is that shareholders meet legally, say, once a year, to discuss the faults of the firm; while the Yugoslav workers have the possibility of meeting practically every day, or at least once a month to discuss the policy of the management. By various means, if nothing else is possible then by a sort of referendum, they can prevent a certain policy from being executed.

This does not mean that managements in Yugoslavia do not try to misuse their power, but there are powerful checks against too much misuse. First, there is the institution of workers councils, elected every second year. The workers' councils elect the management board and the management has to say something on what the Director does. They may even discharge a Director. Also the trade unions have the possibility of supervising the legality of steps taken by various people in the enterprise. There is one more check which is extremely efficient, the Press. This check has been used particularly in the last few years. The people have come to realise that if things become unsatisfactory, there is the possibility of writing to the newspaper. If the letter is published, things are likely to be changed. The local authorities must reach, the party organisation will be asked why they were doing certain things, and so on. A Commission will be set up with strong public pressure. Thus the Press is one of the checks which prevent too great a massuse of power.

Dr. Horvat proceeded to discuss the results of planning. Between 1952 and 1960 the results were extremely close to the forecasts. If the growth of

output of manufacturing industry was forecast to be in the range of, say, 15 per cent, then the range of results was on the average no more than 14-16 per cent. Very rarely - once or twice in ten years - it occurred that the deviation was as much as 2 per cent. Of course, this accuracy does not occur for agriculture, because the weather fluctuations are extreme. In 1961 and 1962 there was a big exception. The planners envisaged a rate of growth of 10 per cent, and the realised rate of growth was 5 per cent. In 1962, the same thing happened again. But this was not an efficiency crisis, it was one very specific sort of fluctuation in our economy, created by very specific circumstances. A new constitution had to be produced, and politicians wanted to have it in 1962. This proved impossible. Then they wanted to have it in 1963, and the government session was extended for one more year. The new constitution was a further radical move in the direction of decentralisation. In 1961, they passed in haste three radical and partly contradictory and ill-prepared reforms, in the monetary and fiscal policy, in wage policy, and foreign exchange policy. Each of these reforms, if it is not well-prepared may cause a lot of trouble, with three at once you have more trouble than you need. From January 1961 to July 1961, the rate of growth of GNP fell from 10 to 5 per cent. In industry, it fell from 14 to 7 per cent and remained at that level for about one year. This was, of course, alarming. The leading economic ministers, presidents of economic councils, and so on, were changed. There was much discussion in the country, The Yugoslav Institute of Economic Research was asked to prepare a study of the causes of what had happened. The association of economists was asked to discuss this and other documents. The results of the measures taken were that now, a year after this inquiry was initiated, the rate of growth is back to 15 per cent again. For this year, they envisaged a rate of growth of 10 per cent for G.N.P.; 13 per cent for industry, and something like 10 per cent for agriculture. In fact, there is a rate of growth of about 15 per cent in industry, and something more than 15 per cent in agriculture which would make about 15 per cent altogether. So this crisis is now over. Dr. Horvat called it an institutional crisis, not an efficiency crisis.

Referring to cost—push as a factor in inflation in Yugoslavia, Dr. Horvat said that between 1952 and 1962, roughly, the rate of inflation in manufacturing

was only some half of 1 per cent per year, really not an inflation at all. In agriculture and services it was 3 or 4 per cent. But in industrial products it was much less than 1 per cent. Second, costpush was checked by price control. Some industries, such as the radio industry and the textile industry are extremely competitive. For these industries price controls are unnecessary because there is a trend toward downward movements in prices. There are other industries which are not of great importance; if they increase prices, it does not matter very much. But there are some industries, particularly producer goods industries, where price increases have a multiplier effect. These are the industries where it is important to controle prices, more or less. Yugoslavia has done this through price offices, with the following procedure. If any one firm wants to increase the prices of its products, it has to report to the price office. If it does not get an answer in one month's time, it automatically is allowed to increase prices. If, on the other hand, the price office finds that the increase is not justified, it might refuse to give approval. If the firm is not satisfied, then it may go to arbitration and so on. This system works well, because the time lag increases, and with arbitration and so on leading price increase is checked.

Dr. Horvat next dealt with the question of follow—up. This is made easier by two factors. First, the statistics are good. The main indicators—output, wages, nominal and real cost of living, etc.—are available within no more than two weeks. There is a unified accounting system obligatory for all firms. All firms have their accounts with the banks. The transaction of the firms are continuously aggregated, and these aggregates are quickly available in the centre. On the basis of ordinary statistics and on the basis of the banking statistics, it is possible to follow up what is happening in the community rather quickly. But the planners still are not satisfied, and are playing with the idea of building up a system (the Russians invested a name for it, economic cybernetics) whereby standardised data in all enterprises of each district, regional republics and federal centres, with electronic computers are collected, this system would then be integrated into one whole, so that the data could be transmitted directly, without any intervention of man, by tele—processes from one centre

to another. I would take us at least ten years to install such a system, but it is one of the ideas of how to achieve an efficient follow Ψ and, even more, an efficient reaction to the information you get.

With regard to project screening, Dr. Horvat stated that while the Planning Bureau participates, especially with regard to location of factories, optimum size, etc., it is inefficiently done so far, with no formalisation. It has been done on the basis of experience of people who know each other. The essential decisions on the profitability of various projects etc. are still being made in a very primitive way. This is one of the weakest points in the whole system and one which must be improved.

On the question as to whether production plans are made independently by enterprises, including investment goods, Dr. Horvat replied that they were. Investment goods producers are among those enterprises which are best organised. They are usually big firms. The Planning Bureau can contact them they can contact each other, they can contact their economic chamber, and so on. Thus they may be left to make their plans independently, and still these plans are fitted into the general framework. From time to time it is true, there are complaints. For instance, a big agricultural machinery factory in Belgrade wanted to increase its capacity, especially for combines and tractors. They asked the Planning Bureau how big the demand might be. At that time we had a big expansion programme in agriculture, everybody was very optimistic and the factory got a certain figure. They increased the output capacity accordingly, but the agriculturists stopped buying their products and their sales were not 50 per cent of capacity. Then, of course, they were furious.

With regard to self-financing, Dr. Horvat stated that only one—third of investment is controlled centrally. About 40 per cent of the investment resources are put at the free disposal of enterprises and banks, the rest is controlled by local authorities and non-business organisations.

With regard to the need for planning in a fast-growing economy, Dr. Horvat's view was that planning is still needed to coordinate economic capabilities of producers in any economy. The more efficient the coordination the better the results. By planning Dr. Horvat said only coordination is meant, not detailed targets. The institutional background which permits efficient planning

is a different story. That is the ultimate reason really for differences in the rates of growth. It seems clear that in the United States more planning would increase the rate of growth Planning reduces risk and uncertainty, and the idle capital will be drawn into investment. The problem is not to devise an elegant programming scheme for the United States, but to find the appropriate institutional changes which would enable effective planning. Planning is a word which is not very much liked in Germany, so there everybody speaks about "programming", but there is more real planning in Germany than in many other countries of the world.

On big enterprises vs. small enterprises, Dr. Horvat said that the only wish of small enterprises is to become big. Growth brings not only higher wages, but social prestige to the trade union officials in the small enterprise which is politically active and so on. If they succeed in expanding capacity, the Press will write about it. Small enterprises dream only of becoming large. If they employ a hundred workers, their dream, in a 7-year plan, is to grow to 500, if they have 500, to grow to 1,000 etc.



PUBLICATIONS OF THE JUGOSLAV INSTITUTE OF ECONOMIC RESEARCH, BEOG (AD, Zmaj Jovina 12

[Economic Studies

- 1. Branko Horvat, Towards a Theory of Planned Economy
- 2. Branko Horvat, Industrija nafte u Jugoslaviji

Enjiga 1. Proizvodnja nafte

Knjiga 2. Rafinerija nafte

Knjiga 3. Distribucija nafte

II Textbooks and Handbooks

- 1. Branislav Ivanović, Teoretska statistika
- 2. Olga Tomić, Priprema rukopisa naučnih i stručnih radova
- priručnik za autora

III Papers

- Branko Horvat, Primjena medjusektorske analize u planskom bilanciranju privrede
- Leopoldina Vukojević, Tendencija menjanja strukture jugoslovenske privrede u periodu 1952-1960. godine
- 3. Branko Horvat Analiza nekih efekata promjena cena
- 4. Branko Horvat, Note on the Rate of Growth of the Yugoslav Economy
- 5. Dančika Nikolić i Pavle Sicherl, Konstrukcija proizvodno-kapitalnog modela za privredni razvoj Jugoslavije
- 6. Dražen Bejaković, Mjerila u nauci i ekonomskoj politici za utvrdjivanje saobraćajnih gravitacionih područja luka
- 7. Branko Horvat, Samoupravlenije centralizm i planirovanie
- 8. Branko Horvat. Društveno računovodstvo za jugoslavensku privredu (projekat)
- 9. Branko Horvat, Ekonomska simbolika

IV Translations

- 1. Beleške o primeni matematike u sovjetskom planiranju
- 2. P.C. Mahalanobis Planiranje u Indiji
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- 4. Primena matematičkog programiranja i elektronskih računara u planiranju

V Reprints

- 1. V. Tričković "Ispitivanje strukture i elastičnosti tražnje", Ekonomist, 3-4/1957, 238-269.
- 2. B. Horvat, "The Depreciation Multiplier and a Generalised Theory of Fixed Capital Costs, The Manchester School, May 1958, 136-159
- 3. B. Horvat, "The Optimum Rate of Investment", The Economic Journal, December 1958, 748-767.
- 4. V. Tričković, "Strukturne promene u ličnoj potrošnji", Ekonomist, 3/1960. 427~458.
- B. Horvat and V. Rašković, "Workers Management in Yugoslavia: A Comment", The Journal of Political Economy, April 1959, 194-198.
- 6. B. Horvat, "Drei Definitionen des Sozialprodukts", Konjukturpolitik, Erstest Heft, 1960, 27-40.
- 7. B. Horvat, "A Restatement of a Simple Planning Model with some Examples from Yugoslav Economy", Sankhya, Series B. Vol. 23, Parts 1, 2, 3, 29-48.
- 8. B. Horvat, "The Characteristics of Yugoslav Economic Development", Socialist Thought and Practice, 1/1961, 1-15
- 9. B. Horvat, "Caracteristiques du developpment de l'economie Yougo-slave", questions actuelles du socialisme, 60/1961, 89-105.
- 10. B. Horvat, "The Conceptual Background of Social Product", Income and Wealth, Series IX (1961) 234-252.
- 11. B. Horvat, "Radna vrijednost proizvodnje jugoslavenske poljoprivrede i industrije, Ekonomist, 4/1961, 512-523.
- 12. B. Horvat, "Raspodjela prema radu medju kolektivima", Naša stvarnost, 1/1962, 52-66.
- 13. B. Ivanović, "Primena metoda I-odstupanja u problemima odredjivanja stepena ekonomske razvijenosti", Statistička revija, 2/1957, 125-154, 1-2/1959, 26-42, 1/1962, 1-14. Ekonomist, 2/1961, 182-205.

- 14. B Horvat, "Metodological Problems in Long-Term Economic Development Programming" Industrialization and Product ivity. UN. Bulletin, 5/1962, 37-51.
- 15. B. Horvat, "Ekonomska nauka i narodna privreda", Naša stvarnosi, 7-8/1962, 48-67.
- 16. B. Ivanović "The estimation of the two dimensional distributions of a statistical set, based on the marginal distributions of its strata", Statistica Neerlandica, 1/1963, 13-23
- 17. B. Horvat, "Naftni kartel u predratnoj Jugoslaviji", Ekonomski anali, 12-13 (1962), 205-222.
- 18. B. Savić, "Problemi regionalne lične potrošnje u Jugoslaviji", Ekonomski anali, 12-13 (1962), 97-116.
- 19. D. Nikolić, "Konstrukcija jednog ekonometrijskog modela za razvoj industrije", Ekonomist, 2/1963. 388-419.
- 20. M. Živković, "Matematika u sovjetskoj ekonomiji", Naša stvarnost, 7-8/1963, 126-135.
- 21. V. Tričković, "Lična potrošnja kao kriterij proizvodne politike". Ekonomist, 1-2/1958.
- 22. V. Tričković "Tendencije potrošnje hrane u svetlosti savremenih izučavanja", Ekonomist, 1/1960. 41-71.
- 23. V. Matejić, "Suština i metode operacionih istraživanja, *Statistička revija*, 1/1963. 1-18.
- 24. B. Horvat. "Quelques aspects de la planification economique nationale", Les Annales de l'economie collective, 2-3/1963.
- 25. B. Savić, "Nivo ishrane seoskog stanovništva: Srbije rpo poljoprivrednim rejonima: Hrana i ishrana, IV 1963.
- 26. B. Horvat, **Metodološki problemi dugoročnog programiranja privrednog razvoja**, Ekonomski pregled, 10-11/1962
- V. Medenica i V. Tričković, "Materijalni i novčani tokovi i njihov uticaj na cene i tržište", Ekonomski pregled, 10-12/1963.
- 28. B. Marendić, "Financiranje djelatnosti visokog školstva SRH u periodu 1960-63. godine", Ekonomski pregled, 10-12/1963.
- 29. B. Horvat, "Samoupravljanje, centralizam i planiranje", Pregled, 5/1964. 413-444.

- 30. B. Horvat, "Dva modela efekata formiranja zaliha na kretanje društvenog proizvoda". Ekonomski pregled, 7/1964, 407-415
- 31. B. Horvat, "Ekonomski smisao indeksa proizvodnje i cijena", Statistički revija, 1/1964, 7-14.
- 32. B. Ivanović" "Statistički rasporedi sa aleatornim parametrima", Statistička revija, 1/1964, 1-6.
- 33. B. Horvat, "The Optimum Rate of Investment Reconsidered", The Economic Journal, 1965, 572-576.
- 34. Lj. Madžar, "Privredni sistem i mobilnost faktora proizvodnje", Ekonomist, 1-2/1965, 28-48.

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