7 143488012

Народна библиотека



PLANNING AND THE MARKET: The Yugoslav Experience

By BRANKO HORVAT

REPRINT 38



7.2385, WO7

JUGOSLAV INSTITUTE OF ECONOMIC RESEARCH

JUGOSLAV INSTITUTE OF ECONOMIC RESEARCH

BRANKO HORVAT, Ph. d., D. Sc., Director ŽARKO MRKUŠIĆ, D. Sc., Assistant Director

The institute grew our of the Research Department of the Federal Planning Bureau which was founded in 1958.

Its purpose is to conduct research in the theory and practice of economic development at home and abroad, to study the Jugoslav economic system and contribute to the application of the Jugoslav economic policy, to improve the methodology of economic planning, to collect and analyse statistical data necessary for economic measurement. The Institute has also a post-graduate school with degree courses in economics, statistics and management science. A Center for Organisation and Development of Economic Enterprises, which helps solve the practical problems of individual enterprises and an Electronic Computer Center are also attached to it.

To make available the results of its research work to other scholars and professional people, the Institute publishes books, monographs and papers. The Institute's library endeavours to achieve a complete intake of significant economic publications and is open on request to scholars from other institutions.

11 531589

PLANNING AND THE MARKET: The Yugoslav Experience

Branko Horvat, professor of economics

JUGOSLAV INSTITUTE OF ECONOMICH RESEARCH B E O G R A D, 1967. "Planning and the Market: The Yugoslav Experience", Planning and Development Probramming, OECD, Paris, 1964

Published by: Jugoslovenski institut za ekonomska istraživanja, Beograd, 1967. **FLANNING AND THE MARKET:**

The Yugoslav Experience

BRANKO HORVAT*

Nineteenth century liberal capitalism produced economic growth, but also recurrent depressions and great inequalities in income distribution with great suffering and injustices. The remedy for the former evil was thought to be found in central planning, for the latter in socialism. Since depressions could not be tolerated in a socialist society, socialism had to be based on central planning. And then again, as a natural ideological feedback, central planning was identified with socialism. This is a somewhat simplified description of a doctrinal view shared equally by professionals and laymen until quite recently. In fact, it is still commonly accepted regardless of ideological differences in other respects.

Since the idea of planning was conceived as a reaction to the observed evils of the market economy, it is natural to find that planning has been defined as a simple negation of the market. The market economy was privately owned, so a planned economy should be state owned. Market economy was governed by uncontrollable and impersonal forces, so a planned economy should be ruled by centralized decisions of a responsible government. And instead of a vicious play of prices there was to be a flow of administratively determined instructions dealing with the fundamental economic questions of how, for whom and how much to produce. In short, we have inherited the

Professor of Economics, Yugoslav Institute of Economic Research.

2

following conception of planning. An over-all consistent economic plan is passed by the parliament. This central plan becomes binding for all economic agents of the contry. Production tasks are assigned in more or less the same way as in an integrated concern. The national economy is conceived as an enormous business firm, and the operations of this big firm are controlled in the same way as in any other firm.

It may seem a little strange that people have so universally failed-and many still fail-to ask rather obvious questions: Why should planning be administrative? Why should Socialist economy be state owned? The answer is that these questions looked patently nonsensical. Decentralized or market planning and non-government socialism looked like contradictions in terms. But are they?

The following argument advanced by L. Robbins may be considered characteristic for the "theoretical, refutation of planning: "The alleged advantage of economic planning,-namely, that it offers greater certainty with regard to the future-depends upon the assumption that under "planing" the present controlling forces, the choices of individual spenders and savers, are themselves brought under the control of the planners. Therefore a paradox presents itself: either the planner is destitute of the instruments of calculating the ends of the community he intends to serve, or, if he restores the instrument he removes the raison d'etre of the "plan'" (An Essay on the Nature and Significance of Economic Science, Macmillan, London, 1932). The paradox arises only because in the good neoclassical tradition Professor Robbins makes an implicit assumption that "choices of individual spenders and savers" are made in a physical and social vacuum. In other words, he overlooks the fact that economic process occurs in time and space and makes a value judgment by implying that the distortions of choices due to social relations and economic institutions do not matter. Strangely enough, the quoted passage was written in the middle of the worst economic depression ever experienced (1931).

The Market as an Instrument of Planning

There is another closely related misconception, which conceives of the market as an antithesis to planning and which was illustrated by the quotation from Professor Robbins.

The market is supposed to be a mechanism which makes it possible for consumers and producers to exercise their choices. But so is planning in general. There is no fundamental difference between the market and planning. The market is just one possible type of planning, just one possible mechanism for bringing about economic equilibria, i .e. for the allocation of resources in order to satisfy consumer needs. And it is not necessarily the best or most efficient mechanism we have for this purpose. Thus the appropriate question to be asked is not: Market or planning?—but: How to make best use of the market in order to increase efficiency of planning? If will help to elucidate the issue if we deal briefly with two cherished notions of theoretical economists; consumer sovereignty and the market formation of prices. I have the following four points to make:

(1) First, prices of consumer goods reflect only approximately the objective relative importance of consumers' wants, i.e., of their true needs. Consumers' choices are often irrational, shaped by habit, custom and lack of knowledge. The purchase of narcotic drugs and liquors, conspicuous consumption, and the purchasing of foods of little nutritive value in proportion to the money paid out by the housewives of the poor are examples frequently cited. The frequently used phrase- "consumers exercise free choice" -should also be interpreted in a broad sence since there is no possibility for consumers to be absolutely sovereign. As Dobb points out: "... the consumer and his wants are a social product, moulded both by the commodities which enter into his expericence and by the social standards and customs among which he has been reared. Thus, in shaping the course of development, economic policy inevitably shapes the changing pattern of consumers' wants"

(2) Next, prices are money indices of alternatives. As all valuations cannot possibly be expressed in money, occasionally considerable differences arise between real social cost and money cost and between real social benefit and price. Air pollution, professional diseases and destruction of aesthetic values may appear on the cost side; enjoyment of economic and social equality, security from disease and employment security will appear on the benefit side.

It follows that individual valuations are in insufficient basis for a price system in a planned economy and the market prices alone are an insufficient instrument for guiding production. Bothe have to be supplemented by social valuations resulting either directly in a new set of market prices directly or in administrative interventions in the production process. The examination of how social valuations are arrived at falls outside the field of economics. For the purpose of this paper it will be considered that (a) the need for social valuations arises when the choices to be made would lead to a diminution of the potential welfare of the community if they were made on a strictly individualist basis, (b) social valuations somehow reflect the preference scale of the community, and (c) consumer communal preferences, representing the preferences of more than one individual, are superior to isolated individual preferences. Prohibition of liquor, subsidies for publishing books, compulsory education and free health services; all of these are instances where social valuations have been imposed upon individual valuations.

In this connection, it would seem necessary to call the attention to a dangerously misleading practice, common to many economists, of treating all non-individualist choices as arbitrary, the implication being that economic theory (and policy) ought to be based on individual choices exclusively. This conception implicitly attributes a quality of absoluteness to the choices of the individual although, however, they are doubly relative: they are socially shaped, and their fulfillment depends on the interaction with all other individual choices in the system. In other words, individual choices are socially determined (e.g., an economic slump is a result of an undesirable interaction of individual choices): Thus, if social valuations were arbitrary, individual valuations would be even more so. As a result, it would be impossible to rationalize the conduct of the economic affairs of mankind. This simple commonsence conclusion has been so generally ignored that I cannot emphasize too strongly the importance its implications have for economic theorizing.

(3) The third comment refers to cases where prices are in principle applicable but production does not react, so that the price-output mechanism breaks down, or, simply, that the uncontrolled price system leads to uneconomic production solutions. In all such cases, adjustment has to be brought about directly by the Planning Authority. Examples are the case of external economies and diseconomies which the profit maximizing firm does not take into account; new industrial locations; establishment of a monopoly; great or sudden economic changes like acute shortage of certain commodities, or the state of war, when the supply does not react even to enormously increased prices.

(4) Finally, there remain two vitally important decisions which ought to be made in every economy and which in a planned economy cannot be left to a free play of market forces. Every price system will also produce a certain distribution of income among the members of the community and *a certain* distribution of the socal product as between the investment and consumption. However, in a planned economy the *optimum* is required in both cases.

Concluding the discussion of this section, we may note that a definition of planning has been gradually emerging. In a non--planned free market economy--which in a pure text--book form has never existed-- production and distribution, including human relations in production, are determined automatically by haphazard market forces, i.e., by a more or less uncontrolled price mechanism. In other words, the "Market" is the Planning Authority. Now, if the market is left to operate as an automatic choice--mechanism, but at the same time its choices are constantly being corrected in the four respects described above, the economy will be transformed into a planned economy. Planning means perfection of market choices in order to increase the economic welfare of the community. Consequently—and this appears to be the only economically meaningful criterion of efficiency—ideal planning will lead to a maximum rate of growth of economic welfare.

Basic Principles of Decetralized Planning

Decentralized market, or indicative, planning is not necessarily the best solution for every country and for all circumstances. As a matter of fact it is not difficult to enumerate instances when centralized planning proves to be far superior. War is one of them. The initial stage of economic development is the other one. An undeveloped country lacks all the necessary ingredients for growth and international competition; skill, know-how, tradition, capital, institutions. The best the country can do in such a situation is to concentrate its meagre human and capital resources in the hands of the government, to impose stringent discipline, to proceed according to a central economic plan-and take off. Similarly, immediately after a social revolution, or after a colonial country has won independence, the market might not be the most efficient instrument of planning for growth, and centralization may, for the time being, produce more desirable results. However, assuming that the circumstances are favorable, an efficient system of planning may be developed on the basis of the following seven principles.

(1) First of all one has to bear in mind that drafting a plan is not only a matter of experts; it is basically a social act. Many a plan has badly failed because its authors worried only about the allocation of resources and forgot to consider the people and institutions that were to implement the plan. Both components-scientific and social-political-are equally important for efficient planning. The importance of professional competence is obvious. As far as the other component is concerned it will be useful to add a few more words. If the task is not only to produce a plan but also to implement it, then the plan must contain the motivation for its own implementation. The economic

agents-firms, farmers, business association, trade unions, banks, regional interests-must be informed and understand what is going on, must actively participate in producing the draft of the plan, must find their interests corresponding broadly to the intentions of the plan. Thus planning presupposes constant flow of information in every direction; it requires an elaborate mechanism for consultations on all levels, for an exchange of opinions and for resolving divergences in opinions, real or fictitious. One could perhaps say that planning should be done in a democratic way, but it is more than that, A central plan produced by several scores of experts in a Planning Bureau and passed as a law by a majority vote in the parliament will satisfy the usual requirements of democratic procedure. Yet it is likely to remain a paper work-or require most undesirable administrative interventions by the government. It is not formal democracy which is required; it is a more fundamental awareness of all concerned that it is in their own best interest to follow the plan. Now, if interests are too divergent, planning cannot be efficient. Social institution s and social-political relations in the country play a fundamental role. Not in all social systems is efficient planning a possibility. But that is a subject which I cannot pursue here.

(2) Additional motivation for a successful implementation of social plans is to be found in what might be called their "realism". If the targets of past plans have been more or less fulfilled, businessmen are likely to take it for granted that the new plan will also be fulfilled. Success instills confidence. Thus they will be following their own income maximizing interests if they try to frame their activities so as to make them consistent with the general economic framework provided by the social plan. In this respect the mere publication of a social plan provides an extremely important mobilizing and coordinating force. But we have still other instruments in our tool-box.

(3) It is useful-following Marshall-to distinguish between the short-run and long-run aspects of the plan. In the short run the output capacity is given for all practical purposes and economic policy is focused on

the problems of current production. In the long run the main problem is how to effect an adequate change in the output capacity, i.e., we focus on the volume structure and territorial allocation of investment.

As far as short-run planning is concerned, there is much to be learned from-and little to be added to-the stabilization policies practised by all market economies. Since the days of the Great Depression every industrialized country has developed some sort of short-run planning-budgeting or programming, as some people prefer to call it in order to avoid the unpleasant sound of the term "planning" -and instruments of monetary and credit policies and, in the days of stress, of physical control, are well enough known not to require any additional comment.

(4) The preceding principle (3) dealt with short-run equilibrium. Such equilibria are possible at various rates of growth-and also at no growth at all. However, the central economic problem of our day is growth; not for its own sake, but because it is the way to increase the level of living of the world's population which is still at or below the subsistence level and in misery which cannot be tolerated. The main lever of growth (technically, not socially) is investment, and it is in this field that planning, defined in a narrow sense, might help. Of the three fundamental investment problems, the first one is the easiest to solve. If the volume of investment is too high, so that the social marginal efficiency of investment becomes negative, an increase in the rate of interest or in the rate of taxation (of capital, income, profit or other) will tax away the surplus funds of the business and adjust investment activities to the absorptive capacity of the economy. If the volume of investment is insufficient, the Planning Authority can stimulate investment activities in various ways, even by providing additional investment funds.

(5) It is much more difficult to solve the problem of the optimal structure or location of capital formation. For some time it was believed that the Planning Authority should control most, it not all, of the country's investment resources in order to be able to implement optimal decisions. However, practical experience has shown that by controlling directly about one-third of investment resources the Central Government-which is the supreme Planning Authority next to the parliament-is able to implement the plan effectively. The explanation is to be found in the heterogeneity of the investment projects which makes it possible to apply a selective policy;

There are investment projects which may absorb several percentages of a country's annual national income. The Tennessee Valley, Aswan Dam and Skopje Steel Mill projects belong to this group. Such projects can be financed and carried out only by the central government. There are, further, closely related projects with relatively large minimum capacities, heavy capital investment, long gestation periods and low profitability. They also call for government participation

Next, there is a group of industries which may be thought of as prime movers of economic growth. Power generation, heavy industry and, partly, transportation belong to this group. Since, without power, without equipment and without transportation no other output is possible, and since these three industries do not adapt themselves easily or quickly to demand requirements, government must make sure that an appropriate share of nation's investment fund is allocated to these industries.

Finally, the remaining industries, particularly the consumer goods industries, do not have difficulties in adapting themselves to the requirements of the market. Their investment gestation periods are short and profitability normally high. Thus they can take care of themselves and there is no need for government to interfere.

In Yugoslavia the first two groups absorb about 30% of the nation's investment fund, are directly controlled by the central government. An additional 20% is controlled by the state governments and local authorities. The remainder is controlled by business. I should, however, mention that the indirect control of the central Planning Authority extends to investment funds far in excess of 30%. This increased control is made possible by the system of investment participations. Firms frequently lack the investment resources needed for full self-financing. Thus they have to borrow from the Investment

8

Bank. And the Bank, although participating sometimes with small amounts, is able to stipulate certain conditions in conformity with the targets of the social plan.

(6) In any country there are likely to exist underdeveloped or depressed regions. Investment in these regions is, as a rule, less profitable than in other regions. It is well known that, if the market is left to operate of its own accord, the development gap is lekely to widen. This creates various undesirable economic, social and political effects. The problem of balanced regional development may be solved by allocating a certain amount of the nation's investment resources to these regions through a special Fund for Underdeveloped Regions.

(7) Finally, the specific role of the banking system in a planned economy should be mentioned separately. Banks are hybrid institutions. In framing their general policies they have to obey the instructions of the Social Plan. In this capacity they act as representatives of the society. But in choosing among their individual clients, they seek to maximize profit and thus act as all other business establishments. An efficient banking mechanism greatly contributes to the flexibility of a planned economy and thus to the efficiency of planning.

Yugoslav Experience

Various systems of market planning may be envisaged. They will not be equally efficient, nor will they be equally applicable to any particular economy. But I refrain from discussing various theoretical possibilities here. It seems more useful to pick up one concrete economy and describe briefly its operations. I choose the Yugoslav economy which I happen to know best.

The fundamental institution of the Yugoslav economic system is an autonomous enterprise run by the workers. Autonomy means that basic decisions are made within the enterprise and no one from outside can interfere. The basic decisions are the determination of output and rates, investment policy, price information, employment policy, and the determination of wages. ""Run by the workers" means that all workers in a particular enterprise (the "working collective") elect a Workers' Council which is the supreme policy-making body of the enterprise. The Workers' Council elects the Management Board – a smaller body consisting of three to fifteen members-which is responsible for the implementation of the workers' council's policy directives and for the current operations of the enterprise. The Director of the enterprise is an ex-officio member of the Management Board. But the Director and his managerial staff are considered employees of the Workers' Council, so that the lines of command do not have loose ends-and so there is no possibility for a hierarchhical or stratified structure to emerge.

The workers' management system was developed mainly for two reasons. First, and this is the more important reason of the two, "factories to the workers, land to the peasants", isan old socialist goal, and Socialism was what the Yugoslav revolution had fought for. It was thought that by socializing the capital of the society — not by nationalizing, which presupposes state ownership and government control — the preconditions would be created for the state "to wither away", which is another goal of Marxian socialism.

Government control implies bureaucratization, and bureaucratization not only stifles individual, local and collective initiative, but also leads to a hierarchically structured society with extremely undesirable social and political relations. Therefore, government control and interference must be eliminated from social life as much as possible, and to make this elimination effective and lasting, one has to start by reshaping economic institutions. Those who hold economic power control the society, and the state stripped of that power will be more suspectible to other social reforms. These ideas have been rather scrupulously implemented, and today the Yugoslav state neither owns nor controls any enterprise, not even the Post Office. 12

- -

The same reasoning applies, of course, to the private sector. Private capital has been socialized in order to eliminate the sources of exploitation connected with private economic power. But family businesses exist in handicrafts and, particularly, in agriculture. However, there is hardly a private sector any more. I prefer to call it the "individual sector" since once the hiring of other people's labor is made practically impossible, it makes no fundamental difference whether you work for your own account alone (family business), or together with your fellow workers where you share the responsibility and proceeds (workers' councils' enterprise). Thus the old "junctaposition between "private" and "state" ceased to exist; not because the state has swallowed the "private" but because both were eliminated.

The second reason for the system is to be found in the belief that workers' management will unfold latent individual, collective, and local initiative. As we shall see this anticipation also proved correct.

Two-by now classical-arguments have been advanced against the workers' management system. It has been argued: (a) that it will cause a breakdown of the work discipline, and (b) that the workers, once in a position to distribute the income of the enterprise, will eat up total income earned and nothing will be left for investment which, in the absence of foreign aid, implies a high rate of saving. This in turn implies great hardshin and suffering on the part of the population. Thus, unless you impose saving by brute political force, you cannot expect spectacular economic expansion. This criticism also proved to be wrong. As Keynes has shown, it is surplus and not an insufficiency of saving that one finds in industrialized societies. Thus it is a matter of economic policy-of efficiency of planning, we may say-to convert this surplus from the source of depression into the source of growth. As the Yugoslav practice has shown, once you entrust working collectives with the power of making investment decisions, even in an underdeveloped economy the rate of saving-in Yugoslavia more than 30% of national income, S.N.A. definition-and, consequently, the rate of growth is

high. Space does not allow me to deal with the three criticisms more fully. The reader interested in these problems is advised to look up my book on the theory of planning.

The three criticisms proved to deal with fake problems. There are, however, real problems encountered by the Yugoslav economy. I shall single out four that I consider most important.

In every socialist economy the distribution of income is supposed to follow the principle "to everyone according to his work". In the Yugoslav context this principle implies that not only "labor" but also the "entrepreneurship" component of the work done should be remunerated. However, no economy—and the Yugoslav one is no exception—runs smoothly. There are always some windfall gains as well as unpredictable losses, which have nothing to do with either the labor or the entrepreneurship of a particular working collective. How are we to account for them;" There are various ways to cope with windfalls, but basically no satisfactory solution has been found so far. Thus "equal" starting conditions" are usually effected through administrative interventions, which, of course, represent an alien and disruptive element in the system.

Closely related to the problem of income distribution is that of price formation. In a way these are just two facets of one single problem, and administrative interventions in the former case imply similar interventions in the latter. In this respect the consumer market—with the exception of staple foodstuffs—works rather well. Other markets work less satisfactorily. Thus there is a frequent need for price control, and until now Yugoslav planners have been unable to eliminate inflationary tendencies. Wholesale prices of manufactured goods rise at a rate of 1/2% per annum, but the cost of living is increasing at a rate of 3/4% per annum.

Capital mobility is the next on the list of not satisfactorily solved problems. The textbook solution is, of course, very simple. You accumulate investment resources in one central Investment Bank and you lend the money to the highest bidder using the rate of interest as an instrument 14

of allocation. Thus marginal cost and product are equalized throughout the economy and we have a welfare optimum. However, as usually, theory and practice diverge. A solution of the type mentioned was tried for some time and was found inefficient. The Central Investment Bank turned out to be a highly bureaucratic institution susceptible to all sorts of erratic political pressures and there was an endless series of complaints about its decisions. If centralization does not work well, you try decentralization. It was decided to maximize the amount of self financing; of investment by the enterprises. This implies that profitability should vary from industry to industry. In the rapidly expanding andustries prices should be somewhat higher in order to allow for higher profit margins out of which investment for expansion is to be financed. In the stagnant industries-if such exist in an economy which doubles its output every seven years-profit margins should be close to zero. All this would centainly horrify a theoretical welfare economist. But the system seems to work better than earlier. I may add that shares on the Stock Exchange are incompatible with a Socialist economy because they conflict with the principle of the distribution of income according to the work done and because they would introduce an unnecessary element of speculation and uncertainty into the system. But certain kinds of bonds circulating between enterprises and banks are possible and have been tried.

Finally, the economy runs a rather large balance of payments deficit which together with meagre foreign exchange reserves invites government interventions all the time. That prevents the development of free trade relations with their beneficent effects on the quality and prices of domestically produced commodities. It is, however, hard to say how much this is a result of the present level of development, or of the high rate of growth, and how much-if at all-it is an intrinsic difficulty of the system.

Evaluation of the Yugoslav Economic System

Workers' management was legally introduced in 1950. but workers' councils became really operative in 1952. Since then twelve years have passed. That is too short a period for a definite evaluation of the system. The more so because-though the main principles are clear enough and since 1963 embodied in the new constitution-the system is still in the state of flux as far as details, and technicalities are concerned. The period of twelve years was a period of constant adjustments, of experimentation with new solutions, of probing into hitherto unexplored territory of the macroeconomic organization. The expansion of the economy was not at all smooth or "balanced." There have been oscillations; the instability or "disequilibria" from time to time have become quite apparent; there have been inflationary tendencies; foreign exchange has been in chronically short supply and has caused great troubles; and administrative interventions have been frequent. On the other hand, since workers' management and decentralized planning were introduced, capital efficiency has increased enormously - the marginal efficiency of investment, measured by the reciprocal of the capital coefficient, has more than doubled-and the productivity of labor is increasing steadily and rapidly. In the past twelve years the rates of growth of the national economy and of the level of living of the population have been the highest in the world.



PUBLICATIONS OF THE JUGOSLAV INSTITUTE OF ECONOMIC RESEARCH, BEOGRAD, Zmaj Jovina 12

| Economic Studies

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

Knjiga 1. Proizvodnja nafte Knjiga 2. Rafinerija nafte Knjiga 3. Distribucija nafte

[] Textbooks and Handbooks

1: Branislav Ivanović, Teoretska statistika

 Olga Tomić, Priprema rukopisa naučnih i stručnih radova - priručnik za autora

ill Papers

- 1. Branko Horvat, Primjena medjusektorske analize u planskom bilanciranju privrede
- 2. 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
- 3. Matematičke metode u ekonomiji
- 4. Primena matematičkog programiranja i elektronskih računara u planiranju

V Reprints

- 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
- B. Horvat, "The Optimum Rate of Investment", The Economic Journal, December 1958, 748-767.
- V. Tričković, "Strukturne promene u ličnoj potrošnji", Ekonomist, 3/1960. 427-458.
- 5. 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.
- 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 Yougoslave", questions actuelles du socialisme, 60/1961, 89-105.
- 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.
- B. Horvat, "Raspodjela prema radu medju kolektivima", Naša stvarnost, 1/1962, 52-66.
- 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.
- B. Horvat, "Ekonomska nauka i narodna privreda", Naša stvarnost, 7-8/1962, 48-67.
- 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.
- 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.
- M. Živković, "Matematika u sovjetskoj ekonomiji", Naša stvarnost, 7-8/1963, 126-135.
- 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.
- 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: Srbijerpo poljoprivrednim rejonimat¹⁰, Hrana i ishrana, IV 1963.
- 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.
- 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", Statistič 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.
- Lj. Madžar, "Privredni sistem i mobilnost faktora proizvodnje", Ekonomist, 1-2/1965, 28-48.
- 35. B. Horvat, "Planning in Yugoslavia" Studies in Development 1, 19,64. 149–165.
- S. Bolčić, "Tendencije u razvoju metoda savremene sociologije grada", Sociologija 4, Beograd, 1965.

"Analiza sistema statistike sa stanovišta sociologije naselja", Sociologija 3 Beograd, 1965.

37. B. Horvat, "Individualno i društveno vlasništvo u socijalizmu", GlediŠta3, Beograd, 1967.