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**Yugoslavia's Labour-Managed Firms
and Labour-Managed Economy in the Post-War Period**

by

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Abstract

This thesis is concerned with the characteristics of the Yugoslav economy and the implications of the system of workers' self-management as it has developed in Yugoslavia. In the post-war period, the Yugoslav economy was gradually transformed from a centralized Soviet-type economy to a decentralized 'market-socialist' economy. In the course of this transformation, the locus of decision making shifted from planning agencies to the enterprises. As a result, Yugoslav enterprises which were once completely subordinated to the central planning agencies became autonomous units like the corporations in capitalist economies.

What has actually happened in the course of the evolution of this system, is the formation of a powerful technical/administrative strata composed of the managerial and supervisory personnel of each enterprise, which by concentrating the decision making power in their own hands, have in effect replaced the planning agencies of the early post-war years and deprived the majority of the work force of any significant influence over their conditions of work.

On the microeconomic level, the technical/administrative strata has increasingly dominated the objectives pursued by the enterprises, the distribution of their revenue, the remuneration of the work force, and the determination of the level of investment as well as its sources of finance. Of particular importance is the growth-bias in the behaviour of this strata which leads to an over-investment tendency in the enterprises and an increased reliance on the use of external credit for investment financing. These tendencies are, of course, subject to constraints such as the provision of an acceptable wage level, the maintenance of a healthy balance sheet, etc., which limit the management in pursuit of their objectives.

On the macroeconomic level, the major indicators of economic activity show a sustained long term growth. In terms of secular trend, two adverse developments have emerged. Firstly, the level of unemployment has continually

increased and, since the mid-sixties, has been accompanied by inflation. The rising level of unemployment, coupled with the large scale migration of the Yugoslav workers to Western Europe, casts serious doubt on the ability of the Yugoslav system to ever provide enough jobs for its work force.

Secondly, despite government efforts, regional unevenness - a natural by-product of a decentralized market economy - has developed and the disparities between the more developed and less developed areas have continued to survive.

In the short run, the Yugoslav economy has manifested a significant degree of instability and cyclical fluctuations. The industrial cycles in Yugoslavia, as in other market economies, originate from the absence of coordination between economic units. They are further influenced by the increased sensitivity of investment expenditure and the operation of ceilings, floors and external shocks. The availability of foreign exchange has been the most important ceiling imposed on the expansion phases of the cycles. The major economic reforms of 1950, 1960 and 1965 also affected the cyclical pattern of growth in an adverse manner due to their untimely implementation. They were introduced in the contraction phases of the cycles and resulted in prolonging the recessions of the early fifties and mid-sixties.

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List of Abbreviations

Cominform	Communist Information Bureau
CPY	Communist Party of Yugoslavia
ESOE	Economic Survey of Europe
FPRY	Federal People's Republic of Yugoslavia
ILO	International Labour Organization
LCY	League of Communists of Yugoslavia
LDRs	Less Developed Regions
MDRs	More Developed Regions
OECD	Organization for Economic Cooperation and Development
QER	Quarterly Economic Review: Yugoslavia, the quarterly publication of the Economist Intelligence Unit
SFRY	Socialist Federal Republic of Yugoslavia
SGJ	Statistički Godišnjak Jugoslavije, the annual publication of Savezni zavod za statistiku (in Serbo-Croat)
SZS	Savezni zavod za statistiku (the Federal Institute for Statistics)
SYI	Statistical Yearbook of Yugoslavia, the annual publication of the Federal Institute for Statistics (in English)

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Introduction

The object of this thesis is the study of Yugoslavia's economic behaviour on both micro and macro levels. This has been done by focusing on the following three main areas: the characteristics of the Yugoslav economy, the implementation of the concept of workers' self-management through the development of relevant institutions and the implications of the workers' self-management system for the micro and macroeconomic behaviour. While the bulk of the literature on the Yugoslav economy has been concentrated on the formal and legalistic differences between Yugoslavia and other market economies, the present work is essentially aimed at analysing the actual behaviour of the Yugoslav economy and enterprises and at bringing out the basis of their similarities with the modern corporation and capitalist economies.

The characteristics of the Yugoslav economy are:

- a. Enterprises are managed by their workers, that is, the decision making power is relegated to the representatives of the employees of each enterprise.
- b. Enterprises are autonomous and independent units responsible for their own profit and loss. Subject to some restrictions, they are responsible for the determination of the product prices, wage levels, volume and composition of investment and the sources of finance for their investment projects.
- c. The central planning apparatus is almost completely dismantled now. What is left of planning -the so called 'social plan'- is quite similar to the annual economic programmes of the West European governments, i.e., a declaration of the government's wishes.
- d. With the abolition of the central planning mechanism, so too was abolished the centrally controlled 'social investment funds', a pool of resources to which all enterprises contributed and from which investment projects were financed. Since then the volume and composition of investment is determined by enterprises.
- e. Along with economic decentralization, i.e., the relegation of decision

making power to the enterprise level, there has also developed a significant degree of political decentralization. Through this, the constituent republics and autonomous provinces have obtained a large degree of autonomy over their own economic and social affairs including even certain fiscal and monetary powers.

The second area of interest will be the development of the theory and practice of workers' self-management. The concept of "workers' management" has, of course, been popularized through the Yugoslav experience although the origin of the notion goes back to the early nineteenth century. The precursor of the idea of workers' participation in deciding on their own affairs was Phillippe-Joseph-Baptiste Buchez who, in the 1830s, advocated the setting up of "working-man's associations". These associations, according to Buchez, were to be based on the accumulation of capital which was contributed by members and which was to become the full property of the association. Similar notions were also put forward by a number of utopian socialists of mid-nineteenth century among which Louis Blanc's "national workshop", the Pioneers of Rochdale's cooperatives and Proudhon's producers' associations can be mentioned.¹ Marx and Engels, basing themselves on the experience of the historic Paris Commune of 1871, spoke of "the free association of producers" that were to be set up in every village, factory and hamlet. This last reference to the subject has been extensively utilized as a piece of ideological justification by the Yugoslav proponents of workers' management.

"Workers' management", however, must be distinguished from "workers' participation". The former notion means the most specific and direct participation of the workers in the process of control, management and decision making. It excludes participation in these affairs through labour unions, collective bargaining, etc., which belong to the latter concept. The notion of "workers'

¹ For a historical background on workers' management, see Jaroslav Vanek (1975), pp. 16-21

participation" has become very popular in recent years. The developments in this field in Sweden and Germany, EEC Commission's Green Paper on Employee Participation and the Bullock Report in Britain have made this subject one of the most widely discussed topics in the fields of industrial relations and industrial policy. The essence of "workers' participation", of course, is that the workers will participate in decision making on a par with other groups such as the representatives of the owners of capital. In other words, the workers will share the decision making power with others. "Workers' management", on the contrary, empowers the representatives of the employees of each establishment, and them alone, with the authority to manage their firm.

Unlike the idea of workers' management which did not originate in Yugoslavia, its practice certainly did so.¹ In the post-war period, except for a short-lived and unsuccessful attempt to set up a centrally planned economy along the lines of the Soviet model, the Yugoslav leaders embarked on a unique economic system which subsequently has become known as "market socialism" or the Yugoslav "road to socialism". As this "road" was hitherto untraversed, its particular features had to be discovered and the specific institutions which were necessary or suitable for its advance had to be gradually developed. The change-over from a centrally planned economy to one characterized by labour-management took a long time, nearly two decades. The transformation was brought about by a number of major economic and social reforms, one in every few years, which consisted of a comprehensive programme of change in the way economic decisions were made and in the locus of the decision making power. Each of these reforms consisted of measures that increased the power of enterprises in influencing the formation of revenue at their disposal as well as the division of this revenue into personal income funds and invest-

1 This is, of course, if we leave out the politically oriented "factory committees" that emerged in Russia's industrial centres in the early years of the Bolshevik Revolution, the "workers' councils" (Betriebsräte) that developed in Germany in the 1918 revolutions and those that occupied some Italian factories in 1920.

ment funds.

The third area of investigation is the implications of the system of workers' management. Here, the difference between the theory and practice of self-management has to be studied. In theory, workers' management is an step in the direction of furthering democracy at the place of work, and of increasing the level of participation and involvement of the ordinary members of the work force in the affairs of their enterprises. In practice, however, the situation is somewhat different. The organizational structure of the Yugoslav enterprises can hardly be described as democratic. The development of self-management has been accompanied by an increasing concentration of the decision making power in the hands of a minority of employees in the highly skilled and highly educated categories who have also achieved a dominating position on the management organs of the enterprises despite legal requirements to the contrary.

Furthermore, the dismantling of the central planning apparatus and the enhanced autonomy of enterprises, coupled with the hierarchical organization of the firms, have resulted in the emergence of wide income differentials on the basis of skill, industry and regional location.

From the macroeconomic point of view, the theory suggests that the pursuit of self-interest by each enterprise ensures maximum efficiency for the economy as a whole and guarantees the superiority of the labour-managed economy over the capitalist and centrally planned economic systems.¹ The actual experience of the Yugoslav economy, again, does not lend support to this optimism. The major macroeconomic variables have suffered from a high degree of instability accompanied by rapid inflation, increase in unemployment, the deterioration of balance of payment, increase in emigration of the labour force to the Western European countries and the widening of the gap between

1 B. Horvat (1964), pp. 97, 120-130- Jaroslav Vanek (1970), p. 403, and (1971), p. 161.

the less developed and the more developed regions.

The thesis is divided into two parts and six chapters. The first Part deals with the microeconomic characteristics and behaviour. In Chapter One, the organizational structure of the Yugoslav enterprises and the essential features of the system of workers' management are analysed. The implications of the adoption of this system in terms of the distribution of influence on decision making power among various strata of the work force and the development of a technical/managerial elite as the locus of power and control in each establishment are also investigated in Chapter One. At the same time, we have discussed the hierarchical nature of the labour-managed firms which underlies a system of industrial relations characterized by increased labour turnover, absenteeism and strikes. The similarity of these developments with what goes on in capitalist firms is already causing concern and creating alarm.

Chapter Two deals with the theory of the labour-managed firm and its shortcomings, particularly in the Yugoslav context. Here, we shall discuss the two major variants of the theory of the labour-managed firms, namely the income per head maximizing model developed initially by Ward, and the profit maximizing model put forward by Horvat. Both variants, however, fall within the so-called "constrained maximization paradigm" and, therefore, ignore many of the complexities of the functioning of modern enterprises under conditions of imperfect competition. The recent developments in the area of managerial and behavioural theories of the firm are then used to formulate a more comprehensive set of objectives as well as to identify the factors that constrain the conduct of managers in pursuit of their objectives. The Yugoslav managers are stimulated by growth, secure futures, higher emoluments, etc., as much as the executives of the capitalist corporations are. However, their environment is somewhat different and they are subject to slightly different limitations.

Chapters Three and Four discuss the methods of formation and distribution of enterprise net income. Here, the three-way division of net income into the employee's wage fund, enterprise fund and appropriations by the State as well as the details of the first two parts are analysed. It is shown that along with the development of the system of workers' management, the share of the State appropriation has decreased in favour of the other two parties and, at the same time, the enterprises have become increasingly more autonomous over the way in which they decided on the total as well as the details of the enterprise fund and the personal income fund.

Associated with this autonomy is the strengthening of the dependence of the personal income on the performance of the enterprise which provides the ground for the development of income differentials among workers of different enterprises, industries and areas.

With the dismantling of the central planning system and the central allocation of investment funds, the decision on the level and composition of investment has also been transferred to the enterprise level. This would imply that another function of the management in the field of investment expenditure is to find the most suitable source of finance for their projects. The question of source of investment financing is closely related to the degree of decentralization and deepening of the system of workers' management and the development of autonomous commercial banking.

Part Two of the thesis is devoted to the analysis of Yugoslavia's macro-economic behaviour. In Chapter Five, the long run growth pattern and the structural changes of the economy in the post-war period are studied. The latter will include the changes in the structure of major sectors of the economy (primary and secondary, as well as major branches of economic activity), the changes in the structure of the manufacturing sector and the changes in the regional structure of the economy. The growth pattern of major economic indicators and the different aspects of the structural change

are discussed against a background of developing enterprise autonomy and the relaxation of the State control.

Chapter Six deals with the short term growth behaviour and the cyclical fluctuations in the level of economic activity. In this Chapter we shall first review the theories explaining the cyclical fluctuations under the capitalist and socialist economic systems. It is particularly pointed out that the widely held views on the absence of business cycles under socialism are nothing but a myth. Later, the actual experience of the Yugoslav economy is used to identify the major industrial cycles in her post-war history and analyse the specific factors that have been responsible for the cyclical pattern of growth as well as for the different phases, duration and amplitude of each cycle.

Finally, a summary of the conclusions of the whole work together with some general comments on the nature and implications of the Yugoslav 'road' to socialism shall be presented.

Part One

The Microeconomic Behaviour

Part One

The Microeconomic Behaviour

In the immediate post-war period, the Yugoslav enterprises were organized along the same lines as the Soviet enterprises, both of them performed similar functions and behaved in similar ways. The organizational structure of enterprises, and their functions in a centrally planned economy, as well as the role of the management of such enterprises, have been discussed in detail by a number of economists.¹ For the present purpose, the simplest way of describing the functioning of a Soviet type enterprise is to treat it on a par with the 'plant' of a multi-division capitalist corporation.² A plant is a purely technical unit in the sense that major decisions regarding its operation and performance are made not by it but by the firm of which the plant is a part. The prices and output of each plant are determined in the corporation headquarters and are based on the assessment of the performance of the firm as a whole and not just the plant. The expansion of the plant capacity is similarly decided at the level of the firm. Although profitability calculations are possible at the plant level (and are often made to serve cost accounting and managerial purposes), the decisions regarding whether or not a plant is to be kept in operation are not made within the plant but at the level of the firm. In short a plant is geared to the fulfillment of certain tasks and objectives (e.g. production targets) which are decided at the level of the firm. Similar to a plant, the post-war Yugoslav enterprise was a technical unit of production subordinated to the central planning agency as well as one of the ministries responsible for the enterprise's line of operation. In a general sense, the relation between the planning

1. The classic text is J. Berliner (1957). Also see A. Nove (1977) and P.J.D. Wiles (1977).

2. A similar comparison is also made by J. Child (1969), p. 9.

agency and the enterprise was the same as that between a firm and its constituent plants. Inputs of raw material and labour, choice of technology, level of output, prices (and therefore profits) were all determined by the planning agencies. The enterprises were founded by the federal, republican and local authorities and the agencies founding the enterprises retained the right to dispose their profit in accordance with their own priorities and preferences. Decisions regarding the expansion of enterprises were made at the centre and often without much consideration of the profitability of such decisions. The management of each unit, represented by its state appointed director, was responsible to one of the ministries or their departments. The management followed the directives of the planning bureau and performed very limited functions such as supervision of labour, the maintenance of customary standards of efficiency, the implementation of cost reduction methods and arrangement for repairs.

However, the Soviet type enterprises did not survive long in Yugoslavia. Not only the enterprises but the whole system of central planning and the direction of economic and social affairs by the State on the basis of a central plan came under attack on economic, political and ideological grounds. Many factors contributed to this attack, but the economic difficulties during the period of the First Five-Year Plan, expulsion from the Cominform and the new ideological trend can be pinpointed as the principal factors.

To take the economic difficulties first: The ambitious First Five-Year Plan of 1947-51 (later extended to 1952) had run into severe bottlenecks and its fulfillment had become literally impossible.¹ The performance of the economy during this period was well below expectation and had led to the disillusionment of a large section of the leadership from the existing economic organization. Table 1 and Figure

1. The performance of the economy during the First Five-Year Plan will be discussed in greater detail in Chapters Five and Six.

1, on the next page, showing the growth of industrial production, agricultural production and national income, demonstrate the seriousness of the economic difficulties during this period. As can be seen from this table, the average annual rate of growth of these three important indicators were well below the planned targets.¹ In fact, even if we disregard the ambitious plan targets, we can easily see that these rates of growth, particularly if calculated in per capita terms, show a situation of stagnation.

TABLE 1 - Indices of Industrial and Agricultural Production and National Income, 1947-1952

Year	Industrial Production	Agricultural Production	National Income
1947	100	100	100
1948	127	117	123
1949	136	119	131
1950	136	85	117
1951	128	128	129
1952	126	84	109
Average Annual Rate of Growth:			
Actual (47-52)	4.6	-3.3	1.7
Planned (47-51)**	36.8	14.5	7.6

Note: * Based on constant 1956 prices

** The planned rates of growth are rough estimates. The targets were given in terms of 1939 levels which are not always known levels.

Sources: Statistički Godišnjak Jugoslavija (hereafter SGJ) (1962) pp. 92-93 and B. Horvat (1976), p. 43.

1. The targets of this plan for the national income, agricultural and industrial production were only achieved by 1954, 1959 and 1964 respectively. B. Horvat (1976), p. 43.

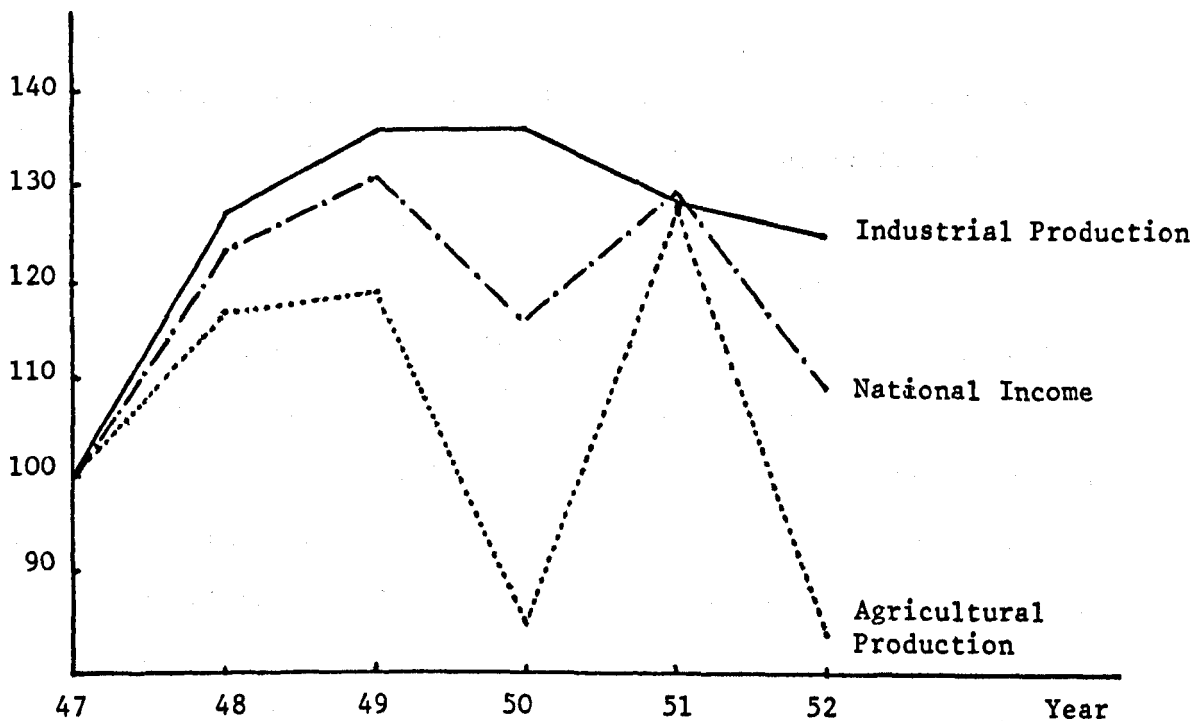


Figure 1 - Indices of Industrial and Agricultural Production and National Income, 1947-52

Source: Table 1.

Among the political factors the dispute between Yugoslavia and her Cominform allies and her expulsion from the organization in June 1948 was of particular importance.¹ The economic relations between Yugoslavia and her Eastern neighbours, which included her major trading partners, were severed a short time after the Cominform resolution expelling Yugoslavia. Disruption of the established channels of foreign trade, as we shall discuss in greater detail elsewhere, meant that Yugoslavia was unable to obtain raw material, machinery and equipment required for the fulfillment of the Plan. The political

1. The dispute with the East European allies and its effects on the political and economic trends in Yugoslavia will be discussed in Chapter Five.

dispute also led to a major shift of emphasis in favour of defence industries, which further added to the economic difficulties resulting from the severance of foreign trade.

Ideologically, the Yugoslav leaders had begun to assess the development of socialism in a way radically different from their colleagues in the rest of the Eastern bloc. Although such differences can be traced to the period of the National Liberation War and early post-war years, it was only after Yugoslavia's expulsion from the Cominform that they took an all-round and systematic form and became public. In other words, the dispute with the allies strengthened the position of those leaders who envisaged socialist development and socialist relations to be different from those practiced in the rest of Eastern Europe.¹

During 1949 and 1950, prominent Yugoslav leaders such as Milovan Djilas, Milentije Popović, Boris Kidrič, Moše Pijade and Edvard Kardelj formulated their criticism of the Soviet model of organization of enterprises and the national economy in the period of transition from capitalism to socialism and communism.² According to them, the emancipation of the working class cannot be achieved unless workers actually run and manage their places of work, i.e., enterprises and other institutions employing workers. They argued that, "the assertion that working people are the sole masters of the means of production is a sheer declaration so long as they do not themselves manage these means."³ In its basic essentials, it was argued, the Soviet system is similar to the capitalist system in the sense that workers, in both cases, are subject to bureaucratic controls imposed by either the State or the private owners of the means of production. It was pointed out that:

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1. As Horvat puts it, "the savage attack of the Cominform countries forced people to reconsider their ideological positions thoroughly." B. Horvat (1971a) p. 75.
 2. For details of these contributions see *Ibid.*, pp. 75-77 and D. Milenkovich (1971), pp. 62-65.
 3. Central Council of the Confederation of Trade Unions of Yugoslavia (1957), p.8.

We consider essential the participation of workers in the management of the nationalized property and of the means of production. This participation ensures social and economic democracy and represents the main barrier to bureaucracy and the domination of the state. The Workers' Council and the whole system built upon their foundations are a specific form of struggle against the danger of bureaucracy in socialist socio-economic conditions.¹

The Yugoslav leaders maintained that through their two-fold innovation of workers' self-management and decentralization of the decision making, they were going to leave the affairs of each collective to its members, reducing the bureaucratic control from the centre and preparing the conditions for "withering away of the State" and application of the principle of "free association of labourers" to which both Marx and Lenin referred.²

According to Djilas, the idea of self-management was conceived by him and Kardelj, with some help from Kidrič, soon after the quarrel with the Soviet Union. As he has put it,

I began to reread Marx's Capital ... I discovered many new ideas, and most interesting of all, ideas about a future society in which the immediate producers ... would themselves make the decisions regarding production and distribution.....

One day - it must have been in the spring of 1950 - it occurred to me that we Yugoslav communists were now in a position to start creating Marx's free association of producers. The factories would be left in their hands ... I soon explained my idea to Kardelj and Kidrič.... A couple of days later, Kidrič began to elaborate and expound on the whole conception.³

When Djilas and Kardelj put their case to Tito and tried to obtain his support, the most important part of their case was that "this would be

1. *Ibid.*, p. 15.

2. The Yugoslavs often use Marxist concepts, or their interpretations, to justify their reorientation to the decentralized market economy model. One has to remember that Marx's main concern was the formulation of the analysis of the capitalist mode of production and not the socialist one. His remarks about the socialist society are usually partial and sketchy and not fully developed, and as such cannot be taken as guidelines for socialist development of a particular society.

3. M. Djilas (1969), pp. 157-158. For a slightly different version of the development of the self-management ideas see L. Sirc (1975), pp. 1-2 and P.J.D. Wiles (1977), pp. 42-43 and 475.

the beginning of democracy, something that socialism had not yet achieved."¹ Few months later the Workers' Management Bill was presented to the National Assembly.

Here, we may ask, which of the factors discussed above (economic, political and ideological) played the decisive role in abandoning the central planning system and the development of the Yugoslav 'road'? It is difficult to ascribe the change to one single factor. Certainly economic factors were not the main cause as it is possible to explain the poor performance of the economy by factors which had nothing to do with centralized planning. Among these factors we may mention: the disruption of foreign trade caused by the expulsion from the Cominform, the abandonment of Soviet aid and credit, the untimely collectivization drive of 1949 resulting in the disruption of agriculture, and the severe droughts of 1949 and 1951. As can be seen from this partial list, most of these factors have a political tinge to them. The shift from centralized to decentralized organisation of the economy cannot be simply attributed to the poor performance of the economy. The experience of the central planning was so short and so intermingled with other fluctuating political developments, that no definite assessment of its effectiveness or otherwise can be made.² However, if we are to identify one factor as playing a significant role in the reorientation, it has to be the dispute with the Cominform. By intensifying the economic difficulties, the dispute prepared the necessary conditions for that section of the Yugoslav leadership opposed to the Soviet model of economic development, to gain an upperhand. Marxist polemics were then used as the ideological justification for the position taken by this section. As Sirc points out, the new model of 'socialist development'

1 M. Djilas (1969), p. 158.

2 Milenkovitch also maintains that as far as she is concerned, the economic motive for the reorientation is still unclear. D. Milenkovitch (1971), p. 76.

was introduced to "provide, *ex-post*, a plausible Marxist justification" for the Yugoslav position in the dispute.¹

At any rate, from 1950 the reorganization of the whole economy began along the new lines. The organization, functions and pattern of behaviour of the enterprises gradually diverged from those of the Soviet-type enterprises. In his speech on 26 June 1950, Tito talked of "workers managing the factories" and made it clear that the workers' councils (the representative organ of the employees of each enterprise) were to become the basic decision making bodies in all enterprises.² The Law on Management of Economic Enterprises and Higher Associations by the Workers' Councils was passed the following day and a chain of economic and social change (which continue to take place even to the present time) started.

In the initial period, of course, the workers' councils were mere formalities to which only minor responsibilities were entrusted. At the same time the central control on the economy was not loosened immediately. In subsequent years, gradually, the areas in which the councils exercised decision-making were enlarged and concomitantly the central control weakened and the present day labour-managed firms operating in a decentralized 'socialist' market economy emerged.

The analysis of these developments as well as their consequences in the field of microeconomics are the subject of the next four chapters. In the first chapter the organizational structure and the decision making process in the Yugoslav enterprises are discussed. Also in this chapter the degree to which the organs of management of the 'new' Yugoslav firms represent the various strata of the work force and the pattern of the distribution of the decision making power among

1. L. Sirc (1975), p. 5.

2. J.B. Tito (1950).

these various strata will be taken up for analysis. In the second chapter, various theories of the labour-managed firms and their applicability to the Yugoslav enterprises are discussed. The application of some of the more recent developments of the theory of the firm to the Yugoslav conditions, particularly the importance of the management motivation for the objectives and behaviour of the firm, are also analysed in the second chapter. The third and fourth chapters deal with the distribution of the enterprise revenue, the determination of personal incomes of the employees, the determination of the level and composition of investment and the sources of investment financing. Also in these chapters the effect of the gradual expansion of the enterprise sphere of influence, in the course of the development of self-management, on the distribution of enterprise revenue and the factors affecting its components are discussed.

Chapter One

Organizational Structure and Decision Making Power

Workers' organizations at the place of work have been in existence in many countries for quite some time. The "comité d'entreprise" in France, "commissioni interne" in Italy, "joint consultation" in Britain and "betriebsräte" in Germany are modern examples of such organizations. They perform a variety of functions ranging from matters dealing with productivity increase to welfare problems and handling of workers' grievances. In recent decades, the trade unions in the advanced capitalist countries have shown increasing interest in participating and being involved in the decision making process not only on matters of direct relevance to the workers such as wages and working conditions, but also on matters affecting the long term position of the firm such as the investment plans of the firm, mergers and take-overs. In fact in some European countries, like Sweden and Germany, the participation of the employees in the running of the affairs of the firms has already reached the level of representation at the company board (in the former country) and at the supervisory board (in the latter). The EEC Commission's Green Paper on labour participation in management endorsed this idea as a "democratic imperative" and recommended a specific programme for its implementation to the member states.¹ In Britain, recently, the Bullock Committee on Industrial Democracy recommended the statutory representation of the employees on the company boards.²

The Yugoslav experience, however, has taken an entirely different route. Here, an enterprise belongs, in a legal sense, to its workers. A separate category of non-worker owners, with whom the workers need to

1. A. Bullock (1977), p. 25.

2. *Ibid.* This is of course, the recommendation of the majority of the committee members. The minority, producing a separate report, supported the idea of representation but disagreed with making it statutory.

deal, negotiate or consult in the affairs of the firm, does not exist. As a result the power of the workers' organization in a Yugoslav firm is not constrained or limited as is the case in other countries mentioned above. The organization of workers in other countries are either restricted to certain matters, or at best, have to share the decision making power with other groups such as the representatives of the shareholders, management, etc. In Yugoslavia, the right to manage an enterprise is vested in the organization of its workers and they do not share this right with any other group. Here, the representatives of the workers of each enterprise decide on the level of output, price, employment, investment, expansion, etc., with increasingly little intervention on the part of the government. The system of "workers' self-management" thus developed, has been implemented not only in economic activities where some kind of goods or services are produced, but is also applied to all work organizations including those in social, cultural, health and educational activities.¹ Relegation of decision making power to the level of the individual establishment and to the representatives of the employees of each establishment distinguishes the Yugoslav firm from its counterparts in the market or the planned economies. In the market economies, although such decisions as regards output, pricing, expansion, mergers, etc., are made at the level of the firm, they are not made (or agreed upon) by the representatives of the firm's employees. In the planned economies, on the other hand, although the workers' organizations perform a large number of functions regarding the internal affairs of each enterprise, the above decisions are not made

1. The recently developed term is "organization of associated labour" covering all fields of activities. This arrangement, the Yugoslavs claim, is the realization of the Marxist conception of the organisation of socialist enterprises. Their often used, but rare source of reference is Marx's sketchy comment on the historic Paris Commune of 1871 to which he referred as the free association of "self-government of the producers" which was to become "the political form of even the smallest country hamlet". K. Marx (1871), P. 221. For the use of this ideological justification in the Yugoslav literature, see, e.g. B. Horvat (1964), p. 97 and (1971a), p. 76.

by them - and in most cases they are made at much higher levels.¹

In Yugoslavia, the representatives of the workers of each enterprise form its Workers' Council which, legally, constitutes the most important organ of management² and the highest source of power in the enterprise. According to the Yugoslav legislation, the all-powerful councils are empowered to an unlimited degree to carry out the activities of their production units in such areas as production, employment, investment, wage and price determination, integration, etc., according to their own choice and as they see fit. In the early days of the system of workers' management the western economists were highly sceptical of these formal pronouncements. The legislations pronouncing the sweeping devolution of decision making power were treated as mere formalities with which Yugoslavia was trying to distinguish herself from the Soviet Union. Ward, for example, regarded the actions taken by the councils as "the sort of rubber stamp function exercised by parliamentary bodies in most communist countries."³

But as the economic reforms in the area of decentralization proceeded and as the government policies emphasized the determination to go ahead with devolution of decision making power to the enterprise level, the

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1. Even in Hungary, where microeconomic planning is practically non-existent, such decisions are not made by the workers of the factory or at the factory level. Here the important decisions are made at the headquarter of the big industrial enterprises (which comprise many establishments in a particular line of activity) in coordination with various ministries (or inter-ministrial commissions) to which the firms are subordinated. For the situation in Hungary as well as G.D.R. and Rumania, see D. Granick (1975) specially, pp. 295-300. In China, the organization of workers in each enterprise is marked by the requirement to fulfil two basic functions: maintenance of the Communist Party's political power, and, running the normal operation of the enterprise according to the national or provincial economic plan. Bodies such as "revolutionary committees" and "workers' management teams" in each enterprise are very different from the Yugoslav institution in the sense that in terms of the major decisions they are subordinated to the planning agencies. C. Bettelheim (1974) pp. 13-43, and O. Laaksonen (1975).
 2. The others being the management board (comprising also of workers' representatives) and the director. These will be discussed in greater detail shortly.
 3. B. Ward (1957), p. 381. For similar assessments also see J. Bombeless (1968), p. 72.

tone of the majority of early critics changed. The institution of workers' management began to receive increasing attention in the economic and sociological literature, and the observers, one after another, pointed out that the enterprises were gaining increasing autonomy from the government and that they did not operate as a facade for Party rule. Workers' councils and management boards, it was maintained, were independent in deciding on the quality and quantity of output, and were gaining more and more influence on the distribution of profit and wage, and price determination.¹

These views, in essence, are along the same lines as the official pronouncements and express the formal and legal position of the organs of management of the enterprise and their functions. Here is an example of the formalistic nature of these assessments:

If the workers do not control the factories, what sense does it make to turn the whole economic organization upside-down to make them behave as if they did? Would it not be much easier to copy an already established system, say, the American or the Soviet one?²

The legalistic and formal appraisal of the system, provided in the Yugoslav as well as the Western literature³, maintains that the decisions made by the management organs are the crystalization of the short and long term interests and aspirations of all strata of the enterprise work force. Accordingly the system of workers' management provides the workers with the opportunity to participate in the determination of the conditions of their labour and running of the affairs of their work place. They would think themselves the direct and main beneficiaries of the success of their enterprise. The feelings of involvement, participation and job satisfaction should then lead to

1 See for example, G.W. Hoffman and F.W. Neal (1962), p. 238; F.W. Neal (1966), p. 30; S. Pejovich (1966), p. 90; B. Horvat and V. Rašković (1959), p. 194.

2 B. Horvat and V. Rašković (1959), p. 194.

3 The works of Jaroslav Vanek on the "general theory" of the labour managed economy are the most developed example of such approach. Jaroslav Vanek (1970), (1971) and (1975).

a great improvement in the system of labour relations, and inter-firm conflicts of interest, typical of the capitalist forms, would be largely done away with.

In this chapter, we intend to avoid the legal and formal approach to the behaviour of the Yugoslav enterprise, and instead, concentrate on its actual performance. We will try to show that there is a big gap between the actual and the legal (or formal) aspects of the organization and management of the Yugoslav enterprises. In the first section the organs of management and their inter-relation are discussed, and it is shown that the organs made up of the workers' representatives do not, in practice, have the power they are formally equipped with. They do not run the enterprise as they wish to because, in reality, they lack the necessary tools of analysis and information which are required to make intelligent decisions on complicated matters such as investment financing, cost accounting, mergers, etc.

In the second section we turn to the question of "who is represented on the organs of management?" Here we shall present data clearly showing the unequal representation of various sections of the work force on the management organs. Of particular importance is the over-representation of a small group of the enterprise employees - the technical/administrative strata - who are also shown to wield greater influence in the operation of the enterprise than any other strata of the work force.

The consequences of this state of affairs is far from the "community of interest" and the feelings of "involvement", "participation in decision making", etc., on the part of the work force. In reality the Yugoslav enterprises face the same conflicts, though on a smaller scale, that the capitalist firms have been beset with for more than a century. The "new" system of labour relations has not been able to prevent work stoppages and even strikes which, in a formal sense, are completely

inconsistent with and alien to the system of workers' management.

I. Organs of Management

In general, the managerial organs of a Yugoslav enterprise comprise of the following: the workers' council, the management board and the director. Briefly, the workers' council, composed of the elected representatives of the work force, is responsible for final decisions on the long and short term policies of the enterprise while the management boards, as the executive committee of the council, is responsible for the preparation of plans and proposals and their submission for approval to the council. The director is an outside person, employed by the council, responsible for the day to day management of the enterprise and executing decisions made by the council and the board. As each enterprise is subdivided into departments, plants and finally into work units (or economic units), the extension of the system of self-management has meant that these subdivisions also enjoy a large degree of autonomy over their own internal affairs. This autonomy and self-management is exercised through the elected organs of management at each level of the subdivision. With the on-going process of integration of smaller firms and expansion of larger ones, the multi-level system of workers' management is gradually becoming the standard form of organizational structure.

In larger enterprises, the organs of management are supplemented by expert commissions attached to the management board or the director's office. Their function is to provide expert analysis and advice to aid the management organs in the formulation of various policies. Figure 1, below, is the schematic representation of the multi-level management structure of a large enterprise.

At the outset, it should be pointed out that Figure 1 and the following discussion are based on the general structure and net-work of

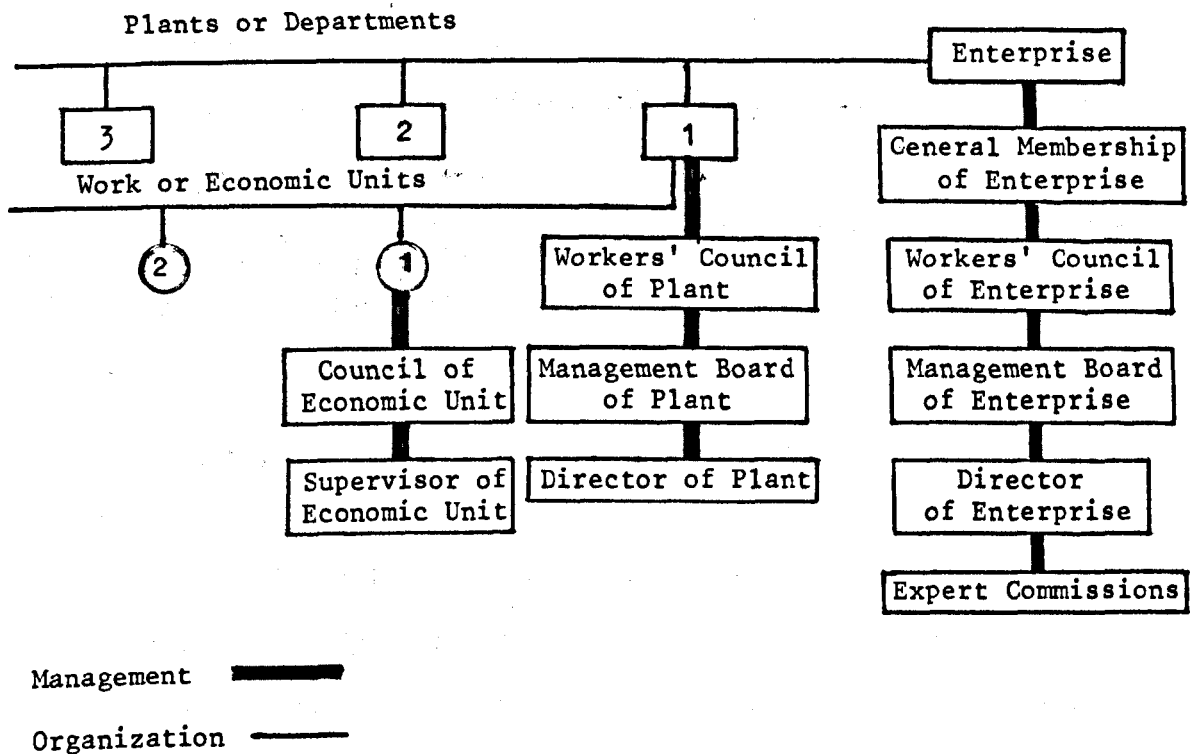


Figure 1 - Management Structure of an Enterprise

the system of enterprise management. In practice, many enterprises may differ in their management structure from the standard form due to variations in technical and business conditions. This is to be expected given the differences among enterprises with regard to their size and the nature of their operation. The need for the development of different forms of management network in different enterprises was legally sanctioned by the Constitutional Amendment XV in December 1968 (and the pursuing legislations) which authorized each of the enterprises to set up their own formal organizations according to their own particular conditions.¹ The result was that some organizations were led to modify their network and retain only one collective executive body, the workers' council or the management board.² In short, the workers of each establishment were not only given the legal power to manage their own work place but also the power to decide the way in

¹ According to this amendment, "working people in work organizations shall determine the organs of management of their work organization." Quoted in I. Paj (1971), p. 32, footnote 5.

² L. Sirc (1975), p. 108 and I. Paj (1971), p. 47.

which to manage their affairs.

With this qualification in mind, we can now discuss the structure, functions and the inter-relations of the organs of management with particular emphasis on the scope and limits of the power of each of the organs of management in actual practice.

A. The Workers' Council

In theory, the workers' council is a sovereign body in that all the powers concerning the management of the enterprise are vested in it. With a membership of 15 to 120 depending on the size of the work force, the council is a body of the representatives of the employees of each enterprise elected from amongst its work force. In cases where the number of employees of an organization is less than 30, the whole body of employees constitutes the workers' council. The term of office was originally limited to one year, but in the 1963 Constitution it was extended to two years.¹ The members of the council cannot be elected for more than two subsequent terms to the office and they are not remunerated for the time they spend in serving as councillors. The period of the office of council members does have a significance which will become clear later when we compare it with the length of the office of the director and other executive staff.

The legal provisions regarding the representation of various strata of the enterprise work force on the council are rather vague and do not clearly determine who are actually represented. The law requires only that at least three quarters of the members of the councils be elected from amongst the production workers, as distinguished from the administrative and technical employees. Even though this provision is not clear enough, it is still an important guideline since it is aimed, theoretically, at preventing the administrative and technical staff (the

1 H.M. Wachtell (1973), p. 64.

so-called white collar workers) from gaining a dominant position in the decision making process. The implications of this provision and the failure to implement it in practice will be discussed later.¹

The Basic Law of Enterprises has defined the functions of the workers' council in such a way as to make it the most powerful and all-embracing body at each establishment with full authority to lay down the structure of the organization and determination of the path which the establishment is to follow in its functioning. This, however, is true only in a formal sense. Although such issues as: approving the Statute and Bye-Laws of the enterprises, development programmes, the statement of accounts (including the income distribution scheme and wage-skill classification), amalgamation, affiliation and division of the enterprise, establishment of lower level decision making units, hiring and firing, and the details of disciplinary measures have been formally relegated to the competence of the workers' councils², it does not - and cannot - actually *decide* on all these issues. Usually, a great deal of authority and decision making power is delegated to other management bodies. The council is, in the main, restricted to general supervisory function and *approving* of the proposals and submissions of the higher-up management bodies regarding the above issues. This kind of role, one may note, is very similar to that which the shareholders of a modern capitalist corporation play in approving the statement of account presented by the board at the annual general meeting.

The exact duties of the council differs from enterprise to enterprise depending on their size and the nature of operation. Detailed studies of the work of councils in specific circumstances (which can shed light

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- 1 We shall show later, in Table 3, that the proportion of blue collar workers on the councils, which was slowly increasing in the fifties, began to fall during the sixties and seventies. The proportion changed from 75 per cent in 1956 to 77 and 65 per cent in 1960 and 1972 respectively. More on this point at a later stage.
- 2 Article 48 of the Basic Law of Enterprises, Federal Chamber of Economy (1967), pp. 44-45.

on the actual performance of these bodies) are very rare. A brief glance at the few available case studies will help clarify some of the ambiguities. At Rade Končar Enterprise, a large Croatian electrical equipment manufacturer (with 9000 employees in 1968), for example, the Central Workers' Council has been concerned with approving the basic rules, annual plan, financial statement, large scale purchases, income distribution, disciplinary rules and disposition of enterprise assets.¹

At Energoinvest Enterprise of Sarajevo, another large conglomerate made up of more than 20 separate enterprises, the Central Workers' Council, according to its director, "*gives consideration*" to the balance sheet, "*adopts*" the short and long term plan and decides on the short and long term loans for the enterprise as a whole.²

The management system within the enterprises have been increasingly decentralized too. An important step in this process has been the gradual evolution of lower level management organs (particularly in larger organizations) in the departments, plants and divisions down to the lowest economic units. The Statute of enterprises allow the formation of work unit or work team "wherever there is an identifiable stage or division in the activity of the business"³, or simply, "where job performance is measurable"⁴. If the number of employees at each level is small then the functions of the unit's council will be performed by the unit assembly. In order to get an idea of the magnitude and relationships in enterprises with multi-level management, the situation in several big enterprises can be mentioned.

At Rade Končar Enterprise, a three level workers' council system, i.e., the Central Rade Končar Workers' Council, the divisional workers' councils and the working unit councils, are in operation. In 1968

1 M. Bogosavljević and M. Pašaković (1959), p. 31.

2 E. Blum (1970), pp. 30-31. For some examples of the decisions of the workers' council at Energoinvest, see *Ibid.*, pp. 40-41.

3 J. Dirlam and J. Plummer (1973), p. 23.

4 E. Blum (1970), p. 32.

the employees of this firm were organized in 16 workers' councils and 75 workers' assemblies at various levels. The councils at each level are basically concerned with the affairs of their particular division or unit and send delegations to the Central Workers' Council.¹

At Energoinvest Enterprise, as early as 1960, thirty workers' councils were operating in the factories, departments, research and development centres, and planning and design bureaus. The Central Workers' Council was responsible only for fundamental questions relating to the whole enterprise.²

The decentralization of management within the enterprises has been in response to practical problems that cropped up in the course of expansion, especially in the larger organizations. Many enterprises were beset with problems arising from the failure of the majority of the work force to show interest and to participate in decision making on matters relating to the enterprise. This meant that in order to arouse the interest of the workers, the proposals submitted for their consideration would have to change and become more related to their experience and more relevant to them. This, in turn, led to the formation of lower level units with increasing decision making power. One of the enterprises facing this kind of problem in the sixties was the very large Jesenice Ironworks (employing 62225 people in 1965) whose case was submitted, as an example, to the Second Congress of Self-Managers of Yugoslavia in 1971. After much study and analysis, the Ironworks Workers' Council adopted a decision to form "work teams" in April 1969. The members of the work community would exercise their right of self-management in the work teams and by means of referendum. The work team was to be a collective of workers engaged on a "specific narrow sector of work", whose number did not exceed 30 and was usually headed by a

1. J. Dirlam and J. Plummer (1973), p. 23.

2. E. Blum (1970), p. 30.

foreman or some other member of the supervisory staff. By 1971, 265 of such work teams had been formed at Jesenice. It was argued that the small size of the work team and the personal acquaintance of its members and the fact that they performed the same tasks and duties, would help overcome problems such as the participation of individuals in discussions, and group interests would stimulate "active participation of direct producers in self-management."¹

The establishment of lower level workers' councils may seem to solve the problems arising from the large size of the enterprise and absence of close contact among the work force, but at the same time, it gives rise to new problems. Modern production processes are characterized by the division of labour which means that each person (or small group of persons) is concerned with only a small part of the organization and therefore his interests and concern lie within that part. Only the upper echelon of the technical and administrative strata of the organization are concerned with the performance of the enterprise as a whole and the coordination of the activities of various parts. As we shall discuss later, the extension of the power of the technical, managerial and supervisory staff, which to an extent is based on the division of labour within the factory, poses a serious threat to the

1 Work Organization of Jesenice Ironworks (1971), pp. 110-111. It should be noted that the above discussion on the lower level management organs does not exhaust all the different arrangements in use in different Yugoslav enterprises. To give one example, in the Sisak Ironworks (whose report was also submitted to the Second Congress of Self-Managers of Yugoslavia), in addition to the elected bodies such as 42 workers' councils and numerous management boards, other bodies such as the Meeting of the Working People (assembly of all employees) also exists at various levels. For details see Work Organization of Sisak Ironworks (1970), p. 130. It is interesting to note that other enterprises at the same Congress maintained that the Sisak practice, in comparison to the practice of having work units, is a rather inefficient form and that the meetings of the working people "at least in large production units, resembled more to a rally than an assemble." Work Organization of Jesenice Ironworks (1971), p. 112.

system of self-management.

A second problem is that within the smaller units, there will also be a division of labour between those who know or plan the totality of the unit's operation and those who take care of the smaller and individual parts of the operation - a division between the unit's workers and supervisors. As we shall discuss later, the polarization within large enterprises will also be accompanied by a polarization within their lower level units. The supervisors and heads of the economic units will gradually become part of the upper echelon of the enterprise employees holding considerable power and influence.

The question to which we should now turn is the 'scope' of the work of workers' councils. The issues taken up by the councils and the interest shown towards different issues by the councillors reflect the scope of the activities of the councils. Although detailed study of the minutes of the councils and boards are extremely rare, the few available pieces of evidence are sufficient to show the diversity of emphasis put on different topics discussed at the council meetings. Wachtell's summary of the minutes of the meetings of the workers' councils of enterprises in Manufacturing and Mining sector is a useful piece of evidence. He classified the discussions into major categories such as income related issues, sales, investment, etc., and computed the frequency of occurrence of each category as percentage of total items discussed. Although Wachtell's data is aggregative for all Manufacturing and Mining enterprises, and wide divergences exist between different enterprises in this sector, nevertheless it provides a general idea of the relative importance of the issues discussed by the councils. Table 1 represents the revised summary of Wachtell's study.

Comparison of the relative importance of the issues on the agenda of the councils in the two years shows a fairly stable pattern. It is strikingly clear that the issues dealing with workers' direct interests

Table 1 - Relative Importance of Various Issues Discussed by the Workers' Councils in the Manufacturing and Mining Enterprises in 1962 and 1964

Issues	Relative Importance of Each Item on the Agenda as Percentage of Total Items [*]	
	1962	1964
Income related issues ^{**}	35	33
Labour productivity	22	27
Investment	14	14
Sales	13	12
Work of management board and director	10	8
Cooperation with other firms ^{***}	6	6

Notes: * The total number of issues discussed in 1962 and 1964 were 96004 and 77569 respectively

** Includes income distribution, fringe benefits such as vacation, housing, etc., and vocational training

*** Includes contracts for intermediate goods, mergers, affiliation, amalgamation, etc.

Source: H.M. Wachtell (1973), p. 68.

(income distribution, fringe benefits and vocational training) comprise more than one third of the total issues discussed in the meetings while long term issues such as investment and other topics which do not directly affect the workers' present situation, though crucial to their long term interests, drew less attention.¹

1 Lavigne's study of the Eastern European economies also confirms these conclusions. She maintains that the interest in those functions of workers' management related to "the drafting of plans and production programmes and the approval of balance sheet" are far less than the interest in matters such as "distribution of bonuses or the allocation of residential construction." See M. Lavigne (1974), p. 91. Similarly Wiles argues that except for income distribution and conditions of work (with which the council members are well acquainted), other issues are handled by the experts and the councils deal with them only formally. See P.J.D. Wiles (1977), pp. 545-546.

It is essential to note that varying interests towards different issues facing the enterprise is not limited to members of the councils alone but engulfs the whole of the work force. In fact the scope of the work of the workers' council is directly connected and follows the interests shown by the work force. A study by Vladimir Arzenšek dealt with the interest shown by the employees of several enterprises towards participation in decision making over various issues. The results of this study, as reported by Rus, are shown in Table 2.

Table 2 - Percentage of Employees Wishing to Participate in Decision Making About Various Issues

Issues	Percentage
Discipline and labour relations	59
Conditions of Working Place	50
Distribution of personal income	48
Hiring and firing in Organizational Units	40
Investment	28
Public Relations	21
Marketing	17

Source: V. Rus (1970), p. 159.

The advocates of the system of self-management have always maintained that given the chance and right conditions, the workers of each establishment would become interested in participating in decision making over issues related to their work place. Some years of experience proved that this assumption was essentially baseless. Then, as we pointed out a little earlier, the attention was concentrated on the development of the system of multi-level management as a means of involving a larger number of employees in the decision making process. What seems to have been ignored is the 'form' of organization of the production process. An ordinary workers' job is not to look after the affairs of the enterprise as a whole. That is left to the managers. This division of duties, accompanied by the expanding gap between the managerial functions and non-managerial functions, has resulted in a division of issues and problems into those which are of direct relevance to workers and those which are of direct relevance to managers (see Table 2).

The 'form' of the organization is not neutral and if the employees are to participate actively in the affairs of the enterprise, then new forms of organization and management must be found. So far, little attention has been paid to this and very few experiments have been undertaken.

The answer to our question regarding the scope of the work of the councils is now clear in general terms. Although, legally, the councils are empowered to decide on *everything* relating to the enterprise, in actual practice their authority is limited to a few areas only. This is partly because they have delegated some of their power to other management organs and partly because they, and most of their clients, are familiar with only a minor section of the affairs of the enterprise and do not possess the knowledge of the working of the whole enterprise which is necessary for efficient decision making. As a result, they mostly *approve* and *give consideration* to the proposals submitted by the higher management organs; they pay greater attention to subjects relating to the short term interests of the workers and less attention to matters which are of great significance for the whole of the enterprise. In short, they assume the role of a 'general supervisory' body overseeing the enterprise affairs but with very limited ability to alter its functioning. This, of course, poses another major question as to how other decisions (such as investment, technical change, obtaining bank loans, etc.) are made. To this question we shall turn shortly. For the moment, we should return to the discussion of the organs of management other than the workers' council.

B. The Management Board

The management board is the operational representative or the executive organ of the workers' council. Its members, ranging from 5 to 11, are elected by the workers' council from among the council members or other employees of the enterprise.¹ The director of the enterprise

¹ Before 1966 the size of management board ranged from 3 to 11. For these and other details see H.M. Wachtell (1973), p. 69; S. Pejovich (1966), p. 28; and I. Paj (1971), p. 40.

is the ex-officio member of the board. The election for board membership takes place annually and each member can only be elected to office for two successive one-year terms. At each annual election only up to one third of board members can be re-elected to their posts. The length of office of the board members, like that of the council members, is also of significance. The majority of board members remain in office for only one year which is too short a period to accumulate information and build up knowledge of the various affairs of the enterprise. In contrast to the short term of office of board members, the director's term of office is at least four years (in great majority of cases much longer) and the members of specialist management committees enjoy a kind of permanent position in their advisory role. Here is a basic built-in inequality in terms of opportunities to learn about and competence to decide on the different aspects of the enterprise operation. The majority of board members, like the majority of council members, are not in a position to question the correctness or otherwise of the proposals put to them by the technical and administrative specialists.

The law has defined the functions and responsibilities of the management board so as to make it into a body serving the workers' council in an executive capacity. According to Article 49 of the Basic Law of Enterprises, the management board must supervise the work of the director, prepare the drafts of the statement of accounts, production targets and other proposals and submit them for approval to the workers' council. As with the workers' council, the law only determines the formal position of the management board vis-a-vis the council and other management organs. In practice, however, the board has much greater power and, in fact, formulates the enterprise policy on most of the issues. The information on the actual functions of some specific enterprises illustrates this point. At Rade Končar Enterprise, the management board prepares annual and monthly production plan, draws up

proposals for internal organization, prepares discussions for the council meetings, and approves expenditures of the enterprise.¹ At Energoinvest Enterprise, the board submits proposals on all matters under its jurisdiction to the workers' council, follows up the enforcement of the decisions approved by the council and selects the members of specialist commissions to help the director.²

In large enterprises where the decentralization of management has been extended to lower levels down to the work units, these units may (as in the case of Energoinvest) have their own management board with functions similar to those of the enterprise management board.³

We now turn to the question of the scope of and limit to the power of the management board. The board is the organ which puts proposals regarding output, investment, income distribution, etc., to the workers' council and implements the decisions taken by the council. The exact formulation of these policies requires expert knowledge and detailed information which are possessed by only a small group of employees. In addition to the expert commissions (to be discussed shortly) which are wholly made up of specialists, the management boards must also include some of these specialists in order to function efficiently. In fact, the specialists with high professional qualifications are more heavily represented on the boards than on the councils. As far as the decisions made by the board are concerned, we should emphasize that the boards, like the councils, consist of some worker members without much knowledge of the overall functioning of the enterprise, and some non-worker members whose expertise and knowledge guarantees them a real position of power. We shall come to the important question, 'who is represented on the management boards?' shortly. It suffices at this stage to point out that, legally, three quarters of the board members are required to be

1 M. Bogosavljević and M. Pešaković (1959), p. 36.

2 E. Blum (1970), p. 31.

3 *Ibid.*, p. 32 and I Paj (1971), p. 43.

production workers (like that of the councils), the aim of the requirement being that the views and interests of the direct producers be well represented on the boards. In practice, however, not only has this requirement not been observed, but also the proportion of production workers has continuously fallen over time. As we shall show later, in Table 3, the proportion of production workers on the management board fell from 68 per cent in 1960 to 47 per cent in 1972. The concentration of specialist technical and managerial staff becomes greater as we move upward along the management network, from the workers' council to management board. This also supports our previous assertion that the more important questions are usually settled by the management board and not by the council whose members are not competent to question the decisions of the board. The remarks of an enterprise director puts this in a nutshell. She told Kolaja that "during her several years of work, there had not been one instance of the workers' council rejecting any of the points the management considered important."¹ In a later section of this chapter we shall return to the question of representation again. But now, we must continue with our discussion of other organs of management.

C. The Director

The director is the chief executive officer of the enterprise responsible for the day to day operation and affairs of the organization. According to the Act on Employment Relationships, the director is "the highest disciplinary authority while work is in progress."² This provision seems to be somewhat at odds with the legal pronouncements on the all-embracing nature of the power of the workers' councils. Formally, the workers' council is the source of authority; and the director is appointed and his duties determined by the council. In

1 J. Kolaja (1961), p. 28.

2 *Sluzbeni List*, December 25, 1957.

practice, however, the legislature has deemed it necessary to lay down the responsibilities of the director. Article 53 of the Basic Law of Enterprises defines the functions and responsibilities of the director which include: supervising and conducting the operation of the firm; executing the decisions of the council and board; seeing to the lawfulness of the decisions of the council and board; representing the enterprise in relation to other socio-economic organisations and bodies; and discharging specific functions prescribed in the enterprise Statute.¹ This article of the law is an implicit acceptance of the fact that the workers' councils do not have an unlimited and automatic authority over all matters related to their enterprise and that other discretionary measures are needed to strengthen their position vis-a-vis other management organs.

The exact role of the director varies from one enterprise to another. At Energoinvest Enterprise, for example, the director has the right to "issue orders" to other executives on various matters; arbitrate between production units; intervene directly if a unit has not fulfilled its obligations; annul the decisions of the executive if they are at odds with enterprise provisions; make proposals for a unit to be placed under receivership (for a limited period such as one year), etc.² Moreover, as a result of the developments following the Amendment XV to the Constitution, in some enterprises, certain other executive functions, usually in the domain of the work of the councils or boards have been entrusted to the directors and the managers (supervisors) of the economic units and work teams.³

What is the relationship between the director and other management organs? Formally, the director is an officer selected and appointed by the workers' council, an ex-officio member of the management board, a hired executive who is to oversee the operation of enterprise as

1 Federal Chamber of Economy (1967), p. 46.

2 E. Blum (1970), pp. 32-34.

3 I. Paj (1971), p. 48.

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enterprise responded to a question about his relationship with the workers' council in the following way:

There is a Yugoslav statute stating that the director must keep the law and is responsible for enterprise performance. In fact, in some contracts only the director is responsible. Directors can make many many decisions. Their power is very very large. The councils *approve*, *not make*, policy but in this way do participate in the making.¹

Similarly, another director (this one from a technical consulting enterprise) remarked that "ideas come from educated people; the director uses these ideas and the workers' council *accepts* or *approves* them."²

The procedure for the appointment of the director is also of great significance in terms of understanding the unequal position of the managerial and supervisory staff, on the one hand, and the rest on the other. The director is chosen by a selection committee of the workers' council on the basis of his skill, professional qualifications and experience. Applications for the job are invited through advertisement in the press. The director's term of office is four years with the possibility of unlimited reappointment.³

1 *Ibid.*, p. 28.

2 *Ibid.*, p. 27. The same conclusion was obtained by Županov and Tannenbaum when they interviewed a group of 56 workers attending Moše Pijade Workers University of Zagreb. According to the interviewees the director was the most influential of the three organs of management, and that in great majority of the cases of conflicts, he was the most important arbitrator. J. Županov and A.S. Tannenbaum (1968), p. 100.

3 The procedure for the appointment of the directors has undergone many changes. In the initial stages of decentralization, the directors were appointed by the state authorities and formally had a strong voice in the decisions made by the enterprises. From 1953, the workers' councils were authorized to take part in the proceedings for selection of directors. Appointments were studied by a selection committee, one third of whose members were chosen by the workers' council and the remaining two thirds by the local commune. After 1957 the proportion of members of selection committee appointed by the workers' councils increased to one half with the proviso that the final decision of the committee had to be ratified by the authorities in the local commune. The 1965 reforms extended the competence of the enterprises in this area as well so that the final ratification of the selection committee's decision is made by the workers' council and not by the commune authorities. The 1968 Constitutional Amendments legally sanctioned the full autonomy of all enterprises (with the exception of banks, newspapers and insurance companies) to appoint their own directors. See L. Sirc (1975), p. 109; H.M. Wachtell (1973), pp. 70-71; J. Dirlan and J. Plummer (1973), p. 26.

The much longer term of office of the director compared with that of the council and board members is an important element in the consolidation of the influence of the director vis-a-vis the other management organs. While the terms of office of the councillor varies between two to four years and that of the board members between one and two years, the director retains his post for at least four years and in the great majority of cases for a longer period. Dirlam and Plummer maintain that despite the legal requirement for open competition in the appointment of directors, the vast majority of them are re-elected at least once with no serious competition while others keep their job until retirement. They also point out that "it is not difficult for the selection committee to describe the qualifications for directorship in such terms that only the incumbent can satisfy them."¹ The information available on the appointment of directors in 1968, 1970 and 1972 support this assertion. In 1968, 89 per cent of the vacant posts went to previous incumbent directors,² while in 1970 and in 1972 this ratio was 83 per cent for the economic organizations.³ The wide difference between the terms of office of the directors on the one hand and the board and council members on the other, automatically strengthens the advantageous position of the director because he is able to accumulate the knowledge of the different aspects of enterprise operation.

D. The Supplementary Organs

The Basic Law of Enterprises provides for standing commissions such as the commissions on production, investment, financial operations, personnel, etc., to be set up by the workers' councils or other management bodies. Most of these commissions have the character of 'expert committees' since they are made up of the technical/administrative experts

1 J. Dirlan and J. Plummer (1973), p. 26.

2 SZS (1969), p. 24, cited in *Ibid.*, pp. 30-31.

3 SGJ (1972), p. 70 and SGJ (1973), p. 80.

who advise various organs of management. As a result of the implementation of the Constitutional Amendment XV, even some of the functions of the management organs in some enterprises have been relegated to these supplementary organs.¹ The role of these commissions, particularly in large scale enterprises where the complexities of the over-all work requires heavier reliance on the experts, is of utmost importance since most councils' decisions are formulated and suggested by them and these suggestions, being "expert suggestions", are hardly turned down. The comment of a director of a banking enterprise reflects the importance of the role of the expert committees:

The workers' council elects experts because they realize that this must be a 'professional' group. *Committees often have a greater role than the workers' council.* They can make some decisions apart from the council. The unskilled worker occasionally presents problems for workers' self-management.²

The expert committees are the core of the influential managerial strata in the Yugoslav firms. Their influence stems from the technical and administrative expertise which is instrumental in the formulation and implementation of the short and long term policies of the enterprises.

To sum up the discussion on the organs of management, it is important to emphasize the difference between the formal and the actual scope of work of each of these bodies. The workers' council formally represents various strata of the work force and enjoys full power in determining the policies of the enterprise in the interest of its constituency. In reality, however, neither of these aspects are quite correct. The councils do not represent all strata of the work force (as we shall discuss in greater detail shortly) and do not determine the firm's policy autonomously since they are not competent enough to do so. The management board, which relies more heavily on specialist members and expert commissions, is much more influential in determining enterprise

1 I.Paj (1971), pp. 48-49.

2 R.P. Farkas (1975), pp. 27-28.

policies. The decentralization of the management system down to the lowest level of the organization has meant that the knowledge of ordinary workers (and those of their ranks on the council) about the whole organization and its overall problems is limited. In arriving at policies and solutions, therefore, there has been increasing reliance on the small strata of the technical and managerial staff. Although studies of the actual conditions in which this reliance is manifestly expressed are very rare, nevertheless the few available case studies corroborate our conclusions. Kolaja's study of the minutes of the meetings of the council and the board of two enterprises in 1957 and 1958 clearly show that only around 8 per cent of decisions adopted by the councils and 16 per cent of decisions adopted by the boards were at the initiative of the ordinary worker-members. The rest of the decisions were put forward and discussed at the initiative of the director and other management personnel who were not full members of these bodies.¹ More recently, in the late sixties and early seventies, Obradović has studied the situation in 24 enterprises for a period of three years and shown that a similar pattern has continued to exist. He maintains that top management dominated the whole decision making arena by: making most of the proposals; having most of their proposals accepted; speaking at the meetings of the workers' councils more than other groups and for longer period of time.²

Under such circumstances, the provisions dealing with the rotation of the council and board members (aimed at preventing the domination of a small group of management personnel being perpetuated) and minimum representation of the production workers - even if properly observed - become largely pointless. The organizational set up is such that the technical/managerial strata possess the knowledge and ability which are required for decision making while others do not. Neither has the

1 J. Kolaja (1961), pp. 28-29. Also see J. Kolaja (1965).

2 J. Obradović (1975), p. 30.

situation changed for the better in the last two decades. Although it is estimated that some 7-8 per cent of the industrial work force have been taking part in self-management organs annually, the degree of active participation, in the sense of being able to influence decisions, has been basically limited to issues which are of direct concern to the workers and with which the worker-members of the councils and boards are familiar. Otherwise, as Dirlam and Plummer point out, even in the most developed areas like Slovenia, "most members of the workers' councils would hesitate to question the technically complex proposals of the management."¹

Having emphasized the considerable difference between the formal set-up and the actual behaviour of a Yugoslav enterprise, it is interesting to compare, very briefly, the management system of these enterprises with that of the modern corporations. This comparison is very useful as the pattern of management and behaviour of the modern corporation are fairly well developed in the Western economic literature. There are, of course, considerable legal differences between the two. The Yugoslav firm is entrusted to its workers who are the principal beneficiaries of the successes, and victims of the failures, of the firm not because they personally own the firm but because they work for it. The capitalist corporation on the other hand, has a group of shareholders who receive a portion of profits by virtue of their possession of shares. Here, the labour force is not generally entitled to participate in the management of the firm, and even when it is (as is the case in some Swedish and German firms and as proposed by the Bullock Committee), it has to share the managerial power with the representatives of the shareholders. In the Yugoslav case, non-worker beneficiaries are absent and the employees of the firm do not share their legal right to manage the firm with anybody. Despite these and other differences,

1 J. Dirlam and J. Plummer (1973), p. 246.

there are strong similarities in the actual working of the management system of the two types of organizations. The workers of a Yugoslav enterprise do not in fact own the firm just as the shareholders of a corporation do not own the corporation. Both groups elect their representatives to oversee the work of their firm. The workers' council is very much similar to the company board of directors. They are both formally empowered to make various decisions about such issues as development programmes, production plans, investment policy, the supervision of the executives, etc. Both bodies delegate most of their authority to other organs of management, and to the technical/administrative personnel who formulate the policies of the firms and direct their operation. Both bodies, in the main, move into the background of the active management scene and take a general supervisory role as bodies which are legally necessary to approve the proposals and submissions of the executives. The board of directors is legally expected to act as the watchdog over the managers. In practice, however, this is not so.¹ In the Yugoslav enterprise too, the workers' council and management board are supposed to supervise the director and other management personnel but their ability is greatly constrained by the insufficient information, experience and expertise which they have. In both types of organizations the managers play the central role. In short, despite formal differences, the Yugoslav enterprise and the capitalist corporation are very similar in terms of the form of organization and management hierarchy.²

The mechanism by which the technical/administrative strata come to hold such decisive power in enterprises of a formally different set-up

1 R. Marris (1964), p. 14.

2 The workers' council in Yugoslavia, of course, exerts a moderating influence on the managerial tendencies of the executives at least on such issues as income distribution and conditions of work. As a result, the executives are more involved and concerned with these questions than their counterparts in capitalist corporations.

remains to be explained. In the next section we shall trace the development of this strata over time and the reasons for their increasing influence.

II. The Technical/Administrative Strata and Decision Making Power

Although the Yugoslav enterprises are governed by their employees the control and decision making powers are not evenly distributed among them all. In legal terms, it appears that the control and power should be distributed in relation to the numerical strength of different strata of the work force. This is only fair if various groups and therefore various interests are to be democratically represented. This criterion has found its legal expression in the provision that at least 75 per cent of the council and board members should be from the ranks of production workers. But in fact, while production workers constitute the great majority of the work force (nearly 80 per cent), they do not wield a similar proportion of the decision making power. The first question to be posed is: to what extent do the organs of management represent various strata of the employees? We shall use the information available on the qualification and skill grading of the members of councils and boards to show that the white collar workers, particularly the technical/managerial strata, have been increasingly over-represented on the workers' councils and management boards, and the extent of the over-representation has increased over time. This bias in representation also implies that the interests of one group receive more attention than those of other groups. This, potentially, has an important significance in the area of industrial and labour relations.

The over-representation of particular groups of employees on the organs of management, however, does not lead us directly to the location of power, control and influence within the organs of management. In the second part of this section therefore, we shall investigate the question

of the distribution of influence between various sections of the board and council members. Here we find that the technical/administrative strata of the employees - whether they are members of boards and councils or merely members of advisory committees - wield a greater degree of influence than the representatives of the non-managerial groups. Like the bias in representation of various strata on the managerial organs, the bias in distribution of power and influence between various sections of the work force will also have serious implications for labour relations. These implications will be discussed in the next section of this chapter.

A. Who is Represented on the Organs of Management? The Professional Qualification of the Members of the Workers' Councils and Management Boards.

In legal terms, under the system of workers' management, all employees have an equal say in the working of the enterprises. It is meant to be an exercise in democracy at the place of work. In practice, however, the workers are not a homogeneous entity. On the contrary, the category of "workers" is composed of most heterogeneous elements ranging from unskilled labourers just come from the countryside at one end of the spectrum to the highly educated management personnel at the other end. These different groups do not have similar interests and objectives, and their representation on the organs of management has not been based on some democratic criterion such as their numerical strength in the work force. Table 3, next page, summarizes the qualification of the members of management organs in the period of 1956-72.¹ Before discussing Table 3, a few explanatory remarks are called for.

- i The employees of the Yugoslav enterprises are divided into two distinct categories (well familiar to the Western economists):

1 Table 3 is compiled for the enterprises which are engaged in economic activities, and which employ more than 30 people. According to the Yugoslav methodology, the social product originates in the economic activities alone and the value of the services produced in the non-economic activities (health, education, social services, etc.) is not computed as part of the social product.

Table 3. Qualification Structure of the Members of Workers' Councils and Management boards of Enterprises in Economic Activities (in Percentages)*

Year	White Collar Workers				Blue Collar Workers				
	Total	High and higher levels of professional education	Secondary level of professional education	Lower level of professional education and others	Total	Highly skilled	Skilled	Semi-skilled	Unskilled
members of the workers' councils									
1956	24	3	12	9	76	14	38	14	10
1958	24 (21) **	3 (3)	11 (8)	10 (10)	76 (79)	13 (7)	39 (31)	15 (20)	9 (21)
1960	23 (20)	4 (4)	12 (8)	7 (8)	77 (81)	15 (8)	41 (30)	13 (20)	8 (23)
1965	26 (17) +	6 (2)	13 (7)	7 (8)	74 (83)	17 (6)	38 (28)	11 (16)	8 (33)
1968	30 (20)	8 (4)	15 (9)	7 (7)	70 (80)	17 (8)	35 (30)	10 (16)	8 (26)
1970	32 (20)	10 (4)	16 (10)	6 (6)	68 (80)	17 (8)	34 (30)	9 (15)	8 (27)
1972	35 (21)	12 (4)	17 (11)	6 (6)	65 (79)	17 (8)	32 (31)	9 (16)	7 (24)
members of the management boards									
1956	34	8	16	10	66	18	33	9	6
1958	34	8	15	11	67	16	36	10	5
1960	32	11	15	6	68	19	35	9	5
1965	38	14	17	7	62	20	31	7	4
1968	45	18	19	7	55	19	27	5	4
1970	56	27	23	6	43	18	20	3	2
1972	53	25	22	6	47	18	23	4	2

Notes: * The data for management organs and total labour force relates to economic activities alone. Organizations in non-economic activities and their employment are excluded. Also enterprises employing less than 30 workers are excluded. The figures may not add up to 100 due to rounding.

** The data in brackets () show the qualification structure of the total work force in the economic activities.

+ This line shows the situation on 30 December 1964

Sources: The data on management organs: SGJ(1960), p.29; SJG(1970), p.67; and SGJ(1973), p.77. The data on total work force: SGJ(1959), p.94; SGJ(1961), p.38; SGJ(1966), p.99; SGJ(1970), p.91; SGJ(1972), p.93; and SGJ(1974), p.121.

workers and staff, or, blue and white collar workers. The qualifications of the former group are always described in terms of their 'skill' while the latter group is always described in terms of their educational or professional attainment.

- ii Alongside the qualifications of the members of the management organs, the qualification structure of the labour force employed in the economic activities is also provided in Table 3. This data helps us to assess the representativeness of various organs of management.¹

Table 3 clearly shows that in the period under consideration the representation of the white collar workers, particularly those with high education and professional training, has considerably increased. The representation of the employees with "high and higher levels of professional education" increased from 3 per cent of the membership of the councils in 1956 to 12 per cent in 1972. The change in the representation of this group on the management board was even more pronounced. During the same period their representation increased from 8 per cent to 25 per cent of the members of the boards. The above proportions should be contrasted with the proportion of the labour force which belongs to this category - 2 to 4 per cent.

The employees with secondary school or equivalent level of professional education also enjoyed increasing representation on both organs of management, though the increase was not as sharp as that of the previous category. The proportion of seats occupied by this group increased from 12 per cent of the council and 16 per cent of the board seats in 1956 to 17 per cent and 22 per cent in 1972 respectively. During this period, the proportion of labour force belonging to this category had increased only from 7 to 11 per cent.

¹ The Statistical Yearbook series provide information regarding the qualification of the members of the management organs only up to 1972. This is the reason why Table 3 shows the situation from 1956 to 1972 and not later.

The representation of the "highly skilled" category of workers on both councils and boards increased marginally; from 13 to 17 per cent on the councils and from 16 per cent to 18 per cent on the boards.

The representation of all other categories of workers (skilled, semi-skilled and unskilled) and the lower grade administrative staff on both organs (particularly on the boards) fell sharply during this period. The case of the unskilled workers should receive special attention. While they constituted between 21 to 3 per cent of the work force in the years of observation, they occupied only between 7 to 10 per cent of the council seats and 2 to 6 per cent of the board seats.

The results of Table 3, so far discussed, clearly show that the technical/administrative strata of the work force has been represented on the organs of management (particularly on the more influential management boards) more heavily than their numerical strength in the work force warrants. The three to four-fold increase in their representation on the management bodies has been, over the past twenty years, at the expense of other groups, in particular the unskilled and semi-skilled workers.

Table 3 also shows the trend of the representation of the white and blue collar workers on the management organs - the subject of the legal provisions regarding the representation of white collar workers up to a maximum of 25 per cent. The second and sixth columns of the table show the position of the two groups. In terms of the workers' councils, the legal provision seems to have been observed until 1960. In fact from 1956 to 1960, it seems that there has been a marginal tendency for the blue collar workers to increase their representation on the councils while the representation of the white collar workers slightly fell. But after 1960, the trend reversed and notably since the 1965 reforms the non-production workers have constituted increasingly larger than 25

per cent of the membership of the councils.

In the case of management boards the legal provisions have been ignored altogether right from the beginning. The proportion of white collar workers on the boards which was around 30 per cent in late fifties, has passed the 50 per cent mark in the early seventies.¹ Within the white collar workers, the trend of representation indicates a continuing shift in favour of the upper strata of this group. The apparent disregard for this legal provision is not surprising. The law may require such representation but it would be difficult to enforce it as it is inevitable that in many places the form of the organization and the concentration of decision making power, control, information and knowledge of the firm lead to over-representation of the technical/administrative strata. The managerial group will be in a dominant position irrespective of the law.²

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- 1 Wachtell had put this non-observance of the legal provisions to many Yugoslavs and inquired about the reason for such a pattern, but as he points out, "no adequate explanation was offered for this... in fact, the data were typically greeted with disbelief." See H.M. Wachtell (1973), p. 73.
 - 2 At this point, we should mention something regarding the underestimation of the representation of the *white* collar workers as shown in Table 3. One source of bias is the way the work force is categorized according to its qualifications at different points in time. According to Benson in the industrialization drive of the fifties and early sixties, which led to a great shortage of the professional and administrative staff, a large number of the then skilled workers - particularly the veteran communists - moved into these positions without formally having the qualifications needed for these posts. For statistical purposes, however, they continued to be classified as production workers while in fact they do not perform such duties as production workers anymore. A survey of the directors retiring in 1966 showed that 54 per cent of them had former manual skill classifications. (Statistički Bilten, no. 447, Tables 3-2 and 4-2). If this is taken into account, the proportion of actual production workers on management organs will be even less than what appears. The second source of bias, to which we have referred, is the involvement of the members of expert commissions in the work of the councils and boards. While all members of these commissions do not sit on the organs of management as full members, they do participate in discussions, explanations, justification of various policy proposals, etc. In this sense, their real participation is more than that reflected in the statistical evidence. Benson estimates that if the participation of the specialists is taken into account, the role of manual workers in decision making process will be even further reduced so that they will be in a minority of one to two. See L. Benson (1974), pp. 262-263.

What is the explanation for the increasing representation of the upper echelon of the white collar workers on the organs of management? The process of economic development in Yugoslavia has been accompanied, especially since the 1965 reforms, by a process of mergers and integration of small and medium size enterprises and development of large size firms. The division of labour is much more complex and detailed in the larger organizations and specialists play a more significant role in the operation of these firms. For efficient functioning, the medium and large firms heavily rely on expert service of engineers, accountants, financial specialists, lawyers, administrative managers, etc. The technical/administrative strata is composed of the employees who are instrumental in performing such expert tasks as: time and motion studies for determination of wage schedule and skill categories; the preparation of balance sheets; profitability analysis of various projects; demand forecasting; market analysis; the introduction of new techniques and equipment or modification of the existing ones; the preparation of investment programmes and expansion plans; cost and benefit analysis; and assessment of the benefits or losses of mergers and amalgamations. These tasks, by virtue of their technical complexity, are generally outside the competence of the mass of the less educated and less skilled production workers. It is exactly the possession of these abilities that puts the managerial group over and above the direct producers. As enterprises expand and the nature of their activities become more complex, the position of the managerial group will be further consolidated.

Although as Table 3 shows, the technical/administrative strata are still in a numerical minority on the management organs, the amount of information at their disposal which is necessary for the efficient operation of the firm, more than compensates for their numerical weakness. They are a minority without whom large enterprises cannot function. Obradović's study of 24 enterprises in a three year period shows clearly

how the small managerial group becomes instrumental to the functioning of enterprises. He demonstrates that although the college educated personnel constituted only 6 per cent of the employees of the 24 enterprises studied by him, nevertheless they managed to dominate the meetings of the workers' councils more than any other group of employees. They comprised over 50 per cent of the number of participants in discussions, spoke for over 60 per cent of the discussion time, provided over 65 per cent of the explanations to various proposals and queries, and offered over 50 per cent of the proposals to the councils.¹

The important point is that the division of labour and separation of managers and workers (and the separation of managerial and performance tasks) have created a situation in which the workers are incapable of exercising effective control or influence. Inequality of information and knowledge gradually creates a managerial group independent of the workers' council who can hardly be held responsible and whose authority can hardly be questioned by the workers. The councils can become mere auxiliary committees and, due to insufficient knowledge and information, pass decisions which may later prove detrimental to workers' interests.²

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- 1 J. Obradović (1975), p. 40. The activities analysed by Obradović included: marketing, inter-organizational matters, finance and control, and wages.
 - 2 Two concrete examples to elaborate this point are provided by Benson. First, in Partizanka Knitwear factory in Belgrade, the bonus-penalty scheme was agreed upon and decided by the workers' council at the time of formulating the rules of the enterprise. It was later found that, legally, the white collar workers were exempted from penalties arising from the fall of production below the targets whereas the blue collar workers were not. Second, a similar situation arose in Zenica Steelworks of Bosnia where income amassed was insufficient to cover the planned wage fund arranged on a point system and the employees had to receive less than the planned incomes. But it just happened that the management received *their* full planned income according to the full point system while the remainder of the available funds was distributed among the workers at a lower value per point. In both situations the workers protested quickly. But, upon detail investigation, it was found that the regulations of the enterprise - passed by the councils - contained a clause exempting the management from experiencing an unplanned fall in income of the type discussed, and it was concluded that the management had acted according to the exact rules of the enterprises. Clearly the council members had not paid enough attention and care at the time of approving the rules. See L. Benson (1974), pp. 260-1.

Clearly if this situation continues, we should expect to see the management organs of large enterprises completely taken over by the technical/administrative strata,¹ and the concept of self-management shelved altogether - at least in practice if not in theory.² As the economy develops and becomes more complex and as the decision making procedure becomes more and more technical and intricate, the scope of the functioning of the workers' management becomes increasingly limited,

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- 1 Already such indications are coming from the large firms. But Table 3, being the aggregate indicator, conceals the cases where the technical/administrative strata are much more heavily represented. Table 4, below, represents the qualifications of the members of the Central Workers' Council at Energoinvest Enterprise, introduced earlier in this chapter.

Table 4 - Qualification of the Members of the Central Workers' Council at Energoinvest

Qualification	Percentage distribution	
	1964	1969
Staff with higher education	27	42
Staff with secondary education	37	22
Highly skilled workers	10	23
Skilled workers	20	12
Others	6	1

Source: E. Blum (1970), p. 31.

- The over-representation of the technical/administrative strata at this enterprise is clear enough. The lower strata of the work force, constituting the majority of the workers, have no representation on the council at all, let alone be under-represented.
- 2 In some recent writings, there has indeed been some new suggestions casting doubt on the applicability of the self-management system to large modern enterprises. Obradović, for example, has suggested that the modern technologically advanced automated enterprises do not necessarily benefit from the application of self-management and the workers of such enterprises do not derive extra job satisfaction because of the formal right of participation in the management organs. J. Obradović (1970), p. 167. (This study was based on the investigation of 537 workers with similar qualifications in enterprises with different types of technology - automated, mechanized and handicrafts). It was later argued by Rus that the study of less advanced industries and handicraft organizations show that the "existing forms of self-management are more suitable to this kind of organization." V. Rus (1970), p. 152.

and in reality, there would be less and less room for the application of self-management. The level of required expertise is so high in some large modern enterprises that even foreign management consultants have been employed to help the existing management. In such cases there is actually nothing that a blue collar member of the workers' council can contribute.¹

The representatives of the employees other than the technical/administrative strata are in clear majority on the workers' councils and hold at least half of the seats on the management boards. The question which has to be answered now is: how the decision making power is distributed between various members of the councils and boards. The answer to this question is the subject of our next section.

B. The Distribution of Decision Making Power within the Organs of Management

The settling of the question of distribution of influence and decision making power between the various strata of the work force represented on the management organs is an important step in determining who is in control of the Yugoslav enterprises. In the early days of the introduction of self-management it was suggested that the management organs, particularly the councils and boards, were mere formalities and the real power was vested in the hands of the party branch and trade union committee of the enterprises.² But as the decentralization on economic and political fronts proceeded and gradually engulfed the whole of the society, the position of the proponents of the above view was considerably weakened. With the League of Communists of Yugoslavia (LCY) spearheading the economic reforms (specially those in the sixties) whose final objective was to put the economic criteria - profitability,

1 The import of foreign expertise began in 1970 when Energoinvest Enterprise adopted a new organizational structure worked out by the consultant firm of McKinsey & Co. Inc. of New York to adjust the enterprise's production plan to market demand. See *East Europe*, Vol. 19, no. 2, Nov. 1970, p. 62.

2 G.W. Hoffman and F.W. Neal (1962), p. 238.

efficiency, expertise, etc. - before the political considerations, the period of decline in the influence of the party organization at the place of work began. Few observers, would, today, hold that the party or the trade union branch can dominate the decision making process in the Yugoslav firms. In fact the available evidence shows that with the development of self-management, the influence of the League of Communists has been gradually replaced by that of the technical/administrative strata such as the management personnel, supervisors and heads of economic units - a group that has its basis in the particular form of management in the Yugoslav enterprises. The process is also one of replacement of political factors and considerations by economic expertise.

The bulk of the studies relating to the distribution of influence among various groups has been undertaken by sociologists and suffer to some degree from lack of precision in the measurement of 'influence'. Nevertheless, as the sole source of information on the actual conditions of a large number of enterprises in different sectors and regions, they provide us with at least a general understanding of the distribution of decision making power.¹ Here we shall discuss some of the findings of these studies.

Županov and Tannenbaum's study of the attitudes of 56 workers attending Moše Pijade Workers' University of Zagreb is of major significance. These workers had come from different enterprises (ranging in size from 200 to 10000 members) and a wide range of industries, and as such their attitudes reflected the situation in a much larger context than the university itself.² The result of this

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- 1 One should be sceptical about assigning cardinal numbers to such concepts as degree of influence which are expressed only subjectively. For our purpose, however, the ordinal expression of the ranking of the power of various groups is sufficient. This qualification should be kept in mind in the following discussion.
 - 2 The sample also included a large proportion of formally educated, highly skilled and socially conscious workers. About 89% of them were members of the LCY (compared with 10.6% membership of workers in the Zagreb district) and 39% of them were first-line supervisors. J. Županov and A.S. Tannenbaum (1968), p. 95.

survey was that the interviewees, on average, believed that the top echelon of management exerts the highest influence on the decisions of the workers' councils, followed by the heads of economic units, supervisors and the white collar workers.¹

In another study, the attitudes of the employees of four Slovenian enterprises towards management hierarchy were investigated by Kavčič, Rus and Tannenbaum. The general membership (who were not members of the management organs) believed that the managers and heads of economic units exerted the highest influence in the decision making process, followed by management boards and workers' councils exerting some influence and the semi-skilled and unskilled workers exerting very little influence.² The attitudes of the members of the workers' councils of these four enterprises towards the extent of influence of various groups on the decisions of the councils were very similar to those of the students of the Workers' University discussed in the previous paragraph.³

Kavčič, Rus and Tannenbaum also asked the employees of the four enterprises to express their views about the desired distribution of influence between various groups and found that the greatest discrepancy between the actual and desired degree of influence occurred for workers, and the smallest for managers.⁴ This means that the managerial strata wielding the highest influence in decision making has little to be dissatisfied with while the production workers who are least influential in the decision making process are, as would be expected, most dissatisfied.⁵

There are many other studies which corroborate the conclusions of

1 *Ibid.*, p. 99.

2 B. Kavčič, V. Rus and A.S. Tannenbaum (1971), pp. 79-80.

3 *Ibid.*, p. 84.

4 *Ibid.*, p. 81.

5 This finding is also supported by a more comprehensive (and long term) study by J. Obradović (1975), pp. 38 and 43. These views can also be supplemented by another empirical study showing that the unskilled workers have been five times more "discontented (with their position as workers) than the highly skilled ones." B. Horvat (1969), p. 163.

the above authors and a detailed survey is not necessary here. The summary of a few of these studies, however, will suffice to make the point that the hierarchy of power and influence is organized in favour of the technical/administrative strata. Table 5, next page, shows this summary provided by Rus. It should be re-emphasized that although the cardinal ordering of the degree of influence may be regarded as a questionable, and even dubious, practice, that is not our prime concern at this point at all. We are more interested in the ordinal arrangement of various groups in the hierarchy of influence and power.

The executives are considered by all observers to be the most influential group in the decision making process. With minor differences, their position is followed by the professional staff and heads of economic units. Management boards and workers' councils are the next, though not widely apart from each other.

Although each of these studies are particular in respect to the nature and size of the sample and the field of activity, nevertheless, they have one important aspect in common. The managers are the most influential, and the workers the least, in the running of the enterprises. Following the top executives are the middle-level management strata such as the heads of economic units. This strata owes its influence to the development of management decentralization in the sixties when organs of self-management were set up in the lower level subdivisions and work units of large enterprises. It was thought that by organizing such units along the self-management lines, the ordinary workers would be able to exercise more control and influence on the organs of management and enjoy a stronger sense of participation and involvement. But in practice, things did not work out in this manner. The process of concentration of power in the hands of managerial group that had been developing in the older organs of management, started to develop in the new "economic units" as well. Quickly, a managerial strata consisting

Table 5 - Index of Influence of Various Groups on Decision Making Process in the Yugoslav Enterprises: A Summary

Groups	Index of Influence* According to							Average
	Rus (1964)	Županov (1966)	Rus (1968)	Kavčič, Rus, Tannenbaum (1968)	Možina, Jerovesk (1969)	Kavčič (1968)	Možina, Rus (1969)	
Top management	1	1	1	1	1	1	1	1
Professional staff	2	-	3	-	2	-	2	2.2
Heads of economic units	3.5	4	2	2	-	4	-	3.1
Management Board	5	3	4.5	3	3.5	2	3.5	3.5
Workers' Council	6	2	4.5	4	3.5	3	3.5	3.8
Supervisors	3.5	5	6	5	5	-	5	4.7
Party	-	-	7	-	-	5	-	6
Highly skilled and skilled workers	7	6	8	6	6	6	6	6.4
Semi-skilled and unskilled workers	7	6	9	6	8	8	7	7.3

* Highest degree of influence is designated by 1 and lower degrees by numbers greater than 1.

Source: V. Rus (1970), p. 149.

of supervisors, heads of economic units and technical/administrative staff in the units emerged. In larger enterprises where numerous economic units were formed, a new stratum of influence - the "middle management" as Rus calls them - was created. On the basis of several investigations in 1964 and 1968, Rus concluded that:

Predictably, the subsidiary councils fell under the control of middle management, just as the central councils had fallen under the control of top management. As a result, middle

management's power was increased and communications between workers and top management was blocked. The enterprises involved became both less dynamic and less democratic.¹

An important aspect of Table 5, investigated by Rus (1968) and Kavčić (1968) only, is the influence of the party branch within the power structure of the enterprises. Remembering that in the fifties the party branch was seen as the most powerful force guiding the enterprise decisions, these two studies show the great decline in the position of the party branch. This is a significant development in the context of the development of socialism in Yugoslavia and needs further elaboration. In all socialist countries, the party branch in each enterprise is seen as the vehicle of promotion and popularization of the party policy on all matters, particularly the development policy, and therefore the tasks facing each enterprise in fulfilling such policies. At each establishment the major decisions regarding production, pricing, expansion, working conditions, etc., are made in accordance with the requirements of the general orientation of the economy as enunciated by the communist party and expounded in a central plan. The party branch is to supervise and ensure that the affairs of each enterprise conforms with the general requirements of the plan. The appointment of managers and top executives in each establishment by higher authorities is seen as one way of making certain that the party line is kept in command of the management decisions. The management personnel are, to varying degrees, responsible to the party branch. If the political control of the enterprise is deemed essential, and if the central plan is to be implemented, then the branch will become a necessary apparatus. In short, the party branch is instrumental in maintaining and developing the communist party's political position in the enterprise. In Yugoslavia, however, the advent of decentralized market socialism meant that self-management is to be the prime form of organization, and

1. V. Rus (1970), p. 152.

economic progress is to be the target of social production. Anything that interfered with economic growth or with self-management had to be swept aside. While the central planning had been scrapped long ago, the existence of political influence at decision making level was also seen in contradiction to self-management, and therefore as something that had to be done away with. One of the objectives of economic reforms was to "depoliticise" the decision making process in various fields so that economic criteria could be operative. Political control was seen as opposing economic optimization, as disregarding managerial capacity in favour of political reliability and as wasting enterprise resources on unnecessary and superfluous expenditure on party organizations.¹ Depoliticisation was seen as a necessary aspect of development of the society based on self-management.² The effect was a general decline in the role of party branch as an organization. Although most managerial group members belong to the LCY, it is their professional position that brings them power and influence. To express this differently, although some of the members of the enterprise party committee are influential individuals, it is not their party branch that determines or directs the enterprise policy but the technical/administrative strata, most of whom are also party members. This is a significant difference between the Yugoslav enterprises and those in other 'socialist' countries.

So far we have discussed the higher representation of the technical and administrative employees than that warranted by their numerical strength in the work force, and the inequality of knowledge, information and professional expertise that forms the basis of such over-representation. We have also shown that the decision making power and control over the affairs of the enterprise is not evenly distributed between the members of the boards and councils. The technical/administrative strata

1 R. Bičanić (1966), p. 636.

2 *Ibid.*, p. 643.

by virtue of their expertise, wield the greatest degree of power and control at the expense of other strata and other institutions such as the League of Communists or the trade unions. Despite legal provisions putting this professional elite under the supervision of the workers' council, in reality they have achieved a large degree of independence from the council and have subjected the enterprise to their own control and dominance. This shows yet another significant similarity between the actual organization of a Yugoslav enterprise and the capitalist corporation.¹ These developments do not leave the workers and their relationship to the managers, as well as to the working conditions, unaffected. In the following section we shall discuss the consequences of these developments in the area of labour relations.

III. The Development of Self-Management and its Effects on Industrial and Labour Relations

The consequences of the present distribution of influence and relations of domination developing within the self-management system are rather familiar, though unexpected: indifferent attitudes towards the organization; absenteeism; a high rate of turnover and an increasing rate of work stoppage. (The pattern of reaction of the Yugoslav workers also closely resembles that of the workers in the capitalist

1 Županov and Tannenbaum, for example, clearly maintain that the efficient Yugoslav enterprises have a control hierarchy similar to that of the capitalist corporations, and that essentially there is nothing objectionable about this, i.e., this is a 'natural' state of affairs. See J. Županov and A.S. Tannenbaum (1968), pp. 105-107. On the necessity of avoiding interference in the rank order hierarchy of efficient enterprises, see S. Možina, J. Jarovesk and A.S. Tannenbaum (1970), pp. 60-68. It is necessary to remark that such position is not shared by the people who are subjected to this form of hierarchical organization. While one of their respondents, a worker-student at the Workers University of Zagreb, was discussing her disapproval of the control and influence distribution within the enterprises, she was told the managerial group in American firms have even a higher degree of control than do the Yugoslav managers and that the American workers can exercise much less control than their Yugoslav counterparts. Her reply: "Yes, but there's a difference. It was that way once here too, but we didn't *claim* to be a socialist society." J. Županov and A.S. Tannenbaum (1968).

economies.) The tendencies developing within the system have serious implications which go far beyond the enterprise and extend to the whole society. That is, the polarization and differentiation at the enterprise level gradually extend to stratification within the society, and the relations of domination will be reproduced at all levels of society thus threatening the foundation of self-management.¹ In this section we shall briefly discuss the growing reaction of the work force to the existing power structure and distribution of influence in enterprises.

The inability of the ordinary workers to influence the decision making machinery and to control and supervise the management personnel, is directly responsible for the lukewarm attitude and indifference shown towards the enterprise affairs which have been reported for nearly one and a half decades.² This inability, aggravated in the course of the development of large scale industries, produces frustration for the majority of the workers which manifests itself in permanent hot beds of conflict. The differentiation of the enterprise work force into a hierarchical structure predictably meets some form of resistance which is sharper and more wide-spread amongst the group which is most numerous but least influential: the blue collar workers. The higher rate of absenteeism for semi-skilled and unskilled workers than for other groups is only one manifestation of the indifference and frustration of the workers.³

In addition to absence from work, the high rate of labour turnover is another reflection of the serious contradictions in Yugoslav

1 We shall not go into the social implications of development of an influential and powerful professional elite at the level of enterprises. Construction of socialism, to which the Yugoslavs still *formally* professes, can be seriously affected by these implications. See C. Bettelheim (1974), pp. 78 and 94; P. Sweezy and C. Bettelheim (1971), p. 29; and P. Sweezy (1974) and (1975).

2 J. Kolaja (1961), p. 31; Work Organization of Jesenice Ironworks (1971), pp. 106 and 112.

3 See B. Horvat (1969), p. 163.

enterprises. The workers are more realistic towards their situation, they go from one firm to another if it provides them with a higher level of earning, if it is more promising than "their" existing firm, and do not feel any sorrow over leaving the enterprise in which they have ploughed back a part of their earnings as investment. In going from one firm to another, the Yugoslav workers also behave like their colleagues in the capitalist countries.¹

Attitudes of indifference towards the place of work and frustrations created by the unequal relations of control, Benson maintains, have been chiefly responsible for the high rate of defection of manual workers from the party ranks too, specially after the 1965 reforms.²

The final, and perhaps the most important, manifestation of the dissatisfaction of the workers with the existing state of affairs is their resort to slow-downs and strikes. Along with the implementation of decentralization reforms, particularly in the mid-sixties, the dissatisfaction and aggravation of the workers have also deepened. By the mid-sixties, according to one report, strikes were being organized at a rate of over two hundred per year while the unofficial figures put the number considerably higher. Another report prepared by the Central

1 The comment by a trade union chief to Županov is very illuminating. Discussing the problems faced by the workers who turn to the Zagreb trade union advice bureau for help, he pointed out:

"There is reason to suspect that a large number of aggrieved people do not come (to the bureau) because they are afraid of dismissal and the carryings-on which would ensue. Even those who do come ask us to keep it a secret from their management ... A worker can be got at not only if he constantly receives the most difficult jobs...but also when he gets the easiest, or none at all. In that case, if he asks my advice, I tell him *straight out, get out of that place as fast as you can.*"

In Croatia, in 1970 alone, the number of workers seeking advice from this bureau was about 40 to 50 thousands which comprises 5 to 6 per cent of the work force of the republic, and needless to say, these are the ones who managed to come forward with their complaints. See L. Benson (1974), p. 272.

2 *Lòc. cit.*

Council of Trade Unions of Yugoslavia in 1967 put the number of work stoppages since 1957 at about 1500. The manual workers have been either the sole participants or at least the backbone of the strikes and, among them, the skilled workers have taken up the leadership. The management personnel are usually at the forefront of the opponents of strikes and this often brings them into direct confrontation with the workers - sometimes involving even physical violence. About eighty per cent of the strikes were organized in the three most developed and industrialized republics.¹

The strikes and other labour problems shed new light on the actual functioning of the Yugoslav firms. Essentially, if the workers of an enterprise did in fact manage their enterprise and determine their conditions of work according to their own interest, there would hardly be any room for work stoppage. The official reaction to strikes can be summed up by comments such as "the absurdity of quitting work"², "against whom"³, "the result of the low level of socialist consciousness of some sections of the working class..." and ... "narrow, self-centred and partial interests."⁴ These comments are, of course, based on the formalistic and legal assumption that the workers own and manage their firms. The reality, however, is that the workers do not control the firms and are not able to influence the decision making process to any reasonable degree. The strikes then become, quite understandably, the major means of achieving their aims.

What are the causes of the strikes? As one may expect, the most immediate cause is related to the workers' earnings. As it was put officially, "the causes of conflicts which culminate in work stoppages stem from inadequate income distribution in work collectives."⁵ The

1 L. Benson (1974), pp. 262-264; Jan Vanek (1972) pp. 62-63; and *East Europe*, Vol. 18, no. 7, July 1969, p. 38.

2 *Borba*, 16 October 1966.

3 *Privredni Pregled*, 3 November 1967.

4 Presidency of the LCY (1970), p. 106.

5 *Ibid.*, pp. 105-106.

working conditions and imposition of unreasonable rules have also been cited as the causes of strikes. The economic demands of the workers are, of course, the reflection of a much wider problem - lack of control in the face of pronouncements to the contrary. The workers are expected to take their disputes and complaints to the very bodies (councils and boards) which have made decisions contrary to the workers' wishes and interests. While management can initiate disciplinary action against the workers, the opposite is not true. Therefore they are left with one choice, work stoppage. As a report by the LCY Presidency admitted, the workers have found themselves in an institutional set-up where exercise of control has become difficult, if not impossible, and that they are estranged from the "decision making regarding the conditions and proceeds of their work."¹

The fact that the incidence of strikes and other labour conflicts have grown alongside the development of self-management is not accidental. The development of self-management has not been along its "ideal" path of leaving the workers to manage the factories and increasing the workers' control of the enterprises. On the contrary, in the Yugoslav context and alongside other institutions, self-management has led to polarization and differentiation within enterprises and growth of a professional elite who has concentrated control and the decision making power in its own hands. The objectives of this elite and its interests are not unanimous with those of the workers. In the face of unequal of power, within the enterprise structure, work stoppage becomes the final weapon in the workers' hands. The solution provided by the LCY leadership seems to be the exact opposite of what is needed. They instruct the LCY

1 Loc. cit. As Kavčić has pointed out:

By striking, workers often achieve what they were unable to bring about by normal means. Sometimes workers get negative answers to their demands, with the explanation that these demands cannot be met because circumstances do not permit it. But when they down tools everything is immediately put right, money is found for rises, a way is found of transferring the foreman who doesn't fit and so on... The strike is shown up as an efficient way of resolving problems, at least as far as the workers are concerned. See B. Kavčić (1966), pp. 203-204.

members to do more ideological and political work amongst the working class in order to mobilize more support for the self-management system.¹ One can only forecast a worsening of the situation.

IV. Summary and Conclusions

In this chapter we have traced the development of self-management within the Yugoslav firms and its effect on the organizational structure of the "worker-managed" enterprises since its conception in early fifties. The system of enterprise management and the inter-relations of the organs of management have been discussed from two points of view: as they are defined by legal provisions and as they function in actual practice. The actual as well as the formal operation of the decision making apparatus have also been discussed. Throughout the chapter we have tried to distinguish the actual operation of the system of self-management and its various aspects from the way the laws perceive them. We have pointed out many areas in which the two aspects - legal and actual - are quite different.

The following points are the brief summary of the main conclusions of this chapter:

1. The workers' council, as the elected body of the representatives of the work force, is legally empowered to manage the enterprise and to decide on major issues facing it (output, pricing, investment, income distribution, mergers, etc.) Formally, its authority in the enterprise has no limit. In practice, however, the council is of much less significance and the director and the management board - the bodies formally subordinated to it - have assumed a much greater power. The council has turned to a body with "general supervisory" role whose function is to "approve" the proposals worked out by the management personnel. The participation of the council members in decision making - formally all embracing - has been limited to matters of only direct and short run interests of the

1 Presidency of the LCY (1970), p.108

workers such as income distribution, working conditions, discipline, etc. In short the workers' councils have been gradually pushed to the background of decision making apparatus, while other members of the management personnel have moved to the forefront.

2. The self-management system was aimed at guaranteeing the dominance of the production workers and creating conditions in which the workers could participate in decision making in order to safeguard the position of the working class and its interests. The system also regarded it necessary to prevent the emergence of an elite social strata of administrators, engineers, technicians and other experts. Therefore the provisions were "legislated" to require that 75 per cent of the members of management organs be from among the production workers. In practice, however, this provision was increasingly ignored so that by early seventies the production workers' representation on the boards and councils had declined to 47 and 65 per cent respectively.¹

Instead of production workers, the council and board seats were increasingly occupied by the employees with higher levels of education and professional qualifications. These employees, together with members of the advisory expert committees, gradually became the most powerful group in the actual running of the enterprises. Available evidence dealing with the distribution of influence within various groups in the enterprise work force unquestionably puts this group at the helm of the firm's power structure, followed by the management personnel at the lower level units of the enterprise such as heads of the economic units and supervisors.

3. Despite formal pronouncements, the domination of the Yugoslav enterprises by a small professional elite should not be surprising or unexpected. The division of labour in modern industry implies separation of tasks between various sections of the work force.

1 No data was released on the qualification of the members of the management organs after 1972 and therefore the developments in the seventies are not very clear, though one may expect the trend to have continued.

Technical design, financial requirements, sales and marketing, technical and economic coordination, as well as many other tasks, need to be handled by specialists. The ordinary worker is mainly concerned with his own particular piece of operation and his own shop floor (work unit). It is the task of the specialists to be concerned with broader sections of the establishment, possibly the whole organization. As the enterprise develops, the tasks handled by experts increase in number as well as in importance while the part played by the semi-skilled and unskilled workers become narrower and less important. The experts prepare the short and long term plans for the enterprise operation; prepare proposals and analyses for submission to the councils; explain, discuss and answer questions related to these proposals and steam-roll the submissions through the councils to obtain their mark of approval. The technical and administrative abilities of the leading group, their greater knowledge of the firm as a whole and their access to information put them over and above the workers. Their education and professional training bring them power, control and prestige.¹ Gradually, not only their share of the representation on the management organs has increased, but their position of influence has also been consolidated.

4. The decentralization of the management system within the enterprise in the sixties aimed, formally, at involving the work force in the decision making process and arousing their interest in the affairs of the organization, but, in practice, led among other things to the development of the middle strata of management: the heads of economic units and supervisors. The decentralization also required improvements in the task of coordination within the enterprises. This aspect of the enterprise operation had to some extent suffered as a result of the

¹ Many Yugoslav writers freely admit that education and professionalism are the basis of stratification in their society today. See, for example, B. Horvat (1969), pp. 147-150. The social stratification, of course, has its roots in stratification at the place of work.

devolution of authority to lower divisions.

5. The development of self-management also had the effect of stripping the League of Communists from the influential position it occupied until at least early sixties. The economic reforms of the mid-sixties and the explicit policy of "de-politicization" of the decision making apparatus resulted in the increased influence of that section of the enterprise work force which could promote economic growth, expansion, high productivity, higher income, etc. This was the technical/administrative strata who, in the previous period, was bound by political considerations of varying strength. Here, the Yugoslav enterprises differ significantly from enterprises in the socialist countries where the party branch is the leading organ of every enterprise.

6. The system of labour relations developing under self-management, one would expect, should be significantly different from that under modern capitalism. This is because, formally, in the absence of private property in means of production and proclamation of the dominance of workers, the conflicts of interest typical of capitalist economies should vanish. But, in reality, it is not the workers who dominate the firms but a professional elite, and the firm is not run in accordance with the wishes of its workers but with that of its managers. Indifference and apathy are the first signs of declining workers' control and influence. A lukewarm attitude towards the enterprise is reflected in the absence of active participation in the work of organs of management such as assemblies. When the workers' interests are not represented at the level of management and their aspirations are not taken into consideration, the reaction is more than simple apathy. Absenteeism, high rate of turnover and even work stoppage and strikes can be the outcome. As the enterprises expand, the separation of tasks (widens) and the influence of the managerial elite expands, the labour problems which are the outcome of the conflicts between workers and

management, would also intensify. Self-management cannot be compatible with such a system of labour relations. In fact the present state of affairs (separation of tasks, increasing influence of the management strata, intensification of conflict) would only threaten and undermine whatever is left of the self-management "system".

7. Despite formal differences in terms of ownership and property rights, the Yugoslav firms are very similar in actual management structure and behaviour to the capitalist corporations. The composition of management organs, the distribution of influence between various strata of the employees and the hierarchical nature of the management net-work with the director and the professional administrators at the top of the hierarchy and the less influential unskilled workers at the bottom, brings out most clearly the similarity of the two types of organization. If an enterprise is run on the basis of self-management as it formally stands, then one would expect the management system and the interrelationships within the enterprise to be fundamentally different from the familiar pattern of modern corporations - and this is a particularly important reason for the study of the Yugoslav-type enterprises. But the virtual absence of study and experimentation with new and different forms of organization means that the Yugoslavs are, in the main, using the concept of self-management for the old forms of organization and management.

Chapter Two

The Enterprise Objectives and Behaviour

Having discussed the organizational structure of the Yugoslav enterprises and the distribution of decision making power among its various strata, we now turn to the discussion of the objectives which are most likely to be pursued by these enterprises. In the previous chapter we compared the Yugoslav enterprise with the capitalist firm in terms of their organizational set up and structure of influence. Here too, we shall make use of a similar comparison to investigate how different are the objectives pursued by these two types of firms. Most of the previous work on this subject suffers from an over emphasis on the formulation of a single maximand or objective which the Yugoslav firm supposedly follows in all circumstances. In the real world, however, firms (capitalist, labour-managed or else) operate within a number of restrictions and constraints and do not necessarily pursue a single objective such as the maximization of profit, sales, etc. Furthermore, different firms follow different objectives depending on their size, the line of activity and the state of competition in the industry. The static profit maximizing traditional theory of the firm too, suffered from similar shortcomings (among others) until attention was paid to other objectives and constraints facing the firm.¹ The theory of labour-managed firm-which is said to explain the behaviour of the Yugoslav firms better than other theories - is also open to similar criticism. In other words the environment within which these firms operate and the variables that affect their operation must be analyzed. These variables include on the one hand the objectives followed by the firms and, on the other, the constraints imposed on them. This chapter,

1 Of considerable importance are, among others, the following works: E. Penrose (1959); W. J. Baumol (1959) and (1962); R. Marris (1964) and J. H. Williamson (1966).

therefore, has a two-fold purpose. First, we shall briefly review the theories of the labour-managed firm and analyze their shortcomings in the context of the Yugoslav experience. Then we go on to discuss the multiplicity of objectives pursued by the Yugoslav firms and the constraints to which they are subject.

I. Theories of the Labour-Managed Firm

The theories of the labour-managed firm have been formulated in a variety of ways since 1956. Despite their large numbers, most of the models can be regarded as the variations and extensions of Ward's model, formulated in 1956.¹ While Ward's original contribution dealt with a single variable input/single output firm assumed to be operating under highly simplistic conditions, the latter theories have extended his analysis to more complex situations and have relaxed the restrictive assumptions. In this section we shall choose two major variants of the theory of labour-managed firms for review and will refer to the rest only in relation to specific issues. The choice of the two variants has been based on the nature of the objective functions used. To the first category belong all theories which in one way or other attempt to maximize the income per head of the enterprise work force. While the second variant includes those theories which, as in neoclassical theory, take the maximization of profit to be the objective of the firm.

A. Income per Head Maximizing Model

Most of the work on the theory of the labour-managed firm (those of Ward, Vanek and Meade) deals with firms that decide on the quantities on inputs and output with the express aim of maximizing the per capita

1 Some of the most important works in this regard are: B. Ward (1956), (1958) and (1967); E. Domar (1966), Jaroslav Vanek (1969), (1970), (1971), (1973) and (1975); B. Horvat (1964) and (1967); D. Milenkovich (1971); J. E. Meade (1972) and (1974); A. B. Atkinson (1973); S. C. Maurice and C. E. Ferguson (1972); J. R. Shackleton (1976); and S. Pejovich (1976).

income of their work force. The models are usually based on the following assumptions:¹

i Ownership - The assets of each enterprise are held in trust or in the possession of its employees (but not as their property) who collectively draw benefits from their utilization. This partnership right or the right of 'usufruct', to use Vanek's expression, is non-transferable and is dissolved when a worker leaves the enterprise.²

ii Labour-Management - The employees of each enterprise, in addition to their ordinary obligations as workers, participate in the management of the enterprise. As managers, employees decide on price, output, technology and investment. All members of the enterprise have an equal voice in the managerial decision making process which is based on the democratic rule of the majority.

iii The Residual Nature of Labour Remuneration - As a result of the particular ownership structure and the relegation of managerial/entrepreneurial functions to the work force, labour becomes the 'hiring factor' - to use Meade's expression - and is remunerated residually.³ The employees of a labour-managed firm do not receive wages or salaries, but share the residual earnings of the firm (revenue less costs of production) on an equitable basis, i.e., equal shares for equal work.⁴

iv Competition - The markets for non-labour inputs as well as for products are competitive and in the case of labour there is full freedom of employment.

1 B. Ward (1958), pp. 566-571; (1967), p. 183; and Jaroslav Vanek (1970), pp. 1-2.

2 Ward assumed that the means of production belonged to the State which would in turn charge the enterprises a fixed tax (or interest) for their use.

3 J. E. Meade (1972), p. 416.

4 Ward introduced a contractual wage, guaranteed by the State, that employees would receive as part of their earnings irrespective of the performance of their enterprise. The total income of each worker would then be equal to the sum of his contractual wage and per capita profit. In Domar's analysis of the Soviet collective farm, the notion of contractual wage was absent as in Vanek's formulation. E. Domar (1966), p. 736.

v Labour Supply - Each enterprise faces a completely elastic labour supply curve.

vi Objectives - The operation of the firm is assumed to be subordinated to the "material self-interests"¹ of the employees which are best served by the maximization of income per worker. This maximization is supposed to represent the "natural and rational concern of the participants"² in the partnership.

In the simple one output/one variable input case, the model in formal terms is as follows. Assuming a well behaved production function of the type:

$$y = f(x) \quad (y' > 0 \quad \text{and} \quad y'' < 0)$$

where x represents labour and y the quantity of output in physical terms. The net income per worker w will be:

$$w = \frac{p \cdot f(x) - C}{x} \quad (1)$$

with p and C representing the product price and the total non-labour costs respectively. The level of employment and thus the level of output is determined by maximizing w , i.e.,

$$\frac{dw}{dx} = \frac{p \cdot f'(x) \cdot x - [p \cdot f(x) - C]}{x^2} = 0 \quad (2)$$

$$p f'(x) \cdot x - [p f(x) - C] = 0$$

$$p f'(x) = \frac{p f(x) - C}{x}$$

Substitution from Equation (1) will result in:

$$w = p f'(x) \quad (3)$$

Equation (3) means (as one knows from the simple neoclassical theory of the firm) that the employment of labour should continue up to the point where its remuneration equals the value of its marginal product, i.e., the marginal principle that guides the profit maximizing firm under

1 B. Ward (1958), p. 566.

2 Jaroslav Vanek (1970), p. 2.

capitalism is also applicable to the labour-managed firm.

It must be pointed out here that the income per head maximization procedure is not completely new in economic literature. It bears a striking resemblance to the capitalist firm, with capital as its variable input, which attempts to maximize the rate of profit (and not total profit).

The maximization procedure is represented graphically in Figure 1, below. Here, using Equation (1), we have drawn two curves of $r = \frac{pf(x)}{x}$

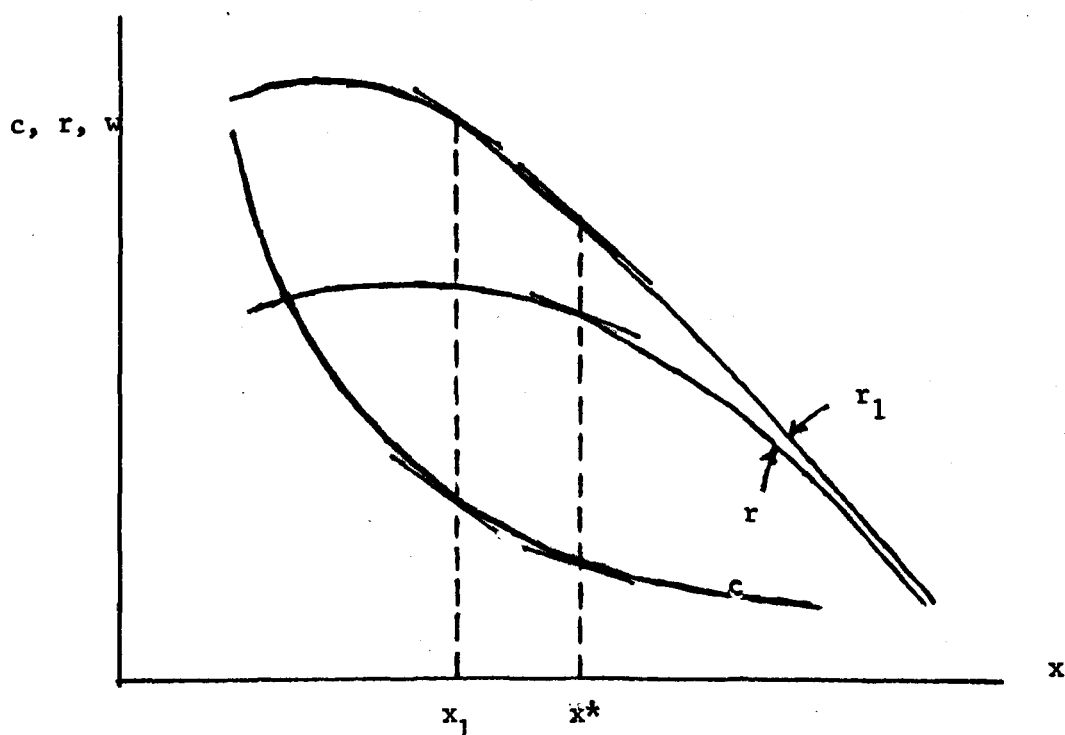


Figure 1 - Income per Head Maximization Model

and $c = \frac{C}{x}$ representing the per head revenue and per head costs respectively. (Curve r_1 should be ignored for the moment.) The vertical distance between the two curves shows the net income per head of the work force.

Maximization of income per worker would lead to the employment of x^* number of workers at which level the r and c curves have equal slopes, in other words, when the marginal per-worker revenue and marginal

per worker costs are equal.

What distinguishes this model from that of the competitive firm is its comparative static properties, which also create some of the difficulties in the model and point to its shortcomings. For example a rise in the price of output as a result of, say, an increase in market demand should, under competitive conditions, lead to an increase in output and thus employment. The situation in this model, however, is different. According to equation (2), $p[f(x) - x \cdot f'(x)] = C$, and, considering that $f(x)$ is concave by assumption, the term in brackets is an increasing function of x . An increase in p will, therefore, require a fall in the term in brackets, meaning a fall in the level of x , and consequently in the level of y .

Graphically, a change in the price level results in an upward movement of the revenue per man curve r to a new position like r_1 (see Figure 1). The old equilibrium will not prevail any longer as the slope of r_1 at x^* is greater than that of r and that of c . The new equilibrium will be reached at a point somewhere to the left of x^* (a point like x_1). Thus, an increase in the output price leads to a reduction in the level of employment and output. It also implies a downward sloping supply curve for the firm and thus instability in the market. A downward sloping supply curve is somewhat unusual in economic theory, specially in the case of commodities. The backward bending labour supply curve which arises in situations where the supply of labour is affected by income/leisure choice is the most widely known case in literature.

Similarly unorthodox results are obtained if parameters affecting the cost per worker, such as the rate of interest, are altered. A rise in the fixed costs leads to an upward shift of the c curve (in Figure 1) and a new equilibrium will be attained somewhere to the right of x^* . In other words, an increase in the fixed costs will lead

to an increase in output and employment. The addition of new features such as multiple inputs, imperfect market conditions, different labour supply condition, etc., to this model can make it more general, realistic and complex. It is doubtful, however, if the problem of instability of the market can be satisfactorily overcome.

In the two variable input case, the equilibrium conditions consistent with income per head maximization would be:

$$\begin{aligned} y &= f(x_1, x_2) & (x_1 \text{ is labour and } x_2 \text{ non-labour input}) \\ C &= p_2 x_2 + R & (C \text{ is the total cost and } R \text{ the fixed cost}) \\ w &= \frac{pf(x_1, x_2) - p_2 x_2 - R}{x_1} & (w \text{ is the income per head of work force}) \end{aligned}$$

$$\frac{dw}{dx_1} = \frac{pf_1 \cdot x_1 - (py - p_2 x_2 - R)}{x_1^2} = 0, \text{ and } pf_1 = \frac{py - p_2 x_2 - R}{x_1} = w \quad (4)$$

$$\frac{dw}{dx_2} = \frac{(pf_2 - p_2)x_1}{x_1^2} = 0 \text{ and } pf_2 = p_2 \quad (5)$$

The maximization conditions are very similar to those of the competitive firm. The remuneration of each factor will, in the optimum situation, be equal to the value of its marginal physical product (Equations 4 and 5). However, the model still remains unstable. For instance, an increase in the product price will lead, most probably, to a fall in output and employment. This can be demonstrated by differentiating the income per head $w = (p \cdot y - C)/x_1$ with respect to p , arriving at:

$$dw = (y/x_1)dp \text{ or } = AP dp \quad (6)$$

with AP representing the average product of labour. From the equilibrium condition (Equation 4) we have $w = p \cdot f_1$ whose total differential would be:

$$dw = f_1 \cdot dp + p \cdot f_{11} dx_1 \quad (7)$$

Using equations 6 and 7, we arrive at the following relation:

$$\frac{dx_1}{dp} = \frac{AP - f_1}{pf_{11}} \quad (8)$$

The effect of a price change on the level of employment (x_1) will basically depend on the relation between AP and f_1 and the sign of f_{11} . Using a conventional diagram showing the average and marginal product curves, Figure 2, we can see that three possibilities may arise.

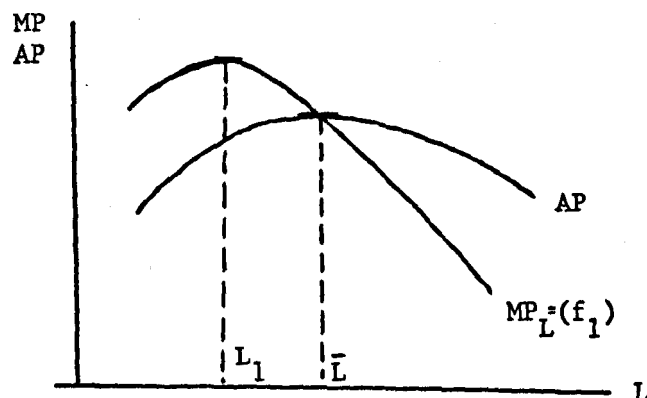


Figure 2

- i Up to the employment level of L_1 , $AP < f_1$ and $f_{11} > 0$, therefore $\frac{dx_1}{dp}$ of equation (8) will be negative.
- ii After the employment level of \bar{L} , $AP > f_1$ and $f_{11} < 0$, leading again to $\frac{dx_1}{dp} < 0$.
- iii Between L_1 and \bar{L} , however, $AP < f_1$ and $f_{11} < 0$, resulting in $\frac{dx_1}{dp} > 0$.

The situation is not always straight forward and the firm can easily run into an area where dx_1/dp is negative and a downward sloping supply curve prevails. In fact, as Maurice and Ferguson argue, within the economically meaningful range of operation (i.e., in the area where $AP > f_1$), the supply curve will always be downward sloping.¹

Domar attempted to solve the instability problem by introducing an upward sloping labour supply function into the model. Although this is

1 S. Maurice and C. E. Ferguson (1972), p. 23. Jaroslav Vanek, in his formulation of two (and three) variable inputs models of the labour-managed firm, has essentially accepted the rather unorthodox behaviour of the income per head maximizing firms. For firms producing more than one product, he maintains that an increase in the price of one good would create substitution effects that wholly or partially compensate the fall in output of the single product case. As a result, the multi-product labour managed firm will always suffer from a low supply elasticity weakness. Jaroslav Vanek (1970), p. 46 and pp. 55-56.

an interesting theoretical innovation which actually eliminates the problem of downward sloping commodity supply curve, it has very limited practical value in the analysis of the Yugoslav firms.

This situation is shown in Figure 3. The w curve is the vertical difference between the r and c curves of Figure 1. If the labour supply curve S is introduced as a constraint, then the maximization of income per head will no longer lead to employment of x^* , but to x_1 , where labour supply conditions are satisfied.

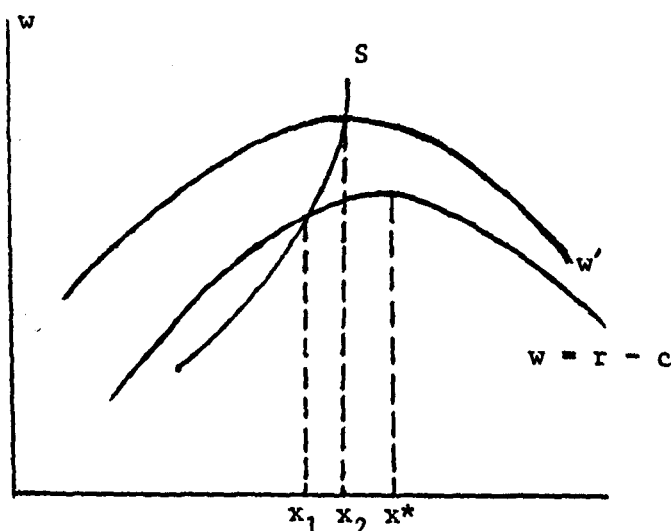


Figure 3

Here, an increase in the product price will lead to an upward shift of the w curve to w' resulting in an increase in the employment level from x_1 to x_2 . This situation is more like a monopsony (with little mobility and little addition to the labour force) than a normal competitive market. This assumption was also picked up by Horvat, though his model was quite different from income per head maximization.¹ Under ordinary conditions, an enterprise in Yugoslavia - or any other market economy - hardly faces this type of supply curve for the great majority of labour categories. In fact most Yugoslav enterprises operate in an environment characterized by excess supply of labour (high unemployment) and thus large scale migration to Western Europe. This together with the absence of monopsonist trade union organizations, implies that the Yugoslav enterprises are very unlikely to face an upward sloping supply curve.

Before discussing the shortcomings of the income per head maximizing model, we shall discuss the second major variant of the theories of the

1 B. Horvat (1967), part 3.

labour-managed firm.

B. The Profit Maximizing Model

There are several versions of this variant of the theory of the labour-managed firm, though Horvat's formulation is more comprehensive than others.¹ The main assumptions of this model as formulated by Horvat are:²

i 'Kolektiv' Entrepreneurship - The community of the enterprise employees, as a collective, perform the entrepreneurial functions (as formulated by Schumpeter and Knight) and receive part of the profit as return. (This is on a par with the income sharing assumption of the previous model.)

ii Employment Criteria - The labourers will constantly look to alternative occupations and move to better paid jobs as the opportunity arises. The enterprises will, in turn, employ the last worker only if his contribution to output (marginal product) is greater (or at least equal) than his total remuneration (wage plus profit share).

iii Efficiency - Decentralization of decision making and the operation of a market coupled with the incentive system guarantees the efficient operation of the firm according to neoclassical criteria.

These assumptions, with the exception of the last one, are similar to those underlying the previous model. What distinguishes Horvat's contribution is the introduction of a new behavioural characteristic for the labour-managed enterprise based on the actual practice of the Yugoslav firms. With almost complete autonomy over their income distribution system,³ Horvat maintained that, in practice, the enterprises

1 M. Todorović (1963); V. Rakić (1964); and B. Horvat (1964) and (1967).

2 B. Horvat (1964), chapter 3 specially pp. 114-121.

3 Since the early sixties, the decisions on the distribution of enterprise income (i.e., decisions about the division of revenue between personal income and enterprise funds) have been relegated to the enterprise management. The details will be discussed in Chapter Three.

do not pay their workers residually. The decision on labour remuneration is made in advance on the basis of estimates of relevant production data. These estimates are, of course, regularly reviewed and the earnings adjusted accordingly. The change in the level of earnings in each planning period is also planned and decided upon by the workers' council in advance. In this way, workers' incomes are not determined *ex-post* (after the production period is over) but *ex-ante*. Although a final adjustment may have to be made at the end of the period, this would only concern a small proportion of total incomes. Having fixed labour remuneration in advance, Horvat argued, the firms will employ labour up to the point where the marginal productivity in value terms equals the planned income.¹

As a result of this postulate the objective function of the firm will change drastically. Having made the decision on labour remuneration, these payments will be treated as part of the production costs and the objective of the enterprise would be to maximize the residual of net earnings over costs. This will make the operation of the Yugoslav firm quite similar to that of the neoclassical firm, or as Horvat put it, "if this behavioural rule is used in the analysis, the results are again the same as in the traditional theory of the firm."²

Although no single method of income distribution is used by all

1 B. Horvat (1967), part 4, specially p. 28 and (1971a), p. 105.

2 B. Horvat (1971a), p. 105. Of the other versions of profit-maximizing model two are worth noting. Discussion of factor usage led Rakić to the conclusion that the labour-managed Yugoslav firm will "use the resources at its disposal in the same way as any individual businessman who...wishes to achieve with available capital the best possible results in business." This is because under the Yugoslav conditions, "the laws of commodity production and the market mechanism act in the same way as in an economy based on private ownership of the means of production." See V. Rakić (1964), p. 130. Mijalko Todorović, one of the leading economist-politician of Yugoslavia, was even more explicit when he wrote that in the worker-managed firm "it is also in the interest of the workers that profit be at a maximum." See M. Todorović (1963), p. 46.

Yugoslav enterprises, the legislations in the early seventies regarding social agreement on incomes give further credence to Horvat's behavioural postulate. These arrangements are designed to ensure that the distribution of net earnings of the firms are agreed upon, in advance, by the work force of each enterprise as well as by various producers' associations and the republican governments.¹

The importance of the profit maximizing variant of the theories of the labour-managed firm is that it explicitly allows for internal financing of investment and makes the formulation of an investment theory and policy possible. While under the income per head maximizing variant it is possible to plough back some of the present earnings for the purpose of increasing future consumption, the amount of the plough back and the procedure for investment decision making have not been satisfactorily worked out. As we shall explain shortly, the assumed structure of property rights in the labour-managed firm and the contention that workers are principally interested in income per head makes it difficult to account for investment in the theory of labour-managed firms. Though in Horvat's model the nature of ownership is the same as that in the Ward-Vanek model, the assumption that incomes are determined *ex-ante* implies that income over and above costs can be used for investment.² In effect, the argument is that the determination of income *ex-ante* is tantamount to a restriction that the surplus over and above costs (including wages and salaries) cannot be distributed among the work force.

The two variants of the theory of the labour-managed firm discussed above suffer from two basic kinds of shortcoming. The first concerns the formulation of the theory itself while the second relates to the application of these theories to the Yugoslav firms. In the following

1 See E. Furubotn and S. Pejovich (1973), pp. 289-292. More on income distribution methods in next chapter.

2 For the treatment of the theory of the firm from a 'property rights' point of view, see E. Furubotn and S. Pejovich (1972).

section we shall discuss these shortcomings briefly.

C. Shortcomings of the Theory of the Labour-Managed Firm

The shortcomings of the theory of the labour-managed firm discussed in this section are applicable to almost all variants of this theory although some of them are more pertinent to a specific model than others. However, we shall try to content ourselves principally with the defects of the two variants mentioned in the previous sections of this chapter. Briefly, the theories of the labour-managed firm fail to take account of the following.

1. Investment Policy

By and large it is fair to say that the theory of labour-managed firms has either neglected investment or has only taken account of investment in an ad-hoc way. This weakness is due to the way in which these firms are conceptualized.¹ Although in the simple model where income per head is maximized, all the profit of the enterprise is distributed to its work force and therefore there is no explicit mention of investment out of profit, the more generalized versions of this model have allowed for part of the profits to be invested in the firm. It is natural to assume that the workers of a labour-managed firm (like other people) would want to distribute their expenditure over time so as to sustain the accustomed standard of living. This, in usual circumstances, would require them to save a portion of their present earnings, which in turn can take a variety of forms. They may keep their savings in the form of financial assets (bank deposits, giro accounts, government bonds, and few enterprise bonds); or alternatively

1 A point of caution must be added here. The study of investment problems can be only partial if, as in this section, it consists of only those aspects that are related to worker-managers and enterprise behaviour. For a complete study of investment problem the structure of the economy as a whole and the characteristics of its investment function must also be taken into account. In this section, of course, we are only concentrating on the former aspect.

they may plough back some of their savings into their own enterprise. But the property rights structure of the labour-managed firm is a barrier against plough back investment (internally financed investment). The important point is that the partnership rights of the members of a firm (which entitles them to a share of profits) are not transferable and last for the duration of employment only. This implies that the workers of such firms, on the whole, cannot be expected to be very enthusiastic about allocating a part of enterprise earnings to investment. For they may not stay long enough in the enterprise to reap the returns from the foregone earnings.¹ To explain this differently, the planning horizon for investment in financial assets is longer than that for internal investment. As a result, one would expect workers to prefer financial assets to investing in their own enterprise. It may, however, be argued that financial institutions would in turn lend to enterprises and thus, in the end, the result would be the same as if the employees had invested in their respective enterprises. In this way they will be assured of an income stream without having had to commit themselves to internal investment.

Furthermore, even if we could assume a single rate of time preference for the majority of the influential personnel of an enterprise, there is still no guarantee that this rate would be the same in all enterprises and be in conformity with the society's time preference rate. For example, as Shackleton points out, a low growth for some enterprises can restrict the alternatives open to others and can also affect the size of the proceeds of the society that is spent on public goods and services.²

It should be pointed out here that even the second model of the labour-managed firm, i.e., the profit maximizing model, shares this

1 *Ibid.*, specially pp. 1149-1156. Also see S. Pejovich (1969), pp. 194-5; R. A. Taylor (1974), p. 77.

2 J. R. Shackleton (1976), p. 55. For another version of this conflict, see E. Furubotn and S. Pejovich (1973), pp. 275 and 286. On problems associated with discount rates, see E. Neuberger and E. James (1973), p. 266

weakness. Although labour is not, in the main, remunerated residually and there is an explicit reference to the profits of the firm being used for investment, the determination of the actual amount of investment is not yet theoretically worked out. Considering that the workers' councils and management boards have extensive power in proposing and deciding on the distribution of net earnings of the enterprise, then there is nothing - at least conceptually - to stop them from *ex-ante* apportioning of a higher percentage of earnings to personal incomes.¹ The self-interest of the members of the collective and their entitlement to a share of profits (even if decided in advance) will subject them to the same rigidities in distribution of earnings that were discussed above.

2. Labour-Management and Debt Financing

Like most firms which cannot finance their investment expenditure solely by internal resources and have to rely on external financing, the labour managed firms, too, often require debt financing. The question of whether or not a firm can raise sufficient funds for its investment programme is closely bound up with the ability of its managers to satisfy the creditors' requirements. This brings us to the discussion of entrepreneurial abilities and functions in the labour-managed firms. Of the many functions of entrepreneurs expounded by Schumpeter, Knight and Arrow among others, is the provision of insurance against risk for owners of productive services involved in an economic activity. The entrepreneurs, Knight pointed out, "guarantee to those who furnish productive services a fixed remuneration" on an *ex-ante* basis.² As labour-managers to whom the entrepreneurial functions are relegated, the workers of a labour-managed firm are expected to offer this kind of insurance to those who provide the firm with productive services (i.e.,

1 The inadequacy of Horvat's analysis in determining the division of the net earnings is also pointed out by H. M. Wachtell (1973), p. 57.

2 F. Knight (1933), p. 271.

loan capital in the context of present discussion). On the other hand, the creditors who provide external financing for the firm can be expected to ask for a reasonable security or collateral against possible default. While a capitalist entrepreneur can use his own property (shares, bonds, etc.) as security, the worker-managers can only rely on their own expected future earnings as collateral for debts. The transferability and mobility of the former type of security makes it superior (of higher collateral value) to the latter type. The risk-taking ability of the worker-managers (owners of human capital) is therefore a major barrier to external financing of investment.¹

Taking into account the fact that the property rights structure associated with the labour managed firm is not very conducive to internally financed investment (as mentioned before), it is clear that an inherent tendency for debt financing must develop in these firms. But as was pointed out in the previous paragraph, the ability of worker-managers to obtain external financing is limited by their inability to provide sufficient insurance against risk for creditors. The dilemma can be resolved either by the direct intervention of the State or by a change in the myopic behaviour of the worker-managers, i.e., an increase in the size of plough back investment.² The final outcome would vary from one firm to another depending on the distribution of influence within the firm and its relationship to the local authority. The interesting point about this situation, as one might expect, is that if the worker-managers agree to participate in financing investment

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- 1 For a detailed discussion of the unsuitability of the worker-managers to undertake entrepreneurial risks, see S. Markowski (1974), Chapter 4.
 - 2 Realizing the restricted nature of the property rights over the benefits of plough back investment and, therefore, the attempts of the participants to reduce it to a minimum level, Jaroslav Vanek goes to the extreme by maintaining that a labour-managed firm will function better and more efficiently if there is no internal financing at all as this will create anomalies in distribution, allocation, risk bearing, entry, research and development, etc. External financing can come from banks and other financial institutions that will accept the saving deposits of the worker-managers and pay them interest. See Jaroslav Vanek (1973), pp. 140-146.

expenditures, their participation would be looked on as a kind of collateral by the creditors. Neuberger and James remarked that as the amount of internal resources allocated for investment (the equivalent of equity capital) increases so does the ability of the labour-managed firm to borrow on more favourable terms, and in addition the position of the workers of the firm in terms of security of employment strengthens.¹

3. Diversity of Organizations

As the labour managed firms cover a wide spectrum of organizations with diverse characteristics, generalizations regarding their behaviour, objective and problem areas are hazardous and must be treated with great caution. The labour-managed firm can exist in a peasant economy as well as in an industrial economy and there is no reason to expect a great deal of similarity between them. If, for example, the members of the former enterprise decide to consume all of their product, nobody will prevent them from doing so and, after all, the effect of such a decision on the whole economy will be very limited. On the contrary, if the workers of a giant industrial complex (which may employ tens of thousands of workers) embark on such a course of action, the effect could be disastrous, not only for workers of that complex who will find themselves unemployed very soon, but also for the economy of that particular region. Certainly the power of State intervention is reserved for such an unlikely event.

Questions relating to investment and growth become extremely important and complicated when large scale modern industrial enterprises develop. The investment decisions can no longer be made on the basis of the comparison of future returns to foregone present income by an

1 These two properties were respectively termed "leverage effect" and "employment security effect", by E. Neuberger and E. James (1973), p. 261. We should also mention that the criteria for credit worthiness used by financial institutions are very important for availability of external finance. In Yugoslavia, for instance, they are less rigid than those in capitalist economies.

individual worker and then summing up individual preferences to reach a collective compromise. Here is where Horvat's contribution seems to become relevant. At least for modern large scale firms, investment expenditure is financed out of the residual earnings of the firm after wages are fixed in advance. The theories of the labour-managed firm as formulated by Ward and Domar are more relevant to small scale enterprises, agricultural cooperatives and to the Soviet kolkhoz than to modern industrial firms.¹

The diversity of enterprises with respect to size, field of activity, the influence of various strata of the work force (more on the last factor later), conditions of product market, etc., has a direct bearing on the type of objective(s) that the firm pursues. The maximization of income per head may be acceptable for an agricultural cooperative, but is unsuitable to a large scale firm in modern industrial sector. If in explaining the behaviour of the labour-managed firm, the theory is to be improved then the enterprises and the type of economy in which they function must be divided into sub-groups (large, small, capital goods, consumer goods, oligopolies or competitive enterprises working under feudal, capitalist or socialist economic conditions) and each sub-group must be studied separately. In this way the factors affecting the situation in each particular industry can be identified.

4. Application of the Models to Yugoslavia

Apart from the above problems, the second main type of shortcoming of the theories of the labour-managed firm arises from their application to the Yugoslav enterprises. The difficulties involved in the explanation of the behaviour of the Yugoslav firms stem from the simplistic analysis offered within the framework of the existing theories and their generalization to all Yugoslav firms. The question of diversity of organizations discussed above is even more significant in the

1. A. B. Atkinson (1973), p. 375 and S. Markowski (1974), p. 156.

Yugoslav context. The great diversity between firms of different size, specialization, technical level, field of activity, distribution of power between various constituent strata and location makes the application of any single - and simple - theory very doubtful. In addition to the lack of attention to diversity, the theories face the following problems:

a. Specification of the Labour Market. The theories of the labour-managed firm, in their many variants, have generally paid little attention to specific characteristics of the Yugoslav labour market. The properties of the labour market assumed in the above theories, are very similar to those of the labour markets of the competitive model, namely: freedom of choice in occupation; mobility; equality of the marginal revenue product with labour remuneration; horizontal labour supply curve facing each firm; etc. In the Yugoslav conditions, however, the labour market has certain particularities which must be explicitly recognized if the theory is to have a greater explanatory power.

Compared to a competitive market economy, the mobility of workers in Yugoslavia is much more restricted. Firstly, because a newly employed worker will benefit from the fruits of past accumulation in the enterprise without himself having suffered for it at all, there will develop a tendency to resist extra hiring unless it is absolutely necessary and clearly beneficial to the existing work force. This fact was recognized long ago by Todorović when he pointed out that the workers would want the "working collective to number as few as possible, because ... as 'co-owners', he must share the joint product with them."¹

1 M. Todorović (1963), p. 46. Incidentally, this characteristic operates in the opposite direction as well, i.e., within the Yugoslav firm there exists a tendency to resist firing and lay off. This is partly due to the solidarity of the workers (as admitted by Todorović, *Ibid.*, p. 51) and partly due to the fact that it is in the interests of all decision makers to postpone lay offs as long as possible as once firing is accepted as a normal recourse, they themselves would lose their job security as well.

One of the consequences of this pattern of behaviour is that an increase in the aggregate demand would not directly lead to the same increase in employment as it would in a capitalist economy.

Secondly, since the workers of each firm enjoy certain non-pecuniary benefits such as the benefits of past accumulation in collective consumption (housing, holiday resorts, etc.), there are further disincentives to their changing jobs.

Similarly, the non-transferability of partnership rights means that the work force of a Yugoslav firm is not in the position of members of a cooperative, i.e., able to sell their shares upon leaving the firm. Rather, they are beneficiaries of the enterprise as long as they stay with it. The restricted nature of property rights will affect their mobility in the same way as it affects their attitude towards investment.¹ As long as there is some degree of internal financing of investment expenditure, the present work force will have a vested interest in remaining in the enterprise. Only the promise of a higher income stream over the entire planning period will induce them to change jobs.²

b. The Instability of the Model.³ A decrease in output and employment as a result of a rise in the product price, though conceptually possible, cannot be accepted as a real possibility when the Yugoslav experience is considered. As Horvat put it, only an econometric investigation could confirm whether or not this has occurred in Yugoslavia and, to this date, no such evidence has been produced by any of the proponents of the theories of the labour-managed firm.⁴

To put this point in a slightly different form, the Yugoslav experience cannot be explained satisfactorily by using the income per

1 The possibility of windfall gains or losses for the workers entering or leaving the labour-managed enterprise also affects the mobility by accentuating the tendencies to resist new hiring as well as firing. See R. A. Taylor (1974), p. 77.

2 E. Furubotn and S. Pejovich (1973), p. 285.

3 Obviously, this shortcoming applies only to the first variant of the model.

4 Cited in Jan Vanek (1972), p. 190.

head maximizing version of the theory. If the real world enterprises were to behave in accordance with the Ward-Vanek model, we would have had to expect that a general rise in the level of demand would lead to a process of "self-mutilation" (to use Vanek's expression¹) in working collectives, ultimately resulting in lower levels of employment, income, aggregate demand, and possibly a fall in prices. In other words, any attempt to solve such economic problems as demand deficiency or unemployment would be self-defeating.

This brings us to an important macroeconomic implication of the income per head maximizing model. An increase in the government expenditure, aimed at reducing unemployment, will lead to a general increase in aggregate demand and in all probability a price rise. But price rise, according to this model, results in a fall in output and employment.²

One may think that in the event of a fall in output and employment, the situation would be ripe for the entry of new firms to compensate for such a fall. For this to happen, the economy must be organized in such a way that the entry of new firms is relatively simple. In fact, neither in a hypothetical labour-managed economy (Ward-Vanek) nor in Yugoslavia, is entry of new firms easy. A firm cannot be started by a number of unemployed persons just because there is an unsatisfied demand for the product they intend to produce. The ability of such a group to raise the initial capital is extremely limited since the only security they can provide is their human capital which, as mentioned before, cannot be regarded as a sufficient collateral.³ As far as Yugoslavia is

1 Jaroslav Vanek (1970), p. 385. Despite admitting to this weakness, Vanek went on to maintain that an economy based on labour-managed firms is superior to other forms of organization from the points of view of allocation and distribution. *Ibid.*, p. 403 and (1971), p. 161.

2 The "stickiness" of the labour market becomes relevant here. Although we should expect a labour-managed firm to reduce employment (as a result of price rise), the inefficiency of the labour market reflected in unwillingness to lay off workers, actually becomes a virtue from a social point of view.

3 It should be pointed out that it is possible for a group of professionals (doctors, lawyers, accountants, etc.) to start a new firm and raise sufficient capital on the basis of their "human capital". The situation is quite different for a group of workers, most of whom are unskilled or

concerned, there is ample evidence that the authorities have never been keen on promotion of large scale new entries even in the fields dominated by few oligopolies.¹

c. The Hierarchical Nature of the Enterprise. Explicit in the theory of the labour-managed firm is the assumption that all employees are equal with each other and there exists a unanimity of interest throughout the enterprise. This implies that each member is given equal voice in management activities including direct decision making on major issues.² This assumption simply overlooks the fundamental problems of inter-enterprise conflicts that have developed in the Yugoslav enterprises. In Chapter One, we discussed the hierarchical nature of the organization of enterprises and referred to the wide divergence in the influence, participation and specially in the interests of various strata of the work force. The blue collar and less skilled workers, for example, are mainly concerned with job security and higher remuneration whereas the executive personnel are more interested in the rapid growth of their enterprise. Under these circumstances, it is incorrect to maintain that all labour-managed enterprises will follow a similar maximand (income per head or profit). The objective function pursued by each firm depends on the relative strength of the different strata of employees in that particular firm. In Chapter Three we shall explain how, after three decades of change and reforms, the Yugoslav enterprises have not yet been able to develop a unique system of distribution of enterprise income between wage fund and enterprise funds. The absence of this unique system in fact reflects the absence of a single objective

1 For example see S. Estrin (1978), pp. 15-17 and J. Dirlam (1968), pp. 3764-73.

2 Jaroslav Vanek (1970), p. 1. This situation may exist only in the advanced stages of development of a socialist economy where division of labour has developed to a stage in which the difference between manual and mental labour and that between administrative and performance tasks have been in the main eliminated. It also requires the costless availability, to every member of the work force, of all information necessary for efficient decision making.

pursued by all firms.

Having discussed the shortcomings of the theory of the labour-managed firm, particularly where its application to Yugoslavia is concerned, we can see that the explanatory power of the theory is extremely limited. The models discussed here are, in the main, the simplistic extension of text-book models which, at best, as Marris has pointed out, "represent a gross simplification of business behaviour."¹ The assumption of a unique objective function or a universal maximand for the Yugoslav enterprise leaves the theory of the labour-managed firm open to the same objections and criticisms that have beset the traditional theory of the firm and its application to modern corporations.² Taking into account the hierarchical nature of the Yugoslav enterprises and the lop-sided distribution of power in favour of the technical/managerial group, we need to extend the theory into a new arena where the motivations of the management and their limitations are explicitly taken into consideration. What is needed is to shift to those explanations that are based on an overt assumption of managerial motivation. In particular the importance of growth as a major variable in the management's preference function must be realized. As Marris has pointed out, the explanation of the behaviour of the modern firms must take into account the assumption that "men who control productive assets which they do not own are likely to find a personal satisfaction in causing the assets to grow."³

In recent years, of course, a great deal of attention has been paid to the analysis of the behaviour of modern corporations with the bulk of the works falling outside the framework of the traditional theory of the firm and the so-called 'constrained maximization paradigm' (to use Devine's phrase⁴). Behavioural and managerial schools, in particular,

1 R. Marris (1961), p. 144.

2 P. J. Devine, et al. (1974), pp. 113-117.

3 R. Marris (1961), p. 145.

4 P. J. Devine, et al. (1974), p. 118.

have studied extensively such areas as objectives, growth, security, effects of the organizational structure on performance, and the constraints within which the corporation has to function. The study of the actual behaviour of the Yugoslav enterprises, however, has hardly progressed beyond the simplistic level. In the next section, therefore, we shall attempt to discuss some of the elements which have to be incorporated in the analysis of the behaviour of the Yugoslav firm in order that a more realistic set of objectives can be formulated and the factors limiting the pursuit of these objectives can be identified.

II. The Objectives of the Yugoslav Firms and Some of their Constraints

The shortcomings arising from the application of theories of the labour-managed firm to the Yugoslav conditions, and the inability of these theories to explain and predict the behaviour of the Yugoslav enterprises, essentially stem from the use of the traditional theory of the firm. Like the firm in traditional theory, the labour-managed enterprise has been assumed to be operating in a relatively competitive situation, usually producing one output, attempting to maximize some objective function (profit or income per head), and expanding or contracting the output level until it reaches an 'optimum' size. While for the capitalist firm, and particularly the modern corporation, these shortcomings have been tackled to a certain extent in the past two decades, no major inroad has been made for the labour-managed firm. The recent works have made it possible to leave the simplistic framework and treat the modern firms as dynamic organisms with certain behavioural patterns and certain limitations.¹ These works have basically established that:

- i The neoclassical theory has ignored both the system of motivation

1 For example E. Penrose (1959); W. J. Baumol (1959) and (1962); R. Marris (1964); and J. H. Williamson (1966).

of the modern corporation executives and their objectives (economic, social and even psychological) by placing the main emphasis on profit maximization.

ii The corporation is engaged in production of many commodities and, as such, its behaviour cannot be explained by the use of single output models that will, among other things, face demand limitation at some point. The modern corporations will easily switch to the production of new commodities when they begin to feel the restrictions imposed on them by demand limitation.

iii The notion of 'optimum' size becomes largely irrelevant for modern corporations. This notion is based on such assumptions as: the limited nature of the output market, the treatment of management as a fixed factor and the existence of diseconomies of scale leading to a U-shaped long run average cost curve. Production of new products (diversification) can over-ride the limitations imposed by demand while empirical evidence has failed to provide unquestionable support for the U-shaped average cost curve.

iv Related to point (iii) above, the standard theory of the firm cannot explain how some corporations become giant ones. Usually growth is seen as the movement of firms towards their 'optimum' size and when this notion loses its significance, the process of growth can continue almost indefinitely. Obviously, there are restrictions that prevent or slow down the permanent growth of firms, but even some of these restrictions (e.g., managerial abilities) can be partially eased or removed in the long run.

v Of all considerations, growth has been suggested to be the most important element entering the preference function of the corporate executives. The executives are themselves salaried employees of the firm with none or a very insignificant share in the ownership. They are not judged by their ability to maximize profit, reach and maintain

an optimum size for the firm,¹ but by their ability to promote organizational growth. Economic factors such as higher earnings and security of future earnings; social factors such as the prestige and status related to being successful in business; personal factors such as the ability to exercise control and power over a large and ever expanding organization; and possibly other considerations could all contribute to this growth-biased behaviour.² Even the dividend policy of the corporation is overshadowed by this principle, i.e., instead of allowing the shareholders to benefit from the fruits of the corporation's success, the dividends are reduced to the minimum acceptable level so that resources at the disposal of the executives, for expansion, are kept as large as possible.³

Despite these developments in the realm of the theory of firm, the theory of the labour-managed firm has not made any substantial improvement in nearly two and half decades since Ward's Illyrian firm was formulated in 1956. In order to analyze the behaviour of the Yugoslav firm, one has to leave the realm of the neoclassical firm behind and employ new tools such as those employed in the above works on the theory of modern corporations. Such analysis must start by discarding the notion of a single universal maximand and the notion that all firms follow the same objective. This should be done for no other reason than the absence of any empirical evidence for maximizing behaviour in a particular firm.⁴

1 As Baumol points out, this "will doubtless be abhorrent to the captains of industry, whose main concern is surely not at what size their enterprise should finally settle down but rather, how rapidly to grow". W. J. Baumol (1962), p. 1078.

2 See also R. A. Gordon (1945), specially pp. 305-306.

3 As Quinton points out, in a growth situation, the "payouts, under an ideal dividend policy ... should exceed the minimum amount necessary to maintain the market position and integrity of existing debt and equity issues and issues contemplated in the near future." H. Quinton (1956), p. 29.

4 "Never have we met ... anyone in Yugoslavia who - as may often be encountered elsewhere - could spell out in one word the object of his enterprise's pursuit, be it profit, plan or even income or bulk of earnings. Consciously or not, every one sees the enterprise as pursuing a large number of objectives of all kinds." Jan Vanek (1972), p. 171. See also D. Milenkovitch (1971), pp. 210-211.

Also, because of the wide diversity that exists between different firms, and the theoretical models have tended to shy away from its implications, each Yugoslav enterprise, depending on its concrete conditions, is pursuing a set of objectives, sometimes even contradictory, that cannot possibly be reduced to profits, income or sales.

In discussing the behaviour of the Yugoslav firms, three different sets of considerations must be analysed. Firstly, there is the multiplicity of objectives deemed important by some or all members of the collectives. Secondly, there is the particular environment within which these enterprises operate and which influences their objectives. Thirdly, the Yugoslav firms are subject to certain macro and micro-economic restrictions which have a direct bearing on their objectives and without which the analysis of the behaviour of enterprises will at best be partial. These three sets of considerations will be the subject of the remainder of this chapter.

A. The Multiplicity of Objectives

The management team of a Yugoslav enterprise must pay attention not only to the present income of its work force but also to many other variables since the long term position of the enterprise and its work force are directly influenced by these variables. Broadly speaking, the following points must be taken into account:

i. Workers' income and working conditions. Most, if not all, members of the collective expect to receive as high an income as possible at the end of the month. They are particularly concerned about the competitiveness of their pay scale with that of workers in similar firms. The workers will also expect their working conditions to improve in a systematic way over time. This objective can include elements such as reduction in working hours and work intensity, and improvements in the conditions of the labour process.

ii. Income and employment security. The members of a labour-managed firm, particularly the more far-sighted ones, will look for some degree of security in the future. This security can be assured so long as the firm is expanding at a reasonable rate, meaning that the workers have to forego a part of their present earnings in favour of investment. The distribution of earnings over time (which results from the combination of objectives i and ii) is affected by factors among which the age, education, expected duration of employment, possibility of alternative employment, possibility of technological redundancy, etc., may be mentioned. In any case these two objectives cannot be pursued with equal intensity as there is a trade off between them. Higher income at present would mean lower earnings in future and greater uncertainty about the future.

iii. Social considerations outside the enterprise. In addition to purely personal objectives, some of the members of the collective, particularly those in responsible positions, can be expected to want to pursue aims which are more pertinent to local or regional needs. These may include areas such as local employment, provision of resources for some public needs such as health and education. It should be noted that this objective is clearly contradictory to the first and second objectives mentioned above.

As we pointed out in Chapter One, the Yugoslav enterprises are composed of different strata of the work force with sharply different preference schedules and different degrees of influence over the decision making process. Each of these strata would attempt to influence the management organs to take up not only the general objectives of the enterprise but also subordinate them to the particular goals of that strata. If the more skilled and educated section of the enterprise are dominant, we should expect the dominance of growth and modernization objectives while if the older and less qualified group are strong, then

we should witness greater attention paid to the level of present incomes at the expense of future security. In addition, there are external forces which may bid for still different aims. If the local government authorities have preserved some influence, then they may want to pursue policies such as the expansion of employment. If another enterprise has participated in the setting up of the firm in question and has thus obtained some say in its affairs, then it may also want to influence its objectives in a particular way.

Also, as indicated in Chapter One, in most of the Yugoslav enterprises - certainly in the larger and more modern ones in the industrial sector - the technical/managerial strata of the work force wields the decisive power in the decision making process. We explained that subject to providing the less skilled and less qualified strata with an acceptable wage level and working conditions, the technical/managerial group enjoys great latitude in decision making. Through this latitude, they can subordinate the objectives of the enterprise to those of their own, or, impose their own wishes on the enterprise. As in the case of managers of capitalist corporations, one of the most important variables influencing the preference function of the Yugoslav managers is the rate of growth of their enterprise. The power of these managers, like their capitalist counterparts, stems from their right to take decisions that influence and control the enterprise affairs. The larger the enterprise, the wider their domain of decision making and control. Therefore, increase in the net worth of the enterprise, meaning expansion of the assets, would become a major objective. There is also the considerable social prestige accompanying successful managers and successful enterprises. Prospects of greater power and greater social influence in the community and prospects of promotion to higher posts wielding greater social prestige are always in the minds of decision makers. And the security that accompanies the members of a successful management strata

should not be overlooked. As a whole, Gordon's remarks regarding the motivation of the corporate executives: "the urge for power, the desire for prestige and the related impulse for emulation, ... (and) the desire for security"¹ are true of the Yugoslav managers as well.

It should be emphasized here that, as in the case of capitalist executives, the Yugoslav managers cannot pursue a policy of growth and expansion without coming across serious constraints and, to these, we shall turn shortly. For the moment we must look at the particular social and economic environment and the political considerations that influence enterprise objectives.

B. Environmental Factors

Since the implementation of the five-year plans in the Soviet Union, the international communist movement (particularly the Eastern European section) has been committed to the principle that building of socialism implies, and corresponds to, the development of the productive forces of the society.² According to this conception, the underdeveloped and backward nature of the productive forces is responsible for the problems and obstacles to the building of socialism. Development along the socialist path thus requires a high rate of capital accumulation and a fast rate of growth of the overall social product. The industrialization of the Soviet Union particularly was seen as evidence of the correctness of this view by other communist parties and many Marxist scholars. The Yugoslav leaders were no exception and despite their ideological dispute with the Soviet Union, they preserved their attitude towards economic growth and continued their policy of emphasizing rapid industrialization and encouraging fast economic growth. The government agencies, various chambers, associations of producers and particularly the LCY have continually encouraged their associates to adopt measures

1 R. A. Gordon (1945), p. 305.

2 A major exception to this view was put forward by the Chinese Communist Party during the Cultural Revolution. See C. Bettelheim (1976), Preface.

and policies conducive to growth. As the large majority of the influential personnel of Yugoslav enterprises are members of the League,¹ they ensure that the League's policies are carried out in their places of work. The result is the build up of a kind of social pressure with a relevant incentive/punishment mechanism in the background of enterprise policy making. There are, of course, good reasons why the LCY or other State institutions such as trade unions would prefer high rates of investment and growth. A high investment strategy would guarantee a stable and high level of employment which could be crucial for any 'socialist' government.

With the natural resistance of the work force of a labour-managed firm towards plough back investment, it is clear that the political factor is the most significant factor in explaining a sustained high rate of investment (25-30% of the social product). The experience of other Eastern European countries also testifies to the importance and decisiveness of the political factor in sustaining a high investment economy.

In addition to the political factor, the economic policies of the government, from the mid-fifties onward, have resulted in the creation of a low cost, low risk situation in which decisions on expansion can hardly go wrong and the enterprises are rarely and minimally penalized for their mistakes. Following Matthews, we shall characterise this situation as the existence of a "safety net".²

1 In 1966, the LCY members included about 59 per cent of the employees with college education and 5 per cent of the unskilled workers. B. Horvat (1969), p. 201.

2 Matthews employed this concept in dealing with the problems of the British economy. Essentially, this refers to a situation where various socio-economic forces are operating in a fashion which produces a high rate of return on any investment, and/or at the same time, the risk on investment is greatly reduced. Matthews argued that in post-war Britain, "the belief on the part of entrepreneurs that the government would not permit a slump has improved confidence - a safety net theory of the role of government, implying that although the acrobat has not actually fallen, his knowledge of the presence of the safety net has given him confidence and improved his performance." R. C. O. Matthews (1968), p. 562.

The existence of this safety net is the result of the combination of several factors outside the scope of enterprise jurisdiction which have direct bearing on the expansion policies and growth performance of the enterprise. Briefly, these factors include:

a. Market Structure - It is generally agreed that the markets for most industries in Yugoslavia are highly concentrated and oligopolistic. The industrial enterprises operate in a seller's market and do not find it difficult at all to sell whatever they have produced.¹ Furthermore, the oligopolistic nature of the markets coupled with various forms of import control helps the Yugoslav enterprises to establish themselves and consolidate their position without having to worry about competition. The market structure guarantees that the investment decisions of large enterprises, specially the capital goods industries, unless they were hopelessly unrealistic, would not go basically wrong.

b. The Cost of Borrowing - An important aspect of expansion decision is the financing of investment expenditure. The relevant factor, here, is the cost of borrowing. The consistently low rates of interest, even during inflationary periods, has encouraged the firms to borrow from external sources. Table 1, below, represents some of the interest rates in recent years and compares them with the changes in the retail prices.

Table 1 - Interest Rates and Inflation (1967-75)

Rates	1967	1969	1971	1975
Percentage rise in retail prices during the year	5.0	10.0	18.0	26.0
Interest rate on sight savings deposits	6.0	6.0	6.0	7.5
Interest rate on time savings deposits	7.0	7.5	7.5 up to 10	
Interest rate on bank credits	8.0	8.0	8.0	12-13

Sources: V. Dubey (1975), p. 328; OECD (1977), p. 23; and SGJ (1977), p. 305.

¹ J. Dirlam (1968), pp. 3764-65 and 3772-73; I. Lavrač (1964), p. 150; J. Kornai (1971), Chapter 19; and A. Nove (1973), p. 61.

A recent OECD report concluded that the real interest rate on borrowed funds is either very low or even negative. Table 1 clearly supports this assertion.¹

c. Absence of Take-Over Risk - Heavy reliance on external finance can subject the modern corporation to the danger of being taken over by other organizations. The debt-asset ratio is therefore a significant indicator of the financial strength of the firm in a market economy. But in the Yugoslav case, partnership rights are not transferable (restricted property rights) and consequently no market for trading in such rights exists. The managers do not, therefore, face the risk of take over and are not subject to indirect control by the stock exchange.

d. Limited Penalties for Mistakes. Another aspect of the safety net is that the consequences of going wrong and making mistakes are hardly serious. If a firm makes incorrect decisions leading to loss of revenue to such an extent that even the minimum wages of its workers cannot be paid, then it will receive aid from one of the many sources (socio-political communities, solidarity funds, reserve funds, banks, etc.) to make up for part or all of the loss. Inability to pay back the bank loans which, technically, should result in liquidation, is itself penalized by further interest charges. The "notorious laxity towards debtors", as Dirlam and Plummer put it, has resulted in the undertaking of very risky and peculiar endeavours such as using the piled up and unused inventories as collateral for obtaining loans to expand fixed assets.² This laxity in imposing sanctions against debtors failing to honour their commitments has also been regarded as the basic factor causing the illiquidity with which the economy has been beset in the past decade.³ Banks as well as other creditors are

1 OECD (1977), p. 20. This point has been argued by many authors. Professor Bajt, for example, maintains that the long run rate of interest for the whole economy may be as low as 2 per cent. See H. M. Wachtell (1973), p. 112.

2 J. Dirlam and J. Plummer (1973), pp. 48 and 183.

3 L. D. Tyson (1977), p. 287.

unwilling to press their claims against their customers to the point of initiating bankruptcy proceedings. Such leniency is generally due to the political pressure by various government agencies (particularly the communal level) to prevent closures and unemployment. Furthermore, even when some firms actually get into trouble, there exists various financial facilities such as republican or communal solidarity funds to save them.¹ Because bankruptcy is a drastic event in Yugoslavia, a World Bank report observed, "it invites rescue operation by patron State units and banks."² The result is that while many firms fail to cover their costs and obligations (including the personal income of their workers), usually very few go to liquidation. In the first 9 months of 1968, for example, 1715 enterprises (constituting 20 per cent of all firms in economic activities) did not cover their personal income fund as well as various interest charges. The firms going into liquidation, however, were less than 100 and the majority of them were artisans, small traders and agricultural supply cooperatives.³

Recognizing the existence of such a safety net and its influence on investment decision making, the federal government moved in recently and passed various laws effective from January 1973 to limit the operation of firms which have remained indebted for a long time. These measures, reported in a World Bank review, included cutting down on the personal incomes of workers in such enterprises and sanctioning laws designed to bring some order to procedures for supporting an enterprise

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- 1 Solidarity funds are formed by enterprises contributing a proportion of their investment expenditure (4 per cent presently). This fund provides financial aid to enterprises in grave difficulties in order to enable them to undertake major renovations. An interesting provision in the Yugoslav legislation is that in the unlikely case that legal proceedings against a debtor enterprise starts, the majority of creditors can decide to reduce their claim against the firm and such decision would be binding on all other creditors as well. Jan Vanek (1972), p. 266.
 - 2 V. Dubey (1975), p. 242.
 - 3 J. Dirlam and J. Plummer (1973), pp. 49-50; SGJ (1970), p. 67 and L. D. Tyson (1977), p. 288. According to another report, in the late sixties, some 10 per cent of all Yugoslav enterprises operated at a loss with rare cases of bankruptcy. I. Paj (1970), p. 88.

in financial difficulties.¹ How effective these measures will prove remains to be seen.

The environmental factors mentioned above (the safety net and the political factors) essentially reinforce the preferences and objectives most likely to be pursued by the technical/administrative strata of the enterprises. However, it should be emphasized that the Yugoslav managers cannot pursue their own preferences without facing various limitations and constraints. In the following section some of these constraints would be discussed.

C. Constraints on Enterprise Operation

Although it is correct to regard the bias towards growth as an in-built feature of the Yugoslav economy and enterprises, it should also be pointed out that there exist a variety of factors limiting the growth behaviour. These can be broadly classified as managerial, financial and distributive limitations.

1. Managerial Limitations

The managerial theories of the modern corporation have clearly pointed out the importance of the entrepreneurial factor in the production process. Many of them have even maintained that managerial constraint is the principal limit to the expansion of the firms. In her work on the theory of growth of the firm, Penrose argued that the the limitations to the growth of the firm such as those imposed by factor and product markets, uncertainty and risk, generally work through the managerial constraint. This is to say that if the managerial resources and abilities of a corporation expand and develop, the setting

1 V. Dubey (1975), pp. 242-243.

in of other limitations will be postponed.¹

Marris has also emphasized that the managerial constraint is the principle internal limit to the expansion of the corporations.²

Similarly, though many years ago, Heller argued that the technical and managerial abilities constituted a serious bottleneck to expansion and constrained the increase in investment in the post-war period.³

These considerations hold for the Yugoslav enterprises also. They operate under conditions of great scarcity of managerial resources, a situation even more serious than that discussed by the above authors in connection with the capitalist corporation. In Yugoslavia too, the leadership and control of the production units are in the hands of a 'managerial team' - to use Penrose's expression - consisting of the director and other members of the influential strata of the organs of management. The team has a limited capacity in performing various tasks of innovating, planning, controlling, coordinating, etc. In the final analysis the capacity of present members of the management team will limit the expansion of the enterprise. An expanding firm must of course obtain the necessary resources needed for expansion. Some of these resources (such as financial) can be hired on the market in a

1 E. Penrose (1959), pp. 38-40 and 43-64. In discussing the problem of limitations to expansion with selected corporate executives, she tried to find out their views on the ultimate limit. In a large number of cases, "businessmen agreed that managerial capacities set the limits to expansion. If I was told that expansion was not warranted in an existing line for a variety of reasons, and I asked why they did not go into new fields, I was almost invariably told, in effect, 'we are-slowly. We do not know enough to go outside our field fast. We can hire experts, but we have to know a bit about these things ourselves'." *Ibid.*, p. 61.

2 R. Marris (1964), pp. 114-118.

3 Heller remarked that: "One of the unforeseen - and most interesting - investment barriers encountered was the bottleneck in top engineering and management talents. In more than half of the companies studied, it was flatly stated that either (1) the postwar pace of capital expansion had been too fast for top management and engineering staff to handle efficiently and digest thoroughly ... or (2) the rate of capital expenditure had been, and still was being, held down to what the very scarce factor of 'brain' - engineering and managerial - could handle." W. Heller (1951), p. 102.

straight forward manner. But the managerial resources needed for the expansion programme of an enterprise cannot be easily hired from the 'entrepreneurial service' market. For one thing, top managers are highly immobile even under modern capitalism, let alone in Yugoslavia. Besides, even if proper candidates are found to fill the newly created posts as the result of expansion, they cannot be quickly shoved into the empty slots and expected to function on a par with the existing management personnel. A newly hired executive will need some time to learn about the existing management and the affairs of the enterprise and develop the habit of working with the existing team as a unit.

As the operation of an enterprise proceeds, the members of its management team get better acquainted with the situation and their ability to work, plan and coordinate together will be enhanced, and thus, new productive potential is created. The growth of such productive potential, i.e., the rate of increase of managerial ability as a result of 'learning by working together' is the factor limiting the growth of the firm. Marris rightly points out that the new recruits into various levels of management team must undergo a training period inside the firm, they must be taught by 'peers', superiors and subordinates:

At a high level, they must find out the nature of a human and material jig-saw puzzle represented in the organization, and in particular must find out the shapes into which new pieces will have to be fitted if further expansion is contemplated ... They must learn (these things) on the job by personal contact with old members, and the capacity of these 'teachers' is necessarily limited.¹

In the short history of industrialization in Yugoslavia, particularly along self-management lines, only a limited number of qualified and competent management personnel have been trained and this scarcity imposes a serious constraint on the growth motives of the existing executives. A glance at the qualification of the directors appointed

1. R. Marris (1964), p. 115.

to their post in 1970 and 1972 serves to confirm this point.

Table 2 - Qualifications of the Directors Appointed
in 1970 and 1972 (%)

Qualifications	1970	1972
<u>i Directors Newly Appointed</u>		
With a university degree or equivalent professional qualification	19	15
With a college degree or equivalent professional qualification	51	58
With a secondary level of professional qualification	19	20
With very little professional qualification	-	-
Highly skilled worker	10	6
Skilled worker	1	1
Total	100	100
<u>ii Directors Reappointed</u>		
With a university degree or equivalent professional qualification	23	21
With a college degree or equivalent professional qualification	31	29
With a secondary level of professional qualification	22	28
With very little professional qualification	4	4
Highly skilled worker	16	14
Skilled worker	4	4
Total	100	100

Note - The total number of newly appointed directors and reappointed directors were, 199 and 985 in 1970, and 238 and 1137 in 1972.

Source: SGJ (1972), p. 70 and SGJ (1974), p. 101.

Between 23 and 15 per cent only of all appointments in 1970 and 1972 can be considered highly qualified directors. In a large number of cases, the leading figures of the organs of management have only modest or very little professional training.

2. Financial Limitations

The managers' growth desires are closely related to the availability of resources for investment. Since the abolition of the social investment funds in the mid-sixties, the enterprises have had to rely increasingly on bank credits to supplement their own internal resources earmarked for investment.¹ But the resources of the banking system are not unlimited and have been allocated according to specific criteria. Although the firms which have participated in the setting up of a bank, and are like its shareholders, and firms which have received special privileges from various government agencies are in a better position to secure loan for themselves, such firms are generally few in number. In the great majority of cases, the financial position and strength of the enterprises are used as the basic criteria. The degree of indebtedness as measured by *poslovni fond* (net worth), the difference between the assets of the firm and the debts incurred in financing them, is a major indicator (as is the 'gearing ratio' for capitalist firms). From the point of view of the creditors, Dirlam and Plummer maintain, "the most significant account is the *poslovni fond*."² The volume of internal funds available for investment is another criteria. These funds, in essence, constitute a leverage by which the firms are able to attract more external financing.

It should be pointed out that the Yugoslav enterprises do not have the same channels of fund raising that modern corporations do. The latter can raise money by selling equities and bonds or embarking on various forms of borrowing including that on the international money markets (specially used by the multinationals). For enterprises in Yugoslavia, however, most of these channels are closed and their external financing comes primarily from the banks with a small amount

1 Sources of investment financing are discussed in greater detail in Chapter Four.

2 J. Dirlam and J. Plummer (1973), p. 45.

coming from individuals and government agencies.

Clearly, we should expect those industries with a more secure market position, more advanced technology, stronger political influence and muscle, and more aggressive management to be the main beneficiaries of bank credits. Analysis of the distribution of bank credits shows that the capital goods industries and some other growth activities fall into this category. Firstly, if we look at the total of the bank credits used for investment financing and the way it has been distributed between various industries, we can confirm the above assertion. From 1965 to 1972, out of the total investment credit allocated to Manufacturing & Mining, some 70 per cent went to electric energy, coal, iron and steel, metals, electric machinery, chemicals and construction materials. In the same period, the equivalent share of wood products, paper products, textiles, leather and footwear, plastic products and tobacco - put together - was about 10 per cent.¹

Secondly, we can compare various sectors and industries in terms of the degree of their reliance on bank credits. Table 3 represents the relationship between investment expenditures financed out of bank credits and those financed from internal resources in some selected activities.

The first group of activities in the upper part of the table, which may be described as 'growth areas', is composed of capital goods industries and some services. They rely heavily on bank credits. For most of the period under consideration, these activities have been able to draw on bank resources several times the size of their own internal funds. On the contrary, the second group of activities, which consists of more competitive consumer goods and services, as well as those services generally expected to be provided by the State,

1 The exact figures for the former group in 1965, 1969 and 1972 were: 74, 73 and 62 per cent and for the latter group 12, 9 and 13 per cent. SGJ (1967), p. 255; SGJ (1970), p. 249; and SGJ (1973), p. 263.

Table 3 - Investment Expenditures Financed by Bank Credit as a Percentage of those Financed by Enterprises Own Funds (1965-72)

Activity	1965	1967	1968	1971
Electric Energy	382	364	356	183
Production of Coal	140	153	120	98
Iron and Steel	660	1727	711	407
Production of Metals	131	90	80	153
Electric Machinery and Appliances	199	181	99	302
Chemical Products	126	179	207	117
Construction Materials	66	85	141	158
Pulp and Paper Products	247	392	226	167
Catering and Tourism	131	90	602	560
Wood Products	69	52	117	118
Textiles	90	59	117	75*
Leather and Footwear	70	30	95	76*
Plastic Products	196	15	74	94
Film Industry	11	177	50	100*
Construction	18	13	49	40
Road Transport	71	28	52	62
Communication	63	53	58	55

* 1972

Sources: SGJ (1967), p. 255; SGJ (1968), p. 257; SGJ (1970), p. 249; SGJ (1972), p. 257; and SGJ (1973), p. 263.

have not been able to borrow greatly from the banking system. The amount of their borrowed funds has remained much smaller than the amount of internal funds used for investment.

The point is that the general desire of enterprises to borrow from banks for the purpose of expansion cannot be totally satisfied because the volume of bank credits is limited and it has to be rationed out according to some criteria. The activities in growth areas will obviously benefit from bank credits more than those in other areas as they can better satisfy the eligibility requirements.

3. Limitation on the Distribution of Income

The managers of modern corporations must provide their shareholders with a reasonable annual dividend as dictated by the conditions of their shares and bonds as well as that of their competitors on the stock exchange.

The Yugoslav firm must provide its work force with a reasonable and satisfactory income (wages plus bonuses), comparable with that in other industries. A growth oriented management, in the case of a corporation, will try to retain as much of the profits as possible for the purpose of investment. The growth oriented management of the Yugoslav enterprise would want to behave in the same way but here an important constraint, that of income distribution, sets in. As we pointed out in Chapter One, income distribution and wage determination are the areas to which the workers and their representatives on the management organs pay close attention. They have a greater interest in matters dealing with their wages, bonuses and other aspects of remuneration than those dealing with investment and growth. The bulk of the employees are from the less educated and less skilled category and have a different preference schedule than the technical/mangerial strata. The main objective of the former group of employees is to press for higher present incomes and an income distribution scheme which would certainly differ from that desired by the latter group. In the discussion of Chapter One, we showed that they pursue this objective by relatively active participation in decisions relating to income distribution and by tight scrutiny of the decisions of the management organs in this field. Although in deciding on a wage scale and bonus system, the situation in the labour market is taken into account, nevertheless, the level of personal incomes in each enterprise ultimately depends on the balance of forces and distribution of influence between the various strata of the work force in that enterprise.

The influence of the income distribution constraint can be shown in another form too. The low wage firms and industries are always in danger of losing their skilled workers who may be lured to higher paid jobs. This danger actually diverts the attention of the managers from other objectives such as growth. On the contrary the high wage

industries, which do not have any problem in retaining their work force or even attracting necessary skills from other industries, can afford to pay attention to and pursue other objectives.

III. Conclusions

In the first section of this Chapter we reviewed the theories of the labour-managed firm and their relevance to the Yugoslav enterprises.

It was shown that the labour-managed firm will behave similarly to the neo-classical firm in so far as employment of inputs is concerned but differently in terms of comparative static properties. Specifically, the income per head maximizing variant was shown to result in a decrease in the level of output as a response to an increase in the product price or a fall in the costs of production. The resulting downward sloping supply curve leads to serious instability for the industry as well as for the economy as a whole.

In addition to instability problems, the main shortcomings of the theories of the labour-managed firm in relation to the Yugoslav conditions are: weak incentive to invest in assets which do not fully belong to the workers; unsuitability of expected future earnings (the human capital of worker-managers) as collateral for debt financing; and the existence of serious rigidities in labour market resulting in low mobility.

The unsatisfactory state of the theory of the labour-managed firm, particularly in explaining the behaviour of the Yugoslav enterprises, has its roots in the use of simplistic text book models of the traditional theory of the firm, i.e., the 'constrained maximization paradigm'. The solution lies in the use and application of some of the conclusions of the modern theories of the firm. These theories help us recognize: the multiplicity of objectives, the dominance of growth objective in firms controlled by professional executives, and the role of the environment in encouraging or discouraging the management in pursuit of their

objectives.

The hierarchical nature of the Yugoslav enterprises, specially in the modern industrial sector, means the dominance of the technical/managerial strata and thus that of the growth objective. The political factor encouraging a high rate of investment, together with the 'safety net' protecting the investment decisions of the firms constitute the heavily growth-biased environment of the Yugoslav firm. However, in pursuit of growth, the management faces several limitations of which those relating to the availability of financial and managerial resources and provision of a minimum acceptable income for the employees are the major ones.

Chapter Three

The distribution of Enterprise Revenue and Determination of Wages

In this chapter we intend to analyse the factors which govern the distribution of the revenue at the disposal of Yugoslav enterprises. Obviously, with frequent institutional changes, these factors have also changed. In fact the distribution of enterprise revenue is worth analysing only when the enterprises have a measure of autonomy in influencing the gross revenue at their disposal and the uses to which it could be put. In a completely centralized economy, the funds at the disposal of firms are of nominal significance as the firms do not decide on how these funds are to be spent. It would then be the central planning agency, and not the enterprise, that determines how such funds are to be used. Enterprise autonomy, in essence, means freedom to influence the level of prices, wages and investment. In a centralized economy prices and wages are determined by the planning agencies and so is the level of investment and the method of its financing. An immediate consequence of decentralization of the economy and granting of autonomy to enterprises is the appearance of the problem of wage and price determination and investment financing. Although the distribution of enterprise revenue and the financing of investment are closely related areas, the length of the discussion in each area necessitates splitting the discussion into two chapters. The present chapter then will analyse the distribution of revenue and the methods of determination of its components while the next chapter will concentrate on the financing of investment and its details.

Broadly speaking, enterprise revenue is divided into three different categories: remuneration of the work force; enterprise internal funds (to be used for expansion, replacement and reserves) and appropriation by

the State.¹ An important area of interest is the role played by the State in the three-way distribution and the way in which that role has changed.

It must be emphasized here that the introduction of workers' management meant that the locus of decisions changed from the planning agencies to the enterprises. The development of various phases of workers' management has implied that, increasingly, the problems relating to wages and investment expenditures have had to be resolved at the enterprise level. In terms of the level of wages, we are interested in investigating the effects of the self-management system on the level of wages of workers of different skill categories, different enterprises and different regions. As wages have gradually become dependent on the performance of each enterprise, one would expect to observe an increase in income differentials across various regions, enterprises and industries, and skills.

The essential point that emerges, again and again, in this chapter is that the gradual transfer of the decision making power to the enterprises has led to a continuous rise in the share of enterprise revenue distributed as personal incomes on the one hand and to the development of wage differentials on the basis of skill, industry and location on the other hand.

On the whole, this chapter would provide answers to such specific questions as: how, and on what basis, does the three-way distribution of enterprise revenue take place?, how is the wage fund divided among the employees of each enterprise?, how has the transfer of decision making power affected the level of wages and wage differentials in different enterprises, industries and regions?, what is the extent and form of State intervention in the determination of the actual wages of the work

1 The details of the last part and their variation in different periods will not be discussed here as they fall outside the scope of the present work.

force?

The nature and size of the three-way division of enterprise revenue have undergone many changes in the past three decades and it would be outside the scope of the present work to review each and every change. Instead, we have divided this thirty years into three strategic periods and analysed the pattern of distribution arrangement during each period. We have used the form of the State intervention in the economy as the basis of distinguishing different periods. The first period covers 1947 to 1951 - the phase of central planning. This period will be discussed very briefly to serve as a background to later periods. The second period, covering 1952-60, was the period of transition from central planning to self-management. During this period most of the elements of state intervention were gradually dismantled and enterprises obtained increasingly greater degree of autonomy. The third period, from 1961 onwards, is the self management period, when the central planning apparatus was completely dismantled and economic reforms of 1961, followed by the major reforms of 1965, completed the process of decentralization and granting of autonomy to enterprises.

A. Central Planning Period (1947-51)

As indicated earlier, under central planning, the enterprises were subordinated to the State Plan and had very little autonomy of their own. They were not considered as independent economic or legal entities responsible for their own revenue. They were rather regarded as technical units of production owned by the State which would provide funds for their expansion and other needs if such activities were deemed desirable. Major decisions affecting the enterprise were reached not at the enterprise level but at the district, republican or national levels where the State Plan was formulated. With wages determined centrally, the wage bill for each enterprise was known and what was left of the revenue after payment of operating costs and the wage bill flowed into the State

budget. A small part of the revenue, determined by the Plan, flowed into a 'management fund' which remained at the disposal of the enterprise management and could be used for rewarding the outstanding workers and innovators, the promotion of workers' training or the development of cultural and social facilities for workers.¹

The one area in which the enterprise had some influence was the remuneration of its work force which depended on the following:

- i Basic rates of pay (and its range) for each category of skill and qualification,
- ii Classification of the work force according to their skill and qualification, and
- iii 'Bonus' (if any) for various members of the work force.

The first was fixed by the central planning agency alone and the enterprise had no say in deciding this national wage scale. As far as the second was concerned, although there existed national guidelines relating a worker's classification to his experience, years and type of training, etc., the management of each enterprise enjoyed a small degree of freedom - particularly in the case of more skilled workers - in deciding on the classification of each individual. The third was also determined by the government in a general form while its specific application was left to the enterprise management. The workers on the production line could get a bonus for the over-fulfilment of the norms set down by the superior Ministry or Directorate. The managerial personnel received premiums for over-fulfilment of the relegated enterprise quota. For the former group the volume of bonus was relatively small and did not constitute an important element of their earnings. For the managerial personnel, however, the premiums constituted an important part of their incomes. As a whole, we may conclude that the enterprise had a very limited degree of freedom (formal or actual) in

1 I. Paj (1970), p. 68

determining the earnings of their employees.

The adherence to the national wage scale was, however, less than complete and this created certain difficulties. Though wages were fixed nationally, workers were employed by individual enterprises. Since the performance of each enterprise could affect the remuneration of its employees (specially the managerial strata) and since there existed a shortage of skilled labour and qualified personnel, the above discrepancy meant that the firms would compete against each other for the skilled workers and would try to find loop-holes in the national wage scale in order to offer higher wage and attract the particular skill that they needed. This competition among managers led them to offer what Bičanić has termed "black wages over and above the stipulated level."¹ The problem of non-adherence to the national wage scale was not a peculiar phenomenon of postwar Yugoslavia. It exists in one form or other in all centrally planned economies where wage scale is determined nationally but labour is employed by individual enterprises and not by the central planning agency. Unless labour is allocated to different enterprises by administrative means, the enterprise management will be forced to subvert the national tariff by means of "non-wage" incomes such as bonus, fringe benefit in cash or kind, etc. Horvat maintains that for some categories of workers, in this period, the 'non-wage' income was greater than their wage incomes.²

As basic wages were determined by the Plan, there was no systematic attempt to relate them to the work performed. Efforts to increase production and productivity heavily relied on moral incentives rather than material rewards. Moral incentives took the form, familiar in Eastern Europe, of trophies, flags and titles to model factories and workers. In the immediate post-war period, it seems that this type of incentive did have the desired effect as there was a great deal of popular

1 R. Bičanić (1973), p. 103.

2 B. Horvat (1971a), p. 114.

enthusiasm for the new government and the new-socio-economic system.¹ But by late fourties and early fifties, the social and political conditions for continued reliance on moral incentives were eroded. The events after the expulsion from the Cominform created the conditions for increased reliance on market forces and the granting of autonomy to enterprises. These developments also marked the end of the reliance on moral incentives for work stimulation.

As far as the 'bonuses' are concerned, their significance lay in their contribution to the development of differentials between the earnings of the workers of same skill category employed in different enterprises. Since the degree of over-fulfilment of planned quotas varied from one enterprise to another and from one branch of production to another, it meant that bonuses varied in different establishments. However, considering the relatively narrow range of planned wage rates and small bonuses, earning differentials had considerably decreased from their pre-war levels. The range of employee remuneration which had been about 1:16 before the war, was reduced to 1:3.5 during the central planning period.²

To sum up: the main characteristic of this period was that enterprises, being owned by the State, were not regarded as independent entities. They had very little control over the formation and distribution of their revenue. By and large, their revenue was divided into two categories: payment to the workers and appropriation by the State. The former was only marginally affected by their performance and influenced by the enterprise management. However, compared to the majority of work force, the skilled workers and qualified employees, who were in short supply, enjoyed a better bargaining position and could manage to receive a higher level of non-wage income.

By 1951, the Yugoslav government had taken various measures in the

1 *Loc. cit.*

2 Cited in B. Horvat (1976), p. 179.

direction of decentralizing decision making and relegating more autonomy to the production units. Two aspects of this autonomy are of particular relevance to our discussion in this chapter. Firstly the State intended to leave as large a share as possible of the enterprise revenue to the enterprises themselves and secondly to leave the enterprises alone in deciding the division of their share between present income of the work force and the internal funds. The newly formed workers' councils and management boards were to handle these and other aspects of the distribution process. But to move towards this arrangement, a transition period was necessary during which the gradual relegation of autonomy could take place.

B. The Transition Period (1952-60)

During the transition period the formation of enterprise revenue was quickly handed over to the individual enterprises while the distribution of this revenue passed over to the management organs more slowly and gradually. The important measures taken in regard to the former were the abolition of production quotas and the freeing of the prices from central control. As far as the latter was concerned, the process took longer and was carried out through several steps. In 1952 and 1953, the earnings of enterprise employees became partly dependent on the enterprise performance and by 1954 the principle of variation of wages in different enterprises and industries was formally accepted. The power to determine the basic wage rates for different categories of workers was handed over to the enterprises in 1955 subject to various constraints that lasted until the end of this period. The power to decide on the level and type of investment in the enterprise was partially relegated to the organs of enterprise management only after the 1958 reforms, while the central authorities continued to control the bulk of investment resources until the early sixties. The significance and implications of each step are briefly discussed in the following pages.

1. The System of Accumulation and Funds (1952 and 53). The abolition of the production quotas and the abandoning of the central determination of prices were the most significant changes of this period. The prices were left to be determined in the market. Of course in the seller's market situation which prevailed in Yugoslavia and under conditions of largely imperfect competition, this meant that the prices would be determined by the enterprises. The government, as one would expect, had not given a free rein to the enterprises in setting the price level; it subjected a large number of commodities to a maximum ceiling price. In 1952 and 1953, however, the prices rose very sharply and this influenced the revenue of many enterprises. There were several reasons for allowing the enterprises to set the prices and at the same time allow the sharp price increases. Essentially, the "new economic system" was aimed at the development of a "socialist" market economy and as such the government could not continue its price fixing operation any longer. The rapid increase in some prices was also necessary as some commodities such as raw material and agricultural products were previously underpriced and had to be allowed to rise in order to reach their market level. Besides, some prices had indeed got out of line with the cost of production. This did not matter very much in the central planning period as most of the transactions - particularly those involving means of production - were of a nominal nature only. But as enterprises began to assume their new role as independent units, which would be seriously affected by the transaction with other firms, the prices had to be related to production costs and this required their determination in the market.

Given the fact that the price elasticity of demand is different for different products, the degree to which enterprises could raise their revenue varied from one enterprise to another. The immediate effect of the end of central price fixing was the emergence of differences in the financial position of enterprises. Had the enterprises obtained, at the same time, the full right to decide on the distribution of their revenue

(which had suddenly increased as a result of price rise), the workers' councils might have apportioned the bulk of the extra revenue to their wage funds. There are many reasons why this could have happened. Workers' councils had just been established and had no experience regarding wage determination, investment requirements, etc. The excess demand for consumer goods and the backlog demand, built up in the post-war years as a result of low wages, could also stimulate a sharp increase in wages. As investment expenditure was financed by the central authorities and did not depend on the performance or internal resources of the enterprise, the managers had very good reasons to keep as little as possible in the enterprise and pay the rest in salaries and wages.

The result was that the State continued to retain its control over the distribution of the enterprise revenue among various uses. The level and composition of investment was still determined by the State which appropriated a part of enterprises revenue for various funds under its own control. The investment expenditure of enterprises (for expansion or replacement), after being approved by the appropriate government agency, was financed out of these funds and as such had nothing to do with the performance of the firm.

The State control over the distribution of revenue was exercised through the so-called 'rate of accumulation and funds'¹ from which the size of the wage fund could be calculated. In the Yugoslav terminology, the Accumulation and Funds of an enterprise refers to the total made up of social contributions and taxes paid by the enterprise and the funds left at its own disposal. The rate of accumulation and funds was defined as the ratio of 'accumulation and funds' to 'wage fund'. The rate was fixed by the annual federal plan. In essence, the rate determined what proportion of the net income of the enterprise (defined as the gross revenue less operating costs²) could be distributed to the employees and what proportion

1 Sometimes called the 'saving-wage bill rate'.

2 Operating costs include the cost of raw material, semi-finished inputs, fuel, other material and depreciation.

would be appropriated by the State. Only a very small part of the latter would remain in the enterprise.

In determining the rate of accumulation and funds several factors were taken into account. As the basic wage rates for each category of worker was still determined by the annual plan, the rate of accumulation and funds must have been chosen in such a way that a reasonably similar wage structure would be produced in different industries and enterprises. Application of a single rate to all industries would have led, among other things, to highly differentiated income patterns for workers of different enterprises and industries. The rate of accumulation and funds had to vary if the aim of maintaining a given scale of wages with rough precision was to be achieved. The desire for relative equality was not the only consideration in the determination of the rates. The need to link the workers' earnings to the performance of their respective enterprise in order to stimulate productivity,¹ as well as the need to control the level of wages and therefore consumption must have been taken into account too.

Table 1, below, shows the rate of accumulation and funds for different sectors and some selected industries. The variation of the rate across the

Table 1 - Rates of Accumulation and Funds for Different Sectors and Selected Industries in Percentages

Sector or industry	1952	1953
Average for all sectors	113	116
Manufacturing & Mining	582	509
Agriculture	19	19
Construction	103	105
Transport	215	126
Catering & Tourism	76	76
<u>Selected Industries</u>		
Electric Energy	564	475
Coal	282	263
Oil	1355	1137
Ferrous Metallurgy	366	499
Textiles	1051	1270

Source: L.Sirc (1975), pp.52 and 54

1 B. Horvat (1976), p.180

sectors and industries was meant to be the recognition of the fact that the distribution of enterprise net income between workers and the State need not be the same in all activities.¹

The problem with the above scheme was that it implied that all enterprises in a single industry could be treated equally and subjected to the same rate of accumulation and funds. Obviously differences in capital intensity, technology of production, level of employment, etc., varied greatly from one firm to another in each industry and the application of one rate to all of them would have created large differentials between the wage funds of different firms, and consequently the personal incomes of employees of different firms. Therefore, for 1953, different rates were applied to the different enterprises in each industry. Some examples of these variations are:²

Production of ordinary nails at Jesenice enterprise	3200 per cent
Production of ordinary nails elsewhere	about 700 per cent
Cotton weaving mills in Slovenia	1512 per cent
Cotton weaving mills in Macedonia	419 per cent

The procedure for distribution of the enterprise net income was then:

- i) to apply the rate of accumulation and fund to the net income, ii) to determine the portion to be distributed among the employees as wages, and iii) to determine the portion to be appropriated by the State.

The workers' remuneration, as before, depended on their basic wage and a possible bonus. The former in turn depended on the category of skill and qualification to which each worker belonged and the rate of pay for each class. The classification of the work force according to their skill and the rate of basic pay for each skill category was still determined

1 To give an example of the meaning of the rate of accumulation and funds, the situation in manufacturing and mining and agriculture may be explained. In 1952 for every 100 dinar allocated to wage fund, the manufacturing and mining enterprises had to allocate 582 dinars to 'accumulation and funds', i.e., only about 15 per cent of the net income could be allocated to wage fund. The situation in agriculture was totally different. The agricultural enterprises could allocate up to 84 per cent of their net income to wage fund.

2 L. Sirc (1975), p.57

centrally. After the basic wages were paid out of the wage fund, the remainder could be distributed as bonuses by the enterprise organs of management. This is roughly the same method as was operative in the previous period except that it had changed qualitatively. Firstly, the total wage fund had become partially dependent on enterprise performance since the output and price were decided at the enterprise level. Secondly, the wage fund could now be large enough to pay out not only the basic rates of pay but also a considerable bonus. Thirdly, an enterprise with poor performance might have ended up with a wage fund not sufficient to cover the basic rates of pay of its work force. This clearly demonstrated the acceptance of the principle of the dependence of wages on the performance of the enterprise. During this period and subsequently, there have existed legislations guaranteeing minimum wage for workers of all enterprises. If an organisation was making heavy losses to the extent that its wage fund was insufficient to pay out the minimum legal wage, then the State would subsidize it up to that point. The minimum legal wages, however, were far below the basic wages.

In terms of workers' incomes, therefore, several possibilities could arise, and two extremes of which should be discussed. First, the possibility that the enterprise would perform poorly due to unfavourable market conditions, obsolete equipment, etc., and as a result the wage fund would be small, maybe too small even to cover the minimum legal wages, thus requiring state subsidy. The second possibility was that of a successful enterprise making a large income as a result of its own performance and/or favourable market conditions and ending up with a large wage fund well above the enterprises in a similar line of activity. The basic wages, as fixed by the annual plan, were paid out first and the rest was distributed as bonuses. The workers in each category of skill in the second type of enterprise could earn incomes several times that of similar workers in the first type of enterprise. In order to prevent large differentiation,

the government imposed a progressed tax on the wage fund of enterprises in which the average monthly wage of the whole enterprise was in excess of 9000 dinars.¹ Clearly, if the enterprise had sufficient numbers of unskilled and semi-skilled workers on its payroll who received low wages and kept the average wage down, it could afford to pay very high wages to its more skilled workers and highly qualified staff without subjecting itself to a tax. Thus many employees who received more than 9000 dinars could go untaxed.

During this period the possibilities for wage differentiation within the enterprises and between enterprises were enhanced. On the one hand, the total revenue (and therefore the wage fund) was now related to the enterprise performance vis-a-vis price and output. This opened up the possibility of divergences between different enterprises. Of course this divergence was meant to be wiped out by the imposition of different rates of accumulation and funds. But it was almost impossible to fix the rate so precisely and accurately that the final wage scale would be uniform across the country. It was impossible because of: i) the lack of complete knowledge of the performance of each and every enterprise a year ahead, ii) the inexperience of the planning agencies, iii) the administrative difficulties involved, and most important of all, iv) the fact that a certain degree of differential between enterprises was actually considered desirable. This type of differentiation was to some degree exacerbated by the discovery of certain loop-holes in the system of fixing rates. The difficulties in determining the rate of accumulation and funds produced conditions in which the rate fixing authorities could exercise a certain degree of arbitrariness and, therefore, favouritism. As Bićanić pointed out, the rates sometimes depended "on the 'pull' of the managers and their VIP friends."²

On the other hand, the distribution of bonuses and the use of

1 L. Sirc (1975), p. 57.

2 R. Bićanić (1973), p. 105.

practice of avoiding progressive tax on high incomes also lent themselves to further income differentiation. Bonuses are essentially meant to be based on the performance of the individual worker as well as his production unit. But in Yugoslavia, in addition to performance, the bonuses were also linked to scarcity, i.e., the skilled workers and qualified staff could receive large bonuses by virtue of their being in short supply leading to competition between different enterprises. This, then, contributed to the expansion of income differentials not only between different categories of workers in each enterprise but also between the workers of different enterprises, industries and regions.

To sum up the developments of this period: the significant step in the direction of granting autonomy to the enterprises was the transfer from the central planning agency to the enterprise management of the power to decide on output and prices. This meant that the enterprises could influence and determine their own gross revenue. In the sphere of distribution of this revenue, the central control, in the main, continued to remain in force. By determining the total wage fund (through the fixing of the rate of accumulation and funds), the skill classification of the work force and the basic wage rate for each class of labour, the central authorities could exert considerable influence in the formation of workers' earnings. The influence of the enterprise was limited to the distribution of bonuses whose size had become much more important than the previous period. But as Paj points out, as far as the basic objectives of self-management - the transfer of decision making power to the work force - was concerned, the system of accumulation and funds "did not mean any major progress towards strengthening the role of producers in income distribution."¹ One important consequence of developments in this period was the acceptance and emergence of wage differentials

1 I. Paj (1970), p. 68.

between workers of different skills in each enterprise as well as between workers with same skill working in different enterprises.

2. The Profit Sharing System (1954-57). From 1954 the system of "accumulation and funds" was abolished and replaced by the profit sharing system. The new system can be regarded as an extension of enterprise autonomy and an application of the principle of leaving as large a share of revenue as possible at the disposal of the enterprises. The major changes that took place in this period were:

- i Extension of the enterprise autonomy over output-price decisions,
- ii Relegation of the power to decide on wage structure, (subject to some constraints) to the enterprise organs of management,
- iii Explicit recognition of the dependence of workers' earnings on the performance of their enterprise, and
- iv Relegation of the power to decide on wage differentials within each enterprise to its management.

Of course, as we indicated earlier, in the previous period too the workers' remuneration partly depended on the enterprise's economic performance. But this dependence was not formally acknowledged as payments to workers over and above those specified by the national wage scale were in the form of bonuses or other fringe benefits. In 1954, the government came round to acknowledging the dependence of the workers' income on the performance of the enterprises in which they were employed and, for this purpose, introduced a new category of income: profit. The employees of each firm were to receive over and above their pre-determined fixed wage, a portion of enterprise profit. The State and the enterprise would apportion the rest of the profit (thus the system of profit sharing). We shall discuss shortly the system of wage determination, but first let us discuss the three-way distribution of enterprise profit.

The 'profit' of each enterprise was defined as the difference between

the gross revenue of the enterprise and its operating costs and contractual obligations.¹ An important development was the treatment of the total fixed wage bill as a component of total costs in enterprise calculations. In other words, the Yugoslav firms began to treat wages in exactly the same way as the capitalist firms. The two types of firms also shared a similar concept and definition of profit in this period. The profit was then divided into the following components:

- i Federal tax on profit (50%)
- ii Contribution to the budgets of local governments (district and commune)
- iii Supplement to workers' fixed wages, and
- iv Enterprise funds.

The division was first of all affected strongly by item (i), i.e., the 50 per cent federal tax on profits in favour of the federal budget. The second item was determined by the commune and district authorities.² The third and fourth items were determined statutorily by the government. There was some room for manoeuvre as the federal plan fixed the range within which the third item could vary (8-16% of fixed wage fund).³ The district authorities, in consultation with the commune and the enterprise, and by considering the performance of the enterprise, decided on the exact proportion in each individual case. The enterprise's own funds were of significance since their formation was the beginning of independent investment financing by the enterprises. Of course at this stage the bulk of investment was still determined by the federal, republican and communal social plan and financed out of the investment

1 Operating costs were defined above. The contractual obligations consist of interest (6%) on fixed capital (introduced in 1954), land tax, fees for membership in economic associations, turnover tax (production tax) and the fixed wage fund. These items will be discussed in greater detail later.

2 District and Commune are territorial and administrative divisions below the republic level. The district was abolished in the early sixties.

3 R. Bićanić (1973), p. 105.

funds at the disposal of the government. The enterprise's own funds constituted only a small proportion of resources available for investment.

The reforms in the sphere of the formation and distribution of enterprise revenue developed the autonomy of enterprise management by: i) making the total revenue and therefore total profit closely linked to enterprise performance, ii) making the supplementary part of the earnings of workers (their share of enterprise profit) dependent on the enterprise performance, and finally, iii) providing a small, but expanding, fund for investment activities at the disposal of the enterprise and linking this also to the performance.

By this time the workers' councils had obtained a great deal of power including, from 1954, the right to participate in appointing the directors of enterprises. The above reforms provided new opportunities for their participation and helped expand the sphere of their work.

The determination of workers' wages was slightly more complex. The total wage was the sum of two independent parts, the fixed wage and the variable wage. The enterprise participated in the determination of both components but was subjected to strict supervision by the State. In terms of fixed wages, in 1954, all workers were divided into four categories of skill (highly skilled, skilled, semi-skilled and unskilled) and a nominal or accounting wage was determined for each category. The difference with the previous period was that the categories of classification had reduced from 9 to 4. The determination of a wage rate for each category of worker in each enterprise was left to its own workers' council subject to the restriction that the average wage of workers in each category did not exceed the accounting wage for that category set by the State. It is clear that wages for various workers in each category were not the same since the conditions of work, their experience, seniority, etc., were different. The autonomy of the workers' council had extended to deciding the fixed wage of the workers in different categories. The accounting wages imposed by the plan in

1954 for the four categories were: 12000, 8000, 7000, and 6000 dinars per month. The local commune was empowered to increase these figures by up to 20 per cent depending on the conditions in which the enterprises operated.¹ Since the classification of workers into different categories was done by the enterprise management, one can claim that the determination of fixed wage rate had been largely transferred to the enterprises themselves. The central control on the average wage of each category meant that the State could control the total wage bill in the economy, and therefore the level of national consumption. This was particularly necessary for, as we discussed in Chapter One, if the enterprises had full control over the use of revenue for wage payment, they would have been able to allocate a much larger share to the wage fund which could have had serious macroeconomic implications.

The variable wage was the supplement to the fixed wage from enterprise profits, i.e., it represented the share of each worker in the profit. As we mentioned before, the size of the variable wage was affected by both the State (through its determination of the proportion of profit that could be distributed to workers) and the enterprise itself (through its performance in the market). Its distribution among various workers was decided by the workers' council on the basis of the fixed wage of individual workers, their individual performance and the performance of their production unit. The size of total variable wages in 1954 was 4.8 per cent of the total profits and gradually increased to 9.2 per cent by 1957. On average the variable wage, usually called the thirteenth pay slip, amounted to the equivalent of one (sometimes two and occasionally more) months of fixed wages.²

In 1955, there was a small change in the system of determination of fixed wages. The accounting wage for the four categories of workers were abolished and a new constraint in the form of a guideline for

1 I. Paj (1970), p. 71.

2 R. Bičanić (1973), p. 106.

distribution was announced. In practice this meant that the workers' council had to prepare the wage schedule (denoting the classification of the employees into nine categories again and the fixed wage rate for each worker), and then obtain the approval of the local trade union council and the local commune on this wage schedule.¹

What were the implications of the system of enterprise revenue distribution in the 1954-57 period? Firstly, enterprise control on the formation of its gross revenue was strengthened. Secondly, the determination of fixed wages (which were the main component of workers' earnings) were left to enterprise management subject to certain constraints (such as the observance of the accounting wages or the approval of the trade union council and communal authorities). Thirdly, the size of the variable wage was dependent on the success of the enterprise operation as measured by its profit. Fourthly, by the allocation of a small proportion of profit to enterprise internal funds and leaving this fund at the disposal of the enterprise management for investment purposes, the first step towards independent investment financing was taken. Fifthly, the method of determination of fixed and variable wages created the necessary conditions for differentiation of earnings within the enterprises and between the enterprises. This was the expression of the fact that the workers' councils had, now, obtained the right to decide on the level of differentials between different categories of workers in each enterprise. Each of these two types of earning differentials must be discussed in more detail.

The sources of earning differentiation for workers of similar skill working in different enterprises were: i) the difference in the market performance of different enterprises which could affect the profit and

1 In principle this system was very similar to that of 1954 with one constraint replacing another. Here the guideline took the form of linking the wage rises to changes in capital-labour ratio and workers' productivity. For details of these guidelines, see S. Pejovich (1966), pp. 73-75.

therefore the variable wage component of the earnings, and ii) the difference in the fixed wages of workers of a particular skill category who worked in different enterprises, as decided by the councils and approved by the communal authorities and trade union councils. The first source is the significant one while the second source played only a marginal role in the development of wage differentials. The monopolistic position of some enterprises, the preferential treatment given to some industries (in the form of tax cuts, subsidies, artificially low priced raw materials, etc.), the regional location of some enterprises (affecting their raw material supply or market) as well as the efficiency of the production process led to some enterprises performing better than others. In other words, the size of profit and therefore the variable wage fund was much greater in some than in others. The variable wage in some enterprises amounted to as high as 75 per cent of the annual fixed wage (i.e., the equivalent of eight monthly pay slips).¹ The second source of differentiation, i.e., the fixed wages for each category, also helped, though to a smaller extent, to enlarge the differentials between enterprises. In theory, of course, the fixed wage was to relate to skill and qualification, with due consideration given to the conditions of work and the experience of the worker, and not to performance. In practice, however, the competition between various enterprises to attract skilled workers led to conditions encouraging the circumvention of guidelines for fixed wages and the introduction of considerations other than skill in the determination of the wage schedule. This was particularly so in the case of skilled workers who, as Pejovich has put it, could "write their own tickets."²

The point is that the enterprises had a vested interest in reducing the size of their profit and in increasing their fixed wage fund, as the profits were heavily taxed by the State. Increase in fixed wage

1 *Loc. cit.*

2 S. Pejovich (1966), p. 99.

fund could be achieved by fictitiously upgrading the skill category of some workers and choosing a very wide range for each category so that high wages could be paid while at the same time the 'average wage' restrictions could be observed too.¹ (This last step also had implications in regard to inter-enterprise wage differentials that will be discussed shortly.) An ILO investigation, for example, showed that the total earnings of the highly skilled category of workers in 35 different coal mines ranged from 13000 to 20900 dinars per month.²

The workers' councils, as we pointed out in Chapter One, paid considerable attention to questions relating to the workers' wages and income distribution. Their objectives during this and the preceding period were dominated by the desire to increase wages as much as possible (very much like the Ward-Vanek type of objective function). This, in turn, implied that there was room for wage differentials between the enterprises to grow as a result of their different bargaining position vis-a-vis the local authorities.

As far as wage differentiation between different categories of skill in each enterprise was concerned, the sources were: i) difference in fixed wages between different skill categories, and ii) difference in variable wages paid out to different skill categories. The government had accepted that there should be a certain degree of wage differential between different categories and its guidelines clearly reflected this acceptance.³ The actual differentials in the fixed wages, however, were greater due to the scarcity of the skilled and trained personnel.⁴

1 B. Horvat (1976), p. 181; Jan Vanek (1972), p. 72; and H. M. Wachtell (1973), p. 103.

2 ILO (1962), p. 137.

3 The guidelines for 1954, spelled out in terms of accounting wages of 12, 8, 7 and 6 thousand dinars, show the accepted level of differences.

4 While the total wage of highly skilled labour could reach as high as 18000 dinars per month, as was the case in the coal industry in Croatia or Ferrous Metallurgy in Slovenia, the total wage of unskilled workers reached as low as 4000, as was the case in Food Industry in Montenegro, (compared to accounting wages of 12000 and 6000 for the two categories in 1954). SGJ (1955), pp. 288-289.

The variable wages, which were decided upon by the enterprise management without government intervention, contributed more significantly than the fixed wages to earning differentials between different categories. The underlying factors were the scarcity of highly skilled workers and qualified staff, as well as the significant influence of these two groups on the decisions made by the councils. In Chapter One we showed the heavy representation of these groups, especially the upper strata of the white collar workers, on the management organs and their gradual domination of the decision making apparatus. Table 2, below, shows the schedule according to which the variable wages were distributed in 1956 and clearly expresses the dominant position of the upper strata of the white collar workers in the determination of this part of workers' earnings.

Table 2 - Variable Wages as a Percentage of Fixed Wages for
Different Categories of Workers in the Manufacturing and Mining
Enterprises in 1956

skill category	variable wage as % of fixed wage
All workers	7.7
<u>White collar workers</u>	14.4
High and higher level of professional education	14.0
Intermediate level of professional education	10.6
Primary level of professional education	8.6
Lower level of professional education	7.9
<u>Blue collar workers</u>	7.0
Highly skilled workers	9.1
Skilled workers	7.1
Semi-skilled workers	6.9
Unskilled workers	5.4

Source: H. M. Wachtell (1973), p. 108

While the percentages show a difference of about 3:1 between the highest and the lowest paid group, the actual earnings of the two groups out of the enterprise profit was even more differentiated as these percentages had to be applied to fixed wages which themselves were already polarized. The system of revenue distribution in this period, in short,

provided a fertile ground for the development of earning differentials between and within enterprises for fixed as well as variable wages.

What was the role of the State in the three-way division of the enterprise revenue? By engaging in various forms of price control (fixing prices of certain commodities or fixing the upper limits for some others), the State influenced the formation of enterprise revenue in the first place. The State also influenced the fixed wage fund through various policy measures, such as the annual federal plan, and by relying on institutions such as the trade union councils and local authorities, which had to approve the enterprises' wage schedules. The degree of effectiveness of these policies, of course, depended on the power of the enterprise management and its bargaining strength, the importance of the enterprise for the local economy, etc. The outcome of the negotiation between the enterprises and their respective local governments was bound to vary widely from one case to another. The State could in the last resort influence the variable wage fund and the funds at the disposal of enterprises by varying the size of these components in favour of the federal, district or the communal government. Although the State had committed itself to workers' management and decentralized market economy, this did not mean that it would allow complete enterprise autonomy over wages. As long as the management of the economy was entrusted to the government, it could not allow the wage system to be handled by workers' councils alone as this would have affected the whole macroeconomic performance of the economy. The government could not be indifferent to the workers' councils wanting to allot a greater portion of net earnings to the workers' incomes, since such a tendency could seriously affect the level of wages in the economy and therefore the level of prices, consumption and investment.

By 1957, the workers' councils had acquired a great deal of experience and were demanding more autonomy. The First Congress of Workers' Councils

in 1957 demanded that a greater share of enterprise revenue be placed at the disposal of the workers' councils for division between enterprises and their employees.¹ The government, having finally completed the investment projects of the ill-fated First Five-Year Plan and also enjoying the successes of several years of very rapid economic growth, was in a position of strength to proceed with its policy of further decentralization and the granting of greater autonomy to the organs of management of enterprises. This implied yet another change in the system of revenue distribution.

3. The Income Sharing System (1958-60).² The changeover to this system, was semantic, more than anything. The category of 'wage' was regarded as implying the old wage-labour relation and the category of 'profit' was associated with capitalist enterprises. As a result, the workers' earnings were to be called 'personal income' and the division of enterprise net earnings between the State, the enterprise and the work force was to be termed 'income sharing'. The determination of the level of personal incomes, however, remained the same, i.e., the main part of the earnings was decided in advance in the enterprise wage schedule and approved by the outside authorities while the supplementary part was paid out at the end of the year. There were, of course, some actual changes too. The enterprises were authorized to form their own fixed and working capital funds out of which a certain amount of investment could be financed. The type and magnitude of the State appropriations also slightly changed.

The three-way division was now based on 'net income' which was defined as the gross enterprise revenue less costs and contractual obligations. The wages were no longer considered part of contractual costs. Therefore the new category 'net income' was equal to the total

1 B. Horvat (1976), p. 182.

2 Some enterprises such as those in industry, transport and communication, and forestry changed to the new distribution system in 1958 while others did so in 1957. I. Paj (1970), p. 73.

of the 'profit' as defined in the previous period and the workers' fixed wage fund.

The net income was then divided according to the following schedule:

i) Contribution to social investment funds¹, replacing the federal tax on profit. This progressive tax (with the marginal rate going as high as 70 per cent)² was paid into the federal, republican and communal investment funds to finance the investment projects approved by these authorities.

ii) Gross income of the employees to replace the sum of fixed and variable wage of the previous system. Unlike the previous period, the gross incomes were subject to a progressive income tax (with the marginal rate going as high as 40 per cent). This was called 'the contributions on personal income' and was collected by the federal, republican and communal budgets.³ There were, of course other levies applied to gross incomes but they existed in the previous period as well (the more important ones being contributions to the Housing Construction Fund and to Social Insurance).

iii) Enterprise funds, now composed of fixed capital fund, working capital fund, welfare fund and reserve fund.

The new arrangement, though largely similar to the previous one, implied that enterprise autonomy as regards the distribution of revenue had increased to a small extent. Firstly, the three-way division of net income was not based on the statutory proportions handed down by the government. After the contribution to social investment funds (item i above) was paid out, the enterprises could decide on the division of the remainder between (ii) and (iii) as they saw fit, though still

1 In Yugoslav fiscal terminology, the terms 'tax' and 'contributions' are basically synonyms. The former is usually applied to incomes derived from property ownership (such as land tax or tax on rent) while the latter is applied to income from labour.

2 For the schedule of tax on net incomes see S. Pejovich (1966), p. 97.

3 *Ibid.*, p. 99.

subject to the approval of the communal authorities and trade union councils. Secondly, the new category of personal income reflected the acceptance by the government of the need to make workers' income more heavily dependent on the enterprise performance. Thirdly, the formation of fixed and working capital funds meant that enterprises could independently decide on a portion of their investment requirements without going to the authorities of the local or higher level governments. The decentralization of investment decision (even if only partial) was an important step in the development of enterprise autonomy. Through deciding on the investment projects, the enterprises could also affect the size of revenue at their disposal in the future periods.

The appearance of taxes is another aspect of income distribution in the period after 1954 and increasingly since 1958. Under the system of central planning, there was no need for taxes in the public sector as the allocation of resources, wages and prices were determined by the central planning agency. With the decentralization of decision making, the introduction of market determined prices and the granting of autonomy over wages, prices and part of the investment to the enterprises, the State relinquished its complete control over resources and this was coupled with the appearance of taxes. The taxes also indirectly affected the actual division of the net earnings. Taxation of personal income (with up to 40 per cent marginal rate) was a means of discouraging the enterprises from distributing their income too heavily in favour of personal incomes since, at such high rates, such a decision would have amounted to handing over their earnings to the government. The part of net income remaining within the enterprise was subject to the capital tax (interest on fixed and variable capital) of only 6 per cent whereas handing it to the workers would have made it subject to a much higher tax. The efficient enterprises found themselves in a situation biased towards further investment and expansion. The system had, within it, a

built-in bias of the type discussed in the previous chapter. On the other hand since income tax was shared by the budgets of the local and republican governments, their interest lay in having a large personal income fund. This could be assured by the local government being less stringent when it came to approving the wage schedule of the enterprises.

In terms of the earnings of the work force, the new system was different from the previous one in some respects. In theory, the shift from one category of earnings (wage) to another (income) was based on the view that granting of autonomy to enterprises meant that the final step was taken in transforming state-controlled enterprises to workers' partnerships. The income derived from partnership is, to some extent, an uncertain quantity due to the fact that the partners do not control all the variables involved. This is a characteristic attributed to 'profit' when it is regarded as a return to risk. The category of 'wage', however, implies a contractual relation, with no uncertainty and no risk. The distribution of the net income in the new system was meant to signify that the Yugoslav firms were moving towards partnerships. As the exact volume of the 'personal incomes fund' depended on the annual level of output and the calculation of all taxes and contributions based on annual performance, it could not be known until the annual production period had ended. The workers would receive monthly payments in the form of advances on their final earnings until the result of the annual operation was fully known. The thirteenth pay slip would be the difference between their total personal income and the sum of their twelve monthly advances. This view, however, is the formal aspect of the introduction of new categories and of the change. In reality, most of the previous practices continued. The monthly payment, supposed to be advances, were regarded as 'basic wage', the thirteenth pay slip was regarded as a share in the profits (or additional income to employees). More importantly, the bulk of employees' earnings

retained the character of 'wages' rather than 'profit'. From 1961, the official date has ceased to give the break-down of incomes into basic wage and thirteenth pay slip. Instead they provide information on total personal incomes. But the actual practice of the enterprises is far from incorporating these ideas into accounting procedures and distributive practices. As Wachtell points out, the enterprises still treat the monthly pay slip as basic wages and as a component of costs and deduct the total of basic wages along with other cost items from the revenue to reach the profits, part of which is handed to the employees as a supplement to their incomes.¹

The determination of personal incomes in this period was much the same as before. The only difference was the improvements in the system of classification and evaluation of each worker's contribution to output. While in the previous periods job classification was based on broad categories, now the use of job evaluation techniques coupled with the finer classification of the work force enabled the enterprise management to assess the performance of each employee more accurately. These assessments were then to be used as the basis for remuneration. A finer classification obviously meant an increase in wage differentials within different categories of workers in each enterprise. At the same time different methods of job evaluation began to develop. The wage rate was to depend on various factors such as skill, experience, education requirement, responsibility, physical effort, mental effort, working conditions, etc. The most common method of job evaluation was the so-called 'point system'. This method involved assigning a certain number of points to every criteria that affected the wage rate. The total of

1 H. M. Wachtell (1973), p. 101. Wachtell's assertion can be supplemented by another evidence yet. Extracts from the 1967 and 1968 Annual Accounts of the Worker-Managed Enterprises include the item "personal incomes charged to costs" in exactly the same sense as pointed out by Wachtell. See Jan Vanek (1972), p. 253.

these points for all the relevant criteria constituted the price tag on each job. An example of the application of this system is given in Table 3, below. It represents the points assigned to each of the criteria for wage determination, of a sample of jobs in a textile factory.

Table 3 - Sample of Job Evaluation by Point System

Job	Education	Ability & Experience	Management	Responsibility	Physical Effort	Mental Effort	Working Conditions	Total
General Manager	100	170	150	190	10	100	10	730
Technical Manager	100	140	140	160	10	90	10	650
Works Manager	100	130	100	120	10	90	30	580
Sales Manager	100	130	100	140	10	90	10	580
Book-keeper	100	100	50	90	10	80	10	440
Foreman	80	60	40	50	10	40	40	320
Skilled weaver	50	40	-	40	35	30	40	235
Semi-skilled spinner	30	20	-	20	30	10	40	150
Lorry Driver	80	60	-	70	30	40	40	320
Cleaner	20	10	-	10	40	10	40	130

Source: R. Bičanić (1973), p. 109

According to Bičanić in this factory of 2800 workers, some 400 different jobs were evaluated according to this system.¹

The above schedule does not include any points relating to bonuses and premiums for such actions as lowering costs, safety, increasing productivity, etc. A separate schedule formulates the distribution of premiums.

An important aspect of the point system as shown in Table 3 is the role it plays in increasing income differentiation within each enterprise. This is done by attaching different weights to different criteria which, at the same time, are associated with different skills. We shall return to this shortly.

As far as the two types of income differentiations are concerned, the 'income sharing period' is essentially similar to the previous 'profit

¹ R. Bičanić (1973), p. 108.

sharing period'. Except that in this period, the need for personal income to depend on the actual performance was stated explicitly. Accordingly, there was greater reliance on profit as a stimulus to raise productivity. This aspect was important particularly in developing income differentials between different enterprises. In order to point out the importance of profit share (the thirteenth pay slip) in the workers' earnings, the situation in three different enterprises is shown in Table 4. The figures on basic wage and supplements from profit are taken directly from the income statements of the three enterprises.

Table 4 - The relationship between Earning Components
(1000 dinars) in three Different Enterprises

Earnings	Metalna		Tovarija Pol- joprivrednih Sprava		Vaga
	1958	1959	1958	1959	1959
Basic wage	288	282	187	177	278
Additional pay from profit	142	145	52	75	-54*
Additional pay as a proportion of basic wage (%)	49	52	28	42	20

* This means that in the next period, the workers' earnings will be reduced by this amount.

Source: S. Pejovich (1966), p. 102

The second type of differentiations, i.e., that within each enterprise continued to persist and even expand to some extent. The wage schedule determined by the 'point system' such as that shown in Table 3 was one source of this type of differentiation. As one can see from this table, the criteria which mostly applied to lower level employees carried smaller weights than those which are mainly related to the management strata. For example the criterion of 'conditions of work' or 'physical effort' applying basically to workers on the shop floor and in harsh environments received points between 10 to 40, while the criterion of 'responsibility' carried weights of 10 to 190. The scale was clearly tilted in favour of the managerial strata. In view of our

discussions in Chapter One concerning the dominant position of this strata on the enterprise management organs, this bias should not be surprising.

Another source of inter-enterprise differentiation was the distribution of the 13th pay slip. Although the nature of this was supposed to be different in the post-1958 period (i.e., a residual earnings for coop members rather than a bonus for hired labourer), in practice its distribution remained subject to the same considerations as before. Table 5 represents the size of the 13th pay slip as a percentage of the basic wage in 1959 and 1961 in the enterprises of the Manufacturing and Mining sector for different categories of workers.

Table 5 - The Thirteenth Pay-Slip as Percentage of the Basic Wage for Different Categories of Workers in Mf'g. and Mining

Skill category	1959	1961
All workers	13.9	9.7
<u>White collar workers</u>	18.1	12.7
High & Higher levels of professional education	20.6	14.1
Intermediate level of professional education	16.6	11.8
Primary level of professional education	14.0	10.2
Lower level of professional education	11.7	8.2
<u>Blue collar workers</u>	13.2	9.4
Highly skilled workers	16.7	11.8
Skilled workers	13.3	8.6
Semi-skilled workers	13.1	8.2
Unskilled workers	9.1	6.7

Source: H. M. Wachtell (1973), p. 108

According to the above table, the more successful the enterprise, the greater would be the wage differential between the professional staff and the unskilled workers. The uneven distribution of supplements is, more than anything else, the reflection of the unequal distribution of influence between the two groups of employees on the decisions of the management organs - a point explained in detail in Chapter One.

By 1960, the Yugoslav society was ready for another major shake up

in the form of new reforms in all fields of social, economic and political life. The system of distribution of enterprise revenue and wage determination also underwent some changes. But before moving to the third period of our analysis (the post-1960s), we must sum up the developments in the fields of revenue distribution, wage determination and income differentiation in the transition period of 1952-60.

During this period the enterprises gained increasing autonomy in three important fields. Firstly the formation of enterprise revenue became a matter within enterprise competence via decisions on price and output. Though some prices were still subject to legal ceilings, and sometimes freezes, the majority of producers had acquired the power to influence their own revenue.

Secondly, by the end of this period, the enterprises had obtained the right to form their own working capital and fixed capital funds to finance part of their investment. Although the size of these funds were still small and the bulk of investment, together with its composition, was still controlled by higher level authorities, the formation of capital funds at the enterprise level was the first step towards independent investment financing. The experience gained in the last years of this period was to help the management of enterprises to familiarize themselves with new problems and new outlets for decision making.

Thirdly, the determination of wages was partially left to enterprise management while the imposition of some kind of constraint (such as average wage for each category of skill or the need to obtain the approval of the commune or the trade union councils) was to guarantee that wages remained in line with the performance of the work force and the enterprises, as well as with the overall macroeconomic policies of the government. The basic part of the wages (called accounting wage or fixed wage or basic pay in different sub-periods) was under the influence of the State through its wage guidelines. The basic considerations in

its determination were that workers' pay should be related to their qualification and skill, and that the differentials between different category of workers should be relatively small. The distributive feature of this wage system was that the level of wages had no direct relationship to the conditions of supply and of demand for labour of different categories. Wage guidelines were prepared centrally while actual employment and distribution of labour to various enterprises were not done centrally. Instead labour was employed by individual enterprises in some form of decentralized quasi-market. It was quasi-market because the price of labour had little to do with conditions of supply and demand. There was, of course, no problem in enforcing the wage schedule in that section of the market dealing with unskilled and semi-skilled labour due to the excess supply of these types of workers. However, the section of the wage schedule which dealt with skilled labour and qualified personnel could not be easily enforced due to the shortage of these types of labour and the excess demand for them. The result, as we indicated above, was various attempts by the management to circumvent the wage guidelines and pay the highly qualified and highly skilled employees higher wages than was allowed. In this connection, the status of bonuses became of great significance. Unlike the basic wage (which was based on qualifications and skills), the bonuses were meant to depend on the performance of the enterprise and its units. Bonus payment was to be a method of rewarding the employees of efficient enterprises. In practice, however, the bonuses were used as a means of attracting the type of labour in short supply which was needed by the enterprise. As we showed in Tables 2 and 5, the distribution of the bonuses were highly tilted in favour of the dominant section of enterprise employees.

Another aspect of the national wage schedule was the difficulty it could create when applied to different parts of the country. Yugoslavia was, and still is, a very heterogeneous country consisting of regions

with varying degrees of socio-economic development. The payment of basic wages according to one national schedule meant that the economic differences between the regions were, in effect, ignored. The conditions of market, the demographic characteristics, the qualification of the labour force, as well as many other factors which influence the formation and distribution of enterprise revenue, varied between different regions and any system of remuneration had to take these factors into account in order to be sound and equitable (which was deemed to be an over-riding factor). The developments in the last sub-period, partly removed this restriction by putting the determination of wage schedule at the enterprise disposal. The result of this, as one may expect, was an expansion of inter-regional wage differentials. In 1956 the average wage in Manufacturing & Mining in Slovenia was 109 per cent of the national average while the average wage in Montenegro and Macedonia were 94 and 84 per cent of the national average. By 1959, the Slovenian wage had increased to 116 per cent of the national average while those of Montenegro and Macedonia had reduced to 83 and 79 per cent respectively.¹

The relegation of a certain degree of autonomy over the formation and distribution of revenue was accompanied by growing differentiation in earnings. While during the previous period the enforcement of national wage system, accompanied by emphasis on moral incentives, had limited the spread of wages, the measures taken during this period allowed this spread to grow. Not only did wage differentials expand between different categories of workers in the same enterprise, but also the earnings of similar category of workers in different enterprises grew. If the heterogeneity of the country is taken into account, one can see that the ground was paved for the expansion of the inter-regional earning differentials too.

1 H. M. Wachtell (1973), p. 135.

C. The Self-Management Period (1961 Onwards)

Further development of the system of self-management in Yugoslavia required some basic changes to take place in various spheres of economic and social decision making. Among these was the need to enable the management to handle and decide on a larger number of issues related to enterprises. Until the late fifties, the concern with wages took a significant part of the time of the workers' councils. Decentralization of decision making and improvement in the system of workers' management meant that decisions on more important issues such as investment financing, long term credits and loans, integration, etc., had to be transferred to the enterprises too. These, in turn, required new measures to be implemented in the related fields (such as reforms in the banking system). The 1961 reforms were meant to introduce and implement the necessary measures for further development of self-management. In some spheres, however, as a result of the intervention by the opponents of the reforms, the implementation of new measures were strongly resisted or blocked. The 1965 social and economic reforms, therefore, came as a major clean up operation that swept aside all opposition and consolidated the arrangements introduced in 1961 as well as instituting new measures. As far as the formation and distribution of enterprise revenue is concerned, the important measures introduced in this period were:

i. Improvements in the system of price determination which helped to align prices to market forces. Particularly important was the abolition of an artificially low ceiling on raw material prices and the ending of most subsidies to enterprises whose products were subject to price control. The improvement in the price system enabled the enterprises to have more influence on the formation of their revenue.

ii. From 1961, the enterprises no longer needed to obtain the approval of the communal authorities or the local trade union council for their wage schedule. This measure, in effect, left not only the determination

of the earnings of the employees to the workers' council, but also entrusted the councils to distribute the net income between the enterprise funds and the personal incomes.

iii. From 1961, the banking system began to deal with the economic organizations in their own locality directly and to extend credit for short and long term purposes to them on the basis of their own credit worthiness. The enterprises had (since 1958) accumulated their own fixed and working capital funds for the purpose of independent investment financing. The 1965 reforms in the banking system removed even the geographic restriction on the activities of the banks and enabled them to extend credit for almost any purpose to enterprises anywhere in the country. The bank itself as an independent profit-oriented enterprise was to be responsible for the success or failure of its credit operation. The significance of this measure (in conjunction with step iv below) was its effect on the level and composition of independent investment undertaken by the enterprises.

iv. From 1963, beginning with the General Investment Fund, all social investment funds began to be abolished and their assets transferred to the banks. This had a three-fold effect. Firstly, the central control on the level and composition of investment was dismantled. Secondly, the banking system was endowed with a considerable amount of resources with which to satisfy the demand of the enterprises for investment loans. Thirdly, the size of the State appropriation from enterprise revenue could be greatly reduced. The implications of this measure shall be discussed in greater detail in the next chapter.

In this section we shall first discuss the system of income distribution as it developed during the self-management period. The main problem in the field of income distribution was that, in addition to the acceptance of various strata of the employees, the State authorities had also to be satisfied with the arrangement in a general sense. These

various agents, as we shall see shortly, do not always possess mutually consistent preference schedules. While the interest of the enterprise and some of its employees may lie in apportioning larger resources to enterprise funds, that of the majority of the workers may lie in a larger personal income fund. The government will then have to arbitrate. The types of government intervention in the formation and distribution of revenue are therefore discussed as well. We shall then investigate the developments in the methods of wage determination in the recent period, paying special attention to the collective agreements which were to be reached by the enterprises and the republican governments. Finally, various types of income differentiation (within enterprises, between enterprises, between industries and between regions) will be discussed.

1. Distribution of Enterprise Revenue. During the self-management period, the system of distribution of enterprise revenue underwent several changes. Firstly, the State ceased to appropriate any part of the net income or profit of the enterprises directly. The contribution to social investment funds (item i, p.138), was therefore abolished. After all, with the abandoning of the social investment funds, it was only natural that enterprises would cease paying contributions for them. This was done in two stages. In 1961, the progressive taxation was replaced by a flat tax of 15 per cent and in 1965 it was abolished altogether.¹

Secondly, straight taxation became the dominant form of the state appropriation from the social product of the enterprises. Progressive income tax changed to a flat tax of 15 per cent on gross personal incomes in 1961.² A separate tax was also imposed to finance the educational activities of the local commune.

1 B. Horvat (1976), p. 182.

2 S. Pejovich (1966), p. 99.

Thirdly, the fixed and working capital funds of the enterprises were merged into one to facilitate the use of these funds for different needs of the enterprises.

The income statement of a typical enterprise as submitted to the Social Accounting Service would now include the following items and categories.

1. Gross Revenue (including sales, increase in inventories, etc.)
2. Operating Costs (including raw material, fuel, semi-finished inputs and depreciation)
3. Obligations
 - 3a. Contractual Obligations (including interest on credits and payments for other bank services, insurance premiums, contributions to economic chambers and associations and similar payments)
 - 3b. Statutory Obligations (including interest on business funds, contribution for exploration, renewal and maintenance of ore resources, water contributions, contributions for Skopje¹, etc.)
4. Net Income (Gross revenue less operating costs and obligations) divided into:
 - 4a. Gross Personal Income, consisting of
 - (i) Net Personal Income
 - (ii) Contributions on personal income and contributions for education²
 - (iii) Social Insurance Contributions
 - (iv) Labor Exchange Contribution³
 - 4b. Enterprise Funds, consisting of:
 - (i) Business Fund
 - (ii) Reserve Funds (legal and voluntary funds)

1 This was a fund designed to help in rebuilding of the city of Skopje shattered by earthquake in 1963.

2 The first part is the usual income tax and the second part is the levy used to finance the educational activities of the communes.

3 A contribution of 0.5 per cent levied on the personal incomes since 1965 in favour of the communal and republican Labour Exchange Bureau which use the money to finance part of the unemployment benefits and to help the jobless to find new employment. See I. Paj (1970), p. 76.

- (iii) Welfare Fund (sometimes called the Collective Consumption Fund)
- (iv) Other Funds

In order to get some idea of the magnitude of various component parts of the 'enterprise funds', the following table representing the situation in the sixties can be studied.

Table 6 - Percentage Distribution of
Enterprise Funds, 1962 to 1966*

Industry or Branch	Yr.	Business Fund	Legal Reserve Fund	Voluntary Reserve Fund	Welfare Fund	Other Funds
All branches	1962	38.8	13.2	11.7	22.3	14.1
(in Socialist sector)	1964	48.8	8.0	7.3	21.2	14.7
	1966	56.5	7.7	7.3	25.5	2.9

Note * totals may not add up to 100 due to rounding

Source: Jan Vanek (1972), p. 236

As can be seen from Table 6, the Business Fund is the largest and most important of the enterprise funds. It is the amalgamation of the working capital fund and fixed capital fund which had been set up since 1958. The former was used for financing the cost of material, production in progress and payment of incomes while the latter was used for financing of the long and medium term investments. Amalgamation gave the enterprises the freedom to use operational capital for expansion purposes and vice versa. Other funds were set up to help enterprises in urgent need of resources and to provide for the welfare needs of the enterprise employees.¹

¹ The Legal Reserve Fund is designed to save enterprises in specifically defined emergency circumstances. When the size of the fund reaches a statutory minimum, the annual contribution is reduced. Some industries experiencing particular difficulties, such as railways, get exemption from part or most of the required contribution. Since the emergencies in which the Legal Reserve Fund can be used are very specific, most enterprises have developed their own Voluntary Reserve Fund. The resources in this fund can be used under any kind of emergency. The contributions to the Welfare Fund (or the Collective Consumption Fund) was set up to provide for the collective needs of the members of each enterprise such as housing, catering, holiday facilities, training schemes, etc. Since it directly benefits the members of the enterprise, its size has remained relatively stable and rather high.

The distribution of enterprise revenue, as discussed above, is schematically represented in Figure 1.

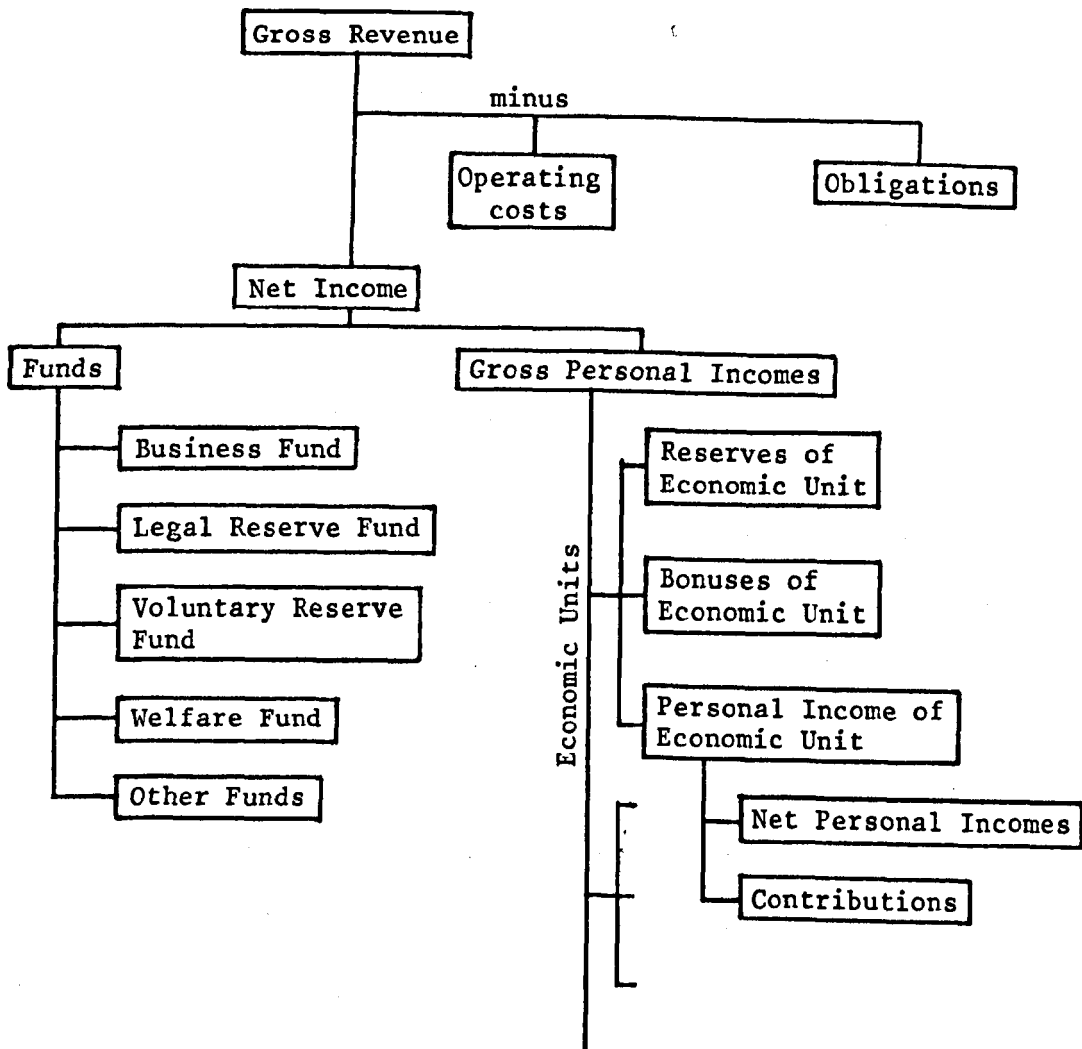


Figure 1 - Distribution of Enterprise Revenue

The most important decision in the sphere of distribution is the division of the net income (item 4 in the above discussion, p.151) into Gross Personal Income (item 4a) and Enterprise Funds (item 4b). The problems associated with this division have dominated the whole of the self-management period. Although this decision has been, in principle, left to the enterprise management and workers' councils, the government has been watching it closely with great care. The government's interest stems from the significant impact that this division can have on the macroeconomic variables such as price and wage levels, consumption,

investment, growth rate, etc. The decision on the division of net income is, to a large extent, influenced by the preferences and the relative strength of the different strata of the work force. On the one hand, as we pointed out in Chapter Two, the particular structure of property rights in Yugoslavia - with the restriction that property rights over the plough back investment can be enjoyed only for the duration of employment - weakens the incentive for internally financed investment. The workers whose expected duration of employment is long would also have longer planning horizons than those with a shorter expected duration of employment, i.e., the two groups would have markedly different preference schedules.

On the other hand, the extent of information and knowledge about the working of the system as a whole and the degree of involvement in the work of an enterprise also influence the planning horizons of the employees.

On the basis of the discussion in Chapter One concerning the indifference of the bulk of employees towards the affairs of their enterprise and the inability of the members of workers' councils to analyse the submissions of the technical/managerial experts, we can expect a large section of the work force (certainly the older, the young and the uneducated, and the dissatisfied) to insist on higher levels of personal income at the expense of investment. This conforms to the myopic behaviour of the type envisaged by the Ward-Vanek models. For various reasons, also discussed in Chapter One, the technical/managerial strata would be in favour of a division of net income with a bias towards higher enterprise funds.¹ These members of the firm resemble the executives of modern corporations who are interested in achieving the maximum rate of growth for their firms. The difference between the two being the type of constraints to which they are subjected. While

1 Similar position, only in much stronger form, has been argued by P. J. D. Wiles (1977), p. 85.

the managers of a capitalist corporation, for example, must provide their shareholders with a reasonable dividend payment, the Yugoslav executives must provide their employees with a satisfactory wage payment. In Chapter Two we referred to this as the "income distribution constraint".

In addition to the asymmetry of workers' attitudes towards wages and investment and the existence of different preferences among the different strata of the work force which influence the division of enterprise net income, the post-war period, and particularly the self-management period, has also witnessed the exertion of a constant pressure for higher earnings from the employees. Among the reasons for such pressure, the following three need further elaboration:

- i The possibility of relying on external financing. With the development of the banking system, relatively cheap credit became available to enterprises and, as we shall discuss in greater detail in the next chapter, the proclivity towards greater reliance on external financing strengthened.¹ In other words, if investment expenditures can be financed with external loans, more resources can become available for distribution to the employees.
- ii The effect of the migration of the scarce type of labour. Although Yugoslavia has been a labour surplus economy in the whole of the post-war period, it has continually suffered from the shortage of skilled and qualified personnel. Emigration of the Yugoslav workers to the Western European countries has had the two-fold effect of easing the general labour surplus and, at the same time, intensifying the shortage of highly qualified workers. This outflow

1 According to Furubotn and Pejovich an increase in the personal incomes fund and a corresponding decrease in the enterprise fund has been the natural outcome of the particular property rights pattern of the labour-managed firm for which external financing has become possible, see E. Furubotn and S. Pejovich (1973), pp. 280-281. On this question also see Jaroslav Vanek (1973), pp. 140-146 where he argues that the internal financing actually interferes with the efficiency of the labour-managed firms and proposes complete reliance on external financing.

becomes very significant when we consider the magnitude of the migration involved. In 1966, the number of Yugoslav workers abroad was estimated to be about 300,000 (about 8.3 per cent of the total employment); in March 1971, the population census put the number of migrant workers at about 700,000 (about 17.3 per cent of the total employment); and by the mid-seventies the migration reached an all time high of 1.2 million. In 1966, there were 5000 university and college graduates and 25,000 skilled workers among the migrants. The number of these two categories had reached roughly 10,000 and 112,000 by March 1971.¹

Of course there has always been a shortage of highly skilled and qualified employees in Yugoslavia, but the migration of these specific types of labour meant that the shortage has been aggravated and the pressure to increase the remuneration of these workers intensified. The pattern of migration has also meant that the incomes of the technical and professional staff have been affected differently than the incomes of the unskilled workers.

- iii. Dependence of workers' earnings on the going-wage in other industries. As we shall discuss shortly, the commission of the workers' council responsible for preparation of pay-schedule takes into account many factors in arriving at the wage rate for each of the employees. One of the significant criteria considered by the commission is the going-wage rate at other enterprises in the region.² Naturally, some enterprises by virtue of their financial superiority take the lead and offer higher wages. They are then in a better position to attract the highly skilled workers and professional staff from other enterprises. Berković has shown that industries

¹ G. Macesich (1969), p. 222; M. Begić (1972), pp. 17, 19 and 22; NLR, Jan-Feb. 1976, p. 25, quoting NIN, the Belgrade weekly; and SGJ (1972), pp. 80, and 89. The data for employment shows the number of people formally entered into employment relation and as such does not include the self-employed peasants.

² H. M. Wachtell (1973), chapter 5.

such as electric power generation, oil extraction and processing, and chemicals, for instance, pay higher incomes to their employees than others.¹ Horvat has also pointed out that the capital intensive enterprises have been able to improve their personal income position by distributing a part of their profits as wages.² The enterprises in the less successful industries must then follow these pace-setters. The workers in a low-wage enterprise or industry would certainly put pressure on the council to improve their personal income to the level of high wage industries. Many of the enterprises investigated by various researchers, did point out these pressures by maintaining that one of the main factors in their wage decisions was the level of wages in other industries.³

Whatever the outcome of the above considerations, the distribution of the net income between the enterprise funds and personal income fund has had to be acceptable also to the government. Since the government's main responsibility has been the management of the whole economy, it was natural for it to be sensitive to the pattern of division of net incomes of enterprises. A large wage increase can lead to changes in the general price level, consumption, investment, balance of payment and other macroeconomic variables which may not be acceptable to the government. The transfer of power to fix prices and wages to the enterprise management have, under the particular Yugoslav conditions, led to the familiar wage-price spiral. Wage and price increases tend to spread from one sector to another. Workers' councils have been sensitive to wage differentials between different enterprises and industries and this has meant that, if the conditions permit, they will use the simple method of price increase to raise their wages to the level of leading enterprises.⁴ However, some enterprises, for a variety of reasons,

1 E. Berković (1969), p. 83.

2 B. Horvat (1971a), p. 117.

3 H. M. Wachtell (1973), pp. 105-106.

4 See, e.g., S. Popov (1972), p. 80.

could not increase their prices to finance wage increases and this resulted in an expansion of the inter-enterprise and inter-industry wage differentials.

There were, therefore, ample grounds for the government stepping in to bring the enterprise management and the work force into line. The interventions usually took two forms: either putting a ceiling on prices and control of wages, or limiting the rate of increase of wages and prices.¹ Thus immediately after the 1961 reforms, the increased allocation of net income to the personal incomes fund in 1961 and 1962 necessitated the imposition of guidelines for distribution linking wage increases to the increase in labour productivity and capital labour ratio.² The 1965 reforms led to such a sudden increase in price level that, only two weeks after the announcement of the reforms, the imposition of a price freeze and, later, price ceilings became necessary. The seventies witnessed the introduction of social agreements on personal incomes, a kind of voluntary agreement entered into by enterprises and the government (to be discussed shortly). This phase is particularly significant as the central government has gradually retreated to the background and its role has been relegated to the republican governments. This is one of the results of the Constitutional Amendments of 1971 which were to further develop the political and economic decentralization.

It may be argued that government intervention as discussed above is an interference in the autonomy of enterprises and may threaten the system of self-management. The government may seem to have followed a contradictory policy towards enterprises by increasingly granting more autonomy in the determination of the level of wages, prices and investment, and then intermittently withdrawing or weakening that autonomy by imposition of wage and price controls, and sometimes freezing the

1 Other forms of intervention such as freezing of certain enterprise funds or blocking them in banks have also been sometimes used.
2 S. Pejovich (1966), p. 74.

enterprise funds to prevent them from financing new investment. The point is that the government could not leave everything up to the enterprises and at the same time keep the macroeconomic variables under its own management. The limits on the extent of self-management were not formally fixed and as a result the government let things develop under their own momentum until circumstances forced it to impose limits on self-management at particular times and under particular conditions. In fact one can say that the government was not fully aware of the implications of the independent decision making by the enterprises. It only realized, *ex-post*, that price rises, wage increases, inflation, etc., were some of the effects of the new system. As such it had to act to bring the macroeconomic variables under control. It must, of course, be emphasized that the interventions by the government have always been of a temporary character, for permanent controls would be contradictory to the principles of self-management and may undermine its basis.

So far we have discussed various reforms which aimed at increasing the share of revenue left at the disposal of enterprises, various attempts by the work force to appropriate a larger portion of the net income in the form of wages, and the methods of state intervention aimed at keeping the distribution process in line with the requirements of the overall management of the economy. What was the final result of the attempts of the three parties involved (the government, the enterprise and the workers) in the distribution process? How far did the workers succeed in appropriating a greater share of the revenue? How far was the autonomy of enterprises extended over the distribution of their revenue? Did the share of the State appropriation of the enterprise revenue reduce significantly?

Table 7 represents the summary of the three-way distribution of enterprise social product.

Table 7 - Distribution of the Social Product Between the Govern-
ment, Enterprises and the Work Force in the Social Sector of
Economy (%)

Year	Government & Community*	Enterprises**	Net Personal Income of Work Force
1959	57.2	17.7	25.1
1960	56.7	17.9	25.4
1962	52.0	21.7	26.3
1964	45.6	26.4	28.0
1966	38.1	27.9	34.0
1968	40.6	24.2	35.2
1969	42.5	21.0	36.5
1970	41.2	21.7	37.1
1971	37.8	25.7	36.5
1972	38.9	25.1	36.0
1973	40.0	25.4	34.6
1974	38.7	27.7	33.6
1975	39.0	26.5	34.5

Notes: * Including all taxes and contributions levied on enterprises as well as the work force.

** Sum of depreciation and enterprise funds only.

Source: The data for 1959-1968 is compiled from: I. Paj (1970), p. 82 and p. 85. The data for 1969-75 is from SGJ (1971), p. 115; SGJ (1972), p. 121; SGJ (1973), p. 129; SGJ (1975), p. 143; SGJ (1976), pp. 145 and 147; and SGJ (1977), p. 149.

The change in the division of the social product between the three parties during the period under consideration (1959-75) is striking. The share of government agencies and community as a whole decreased from 57 per cent to 39 per cent of the total. These resources were transferred roughly equally to the enterprises and the work force. The share of the workers seems to have stabilized by mid-sixties with some short term variations (sometimes significant) occurring all through the period. The increased share of the enterprises has been mainly devoted to their business funds and reflects their greater reliance on their own funds for investment expenditure. However, the change in the pattern of the distribution of the social product and specially the transfer of resources from the government to the enterprises does not imply a change in the pattern of use of the social product. This is because following the granting of autonomy over investment expenditure to

enterprises, a large proportion of investment activities were no longer handled by the government but by the enterprises, and the investment resources began to appear under enterprise funds rather than under the government controlled funds. In a sense, this part of the change, depicted in the above table, is due to a reclassification of the investment expenditure and does not imply anything about changes in the pattern of use of the resources.

The part of resources transferred from the State to the workers, however, is different. Not only does it mean that the agent appropriating the resources has changed but it also implies that the pattern of use of this part of the social product has changed in favour of personal consumption. In terms of the end use, therefore, the major impact of the autonomy granted to the enterprises has been on that portion of the social product allocated to personal incomes. We have already discussed the reasons which explain how the transfer of power over the determination of wages, from the State to the workers' councils, has led to an increase in the earnings of the employees.

Apart from the above consideration, Table 7 also shows that:

- i. The autonomy over the distribution of the social product has been greatly relegated to the enterprise management. While in 1959 the management was responsible for distribution of 43 per cent of the social product, by 1975 they were exercising effective influence over 61 per cent of the total output.
- ii. The pressure from workers, as well as various other considerations mentioned above, have indeed led to a significant increase in the proportion of social product going to the personal incomes of workers. The increase in this proportion was particularly sharp in the post-reform period until 1971 after which it began to decline slightly. From 1966, as a result of their newly gained independence, the councils suddenly began apportioning a larger share of the output to wages

(from 28 per cent in 1964 to 34 per cent in 1966) and the increase continued until 1971 (37.1 per cent). Then, the intervention by the State in the form of social agreements on incomes halted the rapid growth.¹ The increase in the share of personal incomes in the social product was not uniformly divided between various sections of the work force and in the course of this period significant income differentials began to appear. But before discussing this aspect, the development of the process and methods of the determination of the actual wage levels should be discussed.

2. Determination of Wages. Although the system of determination of wages or personal incomes has undergone numerous changes in the post-war period, nevertheless, it is claimed that the underlying principles throughout the period has been the Marxist distribution formula of "from each according to his ability, to each according to his work." During the central planning period, the wages were determined by the central plan and depended on the skill and qualification of the worker concerned. It was implicitly assumed that different workers, of the same skill category, would exert equal effort in their job and therefore had to be remunerated equally. During the transition period, wage determination was gradually transferred to the workers' councils (subject to certain guidelines and restrictions). Here the guidelines were meant to reflect the need for equal remuneration for equally qualified workers while the enterprise autonomy would determine the actual contribution of the workers (the bonus or variable wage). In the self-management period, the central guidelines were abolished and the whole issue was left to the enterprises. The principle of "remuneration according to work", however, continued to dominate the discussions on wage policy be it among academics or in trade associations, economic

1 See, e.g. M. Vujačić (1977), p. 53

chambers or policy making circles.¹ But the basic problem, which incidentally has been ignored, is that a precise wage schedule cannot be derived from the formula "to each according to his work" alone if the workers are to be compensated by cash or any other single medium of exchange. There are two reasons for this: firstly, work is heterogeneous and there is no natural way of comparing different kinds as there is no standard unit by which different kinds of work can be measured. If various types of labour are to be measured by a common standard unit, then it is necessary to have a ranking of different kinds of work based on some assumption about the relative importance of different types of jobs. The formula "to each according to his work", however, does not furnish such a ranking. Instead, it is the planning authorities or the enterprise management (depending on what period one is talking about) who decide on the ranking of different jobs in terms of importance, and therefore remuneration. Secondly, the domain of the application of the formula is not clear. The formula can be applied to individual enterprises or to larger units such as the industry, the region or the whole country. In the former case, provided some assumption is made about ranking, all workers of similar skill in each enterprise would be remunerated equally whereas in the latter cases it is the workers with similar skill throughout the whole industry, or region or the whole country that would be remunerated equally. Traditionally, the latter consideration has dominated the Marxists view of the subject. In Yugoslavia too, during the central planning period and earlier part of the transition period, this same view was dominant, expressed through the central determination of wages. But gradually, as enterprise autonomy over wage determination expanded, the units of production became the domain of the application of the

1 See B. Horvat (1971a), pp. 179-185 for a summary of the discussions among the Yugoslav economists on the 'validity' or 'applicability' of this principle in the self-management conditions.

formula. Methods of job evaluation, point system, time and motion study, etc., are all examples of the attempts to determine the contribution of each individual worker to output or net income. From the early seventies though, some attempts have been made to formulate the wage guide lines on the level of each constituent republic rather than on the level of each enterprise. (We shall come back to this point shortly.)

In preparation of the wage schedule, or the "Rules for the Distribution of Personal Incomes" as it is officially known, factors other than "to each according to his work" are also considered. Market conditions and particularly the pay schedules of other enterprises in similar lines of activity are examples of these other factors. In this way the element of scarcity is indirectly introduced into wage determination. In other words, the earnings of a specialist will not only depend on his contribution to the enterprise functioning (leaving aside the difficulties involved in measuring his contribution and comparing it with that of other employees), but is also affected by the shortage of his expertise. It would be difficult, if not impossible, to determine the contribution of either characteristics to his earnings.

The actual method of determination of personal incomes has changed very little during this period. Every year, a sub-committee of the workers' council considers each job in the enterprise and prepares a draft job evaluation and wage schedule for the next year with the aid of time and motion study and other experts. The schedule is then adjusted according to the market conditions, i.e., by comparing the pay scale with the going wage in other enterprises of the same industry and region as annually published by the Confederation of Trade Unions. Herein lies another peculiar aspect of the 'labour market' in Yugoslavia. The effect of market conditions on wages is asymmetrical in that the wage level is affected only in conditions of labour scarcity and not in those of labour surplus. For example the wages of technical and skilled

labour have increased on the grounds that higher wages have been necessary to keep this kind of labour and to attract it from other enterprises. On the other hand the wages of unskilled labour did not decrease on the grounds of its abundance. In other words, wages are flexible upwards but inflexible downwards. This is obviously linked to the particular structure of the Yugoslav economy and labour market where the unemployed workers cannot bid the wages down as the decision to fire some workers or lower the wage of a considerable proportion of the work force is socially and politically unacceptable.

After the above considerations, the draft of the wage schedule is distributed to all members of the work force as well as other interested bodies such as the trade union branch, commune authorities, etc. These other bodies study the draft and prepare an analysis, criticisms and suggestions. Then an enterprise meeting is called in which the general work force as well as external bodies participate. The draft proposal is discussed and various proposals and modifications are considered. The meeting then adopts the pay scale as the "Rules for the Distribution of Personal Incomes" which is a binding decision and needs no one else's approval.¹ The method of actual receipt of income by the workers remained very similar to that already discussed. At the end of each month, every worker receives an income based on the estimated output as well as his wage rate. At the end of the year, if the enterprise has made a profit, i.e., if there is any left-over from the gross revenue after subtraction of costs, obligations, allocation to enterprise funds and wages already paid, then the workers will receive their residual income in the form of 13th pay slip. But if the enterprise has made a loss (i.e., if the workers have already received an income in excess of their *ex-post* determined personal incomes), then the excess receipts

1 H. M. Wachtell (1973), Chapter 5.

will be charged against them in the next production period.¹ In this method lies an important features of the behaviour of the Yugoslav enterprises. Although in theory the workers share the net income of the firm (subject to uncertainty, risk, etc.) and in fact they do press for higher wages continually, in practice the earnings are not completely uncertain. In the main, the wages of all members are decided in advance with minor adjustments left to be performed at the end of the accounting period. In terms of our discussion in Chapter Two concerning the objectives of the labour-managed firms, the actual procedure of wage determination, as discussed above, corroborates Horvat's argument that in the labour-managed firm the incomes of the workers are essentially fixed in advance and that the income per head maximization process - as envisaged in the Ward and Vanek models - is largely of a theoretical and not a practical nature. When the wages are relatively predetermined, all that enterprise management can aim for is to maximize the net income less fixed wages.

Obviously, the procedure for determination of personal incomes does not mean that the government ceased to be concerned or to intervene in the determination of final level of personal income. The form of intervention, nevertheless, has slightly changed. Along with the transfer of power in the fields of wage and price determination and level of investment from planning agencies to the enterprise organs of management, there was also a transfer of the power of intervention from the central government to the republican governments. The 1971 Constitutional Amendments were significant steps in this direction as

1 V. Dubey (1975), p. 318. The 1966 Law on Employment Relationship specifies the method of wage payment to the workers as follows:
"1. A worker's income shall be fixed by the (collective) on the basis of the money available for distribution of final income;
2. In the course of a year, a workers shall receive advances on his personal income on the basis of current result of work operation;
3. A worker shall be entitled to minimum personal income irrespective of the organization's work and operation". (This is the statutory minimum income guaranteed by the State and is usually very low). See Institute of Comparative Law (1967), p. 36. For an example of the guaranteed minimum income levels see H. M. Wachtell (1973), p. 101.

they empowered the republican authorities with making important fiscal and monetary decisions. The income distribution arrangement and particularly the wage policy of enterprises were now to be overseen by the republican instead of the federal government. The inflationary situation of the early seventies and the increased pressure for large wage increases led to a new type of intervention called the "Social Agreement on Incomes". This was a voluntary agreement on specific guidelines for payment of personal income, entered into by the republican government, the enterprise associations (representing the enterprises in each industry) and enterprises themselves. The agreement, in essence, has been an arrangement to prevent too rapid an increase in the level of personal incomes. All republics by now have developed some kind of social agreement and succeeded in varying degrees to implement them.

The basis of the social agreement is to link the earnings of the employees of each enterprise to their productivity as well as to the average earning and average productivity of all enterprises in the republic. In other words if the productivity (measured in simple terms of output per worker) of the workers of an enterprise exceeds the republican level of output per man, then the average earning of the employees of that enterprise could also exceed the republican average. The Social Agreement is meant to determine: i) the form of this proportional relationship, and ii) the way in which different categories of workers are to enjoy the fruit of their higher than average productivity. In this way the Social Agreement can also influence the inter-enterprise as well as the intra-enterprise income differentials.

As an illustration of the type of arrangement for income distribution, we shall discuss the Social Agreement on Incomes in Croatia in the Appendix to this chapter.

Although the Social Agreement seems to provide limits to the demand

for wage increase, it has had significant implications for policy towards the earnings of different categories of workers. Firstly, it has implicitly sanctioned, and in a way consolidated, the wage differentials between different categories of workers in each enterprise by providing a specific ranking of the importance, as well as a coefficient of comparison, for different categories of workers (as in Table 11 in the Appendix). Secondly, the use of the recent pattern of income distribution and wage structure in the enterprises as the basis of the standard income per head of the work force is not without objection. There is no reason to believe that the recent pattern has been correct, appropriate or desirable enough to be used as the basis for future income determination. The arrangement, again, consolidates the previous pattern with all its undesirable aspects such as income differentials, the imprecise nature of the relationship between performance and remuneration, etc. Thirdly, while the Agreement intends to link the personal incomes of the employees to their qualification and their average output, it fails to take note of other factors outside, as well as, inside the enterprise that can affect the output per head while having nothing to do with workers' qualifications or their efficiency. With prices determined in predominantly oligopolistic markets, some enterprises will have extra income by virtue of their market position rather than the qualification of their workers. Some enterprises are highly capital intensive, and can produce a larger output per head without having better quality workers or more efficient production. Without exerting any more effort or being any more qualified, some workers end up with higher earnings than others for the simple reason that they work for the more capital intensive firms or for firms enjoying a particularly favoured market position. A built-in system of earning differentials is thus part and parcel of the Social Agreement on Incomes.

This brings us to the last part of the discussion of the self-

management period, i.e., the different types of income differentiation.

3. The differentiation of incomes. In the self-management period, income differentials have been developing: i) between various categories of workers in each enterprise; ii) between the average worker of enterprises in the same industry; iii) between various categories of workers in different industries; iv) between the average worker of different industries; and v) between the average worker of different regions. As before, the sources of differentials are two-fold: firstly the difference between the performance of different enterprises in the market which leads to a different level of net enterprise income and net personal income in different industries and regions; secondly, different arrangements within each enterprise with an unequal bargaining position for different categories of workers which lead to income differentials between different strata of the work force in each enterprise.

As far as the first two types of differentials are concerned the only available data is the partial survey of some 179 enterprises in Belgrade area carried out in 1966 and 1967. According to this survey, the ratio of the earnings of the highest paid to that of the lowest paid employees varied between 1:2.5 and 1:8 with 1:4 being the most frequent ratio.¹ It is interesting to observe that the Social Agreement on Incomes as implemented in Croatia in the early seventies, actually allows a similar differential between the most qualified and least skilled employees (see Table 11 in the Appendix to this chapter).

In terms of the income differentials between the enterprises in the same industry, the partial survey mentioned above showed that for the metal manufacturing enterprises in the Belgrade area the ratio of the highest to lowest average personal income was 1:2.37.²

It is impossible to draw any significant conclusion, from the above

1 E. Berković (1969), p. 82.

2 *Ibid.*, p. 83.

results, about the trend of the differentials or even their actual extent over the whole economy or even in a particular sector of the economy. More detailed information is necessary to make a definitive assessment of the pattern of income differentials. As for other types of differentials, fortunately, comprehensive data is available on the average personal incomes of the workers in different categories of skill, different industries and different regions. These data can be utilized to investigate the trend of inter-skill, inter-industry and inter-regional income differentials.

a. Inter-skill income differentials. Here we shall make use of the available information regarding the average monthly personal income of the workers in different skill categories. Table 8 represents this information for the workers engaged in economic activities for selected years from 1959 to 1974.

Table 8 - Index of the Average Monthly Personal Income of
Different Categories of Workers Engaged in Economic Activities
(Percentages)*

	1959	1964	1967	1971	1974
All workers	100	100	100	100	100
<u>White collar workers</u>					
Advanced level of professional educ'n.	{196	204	196	198	187
Higher level of professional education		175	156	159	148
Secondary level of professional educ'n.	120	141	115	112	112
Lower levels of professional education	89	104	89	87	87
<u>Blue collar workers</u>					
Highly skilled	153	140	128	128	126
Skilled	105	108	94	92	95
Semi-skilled	81	86	78	77	79
Unskilled	66	77	72	69	69
Ratio of extremes	3.0	2.6	2.7	2.9	2.7

* The average monthly net personal income of the workers employed in the whole of economic activities, for each year, is assumed to be 100 and then that of different categories is expressed as a percentage.

Source: SGJ (1960), p. 257; SGJ (1966), p. 284; SGJ (1970), p. 266; SGJ (1973), p. 288; and SGJ (1976), p. 305.

The dispersion of personal incomes can be seen by the extent to which

the data for each year departs, in either direction, from 100. The average white collar employee with an advanced level of professional education has continually received nearly twice as much as the average employee in the economic activities while the unskilled labourers have been receiving only about 70 per cent of the national average. Table 8 shows that the trend of inter-skill earning differentials (represented by each horizontal line in the above table) follows a somewhat oscillating path and is different for different categories of workers. Between 1959 and 1964, the relative position of medium and lower grade workers improved slightly. On the contrary the relative position of those employees with high and higher levels of professional education and that of the highly skilled workers slightly deteriorated. This can be explained by referring to our discussion in Chapter One where we showed that in this period the representation of the lower grade workers increased on the organs of management. The increased representation of these groups could have been a major factor in the improvement of their relative earnings. Also the introduction of compulsory wage guidelines in 1963 (as a reaction to the rapid wage rise following the liberalization measures of 1961)¹ prevented the wages, particularly the wages of the upper strata, from rising too rapidly and therefore contributed to the marginal reduction of the differentials. From 1964 to 1967 the relation was marginally reversed. Although the highly educated employees suffered a slight fall in their relative earnings, the blue collar workers' position deteriorated even more with respect to average personal incomes so that the ratio of extremes marginally increased. From 1967 to 1971 the dispersion became slightly wider due to the improvement of the position of the top two groups at the expense of the last group (the unskilled workers). During the seventies the situation was again marginally reversed and the spread narrowed slightly.

1. D. Milenkovich (1971), p. 171.

In the self-management period, as a whole, one can conclude that the extent of differentiation of personal incomes between different categories of workers engaged in economic activities did not change much.

The periodic change in the relative position of various categories is the result of several factors which simultaneously influence the earnings of each category of workers. The influence of the technical/administrative strata, shortage of the highly qualified personnel, pressure from the workers' councils who are most clearly concerned about the earnings and the performance of the enterprise in the market are some of these factors. Table 8 actually represents the sum of two different types of income differentials mentioned before. A part of the differential is due to the differences in the quality of the labour performed while another part is due to the performance of different enterprises in the market. It is, of course, impossible to separate the two as this requires highly disaggregated data. As a note of caution it must be emphasized that the data in Table 8 shows the average personal income of different categories of workers in all branches of economic activity. As such the differences between various branches (and even enterprises within each branch) are concealed. Just to give an example, while in 1964 the ratio of the two extremes of personal income was 2.6, the printing industry had a ratio of 2.1 and the Textile industry had a ratio of 3.6. In 1967, the ratio ranged from 2.3 (Ferrous Metallurgy) to 3.4 (construction); in 1971 from 2.2 (Tobacco industry) to 3.4 (Construction); and in 1974 from 2.3 (Manufacturing of Metals) to 3.0 (Construction). Still, the situation within enterprises or within the non-economic activities could have been more divergent.¹

1 As Ekonomska Politika, July 26, 1971 reported, in 1969 the highest personal income in the country was 2700 per cent higher than the lowest. Director of a scientific institute with 6141 and a Serbian pilot with 6122 dinars per month were the highest paid workers while an unskilled hotel worker with 224 and a railroad cleaning lady with 281 dinars per month (both in Kosovo) were the lowest paid ones. Strangely enough, both of the lowest wages were below the legal minimum wage rate. Certain sections of the employees in non-economic activities such as those engaged in banking and insurance and employees of social organizations have also been receiving salaries 50 to 70 per cent higher than the average worker in Manufacturing & Mining. See E. Berković (1969), pp. 85-86.

Income differentials between different categories of workers are usually influenced by the extent to which the management personnel receive non-wage incomes. There is no exact data available on this type of remuneration, but according to Dirlam and Plummer the directors and executives of the Yugoslav firms receive fringe benefits such as generous travel allowance, car, expense accounts, etc.¹ Since the non-managerial, non-administrative members of the work force do not ordinarily receive such fringe benefits, the inter-skill income differentials are actually widened as a result of such benefits.

b. Inter-Industry Income Differentials. Since the data on average net personal incomes are available for workers in various industries in the Manufacturing & Mining sector, we can take this sector as the basis for investigation of inter-industry income differentials. We shall express the average personal income in each industry as a percentage of the sectoral average (i.e., the average personal income in Manufacturing & Mining) so as to point out the relative position of different industries and their trend over time. Table 9 represents the situation from 1959-76, (see next page for Table 9).

From a simple comparison of the personal incomes in different industries in each year, two kinds of industry stand out clearly. First is the group of industries which have continuously paid out higher than average personal incomes. Among them the electric power, petroleum, iron & steel, shipbuilding, chemicals, printing & publishing, and film making industries occupy the prominent position. The second group includes tobacco, leather & footwear, textile, timber & wood products and building material industries which have continually paid out lower than average incomes to their workers. Two factors separate these two groups of industries. Firstly, the former group is associated with such characteristics as modern technology and high capital intensity,

1 J. Dirlam and J. Plummer (1973), p. 31.

whereas the latter group covers the more traditional and technologically less advanced branches. The former group includes industries with some of the highest rates of industrial concentration (petroleum, ferrous metallurgy and shipbuilding)¹ while the latter group includes the more competitive types of industries.

Table 9 - Average Net Personal Income of the Workers in Different Industries in Manufacturing & Mining (%) 1959-1976*

Industry	1959	1963	1967	1970	1973	1976
<u>Manufacturing & Mining</u>	100	100	100	100	100	100
Electric power	116	136	158	150	138	140
Coal & coke	114	107	95	99	112	119
Petroleum	120	135	164	148	155	154
Ferrous metallurgy	124	116	111	112	114	112
Non-ferrous metallurgy	111	111	126	113	111	112
Non-metallic mineral products	97	90	89	92	91	91
Metal products	117	111	102	103	99	105
Shipbuilding	125	133	140	138	134	126
Electric equipment	106	106	100	103	96	101
Chemical products	112	116	119	111	109	112
Building materials	84	84	93	96	96	92
Timber and wood products	80	79	75	88	90	86
Paper products	106	113	98	105	100	103
Textile	85	81	80	77	85	78
Leather & footwear	96	90	89	84	91	83
Rubber products	122	104	105	95	94	96
Food products	89	91	99	97	100	99
Printing & publishing	104	120	127	128	114	117
Tobacco	81	85	87	83	97	99
Film making	125	131	139	147	128	132
Ratio of extremes	1.6	1.7	2.2	2.0	1.8	2.0
Relative deviation **	14.2	17.0	22.4	20.2	16.7	17.6

* Average monthly personal income of all workers in Manufacturing & Mining sector in every year is assumed to be 100 and that of the workers in each industry is expressed as a percentage of the sectoral average.

** This is equal to the ratio of standard deviation to the mean.

Source: SGJ (1960), p. 259; SGJ (1966), p. 277; SGJ (1970), p. 265; SGJ (1973), p. 284; SGJ (1977), p. 311.

Secondly, the proportion of highly skilled and qualified personnel is much greater in the work force of the former group than in that of the latter. The result is that, *ceteris paribus*, the former group, enjoying a better market position, can have a more profitable performance

1. See H. M. Wachtell (1973), p. 191 for some measures of concentration. Also see S. Estrin (1978).

and faster rates of growth.¹ They can finish their financial year with higher net incomes, and as they are able to rely on external finance and have a better access to external resources, they can afford to distribute higher personal incomes.²

The differentials between different industries are thus due to the two factors mentioned before. The varying performance of different industries and the greater concentration of the scarce type of labourers - the highly qualified and skilled - in some industries than others lead to the differentials between the average earnings of the employees of different industries.

Another aspect of the inter-industry income differentials is its trend in the sixties and seventies. Here, the trend is not uniform and several fluctuations can be observed. From 1959 to 1967, the differences between the high-wage industries and the low-wage industries expanded. This can be seen from several angles. The relative position (relative to the average) of electric power, petroleum, non-ferrous metallurgy, shipbuilding, chemicals, printing & publishing, and film making industries improved, while that of the coal & coke, non-metallic minerals, building materials, textile and leather & footwear industries deteriorated. This resulted in the expansion of differentials between these industries. The expansion is also reflected in the increase in the two measures of dispersion calculated in Table 9. The ratio of extremes, showing the highest average wage to the lowest, increased from 1.6 to 2.2. The relative deviation also increased from 14.2 to 22.4. At least part of this expansion in income differentials must be due to

1 Petroleum, chemical products and electric power industries were among the fastest growing industries since 1960 while tobacco, coal & coke, leather & footwear, textile and building material had the lowest rates of expansion (sometimes even negative), SGJ (1976), p. 187. See also V. Dubey (1975), p. 115.

2 The tendency for the capital intensive industries to pay out higher personal incomes by distributing part of the return to capital as wages has been pointed out by many investigations, among them, V. Dubey (1975), p. 238 and B. Horvat (1971a), p. 119

the increased reliance on market forces to determine prices and the increased autonomy of the workers' councils to decide on wages and investment. This trend was particularly strong after the 1965 reforms when, eventually, strict price control had to be introduced. From 1967 to 1973, the general trend discussed above was slightly reversed and the income differentials between the two groups of industries was marginally reduced. The range of dispersion and the relative deviation indicators also slightly reduced. The most important factor for this reversal must be sought in several government interventions to curb price rises and impose guidelines on allocation of personal incomes particularly in the seventies. From 1973 onwards, the trend seems to have reversed again and the difference between the modern industries on the one hand and the traditional industries on the other, expanded again. Nevertheless, it is too soon to make a definitive judgement about this period. We can only see that the measures of dispersion have taken a turn and begun to increase.

The change in the relative position of the two groups of industries above should not, of course, be generalized to all branches as the relative position of many industries changed in ways different from the general trend during various sub-periods. The particular conditions of these industries such as the market for their products, were as important factors for their wage policy as were the internal factors such as the performance and productivity of their work force. For example, in the deterioration of the relative position of the ship-building industry since the late sixties, the world wide depression in this field must be taken into account, and the recent improvement of personal incomes in the coal industry must be partly associated with the effects of the energy crisis which led to an increase in the demand for coal.

The important point here is that income differentials do not just

arise from differences in the quality of the workers in particular industries. Instead, due to the particular method of wage determination and the Yugoslav labour market, they are closely linked to the position and performance of the enterprises in the market and their profitability. As long as the system of income sharing is in operation, no amount of liberalization and economic reforms will lead to a change in the structure of the labour market to make it more responsive to wage differentials.¹

c. Inter-Republican Income Differentials. The available data on the breakdown of the income differentials in six republics allows us to analyse the differentials in the earnings of each category of worker across various republics. In this way, we can be sure that inter-republican differentials are totally due to the varying performance of the enterprises in different regions. Table 10 shows the republican average net personal income per month for three different categories of employees: those with advanced professional training, highly skilled and unskilled workers. (see next page for Table 10).

Each column of Table 10 shows that in some of the republics, the personal incomes paid out to the workers of each particular skill, exceeds the national average while those in some other republics fall short of the national average. The divergence from the national average reflects the income differentials across the republics. Significantly, almost always, the personal incomes distributed in Slovenia and Croatia are much higher than the national average while in Macedonia and Montenegro personal incomes have always remained below the national

1 Several authors have studied the inter-industry wage differentials in Yugoslavia. While they have generally pointed out the underlying tendency for the expansion of wage differentials, some of them maintain that further improvements in labour market will narrow down the differentials. The experience of the late sixties and early seventies, as shown in Table 9, however, does not support this view. See E. Berković (1969); H. M. Wachtell (1970) and (1972), pp. 548-551, and (1973), pp. 138-140; and S. Popv (1972).

average. Personal incomes in Serbia have also remained below average though not as low as those in Montenegro and Macedonia. The situation in Bosnia-Herzegovina has been closer to the national average. These results, of course, should be expected. The republics of Slovenia and Croatia are more developed, with more advanced industry and commerce, with a more developed market-oriented economy, with a longer history of

Table 10 - Average Net Personal Income of Different Categories of Workers of Various Republics, Economic Activities Only (%), 1964-1974*

skill category and region	1964	1967	1970	1974
<u>Employees with Advanced Professional Education</u>				
Yugoslavia	100	100	100	100
Croatia	97	111	107	105
Slovenia	130	122	129	117
Bosnia-Herzegovina	104	90	97	98
Serbia	94	97	87	95
Macedonia	83	89	84	85
Montenegro	92	91	95	95
<u>Highly Skilled Workers</u>				
Yugoslavia	100	100	100	100
Croatia	132	111	113	109
Slovenia	125	121	119	113
Bosnia-Herzegovina	100	96	100	101
Serbia	92	95	89	95
Macedonia	85	86	86	86
Montenegro	86	85	92	93
<u>Unskilled Workers</u>				
Yugoslavia	100	100	100	100
Croatia	116	103	105	109
Slovenia	130	118	121	113
Bosnia-Herzegovina	85	90	98	92
Serbia	90	99	95	97
Macedonia	84	87	86	89
Montenegro	83	89	92	90

* The national average personal income for each category, in each year, is assumed to be 100 and the republican personal incomes are expressed as percentage of the national average.

Source: SGJ (1966), p. 486; SGJ (1970), p. 467;
SGJ (1973), p. 499; SGJ (1976), p. 513.

industrial experience and with more efficient enterprises and management personnel. They also enjoy a superior position vis-a-vis their

competitors by being nearer to the markets for their final products. The enterprises in these two republics can, *ceteris paribus*, perform better and end up with higher net incomes and therefore distribute larger personal incomes than the enterprises in the less developed regions. The differential was particularly large in the early sixties (for example, see the situation in 1964, Table 10). The trend of variations in the republican personal incomes can be observed by looking at each of the horizontal rows of Table 10. Clearly in the period from 1964 to 1967 (and sometimes to 1970), the dispersion between the republican personal incomes reduced. The personal incomes in Slovenia and Croatia as well as those in Macedonia and Montenegro move towards the national average. In the late sixties and early seventies the situation seems to have stabilized with a certain degree of dispersion remaining. Since we are considering the differentials for each category of skill separately, the remaining differentials are only due to the difference in the performance of enterprises in different republics. Of course, like Tables 8 and 9, the above table also suffers from the fact that it shows the republican average personal income. As such a greater degree of dispersion which can exist within each republic has already been levelled out. Theoretically, one may expect that with the improvement in the labour market, the inter-republican income differentials would gradually diminish. The workers in the low-income industries would be expected to move to the high income industries and firms and the large differentials would eventually level out. However, the particularity of the Yugoslav labour market is that the unemployed workers, or the low paid employees, cannot bid down the going wage of those already employed in the prosperous and high income industries. Besides, with the largely underdeveloped social and economic institutions, the labour market in the less developed regions (LDRs hereafter) also suffers from very low mobility particularly in the case of the less

qualified workers. This factor tends to perpetuate the persistence of the income differentials across republics.

To sum up: During the self-management period the locus of decision making was further transferred from the central government to the enterprise workers' councils and other organs of management. Two aspects of this transfer were of particular importance: the increased independence of enterprises in influencing the formation of their revenue and the increased autonomy over the uses to which the revenue could be put. Economic reforms of 1961 and 1965 improved the system of price formation, reduced the number of commodity prices subject to controls and left most of the decisions on price level to enterprises. In terms of the distribution of the net income between the government, the enterprise and the employees, the enterprises gained complete autonomy over the determination of the level and composition of investment, on the one hand, and the classification of the work force and their pay structure, on the other. The most significant step taken by the government since the introduction of the Yugoslav 'road' was the dismantling of the machinery of central determination, allocation and financing of investment from 1963 onwards. Since the investment decisions were transferred to enterprises, the government could afford to appropriate a smaller proportion of the social product of the enterprises in the form of taxes and contributions. As a result the share of the government in the three-way division of the social product fell and the shares of the enterprises and the employees increased. This, of course, was in line with the self-management principle of leaving as much of the social product as possible to the enterprises themselves.

In the area of wage determination, in the self-management period, the enterprises gained full autonomy on deciding the earnings of their employees. These earnings became totally dependent on the performance of the individual worker and that of his enterprise. This created the

necessary conditions for the development, and even widening, of different kinds of income differentiations. In the period leading to the 1965 reforms and immediately afterwards, the three types of income differentials (inter-skill, inter-industry and inter-republic) widened. After a small reduction in the differentials in late sixties, they seem to have stabilized.

D. Summary and Conclusions

In this chapter we have been concerned with the effects of the implementation of self-management principles in the fields of income distribution and wage determination in Yugoslav enterprises. During the central planning period, and to a large extent during the transition period, the decision making power was vested in the hands of the government. Division of enterprise revenue into three portions for enterprise, employees and the State was done according to the annual social plans which reflected the preferences of the planning authorities. The level of wages and investment expenditure only marginally depended on the performance of the enterprise. During the transition period, various steps were taken to increase that portion of wages and investment expenditure which was linked to the profitability of enterprise operation. This meant that on the one hand the size and importance of the bonus payments (the thirteenth pay slip) increased, and on the other hand a certain proportion of net enterprise income was allowed to remain in the firm as fixed and working capital funds which could be used for investment financing independently. Through various methods, however, the State continued to retain the decisive position in the field of income distribution. This position was necessary due to the particular behaviour of the Yugoslav-type labour-managed firms. From the time the workers' councils obtained the power to influence wages, they did not hesitate for a moment to press for higher remunerations. They used

all the legal means at their disposal, as well as some illegal ones, to increase the wage payments. Benefiting especially from this situation were the highly skilled workers and professionals who were in great demand and short supply. The basic reason for the continued government intervention was the interest in the overall management of the economy, particularly the control over wages and prices and the need to ensure that sufficient resources were channelled to investment.

The demand for further relaxation of State control, granting further autonomy to the enterprises and increasing the share of the resources left at the disposal of enterprise management, came not only from certain sections of the national and regional leadership but also from certain sections of the population (specially in the more developed republics) and from a large proportion of the enterprises and their organs of management. Bitter struggles took place over these issues in the early sixties. In economic terms, the outcome of these struggles were the 1961 and 1965 reforms supplemented by various measures decided upon in the intervening years.

The principal guideline underlying the self-management period was that the locus of decision making power was to be transferred from the State to the enterprises. This required the enterprises to enable themselves on the one hand to decide on the division between investment and personal income funds and, on the other, to determine the level of personal incomes of the employees and the level and composition of investment. We showed that the distribution of the social product between the three parties changed considerably during this period. The share of the government, as one should expect, fell and the share of other agents increased. Although in terms of control over resources the change was important, in terms of the use to which the resources were to be put the change was less significant. Part of the reduction in the share of the State was clearly distributed as income and led to

an increase in consumption. But the other part of the reduction, appropriated by the enterprises, was spent on investment expenditure as the State would have done.

In the area of wage determination, the autonomy of enterprises expanded to the fullest possible extent. The management organs of each establishment became responsible for deciding on the ranking and classification of different employees and on respective pay levels. The expansion of the autonomy of enterprises was accompanied by an increase in the share of social product allocated for personal incomes. Many factors were responsible for this trend. The particular structure of property rights in Yugoslavia, the disincentive to invest in one's own enterprise, the concern of the bulk of the employees with higher present incomes and their apathy and lack of involvement are some of the contributing factors.

Unlike the self-employed labourer whose relations with his firm cannot be revoked without affecting his status as a self-employed person, the relationship of a Yugoslav worker to his enterprise is a purely commercial one which can be revoked at any time by the worker - at least as soon as he finds another prospective employer paying a higher personal income - without affecting him or his status as worker. The commercial nature of the relation of workers to their enterprises in Yugoslavia is quite similar to that of workers towards their firm in capitalist economies. Higher wages are as likely to lure a Yugoslav labourer as they are the labourers of a capitalist firm. Given the possibility of labourers changing their enterprises, they are likely to adopt a myopic view towards the benefits of investment and treat such benefits - which are spread over a long time in future - as irrelevant to their present position.

The gaining of complete autonomy over the division of net income between the enterprise fund and the personal income fund and over the

system of division of the latter fund among the employees did not mean that the State withdrew from this scene altogether. As long as the government has the responsibility for the management of the economy as a whole and as long as it is interested in such macroeconomic variables as wage and price level, consumption, investment, trade deficit, etc., it cannot remain indifferent towards the decisions made by the workers' councils. An inflationary wage-price spiral changes the composition of demand and output in favour of more consumption goods and less investment goods and will also affect the balance of payment as well as many other macro-variables. This is the reason why we have witnessed periodic intervention by the government in a way that seems almost to contradict the self-management principles. Imposition of price ceilings, limits on pay rises, and in the most recent form, engaging enterprises in agreements on incomes policy are examples of intervention by the State.

Although there was a general increase in the share of enterprise revenue going to wage fund, the increase was not uniformly distributed among all workers. In the previous period, the existence of a national wage scale (even for the fixed wages) meant that the difference between the earnings of workers of each skill category who work in different enterprises would be small and, mainly, centred on bonuses (or variable wages) which linked their earnings to the performance of their enterprise. In the present period, the national wage scale was done away with and the whole of earnings became dependent on enterprise performance. Besides, as the performance of different enterprises (particularly in different regions) was very varied, the increase in wages was not uniform across different enterprises, industries and regions. As a result, a considerable degree of income differentiation developed between workers of different skill categories, workers of different enterprises and different industries. Given the difference

between Yugoslavia's different regions (in terms of the level of economic development, demographic characteristics, social and cultural attributes), the income differentials between different regions also expanded. The persistence of income differentials are essentially due to the difference in the performance of different enterprises (due to different levels of capital intensity, different techniques of production and different market powers), shortage of certain types of labour and the particular characteristics of the Yugoslav labour market where the personal incomes in a prosperous enterprise cannot be reduced even if the unemployed workers are willing to work for lower wages. The measures taken in the early seventies to control the overall level of wages, though not directly aimed at reducing these differentials, did have the effect of partially halting their expansion.

Appendix to Chapter Three

The Social Agreement on Incomes in Croatia

The basis of the Croatian agreement is to link the earnings of the employees of each enterprise to their productivity (measured in output per man terms) as well as to the average earnings and productivity in the whole republic. It consists of: (a) ranking of different types of skills and qualifications, (b) a scale by which workers of different skill categories can be compared with each other, and (c) a scale determining the percentage wage increase allowed for each category of workers due to increased productivity. Briefly, the procedure is as follows:

Each enterprise is supposed to divide its work force into ten standard categories according to skill and qualification. The skilled worker is taken as the standard unit of labour (numeraire) and other categories are compared and quantified in terms of this standard unit by means of a coefficient which indicates the importance of various categories in terms of the standard unit of measurement (i.e., the skilled worker). These equivalents or coefficients are given in Table 11.

Table 11 - Standardization of the Work of Various Categories of Workers in Terms of the Work of a Skilled Worker According to the Social Agreement on Incomes in the Croatian Republic

Skill group	Equivalent of skilled worker
Doctor of science	2.533
Specialists and masters of science	2.200
Workers of 'high' professional education	2.033
Workers of 'higher' professional education	1.533
Workers of secondary level professional education	1.133
Workers of lower level professional education	0.800
Highly skilled workers	1.400
Skilled workers	1.000
Semi-skilled workers	0.767
Unskilled workers	0.667

Source: V. Dubey (1975), p.351

This table, indirectly, also fixes the range of dispersion of wages and provides a ranking of different types of labour. This is the type of extra assumption needed to change the formula "to each according to his work" into a workable wage guideline. It is a method of ranking the importance of different categories of workers and, additionally, comparing them. Before proceeding with the method of application of the Social Agreement, some observations on the above table are necessary. The coefficients of comparison are clearly linked to the years of education or training, i.e., the characteristic of the workers and not with the performance of these agents in production - however that may be measured. There is again the implicit assumption that the factors relating to performance (such as the degree of responsibility accepted by a worker, conditions of work, attitudes towards work, required and exerted effort, etc.) carry equal strength for workers of each category and as such there is no need for them to be explicitly taken into account.

Using the coefficients given in Table 11 and the number of employees in each category, the enterprise can calculate the size of its work force in standardized unit - called the 'standardized work force' (L).¹ The agreement, then, puts forward guidelines as to how the personal income per unit of standardized work force (W/L) can be linked to the gross enterprise income per unit of standardized work force (Y/L). In other words, roughly speaking, they indicate how the output per man and income per man can be linked. The gross enterprise income (Y) is defined as the sum of enterprise funds, personal income fund and depreciation. (It is equal to item 4 of the scheme on p.151 plus depreciation). The problem is, however, to take into account the performance of all enterprises in the republic as well. For this purpose, in each enterprise, a relation is devised between (W/L)

1. The notations are: L, total standardized work force; W, total personal income of the work force; and Y, total gross income of the enterprise (sum of the enterprise funds, personal income fund and depreciation).

as a percentage of the republican (W/L) on the one hand and (Y/L) as a percentage of the republican (Y/L) on the other. In other words, for example, if the (Y/L) of the enterprise in question is 25 per cent higher than the republican (Y/L), then the personal income of the standardized worker (W/L) can be 20 per cent higher than the republican (W/L). A higher rate of performance compared to the republican average will allow higher income per head to be distributed. The exact formula of the relationship, as summed up in Table 12, is also a part of the Social Agreement.

Table 12 - Relation Between Gross Enterprise Income per Head of Standardized Work Force (Y/L) and Personal Income per Head of Standardized Work Force (W/L) in Each Enterprise and their Comparison with the Republican Performance according to the Social Agreement on Incomes in the Croatian Republic

Y/L as percentage of the republican average	Maximum W/L allowed as a percentage of republican average			
100-125*	100 + 0.8	for each additional % point of Y/L from 100 to 125		
126-150	120 + 0.40	"	"	" 126 to 150
151-175	130 + 0.20	"	"	" 151 to 175
176-200	135 + 0.16	"	"	" 176 to 200
201-250	139 + 0.12	"	"	" 201 to 250
251-300	145 + 0.08	"	"	" 251 to 300
301-400	149 + 0.04	"	"	" 301 to 400
over 400	153 + 0.02	"	"	" over 400

* This reads: If the Y/L in the enterprise is 100 to 125 per cent of the republican Y/L, then the W/L in the enterprise can be 100 per cent of the republican W/L plus 0.8 per cent for each additional percentage point of Y/L from 100 to 125.

Source: V. Dubey (1975), p.352

As an example, if enterprise gross income per unit of standardized work force has reached 350 per cent of the republican average, then the personal income per head of the standardized work force could be as high as 151 (= 149 + 0.04 X 50) per cent of the republican W/L.

For the enterprise producing below the average republican Y/L, a different set of tables would determine the functional relationship between Y/L and W/L. These schedules also are part of the Social Agreement.

In devising the above schedules (Tables 11 and 12), the data on the productivity and personal incomes in the recent years have been used. This

was done in order to prevent a sudden sharp rise or fall in the incomes of the employees of each enterprise.

Chapter Four

Methods and Sources of Investment Financing

The methods and sources of investment financing in Yugoslavia have been closely geared to the system of the distribution of enterprise revenue. As we discussed in the previous chapter, the gradual transfer of decision making power from the centralized planning apparatus to the enterprises was accompanied by the appearance of such problems as the division of the net enterprise income into investment fund and personal income fund, the determination of the level and composition of investment in each enterprise and deciding on the sources of financing the investment expenditure. Obviously, the question of the determination of investment is closely related to the discussion of planning and banking systems and their variations in different periods and, as such, is outside the scope of the present thesis. Here, we shall concentrate on the sources of investment financing in different periods in order to demonstrate another aspect of the decentralization of decision making. In this chapter we are specifically concerned with such questions as: How are the internal funds of the enterprises used? What is the significance and importance of various sources of investment financing? How did the transfer of the decision making power affect the level and composition of investment and its regional distribution? What is the extent and form of the state intervention in the allocation of investment funds in different enterprises and different regions? All of these questions are closely associated with the transfer of the locus of decision making from the State to enterprises. Under central planning there was no problem of investment financing. The central planning agency which decided on the level, composition and distribution of investment between different sectors and enterprises, also provided the funds out of which investment projects could be financed. In other words, once the total level of investment was decided on, sufficient

resources were set aside for its finance. But as the power of the central planning agencies in the field of investment began to weaken, the enterprises themselves had to start thinking about how much investment to undertake and how to finance it, i.e., they faced a set of completely new problems. It may also be argued that the transfer of investment decisions to the enterprise management has, in fact, affected the level and composition of investment in the economy, as well as its regional distribution. The transfer of the locus of investment decisions implies a change in the criteria used to assess investment projects and to decide on the volume of investment. Under central planning the revenue (or profit) of an enterprise does not play any part in the determination of the level of investment in that enterprise. With the decentralization of investment decisions, however, the revenue earned by an enterprise becomes an important determinant of investment expenditure because the enterprise has to finance its planned investment wholly (or at least partly) out of its own earnings (and if necessary borrow the remainder on the basis of its expected profit). There is no reason to expect that the final level and composition of investment realized in this way would be the same as that decided centrally by the planning authorities. The linking of the investment expenditure of enterprises to their performance and expected profitability (which was a direct result of the transfer), leads one to expect considerable differences to develop between different industries and regions. In fact, as we shall show, the financing of investment out of the internal resources and bank credits (which also depend on the enterprise expected profitability) meant that considerable differentiation could emerge across various republics. Since Yugoslavia is a heterogeneous country with large regional differences and rivalries, the transfer meant a bias in favour of investment in the more developed regions. As the more developed regions (MDRs), like Slovenia and Croatia, possess more developed industry, agriculture, transport facilities, etc., the enterprises in these regions have been able to

finance a much greater share of their investment expenditure from their internal resources and bank credits than the enterprises in the less developed regions (LDRs). The LDRs, on the other hand, have continued to depend on the State subsidies and, in fact, only by State intervention has the shortage of internally generated funds been compensated.

In general, investment expenditures can be financed in a number of ways. The government can finance investment expenditures out of taxation or other fiscal revenues; the enterprises can do it by using their own internal funds or by borrowing from external sources such as banks; and the private producers can undertake investment out of their own saving. The securities market, which is an important medium of raising funds for investment in the developed capitalist economies, is only in its very initial stages of development in Yugoslavia and its contribution to investment financing is almost insignificant although the implications of its development are quite serious. The investment expenditure undertaken by each of the above methods is financed through some form of financial intermediary or institution. Before discussing the changes in the methods and sources of investment financing, it is necessary to explain the nature of the financial institutions which have, at one time or other, played a part in the financing of investment. Later on we shall discuss the contribution of each source and the changes over time in each of these sources.

i. The Budget. The federal, republican or communal budgets have financed a considerable proportion of post-war investment expenditure. The budgetary revenue stems from various taxes and contributions levied on the enterprises and individuals by various levels of government.

ii. The Social Investment Funds. These are various types of funds set up after 1952 for the explicit purpose of financing investment. They were set up at all levels from the federation to the commune, and sometimes for specific purposes. These funds, like the budget, were under

full control of the State. They operated in such a way that the level and sectoral distribution of investment would be in accordance with the centrally determined investment plans. The most important of these funds was the General Investment Fund which was formed on the federal level and was run by the Yugoslav Investment Bank. Its resources came from payment of interest on the fixed and working capital of the enterprises and from repayment of loans granted in previous periods. Other social investment funds were financed by allocations from the governmental level at which the funds operated. Most of the social investment funds were abolished from 1963 onwards. The major remaining fund is the Fund for the Accelerated Development of the LDRs which is run by the federal government.

iii The Enterprise Funds. The enterprises have always been allocated a portion of their final profit for their own internal use. The size of this portion has varied considerably in the last three decades. Until the late fifties, the internal funds were very small and were used for minor improvements in the work of enterprises. However, from 1958, when the enterprises were authorized to form their own fixed and working capital funds by allocating part of the enterprise net income for this purpose, the importance of the internal funds grew. This was because they could now be used for financing the short and long term investment projects which were decided on by the enterprise management. Of course, as we shall explain later on, the enterprises were far from completely free to use these funds as they saw fit. From 1961 these two funds were amalgamated into a single business fund and restrictions on the use of the fixed capital fund for short term needs and on the use of the working capital fund for long term investment were also removed. The internal funds gradually became independent of State control and, specially since 1961, they have been transferred to the domain of enterprise control. The components of the enterprise funds as well as the importance of each

component have already been discussed in Chapter Three (Section C).

iv Depreciation Fund. During the whole post-war period the enterprises have had to leave aside a certain part of their gross revenue as capital consumption allowance. These allowances have formed the Depreciation Fund, the authority over which has varied in the course of time. The depreciation funds have been used, at different times, for different types of outlays such as repairs, replacement of fixed assets, new investment, etc.

v Bank Credit. With the 1961 and 1965 reforms, the banks were transformed from state agencies to independent, profit-oriented credit institutions. They have been able to accept deposits of different kinds and extend loans to their customers. The extension of credit to an enterprise is decided by the management of the bank on the basis of the profitability of such a transaction which, in turn, depends on the credit-worthiness of the customer in question.

vi Private Resources. Although the private sector has always been considered as a significant part of the overall economic activity in Yugoslavia, it has hardly received any attention where questions such as investment financing are concerned. To finance their planned investment, those engaged in private activity have had to rely on their own savings. This is particularly important in agriculture where the bulk of the land, peasants and output are in the private sector and do not receive any help from the State or the banks for their financial needs.

In addition to the above sources of investment financing, which are more or less common to all East European economies, some more unorthodox methods of financing have been introduced in Yugoslavia in recent years. Floating bonds and initiation of joint ventures with the participation of foreign firms are examples of such unusual practices in this 'socialist' market economy.

Having explained the different institutions through which investment expenditures are financed, we can now look at the changes in the nature and significance of each source while the locus of investment decisions was being transferred to the enterprises.

A. The Central Planning Period (1947-51)

During this period, questions such as the determination of the level of investment and its sources of finance were not within the competence of the enterprises as the enterprises were merely technical units of production, very much like a 'plant' of a modern corporation, completely subordinate to the central planning bureau in the same way that a 'plant' is controlled from the corporation headquarter. Decisions on the level of investment and its distribution between different sectors and even different enterprises were made by the planning authorities. The allocation of investment funds was unrelated to the performance of the enterprises and only reflected the priorities set out by the Plan. The enterprise 'profits' (revenue less operating costs and wages) flowed directly into the State budget which was the principle institution for financing the investment projects. There was no obligation on the part of the receiving enterprise to pay back the investment resources provided by through the budget.¹

Apart from the State budget, depreciation fund was the only other institution in this period out of which some investment in the public sector was financed. The method of calculation and the rate of depreciation charges were determined by the federal government. About 70 per cent of the depreciation charges were paid into the "central depreciation fund" under the control of the central government while the remaining 30 per cent, constituting the "enterprise depreciation fund" remained in the enterprise but could only be used for repairs.²

1 Yugoslav Survey (1963), pp. 2156 and 2166.

2 V. Ginoski (1968), p. 101.

The bulk of the depreciation fund was used by the central government according to provisions made by the State plan.

The only source of investment outside government control was the resources of the private sector. These were the personal savings of the individuals engaged in private activity, mainly in agriculture, and for which no data is available. However, due to the intensification of the collectivization drive (from mid-1948), the confiscation of big estates, the general backwardness and poverty of the peasantry and the strong anti-capitalist attitudes and policies of the government, it is likely that few individuals undertook the risk of using their personal savings for expansion of facilities that could have been easily taken over or confiscated. Therefore the size of the investment expenditure out of private resources must have been very small.

As a whole, during the central planning period, the mechanism of investment financing was quite simple. The State budget was the principle source of finance with the depreciation fund playing a subsidiary role; both according to the State plan. Enterprises had nothing to do with decisions about the structure of investment. As such, they were not concerned with the method or the source of finance.

B. The Transition Period (1952-1960)

The transfer of the decision making power from the government to the enterprises was much slower in the field of investment than in the field of wage determination. On the one hand this was due to the inexperience of the newly developed workers' councils and their inability to handle problems relating to investment expenditures. On the other hand, the pressure for wage rises which had built up as a result of the increased freedom of the workers' councils meant that sufficient investment might not be realized in the economy if the investment decisions were also relegated to the councils. As a result, it took a long time, and repeated trials, before the State could

effectively withdraw from decision making regarding the level and composition of investment and its financing.

Before discussing the sources of investment financing, we should briefly point out the mechanism and method of allocation of investment resources during the transition period. Although in this period the system of planning did not include compulsory output quotas and material use any longer, it continued the practice of central allocation of investment resources. The decision on the level of investment as well as its sectoral and regional distribution was made centrally on the basis of annual or five-year social plans.¹ The distribution of investment funds between the enterprises of each industry, however, was relegated to the banks and various funds. This was done in two major ways. A small proportion of the resources earmarked for investment was left at the disposal of federal banks to be allocated to enterprises in a specific sector or industry through "auctioning". These resources were lent to those enterprises that could offer the highest interest rate.² Most of the investment resources, however, were allocated to enterprises through the social investment funds. The allocation was to be carried out on a competitive basis. The enterprises requiring funds for investment applied for a loan to any of the social investment funds (mainly the General Investment Fund). The fund, facing a situation of excess demand for its resources used criteria such as the interest rate the applicant was willing to pay, the repayment period, the social benefits of the project (increase in local employment or foreign exchange earning), etc., in deciding which applicants were to receive loans. Later on (particularly from 1958) the applicant's participation in the financing of the investment project also became a criterion for allocation of funds. The implication of

1 Occasionally, the Plan provided for direct allocation of resources to specific enterprises. The big land reclamation and irrigation project in Vojvodina was, for example, financed this way. G.W. Hoffman and F.W. Neal (1962), p. 249.

2 For the mechanism and details of 'investment auction' and the funds allocated by this method, see E. Neuberger (1959).

this criteria and the conditions for its development will be discussed shortly. The main point is that the State intended to make the allocation of funds between enterprises (not sectors) market oriented and related to the performance of the production units. The Law on Investment Auction (1953) and the Law on Loans to Commercial Enterprises from the General Investment Fund (1954) were explicitly introduced to regulate the investment activity on a competitive basis.¹ However, as the number of criteria to be used by the creditor increased, and as the weight which was to be attached to each criterion was unknown, the process of allocation became increasingly less objective. Political considerations began to influence the decisions made by the Funds and led to the mushrooming of what are known as "political factories". The regional rivalries were particularly evident and strong. As Horvat points out, once an important investment project was financed in one republic, other republics followed suit and financed similar projects without considering the economic justification for such expenditures.² The basic problem was that the investment expenditure did not depend on the performance of the enterprises and the enterprises had nothing to lose from heavy investment, even if it was not economically viable.

The implementation of self-management principles required developing a link between the investment expenditure and performance of each firm on the one hand, and the sovereignty of the organs of management over investment decisions on the other. Towards the end of the period under consideration (1958) some steps were taken in this direction, but the introduction of decisive measures had to wait until the mid-sixties. Although the transfer of investment decisions to enterprises was slow, the process of decentralization resulted in some limited change in the importance of various sources of financing.

1 S. Pejovich (1966), pp. 18-20.

2 B. Horvat (1976), p. 221.

The first step in the direction of decentralization of investment decision was the separation of the machinery of investment from the budget and its transfer to social investment funds at various levels. Although some investment projects continued to be financed by the budgets of various governmental levels, the share of budgetary contributions declined rapidly. In 1952 the financing of investment project was done through the Fund for Basic Capital Development according to the annual social plan. This was a completely centralized fund under the control of the federal government. In 1952 about 98 per cent of investment in the social sector was financed by the State funds, 95 per cent of which were through the Federal Fund for Basic Capital Development.¹ Decision on the level of investment in each enterprise was still taken by the State agencies without any repayment obligation. From 1953 onwards, other social investment funds began to develop in the economic activities sector. (Investment in non-economic activities was still financed out of budget.) The largest and the most important of these funds was the General Investment Fund set up in 1954, followed by the Housing Construction Fund set up in 1955. A repayment obligation was then introduced on the investment expenditures financed out of these two funds (with some exceptions for projects like roads, railway lines, etc.). There were of course other sources of investment such as budgetary resources whose loans were without repayment obligation.² Also from 1954 the enterprises were required to pay an interest charge of 6 per cent on their fixed capital irrespective of the source of finance of their assets. This levy was later on (1958) applied to the working capital as well. The interest charged on the fixed and working capital flowed into the General Investment Fund (the most important component of the social investment fund) which was also

1 Yugoslav Survey (1963), p. 2167 and B. Horvat (1976), p. 219.

2 Yugoslav Survey (1963), pp. 2156-2157.

supplemented by a part of the turnover tax and some State contributions. During the transition period, the social investment funds constituted the most important source of investment financing.

Table 1, on the next page, shows the contribution of various sources of finance during the transition period and most of the self-management period (until 1970).¹ For most years from 1952 until 1963 (the last year of the operation of the General Investment Fund), the social investment funds accounted for more than half of the investment financing. Since these funds were run according to the preferences of the planning agencies, as reflected in the investment plan, they can be classified under government controlled sources in Table 1. The share of budget in investment financing, which was most significant in the central planning period, declined rapidly and stayed at a low level of 4-6 per cent in the course of the transition period.

The banks in this period did not constitute an independent source of investment financing and, as Table 1 shows, no investment was financed from their credit resources. Although from 1956 the administration of the General Investment Fund was legally relegated to the Yugoslav Investment Bank², and although other social investment funds handled their lending operations through one of the banks, nevertheless, the banks were not credit creating institutions. They were not guided by profitability considerations in their operations and they did not decide on the allocation of the resources at their disposal independently. By and large, the banks followed the criteria provided by the planning agency for allocating the investment funds among different enterprises. Therefore, we cannot talk about investment financed by the banking sector in this period since the banks were not

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- 1 The publication of the information enabling us to construct Table 1 ceased after 1972 when the data for 1970 was given. We shall try to construct a similar but slightly different table for the post-1970 period later.
 - 2 This was done by passing of the Law on Investment Loans (25 July 1956), see S. Pejovich (1966), p. 18.

Table 1 - The Sources of Financing of Gross Investment (Percentages)

Year	Non-government sources (at enterprise disposal)					Government sources (at government disposal)				Total
	Investors' own resources (internal)	Depreciation funds*	Bank resources***	Private resources+	Sub-Total	Social investment funds++	Budgetary resources	Depreciation funds*	Sub-Total	
1952	1	-	-	5	6	69	7	18	94	100
1953	10	-	-	6	16	59	4	21	84	100
1955	16	-	-	6	22	46	6	26	78	100
1956	14	-	-	6	20	47	5	28	80	100
1958	17	-	-	7	24	53	5	18	76	100
1959	15	-	-	6	21	59	6	14	79	100
1960	19	-	1	7	27	53	5	15	73	100
1961	21	13	1	8	43	53	4	-	57	100
1962	30	4**	3	8	45	52	3	-	55	100
1963	26	5	9	8	48	50	2	-	52	100
1964	24	5	29	8	66	32	2	-	34	100
1965	26	5	32	13	76	22	2	-	24	100
1966	33	4	35	17	89	10	1	-	11	100
1967	28	..	36	22	86	13	1	-	14	100
1968	28	..	39	19	86	13	1	-	14	100
1969	26	..	43	18	87	12	1	-	13	100
1970	25	..	44	17	86	13	1	-	14	100

* The depreciation fund, as discussed in the text (pp. 77-78) and shown above, was under government control - and sometimes administration - until 1961 when full control over them was transferred to the enterprises. Since 1967, no separate data is available for the depreciation fund.

** From 1962, a part of the depreciation fund was added to the business fund and the data shows that part of investment which is financed directly out of depreciation funds.

*** Beginning in 1964, the resources of the abolished social investment funds were transferred to the banks. This accounts for the sudden rise of the share of bank resources in the financing of investment. Also from 1966, the resources of the Housing Construction Fund were transferred to the banks.

+ Including the depreciation of the assets of the private sector.

++ These funds are too numerous to be named. During each period one or two of them were the principal ones. Just to mention a few, the General Investment Fund, the Fund for Investment of the Federation and other Socio-Political Communities, the Fund for Exploration Works, and the Fund for the Accelerated Development of the LDRs.

.. Data not available.

Source: Data for 1952-53 from *Jugoslavije 1945-64*, p. 85; for 1954-58 from SGJ(1960), p. 180; for 1959 from SGJ(1966), p. 118; for 1960-68 from SGJ(1970), p. 112; and for 1969-72 from SGJ(1972), p. 112.

in a position to finance any project on their own accord or on the basis of their deposits. In fact the banks should be regarded as an integral part of the planning agency and not as an independent economic organization.

The depreciation fund was another important source of investment financing on which State control gradually loosened. The division of depreciation charges into a unified state depreciation fund and an enterprise depreciation fund continued until 1954 when a new method of calculating depreciation was introduced and the custody of depreciation funds was changed.¹ While in the pre-1954 period depreciation was charged on the basis of output, it was now to be computed, rightly so, on the basis of the estimated value of the assets. The unified depreciation fund was also abolished and enterprises were to keep their own depreciation funds. Although the custody of these funds changed from the State to the enterprises, the authority of the State over them did not change accordingly. The depreciation funds were to be kept in separate bank accounts; they had to remain in these special accounts for at least three months before they could be used; they could only be used for fixed assets.² But the most serious restriction on the use of these funds was that they could be frozen in the banks by a government decision. According to Ginovsky, the bulk of depreciation funds was usually frozen and could not be used by the enterprises. The blocked portion was, as a part of the capital of the central bank, used by the government in pursuing its policy.³ As such, one can argue that the depreciation funds, despite being formally relegated to the enterprises, remained under State control. The rate of depreciation coupled with blocking were in fact used as policy instruments to control the direction, timing

1 V. Ginovsky (1968), pp. 101-103.

2 During the fifties when this provision was in force, according to Paj, there were occasional enterprises which used their depreciation funds for new investment. But this was by no means a prevalent practice. I. Paj (1970), p. 69.

3 V. Ginovsky (1968), p. 102 and R. Bičanić (1973), p. 130.

and the level of investment undertaken by the enterprises and to ensure the realization of investment plans. The nature of the control of the State over the depreciation funds was of course different from that over the social investment funds. In the case of the latter, the State could fully determine their level and distribution in different industries. In the case of the former, however, the State could control its timing but could not decide on its distribution between different enterprises and industries. This was an important departure from the position under central planning when the government had, more or less, complete control over this source of finance. Table 1 also represents the change in the share of depreciation fund in the period under consideration. For the reasons already mentioned, the depreciation fund, in this period, is classified as part of the resources controlled by the government.

The budgetary contributions, the social investment funds and the depreciation funds were sources of investment financing which were controlled by the government. The sources of finance free of government control during the period under consideration were the enterprises' internal funds and the resources of the private sector. As mentioned in Section IB of this chapter, since 1954 when the distribution of enterprise revenue was carried out according to a 'profit sharing system', the enterprises received a share of their profit, however small, out of which some of their investment expenditure could be financed. The 1958 reforms in the sphere of income distribution and implementation of an 'income sharing system' enabled the enterprises to form their own fixed and working capital funds for the explicit purpose of investment financing. Although the share of investment financed out of enterprises' own funds increased from 11 per cent in 1953 to 19 per cent in 1960 (see Table 1), it is doubtful whether the actual control of the enterprises over these funds also increased at the

same rate. As we mentioned before, during this period, particularly in the second half of the fifties, the distribution of investment funds between enterprises of each sector was to be carried out on a competitive basis. The General Investment Fund and other social investment funds received applications for loans from different enterprises, and used criteria such as interest, the repayment period, social benefits and the degree of participation by the enterprise in distributing their available funds. Towards the end of this period, the criterion of internal participation had become the only objective criterion which was based on the actual performance of the enterprise and expected profitability of a project. What happened was that by using their own funds as part of the resources for financing a certain investment project - which was approved by the State controlled social investment funds - the enterprises actually allowed part of their resources to be bound to the preferences of the planning authorities (which were manifested in the way in which the resources of the social investment funds were allocated). In other words, by requiring some internal participation, the State controlled more of the resources than was reflected in the magnitude of the social investment funds.¹ Of course, it must be emphasized that the internal funds were allocated as deemed fit by the enterprise management and even in the case of them being 'bound up' with the loans from the social investment funds, this was done by the decision of the workers' councils. The nature of State control over the internal funds of enterprises was quite different from that on the social investment funds or even the depreciation funds. For this reason, Table 1 has classified the contributions of the enterprise internal funds as part of the resources outside the sphere of government decision making.

1 On this point also see B. Horvat (1976), p. 221.

The resources of the private sector, used for investment financing did not change much during this period. They were mainly used in agriculture and handicrafts where private activity were prevalent.

To sum up: the policy during the 1952-60 period clearly showed that the end of central planning and the granting of a certain degree and kind of autonomy to the enterprises did not mean that the government was going to stop making investment decisions. Although the enterprises were allowed to keep their own internal funds and although the depreciation funds were to be kept and handled by the enterprises (though in separate accounts), nevertheless, the State continued to decide on the level and composition of investment through the social investment funds, primarily, and the budget, secondarily. The practice of blocking the depreciation funds accounts of the enterprises gave the State additional control over the timing of the investment while the requirement of internal participation enabled it to have some control over the enterprises' internal funds. As Table 1 shows, from 1952 to 1960, though the enterprise controlled share of resources used for financing increased (from 6 to 23 per cent), nevertheless the bulk of resources continued to remain under the control of the State (from 94 to 73 per cent).

C. The Self-Management Period (1961 onwards)

Self-Management principles required that the locus of investment decisions be transferred to the enterprise organs of management in the same manner as was done for the workers' personal incomes. This, in turn, meant that enterprises had to seek sources of finance for their planned investment independently, that is, they had to use either their own internal funds or be able to borrow money from banks. These requirements were made possible only by the introduction of the 1961 and 1965 reform measures. The measures affecting the system of investment

financing were:

i Changes in the Status of Banks. The reforms transformed the banks from mere state agencies to independent credit institutions whose lending operations were no longer subordinated to the requirements of the State plan. On the contrary, the lending operations began to be performed on the basis of profitability and credit worthiness of the customers. The 1965 reforms also removed the geographic restriction that limited the banks' credit operations to their own locality and enabled them to extend loans to enterprises anywhere in the country. The banks used the sight deposits of the enterprises, social organizations and government, and the saving deposits of the population, as their loan capital, in very much the same way as the banks in other market economies. They were also subject to similar forms of government control and supervision such as the imposition of limits on interest rate, reserve requirement, etc.¹

ii The Abolition of the Social Investment Funds. Although through the above measure the nature of banking operations and the relations of banks to enterprises had theoretically changed, the actual possibilities open to banks, in the early sixties, were still greatly limited. The investment resources at the disposal of banks which could be loaned out according to the banks' preferences and decisions were very small. This was due to the fact that the bulk of investment resources were appropriated and held by various social investment funds. This limitation, however, was removed from 1963 onwards with the abolition of these funds and the transfer of their resources to the bank capital. The General Investment Fund was abolished at the end of 1963 and other social investment funds were gradually abandoned. This measure provided the banks with a considerable proportion of investment resources in the economy and enabled them to become, effectively, a major source of

1 For details see J. Dirlam and J. Plummer (1973), p. 70; R. Goldsmith (1975) and J.J. Hauvonen (1970).

investment financing. It amounted to the transfer of decision making power over a considerable volume of resources from the State to the banks. The abolition of the funds also meant that the governments at various levels could reduce the size of their appropriations from the enterprise revenue and leave a larger share at the disposal of the workers' councils.

iii. Change in the System of Control over Depreciation Funds. The restrictive practice of freezing the bulk of the depreciation funds in banks was abandoned in 1960¹, though other practices such as keeping separate accounts and enforcing a minimum time limit of three months on the use of these funds remained in force until 1966. Clearly such practices were not in accordance with self-management principles and had to be changed, but nonetheless, in principle, control over the depreciation funds was handed to the workers' councils from 1961 without any restriction on their use (replacement, repair or new investment in fixed or working capital). In 1966, the determination of the rate of depreciation and the method of its computation were transferred to enterprises (subject to some legal minimum rates for different types of assets). The depreciation funds were no longer required to be deposited in separate accounts.² In fact from 1967, the depreciation funds were regarded as part of the enterprises' own funds for investment financing (see Table 1) and no separate data were given for the investment expenditures financed by these funds.

The introduction of these policies led the organs of management to achieve the largest degree of autonomy since the introduction of the new economic system. The concrete meaning of 'self-management' for individual enterprises was that they could influence the volume of

1 V. Ginovsky (1968), p. 102.

2 These measures were legally introduced in the Enterprise Depreciation Act of July 1966, see *Ibid.*, p. 104.

resources at their disposal (total revenue) and its distribution. These measures of autonomy became possible only after the 1961 and 1965 reforms. Particularly important among these measures was the ability of the enterprises to decide on the level and type of investment according to their own needs, and to finance such investment on the basis of their own earnings and credit position. Relegation of decisions regarding the level and composition of investment to the enterprises also had a significant impact on the power structure within the enterprises. If the investment decisions were to be made at the enterprise level, then new talents and expertise were required to undertake the new tasks such as investment analysis, project evaluation, risk analysis, management accounting, etc., to ensure the successful functioning of the firm. This meant a greater reliance on the abilities of these experts and, because of the scarcity of such professionals, the inevitability of giving them a bigger voice in the running of the firm despite their numerical weakness. As we showed in Chapter One, from the beginning of the sixties the representation of the professional managers and technicians on the organs of management began to increase. Concomitantly in this period the relegation of new areas of decision making to the enterprise management took place.

The implementation of the 1965 reform measures affected the nature and importance of various sources of investment financing, resulting in a major shift of the locus of investment decisions from the State to the enterprises.

From 1964, i.e., the year after the abolition of the General Investment Fund and the transfer of its resources to the Yugoslav Investment Bank, there was a sharp fall in the share of investment financed out of the social investment funds, accompanied by a sudden rise in the share of investment financed by bank credits. As Table 1 shows, in 1964, the investment financed from the former source declined by 18

per cent while that financed by the latter source increased by 20 per cent. The change was not merely a nominal one but a change in the locus of control over resources and in the criteria applied to their use. When the commercial banks take charge of these resources, they would use them only on the basis of profitability and the strength of the borrower's credit position. Before this, however, the resources of the social investment funds were loaned primarily on the basis of the preferences of the planning authorities expressed in the social plans, and, such considerations as profitability did not play an important role. After 1964, the fall in the importance of the social investment funds continued as the rest of them were gradually abolished. The most important remaining fund, controlled by the federal government, is the Fund for the Accelerated Development of the LDRs which was formed after the 1965 reforms and has continued to finance a small proportion of the total investment up to now.

After 1964, the importance of bank credits continued to grow so that by 1970 the banks financed some 44 per cent of total gross investment in the economy (see Table 1). The increased reliance on the bank credit is an important development of the post-reform economic behaviour of the Yugoslav enterprises and should be looked at in conjunction with the role played by the enterprises' own funds. The share of these funds reached its maximum of 33 per cent in 1966 and then began to taper off. As we argued in Chapter Three, the workers' councils were biased in favour of distributing a higher portion of the enterprise net incomes as present income and against using it to finance investment. The Yugoslav enterprises have constantly been facing pressure for higher personal incomes from their workers. Whenever the general situation in the economy was ripe, the workers' councils managed to increase the personal incomes. We also mentioned that the leading industries, enjoying larger net incomes, could afford to

distribute higher personal incomes and leave less for the internal funds. This was made possible only as the result of the opening up of the possibility of external financing, i.e., using bank credits for the financing of investment expenditures. The investment which is financed by external resources is not at the expense of current personal incomes of the work force and so long as it is profitable it has no adverse effect on the level of personal incomes now or in the future. The reliance on bank financing led, immediately after the reforms, to the distribution of higher personal incomes and a reduction in the share of net income left for the enterprises. Table 7 (in Chapter Three) clearly shows that the share of social product left for the enterprises increased in the early sixties, reaching its peak in 1966 and falling afterwards. The result was that the share of investment financed out of the enterprises' internal funds also declined after 1966 (see Table 1). This trend, however, was partially reversed during the seventies, a process which is not shown in Table 1 due to the discontinuation, after 1970, of the data on which this table is based. Nevertheless, a similar set of data based on alternative information regarding the origin of resources used for investment in the social sector alone has been used to

Table 2 - Distribution of Sources of Investment Financing (%)

Year	Economic Organizations	Non-economic Organizations	Banks	Government Units
1966	39	7	39	15
1969	28	6	49	16
1970	27	6	51	16
1971	27	7	51	15
1972	30	8	42	20
1973	33	9	40	19
1974	35	10	37	18
1975	36	11	37	16

Source: Indeks, no. 5, May 1968; and no. 12, Dec. 1976, p. 48.

compile Table 2, which shows the distribution among the enterprises, banks and government units of the sources of investment financing in the social sector since the mid-sixties.

By 1971 the share of enterprise financed investment had reached its lowest point in this period (27%) while the share of the bank financed investment had reached its all time high (51%). The State intervention in the economy, which was aimed at preventing the enterprises from distributing their net incomes too heavily in favour of personal incomes, changed this trend. The intervention took the form of, firstly, the abolition of interest on the capital assets of enterprises and, secondly, the introduction of the Social Agreement on Incomes. The enterprises could no longer allocate their net income as freely in favour of personal incomes as before. As a result, the trend was reversed so that by 1975 the share of economic organizations in investment financing rose to 37 per cent, though it has not reached its previous peak of 39 per cent (in 1966) yet.

The Yugoslavs expected that, firstly the 1965 reforms and secondly the measures taken in the seventies would lead the enterprises to become the major source of investment financing. But as one leading economist has put it, these measures failed to create sufficient conditions for the economic organizations to become the dominant source of financing.¹ This was partly due to the fact that the various levels of government still controlled a sizable share of resources, and partly to the fact that the Yugoslavs had underestimated the role that a relatively independent banking system could play in the financing of investment expenditures.

Going back to Table 1, we still need to discuss briefly the share of the budget and the private sector in the financing of investment. The investment financed directly out of budget reduced to an insignificant level during the sixties as the result of the requirement that the State should withdraw from direct involvement in investment activities. The

1 M. Vujačić (1977), pp. 53-54.

investment activity of the federal government was particularly restricted by the third amendment to the Constitution and the legislations in 1967 which limited the investment undertaken by the federal government to those projects and activities specified by the law or by the social plan.¹

The share of investment financed out of private resources, on the contrary, increased significantly during the sixties. The increase was particularly striking after the 1965 reforms when it was explicitly recognized that the parts played by the private sector in agriculture, crafts and catering sectors were complementary to those of the social sector. This recognition meant that the private producers were further assured that their investment would be safeguarded by the State. The Amendment XXV to the Constitution, passed in 1971, was a further emphasis on the importance of the place occupied by the private sector and a further assurance to the private producers.²

Before ending the discussion of the sources of finance during the self-management period, the regional implications of the changes in this period, as briefly pointed out in the introduction to this Chapter, should be analysed. During the central planning period and, to a large extent during the transition period, the regional distribution of investment was carried out according to the plan. With the State intention of pumping more investment into the less developed regions, and with the investment resources controlled by the State agencies, it was possible to earmark and direct the resources into the LDRs. However, with the transfer of the locus of decision making to the enterprises and as a result of the new situation in which the investment decisions largely

1 For details see Jan Vanek (1972), p. 58 and S. Sekulić (1970), pp. 9-10.

2 Yugoslav: Survey (1971a), pp. 13-14. Interestingly enough, this Amendment left the determination of the sphere and scope of the activities of the private producers to the republican and provincial authorities. Before 1971, however, the federal Constitution had explicitly delineated the work of the private sector.

depended on the present or expected profits of an enterprise, the mechanism of regional allocation of investment was necessarily altered. One would be led to expect, that if the investment expenditure of each enterprise (or each region) is related solely to its own operations, then the LDRs, with many shortcomings in the quality and quantity of their resources and at a low stage of development, would necessarily be at a disadvantage in comparison with the more developed areas. In fact one would expect that the volume of resources generated by the LDRs for investment purpose would fall as a result of the transfer of investment decisions to enterprise level and that the distribution of investment resources between various regions would also be subject to change. Results such as these would have been totally unacceptable in Yugoslavia. With the deep rooted problem of nationalities, no central leadership could have afforded to embark on a programme which would lead to a serious fall in the share of investment going to the LDRs. To avoid such consequence, it was necessary for the State agencies to make up for the shortage of resources over and above the volume generated by the enterprises in the LDRs. In other words, along with the self-management measures we find that the share of investment financed by the LDRs themselves is far below that of the more developed areas while the share of investment financed through various government controlled funds and agencies is much greater for the former. Only in this way could the regional distribution of total investment, regardless of the source of finance, remain roughly stable. Let us look at the data now. Table 3 summarizes the regional distribution of investment as well as the distribution of the major sources of financing the investment expenditures.

Here, we have selected the two advanced republics of Croatia and Slovenia, the two less developed republics of Macedonia and Montenegro, and the very underdeveloped autonomous province of Kossovo to illustrate

Table 3 - The Distribution of Investment and Sources of Finance in Selected Republics* (Percentages)

Year	SFRJ	Croatia	Slovenia	Montengro	Macedonia	Kosovo
<u>A. Regional Distribution of Total Investment</u>						
1959	100	23	12	3	6	n.a.
1964	100	23	14	3	13	n.a.
1968	100	24	12	2	7	4
1972	100	24	14	4	7	3
1975	100	22	20	3	6	4
<u>B. Proportion of Total Investment in Each Region Financed by Enterprises' Internal Resources</u>						
1959	32	35	43	11	18	n.a.
1964	32	37	36	20	11	n.a.
1968	37	41	43	23	22	15
1972	38	47	46	12	24	11
<u>C. Proportion of Total Investment in Each Region Financed by Bank Credit</u>						
1959	-	-	-	-	-	-
1964	31	35	39	19	26	n.a.
1968	47	52	51	40	51	34
1972	43	46	45	36	39	13
<u>D. Proportion of Total Investment in Each Region Financed by the Social Investment Funds</u>						
1959	58	55	51	80	73	n.a.
1964	25	19	15	57	41	n.a.
1968	9	1	1	32	16	48
1972	12	1	0	49	31	72

* The data for 1968 and 1972 in Sections B, C and D show the situation for investment in fixed assets and not for total investment.

Source: SGJ (1961), pp. 424-28 (for 59); SGJ (1966), p. 471 (for 64); SGJ (1973), pp. 477-81 (for 68 and 72) and SGJ (1974), p. 506 (for total investment 68 and 72); and SGJ (1977), p. 508.

various points made above.

In Section A of the above table we can see that the distribution of investment between the five selected areas has remained relatively stable over time. A first glance may give the impression that the structural changes experienced by the economy (the most important aspect of which was the transfer of investment decisions to individual enterprises), did not affect the share of investment going to each area. In other words, the preferences of the planners, reflected in the

allocation of resources of the social investment funds, may seem to have coincided with those of the individual enterprises. Obviously this is not the case and an analysis of the Sections B-D of Table 3 shows that such impression is wrong. Firstly, take Section B of this table which represents the proportions of investment financed out of the enterprises' own funds in different regions. Here we can clearly see that the reliance on own resources was much greater in Croatia and Slovenia than it was in the LDRs. Secondly, taking Section C of Table 3 which shows the extent of reliance on bank credits for investment financing, we can see that the more developed regions managed to obtain a greater share of their investment expenditures from this source than did the LDRs. Sections B and C of Table 3 link the investment expenditure in different regions to the profitability (current or expected) of their enterprises. If investment decisions had been totally decentralized, (i.e., the internal resources and bank credits were the only sources of investment financing), the less developed regions would have ended up getting a much smaller share of total investment, from 1964 onwards, compared to the previous periods. It is here that the State's rescue operations unfold. Section D of Table 3 shows the share of investment in each region financed by social investment funds which have been under the control of various levels of government. Here, we can see that - particularly after 1964 - Croatia and Slovenia practically stopped using these funds as sources of finance while the LDRs continued to depend on them for financing anything between one-fifth to four-fifths of their total investment. This is how the State managed to keep the distribution of total investment between various regions relatively stable during the pre-1965 and post-1965 years.

To sum up the discussion on the sources of investment financing: along with the transfer of the locus of investment decisions from the State to the enterprises, the sources of investment financing controlled

by the State gradually diminished. The transfer was very slow and lasted until the early sixties. During the central planning period there was no such problem as finding sources of investment, as the level and composition of investment were determined by the State Plan and financed out of the budget. During the transition period, especially the latter part of it, investment decisions were gradually transferred to the enterprises. Nevertheless, during this period, the State continued to retain effective control over the level and sectoral distribution of investment and left the distribution of investment between enterprises of each industry to be decided by the social investment funds on a competitive basis. This was the first attempt to make investment dependent on the performance of the enterprises and the profitability of their investment projects. With the 1961 and 1965 reforms, the enterprises gained autonomy over investment decisions and also became responsible for finding sources of finance for their planned investment. The commercialization of banks and the transfer of the resources of the abolished social investment funds to the banks enabled them to become an important element of the new system of investment financing. The share of government controlled resources declined from 1964 onwards while that of the enterprise controlled resources (including the banks') sharply increased. The pressures applied by the workers' councils for extra wages (discussed in Chapter One) and the structure of property rights (discussed in Chapter Two) meant that a smaller proportion of net incomes was left for investment. This created a bias in favour of external financing. In the relatively free period after the 1965 reforms, the workers' councils took advantage of the situation and approved the distribution of higher personal incomes. The result, shown in Table 1, was a fall in the share of internal resources accompanied by a rise in the share of bank resources used for investment financing. There were two possible outcomes to these tendencies: a continuous increase in personal incomes and/or adoption of

ambitious investment programmes which were heavily dependent on external resources. Both outcomes, if unchecked, could have intensified the inflationary situation with which Yugoslavia has been beset for more than a decade.

Concern for the management of the economy in general was the reason for government intervention in the early seventies which resulted in the introduction of the Social Agreement on Incomes and the slow down in the rapidly rising personal incomes. A secondary effect was the rise in the share of internal financing accompanied by a fall in the share of banks credits used for investment financing. Table 2 also shows this reversed trend.

Geographically, the transfer of investment decisions to the enterprises meant that there was an imminent danger that the LDRs would not be able to raise sufficient resources for investment by relying on their own performance. In fact, as we showed in Table 3, the share of investment expenditure financed by internal funds and bank credits in the LDRs were far below that of the more developed regions. This was yet another area where the government had to intervene in enterprise affairs, this time through the remaining social investment funds and its budget (mainly through the Fund for the Accelerated Development of the LDRs) in order to supplement the internally generated resources of the enterprises in the LDRs so that, at the least, their relative position would remain unchanged.

D. Recent Developments in the Field of Investment Financing

In recent years, the attempts by the Yugoslav leaders to improve market conditions, to reduce the involvement of the State in the economy and, in short, to develop the system of self-management, have led to several developments which directly affect the system and sources of investment financing. Most important of the recent

developments, discussed below, are the freedom to float bonds (in association with the possibility of developing a securities market) and the freedom to pool resources with other enterprises, even foreign companies, in order to enter into joint ventures.

1. Floating Bonds. In September 1968, for the first time, the Yugoslav automobile firm of Crvena Zastava (assembling Fiats) invited the public to subscribe to a preferential loan at 6 per cent interest through the banks.¹ In 1970, Slovenije Les, a furniture manufacturer in Slovenia, announced plans to float an 8 million bond issue, with the bondholders having a voice in the distribution of enterprise profits.² In 1970, other enterprises were allowed to float long term bonds with interest rates which were not subject to the same restrictions as bank rates.³ Article 5 of the Amendment XXII to the Constitution (passed in 1971) states that enterprises may draw on the financial resources of the private sector, thus, creating a new outlet for private savings. Private capital would receive interest and possibly 'other advantages' such as a share in the revenue, but not the right to participate in management.⁴ Although legally sanctioned, direct borrowing from individuals for investment purposes has been low-keyed so far. Nevertheless, the implications of this Amendment could be instrumental in the development of a securities market. Certainly the Yugoslavs have not hidden their interest in and desire for the development of some kind of a capital market.⁵ In 1976 a bill allowing for a 'socialist' capital market was approved. The enterprises according to this bill, can have access to the capital market through one of the major banks and can raise capital by selling shares to other firms, social organizations or

1 M. Lavigne (1974), p. 94.

2 *Quarterly Economic Review: Yugoslavia* (Q.E.R. hereafter), no. 4, 1969, p. 6. Prime Minister Ribicic found it necessary to warn Slovenije Les that workers' management should not be endangered due to this action.

3 V. Dubey (1975), p. 229.

4 M. Lavigne (1974), p. 96.

5 B. Horvat (1976), p. 223.

private individuals. Obviously such developments will have very important, and possibly serious, implications for the self-management system. This is because a securities market is not merely a new and additional source of funds, but also a medium of financial investment. If enterprises are allowed to operate in a capital market, the nature of investment undertaken by the firms will change. Like firms in modern capitalist economies, they would be able to undertake physical as well as financial investment. It can be clearly seen that the development of a securities market will require firstly that the enterprises are able to receive that category of income called 'interest' and, secondly, that they are allowed to buy and sell shares. A capital market is not a neutral source of funds applicable to capitalist economies as well as economies based on other social systems. A capital market can be developed only when enterprises in an economy are of a particular type, namely joint stock companies. The establishment of a capital market not only helps the mobility of capital assets and expands the sources of investment funds, but also requires that the enterprises be organized on a 'joint stock company' basis. The system of workers' self management may not be exactly compatible with joint stock companies which, among other things, can hold the assets of other enterprises and engage in takeovers. This is because those who hold the shares of an enterprise would necessarily become a new category of interested bodies (in addition to the employees of the firm who used to be the sole beneficiaries) who would demand certain powers in the running of the enterprise. This would bring the situation closer to the model of an enterprise as envisaged by the Bullock Committee than to the labour-managed firm as conceived by the Yugoslavs. What is important is that already some of the measures necessary for the development of a securities market have been accepted and implemented.

In the post-1965 reforms period, the reduction of levies and

contributions on enterprise incomes and the varying levels of efficiency and profitability of operations in different enterprises, led to the appearance of 'surplus' enterprises on the one hand and 'deficit' enterprises on the other. Of course the banking system was to absorb the excess funds of the units with surplus and provide credit for the units in the red. But on top of that, the 'surplus' enterprises were allowed to lend directly to the 'deficit' enterprises and receive a mutually agreed upon interest in return.¹ Although attempts have been made to prevent the interest income of the enterprises from being distributed as personal income to the employees (except in the banking sector), it is clear that 'interest' is already accepted as a category of income and the possibility of successful firms becoming the creditors of the less successful ones has already materialized. Besides, the safeguards to prevent the enterprises from using interest incomes for the benefit of their employees have not been very tight and successful. The enterprises can use such payments for further investment and, in this way, merely postpone the distribution of their profits. They can, also distribute more of their internal funds as personal incomes and use their interest earnings to supplement the reduced internal investment funds.

2. Joint Ventures. Another method of creating finance for new investment projects has been the pooling of resources by two or more enterprises. This method of 'joint venture' - as it is officially called - was legally sanctioned by the 1967 legislations which defined, though unsatisfactorily, the limits on the powers and the rights of the parent companies as well as the workers of the newly established enterprise.² Once a new enterprise has been set up by pooling the

1 D. Milenkovitch (1971), p. 262.

2 Joint ventures had been possible since the early sixties but the legal limits on the participants discouraged them from entering into such partnerships. The removal of the limitations were the object of the 1967 legislations. See J. Dirlam and J. Plummer (1973), pp. 54-55.

excess resources of other organizations, the original capital invested by the partners in the joint venture will be considered a loan to the new establishment from the parent ones, against which interest will be paid. The regularity and the length of the period of interest payments has not been specified. Even the 1971 Constitutional Amendments failed to sort out these ambiguities. Technically speaking, no enterprise is allowed to have a permanent share in the profits of another, and the rights of parent organizations in a joint venture are limited by the rights of the workers' council of the new enterprise. Besides, theoretically, as soon as the original invested capital of the parent firms are paid back, their claims on the enterprise will end. This has been a serious drawback on the promotion of capital mobility. The solution was found by lawyers through the loopholes in the regulations which allow the workers' councils to relegate some of their responsibilities and functions to another party. In addition to this loophole, as long as the original invested capital remains unrecovered, the parent companies' rights and claims will continue to survive.

3. Joint Ventures with Foreign Firms. The legislation in July 1967 enabled the Yugoslav firms to enter into joint venture with foreign firms.¹ Subject to certain conditions (such as the approval of the Federal Secretariat of the Economy, ownership of 51 per cent of the shares by the Yugoslav side, guarantee of export of about 40 per cent of the output, etc.), the Yugoslav enterprises were now able to enter into profit sharing agreements with foreign firms and become the vehicle of foreign investment.² The foreign partner was originally required to reinvest or at least deposit 20 per cent of its share of profits in Yugoslavia. It was later recognized that this limitation acted as a deterrent to foreign firms and steps had to be taken to remove it.³

1 M. Sukijasović (1973), p. 41.

2 V. Dubey (1975), p. 126. Some of these restrictions, such as the upper ceiling of 49% on the share of the foreign firms in joint ventures, were later relaxed. See, e.g., *Q.E.R.*, no. 2, 1976, p. 10.

3 Yugoslav Survey (1971b), p. 110.

Other legislations were introduced in 1971, 73 and 76 to reduce the restrictions.¹ The 1971 Constitutional Amendment XXXV gave wider powers to the economic and social organizations (including banks) to enter joint agreements and programmes with foreign firms. At the same time the XXIIInd Amendment expressly guaranteed the protection of the rights of foreign investors in Yugoslavia, acquired as a result of the joint ventures even against legislations passed retrospectively.²

The significance of partnership agreements with foreign firms is not limited to purely financial matters such as expansion and diversification of sources of investment funds. Although financially the importance of these agreements lies in the partial removal of the constraint imposed on the investment plans of enterprises by the shortage of foreign exchange, nevertheless, this may be a minor advantage. The more important advantage of partnership with foreign firms lies in the possibility of the import of advanced foreign technology into the country. The partnership helps to enlarge the technical possibilities of the Yugoslav enterprises, and, over a longer period, the new techniques can be diffused in the whole economy. In fact a glance at the list of the foreign firms and the distribution of foreign investment between different sectors shows that the bulk of foreign capital has flowed into the automobile and producer goods industries in which improved technology is crucial. Amongst the most well-known foreign firms which entered into joint ventures with Yugoslav enterprises are: Fiat of Italy, Citroen of France, Mercedes-Benz and Klockner-Humboldt-Deutz of West Germany (all motor vehicles manufacturers); SKF of Sweden (ball bearings); Semperit of Austria (tyres); VVB of East Germany (producer of chemical titanium dioxide); the Printing Developments Inc. of New York (colour printing).³ In terms of the distribution of foreign investment in different sectors, the bulk of the capital entering

1 *Q.E.R.*, no. 4, 1971, p. 7; no. 3, 1973, p. 13; and no. 2, 1976, p. 10.

2 Yugoslav Survey (1971a), pp. 11 and 26.

3 For details of some of these contracts see S. Milošković (1970), pp. 74-75 and V. Dubey (1975), p. 128.

Yugoslavia up until the beginning of 1973 went into the metal using industries (50%) followed by the chemical industry (19%), rubber industry (7%) and electrical industry (5%).¹

Although the absolute size of foreign investment has been very small in Yugoslavia so far, its political and social impact has been great. Most of the foreign firms with whom partnership agreements have been concluded are from the advanced capitalist countries. Partnership with these firms is a major and decisive step in injecting capitalist relations, methods and techniques into the Yugoslav production units. When the growth of a firm, its credit worthiness and the income of its workers become dependent on the amount of profit it makes, then it is to be expected that the management of such firms would be very willing to cooperate and enter into partnership with the multinational corporations which benefit from advanced technology, know-how and management techniques much superior to their own. Such partnerships would help the Yugoslav firms to become more competitive (at home and abroad, specially in Eastern Europe), gain a wider market, make more profit, distribute higher incomes and bonuses to its workers, and even grow faster. Sweezy has rightly pointed out that in an economy where profit has become the index of success and where the enterprises have full autonomy in their investment decisions, "the demand for more trade, more technology, more finance and *finally more investment* from the advanced capitalist countries is bound to increase."² Such demands will naturally be stronger when the enterprises are more advanced and more prosperous. It is not accidental, therefore, that 39 per cent of total foreign investment for the 1967-72 period found its way to the most developed republic of Slovenia while Kosovo's share was only 0.81 per cent.³

1 M. Sukijasović (1973), p. 53.

2 P. Sweezy and C. Bettelheim (1971), p. 11.

3 M. Sukijasović (1973), p. 53.

E. Summary and Conclusions

In this chapter we have been concerned with the effects of the implementation of the self-management system on the methods and sources of investment financing. During the central planning period and, to a lesser extent, the transition period the decisions on the level and composition of investment were made by the planning agencies who also determined the sources of finance. In the first period almost all of the investment projects were financed out of the budget of the Government while in the second period social investment funds were the principle source of investment financing. Through the budget and, later on, through the social investment funds the government could exercise its control over the allocation of resources between different enterprises, industries and regions.

In the self-management period, the locus of investment decision making was transferred to enterprises and the responsibility of finding the relevant source of finance was put on their shoulders as well. Two important measures, initiated in this period, facilitated this transfer. Firstly, the commercialization of the banks and their transformation into profit making credit institutions was an important measure in the development of a market oriented system of investment financing. The banks had to be assured of the borrowers' credit worthiness and had to be satisfied that a particular credit was to be used for a project with expected profitability. The second important measure, starting from 1963, was the abolition of the social investment funds and the transfer of their assets to the loan capital of the banks. This step had the dual effect of increasing the supply of loanable funds at the disposal of the banks and, at the same time, reducing the contribution and levies on the enterprise revenue which used to finance various funds.

The transfer of investment decisions to enterprises meant that investment criteria had also undergone a change. The allocation of

investment during the central planning period and the transition period were based on the priorities laid down by the social plan according to the planners' preferences. They were, in the main, unrelated to the performance of the enterprises. The sectoral and regional distribution of investment resources were decided by the government. But as far as the allocation of investment funds between the enterprises of each sector was concerned, the large number of criteria and the vagueness of the importance of each criteria, in effect, made the allocation process very subjective and opened the possibility of "pull" and "push" by various governmental levels as well as the influential enterprises. With the abolition of the social investment funds the dependence of the enterprises on the government controlled funds was replaced by their dependence on their own funds and on the banks. The criteria for investment decisions were now quite different than before. The profitable operation of the enterprise and its credit worthiness became the main factors in determining the volume of resources that it could amass for investment. The change in investment criteria, it can be argued, has been instrumental in changing the level and composition of investment. With new criteria applied to investment decisions, there is no reason why the allocation of investment between different sectors and regions should be the same as that in the previous period. In the particular case of regional distribution we showed that in fact if it were not for the continued State financing of a part of investment, the LDRs would have suffered seriously. If the investment resources of these areas were limited to the volume of resources generated internally and the volume of credit they could raise from banks, there would have been a serious deterioration of investment activities in the LDRs and their proportional share of realized investment would have sharply decreased. State intervention through budgetary means and a special fund for investment financing in these areas helped to keep the regional

distribution of total investment relatively stable, if not improve it in favour of the LDRs.

The transfer of decision making power over the level, composition and methods of financing of investment, and to a smaller extent of the determination of wages, to the enterprise management had a significant impact on the distribution of power and influence within the enterprises. Transfer of new powers to the enterprises meant that certain new specialist tasks were to be performed in the enterprises. Analysis of investment projects, cost-benefit analysis, capital budgeting, management accounting, time and motion study, etc., were among such new tasks. These tasks, by the very fact of their specialist nature, are usually performed by the higher echelon of the enterprise work force. The transfer of the locus of decision making to the enterprise resulted in an increased reliance on these specialists and, therefore, led to the expansion of their domain of power and influence. In Chapter One, we have already shown that the representation of the more educated and qualified employees on the workers' councils and management boards has been increasing since the mid-sixties. The increased representation of this strata on the organs of management coincided with the transfer of new, specialist tasks from the State to the enterprises.

Another significant effect of the transfer of decision making power to the enterprises has been the diversification of the sources of finance and the slow introduction of new methods. The need to diversify and expand the sources of investment financing has led the Yugoslav government to pass legislations which enable the enterprises to borrow from households or other enterprises by selling bonds. It also encouraged and facilitated the pooling of resources by several organizations - which could even include forcing firms - to establish new enterprises. The search for better and more efficient sources of finance has been going on and the possibility of the development of a

stock market has been under investigation for some time now. It is true that a capital market will facilitate the task of enterprises looking for investment resources and will possibly increase the level of available resources. But it is also true that the development of a securities market may seriously undermine the principles of self-management. A securities market can only function if the enterprises are allowed to offer a variety of financial assets such as shares and bonds for sale. This, on the one hand, implies that enterprises can undertake financial as well as physical investment and receive interest payment as income on a significant level. On the other hand, such measures will require the organization of the enterprises to change in order to accommodate the possibility of selling shares and bonds, i.e., being organized on the model of joint stock companies. In such a situation, holding shares of other enterprises, mergers and takeovers could become common practice as they are in the capitalist economies. The people or the organizations who hold the shares of other organizations will not only expect to receive a dividend on their investment, but will also expect to influence the direction of development and other related affairs of that organization. A basic tenet of self-management, that the enterprises are managed by its workers alone, will thus be threatened. Although such measures (as selling shares for instance) have not become a common practice in Yugoslavia yet, already there is sufficient change in the mechanism of investment financing to cause alarm. Interest incomes can be received by the enterprises and there is no practical method of preventing it from being distributed to the employees. Enterprises pool their excess funds to establish new enterprises and, in practice, retain a considerable degree of influence and control over their management by virtue of having invested in it. Foreign capital is allowed into Yugoslavia and the profits of the foreign firms, who certainly operate on a purely capitalist basis, are

allowed to be repatriated. Never before, in any socialist country, have such measures been introduced on such a scale *and* as long term policies.

Part Two

The Macroeconomic Behaviour

PART TWO

The Macroeconomic Behaviour

The economic system of self-management not only leads to changes in the structure of the enterprises, their income distribution practices, and the financing of investment, but also produces certain effects on the level of the economy as a whole. In other words, the institution of workers' management, in association with other institutions that have evolved in Yugoslavia in the post-war period, has entailed certain macroeconomic implications. The object of this Part (Chapters Five and Six) is to analyse the behaviour of the Yugoslav economy in the post-war period from a macroeconomic point of view. The long term behaviour, i.e., the growth pattern of the important macroeconomic indicators as well as the structural changes in the economy are discussed in the first chapter of this Part. The effects of various institutional changes and economic reforms on the long term growth pattern are also discussed in this chapter.

The short term pattern of economic behaviour, particularly the fluctuations in the level of economic activity and other important variables will be discussed in the second chapter of this Part. As Yugoslavia has experienced business cycles sharper and more pronounced than all advanced market economies, the relationship between the economic organization and this apparant instability will also be analysed.

Chapter Five

Long Term Growth and Structural Change

In this chapter the long term pattern of growth and the structural change in the Yugoslav economy in the post-war period will be discussed. The post-war period is subdivided into three distinct sub-periods according to the form and nature of State intervention in the working of the economy. In the first - the Central Planning Period (1947-51) - the intervention of the State in the economy was direct and all embracing. In the second period - the Transition to Self-Management (1952-60) - the type of intervention was partly direct and partly indirect, and the scope of intervention limited to selected areas of economic activity such as the allocation of investment funds. In the last period - the Self-Management Period (1961-75) - the State ceased its direct intervention and retreated, in the main, to the background. The implementation of various measures aimed at further strengthening of self-management have not, so far, resulted in the "withering away" of the State as it was once hoped. Although the State has stayed in the background, it has watched the movement of economic indicators closely, and has retained the right to intervene should the autonomous economic agents step out of line.

In the first sub-period, the economy was governed along the lines of the Soviet model of economic development. The overriding objectives were the rehabilitation of the war-shattered economy and the construction of basic industries. The economic, political and ideological considerations forced the Yugoslav leaders to abandon the Soviet model and the ambitious First Five-Year Plan. These considerations were discussed earlier in the Introduction to Part One. Unlike the Soviet economy whose first Five-Year Plan was 'crowned' with success, the Yugoslav version was full of failures and shortcomings. The performance of the economy in this period was far from successful and most of the ambitious targets of the Plan had to be abandoned.

In the second period (1952-60), the economy began to manifest impressive growth patterns. Most of the economic indicators began to grow at average annual rates twice, sometimes more, than in the previous period. The major factors for the change in the pattern of growth were: the existence of broad based primary industries and infra-structure the construction of which had started in the first period, the re-establishment of the severed foreign trade links which enabled Yugoslavia to purchase the raw material and intermediate goods needed for her development and also to pay for them by her exports to new markets, and the abandoning of the unpopular forced collectivization programme.

In the third period, Yugoslavia faced modern economic problems of inflation, unemployment, and slow rate of growth. As a result of the economic reforms of the sixties the formation and distribution of enterprise income were completely relegated to enterprise management (Chapter Three). The result of this relegation was a rapid increase in the price and wage levels. Also the fact that the enterprises had become fully responsible for their own profit and loss resulted in their being extra-cautious about new employment. Thus, the increase in employment opportunities slowed down compared to the previous period. While in almost all less developed countries, the bulk of the unemployed move from rural to urban areas in search of jobs and better life, in Yugoslavia the unemployed tend to leave the country altogether. Migration to West European countries reached the striking magnitude of 1.2 millions in the mid-seventies, a level which by all standards is too high to be acceptable.

In addition to the overall growth pattern and changes in the sectoral structure of the economy, the long term developments in two other fields are also studied in this Chapter. Firstly, the regional development problem as well as the implications of economic reforms for regional disparities and the effectiveness, or otherwise, of the policies employed to reduce the gap between richer and poorer regions will be discussed. Secondly, the

trend of change and the magnitude and importance of the private sector in various branches of activity (agriculture, construction, transport, catering, etc.) and the effect of institutional changes on this trend will be analysed.

I. Long Term Growth Pattern

In the post-war period, Yugoslavia has undergone a very rapid and impressive economic and social transformation. In the early post-war years, substantial political obstacles and economic bottlenecks were faced which resulted in the slow down of the rate of growth of various economic indicators. However, after the removal of these obstacles and bottlenecks, Yugoslavia became one of the world's fastest growing economies¹. The rapid expansionary process lasted until the mid-sixties when elements of a new long term trend, though at a lower level, emerged. The successive economic reforms, particularly those of 1952, 1961 and 1965 led to the gradual transfer of decision making power from the central authorities to the enterprises. The effects of these reforms and the subsequent transfer of the locus of decision making on the development of various macroeconomic variables are discussed in this section. The variables studied consist of total output (including that of major sectors); employment, unemployment and productivity; aggregate demand (including its components); and standards of living indices (including personal incomes, prices and cost of living). Table 1, next page, represents the growth rates of the major economic indicators during the three periods of analysis. The rates of growth of selected indicators are graphically represented in Figure 1.

1 During the 1952-60 period, the rate of growth of the social product per capita was the highest in the world while in the 1952-65 period it was second only after Japan. Central Committee of the Association of Yugoslav Economists (1969), p.11.

Table 1 - Average Annual Rate of Growth of Major Economic Indicators (%)

Indicators	1947- 1952	1952- 1960	1961- 1975
<u>OUTPUT</u>			
Total Social Product (in constant 1960 prices)	2.3	9.8	6.5
Total Social Product net of Agriculture (in constant 1960 prices)	5.1	10.4	7.4
Index of Industrial Production (physical output)	6.4	13.5	8.3
Index of Agricultural Production* (physical output)	-3.5	8.9	2.8
<u>EMPLOYMENT AND PRODUCTIVITY</u>			
Total Persons Employed	8.3	7.0	2.8
Total Registered Unemployment	n.a.	17.2	9.1
Unemployment of Skilled and Trained Labour	n.a.	9.9**	15.4
Labour Productivity in Economic Activities (excluding Agriculture)	-1.4	3.3	3.9
<u>AGGREGATE DEMAND</u>			
Consumption (personal and collective) (constant prices)+	n.a.	6.5	5.8
Gross Domestic Capital Formation (constant prices)+	3.2	11.1	5.9
Exports++	8.5	10.9	15.1
Imports++	17.6	10.5	16.5
<u>STANDARDS OF LIVING</u>			
Average Net Personal Receipts (monthly, per head of employed persons)	n.a.	10.8 ^x	20.7
Index of Real Receipts ^{xx}	n.a.	n.a.	4.8
Retail Price Index	n.a.	2.6	14.2
Cost of Living Index	n.a.	4.9	15.0

n.a. Not available

* The first period is based on average 1947-56=100; the second period on 1952=100; and the rest on 1955=100

** Only covering 1955-60

+ The data for 1947-52 is based on 1962 constant prices while those of the 1952-60 are based on 1966 constant prices and the rest on 1972 constant prices

++ Calculated on the basis of dinar values of exports and imports. They are based on the parity value of \$1=12.5 dinars for the data up to 1960 and on \$1=17 dinars for the remaining years after 1960

x Only for Manufacturing & Mining sector from 1954 to 1959

xx This is equal to the ratio of the nominal receipts to the cost of living index

Sources: SGJ(1955), p. 288; SGJ(1960), pp. 96, 117, 151 and 259; Jugoslavia 1945-64, pp. 58, 65, 80, 233-235; SGJ(1970), pp. 98, 101, 126, 159, 201, 259 and 264; SGJ(1973), p. 120; SGJ(1976), pp. 80, 112, 124, 135, 156, 187, 231, 296, 299 and 303; SGJ(1977), p. 138; Economist (English Edition), 1969, p. 156; SGJ(1966), p. 111.

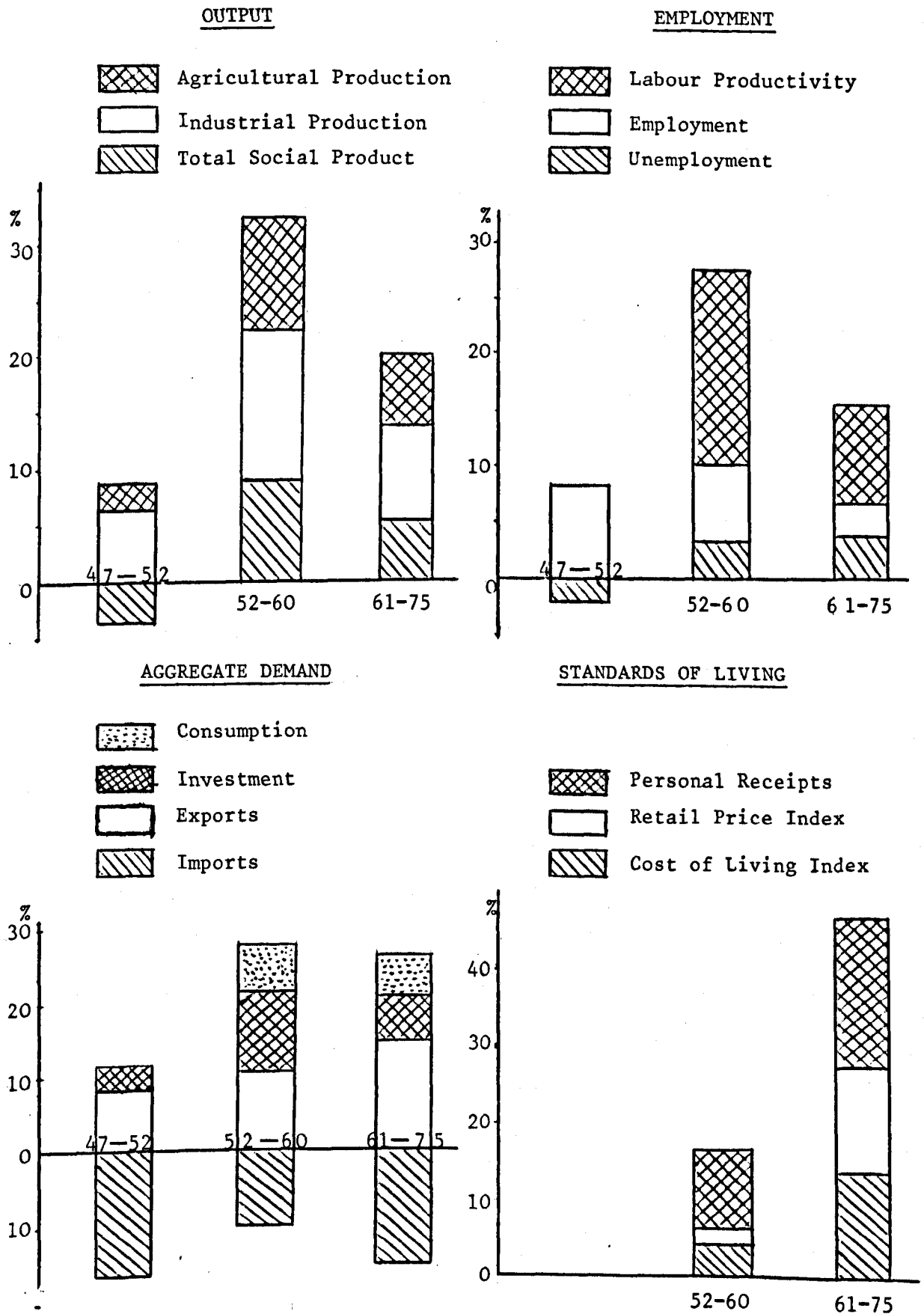


Figure 1 - Average Annual Rate of Growth of Major Economic Indicators (%)

Source: Table 1.

A. Production

The rate of growth of output in major sectors of the economy has changed considerably during the post-war period. Total social product, social product net of agriculture, social product in manufacturing and construction, industrial and agricultural production, and in fact any other sectoral output, show that the rate of growth sharply increased following the introduction of the new economic system in 1952. They also show that during the self-management period, particularly in the latter half of this period, the economy slowed down its rapid expansion. Not only did various indices of output undergo variations from one period to another, they also experienced sharp changes during each period. The causes of these changes will be discussed in greater detail in the next chapter when the short term variations will be dealt with. For the moment, it will suffice to summarize the main causes as follows.

During the central planning period, the foundations of the economy were being built. Investment was concentrated in social overhead capital and large scale industries, all with long gestation periods. The backward state of the agricultural economy, the large mass of peasant population and the inexperience of the new government in economic planning and management, coupled with the destruction and chaos created by the War, had made economic take-off a difficult task. In addition to the poor initial conditions, other calamities were to follow and further hinder the task of economic rehabilitation, reconstruction and industrialization. The expulsion of Yugoslavia from the Cominform, the severing of trade links with the East European countries, and the bad harvests of 1950 and 1952 due to severe drought resulted in a poor economic performance. The poor performance itself was one of the major factors contributing to the creation of favourable conditions for ushering in the economic reforms; breaking with the Soviet model and aiming at decentralization and market socialism.

Particularly hit in this period was the agricultural sector whose output reduced greatly in 1950 and 1952 resulting in a negative growth rate for the first period. Before the bad harvest of these two years, the agricultural production was already hit hard by the collectivization drive of 1948 which, unsuccessfully, attempted to do away with small peasant production.

Unlike agriculture, other sectors of economic activity experienced a moderate growth. Industrial production grew at 6.4 per cent per year (see Table 1) while transport and communication grew at an annual rate of 6.6 per cent and trade and catering at an annual rate of 8.0 per cent¹. These results should be expected as the main thrust of the development efforts was directed at industry and other branches of economic activities.

During the second period, the central control of the economy was partly loosened and, parallel with this, the economic affairs were increasingly left to the enterprises themselves to sort out. Market economy was partially restored and market forces were encouraged to influence the determination of prices. In the agricultural sector, the unpopular and unsuccessful collectivization drive was abandoned and a system of small peasant holding was introduced. This, together with increased investment in agriculture and the employment of better tax/price policies with respect to peasantry, greatly boosted the morale - and production efforts - in the countryside. More importantly, the investment projects planned during the central planning period were gradually completed and began to bear fruit. The outcome was that in this period the social product grew at an impressive rate of nearly 10 per cent per annum (at constant prices too). The output of various sectors grew at annual rates above 10 per cent as well. The output per capita in this period attained the highest rate of growth in the world.

1 Jugoslaviya 1945-64, p.80.

During the self-management period, however, the rapid growth began to slow down and in some cases level off. Of course, part of the reduction in the growth rate should be attributed to the effects of the severe recession of the mid-sixties. Nevertheless, the fact remains that the rates of expansion of various sectors had declined. This has been due to factors on both supply and demand sides. Excess capacities and unemployed resources had gradually declined. Bottlenecks had developed as a result of the uneven development of various sectors. The rate of growth of employment had dropped to one-third of that in the fifties due to the introduction of new criteria in the employment policy of the enterprises after the 1961 and 1965 reforms. (More on the last point in the next section). At the same time the main elements of aggregate demand, i.e., personal and collective consumption and gross investment had begun to grow at slower rates.

Of all sectors, agriculture still remains the sector with the lowest rate of growth. Not only do modern agricultural technology and farming methods need to be further encouraged, but also problems such as the organization of agricultural production, low rate of return to investment and the government's tax/subsidy policy towards the farmers need to be studied and improved if this sector is to be put on a par with other sectors.

B. Employment

Although the number of persons employed in economic and non-economic activities (excluding the vast number of self-employed peasants) has continually increased, the rate of increase has continually declined. The decline has been particularly significant in the self-management period. The wholesale migration of the rural population to urban areas in the early post-war years, the job opportunities in the new industries and construction projects and, above all, the socialist commitment of the government to provide jobs for all able-bodied persons (even at the expense of productivity)

were the factors that resulted in the sharp rise in employment in the first period. Although all these factors became less important during the fifties, the system of income distribution through which overmanning was encouraged, helped to maintain a high rate of growth of employment in the second period (though somewhat lower than during the first period). But the economic reforms of 1965 which strengthened the application of profitability criteria, and reduced State subsidies to inefficient enterprises, as well as the introduction of a new income distribution scheme, which made the enterprises responsible for their own loss and profit, resulted in a rapid decline in the rate of growth of employment. Under the income-sharing system of distribution, the labour-managed firms began to exhibit some of their basic characteristics such as resistance to excess manning (so prevalent in the fifties) and new employment (see Chapter Two). The immediate outcome of this behaviour also was the fall in the rate of growth of employment.

The unemployment rate followed a path similar to that of employment, i.e., sharply rising in the fifties while slowing down in the sixties and seventies. The initial rise was due mainly to the massive influx of the peasantry to the cities and their taking advantage of the newly devised unemployment benefits scheme. Gradually, as the initial migration to the cities slowed down and the newly developed industries expanded, and most important of all, as the opportunities for migration to Western European countries expanded from the early sixties onwards, the rate of growth of unemployment declined. It should be emphasized, however, that the registered unemployment is still growing at the very fast rate of about 9 per cent. Although there has been a continual (though modest) rise in the level of employment, it has not been sufficient to absorb the natural increase in the size of work force, new migrants from the countryside and that part of the labour force which has become unemployed as a result of structural changes in the economy (such as the use of modern labour saving techniques)¹.

1 For the details relating to employment, see R. Livingston (1964) and C. Mesa-Lago (1971).

A glance at the breakdown of the unemployed according to their skill and qualification reveals an interesting, though rather strange, phenomenon. Unemployment among the skilled labourers and qualified staff which was growing at about 10 per cent per annum in the latter half of the fifties, became much more prevalent in the sixties and seventies (15 per cent annual growth, compared to 9 per cent for all categories). Considering that the Yugoslav economy has consistently been suffering from a shortage of skilled and qualified labour force, such rapid rise in the unemployment of this type of labour is very surprising. It should, of course, be pointed out that this section of the labour force constitutes a small proportion of total unemployment. Two reasons can be provided for the rapid rise of unemployment among the skilled and qualified personnel. On the one hand, there is the frictional unemployment accounting for those who are changing their jobs. On the other hand, there are those skilled labourers who prefer to benefit from odd jobs of a private nature (services, repairs etc.) and draw unemployment benefits at the same time rather than be employed.

At any rate from the beginning of the seventies, the problem of unemployment began to attract considerable attention and its solution has occupied an important position in the list of priorities and policy objectives of the government. The fifth Five Year Social Plan (1970-75) as well as the Long Term Development Plan (until 1985) had the reduction of unemployment as one of their main objectives¹.

A comparison of the rate of growth of output in the non-agricultural sector and that of employment leads us to the changes in labour productivity². During the first period, the sharp rise in employment in the newly set up and rehabilitated production units coupled with the slow growth of output led to a fall in labour productivity. This was due, in

1 OECD (1970), pp.38-43; J.Dirlam and J.Plummer (1973), p.168; and SFRY Assembly (1975), p.20.

2 Labour productivity in Table 1 is based on the social product in non-agricultural sectors (constant 1960 prices) and employment in economic activities (excluding agriculture).

the main, to the fact that most of the new recruits were inexperienced workers coming from the rural areas with little knowledge and training in modern economic activities. In fact the labour productivity in the manufacturing sector fell even more sharply than in the non-economic activities as a whole (1.9 per cent per year as compared to 1.4 per cent)¹.

In the second period, however, the situation was reversed due to the relative improvement in the quality of the labour force as well as to the removal of the obstacles to economic expansion. Although the rate of growth of employment had declined in this period, nevertheless, the over-manning tendencies existing in all branches prevented the productivity from growing even faster.

In the self-management period, as a result of measures in the field of income distribution and as a partial manifestation of the inherent resistance to new employment in the labour-managed firms, the labour productivity grew even faster.

C. Aggregate Demand

Parallel with the growth of output, the components of aggregate demand exhibited a slow take-off in the first period, followed by a rapid expansion in the second and a slow-down in the third period. The government's indirect control on the system of income distribution (as shown in Chapter 3) had enabled it to keep a firm control on the consumption expenditure by controlling wage payments. The government could also ensure the flow of sufficient, and continually rising, resources to investment funds. As a result, in the second period, while consumption expenditure grew at annual rate of 6.5 per cent, the investment expenditure expanded at a rate of 11.1 per cent per annum.

1 SGJ (1976), pp.80-81.

In the self-management period, however, the government's control on the income distribution system of the enterprises and particularly on the size of total wages was weakened, and the reduction in the rate of growth of output affected the investment expenditure much more severely than the consumption expenditure. The autonomy of enterprise in distributing their incomes and their determination to provide a rising standards of living for their employees meant that the rate of growth of consumption reduced only slightly compared to the previous period (from 6.5 to 5.8 per cent annually), whereas the brunt of the slow-down of the growth of output was experienced by the investment expenditure whose rate of growth was almost halved (from 11.1 to 5.9 per cent- see Table 1).

The main cause of the slow-down in the rate of growth of investment must be attributed to the decentralization of the machinery of investment funds allocation and the application of new criteria (such as profitability) in investment decisions. While in the fifties the individual enterprises were mere recipients of funds for investment purposes the volume of which did not depend on their efficient operation, the situation was drastically changed in the self-management period. After the abolishing of the social investment funds and the introduction of the 1965 reforms, the firms had to raise funds for investment on the basis of their own operation and credit worthiness, and were thus seriously affected by the profit or loss of their operation. In the new situation, the firms had to be more careful and the management had to think twice before embarking on a new expansion project. The result was the application of more severe profitability rules and the discouragement of dubious investment projects which were more common previously¹.

1 Large scale investment projects undertaken for political reasons or because of regional pressures were frequent in the fifties. The term "political factories" has often been used to describe this type of projects. More on this later.

D. International Trade

As a developing country, Yugoslavia has always relied heavily on foreign trade as a major vehicle of her industrialization policies. Raw material, semi-finished goods, food products, equipment and machinery have always been prominent on the list of imported items. Yugoslavia has also been very concerned about her export potentials not only as a stimulus to her expanding industries but also as a source of earning of badly needed foreign exchange. The expanding foreign trade sector, though small, is of great significance for the growth of the economy. In the next chapter we shall discuss how the foreign exchange earnings act as a ceiling-type constraint to the growth of economic activities, and how the major phases of expansion have come to an end as a result of the shortage of foreign exchange.

In the central planning period, the main trading partners were the "people's democracies" of Eastern Europe which imported raw material such as ores and minerals and exported the equipment and machinery required for the setting up of the new industries. The expulsion from the Cominform and the ensuing trade embargo severely affected Yugoslavia's trade and development. While the exports more than tripled from 1946 to 1947 and almost doubled from 1947 to 1948, they plummeted down in the following years. Only in 1956 the exports reached their 1948 level again. Similarly, the imports rose by almost four times from 1946 to 1947 and almost doubled in the following year only to dive down in the years to come¹. The agreement by Western countries (U.S., U.K., France, Italy etc.) to go to Yugoslavia's aid with defence equipment, food and machinery from 1951 onwards (which would save her some foreign exchange) only partially relieved the difficulties².

1 SGJ (1970), p.201.

2 For the details of the turn-about in Western policy towards Yugoslavia and their trade and aid agreements see: F.W.Neal (1958), pp.6-7; J.Bombeless (1968), p.100; R.O.Freedman (1976), pp.29-35 and 40; G.W.Hoffman and F.W.Neal (1962), pp.347-354.

During the period of transition to self-management and the ensuing self-management period, the international trade mechanism was subjected to numerous reforms in terms of regulations, quotas, exchange rates, etc. The main trend of the reforms has been in the direction of promoting the integration of the Yugoslav economy in the world market and the strengthening of the international division of labour. This task is as yet an unaccomplished one with trade deficits dominating Yugoslavia's position, specially in the recent decade. The level of imports began from a higher initial position than the exports and grew faster, thus making the gap continually wider.

During the fifties, the government's firm control of foreign trade enabled it to keep the rate of growth ^{of} imports in line with that of exports. However, later, particularly in the post-1965 reform period, as the attempts at integration in world market resulted in the removal of trade barriers and further liberalization of international trade, the trade deficit situation deteriorated even further. From 1966 to 1975, exports grew at an annual rate of 16.3 per cent while imports reached the record rate of expansion of 21.9 per cent¹.

E. Standards of Living

One significant consequence of the continued government control of wage payments up to the end of the fifties was the relatively slow growth of the personal income of the employed population which meant a similarly slow growth for personal consumption expenditure. At the same time, the government's price policy, although not as restrictive as that in the central planning period, had resulted in a very small rate of price increase in the fifties. From 1952 to 1960, the retail price index and the cost of living index rose at annual rates of 2.6 and 4.9 per cent respectively.

1 SGJ (1976), p.231

This period of price stability, however, ended with the inauguration of the self-management period. The autonomy in the field of income distribution gained by the workers' councils after the 1958 reforms, and consolidated by the 1961 and 1965 reforms, resulted in allocation of a greater share of net enterprise income to wage funds (as shown in Chapter Three, Table 7). It amounted to a very rapid rise in personal income per head of the employed population, from 10.8 per cent (in the 1954-59 period) to 20.7 per cent (in the 1961-75 period). The autonomy of enterprises in the formation of their revenue, i.e., freedom to determine the level of output and prices, resulted in a rapid rise of the price level as well. The inflationary pressure that hit Yugoslavia from the early sixties onwards, coupled with the ability of enterprises to freely raise their prices, resulted in an increase in the annual rate of growth of the retail price index from 2.6 (in the second period) to 14.2 per cent (in the third period), and that of the cost of living index from 4.9 to 15 per cent, (see Table 1).

Although the development of the social agreement on personal incomes, the Yugoslav version of the 'social contract', introduced in the early seventies, did restrict the share of net enterprise income allocated to personal income funds, it could not restrict the growth of the personal income level itself. A large part of this was, of course, simply financed by increase in prices. Similarly, the restrictive anti-inflationary measures adopted in the early seventies did not succeed in halting the rapid price increases. From 1971 to 1975, the average personal income per head of the employed, the retail price index and the cost of living index, all, grew at a record rate of just over 20 per cent per annum¹. As such almost all of the gains in personal incomes had been wiped out by price increases. The index of real personal incomes which had an overall growth rate of 4.8 per cent per annum in the self-management period, stayed almost constant in the 1971-75 period.

1 SGJ (1976), pp. 296 and 303.

The long term pattern of growth of the major macroeconomic variables illustrated in Table 1 and discussed in the above pages, however, does not enable us to construct a complete and accurate picture of the performance of the economy and the changes in its components in the post-war period. The measurements shown in Table 1 (and Figure 1) are aggregated for the whole economy or for major branches of activity and are averaged over a long period of time. They conceal the changes in the structure of the economy as well as the short term fluctuations in the level of activity over the period under consideration. The development of an economy, as George points out, is characterized by changes in its component sectors and industries.¹ As different sectors and industries grow at different rates, the economy's picture may completely change (especially over a long period like thirty years) and such changes cannot be picked up by the long term growth rates of major economic indicators. We must, therefore, study and analyse the changes in the industrial, sectoral and regional structure of the Yugoslav economy. This is the objective of the next section.

II. The Changes in the Structure of the Economy

As different industries, sectors and regions have been growing at different rates, so must their contribution to output and employment in the whole economy have changed. The decentralized character of the Yugoslav economy, particularly in the self-management period, provided a favourable environment in which different types of activity could grow at different rates. The changes in the share of each industry, sector and region have resulted in a basic structural change in the economy that should be studied from several points of view. The most important aspects of the structural change are: firstly, the change in the contribution of primary and secondary industries to output and employment; secondly, the change in the importance of different branches of economic activity (industry, agriculture, transport,

1 K. George(1974), p.14.

etc.); thirdly, the change in the share of different industries comprising the manufacturing sector, i.e., the structural change within the manufacturing sector; fourthly, the change in the pattern of regional growth and the contribution of different regions to national output and employment; and finally, the change in the magnitude and importance of the activities of the private sector. Each aspect of the structural changes in the economy will be studied in greater detail in the following pages.

A. Sectoral Change- I (Primary and Secondary Industries)

The structural change in the economy is, first of all, reflected in the change in the contribution of primary and secondary industries to total economic activity. Table 2, next page, shows the change in the share of these two sectors in selected years from 1947 to 1975.

It can be observed from Table 2 that we have chosen agriculture, mining and quarrying to represent the primary sector and the manufacturing to represent the secondary sector. The process of industrialization in Yugoslavia has resulted in a declining primary sector accompanied by an expanding and thriving secondary sector. The decline in the former can be observed in terms of both output and employment. The proportion of active population engaged in agriculture declined from 73 to 47 percent and the proportion of the work force employed in mining & quarrying decreased from 9 to 5 percent (of which 3 percentage points were in coal mining alone).¹ On the output side, the share of agriculture fell from 42 to 16 percent while that of coal mining reduced only slightly from 2 to 1 percent and the share of mining & quarrying remained at a stable level of 3-4 percent. In the case of the last sector, the greater fall in employment (compared to output) represents the effect of large scale mechanization and the use of modern equipment on the

¹ The great majority of the agricultural population work on small peasant holdings and, as such, are not regarded as having entered into any 'employment relationship'. In the case of large cooperatives and state farms, however, a small number of people have been actually 'employed', though their number is small. In order to have an accurate picture of the relation between changes in output and labour input in agriculture, we have used the data showing the active population in agriculture and not the level of employment in this sector.

Table 2 - Sectoral Distribution of Output and Employment (%)

A. Sectoral Output as Percentage of Total Social Product in Constant 1972 Prices*

	47	52	60	68	75
<u>Primary Sector</u>					
Agriculture	42	33	28	20	16
Coal mining	2	2	2	1	1
Mining & Quarrying **	3	4	5	4	4
<u>Secondary Sector</u>					
Manufacturing ***	16	18	24	29	33

B. Sectoral Employment as Percentage of Total Employment in the Economic Activities

	47	53	60	68	75
<u>Primary Sector</u>					
Coal mining	n.a.	5	4	2	2
Mining & Quarrying **	n.a.	9	7	6	5
<u>Secondary Sector</u>					
Manufacturing ***	n.a.	32	36	40	42
<u>According to Type of Activities</u>					
Economic activities	82	83	84	83	83
Non-economic activities	18	17	16	17	17

C. Active Population in Agriculture as Percentage of Total Population According to Census

	48	53	61	71
	73	68	56	47

* Data for 1947 and 1952 are computed by interpolation of other data given in 1956 constant prices

** Includes coal, coke and metals

*** The output and employment in manufacturing is obtained by subtracting Mining and Quarrying from the data for 'Manufacturing, Mining & Quarrying'

Sources: SGJ (1955), p.86; Jugoslavija 1945-64, pp.58-59; SGJ(1962), p.93; and SGJ(1976), pp.80, 103, 113, 134-135

one hand and the increased productivity of labour on the other.

Contraposed to the declining agricultural and mining activities is the expanding manufacturing sector. During the period under consideration the share of manufacturing in total output doubled from 16 to 33 percent while its share in total employment rose from 32 to 42 percent. This reflects not only the deepening industrialization of the economy but also the continued increase in labour productivity in this sector.

The above data also demonstrate the still relatively underdeveloped state of the Yugoslav economy compared to industrialized countries of the world. In the developed industrial countries, the share of the service sector gradually surpasses that of the primary and secondary sectors, and after some time the manufacturing sector ceases to be the largest single sector in terms of output and employment. Although the absence of complete data on the service sector makes any comparison with the industrial countries difficult, nevertheless, two points can be deduced from whatever data is available. Firstly, from 1952 to 1975, the proportion of total employed persons engaged in economic activities remained at the high and stable level of 82-84 percent while those engaged in non-economic activities (the nearest equivalent to a service sector) accounted for only 16-18 percent.¹ This is in sharp contrast to the situation in the industrial countries like U.S.A. and U.K. where the service sector has accounted not only for a high share of employment, but, sometimes also for an increasing share. In the United States, the share of service sector in total employment increased from 47 percent in 1929 to 58 percent in 1965, and in the United Kingdom this ratio increased only slightly from 48 percent in 1924 to 50 percent in 1964.²

Secondly, while in Yugoslavia, manufacturing has gradually become the largest single sector in terms of output and employment, the advanced

1 It should be noted that the 'non-economic activities' is not exactly the same as the 'service sector'. Trade, catering & tourism, for example, are classified as economic activities. This qualification, however, does not change the fact that employment in the 'economic activities' has continued to account for a stable and high share of total employment.

2 Cited in K. George (1974), pp. 16-17.

industrial countries have already reached a stage where this trend has been reversed and manufacturing has ceased to be the largest single sector of the economy. In the U.S.A., for example, since 1947 the share of manufacturing in total employment has been declining.¹

B. Sectoral Change- II (Major Branches of Economic Activity)

Another way of showing the structural change is to investigate the distribution of output and employment across broader sectoral categories, thus representing any shift of emphasis from one branch of the economy to another. Table 3 illustrates the changes in the contribution of major branches of activity to total output and employment. Figure 2 represents these changes graphically.

Table 3 and Figure 2 clearly show that industry (composed of Manufacturing and Mining & Quarrying) has gradually become the most important branch of activity in terms of both output and employment. In the period under consideration, it has grown to absorb almost half of the total employment and produce almost two-fifth of the total output. The rapid rate of growth of the industrial sector, which has resulted in the rising share of industry in total output and employment, has been due partly to the industrialization efforts of the government and partly to the increased labour productivity. The increase in productivity can be seen by comparing the changes in the contributions to output and employment.

The growth of the share of industry in total output has been totally at the expense of the share of agriculture, the contribution of which has declined from 45 percent in 1947 to 17 percent in 1975. In Section I of this Chapter, we showed that agriculture has been one of the slowest growing sectors of the economy and this explains the reason for its declining share.

1 *Ibid.*, p. 18.

Table 3 - Change in the Sectoral Distribution of Output and Employment

	47	52	60	68	75
<u>Sectoral Output as % of Total Output (constant 1972 prices)</u>					
Industry*	18	22	29	33	37
Agriculture, Fishery & Forestry	45	35	30	22	17
Construction	13	13	9	11	10
Transport & Communication	5	6	8	8	8
Trade, Catering & Tourism	13	17	18	20	21
Others **	6	7	6	6	7
<u>Sectoral Employment as % of Total Employment in Econ.Activities+</u>					
Industry*	41	39	43	45	47
Construction	12	15	13	11	11
Transport & Communication	15	10	8	9	8
Trade, Catering & Tourism++	12	11	10	13	15
Others**	7	10	12	11	10

* Consisting of Manufacturing, Mining & Quarrying

** Consisting of Arts & Crafts and Public Unilities

+ Agriculture is excluded from this section since the labour force 'employed' in this sector shows only a very small fraction of the total labour force 'engaged' in agriculture. The data for persons engaged in agriculture was given in Table 2.

++ The data for employment in this sector excludes the self-employed

Source: Jugoslaviya 1945-64, p.58; and SGJ (1976), pp.81, and 112.

Among other branches of activity, Trade, Catering and Tourism is the only one whose share of output and employment has somewhat increased (from 13 percent and 12 percent of output and employment in 1947 to 21 percent and 15 percent of output and employment in 1975). The Catering and Tourism, being an important source of foreign exchange earnings, has received preferential treatment from the government and, as a result, has enjoyed a higher than average rate of expansion (see Figure 2).

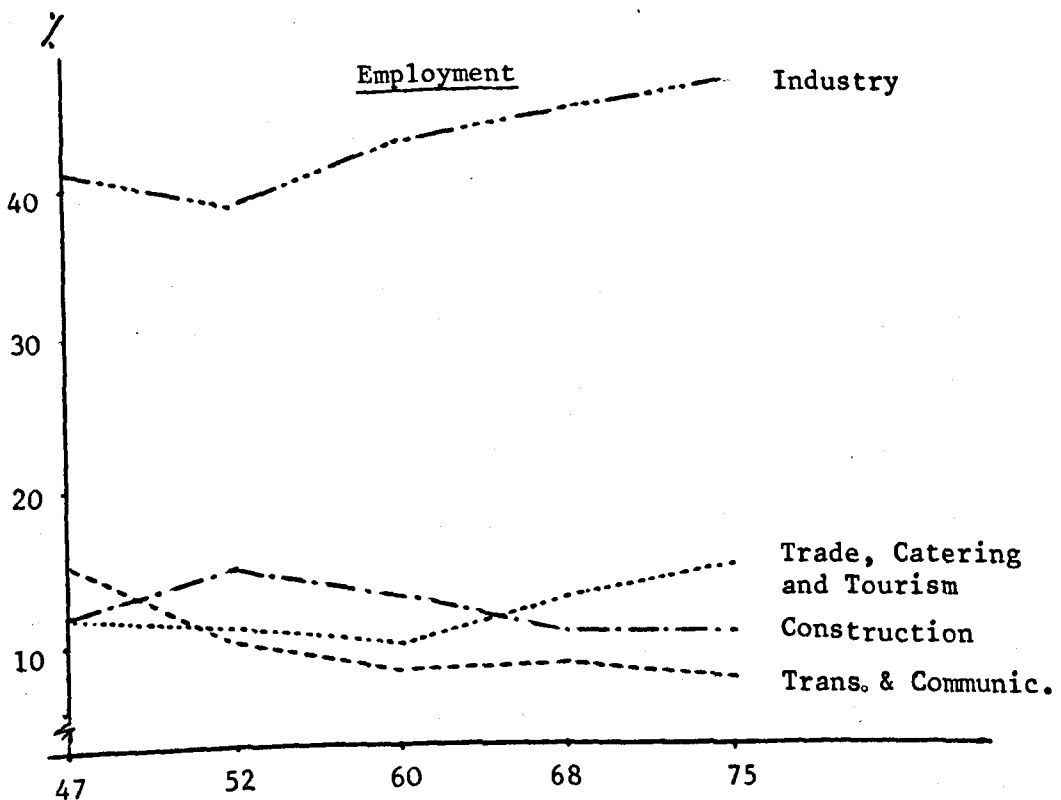
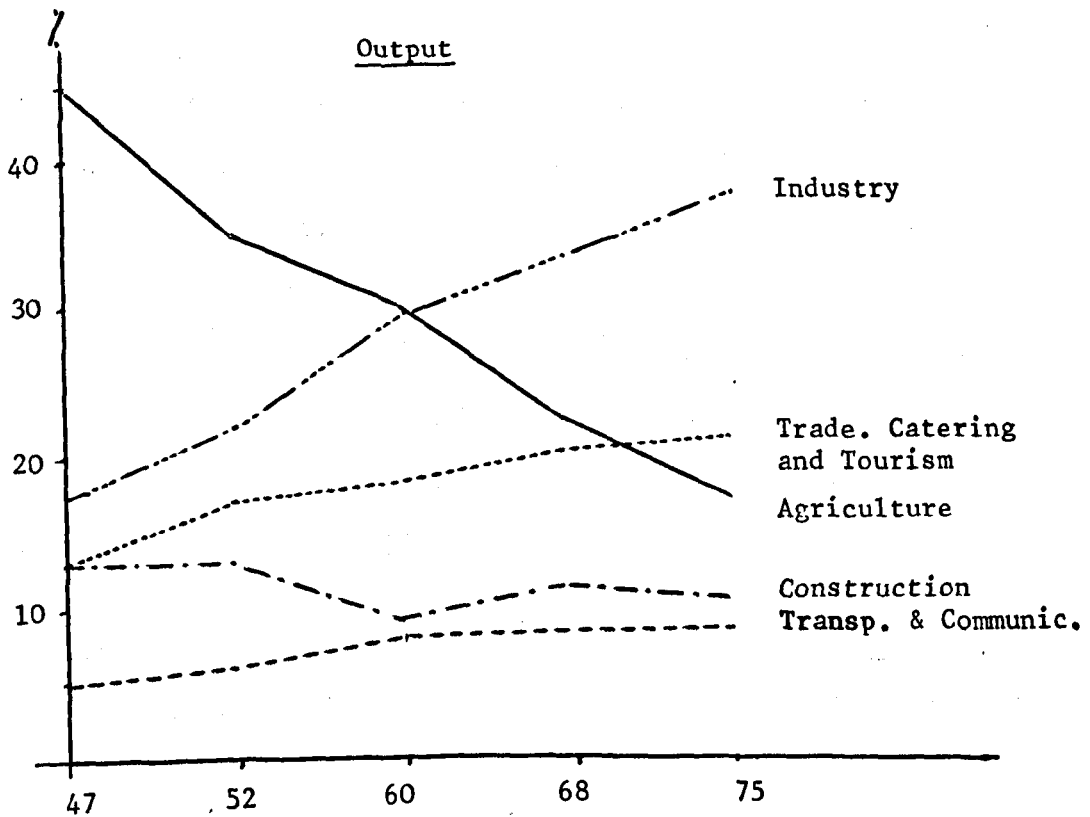


Figure 2- Changes in the Sectoral Distribution of Output and Employment (1947-75)

Source: Table 3.

Except industry, agriculture and trade, catering and tourism, the other branches of activity have experienced little or no change in terms of their contribution to output and employment in the period under consideration. This, also, supports our assertion, in the previous discussion, that in the relatively underdeveloped state of the Yugoslav economy the industrial sector has experienced the most noticeable change while other sectors (construction, transport and communication, etc.) have retained their approximately average rate of growth. If we take into account the complementary nature of various branches of activity such as industry and transport, we can see that the rapid expansion of industry has not been matched by the other complementary branches. One effect of this situation is the development of bottlenecks that, as will be discussed later, limit the potential growth of the economy.

The industrial sector, itself, consists of a large number of industry groups of which the conditions of development and patterns of growth are by no means identical. It is, therefore, necessary to study some of the more important components of the industrial sector. This is the object of the following discussion.

C. Structural Change Within the Industrial Sector

Within the industrial sector great diversity has been experienced by different industries. Table 4 represents the changing contribution of selected branches to total employment and output in industry as well as the rates of growth of their output in different sub-periods from 1947 to 1975. During the central planning period, the contribution of department II industries (producing consumer goods) to output declined while that of department I industries (producing capital goods) increased. This is the reflection of the priorities guiding the government policies in this period. Development of an industrial base from scratch, in a predominantly agricultural country, required putting heavier emphasis on producer goods industries. While the

Table 4 - Structural Change within the Industrial Sector

	47	52*	60	75.
Output as % of total Industrial Output (constant 1972 prices)				
Textiles	19.8	14.5	12.4	11.5
Paper and paper products	1.1	0.9	1.1	1.7
Food	12.3	8.7	8.6	8.9
Iron and steel metallurgy	2.9	3.6	5.3	4.1
Non-ferrous metallurgy	3.7	4.7	4.0	3.7
Production of metals	12.2	16.0	20.5	20.0
Electric machinery and equipment	0.7	1.8	3.6	5.5
Chemicals	1.8	2.3	3.8	7.6
Shipbuilding	n.a.	0.5**	1.2	1.4

Employment as % of Total Industrial Employment

Textiles	12.6	13.7	15.8
Paper and paper products	1.3	1.4	2.0
Food	6.7	7.6	8.9
Iron and steel metallurgy	4.7	4.5	3.7
Non-ferrous metallurgy	5.9	4.0	3.5
Production of metals	12.5	17.3	19.2
Electric machinery and equipment	2.4	4.3	6.4
Chemicals	2.5	4.1	6.0
Shipbuilding	0.5	2.0	1.8

Average Annual Rate of Growth of Physical Output (%)

	47-52	52-60	61-75
Textiles	-0.6	10.6	6.8
Paper and paper products	3.5	16.0	10.6
Food	-2.8	15.6	7.2
Iron and steel metallurgy	7.4	18.5	7.6
Non-ferrous metallurgy	10.0	9.5	7.1
Production of metals	14.6	16.0	8.1
Electric machinery and equipment	29.0	24.5	12.0
Chemicals	6.5	20.8	15.0
Shipbuilding	n.a.	7.8+	9.3

* 1953 for employment figures

** 1956

+ 1956-60

Source: SGJ (1955), p.86; SGJ (1962), p.93; Jugoslavijska 1945-64, pp.59, 144-145; SGJ (1966), p.111; SGJ (1976), pp.113, 134-135, 186-187

rate of growth of the total social product and of the industrial production in this period were as low as 2.3 and 6.4 percent respectively (see Table 1),

department I industries enjoyed much higher rates of growth. In fact, while consumer goods industries such as textiles and food experienced a drop in their output, some department I industries enjoyed growth rates from 7 to 30 per cent per annum. This special emphasis was seen as the only way to bridge the gap between the two departments.

During the second period, this trend was reversed and the emphasis was changed in favour of department II industries. Although the producers' goods industries continued to grow at high rates, the consumer goods industries gradually caught up with, and in some cases even surpassed, them. This, as we shall see later, was partly the result of the new stage in economic development during which the foundations of modern manufacturing was built and the resources were re-channelled from capital goods to consumer goods industries. It was also partly the result of the government policy of decentralization and market socialism whereby the pressure of backlog demand necessitated the increase in the volume of consumer goods output.

Despite the increased growth rate of the consumer goods industries, their share in total industrial output continued to decline, though at a slower pace. Their share of employment, however, slightly increased. This trend which continued well into the third period was the result of the lower than average labour productivity in some department II industries such as textile, food and furniture which included a large number of small, old and inefficient firms.

The third period witnessed not only a general decline in the rate of growth of most branches (as was the case with the indicators of overall economic behaviour summarized in Table 1), but also a moderation of the gap between the two departments and their rates of growth. The general slow-down of the economy accounts for the reduction in the rate of growth of the consumer goods industries and that, in turn, explains the slower growth of the producers goods industries. A comparison of the change in the contribution to output and employment of different industries represents differences in the labour productivity and the extent to which modern production techniques have been introduced to each industry.

The structural change within the industrial sector has to be explained to a large extent by the different rates of technological development in different groups. Thus, we notice that the textiles, food and furniture industries which can be regarded as the traditional branches of activity have not enjoyed the fruits of scientific research equally with such industries as metallurgy, shipbuilding, electric industry and chemicals.¹ Of course we should not ignore the great diversity of firms within each branch of industry and the significance of such diversity for our assertions in this and previous paragraphs. For example within the textile industry, there are firms engaged in production of synthetic fibres which are highly efficient, modern and as much dependent on technological advances and research as metallurgy or shipbuilding. Similar diversities can be found within each of the branches and should be kept in mind as qualifications to the statements made about the industry groups as a whole.

D. Structural Change Within Regions

Yugoslavia is a federation of six republics with considerable cultural, social and economic diversity : Slovenia, Croatia, Serbia, Bosnia-Herzegovina, Macedonia and Montenegro. Furthermore, Serbia - the largest of the six republics - is subdivided to the so-called Serbia-proper and the two Autonomous Provinces of Vojvodina and Kosovo-Metohija which are mainly composed of various national minorities. The advanced, rich and industrially developed north and north-western section was separated from the backward, poor and underdeveloped south and south-eastern section by centuries of wars, occupation, hostility and bitterness. Only after the second world war were the two sections united in a socialist federation as partners on a par with each other, accepting the unequal status of different regions at the start of the partnership and the need to bridge the regional gap through conscious and determined efforts. Therefore we observe that the First Five Year Plan (as well as the following plans) stressed the need for faster growth of the

1 K. George makes a similar distinction between "home based" and "science based" industries in the case of Britain. K. George (1974), p.19.

LDRs by means of preferential treatment in terms of subsidies, taxes, aid and transfer of resources.¹ The post-war development of the Yugoslav economy, in particular the successive economic reforms, have also affected the regional diversities in numerous ways. Neither industrial development nor the development of other sectors have been homogeneous across the republics. Therefore, in addition to unequal starting positions, different republics have grown at different rates and experienced different types of structural changes. Furthermore, some of the policies adopted for preferential treatment of the LDRs have been effective in reducing the regional diversities while others have not. The study of regional development, therefore, must be concerned not only with the trend and persistency of the regional differences but also with the effectiveness of the regional policy measures adopted in various phases of socio-economic development.

Although the designation of different areas to developed and underdeveloped (or developed and insufficiently developed) has varied in different periods, we shall use the relative designation of "less developed regions (LDRs)" and apply it to the republics of Bosnia-Herzegovian, Macedonia, Montenegro and the Autonomous Province of Kosovo, roughly the area to the south of river Sava.² Even though these areas are heterogeneous, nevertheless they share many characteristics and face similar problems that distinguish them from the more developed regions (MDRs). The relative importance of the LDRs and the magnitude of the development problem involved can be seen from the following table showing their area, population and contribution to total output at the present time. (Table 5 is on the next page).

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- 1 For the details of some of the preferential treatment policies towards the LDRs, see R. Bicanic (1973), pp. 182-184 and B. Horvat (1976), pp. 60-63.
 - 2 During the Second Five-Year Plan (1957-61), Bosnia-Herzegovina was excluded from the list of the LDRs. During the Third Five-Year Plan (1961-65), parts of Serbia, Croatia and Bosnia-Herzegovina were added to the list. After the 1965 reforms, the less developed parts of the developed regions became the concern of individual republics. In terms of the national policy the list was limited to the above-mentioned four areas. See V. Dubey (1975), p. 189.

TABLE 5 - Area, Population and Output of the Less Developed Areas and Their Share in the Yugoslav Totals (%)

	Area		Population		Social Product	
	1000 Km ²	%	1000s	%	bil.din.	%
Bosnia-Herzegovina	51.1	20	3977	19	63	13
Macedonia	25.7	10	1756	8	28	6
Montenegro	13.8	5	558	3	9	2
Kosovo	10.9	4	1405	7	10	2
All LDRs	101.5	40	7696	36	110	22

Source: SGJ (1976), pp.70, 369 and 406

The less developed areas which account for 40 percent of the area and 36 percent of the population of Yugoslavia, produce only 22% of the national product. In addition to this economic imbalance, the LDRs also face harsher demographic characteristics such as a faster rate of population growth and a higher infant mortality rate, which directly lead to lower standards of health, education and other social services. Table 6 shows some of the demographic/social problems of the LDRs.

Table 6 - Some Demographic and Social Characteristics of LDRs, 1971

	Rate of natural rise in population %	Infant mortality per 1000 live birth	Illiteracy, % of population 10 years and over	Population per hospital bed
Bosnia-Herzegovina	1.50	53.6	22.7	253
Macedonia	1.55	81.9	18.0	185
Montenegro	1.32	34.6	17.2	165
Kosovo	2.86	89.6	32.2	364
All LDRs	1.73	68.2	22.7	236
All MDRs	0.52	31.6	11.7	153

Source: V. Dubey(1975), pp.370 and 191

With a rate of population growth three times higher than the MDRs, the less developed areas must grow at rates much faster than the national average if they are, someday, to catch up with the rest of the country. The illiteracy rate of twice as high as the MDRs, which is just one indication (among

many others) of the lower level of social services available to the LDRs, illustrates the amount of extra effort that has to be applied to the social aspects of the development process. These aspects, in turn, have direct bearing on the economic side.

The basic feature of the regional problem is that the LDRs are characterized by their persistently low per capita incomes. Despite the regional development policies of the government, the gap between the LDRs and the MDRs does not show any significant sign of being reduced. Table 7 illustrates the percapita income of different regions together with their widening gap.

Table 7 - Per Capita National Income* of Different Regions as Percentage of National Average

	1947	1952	1961	1975
Yugoslavia	100	100	100	100
<u>More Developed Regions</u>				
Slovenia	175	192	199	199
Croatia	107	117	121	122
Serbia-proper	96	92	95	99
Vojvodina	110	89	97	116
<u>Less Developed Regions</u>				
Bosnia-Herzegovina	84	87	76	66
Macedonia	62	59	57	68
Montenegro	71	64	68	69
Kosovo	52	49	36	33
Highest/Lowest Ratio **	3.4	3.9	5.5	6.1

* In 1960 constant prices

** Ratio of per capita national income of Slovenia to that of Kosovo

Source: SGJ(1955), p.51; Jugoslavija 1945-64, pp.87-89; SGJ(197), p. 351; and SGJ(1976), pp. 368-369 and 398.

Figure 3, depicting the above table graphically, represents the changes in the relative position of different areas. The basic problem of regional development is summed up in Table 7 and Figure 3. In spite of all efforts in the course of the last three decades, the LDRs have become relatively worse off in comparison with the MDRs. While the per capita national income of Slovenia has grown from 175 to 199 percent of the national average, that of most LDRs (with the exception of Macedonia) has fallen in

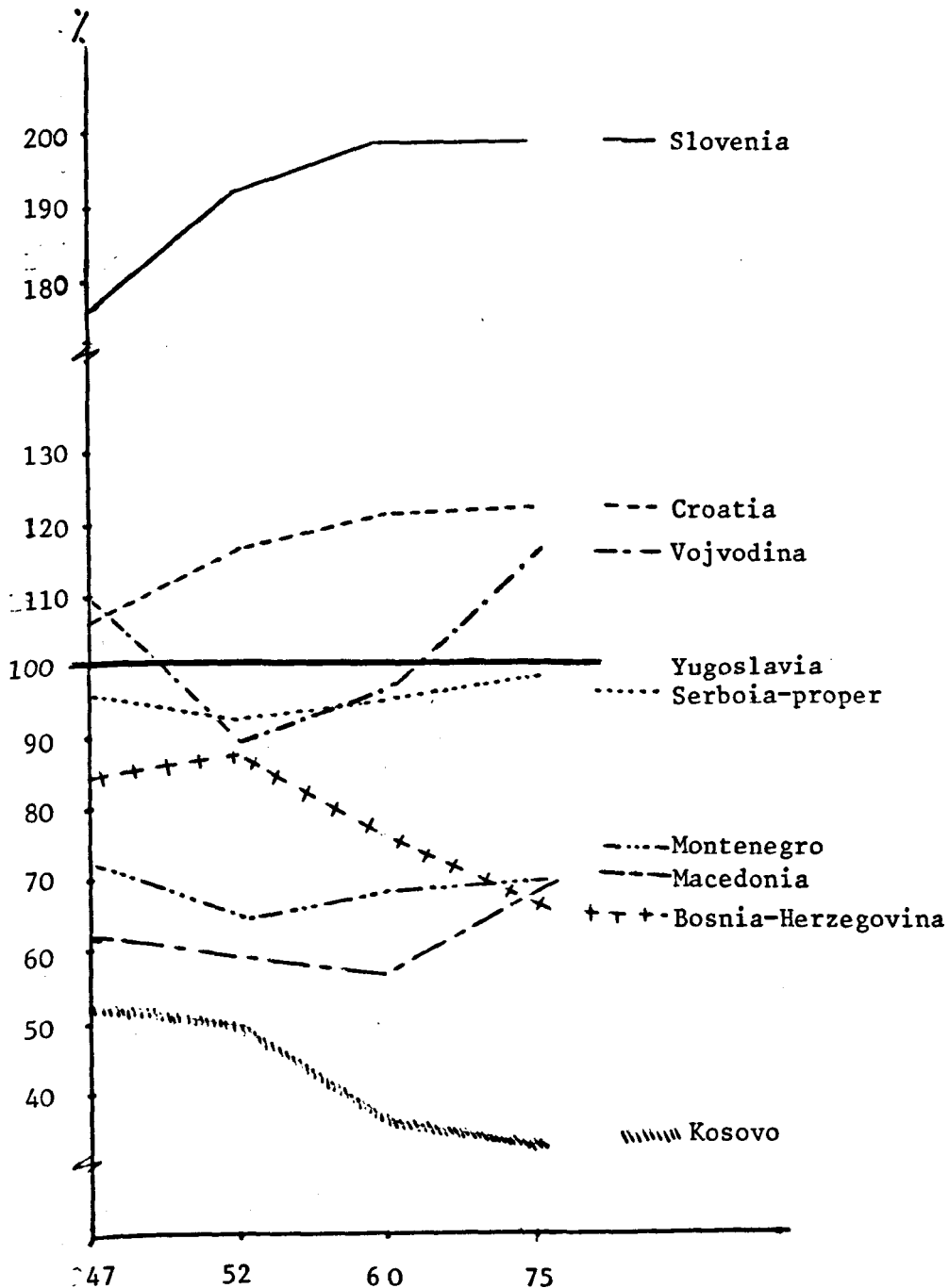


Figure 3- Changes in Per-Capita National Income of Different Regions as Percentage of the Yugoslav Average, 1947-75

Source: Table 7.

relation to the national average. Particularly striking is the situation in Kosovo where from 1947 to 1975 the per capita national income has fallen from about 1/3 to 1/6 of the Slovenian average. All this shows that the gap between the two regions, particularly between Slovenia and Croatia on the one hand and Bosnia-Herzegovina, Montenegro and Kosovo on the other, has been continually widening.

At first glance, it may seem that little effort has been made in the direction of regional redistribution of resources and little attention has been paid to the growth of the LDRs. A close examination, however, will show that the LDRs did not suffer from insufficient attention and from an absence of preferential treatment.¹ One of the objectives of the First Five-Year Plan was "to ensure speedier tempo of development in the economically backward republics and remove all consequences of uneven development".² The later economic plans also continued to emphasize this point as one of their objectives. The investment of funds in control of the federal government were to be the vehicle of implementation of preferential policies towards the LDRs.³ These areas were to receive a proportionately higher share of investment than the rest of the country. Table 8 and Figures 4-6 represent investment expenditure in different regions and can be used to demonstrate the extent to which the LDRs received more than a proportionate share of investment.

As panels A, B and C of Table 8 and Figure 4 show, the proportion of investment funds flowing into the LDRs has been slightly, although not consistently so, higher than the proportion of work force employed and the proportion of social product generated by them. However, through state help,

1 For details of policies towards the LDRs, see B.Horvat (1976), pp.64-68.

2 A. Waterson (1962), p.92.

3 It should be noted that in addition to investment out of federal funds (which presently continues through the Fund for Accelerated Development of the LDRs, though on a much smaller scale), there has always existed the less direct methods of aiding these regions. These methods include budgetary grants, tax exemptions, subsidies, etc. B. Srebric(1969), p.116.

Table 8 - Regional Share of Output, Employment and Investment*

Regions	A Regional Share of Social Product as % of Total**			B Regional Share of Employment as % of Total			C Regional Share of Realized Investment as % of Total**				D Realized Investment as % of Social Product**			E Per-Capita Realized Investment ** (new Dinars)			
	1952	1960	1975	1952	1960	1975	1947	1952	1960	1975	1952	1960	1975	1947 ^x	1952	1961	1975
Yugoslavia	100	100	100	100	100	100	100	100	100	100	29	30	27	26	163	576	6331
MDRs	78	79	78	75	76	74	70	67	77	70	25	29	24	26	149	610	7018
Croatia	18	16	17	15	14	14	13	13	13	20	23	26	23	28	143	584	6737
Slovenia	27	27	26	27	26	24	26	20	23	22	21	24	32	38	239	849	15555
Serbia-proper	24	25	24	23	23	25	25	{34 ⁺	{41 ⁺	19	{28 ⁺	{33 ⁺	21	25	{133 ⁺	{573 ⁺	4720
Vojvodina	9	11	11	10	12	10	6			9			22	16			6240
LDRs	22	21	22	25	24	26	30	33	23	30	49	36	35	25	202	487	5111
Bosnia-Herz.	14	14	13	16	14	14	20	24	12	17	52	33	35	31	237	416	5609
Macedonia	5	4	6	5	6	7	4	5	6	6	32	43	29	15	117	497	4701
Montenegro	1	1	2	2	2	2	3	3	4	3	72	93	44	34	223	951	6850
Kosovo	2	2	2	2	2	3	2	n.a.	n.a.	4	n.a.	n.a.	47	14	n.a.	n.a.	3522
LDRs as % of Yugoslavia														96	124	85	81

* Totals may not add up to 100 due to rounding

** Current prices

+ The data on investment in 1952 and 1960 are not given for separate regions of the republic of Serbia. The share of Kosovo, therefore, appears in the more developed areas and not in the LDRs. This, however, makes little difference to the overall situation as Kosovo's share is usually very small.

++ Private sector excluded

x For this year, the exact population estimate is not available and therefore the investment figures are divided by the population on 15 March 1948.

Sources: SGJ(1955), pp. 51 and 258; Jugoslavija 1945-1964, pp. 79, 91, and 282; SGJ(1962), p. 418; SGJ(1970), pp. 332, and 353; SGJ(1976), pp. 381 and 406; SGJ(1977), pp. 374-375, 406 and 508; and Hoffman, G.W., and Neal, F.W. (1962), pp. 508-509.

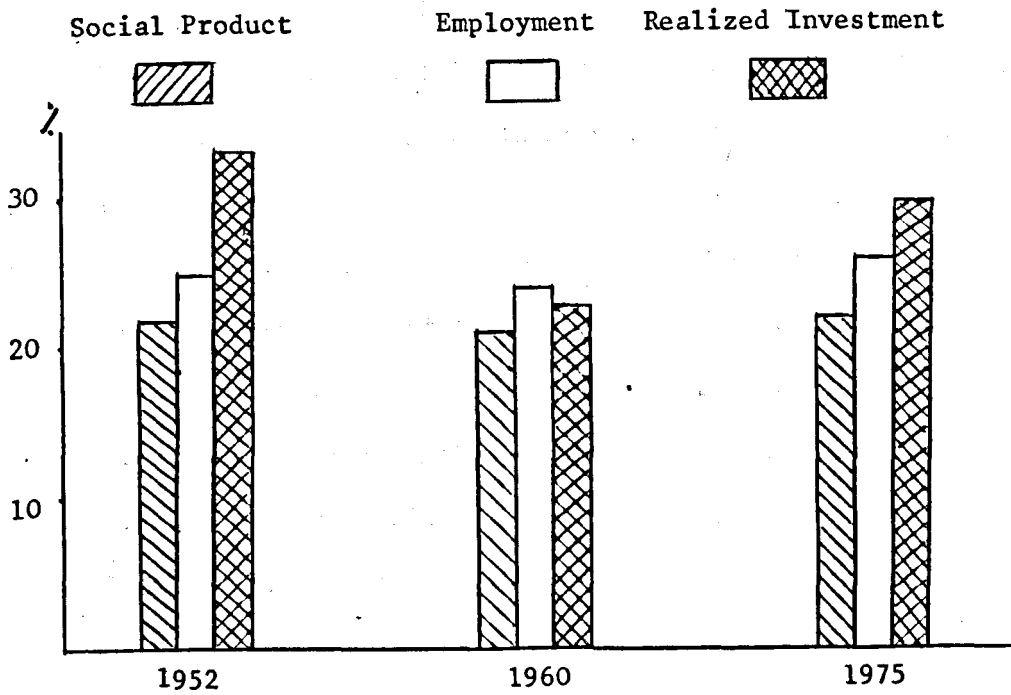


Figure 4- Share of the LDRs in Total Social Product, Employment and Realized Investment

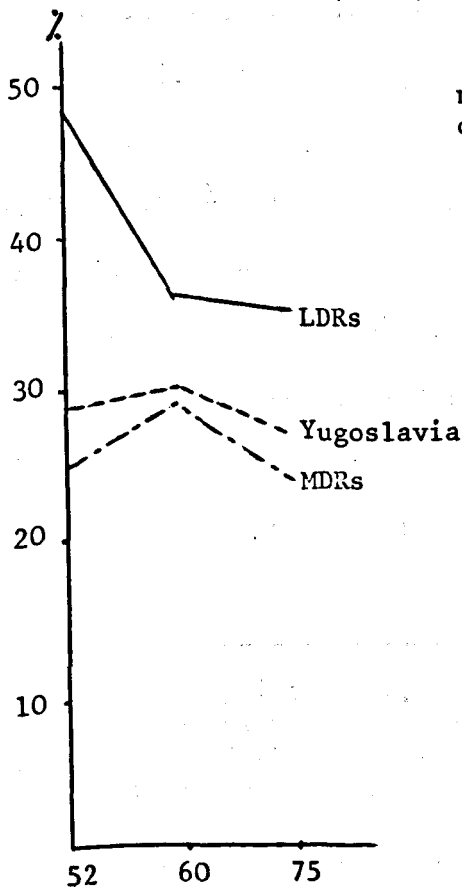


Figure 5- Realized Investment As % of the Social Product in LDRs and MDRs

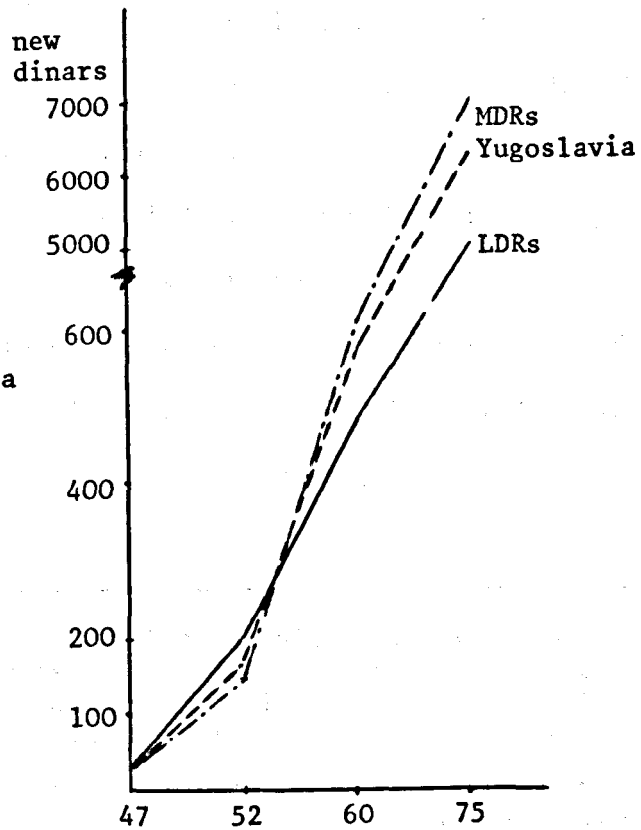


Figure 6- Per-Capita Realized Investment in LDRs and MDRs

the LDRs enjoyed a continually higher investment/output ratio than did the MDRs. This is shown in Panel D of Table 8 as well as in Figure 5.¹ Higher investment ratios, of course, could be misleading indicator of development efforts since it does not take into account the demographic characters of each region. The investment per capita is perhaps a better indicator of the preferential treatment of the LDRs. Panel E of Table 8 and Figure 6 represent the per capita realized investment in different republics and provinces. It is clear from these representations that the less developed regions did not always received a 'more than proportionate' share of resources.² In fact, except for the periods of the First and Second Five-Year plans, when the government had a much stronger influence over the allocation of investment funds, the LDRs have received much less investment resources per head of population than the MDRs.

With the advent of decentralization and the 'new economic system' in the early fifties, the financing of investment was removed from the domain of the authority of federal government and largely relegated to the republican governments. The federal General Investment Fund provided the republics with investment resources with specified sectoral allocation. The republics, then, would make the final decision on the actual projects. The tempo of the development of the LDRs was to be accelerated through special facilities such as subsidized interest rates, waiving of repayment of the loans provided earlier through the General Investment Fund, direct allocation of federal budgetary resources to the republican investment funds for the

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- 1 It must be pointed out, however, that the high investment ratio could be sustained by means of grants and subsidies by the State. In Chapter Four we showed that a considerable part of investment in the LDRs was financed through one of the social investment funds or the budget.
 - 2 Amongst the LDRs, only Montenegro enjoyed a consistently high per capita investment. The small population of this province coupled with the indivisibility of investment in large scale infrastructural projects (particularly in the first and second periods) explain the higher than average figures.

specific use of the LDRs, and the system of 'guaranteed investment'.¹

Development of local autonomy, increasing importance of the local investment funds and increasing reliance on enterprises own funds for expansion meant that the more successful enterprises and the more prosperous republics would be in a better financial position, and freer to decide on their investment and expansion policies. Meanwhile the less successful areas had to rely on the federal and republican funds which were increasingly less available. To a large extent, the market mechanism was responsible for this process. In addition, the system of 'guaranteed investment' in particular and the preferential treatment of the LDRs in general were subjected to increasing criticism by the MDRs. Funds allocated to the LDRs were said to have led to the development of 'political factories' for which political pressure far outweighed their economic justification.² Even today, some economists consider the poor growth performance of the LDRs as being due to : the emphasis on the establishment of new (and large) industries without taking into account the efficiency in the use of resources, the duplication of projects in different regions for purely local interests, and the insufficient supply of supplementary services such as transport facilities.³

The result of the investment policy in this period can also be seen clearly in Table 8. By 1961, per capita investment fell below the national average (85 percent of it) and share of the LDRs (excluding Kosovo) in total investment plummeted from 33 percent in 1952 to 23 percent in 1960. This situation which implied that the LDRs were being left behind, attracted the attention of many Yugoslav economists in the early sixties. It was clear that if the free operation of market forces was relied upon to apportion the resources, the less developed regions would be at a great disadvantage.

1 This facility, introduced during the Second Five-Year Plan, amounted to setting aside a certain volume of investment resources for use in the LDRs out of the General Investment Fund. See V. Dubey (1975), p.202 ; B.Srebrić (1969), p.117 and B. Horvat (1976), p.66.
2 D. Milenkovič(1971), p. 181.
3 M. Gregory(1973), p.228.

The economic reforms of 1965 led to some basic changes in regional policy. Most important of all the General Investment Fund was abolished and with it most of the direct aid to the LDRs, specially the 'guaranteed investment'. A separate Fund for the Accelerated Development of the LDRs was established in 1965 and started to work in 1966.¹ Not only was a smaller amount of funds to become available for direct investment in these regions, but also stricter requirements for eligibility were instituted. They had to provide a certain minimum part of capital investment before any of the specialized banks would participate with them in financing a project. Previously, they used to obtain this minimum by grants or federal aid and had to put up a smaller share, sometimes none, of their own resources.²

Accordingly, the opponents of the reforms were to be found, in the main, in the LDRs. From 1960 when the discussion of economic reforms began, a section of party leaders from Serbia, Macedonia and Montenegro led by Aleksander Ranković resisted the institution of massive reforms. The 1960 reforms were largely trimmed before announcement and, even then, were continually interfered with. The LCY plenum in 1962 was unable to come to a definite compromise decision on the liberalization measures. It was only in 1966, with the removal of Ranković and a large number of other political figures that the resistance to the reforms was finally broken.³ Later on, even Bićanić, himself a supporter of decentralization, admitted that the supporters and opponents of reforms were divided along nationality lines.

1 Realizing the insufficiency of aid to the LDRs, beginning in 1970, additional aid, equivalent to 0.09 percent of the social product contributed by all enterprises, was earmarked for the development of Kosovo, see Z. Jašnić (1974), pp. 68-69. For details of the recent policies in LDRs, see M. Mladenović (1978).

2 R. Bićanić (1966), p. 648.

3 P. Shoup (1968), pp. 249-250 and 254-258.

Opposition to the Reform would logically be expected from those who are least developed, who have to work most and longest to cross the borderline and achieve the level of developed lands ; from those who used to get more from the central moneybag than they put into it The greatest advocates of the Reform would be those who are most developed, who put more into the central bag than they got out of it ...

The first advocates of the Reform and the spearhead of it were the Slovene Communists. They were joined by the Croats and the two now march together. ¹

The practical implications of the reforms in terms of the volume of investment realized in the LDRs can be seen in Table 8 . Panel E demonstrates the fall in the relative position of the LDRs in terms of per capita investment during the self-management period. In 1961, the per capita investment in Bosnia, Macedonia and Montenegro were, respectively, 72,86 and 165 percent of the national average. By 1975, the situation in Bosnia had partly improved (86%), it had remained the same in Macedonia (74%) and had deteriorated especially in Montenegro (108%). Although in the forties and fifties, it was possible to talk of a 'more proportionate' share of investment going to the LDRs, the self-management period witnessed an end to this kind of treatment.

We may ask what are the basic causes of persisting regional disparity despite high investment ratios in the LDRs ? Among the many factors which, at different times, have contributed to the widening of regional differences, the following four may be regarded as the most important.

First, the higher rate of growth of the population coupled with the particular age structure of the population in the LDRs has resulted in a lower percentage of active population (and a higher percentage of dependent population) in these regions.²

1 R. Bičanić (1966) pp. 644-645

2 In 1953 the proportion of active population in total was 40% for the LDRs and 50% for the MDRs. By 1971, the two ratios had reduced to 35% and 48% respectively, ie. the relative position of the less developed regions had deteriorated, see SGJ (1960), p.317 and SGJ (1976), pp.368 and 372.

Second, the LDRs suffer from low labour productivity. This is due not only to the lower standards of health care and literacy (Table 6) but also to the unfavourable sectoral distribution of the labour force. In these areas, a higher proportion of the population has always been engaged in agriculture and a lower proportion of the labour force employed in the social sector.¹ Both of these areas are characterized by low productivity.²

Third, although large chunks of investment funds have been channelled to the less developed regions, their sectoral distribution has not been the same as that in the MDRs. A glance at Table 9, next page, representing the sectoral distribution of investment in the 1952-75 period, shows that of the total investment in the less developed regions : (a) a lower proportion has been allocated to non-economic activities (social, health, education etc.) ; (b) a higher proportion has been spent on manufacturing and mining ; and (c) a lower proportion has been allocated to services. The disregard for the forward and backward linkages between various sectors has resulted in imbalance between sectors, and the development of bottlenecks which have impeded faster growth in LDRs.³

Fourth, the price policy of the Yugoslav government, together with the increasing effectiveness of the market forces, has also assisted the persistence and expansion of the regional disparities. As this factor seems to have been the most important of all factors, its further elaboration is necessary.

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- 1 In 1953, the proportion of population engaged in agriculture was 64% in the LDRs and 59% in the MDRs. By 1971 these ratios had reduced to 42% and 36%. Similarly, the proportion of active population employed in the social sector which stood at 33% (for the LDRs) and 40% (for the MDRs) in 1961, had increased to 40% and 46% by 1971. See SGJ (1960), p.318 ; SGJ (1970), pp.321 and 332 ; and SGJ (1976), pp. 368, 372 and 381.
 - 2 According to a World Bank report, the output per head in the social sector is about five times that in the private sector, V. Dubey (1975), p. 195.
 - 3 The Yugoslav economist Srebrić has observed that in the LDRs, "the development of non-industrial sectors was given only nominal support ... (and that) industrialization, was not always followed by the growth of overhead capital." B. Srebrić (1969), pp.115-116.

Table 9- Sectoral Distribution of Total Investment in Different Regions, 1952-75

	1952-60		1961-69		1970-75	
	LDRs	MDRs	LDRs	MDRs	LDRs	MDRs
Total Realized Investment (bil. dinars)*	27.8	85.6	56.1	151.6	119.1	316.2
<u>Percentage Distribution</u>						
Total	100	100	100	100	100	100
Economic Activities	81.7	68.6	72.5	70.0	79.0	78.8
of which :						
Manufacturing & Mining	40.2	25.3	39.6	22.6	51.7	41.7
(Electric Energy)	(13.2)	(7.1)	(9.5)	(7.7)	(8.2)	(7.1)
Agriculture	10.4	9.0	7.9	9.2	5.1	4.8
Transport & Communication	13.7	14.3	13.6	12.2	16.2	15.8
Trade,Catering and Crafts	4.2	12.9	1.9	18.3	8.2	11.1

* The data on the 1952-60 and 1961-69 periods are based on constant 1966 prices while the data for the seventies are based on current prices.

Sources : V. Dubey (1975),p.200 ; SGJ (1972),p.477; SGJ(1973), p.483 ; SGJ (1974), p.506 ; SGJ(1975), p.499 ; SGJ(1976), p.500 ; and SGJ(1977), p.508.

The price control policies (consisting of price freezes,price ceilings, etc.) have had different effects on different parts of the country.¹ This has been due to the differences in the composition of output in various regions. The LDRs concentrate on basic industries, power and agriculture while the MDRs produce the bulk of manufactured goods. The output of the LDRs consists of goods whose prices have often been kept artificially low in order to stimulate the rapid growth of manufacturing. The MDRs, however, produce goods whose prices have been least affected by price controls. In other words, the terms of trade between the two regions has become increasingly biased in favour of the MDRs.

In addition to price policies, regional disparities have also been affected by the operation of market forces and the development of autonomous enterprises which are responsible for their success or failure.

1 Although the general policy on the formation of commodity prices has been to allow the market forces to function freely and determine the price level, nevertheless, the prices of a large number of commodities have always been affected by a variety of price controls. As late as 1970,for example, price regulations affected almost half of the transactions dealing with industrial goods and a quarter of transactions involving consumer goods, see S.Govedarica (1972),pp16 and 21. For details of the price system and its developments, see D. Vuković (1966) and Yugoslav Survey(1975),pp.78-79.

With the lower levels of education, less qualified and less skilled work force, lower standards of health, and higher rate of engagement of the work force in agriculture, the overall factor productivity and the rate of return on investment must have been lower in the LDRs. Lower profits would mean that internal resources for investment would be limited and external help - based on the enterprise viability and profitability - would be more scarce. Enterprises in the LDRs, as a result, would be able to attract a small amount of these resources. With the lower income and lower effective demand, the possibility of benefiting from economies of scale would be low too. Market forces do not reflect the social benefits of investment in poor regions and, therefore, any purely "economic" or "rational" investment system, would lead to a continuous underinvestment in the low income regions. Long ago, Mihailović and Miljevski argued that market mechanism itself is a cause of perpetuation of regional disparities.¹ Later on, Horvat argued that :

If within a country there are two regions whose levels of economic development are separated by a considerable gap, and the market is left to operate on its own accord, the gap is likely to widen.... Since this process cannot be tolerated politically, and is economically detrimental in the long run, something must be done to control the undesirable effects of the market.²

The less developed regions seem to have been caught in a kind of 'vicious circle' described by development economists. Similarly, their demand for aid, grants, etc. resembles those of the less developed countries in their discussions with the advanced nations in such international forums as North-South Talks and UNCTAD.

1 K. Milhailović (1964), pp.29-45 and K. Miljevski (1964), pp.7-17.

2 B. Horvat (1968), p. 85

In order to reverse the post-war trends in regional disparities, attention must be paid to all the four factors mentioned above. Of course, some of the barriers in the way of faster growth of the LDRs (such as demographic and cultural) are harder to remove in a short period of time than others. But at least as far as economic factors are concerned, development of more linkages between sectors of each LDR as well as between the LDRs and MDRs and transfer of resources in an all round and balanced way has been long over-due.

E. Structural Change in Terms of Sectors of Ownership

The new government which came to power after the second world war intended to eliminate the private sector of the economy at the earliest possible time. By the beginning of the First Five-Year Plan, enterprises and organizations in manufacturing the mining, banking, insurance and wholesale trade were completely taken over by the State (by confiscation and/or nationalization) to form the social sector. Gradually, within a couple of years, the bulk of other branches was also socialized. It was, of course, impossible to bring into the socialized sector the large number of small producers, mainly in the agricultural activities and to a smaller extent in crafts and retail trade. This section of the private sector (containing the self-employed and small producers who employed none or very few people) was looked at as the remnant of the old society, a transitory phenomena incompatible with socialist development which had to be slowly absorbed into the social sector. With the bulk of small producers in agriculture, the collectivization programme was embarked on in 1948. But by 1951, which was the height of the campaign, only 25 per cent of the agricultural land was farmed by the collectives and state farms, leaving 75 per cent of the land still in private hands¹.

1 G.W.Hoffman and F.W.Neal (1962), P.272.

With the development of the 'new economic system' in the early fifties, the attitudes towards private activity changed somewhat, with the abandonment of the collectivization drive as a first step. A "wholesale exodus" from the collective farms followed which, at the end, left only 9 per cent of the cultivated land in the social sector¹. Even in the fifties and early sixties, the Yugoslavs maintained that the private sector would be slowly absorbed into the social sector because of the lack of conditions for its development and the discriminatory policies against it. However, the period of self-management, particularly during the seventies, has led to the recognition of the complementary nature of the private and social sector (specially in agriculture) and the institution of limited measures to aid the private farmers. The private peasants are no longer regarded as aliens to socialism but as an "integral part of the socialist system"². The discussions preceeding the 1971 constitutional amendments reflect the increasing attention given to the private producers. Edvard Kardelj, for instance, pointed out the necessity of recognizing the equality, in rights and obligations, of the people engaged in personal labour with workers in other organizations, and the increasing need for various forms of personal labour in the course of development of the self-managed economy³. By 1973, development of the private sector was even seen as one method of encouraging self-employment as a means of reducing the number of people emigrating abroad. A resolution of the February meeting of the Presidency of the LCY maintained that to achieve these objectives, it is "indispensible... to create more stable and lasting conditions for the development of private work with private means of production in line with relevant constitutional guarantees and social requirements"⁴.

1 A.Waterston (1962), p.23.

2 B.Horvat (1976), p.170 and N.Šišual (1969), p.37.

3 E.Kardelj (1971), pp.36-37.

4 LCY (1973), p.41.

The organizations in the private sector (specially in agriculture and handicrafts) constitute the bulk of the backward and inefficient establishments of the economy. So far, no national effort has been made to improve the conditions of labour and efficiency of work in these establishments. Also, although the 1971-75 Five-Year Plan explicitly took into account the private sector and assigned output targets to it¹, no national plan has yet endeavoured to allocate some of the resources to this sector.

In addition to agriculture, the handicrafts industry has historically had a large private sector consisting of small establishments producing a whole range of articles and providing different kinds of productive services (such as repairs). During the sixties, private activities began to flourish in construction, catering and tourism and transport activities as well. The overall extent and magnitude of the private sector in proportion to the whole economy is represented in Table 10 below.

Table 10 - Share of Private Sector in the Economy(%)

	1952	1960	1971	1975
Active Labour Force*	76	60	52	..
Employment in Economic Activities**	3.5	2.8	2.7	2.3
Social Product	26	24	17	15
Realized Investment	15	15	21	24+

* Active labour force in the private sector denotes the difference between active population and the sum of persons employed in the social sector and persons seeking employment. The bulk of these are engaged in small scale agricultural production and, to a lesser extent, in various services. The data on active population is available for census years only and, therefore, the first two figures in the first row represent the 1953 and 1961 data respectively.

** Representing the persons entered into employment contract with private producers of goods and services. It does not include the self-employed.

+ 1974

Sources: SGJ (1955), p.103; Jugoslaviya 1945-64, p.80, SGJ (1973), p.123; SGJ (1976), pp.80, 103, 141, 281; and V.Dubey (1975), p.392.

¹ OECD(1970), p. 43.

The overall magnitude of the private sector, in terms of output and the number of people involved is clearly declining. The decline is particularly rapid in terms of the labour force. This is due mainly to the migration of individual peasants from the mountainous areas with harsh conditions to the cities and abroad. The trend of employment in the private sector seems to be slightly downward too. The employment figures, of course, do not reflect the actual size of the private sector at all since the persons entered into an employment relationship constitute a very small proportion of the manpower of this sector. The great majority of the labour force of the private sector are the small producers, "personal labour with personal means of production", as one Yugoslav economist has put it¹. The employment figures represent only those workers that enter into an employment contract.

Investment in the private sector has continually increased with the bulk of the increase in the field of construction (85 and 77 per cent for 1971 and 1974 respectively²). There is no credit facility available to the private sector and any investment arises directly from private savings.

Although the highly discriminatory measures of the fifties against the private sector (in the areas of price control, credit facilities, tax, etc.) are not practiced any longer, the restrictions on the type of activity and the level of employment still exist³. Private activity is restricted to farming, services, and small business. In agriculture there is a maximum limit of 10 hectares (about 25 acres) of farmland and 25 hectares (about 62 acres) of woodland on the individual ownership of land in areas of average fertility. After much argument, during the 1971 constitutional discussions, it was pointed out that the fixed maximum limit on land ownership does not enable the small producers in the mountainous areas to maintain a reasonable subsistence. Therefore, the size limit was lifted and the republican authorities were authorized to determine the maximum

1 N.Šišul (1969), pp.38-39.

2 SGJ (1976), p.281.

3 V.Dubey (1975), pp.100, 156; J.Dirlam and J.Plummer(1973), pp.11,14,55-6.

level of land holding in their own area¹. Employment of non-family wage labour has been subject to a ceiling of five, with seasonal activities (like tourism) exempted from these limits. In recent years there has been some discussion in regard to raising the limit on the employment in the private sector as well but so far no major change has taken place².

The magnitudes and development of private activity in different sectors have varied greatly. In the following discussions the situation in each of the five fields: agriculture, arts and crafts, construction, transport and trade and catering is reviewed.

1. Agriculture. With more than half the active labour force in agriculture, this sector is the oldest, largest and most important domain of activity for individual producers. Considering that more than 50 per cent of the private holdings are located in the mountainous areas³, the low fertility of land and the low efficiency of small scale production has led to the continuous de-population of these areas. As Table 11, next page, shows, the active labour force in the private sector declined by more than one million from the census of 1953 to that of 1971. The proportion of private producers in total active labour force has remained high and stable due, mainly, to the slow expansion and the low level of employment in the social sector.

In terms of the total agricultural output, although the social sector has developed very rapidly, the private sector still accounts for a large share of the total production. The faster growth of the social sector

1 E.Kardelj (1971), p.37. Interestingly, only a few months earlier, at an LCY Conference, Stevan Doronjski had attacked the lifting of the maximum land holding limit in the private sector as incompatible with socialist development policy and as undermining the policy of encouraging co-operation. S.Doronjski (1970), p.80.

2 In Slovenia, there exists provisions for private activity in almost all fields, including industry, though the amount of profit that can be extracted is restricted to twice the interest rate paid by the banks on time deposits. Q.E.R., No.3, (1973), p.9.

3 V. Dubey(1975), p. 154.

Table 11 - Some Characteristics of Social and Private Agricultural Holdings*

	1953	1961	1971	1975
<u>Active Population in Agriculture According to Census(1000s)**</u>	5360	4692	4208	-
Those employed in social sector	84	239	201	-
Those engaged in private sector (difference of the above two)	5276	4453	4007	-
Share of private sector in total (%)	98	95	95	-
<u>Cultivable Area (1000 hectares)</u>	12468	10300	10125	10001
Social sector	2564	1160	1484	1535
Private sector	9904	9170	8641	8646
Share of private sector in total (%)	79	89	85	85
<u>Number of Holdings***</u>				
Social sector	8366	5120	2073	-
private sector(1000s)	2564	2618	2600	-
<u>Average Size of Agricultural Holdings (ha/holding)***</u>				
Social sector	98	201	708	-
Private sector	3.6	3.5	3.4	-
Ratio of the average size of social to private holdings	27	57	208	-
<u>Agricultural Production in Current Prices (mil.new dinars)</u>	3210	7920	35208	74493
Social sector	201	1041	8401	19004
Private sector	3009	6879	26807	55489
Share of private sector in total (%)	94	87	76	74
<u>Index of Agricultural Production (1955=100)+</u>	93	121	164	179
Social sector	101	252	636	704
Private sector	120	113	133	145
<u>Authorized Purchases of Products (Market Deliveries)(%)</u>	-	100	100	100
Social sector	-	36	47	46
Private sector	-	64	53	54
<u>Number of Tractors (1000s)++</u>	-	39.2	96.7	225.5
Social sector	-	33.0	25.7	25.5
Private sector	-	6.2	71.0	200
Share of private sector in total (%)	-	16	73	89
<u>Livestocks (millions)+++</u>	-	5.4	5.1	5.4
Social sector	-	0.5	0.4	0.5
Private sector	-	4.9	4.7	5.0
Share of private sector in total (%)	-	91	92	92

* Totals may not exactly match with the sum of components due to rounding

** The active population in agriculture does not include those whose main activity lie outside agriculture but are involved in agricultural activities on part time or subsidiary basis. The figures, therefore, underestimate the extent of the manpower engaged in private agriculture. In 1969, for example, the total number of private agriculturalists was estimated at 5,100,000 (as compared with 4,692,000 in 1966 and 4,208,000 in 1971 as shown above), SGJ 70, p.126. The employment in the social sector includes all members of the cooperatives and their employees (except those in the Peasant Work Cooperatives which are not basically treated as 'persons employed, but self-employed peasants'). SY70, p.34

*** The data for 'number of holdings' and 'average size' of each holding refer to 1955, 1960 and 1969 respectively.

+ The indices for 1953 are approximations based on similar data in Jugoslavia 1945-64, p.80

++ Including all types of tractors. The reduction in the number of tractors in the social sector in recent years is due to the use of bigger size machines on larger fields whereas the tractors on private fields are mainly small. For size of tractors on each holdings see SGJ74, p.173

+++ Standardized into 500kg pieces, SY74, p.142

Source: SGJ(1955), p. 82; Jugoslavia 1945-64, p.80; SGJ(1960), p. 116; SGH(1970), pp. 126 and 139; SGJ(1976), pp. 85, 141 and 156; SGJ(1977), p.158

(illustrated by a rise, three times faster, in this sector, in the index of agricultural production) has been due not so much to the increase in the direct factor inputs, as to the faster rise in productivity. From 1961 onwards, the level of employment in the social sector actually declined and the cultivated area of this sector increased somewhat while the share of output in the social sector increased from 13 per cent in 1961 to 26 per cent in 1975. The difference in productivity of the two sectors, or the relative inefficiency of the small, private peasant farming can be attributed to several factors:

i The absence of credit facilities for private farmers has meant that all the limited private investment has come from the savings of individual peasants. The social sector on the other hand, has enjoyed the bulk of the investment resources allocated to the development of agriculture. From 1953 to 1960, 38 per cent of total investment in agriculture was applied to private holdings. Between 1961 and 1965, this figure was reduced to 26 per cent and from 1966 to 1970 increased slightly to 29 per cent¹.

ii The fragmentation of the private holdings (due to inheritance, for example) combined with a slow but persistent reduction in the area of these holdings has meant that the average size of the private holding have slightly decreased². On the other hand, the gradual increase in the area of social holdings together with the ongoing integration has led to a big increase in the size of social holdings. The average size of private and social holdings in the post-collectivization period are also shown in Table 11.

1 V.Dubey (1975), p.155.

2 K.Vandal has demonstrated that the smallest size private holdings (under 3 ha) which constituted 17 per cent of the area of private holdings in 1960, increased in number so that by 1969 they accounted for 20 per cent of the area of private holdings. K.Vandal (1972), p.99.

Between 1955 and 1969, the average size of cultivable land in social holdings has increased from 27 times to 208 times that of the private holdings. The relatively low productivity of private farming, stems from the small size of plots in this sector compared with the large farms of the social sector on which various forms of economies of scale are realized.

iii The low income of the private peasants has not only prevented them from purchasing a sufficient amount of implements, but has also been responsible for a low level of fertilizer application on the private farms. From 1960 to 1975, the total amount of fertilizers used on the social holdings increased by 80 per cent, from 150 thousand to 270 thousand tons while the amount applied to private holdings increased by only 28 per cent, from 145 thousand to 186 thousand tons. This means that the per hectare application of fertilizers increased from 134 tons to 450 tons on the social holdings and from 14 tons to 52 tons on the private holdings¹.

The low productivity of private agriculture was thought of as the most important single factor that would force the gradual absorption of this sector into the social sector. As mentioned before, in the late forties and fifties, the private sector was regarded as the bastion of capitalist tendencies and activities and as in competition with the social sector. Discriminatory government policies were thus seen as necessary measures in 'restricting capitalism' and strengthening the social sector. However, since the 1965 reforms and particularly since the early seventies, it has been recognized that the two sectors in fact complement each other. The social sector mainly produces the staple commodities like grain and oil seeds while the private sector has concentrated on production of cash crops like vegetables and tobacco, fruits, meat, milk and eggs. The stress in agricultural policy, therefore, has shifted from one of discrimination

1 V.Ačimović (1977), p.61. The figures are in terms of 'plant nutrients' and not actual weights of the fertilizers.

to one of co-operation between the two sectors. Co-operation, as a World Bank report notes, "would help to increase the prosperity of peasant farmers, thus preventing de-population, particularly of the mountainous areas, and would exploit the private sector's apparent advantage in livestock production"¹. It is the advantage of the private sector in such areas as livestock production that has forced the Yugoslav government to change its attitudes and revert to a policy of voluntary co-existence and co-operation. Co-operation ranges from trade in inputs and outputs between the two sectors to provision of services (mainly the machinery of the social sector organizations ploughing, sowing, harvesting, threshing and spraying of fruit trees and vineyards of the private sector) and contracting of joint production (increasingly in livestock breeding and less so in grain production)². According to the above mentioned report, some 30 per cent of the private producers now use some form of the existing co-operation mechanism and as one may expect, the co-operation is more prevalent in the more developed regions.

2. Arts and Crafts. This sector deals with production by artisans, of goods and services in small workshops; it is similar to agriculture in the extent of private activity. Table 12, next page, represents the output, employment and the number of organizations in this sector according to the type of ownership. The data in this table covers those establishments whose size have been large enough to make the owner eligible for tax payment. As a result, the very small establishments have been excluded³. (This underestimation applies to data of Table 11 too).

1 V.Dubey (1975), p.157.

2 See, e.g., SGJ (1976), pp.176-177.

3 SYJ (1976), pp.69-70.

Table 12 - Private Activity in Arts and Crafts

	1954	1959	1971	1975
Total number of establishments	160136	120241	145957	138312
of which in private sector	155215	115722	143349	135349
Share of private sector (%)	97	96	98	98
Total persons engaged (1000s)**	303	315	387	464
Persons employed in social sector	99	166	194	273
Persons engaged in private sector**	204	149	194	191
Share of private sector (%)	67	47	50	41
Total output (mil.new dinars)	429*	1294	6474	16784
Output in private sector	297*	559	3737	7834
Share of private sector (%)	69*	43	58	47

* 1952 ** Including those employed and the self-employed

Sources: SGJ (1955), p.103; SGJ (1961), pp.102,166; Jugoslavija 1945-64, pp.58, 78; SGJ (1970), pp.87, 173; SGJ (1973), p.124; SGJ (1977), pp.140, 205.

The bulk of the establishments in this sector are in the private sector, although the great majority of them employ none or very few people, possibly family workers in the main. The establishments in the social sector, however, are generally much larger as can be deduced from the above table. With 2-3 per cent of the establishments, the social sector organizations have been employing 33-59 per cent of the labour force engaged in arts and crafts. Also, though small in number, these organizations produce a large proportion of total output, reflecting their higher productivity.

The level of employment and share of output in the private sector fell rapidly during the fifties and early sixties. But with the economic reforms of 1965 and further measures to strengthen and stimulate the private initiatives adopted in the early seventies, the trend has been partially reversed in the last decade.

3. Catering. This is one of the sectors where private activity, though flourishing, is still underdeveloped. Table 13 illustrates the situation in terms of size, output and employment in the organizations of the private sector.

Table 13 - Private Activity in Catering

	1952	1960	1971	1975
Total number of establishments	15422	8371	15826	16673
of which in private sector	3501	3342	11959	12509
Share of private sector (%)	23	40	76	75
Total employment (1000s)*	n.a.	77	147	189
of which private sector	n.a.	1	9	14
Share of private sector (%)	n.a.	1.3	6.4	7.2
Total turnover (mil.new dinars)***	n.a.	1212	17048	28653
of which in private sector	n.a.	56	1865	3576
Share of private sector (%)	n.a.	4	11	12
Total output (million new dinars)	40039	103066
of which in private sector	neg.**	neg.	775	1818
Share of private sector (%)	neg.	neg.	2	2

* Excluding the owners and family workers of small private establishments for which data is not available.

** Negligible

*** Catering turnover refers to the value of basic catering services rendered directly to the consumer such as providing food, drinks, accommodation and services such as transport, recreation, etc. which are rendered within a catering establishment.

Sources: SGJ (1955), p.235; SGJ (1961), pp.222-223; SGJ (1973), p.124; SGJ (1974), pp.272-73; SGJ (1976), pp.141, 266-267.

As in the case of arts and crafts, private catering began to expand from the mid-sixties following the economic reforms. Since then, the small private establishments have constituted the great majority of catering units. However, in terms of employment, turnover and output, their share has remained at a low level.

4. Other Sectors. Other sectors in which private activity has been developing rapidly are construction and transport. Table 14 represents the situation in these sectors. (Table 14 appears on the next page). In construction, the share of the private sector in total sectoral output doubled during the fifties and has remained relatively stable since then. In transport, however, private activities were almost non-existent during the fifties and early sixties. But following the reforms of the sixties, it began to develop.

On the question of employment, the data of Table 14 somewhat underestimate the actual size of the labour force engaged in private activities in construction. Individuals engaged in personal labour who do not employ any but family workers and the very small producers are excluded from this table. Nevertheless, it can be seen that the number of 'employed' persons are on a steady, if slow, increase.

Table 14 - Private Activities in Construction and Transport

	1952	1960	1971	1975
<u>Construction</u>				
Total output (million new dinars)	693	1770	24534	56855
of which in private sector	45	210	3270	6877
Share of private sector (%)	6	12	13	12
Total employment (1000s)	217	316	365	420
of which in private sector **	neg.*	neg.	9	13
Share of private sector (%)	neg.	neg.	2.5	3.1
<u>Transport</u>				
Total output (million new dinars)	16655	38047
of which in private sector	neg.	neg.	1012	2313
Share of private sector (%)	neg.	neg.	6	6

* Negligible

** Excluding the self-employed small producers

Sources : SGJ (1955), p.103, Jugoslavija 1945 - 64, pp.58,78,80 ;

SGJ(1970), p.87 ; SGJ (1973), p.124 : SGJ (1976), pp.112,141.

III. Summary and Conclusions

The Yugoslav economy has passed through three major phases of development each of which has been marked by distinct economic policies and different patterns of growth. In this chapter we have attempted to study the effects of major institutional changes and economic reforms on the pattern of growth of the economy as well as its sectoral and regional constituents. In the central planning period, the newly established socialist government embarked

on a crash industrialization programme following, in the main, the experience of the Soviet Union in the twenties. In the industrialization programme the emphasis was laid on basic industries and infra-structural projects. The political and economic problems that resulted from Yugoslavia's expulsion from the Cominform (particularly the severance of foreign trade links) coupled with the long gestation period of most of the investment projects undertaken in this period, led to a very slow rate of growth. This slow growth did not of course characterize all branches of activity. The emphasis on industrialization resulted in the fast expansion of industry and construction and in the increased share of these two sectors in total output and employment. Furthermore, within the industrial sector, the modern heavy industries producing capital goods were receiving greater attention and enjoyed faster growth than other branches. Meanwhile the insufficient attention paid to agriculture, coupled with an unsuccessful collectivization programme and severe drought, produced an absolute drop in the level of production.

The second period witnessed a fundamental change in the conditions that affected the growth pattern in the previous period. As the investment projects of the First Five-Year Plan began to reach maturity, the economy began to develop on a new footing with a reasonably strong heavy industrial base and a rehabilitated or improved infrastructure. Restoration of trade links with foreign countries enabled it to import the requirement for further industrial expansion (such as equipment, machinery and raw material). The new economic system introduced a number of measures that created an environment favourable to rapid growth. The abandoning of the collectivization programme created renewed confidence and enthusiasm among the peasantry and led to a speedy rise in the level of agricultural production. The increased degree of freedom of enterprise together with the new role assigned to the market also allowed the enterprises (and their personnel) to benefit from higher growth rates. The outcome was that all major branches of economic activity enjoyed a period of boom. Even the consumer goods industries which had been relegated to a secondary position previously, received a large share of investment resources and developed at

very rapid rates. As one might expect, following the expansion of various industries, the service sector also enjoyed rapid development. The part of service sector that is regarded as 'productive' (such as transport, communication, trade, catering, tourism, etc.) grew at a fast pace during this period.

The growth of industries and services in the urban areas, the harsh conditions of life in the countryside, specially in the mountainous LDRs, and the development of a social security system in towns were accompanied by a large scale migration of population from the rural areas into the cities. With insufficient employment opportunities in towns, the result of this migration was a rapidly growing army of unemployed who were largely of the unskilled type. The rate of growth of unemployment in this period was much higher than that in the first or third period.

Despite the reform measures introduced in the fifties, the State continued to hold a firm control over the level, sectoral allocation and regional distribution of investment. This meant that such objectives as the faster growth of certain branches of the economy or of the LDRs could be, to a large extent, accommodated in the social plan. Making use of its latitude in allocation of investment funds, the State did manage to pump into the LDRs more than their proportionate share of investment resources (in terms of per capita investment or investment ratio). The increased doses of investment did not, of course, lead to narrowing of the regional differences though it did result in a rapid expansion of the industrial and agricultural production in these areas, not matched by the development of other sectors.

In the self-management period, Yugoslavia began to face economic problems very similar to those of the West European countries : inflation, unemployment, recession, balance of payment problems, etc. The economy as a whole, as well as its constituent sectors, experienced a general slow down in their growth behaviour. This can be attributed to a combination of several factors among which the severe recession of the mid-sixties, absence of excess capacity

(which characterized the industrial organization in the fifties) and the fall in the rate of expansion of all elements of demand must be emphasized. The industrial sector, and to a lesser extent other sectors as well, continued to grow faster than the agricultural sector and, therefore, their share in total output increased at the expense of agriculture. The most immediate effect of the economic reforms of the sixties was the increased freedom of enterprises in deciding on their output and price (formation of revenue), level and composition of investment and wage system (distribution of revenue). In practical terms, this meant a rapid and gradual rise in the price level and, then, in wage levels.

The sixties also witnessed the wave of emigration of Yugoslav workers to Western European countries which reached their record high of 1.2 millions in the mid-seventies. This flow, of course, had the effect of reducing the rate of expansion of domestic unemployment on the one hand, and of creating a new source of foreign exchange earnings (so vital to the growth of the Yugoslav economy) on the other. For both of these reasons, the government actually followed a policy of encouraging the migration of workers, even trying to bring it under its control and supervision. Only the recession of the mid-seventies in the European countries (particularly in Germany) halted the high rate of emigration, though this may prove to be only temporary. Despite the large scale of emigration (which amounted to more than 13.5% of the active population of the country) unemployment continued to increase. The slow-down of the economy meant that fewer new jobs could be created.

The abolition of social investment funds and the new system of investment financing which was dominated by profitability criterion, along with the reduction of the power of the Federal government to undertake investment activities, adversely affected the situation in the LDRs. The regional differences were further aggravated as a result of the new criteria for investment expenditure. As we showed in Chapter Four, if it were not for the help given by the Federal government through the Fund for the

Accelerated Development of the LDRs and budgetary aid, the enterprises in the LDRs would have been in a much worse position as they could not generate sufficient investment resources internally.

A secondary effect of the economic reforms of the mid-sixties was the change in the attitude of the government towards the private sector. Although the private sector had been quite significant in terms of output and employment in the whole of the post-war period, it had always been regarded as 'transitory' and, in comparison with the social sector, treated unfavourably. Only in the late sixties and early seventies, did the government begin to recognize the fact that private activity will last for a considerably long time to come. In fact recently in such fields as construction, transport and catering, the size of the private sector (though concentrated in small establishments) has been growing. Of course, the main bastion of private activity is still the agricultural sector where the government policy of attempting to absorb the less efficient private farmers into the social sector has so far proved unsuccessful.

Chapter Six

Short Term Fluctuations in the Level of Economic Activity

In Chapter Five we discussed the long term growth pattern of the Yugoslav economy and showed that the major economic indicators have enjoyed significant and sustained rates of expansion in the post-war period. However, despite this secular growth, the economy has revealed a considerable degree of short term instability. Major indicators of economic activity such as output, industrial production, investment, exports, imports, etc., have been subject to continuous cyclical fluctuations. In this chapter we shall demonstrate the cyclical pattern of the growth of major economic indicators and attempt to describe some of the factors contributing to their fluctuations.

The fluctuations in the level of economic activity - business cycles - are of course familiar phenomena and, as a recent writer has pointed out, they have been the "central feature of the history of the capitalist economies."¹ Studies of the development of the American, British and other developed market economies have established this point without any doubt.²

Similarly for the socialist countries, despite their comparatively shorter history, the economists have been able to identify somewhat regular fluctuations in the level of activity. The factors contributing to the cyclical movement of the economic indicators in the two systems are obviously different and each case has to be analysed according to its own merits. The important point about the latter phenomenon, however, is that it rightly dispelled the simplistic idea - reputed to be "Marxist" - that socialism will usher in the period in which business cycles will cease to exist. To this dubious notion the Yugoslav policy makers also subscribed,

¹ N. Rau (1974), p.7.

² E. Lundberg (1968) and J. Cornwall (1972) are examples of such studies.

at least until recently when they could no longer deny the relevance of empirical evidence on the existence of business cycles. What we shall be attempting in this chapter is, firstly, to identify the factors that, under the Yugoslav economic system, can be regarded as the most relevant variables explaining the cyclical behaviour. For this purpose we shall begin with summarizing major ideas in the field of business cycles, particularly on the fluctuations in the socialist economies. From this discussion we shall be able to select those elements that can best explain the short term behaviour of the Yugoslav economy. Secondly, by employing the usual methods of representation of business cycles, we shall use post war data on the growth pattern of major economic indices in order to demonstrate their cyclical movements. By using the index of industrial production as the most important indicator of the business cycles, we shall show the existence of six major industrial cycles in the post war development of the Yugoslav economy. Then, by going through different phases of the evolution of the Yugoslav economic system - central planning, transition to self-management and self-management - we shall use the explanatory factors arrived at earlier to explain the particular conditions that led to each of the six cycles.

I. The Patterns and Causes of Business Cycles

The study of the patterns of development of Western economies over a long period of time has led to the formulation of various ideas and theories regarding the forms as well as the causes of cyclical fluctuations in the level of economic activity. Although the term "business cycles" implies some degree of periodicity and regularity in the fluctuations, most economists agree that the term is devoid of these connotations and only implies alternate upward and downward movement of major economic indicators. There is no need for these movements to be symmetrical or for the cycles to be of equal amplitude or duration. A general notion of "business cycles", which is as useful now as it was three decades ago, was

put forward by W.C. Mitchell in the following words:

Business cycles are a type of fluctuation in the aggregate economic activity of nations that organize their work mainly in business enterprises: a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals which merge into the expansion phase of the next cycle; this sequence of changes is recurrent but not periodic; in duration business¹ cycles vary from more than one year to ten or twelve years ...

In the earlier writings on business cycles the main emphasis was on the identification and demarcation of the cyclical fluctuations in different economies. The American economy was shown to have been subjected, since mid-19th century, to fluctuations with average duration of 3 to 4 years. The so-called "Kitchin cycles" - the forty month cycles first formulated by Joseph Kitchin - have been attributed to the characteristics of inventory investment.²

The British economy, on the other hand, has experienced cycles of much longer duration since the early 19th century. Marx and Engels observed the 10 year cycles in 19th century Britain. The French doctor Clement Juglar formulated the 7-10 year duration "Juglar cycles" by studying the movement of prices, interest rates and bank balances. Matthews shows that from 1820 to 1910 the British economy underwent classic cycles of 7-10 year duration. Many economists attribute these cycles to the interaction of waves of domestic and foreign investment activities in the last century.³

Still further, the study of the movements of prices, wages, interest rates, production of major sectors in the United States and several European countries led the Russian economist Nikolai Kondratiev to the formulation

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- 1 A.F. Burns and W.C. Mitchell (1946), p.3. A similar method is followed by Lundberg who also studied the pattern of growth and instability in the European and American economies. In order to avoid the regularity and periodicity implications, Lundberg employed the concept of "conjunctural fluctuations" to represent economic instability. E. Lundberg (1978), pp.4,9.
 - 2 J. Kitchin (1923), pp. 10-16; J. Schumpeter (1935), pp. 7-8; and R.C.O. Matthews (1959), pp. 206, 214 and 216.
 - 3 J. Schumpeter (1935), pp. 7-8; K. Marx, Capital, Vol. I, p.593; F. Engels (1880), p. 142; and R.C.O. Matthews (1959), pp. 206, 214 and 216.

of long cycles with duration of approximately half a century. These cyclical movements are similar to Schumpeter's "long waves of economic activity" of which, between the late 18th and early 20th century, three major oscillations of 54 to 60 years duration were observed. The long cycles, according to Schumpeter, were the result of major entrepreneurial innovations: the industrial revolution, the development of steam power and the steel industry, railroad construction, and finally the automobile industry.¹

As economic theory advanced from a static to a dynamic analysis, new methods of explaining the cyclical fluctuations were also put forward. According to these methods, the internal characteristics of an economy and the interrelation between its constituent sectors were the essential factors accounting for trade cycles. One of the oldest of these methods goes back to Kalecki who employed a model consisting of: a fixed level of consumption for wage earners (equal to total wage fund in the economy); a consumption function for profit earners making consumption dependent on profit; an investment function also dependent on profit level as well as the existing capital stock; and an assumption regarding the gestation period for the materializing of investment orders.² The interaction between the consumption and investment functions would, after taking into account the time lag between making investment decisions and actual production of capital goods, lead to a combined difference-differential equation for investment function in the following general form:

$$\frac{dI_o(t)}{dt} = \frac{m}{\theta} I_o(t) - \left(\frac{m}{\theta} + e\right) I_o(t-\theta) \quad (1)$$

with $I_o(t)$ representing the investment orders in period t , m and e the parameters relating investment orders to profit and capital stock, and

- 1 J. Schumpeter (1935), pp. 7-8; N. Kondratiev (1935). In his tri-cyclical scheme, Schumpeter maintained that the US economy was subject to all three types of cycles simultaneously. See J. Schumpeter (1934) and (1939).
- 2 M. Kalecki (1935), pp. 327-344. Kalecki's model bears a strong resemblance to the modern Keynesian models. Its novelty, however, lies in the fact that it was formulated long before the publication of the "General Theory..." See L. Klein (1966), p.224.

θ is the average time required for the investment orders to materialize (gestation period). The solution to this equation will include fluctuations in the level of $I_0(t)$ as one of many possibilities.¹ These fluctuations will then be directly translated into cyclical movements in the level of output.

The next major macro-dynamic model which attempted to explain the cyclical behaviour of the economy was Samuelson's work on multiplier-accelerator interaction.² In this model, investment was based on the crude acceleration principle that: (a) there exists a 'normal' capital output ratio which determines the optimum level of capital stock that should be in operation in each period, and (b) the entrepreneurs adjust the level of capital stock in their enterprises to the optimum level almost instantaneously. Later on more sophisticated and refined variants of this model were developed in which such restrictive assumptions as instantaneous adjustment of the level of capital stock were relaxed.³ Instead of the naive accelerator principle, the investment function in these models was based on the "capital stock adjustment principle" or "capacity utilization principle" in which investment activity was seen as a process bringing the actual level of capital stock to the desired level over a period of time.⁴ The interaction of such an investment function with a Keynesian type consumption function (lagged or unlagged) will lead to some form of a second order difference equation such as the following:⁵

$$Y_t - (b+v) \cdot Y_{t-1} + v \cdot Y_{t-2} = A \quad (2)$$

with Y_t representing the level of output in period t ; b , the mpc; v , the

1 The exact solution to this type of equation is given in R.G.D. Allen (1959), Chapter 8.

2 P.A. Samuelson (1939).

3 For example R.M. Goodwin (1948) and R.C.O. Matthews (1959).

4 R.M. Goodwin (1948) and H.B. Chenery (1952).

5 For several variants of macro-dynamic models which lead to this type of equilibrium condition (embodying cyclical movements), see N. Rau (1974), pp. 23-39.

accelerator; and A, a constant. The solution to such an equation is in the general form of:

$$Y_t = c_1 X_1^t + c_2 X_2^t + k \quad (3)$$

X_1 and X_2 and k depend on the parameters of equation (2) while c_1 and c_2 depend on the initial conditions.

Depending on the values of the accelerator coefficient and the marginal propensity to consume, equation (3) can lead to any of the following five solutions:

- (i) Once equilibrium is disturbed, the output may grow exponentially in an upward (or downward) direction. This is the case of explosive growth (or deceleration).
- (ii) Once equilibrium is disturbed, the output may start oscillating around some equilibrium level, with the amplitudes of the oscillation growing in size. This is the case of explosive oscillation.
- (iii) Once equilibrium is disturbed, the output may start oscillating movements, but unlike solution (ii), the amplitudes of the cycles will continually reduce. This is the case of dampening oscillation.
- (iv) Once equilibrium is disturbed, the output will grow exponentially but will converge to a new equilibrium level. This is the case of converging growth.
- (v) Once equilibrium is disturbed, the output will grow in an oscillatory form with constant amplitudes.

At first glance these solutions, particularly (i) and (ii), seem somewhat unrealistic and absurd. Observation of the actual experience of various economies shows no indication of an explosive upward and/or downward movement of the level of output. The interesting point is that the normal values of capital output ratio and marginal propensity to consume estimated, for example, for the U.S. economy lead one to expect a solution similar to (ii) above¹, something which her experience has so vehemently

¹ J. Duesenberry (1958), p.36 - (for estimates of COR) and G. Ackley (1961), pp.208-266 (for estimates of mpc).

disproved.

It is in this context that the next set of contributions become significant. If the upward or downward growth or oscillations of the level of activity in an economy are subjected to limits arising from the character of that particular economy, then we would observe not the strange possibilities of solutions (i) and (ii) above, but a fluctuating level of output with modified and reasonable amplitudes. These limits, the ceilings and floors or buffers, may include such constraints as the full employment of the labour force, the capacity of capital goods producing industries, foreign exchange reserves, minimum endogenous investment, etc.¹. A growing economy whose equilibrium is disturbed and changed into an explosive growth, as suggested by solutions (i) or (ii) above, would sooner or later face the ceiling (imposed by full employment, according to Hicks, or the capacity of capital goods industries, according to Goodwin, or other ceilings) beyond which it cannot grow. The fact that the growth rate has reduced to zero or fallen sharply, means that induced investment will sooner or later (depending on the lag structure) reduce. Thus, the level of output will begin to decrease and fall below the trend. But the downward movement is not indefinite either. Induced investment may, at worst, reach zero, making net induced investment a negative value equal to depreciation charges. But in any economy there is always some autonomous, or exogenous, investment with a level independent of the level and changes of the output. Besides, as there are some industries that will continue to expand their capacity and production even during a down-swing, a certain amount of investment will always take place.² This, together with exogenous investment, will determine the floor below which the output will not fall. In different economies the floors and ceilings are different and in our discussion of the Yugoslav business cycles we shall try to formulate the

1 J.R. Hicks (1950), pp.95-107; R.M. Goodwin (1951), p.4; R.C.O. Matthews (1959), pp.564-565; J. Cornwall (1972), pp.104-109.

2 J. Cornwall (1972), p.103.

particular constraints which are most relevant to the Yugoslav conditions.

At this point we should emphasize that the macro-dynamic models discussed above can explain the cyclical fluctuations only in a mathematical sense. In other words, these models end up with a difference equation whose solution contains the possibility of cyclical movements. What we need to do is to explain why the interaction of the multiplier and accelerator should lead to instability. Only in this context can the weakness of an economy and the fact that it is inherently subjected to destabilizing forces be shown. Investment plays a dual role: it influences the level of income and is, in turn, influenced by that same level of income. This situation is resolved, mathematically, by solving the two simultaneous equations. But in reality the solution is not so straight forward. Each entrepreneur bases his investment decisions on expected income rather than on the realized income. The cumulative result of such investment decisions across the whole economy is the flow of goods and services into the product market and of income into the factor service market. The demand for the products of the economy (dependent on the generated factor incomes) may or may not be sufficient to cover the aggregate supply. The outcome is a divergence between the actual and desired levels of output and investment which cannot smoothly disappear by a change in supply or demand or prices. The properties of the economy, specifically the accelerator-determined level of investment (or that determined by the capital stock adjustment principle) will set in motion forces that amplify the divergence and result in a rise or fall of both indicators. To explain this differently, a divergence between supply and demand (or saving and investment) cannot be easily and speedily eliminated because of the nature of the organization of the economy. Because of specialization and division of labour, a firm can control only the level of its own supply not the demand for its output, the latter being determined by other firms and/or households. The important point is that the loci

of determinants of supply and demand for each product are different. In a planned economy, on the other hand, the supply of and demand for capital goods are determined in the same place while the supply of consumer goods is roughly adjusted to the effective demand via control of wages and salaries. It is this coordination, by way of the central plan, that opens up the possibility of speedy elimination of excess supply or demand. (More about this in the next section.) In addition to this, the response of planned economies to excess supply is different from that of the market economies. As Goodwin points out, in a free market economy, if the entrepreneurs set the actual rate of growth below the equilibrium rate of growth, the economy will experience an undesired pile up of stocks. "The entrepreneurs," Goodwin maintains, "will then cut back their expansion rate to avoid further undesired growth in stocks, but, in the next period this only makes a bad situation worse."¹ For the planner, on the other hand, "the appearance of unexpected stocks is not a disaster but rather a happy chance to increase the rate of expansion."²

According to the capital stock adjustment principle, at each point in time a certain desired level of capital stock prevails in the economy. Each entrepreneur would make his investment decisions, independent of others, in order to reach this desired level. But if the whole of the economy is taken into account, there is no way of presuming that the amount of investment undertaken by entrepreneurs as a whole will be equal to the difference between the actual and desired levels of capital stock. The possibility of overshooting and undershooting exists and, under the system of decentralized decisions, there is no way that they can be avoided. Overshooting the desired capital stock target will be manifested in a reduction in the normal profit rate and subsequently leads the entrepreneurs

1 R.M. Goodwin (1970), p.47. The opposite will happen if the actual rate of growth is set above the equilibrium rate and any attempt to replenish the depleting stocks will lead to their further reduction. This is a simplified form of the familiar Harrod-Domar 'knife-edge' problem.
2 *Loc. cit.*

to reverse their decisions on expansion. This will require the firms to reduce their investment expenditure. Lack of coordination among firms means that investment expenditure may be cut even more than is required to reach the desired level of capital stock (undershooting). As Matthews has rightly pointed out, the working of competition and the lack of coordination due to the decentralized nature of decision making are the most important reasons for instability.¹

There are two other explanations for business cycles that deserve brief attention.² Schumpeter has put forward a theory of business cycles based on technical progress and the investment booms that follow major innovations.³ Such innovations as the development of the steam engine or the construction of railroads in the United States can, however, only elucidate the long run cycles of economic activity and not the short run fluctuations. Major innovations, Schumpeter maintained, were accompanied by bursts of investment in several branches of industry and after gradually seeping through the whole economy they brought forth increased investment activities in many other branches. The duration and intensity of the cycle would be determined by the follow-up investment stimulated by the application of the technical progress.

Schumpeter's view of the cycles comes very close to that of another school of thought, the 'random shock' school, which takes fluctuations as the outcome of purely random disturbances in the economy. Irving Fisher, for example, maintained that the cyclical movements in the level of economic activity are no different from those experienced by any random statistical series generated by weather reports for instance, or gambling results in Monte Carlo casinos. In other words, observing cyclical movements -

1 R.C.O. Matthews (1959), pp.38-39 and 57.

2 There are, of course, many other less important explanations of business cycles using concepts such as speculation, condition of extreme optimism and pessimism, export led fluctuations, etc. We have left out these explanations as they are essentially subsidiaries to other major factors. R.C.O. Matthews (1959), pp.60-61 and 197.

3 J. Schumpeter (1934) and (1939).

represented by the fluctuations in the value of an indicator around a trend - should not lead to the notion of 'business cycles' any more than observing weather reports or gambling results would to those of 'weather cycle' or 'Monte Carlo cycle'.¹

At about the same time, a more sophisticated version of the 'random shock' theory of the business cycle was put forward by the Russian economist E. Slutsky.² He analysed a series of numbers taken from the Russian lottery loan and then generated a second series of numbers by finding the moving averages of every ten numbers. This latter series, when graphed, closely resembled the economic fluctuations in the United Kingdom. He repeated the experiment on the second series and generated a third series of numbers which, when graphed, resembled the fluctuations in the American economy. This, of course, was what Fisher had pointed out in 1925, with only a small difference. Whereas according to Fisher the fluctuations in the level of activity were the effect of random shocks in that period, i.e. $Y_t = f(\epsilon_t)$, Slutsky's scheme amounted to using the random shocks of several recent periods in the determination of the fluctuations in each period, i.e. $Y_t = f(\epsilon_t, \epsilon_{t-1}, \epsilon_{t-2}, \dots)$.

It is necessary to recognize the importance of random shocks in the explanation of business cycles. That exogenous factors such as bad harvests, wars, major innovations, etc., do influence the level of activity, we have little doubt. But such factors are not the sole determinants of variations in the level of business activity. The endogenous characteristics of the economy and the inter-relation between the constituent branches play the decisive role. Any exogenous factor becomes important only in so far as it can work through the structure of the economy. In any case different economic systems will behave differently when subjected to similar external shocks because of the difference in their internal organization.

1 I. Fisher (1925), pp.191-192.

2 Slutsky's findings remained almost totally unknown for more than a decade until the publication in 1937 of his article in English. See E. Slutsky (1937).

The pure random shock theory cannot of course explain such different behaviours since it takes no account of the internal properties of an economy.

The bulk of empirical work on the theories of business cycles have been concentrated on the study of the advanced capitalist economies. In recent years, however, increasing attention has been paid to the study of the cyclical fluctuations in the socialist countries. As Yugoslavia falls in the general category of 'socialist economies', it is necessary to review briefly the major theoretical developments in the investigation of the business cycles of these economies before beginning the discussion of her experience.

II. Cyclical Fluctuations in the Socialist Economies

According to a simplistic variant of the Marxist analysis, business cycles are products of the anarchy of production in the capitalist system and the disappearance of capitalism leads, *ipso facto*, to the disappearance of cycles. This, obviously, is of no help in analysing why the rate of growth and the level of economic activity fluctuates in the socialist economies. Neither does it help to find out why the pattern of fluctuations are different in different socialist economies. Of course, a number of economists argue that the fluctuations in the level of activity in the socialist countries should not be called business cycle but merely disturbances.¹ It is not a rewarding exercise for us to engage in a discussion on whether the term business cycle should or should not be applied to the macroeconomic behaviour of these economies. What we are concerned to do is identify the factors that lead to fluctuations and to find out the relationship between these factors and the pattern of fluctuations.

In recent years, there have appeared an increasing number of studies of the cyclical fluctuations in various socialist countries as well as attempts at theoretical formulation of the causes of these fluctuations.

1 G. Haberler (1951), pp.375-376; A. Nove (1969), pp.288 and 302; R.D. Porter (1969), p.330 and A. Bergson (1951), p.388.

Broadly speaking, the factors contributing to fluctuations fall within the following categories:

- i) Conflict of interest between the planners and consumers,
- ii) Weaknesses of planning methods and economic policies,
- iii) Periodic shocks of one type or another.

Each of these categories will be discussed in some detail in the following pages.

i Conflict of interest between the planners and consumers. The first point of view, which was put forward first in the mid-thirties and has been repeated since by various economists, essentially revolves around the notion that planners and consumers have different preference schedules and that the 'plan' - as the realization of the planners' preferences - is 'imposed' on the consumers by coercion. According to Ropke, the tendency to over-invest - inherent in planning - leads to the neglect of consumers and their demand structure, and the chronic shortage of consumer goods. The disharmonies resulting from non-proportionate growth of various sectors will be hoisted onto the shoulders of the consumers through the coercive medium of the 'plan'.¹ Two similar but more sophisticated versions of this view were put forward by Olivera in 1960 and Brainard in 1974. According to Olivera, planning in the collectivist economies is aimed at maximizing growth, and that this basic property leads to the separation of the time preference schedules of planners and consumers and increasing "consumer dissatisfaction". The capital goods industries will receive more attention at the expense of consumer goods industries. As workers receive fixed wages according to their work, the deterioration of the consumer goods industries necessarily leads to changes in relative prices in favour of investment goods and a fall in the standards of living. After some time, the social dissatisfaction and the tensions that develop, as a result of the deterioration of the consumption sector, force the planners to change their pattern

1 W. Ropke (1936), pp.319-321.

of decision making. Investment in consumer goods industries increases, relative prices change in favour of consumption goods, tensions reduce and the economy begins to grow at a slower pace. But sooner or later the planners will revert to their old methods and renew their emphasis on the investment goods sector again. This alternating shift of emphasis on investment resulting from the planners' tendency to over-invest leads, according to Olivera, to cyclical movement in the level of activity.¹ While Ropke held that economic fluctuations "are connected with differentiated societies, whether capitalist or socialist", Olivera wrote that "cyclical growth is connatural with centralized collectivism".²

This position was put forward again, most recently by Brainard who divided the planned economy into a market section dealing with consumer goods and supply of labour and an administratively planned section dealing with everything else in the economy. The two sections, Brainard maintains, are essentially incompatible with each other as the objectives pursued in each section differ radically. The disequilibrium that would generate as a result of this incompatibility would be tackled first by further directives and administrative means and then (as these fail to restore equilibrium) by reversing the emphasis and enhancing the importance of the market section. The shifts in policy would result in variation in the level of activity. In short, the incompatibility of the two sections result in the so-called 'policy cycles'.³

The existence of inconsistency between the preferences and objectives of consumers and planners in socialist countries may be a real problem, but extending this argument to the point of generating cyclical fluctuations is fairly implausible. After all, even in market economies consumers' preference schedules differ from those of the producers and the former group would want the relative prices changed in their favour (although a movement

1 J.H.G. Olivera (1960), pp.243-245.

2 W. Ropke (1936), p.322 and J.H.G. Olivera (1960), p.249.

3 L.J. Brainard (1974), pp.68-71.

in this direction would lower the profit in consumer goods industries and would lead to a reduction in investment). But this divergence in itself does not explain the cyclical fluctuations under capitalism.

As far as the predictions by Ropke and Olivera about the increasing poverty and suffering of the citizens of socialist countries - subjected to overzealous planners - are concerned, the actual experience of these countries shows that, at least in terms of standards of living, they have enjoyed rapid progress and that the "poverty from shortage of the socialist crisis", prophesized by Ropke, has not materialized so far.¹ Of course, at times, the socialist economies have been subjected to hardships of various types - mostly due to failures in agriculture - but such hardships as Nove correctly points out, "cannot be regarded as the inevitable accompaniment of every species of collectivism".² The ups and downs in the psychology of citizens, resulting from changes in their standards of living, cannot be used as a substitute for the interaction of economic forces in generating business cycles.

Furthermore, Olivera and Brainard seem to have ignored the fact that socialist countries do not constitute a homogeneous entity but that each has its own particularities which may be quite different from those of her neighbours. It would be wrong to use one set of factors (e.g., inconsistency of the time preferences of consumers and planners) in an attempt to explain the business fluctuations in all socialist countries.

There are obviously some valid points in the arguments of the proponents of the notion of "inconsistent planners and consumers time preference". For example, the point that the choice of wage rate may not be related to the choice of growth rate deserves attention. It may be argued that because the wage rate is chosen on distributive grounds and not in direct relation to the growth rate, there may appear an unsatisfied demand and shortage of certain consumer goods. But it is by no means clear why this should result

1 W. Ropke (1936), p.322.

2 A. Nove (1960), p.259.

in cyclical fluctuations.

ii Weaknesses of planning methods and economic policies. The second type of explanation of business cycles in the socialist economies, related to an extent to the first point of view, is based on the weakness of planning systems and the irrationalities of the planners and policy makers. The proponents of this view, who come chiefly from Eastern Europe, have not put forward a general theoretical framework for the analysis of business cycles. Instead they have discussed in broad terms the cyclical movements of economic activity in particular countries and attempted to explain these movements by looking at the practices of policy makers and planners. Horvat, Goldmann and Bródy, for example, have tried to explain the cyclical fluctuations in Yugoslavia, Czechoslovakia and Hungary by using this method of analysis.¹ Goldmann's argument involves the description of the limits to economic growth on the one hand and the inherent tendency among the planners to disregard these barriers on the other. He maintains that small socialist countries like Czechoslovakia face barriers to their growth such as the capacity of the raw materials and extractive industries. Attempts to relieve the shortages by imports will in turn set in motion the foreign exchange barrier as a secondary limit to growth.² The operation of these barriers will reduce the growth rate for a period or two, but the "subjectivist and voluntarist" tendencies "inherent in the traditional model of economic planning" will soon lead to new waves of industrialization and investment drive.³ Goldmann uses the data on cyclical movements in Czechoslovakia to establish the existence of cycles with 7-8 years duration based on investment booms following a period of slow growth.

While it is correct that the myopia of planners can cause disharmony in the operation of the economy, one cannot treat this as an inherent characteristic of the planning system. Miscalculations can occur for a

1 B. Horvat (1971b); J. Goldmann (1964) and (1969); and A. Bródy (1969).

2 J. Goldmann (1964), pp.91-92 and (1969), p.333.

3 J. Goldmann (1964), p.93.

variety of reasons: they may be due to insufficient knowledge of the economic factors under socialism or they may be due to the fact that the planners do not control all the conditions necessary for realization of the plan. The existence and operation of constraints to growth is an example of the former, while the state of the weather and conditions of the harvest are examples of the latter type of miscalculation. However, leaving aside the second type of problem, if planning is undertaken with full knowledge of the constraints and the growth rate is chosen after due consideration is given to these constraints, there is no reason why an economy should experience business fluctuations. The fact that some planners in some countries and at various times have behaved subjectively and have not taken into account the barriers to accelerating growth, cannot be used to explain the cyclical economic movements in all centrally planned economies.

The argument put forward by Horvat deals essentially with the behaviour of policy makers. Basing himself on the experience of the Yugoslav economy, he maintains that the economy is inherently unstable and the instability is aggravated by the policy makers' "dogmatic" refusal to admit and recognize the cyclical pattern of growth and, thus, their inability to take sufficient and timely counter-cyclical measures.¹ The notion of a "government stimulated cycles" has, of course, been put forward for the Western market economies as well. Matthews, for example, has maintained that the deflationary measures taken by the British government in the 50s and 60s were usually carried on longer than needed and resulted in further instability.² An even stronger point of view was formulated by Dow who argued that the major fluctuations in the rate of growth between 1952 and 1965 were "chiefly due to the government policy ... (which) went further than intended."³

1 B. Horvat (1971b), pp.43, 227 and 234.

2 R.C.O. Matthews (1959), p.129.

3 J.C. Dow (1965), p.384.

As we shall show later, in Yugoslavia's case, government policies certainly did play a destabilizing role particularly in the down-swing phases of the cycles. Horvat's analysis, however, falls short of investigating the factors whose interactions begin and end each phase of the cycle, an analysis which requires giving attention to the internal structure of the economy.

iii Periodic Shocks. The third explanation for cyclical movement under socialism is that such movements are the results of periodic shocks applied to the economy by internal factors (such as major changes in government priorities) as well as external factors (such as weather condition, wars, etc.). Alec Nove, a major proponent of this view, has pointed out that the fluctuations in the level of activity in socialist economies, particularly in the USSR, have resulted from one or more of the following events.

- a. Variation in agricultural production due to good or bad harvests. The bad harvest of 1921, for example, was a major factor in the crisis of 1922-23.
- b. A drastic, once and for all, change in the government policy or rearrangement of government priorities. The transition to NEP is an example of the former and consumer oriented policies during the Malenkov period is an example of the latter.
- c. A shift of resources to armament due to a change in the international situation. The down-swing of 1937-38 was the result of the policy of shifting priorities to war industries. A similar, but less serious, situation developed in the early fifties during the Korean war.¹

Yugoslavia, of course, is somewhat different from the type of "socialist"

1 A. Nove (1969), pp.294-296. Nove adds other factors to this list which are excluded here as they appear to be chiefly polemical and/or political and void of economic content. One of these factors is the "death of a leader" factor. Another one is that the fluctuations in the East European countries are the direct result of policy changes in the USSR.

country for which the above ideas were formulated. For example, due to the absence of central planning, the inconsistencies of planners' and consumers' preferences do not affect her macroeconomic behaviour. On the other hand, some of the above ideas (such as the implications of periodic shocks due to a change of priorities, untimely government policies, etc.) are fairly relevant to the analysis of the Yugoslav experience. In the next section, therefore, we shall attempt to identify the factors that influence the cyclical movements of the economy and whose variations result in a fluctuating growth pattern.

III. The Causes of Business Cycles in Yugoslavia

We have already shown, in detail, that the Yugoslav economy has been continually changing from a Soviet-type centrally planned economy into a decentralized market economy. A glance at factors contributing to business fluctuations in market and planned economies (sections I and II above) shows that a combination of both sets of factors may be used to explain the situation in Yugoslavia. More specifically, the important factors are:

a. Decentralization. As the organization of the economy has slowly moved towards a decentralized market economy, the absence of coordination between economic units has become more influential. As we discussed in section I, in a decentralized economy where each production unit decides on its own investment and production plans, the dual role of investment and the mechanism of adjusting supply and demand would entail a certain degree of instability. The overshooting and undershooting of the capital stock targets are inevitable, and once this takes place, the cumulative effect of investment - through the multiplier and accelerator - will push the economy further away from the trend. Yugoslavia has been increasingly subjected to this possibility. In particular in the self-management period, with the abolition of the social investment funds and full relegation of investment decisions to individual units, the last vestiges of coordinated economic growth was done away with.

b. Ceilings to Growth. While the shortage of labour and the capacity of the capital goods industries have been generally recognized as major ceilings to growth, their significance varies from one country to another and with the level of development of each economy. Unlike the developed capitalist countries in which these constraints have been shown to be operative, the less developed countries have been subject to quite different limitations. The full employment ceiling becomes meaningless in those LDCs where both open and disguised unemployment are rampant. In Yugoslavia, in addition to an increasingly high level of unemployment, the large scale migration of the work force to Western Europe, reaching the million mark in the early seventies,¹ must also be taken into account. While it is true that certain kinds of skill and training are in short supply, the full employment ceiling (as pointed out by Hicks or Matthews) does not operate.

The shortage of capital goods and the limited capacity of the industries producing these goods have been regarded by many economists as an important barrier to growth.² But the shortage of capital goods in the LDCs has always been met by imports, and it is here that the most serious constraint faces these countries. The LDCs suffer from a permanent shortage of foreign exchange which constitutes the major "cooperating factor" (to use Matthews' term) in the growth process. Like most of the LDCs, Yugoslavia does not have access to an unlimited supply of foreign exchange with which nature has endowed some countries, and must finance her imports of raw materials, capital goods and the intermediate goods by her own exports. Periodically, therefore, as the economy accelerates and the imports increase, or as the supply of agricultural goods reduces due to bad harvests (thus requiring increased import of such commodities) the economy reaches its ceiling and is forced to slow down its pace of growth. As we shall show in the following section, throughout the post-war period, every upswing in the level of activity has been eventually checked by reaching the foreign exchange constraint.

1 B. Horvat (1975), p.7.

2 See, for example, R.C.O. Matthews (1968), pp.564-565.

c. Periodic Shocks. Finally, the level of economic activity in Yugoslavia has been subjected to the fluctuating effects of the periodic shocks by various endogenous and/or exogenous factors. The major reorganizations of the economy in 1952, 1961 and 1965 have left their mark on the economy's growth path. The periodic harvest failures, the imposition of pro-cyclical government policies and the extension of such policies for longer than necessary have also influenced the cyclical movement of the level of output.

Having identified the main factors which have, most directly, contributed to the cyclical fluctuations of the Yugoslav economy, we can now study the actual pattern of growth, identify the cycles in each of the major sub-periods and analyse the particular factors which have played a dominant role in each of these sub-periods.

IV. Economic Fluctuations in Yugoslavia

The Yugoslav economy, in the past three decades, has revealed a high degree of instability. Major indicators of economic activity such as output, employment, industrial and agricultural production, exports and imports, investment, etc. have been subject to almost regular fluctuations. In fact, in comparison with other economies both planned and market, Yugoslavia has been much less stable and subject to more intense fluctuations.¹

In this section we intend: (a) to show the cyclical fluctuations in the level of activity in each of the three major sub-periods viz. central

1 Staller compared the fluctuations in the total output, industrial and agricultural production in 7 planned economies, 18 market economies and Yugoslavia for the 1950-60 period. Yugoslavia was shown to be the most unstable country in the sample in the areas of agricultural and industrial production. The countries included in the study, in addition to Yugoslavia, were: Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, the Soviet Union, Austria, Belgium, Canada, Denmark, France, Greece, Iceland, Ireland, Italy, Luxemburg, the Netherlands, Norway, Portugal, Sweden, Turkey, the United Kingdom, the United States, and West Germany. G. Staller (1964), pp.387-90. Later on, using France, Italy, Japan, the United States, West Germany, Bulgaria, Czechoslovakia, Poland, Romania, the Soviet Union and Yugoslavia, Horvat repeated this comparison for the 1950-64 period. In terms of output, Yugoslavia experienced the most intense fluctuations. In terms of industrial production, the intensity of fluctuation was highest after the USA and Japan. B. Horvat (1971b), pp.197-199.

planning, transition to self-management and self-management; (b) to identify the limits of each cycle and its expansion and contraction phases; (c) to explain which factors, in each particular period, contributed to the upswing or downswing and the turning points. The method used for describing the cycles is the standard method of representing the fluctuations of each indicator from one year to the next around its long term trend (i.e., the average annual growth rate of that indicator in the period under consideration). Following Matthews, we shall consider each cycle from one peak of activity to the next.¹

Among the indicators of overall economic activity, we shall use either the social product or the industrial production series. While the cyclical fluctuations can be observed on both series, we have used the latter as the basis of our discussion for two reasons. Firstly, the total output includes the highly unstable share of agricultural production and, thus, its fluctuations may be slightly more erratic due to such factors as weather conditions. Secondly, and more importantly perhaps, the industrial sector is the one sector that is totally and most comprehensively socialized with its enterprises organized along self-management lines. The fluctuations in the level of industrial production can thus be linked (though not directly related) to the development of the system of self-management. Figures 1 and 2 show the cyclical fluctuations in both the social product (at constant prices) and the industrial production. As we pointed out, fluctuations in the level of social product are slightly more erratic, especially in the first and second periods when the agricultural sector underwent numerous organizational changes and suffered from poor harvests in alternative years. The most important component of the social product, also comprehensively placed in the self-management sphere, is the industrial production represented in Figure 2. The fluctuations in this index can be used to identify the internal factors and the external shocks that have contributed to business cycles in Yugoslavia. Using a

1 R.C.O. Matthews (1969).

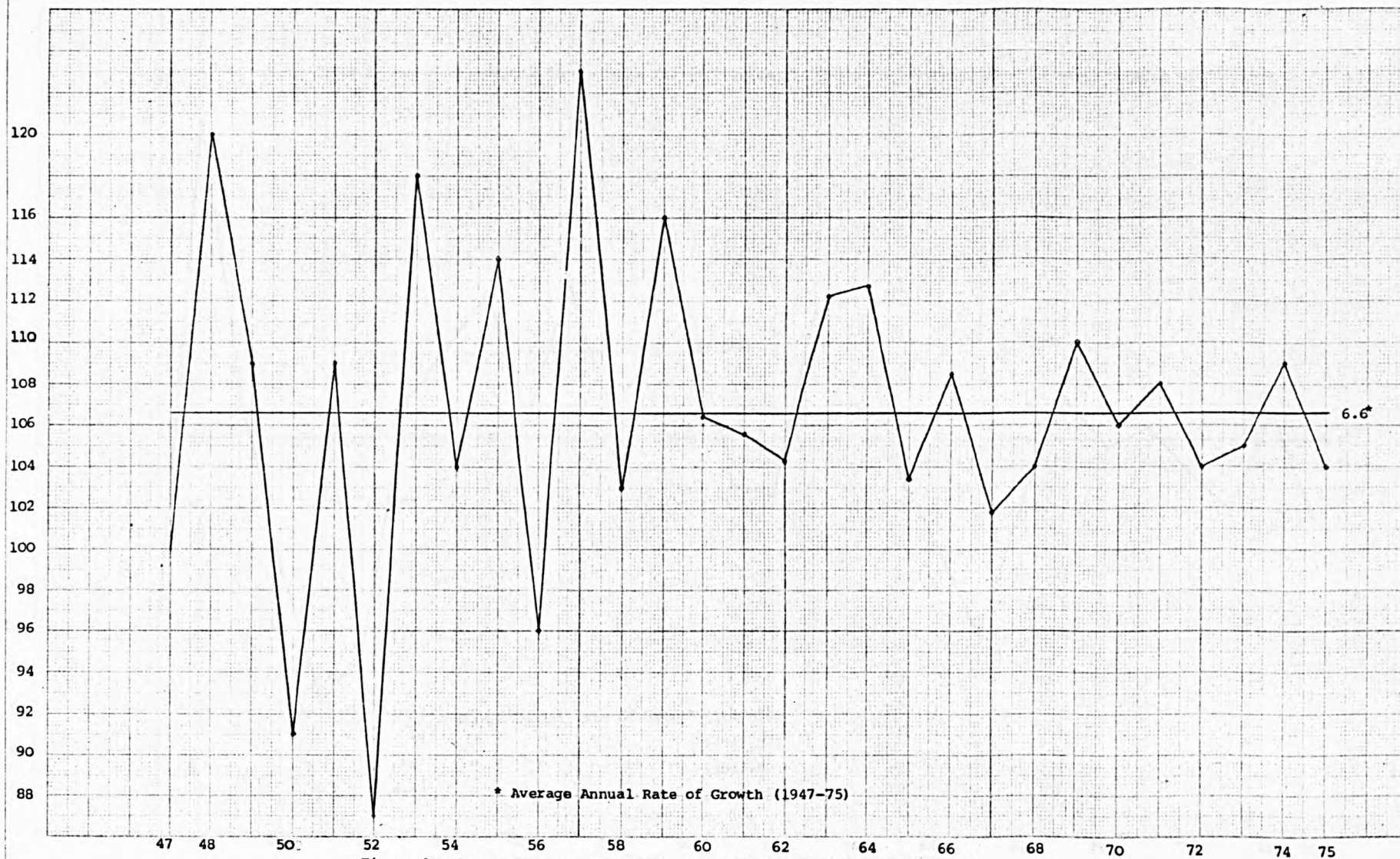


Figure 1- Fluctuations in the Level of Social Product (constant prices)

Source: SGJ, various issues

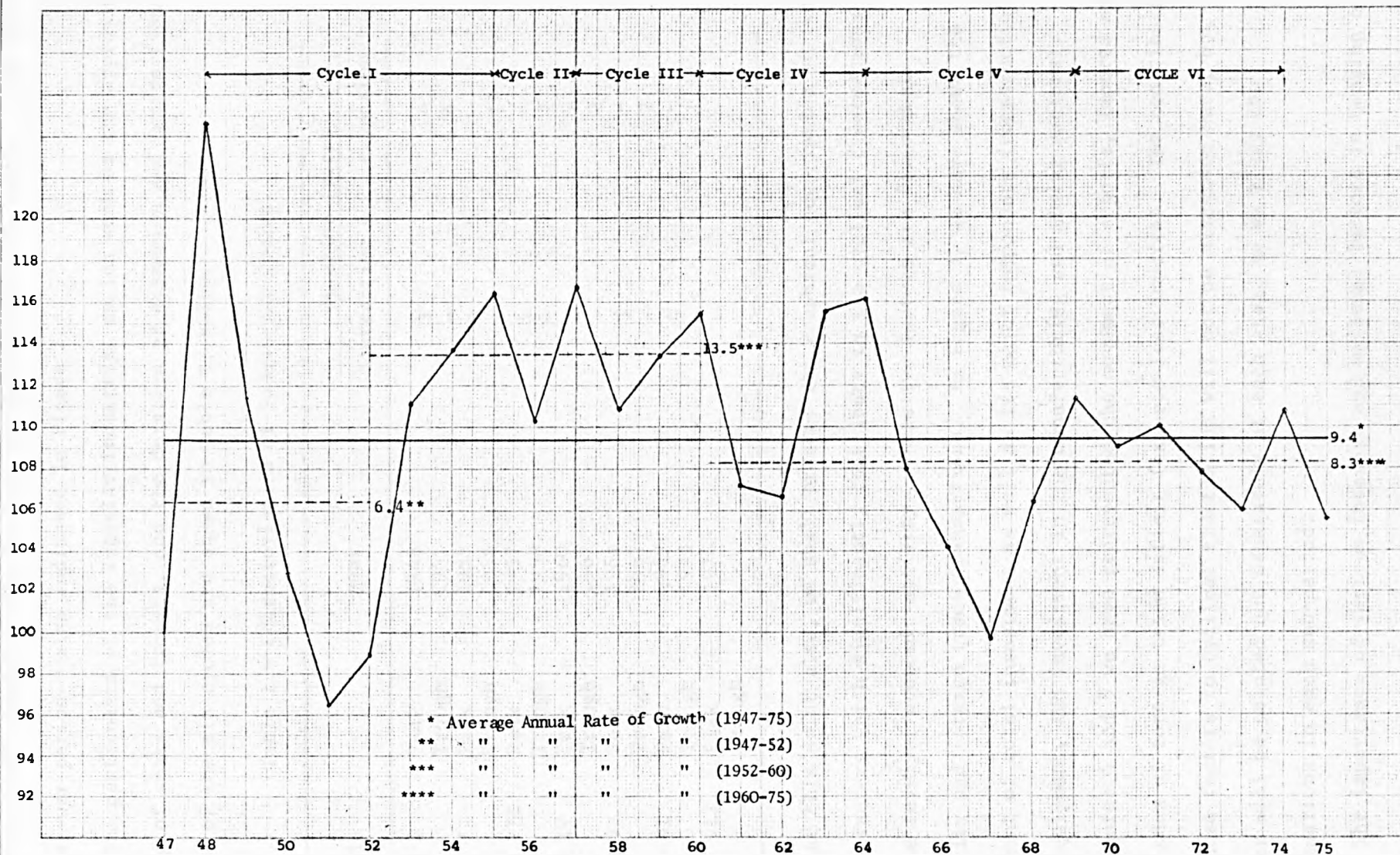


Figure 2- Fluctuations of the Index of Industrial Production

Source: SGJ, various issues

"peak to peak" identification method, we can observe six cycles in the whole of post-war period - also indicated in Figure 2.

The particulars of the Yugoslav industrial cycles such as the approximate timing of peaks and troughs, and the duration of expansion and contraction phases of the six cycles are shown in Table 1, below.

Table 1 - Characteristics of Industrial Cycles

cycle		year	duration (years)	
			contraction	expansion
Cycle I	Peak	1948	3	-
	Trough	1951		4
Cycle II	Peak	1955	1	-
	Trough	1956	-	1
Cycle III	Peak	1957	1	-
	Trough	1958	-	2
Cycle IV	Peak	1960	2	-
	Trough	1962	-	2
Cycle V	Peak	1964	3	-
	Trough	1967	-	2
Cycle VI	Peak	1969	4	-
	Trough	1973	-	1
Cycle VII	Peak	1974	-	
	Trough	..		

At this point also, we shall present the graphical description of two major factors which significantly contribute to the cyclical fluctuations in the level of economic activity. These two factors are investment activity and foreign trade transactions. In Figure 3, we have shown the movement of total investment as well as its major components (construction and equipment, and investment in the manufacturing and mining sectors). In Figures 4 and 5 we have represented the movement of exports, imports and the index of foreign trade deficit (exports less imports). The contribution of these factors to cyclical fluctuation will not be discussed here, but rather will be pointed out separately at each stage as we study the fluctuations in each sub-period.

The importance of various internal and external factors in causing or stimulating the cyclical macroeconomic behaviour has changed frequently in Yugoslavia. Factors such as investment expenditure, foreign trade

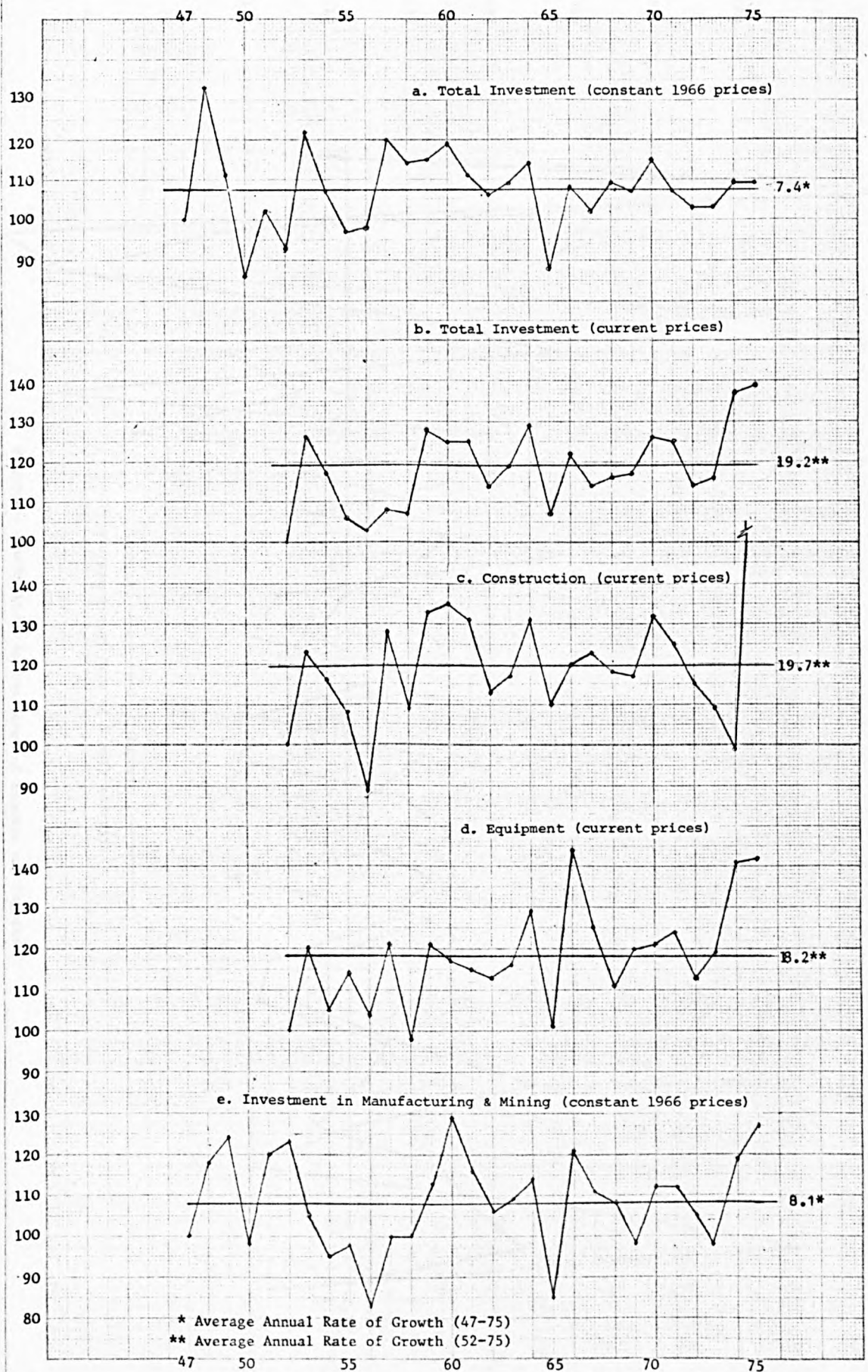


Figure 3- Fluctuations in the Level of Investment

Source: SGJ, various issues

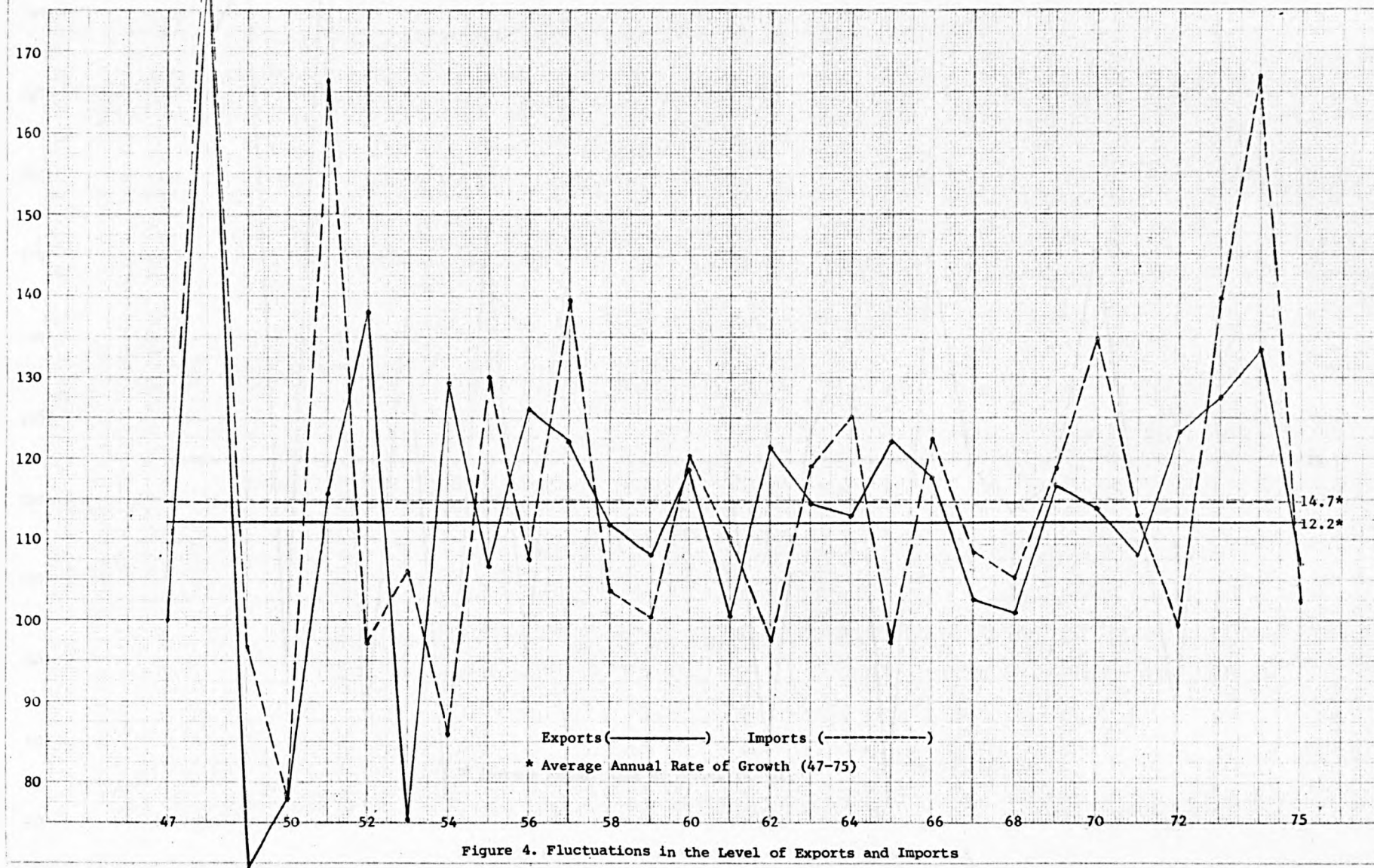
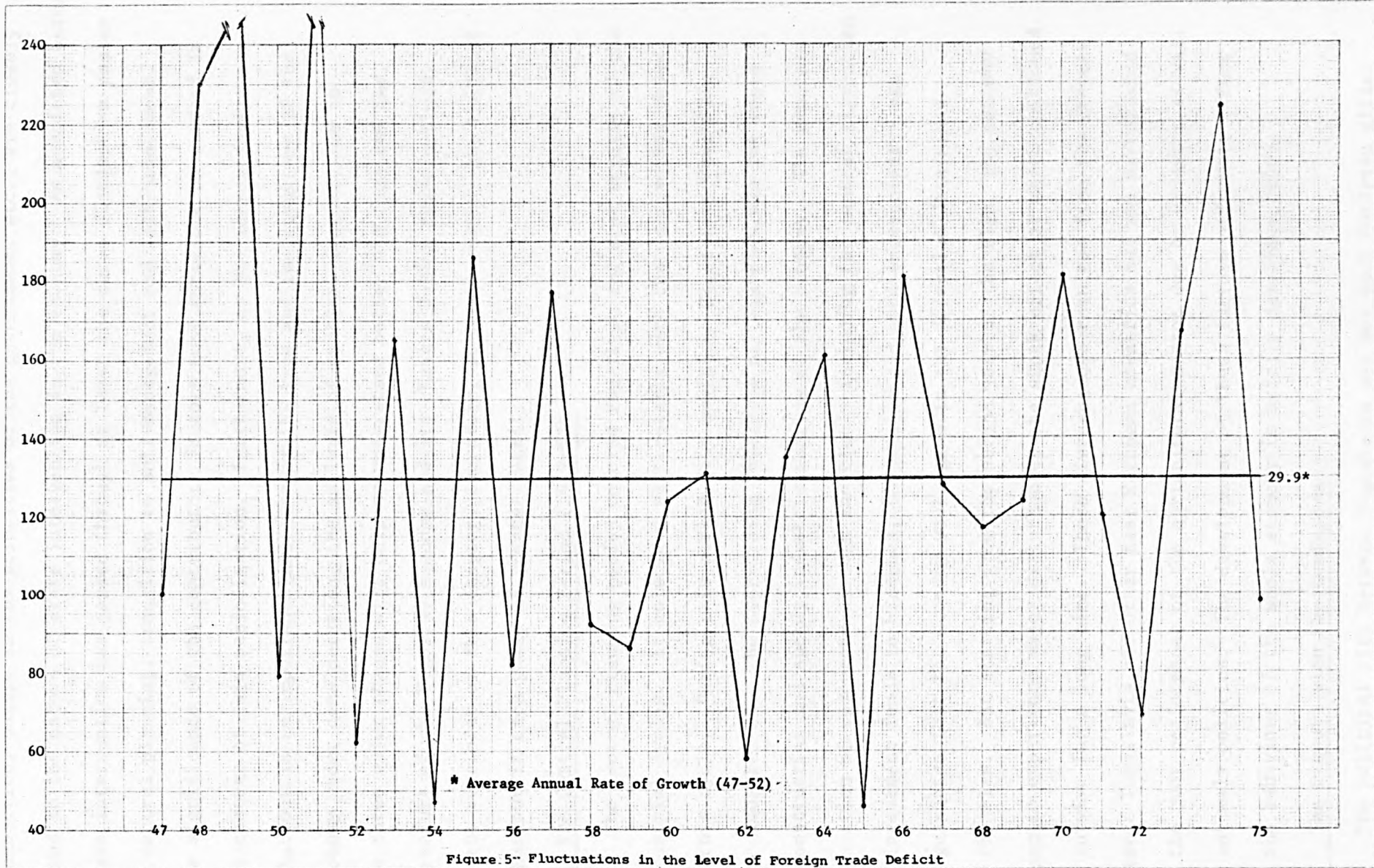


Figure 4. Fluctuations in the Level of Exports and Imports

Source: SGJ, various issues



Source: SGJ, various issues.

transaction, change in the priorities of the government, etc., are closely bound to the nature of state intervention in the economy. As mentioned before, state intervention has passed through at least the three distinctive phases of central planning, transition to self-management and self-management. The significance of the contributory factors must therefore be studied in the context of this periodization. Furthermore, as the macroeconomic behaviour is an important indicator of the type and the structure of the economy under consideration, the analysis of cyclical fluctuations in the three major phases will help us understand better the type and the structure of the Yugoslav economy and its changes during these periods. In the remainder of this chapter, therefore, we shall discuss the cyclical behaviour in each phase in greater detail.

A. The Central Planning Period (1947-52)

The central planning period covered the first and most erratic of the industrial cycles. It coincided particularly with the contraction phase of this cycle. During this period, the ambitious First Five-Year Plan was embarked on. The over-riding objective of this Plan was the rapid reconstruction and speedy industrialization of the economy. The central allocation of resources through the Plan - including the central allocation of investment funds to branches, industries and even enterprises - was to guarantee that the economy would grow in the direction determined by the Plan. But starting from the second year of the Plan, the economy began to experience major disturbances the shock effect of which continued to survive for a long time. These disturbances resulted from the dispute between Yugoslavia and other East European countries and was accentuated by the poor performance of the agricultural sector due to droughts as well as untimely policies. The development of these factors and their effect on the behaviour of the whole economy is briefly described below.

1. The Dispute with the Cominform

The political rift between Yugoslavia and her East European allies which led to her expulsion from the Cominform on 28th June 1948 affected

the performance of the economy in two major ways.¹ Firstly, the economic blockade imposed on Yugoslavia by East European countries severely interfered with her foreign trade and, therefore, with the industrialization programme. Secondly, the political tensions which developed between the former allies necessitated a change in the allocation of investment resources with defence industries receiving an increasing share at the expense of industrialization programme.

a. Interference with Foreign Trade. From 1945 onwards, and especially with the inauguration of the First Five-Year Plan, the Yugoslav economy was very closely linked to the economies of the USSR and other East European countries. The linkage was essentially through foreign trade and was supplemented by Soviet aid and credit. But beginning in late 1948, the USSR, Hungary, Poland, Czechoslovakia, Romania and then others began, one by one, severing their trade links with Yugoslavia. By 1952 trade with former allies had come to virtual standstill. Table 2 represents the changes in the geographical pattern of foreign trade in the period of central planning and shows the effect of the Cominform economic blockade.

Table 2 - Changes in Geographical Pattern of Foreign Trade
(1947-52) (%)

country of origin or destination	1947	1948	1949	1952
<u>Imports (c.i.f.)</u>				
Eastern Europe *	56	46	14	-
US, UK and W. Germany	9	9	28	46
Other countries	35	45	58	54
Total	100	100	100	100
<u>Exports (f.o.b.)</u>				
Eastern Europe *	53	51	13	-
US, UK and W. Germany	3	9	36	53
Other countries	44	40	51	47
Total	100	100	100	100

* Including the USSR, Czechoslovakia, Hungary, Romania, Poland, Bulgaria, Albania and East Germany.

Source: ESOE, 1953, p.112.

¹ For details of the dispute see R. Bass and E. Marbury (1959); R.O. Freedman (1970); F. Claudin (1975); and S. Clissold (1975).

The East European countries were the main source of the raw material, machinery and equipment required for industrialization and, as such, the reorientation of trade was not an easy task. Although it was possible to find other countries that could supply her with needed imports, her foreign exchange reserves were draining rapidly. Disruption of trade had resulted in a fall in the output of all sectors and had affected exports. An increase in urban population and the subsequent rise in domestic demand for agricultural commodities also meant that the planned export of these goods could not be realized. In any case, the agricultural goods - previously exported to Eastern Europe - could not be easily marketed in Western Europe where heavy exchange limitations and quantitative restrictions on imports prevailed.¹ The sharp contraction in the level of exports could not be matched by a similar fall in the level of imports. Not only the requirements for industrialization programmes heavily depended on the imports, but the newly created need for defence spending (to be discussed shortly) also consisted of a significant import component. The change in the imports, exports and trade balance in this period is shown in Table 3.

Table 3 - Change in the Volume of Foreign Trade (mil.dollars)

	1948	1949	1950	1951	1952
Exports	297	199	154	179	247
Imports	306	295	231	383	373
Trade deficit	9	96	77	204	126

Source: Jugoslaviya 1945-64, p.197.

The foreign exchange constraint seriously restricted the growth potential of the economy and although by late 1949 the United States provided Yugoslavia with \$20 million (followed by other grants in cash as well as agricultural goods later²), the economy was severely affected by the

1 M. Aleksić (1956), p.18; and J.V. Mladek, et al. (1952), p.419.

2 For US aid and loans in this period, see G.W. Hoffman and F.W. Neal (1962), pp.347-51. For details of the changes in the attitudes of Western governments, notably the U.S.A., U.K., and Italy, see F.W. Neal (1958), pp.6-7; J. Bombeless (1968), p.110; and R.O. Freedman (1970), pp. 29-35.

disruption.

b. Increased Importance of Defence Industries. Another consequence of the dispute with the Cominform was the building up of tension in various East European capitals and on Yugoslavia's northern and eastern borders, necessitating a rapid increase in defence expenditure. There are conflicting views on whether or not Yugoslavia was actually threatened by external invasion and internal disorders, but what is certain is that military spending rose sharply after 1948.¹ According to Avsenek, the political situation forced Yugoslavia to establish between 30 and 35 new defence facilities in central provinces, employing some 35000 workers and producing a variety of arms, explosives, tanks, armoured vehicles and other defence equipment.² Tito estimated that the rearmament and construction of war industries during the latter part of the First Five-Year Plan cost Yugoslavia nearly \$1407.5mdollars.³ Table 4, below, shows the change in the share of defence expenditure in national income in the period of tension.

Table 4 - The Share of Military Expenditure in National Income (%)

Year	1947	1948	1949	1950	1951	1952
Share	8	7	11	14	20	24

Source: ESOE 1953, p.112.

The trebling of the share of defence between 1948 and 1951 meant that extra pressure was exerted on the already scarce resources (including, particularly, the foreign exchange) needed for the industrialization programme. The slow-down in the economy due to the disruption of foreign trade was aggravated by the redirection of resources to defence industries.

- 1 For details about the accusations and counter accusations, alleged troop build-ups on various sides, suppression of pro-Cominform elements at home and other issues related to the increased military spending, see R.O. Freedman (1970), p.35; S. Clissold (1975), pp.58, 243; F. McLean (1957), p.359; S. Talbot (1974), p.181; G.W. Hoffman and F.W. Neal (1962), p.146; J. Bombeless (1968), p.29; A. Rankavić (1953), p.67; F. Claudin (1975), p.507 and Ministry of Foreign Affairs of FPRY (1951).
- 2 I. Avsenek (1957), p.302.
- 3 J.B. Tito (1959), Vol. VII, p.240.

2. Problems in Agriculture

During the period under consideration, agriculture constituted the most important single component of total output, accounting for 25-33 per cent of the social product in constant prices.¹ Difficulties in this field could, and in fact did, affect the whole economy in several ways. In addition to satisfying the urban population and producing raw material for industries, the agricultural sector accounted for a significant share of the export earnings of the country which was crucial in financing the imports. The major problems that affected the agricultural sector in this period were: the collectivization campaign initiated in January 1949, the serious drought of 1950 and the allocation of insufficient resources for investment in agriculture.

The collectivization drive was part of the general drive to stamp out capitalism by the new government. Although it was originally intended to "persuade" and "encourage" the peasants to join the cooperatives, a variety of measures devised by the State turned the campaign, in practice, into a programme forced on the peasantry. The discriminatory policies in the fields of taxation, availability of credit, delivery quota, and provision of machinery and fertilizer squeezed the profits out of the private sector and forced an increasing number of individual peasants into the cooperatives. The campaign was completely opposed by the peasantry whose disapproval and lack of cooperation were manifested in the decimation of live-stocks and a fall in productivity. By 1951, the height of the collectivization drive, only 20 per cent of the agricultural land was held by the cooperatives.²

Despite the acceleration of collectivization, no comparable effort was

1 Jugoslaviya 1945-64, p.80.

2 For the situation in agriculture and the implementation of the collectivization programme as well as the reaction of the peasantry to this programme, see: D. Milenkovitch (1971), pp.63-64; G. Macesich (1969), p.211; G.W. Hoffman and F.W. Neal (1962), p.272; R. Bičanić (1957), p.73; B. Horvat (1974), p.51; F.W. Neal (1958), p.190; ESOE 1953, pp.112, 116; R. Brashich (1954) p.56 and (1957), pp. 241-242; and S. Clissold (1975), p.205.

made to channel new investment into the agricultural sector and to improve the methods of production. In the whole of the 1947-51 period, agriculture (which accounted for about $\frac{1}{3}$ of the total output) received only 7 per cent of the investment resources.¹ And as a UN report pointed out, little attention was paid to utilization of economies of scale, prevention of fragmentation of land and other aspects of improving the performance of the socialized sector.²

Agricultural production was, in addition to untimely policies and insufficient attention, hit by a major drought in 1950. The combined effect of all these elements can be observed in Table 5.

Table 5 - Index of Agricultural Production (1952=100)

Year	1947	1948	1949	1950	1951	1952
Index	120	138	135	101	142	100

Source: Jugoslaviya 1945-64, p.97.

The decline in agricultural production had two basic and related undesirable effects. It led to a fall in the exports of agricultural goods on the one hand and a rise in their imports on the other. While in 1948, the agricultural sector made a positive contribution (exports minus imports) of 17 billion dinars (\$1=300 dinars) to the foreign exchange reserves, by 1949 this had declined to nil and by 1951 it was turned to a negative contribution of 20 billion dinars.³ The outcome was an intensification of pressure on the already tight foreign exchange reserves and meant a further withdrawal of some of the resources from vital industrial projects.

One of the consequences of the disruption of foreign trade and of the draining of foreign exchange reserves was the abandonment of the goals of the First Five-Year Plan and its replacement by a much smaller Key Investment Programme in December 1950. These projects were retained

1 Government Office of Information (1947), pp.37-39.

2 ESOE 1953, p.116.

3 Jugoslaviya 1945-64, p.97.

because they could prove effective by: (a) removing the bottlenecks; (b) yielding quick returns, and (c) helping the balance of payment problem.¹ The reduction in the level of investment (14% between 1949 and 1950 for total investment and 11% for productive investment²) had a cumulative effect on the level of output as well as on the industrial production and was responsible for part of the recessionary slow down of the economy.

3. Reorganization of the Economy

From 1950 onwards, the government embarked on major reorganization of the whole economy. Yugoslavia was to become a "self-managed", rather than an "administratively planned" economy. The "new economic system", as it is known, was to be based on decentralization of the decision making apparatus, a reduction in State's power of intervention in the economy, on assumption of increased role for market and independence of enterprises from planning agencies. The reforms came at a time when the economy was experiencing a down-swing and, by contributing to the state of uncertainty and confusion which was then prevailing, played an additional part in the deepening of the recession. The reorganization of the enterprises, the abolishing of central planning and other elaborate State apparatuses, the establishment of a market oriented price system and the implementation of other aspects of the new system involved an adjustment period of at least two years and had a negative effect on the rate of economic growth.³

To sum up the behaviour of the economy in the central planning period, several factors seem to have been important. Although central planning was to do away with cyclical movements of the economy, the particular combination of factors led to a serious recessionary period. The disruption of foreign trade due to the economic blockade by

1 For the new programme, see R.O. Freedman (1970), p.29; A. Waterston (1962), p.17; Borba 14 December 1950, quoted in The N.Y. Times 15 December 1950; and ESOE 1953, pp.113-114.

2 SGJ(1975), p.82. The percentages are in constant 1966 prices.

3 D. Milenkovitch (1971), p.67 and B. Horvat (1971b), p.178.

the Cominform countries resulted in the abandoning of a large number of investment projects and a slow down in the rate of growth. The slow down in investment expenditure (and actual reduction between 1949 and 1950) affected the output through the multiplier and accounted for part of the overall slow down. The redirecting of resources away from the industrialization programme to finance the increased defence expenditure on the one hand and increased import of agricultural goods (coupled with a fall in exports of these goods) on the other hand, meant that additional pressure was put on the foreign exchange reserves and the retardation of the economy was further aggravated. The policies and measures employed by the government also played their part in the recession. Inadequate knowledge of economic planning, embarking on the collectivization campaign on political grounds, allocation of insufficient resources to agriculture and the initiation of the Yugoslav model of 'market socialism' were indeed responsible for deepening the slow down. As pointed out in the previous section, a combination of factors - as expounded by Hicks, Matthews, Nove and Horvat - were responsible for the fluctuating level of activity in this period. The foreign exchange constraint, accentuated by untimely State intervention, seem to have been the dominant factors.

B. Transition to Self-Management (1952-60)

This period, as pointed out in the previous chapter, was characterized by quick recovery from the ill-effects of the previous period and by rapid economic growth. The transition period coincided with the expansion phase of the first cycle, followed by two short cycles of two and then three years duration. The economy began from the low trough of 1951 and after a rather long upswing (4 years), experienced three peaks in 1955, 1957 and 1960 (see Figure 2). The cyclical movements during this period were very mild and short, reflecting on the one hand the improved coordination of various activities (especially the allocation of investment which was predominantly under central control) and on the other the

absence of any erratic external shock. The fluctuations in the level of industrial production, however mild, still need to be explained in terms of the factors discussed earlier.

While the investment expenditure at the beginning of this period (and until 1956) was on a general down swing (see Figure 3) and so was the level of industrial investment, the level of total activity was, nevertheless, expanding. This means that the central control of investment resources and the coordination of allocation of resources to various branches interfered with (or possibly postponed) the usual relationship between investment and output (via multiplier and accelerator). The growth of the economy in this period was due essentially to the gradual maturing of investment projects undertaken in previous periods, otherwise the sluggish investment of 1952-56 would have adversely affected the growth of output. But as the old projects were gradually completed, the influence of the present level of investment on output increased. The slow down of the activity in 1955-56 was, therefore, most probably due to the reduction in investment expenditures (Figure 3). After 1956, with the introduction of the Second Five-Year Plan which entailed a general expansion of investment expenditure, including that in industry and construction (Figure 3), was responsible for the rapid growth of the whole economy.

The reason behind the three downturns of 1955, 1957 and 1960 should be sought in the foreign trade sector. In all these three years, the index of foreign trade deficit (Figure 5) reached a high point meaning that the foreign trade constraint was reached and the expansion of the economy curtailed. As the pressure on foreign exchange reserves was building up, further imports of raw material, intermediate goods or capital equipment became difficult and the output began to slow down. Horvat maintains that the imports have usually reached their peak one quarter after the industrial production, due to the lag between the reduction of import orders and the actual fall of imports (i.e., imports fall when

the economy begins to slow down but due to previous orders the actual level of imports falls one quarter later).¹ Of course, the use of quarterly data makes such observations possible but as we have not had access to finer data of this type and have used the rougher annual data, the peaks of imports and industrial production cycles coincide (see Figures 2 and 4).

The transition period began with a long phase of expansion. This expansion was due to several factors including: the gradual completion of the investment projects of the First Five-Year Plan and especially the Key Investment Programme², the establishment of the new economic system with a large degree of autonomy granted to enterprises (Chapters Three and Four) and a fundamental change in the agricultural policy - the abandonment of the forced collectivization drive.³ But alongside economic growth, two related problems began to emerge. Firstly, the expansion was accompanied by an increase in imports. In 1955, despite a good harvest, the import of agricultural goods increased by 36% and that of manufactured goods rose by 16%.⁴ The exports, however, did not match the rise in imports and thus the pressure on foreign exchange reserves increased. Secondly, as a result of greater emphasis on capital goods industries (a continuation of policies of the First Five-Year Plan, reflected in the selection of the projects of the Key Investment Programme) and insufficient attention paid to consumer goods industries (especially food) and agriculture, a shortage of various commodities appeared in the market.⁵ The increased

1 B. Horvat (1971b), pp.158-159.

2 A. Waterston (1962), p.17.

3 The number of Peasant Work Cooperatives declined from 6804 in 1951 to 4225 in 1952 and 1165 in 1953. The number of coop members reduced from 2 millions in 1951 to 1.5 millions in 1952 and 193 thousands in 1953. 1951 was the year when the campaign was at its height. B. Horvat (1974), p.45. For the abandonment of the campaign, see also A. Gruchy (1966), p.853. At the same time it should be pointed out that the agricultural production in constant 1960 prices increased by 45% in 1953 and 24% in 1955. Jugoslaviya 1945-64, p.69.

4 Jugoslaviya 1945-64, pp.97 and 142.

5 In 1952-53, 66% of investment was allocated to metal making, metal using and chemical industries while only 6% was allocated to the food, beverages and tobacco industries. S. Pejovich (1966), p.69.

effective demand could not be satisfied and inflationary pressure began to build up. Inflation was partly fueled by the ability of the enterprises to determine or influence the price of their products. This was a field in which the enterprises had obtained a certain degree of independence after 1952 and were using it to raise the price level to conform with market conditions. The easy credit policy of the government reflected in the rapid rise of short and long run credits granted to enterprises also strengthened the inflationary pressure. In 1955, the retail price index of agricultural goods rose by 21% and the cost of living index by 13%.¹

Inflation became, in fact, a basic characteristic of the expansionary phases of the Yugoslav industrial cycles. The anti-inflationary measures that were needed to cope with this problem contributed, to varying degrees, to the ensuing slow down. This will become clearer in the rest of the present discussion.

After reaching a peak in 1955, the economy began a phase of contraction. The anti-inflationary measures that were decided on in the previous year succeeded in reducing the rapid growth of the price level and the cost of living index. These measures included the imposition of price controls and credit restriction. Already in 1954 the government had realized that the determination of prices according to supply and demand would lead to large price increases, and had therefore begun imposing price ceilings on certain key commodities. But by 1955 the situation had become intolerable and forty new commodities, comprising one half of the total value of industrial raw material and intermediate goods became subject to price control.² The blocking of enterprise funds in banks, coupled with the introduction of the Law on Reserve Requirements (18 July 1956) and the imposition of a 30% required reserve ratio on bank balances strengthened the anti-inflationary policies of the government.³

1 Jugoslavija 1945-64, pp.233, 235.

2 J. Monthias (1959), pp.293-305.

3 S. Pejovich (1966), p.21 and B. Horvat (1971b), p.179.

During 1956 also, preparation was made for the Second Five-Year Plan (1957-61) which included a major shift of emphasis from producer goods industries in favour of the long ignored consumption goods industries and agriculture. Not only did the share of investment in manufacturing decline and that of agriculture and non-economic activities increase considerably after 1956, but also, concurrently, the distribution of investment in manufacturing changed in favour of consumer goods industries. The investment in non-economic activities has a long lag and its effect is transformed to the economic activities some time later in the form of increased productivity. Table 6 summarizes the change in the pattern of investment.

Table 6 - Change in the Pattern of Investment in
Manufacturing and Mining and Agriculture (%)

Year	1955	1956	1957
<u>Total Investment</u>	100	100	100
Manufacturing & Mining	49	43	35
Agriculture	6	8	10
Non-economic activities	16	18	23
<u>Total Investment in Manufacturing and Mining</u>	100	100	100
Ferrous and Non-ferrous metallurgy	21	19	13
Non-metal products	5	5	3
Chemicals	11	7	5
Paper products	2	2	3
Textile, leather and footwear	5	5	6
Food and tobacco	5	10	11

Source: SGJ(1960), p.233.

The new emphasis on consumer goods was to a large extent responsible for increasing the supply of these goods on the market and taking the pressure off prices.

The slow down of the economy in 1956 (Figure 2) was short and the amplitude of the down-swing very small. The deflationary policies which came into force in 1955 and during 1956 were not pursued for too long and together with the easing of foreign exchange reserves (due to a slow

down in imports and a rise in exports¹⁾ created sufficient conditions for the turning point to be reached.

The expansion phase of the second cycle was also short, only one year. The main element in constraining the expansion must have been the shortage of foreign exchange again. The volume of these reserves, built up during the previous contraction phase, was not too large and with the very large rise in imports (nearly 30% including a 59% rise in the import of industrial goods²⁾ and an approximately 90% rise in foreign trade deficit, the industrial production reached its third peak in 1957 and the contraction phase of the third cycle began.

In 1957 a new system of income distribution, namely the income sharing system, was introduced (the details of this system are discussed in Chapter Three). In this system the enterprises gained increased freedom in deciding on the distribution of their net earnings among various uses, on the level of personal incomes and on the level and composition of a part of investment. The new system consisted of a basic redefining of wages and bonuses as well as the introduction of fixed and working capital for the enterprises. Its implementation was not easy and in fact enterprises in manufacturing and mining, transport and communication and forestry implemented it only in 1958. The adjustment to the new system was accompanied by some confusion and difficulties and may have had some influence on the slow down of the growth, thus strengthening the effects of the foreign exchange constraint.

The new system of income distribution worked as a major incentive for the management of enterprises and, as the employees of each enterprise were to be the direct beneficiaries of better performance, it stimulated profitability calculations and a more rational use of resources. The general increase in investment (particularly in non-economic activities,

1 Exports of manufactured goods increased by 22% and their imports by 2% during 1956. This was partly responsible for the improvement in the foreign trade situation. Jugoslviija 1945-64, p.142.

2 *Loc. cit.*

as shown in Table 6) which had been going on for some time started to show its effects too. The economic policy was also generally expansionary: the credit for working capital rose by 13% from the first quarter of 1958 to the first quarter of 1959 and by 21% in the next year; demand deposits grew by 50% and 17% over the same periods; the total money supply grew by an average of 20% per annum from 1958 to 1961; and the consumer credit increased by 33% in 1959 and 17% in 1960.¹ The combination of these factors resulted in the resumption of the expansionary phase of the third cycle. Two phenomena accompanied the upswing. Firstly, as Figures 4 and 5 show, the foreign trade deficit deteriorated with imports rising faster than exports (particularly the industrial goods whose imports and exports rose by 36% and 18% in 1960²). This resulted in the setting in motion of the foreign exchange barrier and the fourth peak of the industrial cycles was reached in 1960. Secondly, the expansionary policies at home coupled with increased imports resulted in rapid inflation again. In 1960, the cost of living index as well as the retail price of the agricultural products increased by 10% (as compared with 1% in 1959).³

To sum up the situation in the transition period (1952-60), we can see that the economy pulled itself out of the recession of 1951-52 and after reaching a peak in 1955 experienced two more cycles in 1955-57 and 1957-60. The fluctuations (especially in 1952-56 period) seem to have had little direct relation to the level of investment expenditure. This was due to the fact that in the transition period, the volume and composition of investment was still largely controlled and coordinated by the government and the enterprises could not strongly influence the level of investment according to their own performances. In other words, investment was not determined by the level of income (or output) in each enterprise or by industry but by a set of national priorities which were influenced by

1 B. Horvat (1971b), p.124; Jugoslavija 1945-64, p.238; and M.Vučković (1963), p.368.

2 Jugoslavija 1945-64, p.142.

3 *Ibid.*, pp.233, 235.

many considerations (not necessarily economic). On the other hand, fluctuations seem to be directly linked to the level of foreign exchange reserves. All three peaks (1955, 1957 and 1960) were reached when the trade deficit was at its highest (or near the highest point), with imports far surpassing the exports. Interestingly, in this period the rise in the imports of industrial goods played a more significant role in the deterioration of foreign trade balance than did the import of agricultural products.

The implementation of the new economic system and the increased role of the market meant that in the up-swing when the economy's purchasing power expanded, prices could rise rapidly through the decision of the increasingly independent enterprises. This, coupled with the expansionary policies of the government in the sphere of credits, especially in 1957 and 1960, led to inflationary pressures making themselves felt in Yugoslavia. The relatively stable growth of the economy after 1952 was interrupted by rapid price increases in the two expansionary phases of 1956-57 and 1959-60. Inflation had just begun to be a permanent feature of the economic system.

C. The Self-Management Period (1961 onwards)

The self-management period covers three industrial cycles (4th, 5th and 6th), longer than the previous ones and with larger amplitudes. The most violent fluctuation since the first cycle occurred in this period during the 1964-69 cycle. The characteristics of this period, enforced by the 1961 and 1965 reforms and other legislations were:

a. The decentralization of investment decisions to enterprise level. With the abolition of the Social Investment Funds as the last vestige of central control of investment resources and the extension of enterprise autonomy to the area of investment financing, the importance of variables such as market expectation, profitability and loss calculations, etc., increased significantly. This resulted in a changed relationship between output and investment. While in the previous period (when central control

of investment was in effect) a change in investment induced by variations in output could have been prevented by the authorities through the use of investment resources at their disposal, the post-reform period witnessed the dismantling of such a mechanism of intervention. The investment-output relationship became market determined, subject to the same uncertainties and possibilities of overshooting and undershooting as other market economies. The State can, of course, still influence the level of investment but only so far as its discretion over fiscal and monetary tools allows.

b. The development of autonomous commercial banking. With the abolition of the Social Investment Funds and the transfer of their resources to the banks, and the assumption by the banks of full responsibility for profit and loss of their operations, the era of commercial banking started in Yugoslavia. In a short period, the banks became the most important source of finance outside the enterprises. The banking system, with its ability to influence the money supply and other liquid assets, was to be the vehicle of the government's credit and monetary policies. The instruments to be used for such purposes were: the reserve requirement, interest rates on various kinds of deposits, conditions of credit (upper limits to size of loans to enterprises or households) and selective channelling of credit to specific sectors of the economy. Beginning in this period, monetary policy gradually became the principal means of controlling the level of investment (and to a lesser extent its composition) which was decided upon by individual enterprises.

c. Reducing the distortions of the price system. In the course of the post-1952 reforms, the price system had undergone many improvements and an increasing number of commodity prices had become market determined.¹ Nevertheless, two basic gaps have survived in the price system. Firstly the gap between the prices of manufactured goods on the one hand and those

1 Periodic inflations, however, have reversed the general trend and, at different times, led to increases in the number of administratively controlled prices.

of raw materials, industrial inputs, public services and agriculture on the other. While the prices in the former branch have been determined primarily in the market, those of the latter have generally been fixed by the state price commissions. The result has been a continuous distortion of the price system with one group of prices having been kept artificially low while the others have been allowed to change according to market conditions. Low prices in raw materials, services and agriculture means low profit, a low degree of self-financing of investment and greater reliance on and need for State subsidies. Although in the 1965 reforms, and several times later, attempts were made to align the two groups of prices and reduce their distortions, these attempts have not been totally successful.

The second gap in the price system is that between domestic and international prices. Liberalization of foreign trade, reduction of restrictions imposed on foreign trade and several currency devaluations have been undertaken in order to facilitate the integration of the Yugoslav economy into the international markets and the international division of labour. Reduction of distortions between domestic and foreign prices has been expected to improve the competitiveness of the Yugoslav exports, make imports less attractive, and increase foreign exchange earnings which are needed to finance the vital imports of capital goods and raw materials. As we have already pointed out, foreign exchange is an important 'cooperating input' in the growth of the Yugoslav economy and foreign trade policies must be oriented towards ensuring sufficient build up of reserves if economic growth is not to be impeded. As in the case of the first distortion, numerous measures have been taken to close the second gap too. In the periods when the balance of payment has been in surplus (or in mild deficits), bigger steps in the direction of more liberal trade have been taken. But in periods of heavy deficit (and there has been quite a few such periods), restrictive measures have reappeared to prevent rapid

outflow of foreign exchange.

All three cycles of the self-management period, as we shall see shortly, share the following general feature. The growth of the economy is accompanied by reduction in foreign exchange reserves (due to increases in imports) on the one hand and the build up of inflationary pressure on the other. The upper turning point is reached when the foreign exchange constraint is met. At the same time, anti-inflationary measures adopted to halt the price rise, lead to the curtailment of investment activity (usually through strict monetary/credit policies), consumption expenditure (usually through tight fiscal policy) and/or government expenditures. The slow down of the expenditure leads to the slow down of the whole economy. The duration of the contraction phase will depend on how long the restrictive government policies persist. Either reflationary policies are adopted to avert the danger of a recession, or the economy hits its natural floor (provided by that level of expenditure which does not change with output). The lower turning point is generally accompanied by expansionary policies which gradually lead to increased demand, larger imports, smaller exports, deteriorating balance of payment and rising prices. The structural problems such as rigidities, frictions and inefficiencies in the formation and implementation of policies are also conducive to rising prices. At the same time, reforms as well as other untimely interventions create uncertainties, confusions, lags and difficulties of adjustment which only help to prolong the contraction phase of the cycle. The particular features and some of the underlying causes of the three industrial cycles of 1960-64, 1964-69 and 1969-74 can now be discussed.

1. The Fourth Industrial Cycle (1960-64)

As pointed out before, the expansion phase of the third cycle (1958-60) ended in mid-1960 with the foreign exchange constraint having been reached. At the same time the counter-inflationary measures employed from late 1960,

aimed at curbing the price rise, also helped the slow down of the economy. These policies included restricting the monetary and credit expansion with direct bearing on investment expenditure, as well as the postponement or abandonment of some public building projects.¹ Investment in manufacturing and mining and construction as well as total investment slowed down as a result of the restrictive policies (see Figure 3). The rate of growth of output, already slowed down because of the shortage of a complementary factor input (foreign exchange), was further reduced by the fall in investment. In addition to monetary/fiscal measures, direct methods of price control such as imposition of ceilings on the price of certain foodstuffs and services were also used.²

The contraction phase of this cycle coincided with the economic reforms of 1961 (formulated in 1960 and implemented in 1961) and was lengthened by its effects. The aims of the reform were: further development of the decentralization of decision making, reforming the price system and reduction of distortions in price structure, decentralization of the credit system, development of semi-independent communal banks, liberalization of foreign trade through abolishing multiple exchange rates and establishing a unified and devalued exchange rate, and the replacement of ad-hoc restrictions on trade by a system of custom tariffs.³ The new banking system was to be responsible for extension of short term credit for working capital to enterprises while the Social Investment Funds were to remain the source of long term credit for investment. Neither enterprises nor banks were accustomed to this methodic division and distinction between different kinds of credit. The outcome of the confusion was the interchangeable use of short and long term credit, shortage of working

1. ESOE 1960, Chap. I, p.55 and ESOE 1962, Part I, Chap. II, p.47.

2. D. Milenkovitch (1971), pp.109, 169-171. These ceilings were to be imposed by communal councils.

3. Official exchange rate of the dinar was devalued from 632 per one US dollar to 750 from January 1, 1961. In practice, however, many industries benefitted from preferential exchange rates. For the 1961 reforms see ESOE 1960, Chap. I, p.56; ESOE 1961, Chap. I, p.45; and D. Milenkovitch (1971), pp.122-123.

capital and a high degree of illiquidity and mutual indebtedness in the economy.¹ While the downturn of the cycle was not precipitated by the 1961 reforms, the length of the contraction phase and its amplitude was adversely affected by the reforms.

The lower turning point was reached in the middle of 1962. The upturn took place partly because the existing volume and rate of growth of investment (and other components of domestic demand) did not warrant any further decline (the floor), and partly because the restrictive policies of the last one and a half years were abandoned from mid-1962.² Thus began the expansion phase of the fourth cycle. This phase witnessed the stepping up of expansionary activities in two directions.

Firstly, through State intervention, arrangements were made for mutual clearing of debts so that by the end of 1962, accounts payable were 70% lower than the previous year and the ratio of trade credit to enterprise sales reduced from a peak of 17.9% in September 1961 to 12.1% in December 1962.³

Secondly, the enterprises and communal banks soon adjusted themselves to the new credit system and, making use of the prevailing easy monetary policy, stepped up the investment activity in all fields (see Figure 3) and this, in turn, stimulated the expansion phase of the cycle. The acceleration of the growth of the economy was accompanied by the two familiar consequences mentioned before: deterioration of balance of payment and inflation.

The growth of industrial production as well as other sectors of the economy, coupled with the relatively more free foreign trade, resulted in a rapid increase in the level of imports (industrial and agricultural goods) which was not matched by a corresponding rise in the level of exports. In fact, even though in 1962 and 1963 exports had played an

1 Accounts payable in the enterprise sector increased by 50% from end of 1960 to the end of 1961. B. Horvat (1971b), pp.124 and 182.

2 ESOE 1961, Chap I, p.47.

3 L.D. Tyson (1977), p.287 and B. Horvat (1971b), p.125.

important role in the recovery, inflation made them less competitive and by the end of 1963 and 1964, their growth rate was dwindling (see Figure 4). In 1963 the imports of agricultural goods increased by 62% (exports by 28%), while in 1964 the imports of industrial goods rose by 35% (exports by 15%). Balance of payment deficit deteriorated by 35% in 1963 and a further 61% in 1964.¹

The second consequence of the expansion phase and growth process was inflation. The expansion of the economy together with easy monetary and credit policies resulted in the rapid increase of various monetary indicators (money supply, total liquid assets, etc.) as well as various components of demand (especially investment). Both factors contributed to the development of an inflationary situation. In 1964 the producer's price of manufactured and agricultural goods increased by 5 and 24% (in 1963 the corresponding rates were zero and 10%), the cost of living index by 12% (against 6% in 1963), and personal incomes by 26% (against 19% in 1963).² As a U.N. report correctly pointed out, the expansion of demand, particularly the fast rate of growth of investment expenditure has been the principal factor underlying the inflation.³ From September 1964, therefore, an anti-inflationary policy was embarked on in the hope of curtailing investment and, to a lesser extent, consumption. This policy consisted of the following measures: the blocking of 25% of the liquid assets of enterprises, an increase in the required reserve ratio on bank deposits from 20 to 30%, a reduction in consumer credit and the blocking of 15% of budgetary revenue.⁴

The draining of foreign exchange reserves acted as a brake and slowed down the rate of growth. The slow down was further encouraged by the monetary and fiscal measures of 1964. The upper turning point was therefore reached.

1 *Jugoslavija* 1945-64, pp.97, 142 and 197.

2 *Ibid.*, pp.64, 230-231 and 235.

3 *ESOE* 1964, Chap. II, p.66.

4 *Ibid.*, p.67.

2. The Fifth Industrial Cycle (1964-69)

This cycle coincided with the 1965 socio-economic reforms and under its influence became the most erratic of all cycles since the establishment of the new economic system in 1952. The contraction phase began with a deterioration in the balance of payment and counter inflationary policies adopted in September 1964. As these policies did not seem to be able to control the rising prices, further restrictions were deemed necessary. In January 1965, a series of measures aimed at slowing down the investment expenditure of the enterprises were decided upon. These measures were then followed by the general price freeze of March 1965.¹ Although in this way the inflationary pressure was checked by mid-1965, the period of relative price stability was to be very short lived. The 1965 reforms (July 1965) were to herald in a new wave of inflation.

The 1965 reforms aimed at eliminating some of the structural shortcomings of the economy (such as the dual price structure) and transforming those features of the system which were incompatible or inconsistent with the principle of self-management and enterprise autonomy. In order to remove price anomalies, steps were taken in two different directions: the liberalization of foreign trade (to narrow the gap between domestic and international prices) and allowing the prices of raw materials, agricultural goods and services to rise (to narrow the gap between these products and manufactured goods). The price freeze of March 1965 was therefore lifted towards the end of July. But the consequence of price reforms was very drastic. Between July and August 1965 the retail price index increased from 118 to 148, prices of agricultural products by 32%, transportation by 26%, construction by 22% and various services by 45%, while the industrial goods prices increased by only 14%.² The rapid price increase enabled

1 ESOE 1965, Part I, Chap. II, pp.97-98. A major problem at this time was the shortage of working capital and increased illiquidity and indebtedness. The January 1965 decisions, therefore, included measures aimed at prohibiting enterprises from spending more than 80% of their investment outlays on fixed assets, and establishment of a special reserve (10% of investment outlays of each enterprise) to meet excess costs.

2 *Ibid.*, pp.99-100

-and at the same time compelled - the workers' councils to use their newly acquired power to push up wages (see Chapter Three for details). The nominal personal incomes increased by 35% in 1965, though due to price increases real personal incomes rose by only 4%.¹ Barely two weeks after the initiation of the reforms, the increases in prices and wages forced the government to intervene again and impose price ceilings on some commodities. These ceilings remained in force until June 1966 when some of them were gradually removed.²

The restrictive credit/monetary policies initiated in late 1964 and 1965 (mentioned at the beginning of this section), continued throughout 1965, 1966 and 1967, though it took some time before the inflation was tamed. By then the slow down had developed into a full scale recession. Table 7, below shows the volume of monetary aggregates and credit in the economy in the post-reform period.

Table 7 - Annual Rate of Growth of Money and Credit (%)

Year	Money Supply M_1^*	Liquid Assets M_3^{**}	<u>Credit to Enterprises</u>			Consumer Credit +
			Total	Working Capital	Fixed Capital	
1965	4	13	..	16	..	-23
1966	5	6	18	27	16	-15
1967	-2	2	14	14	14	-23
1968	24	18	18	17	19	66
1969	12	15	17	18	17	15
1970	18	16	18	17	19	42
1971	14	14	14	13	15	1
1972	38	36	15	19	12	-9
1973	37	32	17	27	8	28
1974	26	23	11	6	16	54
1975	32	29	25	29	22	51

Notes: * M_1 = Total means of payment, i.e., currency in circulation, sight deposits and floats

** M_3 = Total liquid assets consist of M_1 plus savings and restricted deposits

+ End of Year

Sources: SGJ(1970), p.256; SGJ(1974), p.298; SGJ(1976), p.291; Indeks, no. 5, May 1968, p.46; no.12, Dec. 1972; and no. 5, May 1976, p.46

3 SGJ(1970), p.264

4 G. Macsich (1969), p.222 and ESOE 1966, Chap. I, p.61

The tight money policy of 1965-67 can be clearly observed in the above table. The money supply M_1 ¹ increased by 4, 5 and -2% in 1965, 1966 and 1967; and total liquid assets M_3 ² by 13, 6 and 2%. Consumer credit declined by 23% in 1965, 15% in 1966 and 23% in 1967. In the sphere of enterprise credit, however, the government was not equally successful, as can be seen in Table 7. This can be explained by, on the one hand, the willingness of the banks to lend to enterprises according to the merits of each case and, on the other hand, the system of automatic right to credit that existed in Yugoslavia at the time.³ In 1966, some of the shortcomings and inconsistencies of the credit system (like guaranteed credit) were removed, making pursuit of a tighter policy possible. The growth of various types of credit, therefore, slowed down in 1967 (see Table 7).

The essential point here is that because the control of inflation was seen as supreme, anti-inflationary policies were regarded as necessary even in 1966 and 1967 when the recession was well under way. The policy makers, it seems, did not believe that the economy was experiencing a cyclical fluctuation.⁴

As a result of the restrictive measures of 1965-67 and as a reflection of economic slow down (influence of output), the investment expenditure slowed down from the peak of 1964 and in some branches (notably manufacturing and mining) continued for quite some time (see Figure 3). The sluggishness of investment expenditure, as an OECD report in 1967 put it, was the most important reason for the stagnation of production.⁵ The economic reforms

1 M_1 , the total money supply consists of currency in circulation and those deposits of households and work organizations that can be used on sight.

2 M_3 , the total liquid assets, is the sum of money supply (M_1) and all other deposits (savings and restricted). For definitions of the monetary aggregates see D. Dimitrijević and G. Macesich (1973), p.241.

3 Government agencies and enterprises had an automatic right to obtain credit once they could satisfy certain pre-set conditions. At the same time commercial banks had sufficient liquidity guarantee from the National Bank, ESOE 1966, Chap. I, p.60. This system was of course incompatible with the requirements of an independent banking system and eventually had to be scrapped.

4 At the end of 1966, a National Bank report pointed out that although the restrictive measures had succeeded in limiting the expansion of money supply, "their restrictive effect was not sufficient" and they must continue; B. Horvat (1971b), pp.184-185.

5 Quarterly Economic Review (QER, from now on), no.4, 1967, p.4.

of 1965 created institutional changes to which the enterprises could adjust only after some time. This, coupled with the frictions and confusions resulting from the reforms contributed to a further slow down of the economy.

The trough of the fifth industrial cycle was reached in the third quarter of 1967 and from late 1967 the restrictive policies were gradually abandoned, starting with the easing of conditions on consumer credits and a hint at reflation in 1968.¹ An important factor contributing to the turning point (in addition to the still strong investment floor) was the significant consumer demand generated by the generous wage policy of the enterprises. Total consumption (in constant prices) increased by 7% in 1967 while the social product and industrial production rose by 2% and -2% respectively.² The expansion phase of the cycle followed the familiar pattern. The easy monetary/credit policy (see Table 7) and relative stability in foreign trade transactions facilitated the growth of the economy. The stimulus for growth was provided by investment and consumption expenditures.³

The expansion of 1968 and 1969 took place in an atmosphere of relative price stability (particularly in 1968) as the prices of basic industrial raw materials and services were largely under control. But as Table 8 shows, these prices began to accelerate from 1969. The producers' price of industrial and agricultural goods increased by 3% and 6% in 1969 (against 0 and -3% in 1968), the retail prices of these two groups by 7 and 5 per cent (against 5 and 2% in 1968), the cost of living index by 8%

1 *Ibid.*, p.5 and ESOE 1967, Chap. I. pp.94-95.

2 SGJ(1974), p.142. It should be noted that the generous wage policy coupled with enterprises' ability to borrow from banks created a serious state of illiquidity and mutual indebtedness from mid-1967. This also had an adverse effect on investment. See V. Dubey (1975), p.259.

3 The rate of growth of investment in this period was not very high (especially in Manufacturing & Mining) due to the decline in output (as well as industrial activity) and appropriation of a bigger share of the output cake in the form of wages. The behaviour of industrial investment is probably a major reason for the short expansion phase of this cycle.

(against 5% in 1968), and nominal personal income by 15% (against 10% in 1968).

Table 8 - Annual Rate of Growth of Prices and Incomes (1966-75) (%)

Year	Producers' Price of		Retail Price of		cost of living index	Average Net Personal Income	
	Manufac- tured goods	Agricul- tural goods	Manufac- tured goods	Agricul- tural goods		nominal receipts	real receipts
1966	12	17	26	20	24	38	11
1967	3	-3	5	2	6	14	7
1968	0	-3	5	2	5	10	4
1969	3	6	7	5	8	15	6
1970	10	18	9	13	11	18	8
1971	16	25	14	17	16	22	5
1972	10	24	18	16	17	17	2
1973	12	24	17	21	20	16	-5
1974	30	14	30	16	21	28	6
1975	22	14	26	23	25	24	-1

Source: SGJ(1970), p.264; SGJ(1976), p.298; and SGJ(1977), pp.303, 305-6, and 310.

The expansion also resulted in a gradual rise in the level of imports unmatched by extra exports. The inflow of foreign capital in the form of loans (British and World Bank) and foreign investment compensated the trade deficit in 1968. In 1969, however, the deficit reached an alarming size. Imports of agricultural goods rose by 25% while that of industrial goods rose by 18%.¹ In October 1969 the interest on sight and time deposits were raised to attract more foreign exchange into the Yugoslav banking system.²

The deterioration of the foreign trade situation coupled with the effects of the slow-down in industrial investment in 1966-69 period (Figure 3) were the main factors responsible for reaching the upper turning point of the fifth cycle in 1969. Certain structural problems such as the low growth of basic industries compared to that of manufacturing industries (due to the inability of the former to raise their product prices

1 SGJ(1970), pp.126 and 154.

2 The Yugoslav workers working abroad usually keep deposit account in foreign currency with Yugoslav banks and can draw on their deposits at home and abroad. The above measured was aimed particularly at this group of depositors. See QER, no. 4, 1969, p.9.

in the face of rising input costs) also acted as brakes on the expansion of the economy. The developments in the following year, especially further deterioration of balance of payment made the slow-down certain.

The fifth cycle was one of the longest and most erratic industrial cycles in Yugoslavia. The contraction phase was prolonged by the effects of economic reforms of 1965. The stabilization of the situation after the reforms and their long term effects helped the economy to recover from the recession. The wage/price spiral and the foreign exchange ceiling, however, set the mechanism of slow-down in motion.

3. The Sixth Industrial Cycle (1969-74)

The last cycle in the self-management period was somewhat different from all previous ones. It was a prolonged but mild cycle with small amplitude. Early in the downswing phase there existed a possibility of an upturn (early 1971), but the factors which could bring about a turning point were not strong enough and contraction continued (Figure 2). The relative stability of the movements of the economy (reflected in small amplitude of the cycle) was due to two major factors. Firstly, the government embarked on a massive intervention programme to control markets, prices, incomes and foreign trade even though this meant a partial reversal of self-management principles.¹ Secondly, the absence of untimely reforms and changes of strategic priorities prevented the economy from erratic movements reminiscent of the mid-sixties.

The characteristics of this cycle were: rapid inflation, temporary improvement (followed by deterioration) of balance of payment, sluggish investment and enterprise illiquidity. The control of inflation is particularly significant in the Yugoslav economic system since rapid price/wage spiral can destabilize the economy from several directions (overheating of the markets because of an increase in government spending and investment demand,

1 Horvat maintains that in the first half of the seventies, the enterprise autonomy was reduced to its "lowest point since 1955", as a result of the State intervention. B. Horvat (1975), p.11.

increase in enterprise indebtedness and illiquidity, etc.).¹ As the inflationary pressure in Yugoslavia has been due to a variety of reasons, the anti-inflationary policies have also varied from one period to another. Among the most relevant factors contributing to inflation, we can mention: the growth of excess demand (enterprises, government agencies, and households), wage rises in excess of productivity, structural deficiencies accounting for the slow growth of supply, devaluations of 1971, 1973 and 1974, and increased defence spending (following the Soviet invasion of Czechoslovakia and increased political tensions in the Balkans). In the early seventies (1970 and 1971), the anti-inflationary policies were primarily concerned with controlling the excess demand. By 1972 the enterprises had shifted to the regulation of personal incomes and by 1974 attentions were concentrated on the structural shortcomings of the system.

The contraction phase of the cycle started with the shortage of foreign exchange and the deflationary measures of late 1969, followed by the stabilization programmes of 1970-71. It was also partly due to the reduction in aggregate demand in the foreign sector. In 1970 the balance of payment deficit increased by 81%² and contributed to the slowdown of the economy. The dominant view, in this period, regarded the inflation as a "demand-pull" type³ and, as a result, the anti-inflationary measures included⁴: the imposition of a higher deposit requirement for imports (April 1970); the introduction of a valorem tax of 5% on all imports

1 Particular attention should be paid to the following aspects:

i) Wage and price increases result in a rise in the government revenues through income tax and turnover tax. Considering the dominance of the 'balanced budget philosophy' and the fact that the State revenue is distributed to autonomous lower units, an increase in the revenue will automatically lead to increased expenditure and overheating of the markets. K. Bogeov (1969), p.100 and B. Horvat (1971a), p.157.
ii) Wage increases not financed by price rises (because of price control), makes self-financing of investment difficult, increases the credit requirement of the enterprises, and their indebtedness and illiquidity.
iii) Inflation makes exports less competitive and imports more attractive and results in deterioration of the already tight balance of payment and retardation of growth.

2 SGJ(1974), p.237.

3 OECD(1972), p.17.

4 QER, no.14, 1970, pp.3-5; OECD(1972), pp.51-52; and V. Dubey (1975), p.17.

(July 1970); increasing the restrictions on consumer credit; the imposition of price freeze on some commodities such as flour, sugar, oil, fat etc., and making the prior approval of the relevant government agency necessary for any price change (October 1970); the extension of these controls on prices for a further three months (January 1971); the imposition of a maximum limit of 11% on the rise of personal incomes in the first three months of 1971 (December 1970); the introduction of "social agreement on incomes"¹ (December 1971); and the immobilization of a portion of federal revenue in separate bank accounts (1971 and 1972).²

At the same time, monetary and credit restrictions were also introduced so that the investment and government spending may be restrained (Table 7).³ Enterprises with liquidity problems were regarded as the particular target of restrictive policies since they were seen to be contributing to inflation by embarking on investment projects without having first secured sufficient financing. In June/July 1971 these enterprises were prohibited from undertaking new investment before having sorted out their debts. They were also prohibited from obtaining investment credit from banks. In July 1972, it was decided that from January 1973 enterprises would have to reduce their personal income payment by about 10% to pay back some of their debts and increase their liquidities.⁴

The effect of these policies was that from 1970, investment expenditure began to slow down (Figure 3) while the growth of consumption expenditure was stabilized at its previous level of 8%⁵, and thus the rate of growth of the economy slowed down (Figures 1 and 2). While the slow-down in 1970 was due to the slow-down of exports accompanied by sharp rise in imports, the

1 The social agreements on income is discussed in detail in Chapter Three.

2 The expenditure limits over the previous year was 10.8% in 1971 and 14% in 1972. The federal revenue in excess of the maximum expenditure limit was 'sterilized'.

3 The growth of money supply (M_1) and other liquid assets (M_3) in 1972 showed a sudden rise, despite restrictive policies (see Table 7). This was due to the large trade surplus in current accounts in 1972. More on this later.

4 OECD(1972), p.52 and OECD(1973), p.52.

5 SGJ(1974), p.142.

continuation of contraction phase in 1971 and 1972 was due to the slow-down of other components of aggregate demand. Despite the slow-down of the economy, inflation continued to remain the number one economic problem. Despite direct price control measures such as freezing the prices in November 1971 for a six month period¹, the wholesale and retail prices and cost of living index continued their rapid growth in 1970 and 1971 (Table 8). At this point the attention of the policy-makers was drawn to other explanations of inflation.

By now, a large group of economists and policy-makers regarded the inflation to be of the 'cost-push type'.² Others regarded the structural deficiencies of the economy to be responsible for the inability of the aggregate supply to match the demand. Firstly, therefore, measures were taken to regulate and slow down the personal income payments. In December 1972, the personal income of workers in non-economic activities was frozen for six months (affecting about 30 per cent of the work force)³, while further stress was put on the implementation of the social agreements on personal incomes. Secondly, the lack of balance between agriculture, services and basic industries on the one hand and manufacturing industries on the other, was to be sorted out by selective expansion of those sectors which had suffered from inconsistent and inefficient price control. This particular step also helped to assuage the fears of a recession expressed by some observers after three years of slow-down. In 1973 and 1974, some of the administered prices were allowed to increase to restore some kind of balance between various activities, even though this contributed to inflationary pressure.⁴ The Federal Executive Council announced measures of reflation aimed selectively at the "priority sectors", (i.e. those suffering from price distortions and other bottlenecks) such as energy, basic materials, transport and agriculture. These measures supplemented

1 OECD(1972), p.52.

2 OECD(1973), pp.8 and 15.

3 OECD(1974), p.45.

4 OECD(1974), p.5 and OECD(1975), p.42.

by others during the year, included: stimulation of economic investment particularly in the primary sectors, freeing some of the blocked enterprise accounts, reduction or the abolishment of deposits required for imports, deferring payment of custom duties on imports destined for the priority sectors, easing of the conditions on obtaining foreign loans for the development of the priority sectors, reduction of deposit requirements on investment projects¹, and reduction of the proportion of investment financing coming from internal resources of the enterprises (self-financing requirements).² Although these measures were effective in checking the slow down and bringing about the turning point of the cycle, they were unsuccessful in slowing down the inflation. Despite the fact that in February 1973 a decision was made to roll back the prices to their 1972 (December) level and freeze them for six months³, nevertheless, as Table 8 shows, the wholesale and retail prices and cost of living index continued to grow at rapid rates in 1972, 1973 and 1974. The growth of nominal personal income, though still considerable, slowed down slightly in 1972 and 1973 so that the growth of real personal incomes was sharply checked in 1973 when they declined by 5% (Table 8).

The end of the contraction phase was also aided by the improvements in the foreign trade balance in 1972-73. The 'current account' was actually in a surplus in both 1972 and 1973.⁴ Having built up this surplus, the expansionary programmes could proceed without the usual bottleneck of foreign exchange availability.⁵ The Resolution on Economic Policy for 1974, passed by the Federal Assembly in December 1973, continued to emphasize the reflation of the economy. The reflation was to take place

1 This is one of the tools often used by Yugoslav authorities to 'regulate' the volume of investment. Enterprises are required to place in frozen accounts guarantee deposits (about 10% of the estimated cost of the project) until the completion of the project.

2 OECD(1974), pp. 48-9 and 52; and OECD(1975), p. 40.

3 OECD(1974), p. 46.

4 *Ibid.*, p. 14, Table 2.

5 The main reasons for improvements in the foreign trade situation were: slow down of production, lower pressure of domestic demand, devaluations of 1971 (twice) and 1973, increased tourist earnings and remittances from the Yugoslav workers abroad and increase in the number of joint ventures with foreign businesses.

by stimulation of investment and consumption expenditure and by measures to increase the share of productive investment (particularly in the priority sectors). Later on in the year, measures aimed at the restoration of the easy credit policy such as the removal of restrictions on consumer credit, the reduction of required reserve ratio on sight and time deposits were also decided upon.¹

As a result of the expansionary policies, the rate of growth of investment (in real terms) began to increase from 1974; total investment by 9%, investment in Manufacturing & Mining by 19%, expenditure on equipment by 40% (Figure 3). Total consumption expenditure (in real terms) also increased by 7% after two years of stagnation.² The year 1974, thus witnessed the turning point and the expansionary phase of the sixth industrial cycle (Figure 2).

The anti-inflationary programme continued, though mistakenly, to concentrate on the structural aspects of the inflation and therefore the need to develop the supply side, particularly in the priority sectors. This was in line with the economic policy pursued from late 1973 onwards, i.e., a reflationary programme. But as experience has shown, in a situation like Yugoslavia where the pressures of demand, the effects of international trade and the ability of producers to alter their price level coexist with the structural problems, any reflationary policy would be inflationary. As Table 8 shows, the rate of growth of prices and the cost of living index continued to grow in 1974.

The balance of payment situation also changed very rapidly. The improvements in foreign trade in 1972 and 1973 made further liberalization of trade possible and this brought about a rapid rise in imports unmatched by the rise in exports. The expansionary measures of the years 1973 and 1974 resulted in an unexpectedly fast decline of foreign exchange reserves, certainly faster than was envisaged. The imports of industrial goods

1 OECD(1974), p.53 and OECD(1975), pp.43-48.

2 SGJ(1976), p.136.

increased by 38% in 1973 and 65% in 1974 while those of the agricultural products rose by 60% and 72% respectively in the two years. The trade deficit widened by 67% in 1973 and 173% in 1974.¹ The movement of exports and imports can be seen in Figures 4 and 5. The sharp rise in imports in 1973 (and to a lesser extent in 1974) was partly due to the shortage of rainfall leading to the lowering of reservoir levels and a reduction in the production of electric energy. This resulted in large cutbacks in power production and increased dependence on the import of coal and oil (as substitutes for hydroelectric power) as well as other goods.² The quadrupling of the oil prices was another reason for the sharp rise in imports.

The expansion phase of this cycle thus came to an end in 1974 with the deterioration of the foreign trade situation and the operation of foreign exchange constraint. At the same time, inflation continued to remain the number one economic problem. The speed-up of growth in 1974 was achieved at the cost of soaring prices and a widening trade gap. The slow-down of production in 1975 eased the pressure on foreign exchange reserves and the index of foreign trade deficit began to decline (Figure 5). The slow-down of production became definite as stabilization became the keynote of 1975 economic policy.³

V. Summary and Conclusions

Short term fluctuations in the level of economic activity occur in capitalist as well as in socialist economies, though the factors contributing to the fluctuations are different for each particular economy. Although recently some attention has been paid to the cyclical pattern of growth in socialist countries, most of the work on the subject is related to, and based on the experience of, advanced capitalist economies.

1 SGJ(1976), pp.156, 183 and 231.

2 In December 1973, of 16 reservoirs in the country, seven were totally dry and six were dangerously low. QER, no.1, 1974, p.7.

3 Only after the anti-inflationary policies of 1975 and 1976 (composed of a high dose of discretionary measures) did the inflation begin to slow down. See QER, no.1., 1975, p.3 and OECD(1976), pp.18-20.

Yugoslavia, being a 'hybrid' economy, shares some features of her economic system with capitalist economies and some with socialist economies. Therefore the destabilizing factors of both economic systems find fertile ground for operation in Yugoslavia. In fact, in her short history, Yugoslavia has manifested sharper business cycles than any of the developed capitalist countries or the European socialist countries.

The experience of market economies shows that the working of competition coupled with the absence of coordination between the activities of decentralized decision making units in the spheres of production and consumption, lead to business cycles. The cyclical movement is the result of the overshooting or undershooting of optimum capital stock level when making investment decisions. This mathematically, is represented by the multiplier-accelerator interaction. The movements of the economy are then modified by the operation of ceilings and floors that prevent the economy from indefinite expansion or contraction.

In a planned economy, however, distortions of this type are expected to disappear if the planners have complete knowledge of all relevant variables and if they do not behave subjectively with regard to the constraints imposed on the economy from within and without. The investment activities are coordinated centrally and so is the supply of consumer goods, producer goods and effective demand. The possibility of overshooting and undershooting the investment or growth targets are therefore less likely. As far as the existence and operation of constraints to the growth process are concerned, most of the socialist economies are subject to some major constraints of one form or another. The operation of these buffers does indeed produce some form of cyclical fluctuation depending on other properties of the economy. The consequence of disregarding the barriers to growth have been pointed out by various contributors to the subject at least with regard to the USSR and Czechoslovakia.

But in addition to the mechanism of investment decision, allocation

of investment to various sectors and the working of the internal factors, there is also the possibility of external forces affecting the growth pattern. Periodic shocks, random or otherwise, affect the movement of the economy and can produce cyclical behaviour. Of course in the final analysis, the external factors have to work their way into the system through the internal properties, i.e., the consumption and investment functions, lag structure and other relevant parameters. An excellent mechanical example provided by Kendall illustrates this point: the vibrations experienced by different automobiles travelling on a bumpy road differ widely according to the type of the car and the effectiveness of its shock absorbers.¹ In the same way, different economies (and more so, different systems) behave differently towards a similar external shock as their structure and mechanism of reacting to an external shock differ.

In terms of the experience of the socialist countries, most of the relevant contributions have emphasized the role played by external factors. Particular periodic shocks such as changes in priorities and development strategy (transition to NEP in the USSR, for instance), economic reforms and sudden shifts of resources towards armament industries, result in fluctuations in the level of activity with its duration and amplitude depending on the extent of the change brought about by the shock.

The Yugoslav economy was shown to have experienced six industrial cycles in the post-war period with durations varying from 2 to 7 years. The importance of various factors has changed as the economic system has undergone numerous changes and reforms. While, in the central planning period the influence of periodic shocks was predominant, the self-management period witnessed the increasing importance of market and the decentralization of investment decisions. The main factors behind the economic instability in Yugoslavia have been:

- a. Decentralization of decision making and lack of coordination between

1 M.G. Kendall (1959), p.423.

units. During the fifties the impact of this factor was small due to the limited scope for autonomous decision making by enterprises as well as the existence of central control on the level and composition of investment. But after the abolishing of the social investment funds and further devolution of investment decisions, the importance of this factor grew. While the absence of central planning may have saved the economy from consequences of irrational and voluntarist methods, it also left the economy susceptible to the possibility of overshooting and undershooting investment targets. In this process, the role played by investment expenditure becomes crucial. In the pre-1963 period, the relationship between industrial production and investment was not a straight forward one to one correspondence type, and the effects of expanding or contracting the output on investment expenditures were far from clear. In 1952-55 period, when the output was progressively expanding, investment expenditures were falling while in the 1956-60 period when the economy was fluctuating, investment expenditures were growing constantly. But with further improvements of the self-management system and further transfer of the locus of decision making to enterprises, the relationship between investment and output became a market determined relationship. As output expanded, investment expenditures also expanded (with some lag) and helped further expansion of output (via multiplier). Similarly in the downswing, the growth of investment was slowed down, easing further contraction of the activity until the level of induced investment reached a minimum and the lower turning point was arrived at.

The above argument is further supported by the fact that in the course of the development of self-management, the investment expenditures have become much more sensitive to variations in the level of economic activity. This is because the dominant sections of the enterprise management have become increasingly biased towards high-investment and rapid-growth policies, as discussed in Chapters One and Three. Any increase in the level of aggregate demand or any improvement in the market position of

an enterprise would act as a stimulus for its managers to increase investment.

b. Constraints to growth. Foreign exchange was shown to be the principal barrier to the growth process during the expansion phases of all six cycles. In the process of expansion the emphasis on imports increases while the growth of exports tends to decline - or at least remain lower than that of imports. The imports of industrial goods increase as the industrial production speeds up while the imports of manufactured consumer goods and agricultural products grows as the domestic demand builds up. Exports cannot rise at the same rate because, firstly, the international market may not be booming like the domestic market and, secondly, some exporter may find it more profitable to switch to domestic market (particularly if there exists some room for manipulation of prices). The outcome is a deteriorating balance of payment deficit which slows down the growth of the economy and brings about an end to the expansion phase. Only when the economy slows down, the pressure on foreign exchange reserves is eased. We have shown that all six industrial cycles were subject to this barrier and that after the reorganization of foreign trade in 1952, the movement of the index of imports was almost fully synchronized with that of the industrial production.¹

Other constraints such as the capacity of basic industries (energy, metallurgy, etc.) have occasionally posed as bottlenecks to growth as well. In 1969 and 1974 the upper turning point was reached as a combined effect of foreign exchange constraint and other bottlenecks.

c. Periodic shocks of different forms. The first cycle was principally brought about by external factors (though the influence of foreign

1 In 1966 the imports as well as trade deficit experienced an additional peak (unmatched by the industrial production). The reason for this, however, was that the devaluation of 1965 and the liberalization of imports had resulted in a sharp and short rise in imports. In 1969, the severe deterioration of foreign trade deficit, strengthened by other bottlenecks led to the slow down of the economy while the trade gap continued to expand for a short while longer. These are the only two exceptions to the above statement.

exchange constraint was operative). The dispute with the Cominform (resulting in a severing of foreign trade) brought about the slow-down of the economy while the untimely collectivization drive (basically a political intervention), bad harvest, increased allocation of resources to defence industries, and, more importantly, the massive reorganization of the economy on the basis of self-management aggravated the situation and prolonged the slow-down.

Economic reforms were another type of external shock which affected the cyclical pattern of growth. The 1961 reforms, which did not go very deep, sustained the contraction phase for only a short time. The 1965 reforms, however, were much more thorough going and therefore the adjustment of the individual economic and non-economic units to the new conditions took a much longer time. The result was that the duration of the downswing was lengthened considerably and the contraction phase was turned into a serious recession.

d. Economic policies of the government. With regard to the role of government, in addition to the formulation and launching of reforms, even its basic annual economic policy has affected adversely the cyclical movement of the economy. As the expansion phases of the cycles have been characterized by an excess demand situation, and because of the permanent tendency of the enterprises to use their freedom of action in raising prices (a result of increasing the scope of market forces), inflation has been a major accompaniment of the cyclical movements. The anti-inflationary policies, therefore, have been embarked on either at the last stages of expansion or just after the turning point and, in either case, have contributed to the slow-down. This was shown to be the case with the deflationary measures of 1955, 1960, 1964 and 1969. The problem, however, has been one of the extent to which anti-inflationary policies are pursued. At times the fight against inflation has so preoccupied the policy-makers that the anti-inflationary measures were allowed to

remain in force at the cost of prolonging the slow-down. Policies in 1964-7 and 1969-73 were examples of such tendencies.

Of course when the diagnosis of inflation changed from a "demand pull" to a "cost push" and then to a "structural" one, the anti-inflationary policies ceased to be deflationary. It was a fortunate coincidence that the change of notion occurred in the trough of the cycle (1973) and the solution to the structural inflation was in fact expansionary, thus helping the revival. Needless to say, by the end of 1974 the inflation had got worse and restrictive stabilization policies had, again, to be embarked on.

Another aspect of the government's fiscal and monetary policy was that the process of decentralization and development of self-management system had reduced its effectiveness and efficiency. The devolution of fiscal and monetary powers to lower units of administration (republics and autonomous provinces) meant that, firstly, the federal government had little control on the revenues and expenditures of the lower units and, secondly, even if the federal government did want to go through the elaborate mechanism of enforcing a certain type of policy, the administrative lags would be prolonged. Furthermore, the dominance of a balanced budget philosophy in the thinking of policy-makers was to act as an automatic "destablizer" built in the system.

The economic system built according to the model of "decentralized market socialism" and along the principles of self-management is highly unstable. As these principles have been increasingly implemented in economic, social and political spheres, the economic system has been subjected to an increasing number of destabilizing factors. At the same time the ability of the federal government to cope with the cyclical pattern of growth has been greatly weakened by the emergence of autonomous enterprises, banks and lower levels of administration and government. As the last industrial cycle clearly illustrates, an austere stabilization

programme aimed at dampening the fluctuations in the level of activity can be embarked on by imposing tight guidelines on wages, prices, investment plans, financing practices and other relevant variables. But the government can initiate such a programme only, and only if it is willing to restrict some of the powers of economic, social and political organizations, i.e. if it is prepared to limit or even reverse the application of self-management principles.

As far as the future pattern of growth is concerned, no fundamental change can be expected. The foreign exchange constraint, that so seriously limits the expansion phase of the cycles, does not seem likely to be eased in the near future. This is because there is no reason to expect a considerable increase in the exports earnings, the remittances of the Yugoslav workers working abroad or the tourist inflow which would significantly surpass the import requirements.

Concluding Remarks

What is the nature of the economic system based on workers' self-management as it is practiced in Yugoslavia? What are the factors that distinguish this system from the capitalist economic system? How significant are these factors in influencing the behaviour of the economy on micro and macro levels? How has the structure of the Yugoslav economy changed in the course of the implementation of the system of self-management?

These are the main questions with which this thesis has been concerned. Before discussing these questions, however, it is essential to emphasize one major factor in the evolution of self-management. In order to explain why the Yugoslav 'road' was chosen, we have to rely more on political and ideological factors than on directly economic factors. The dispute with the Cominform and its consequences (expulsion from the organization, severance of foreign trade with the East European countries, increased need for defence expenditure, etc.) in conjunction with the specific ideological line which had developed in the leadership of the Communist Party of Yugoslavia, should be regarded as factors much more significant than the poor performance of the economy under the Soviet model of centralized planning. The poor performance of the economy was due to many factors and the experience of central planning was too short and limited to be blamed as a major factor. In fact, the dominance of the political and ideological position of the proponents of the Yugoslav 'road' has continued to be the most important driving force in the further development of the system of workers' management up to the present time. These proponents have pushed forward various economic reforms despite the significant resistance from other sections of the LCY (such as the Rankovic faction in the early sixties and the nationalist factions in the early seventies). Besides, the persistence of a high-growth and high-investment mentality can only be explained by the exertion of strong political pressure from the advocates of self-management.

In the first part of the thesis we examined the organizational structure and the behaviour of the Yugoslav enterprises with reference to areas such as : the distribution of decision making power, the industrial and labour relations, the objectives of the firms, the distribution of enterprise revenue, the determination of wages, the determination of the level and composition of investment, and finally the sources of finance. The following conclusions emerged from the study of these areas: the hierarchical nature of the enterprise organization; the polarization of the enterprise into an influential minority composed of the technical/managerial strata and a largely powerless majority made up of the bulk of the work force in lower skill and qualification categories; the dominance of the views and objectives of the influential executive strata on the organs of management; the existence of economic and political factors for deepening this division of labour and consolidating the position of the upper echelon; the dependence of the earnings of the work force on the performance of individual enterprises, resulting in the emergence of factors such as the availability and age of capital equipment, technology and market structure as the determinants of earnings; the differentiation of the earnings of employees on the basis of the industry and location of the enterprise and along the same lines as those of the distribution of influence; and finally, the dependence of the level of investment on the performance of individual enterprises, resulting in the emergence of grounds for differentiation amongst enterprises, industries and regions in terms of the amount of investment resources they are able to amass.

These issues are, of course, closely inter-related and continually reproduce each other. The prosperous enterprises in the more developed republics can, not only, afford to offer higher wages and better fringe benefits but are also in a more favourable position to borrow from banks and embark on high-growth policies. They are able to use more modern equipment and technical processes which, in turn, result in increased productivity, faster growth and an ability to provide better working conditions and higher remuneration.

ration for their work force. At the same time the larger, more developed and complex organizations have to depend increasingly on the expertise of the technical/managerial strata. This consolidates the position of this strata and ensures the domination of their objectives and goals over those of the other members.

On these issues, how different is the Yugoslav economy from a capitalist economy? The pattern of ownership is certainly an area of significant difference. At least in the industrial sector, the individual ownership of the means of production is completely abolished. Legally, a firm is owned by the Society and its control is relegated to its workers. Due to the particular organizational structure and distribution of power, however, the general work force has little to do with the running of the firm and its real control. The control is, in fact, concentrated in the hands of a small group of professional technical/administrative personnel, the executive strata or the Yugoslav equivalent of the "technostructure" -to borrow Galbraith's phrase. They run the day to day affairs of the enterprises, prepare plans for future work, prepare technical and financial analyses of the operations, etc. In its practice, this strata is motivated by specific objectives of its own: economic, social and psychological. Higher earnings, security of employment, prestige, power, prospect of higher posts in the socio-political structure and similar desires are some of these objectives. The executive strata is highly growth oriented since rapid growth satisfies most, if not all, of these objectives.

In this respect, the 'self-managed' enterprise is hardly different from the capitalist corporation. The shareholders of a corporation are very much on a par with the workers of the Yugoslav enterprise. They are legally empowered to supervise the work of the executives and censure them if necessary. But, in practice, they are in no way able to exercise effective control or supervise the executives. The technical/managerial strata of the Yugoslav enterprise can be compared with the "technostructure" of the

capitalist corporation. They have similar objectives and pursue these objectives in similar ways. Although they wield great power within their firms, their discretion, however, is not unlimited. They are able to pursue their goals as long as certain constraints are satisfied. Here lies one difference between the two types of firms. The capitalist corporation's executives are constrained by the conditions of the stock market and the possibility of take-over or dismissal if their share prices (or profits) fall below a certain level. Their Yugoslav counterparts will face threat of censure and industrial action if they do not provide their work force with sufficient personal incomes.

There are two more major differences between the Yugoslav enterprise and the capitalist corporation that need to be pointed out. Firstly, in addition to performing an economic function, the Yugoslav enterprise also has a political role to play. The majority of the members of the technical/managerial strata are members of the LCY and act as the vehicle for adopting the League's policies in the economic sphere. At times, they make decisions for purely political reasons even though economic justification for these decisions may not be strong or convincing. The high-investment policy and the growth bias of the Yugoslav enterprises are examples of the effects of the political factor.

Secondly, although the majority of the labour force is deprived of any significant influence in the decision making process, this does not mean that they are in exactly the same position, viz. the management, as the workers of a capitalist corporation. Through rotation of the membership of the workers' councils, management boards and other lower level organs of management, the workers of the Yugoslav enterprises are much better informed about the operation of their enterprise than their capitalist colleagues. Their knowledge of the enterprise functions must be looked at as an extra constraint on the management of enterprises.

The hierarchical nature of the relations within the enterprises has

resulted in a system of industrial relations which is becoming increasingly like that in the capitalist countries. The system of workers' management, it was hoped, would lead to the expansion of democracy at the place of work and an increase in employee participation in decision making. There were even legal stipulations by which the representation of white collar workers on the management organs was limited to only one quarter of the membership. But the actual practice of the system has not justified the initial optimism. The relations within the enterprises have been hardly democratized, and at the same time, there have emerged employee indifference and apathy towards their enterprises together with manifestations of a deteriorating system of labour relations such as increased labour turn-over, absenteeism and strikes. When the Yugoslav workers go on strike, the obvious question is: against whom? On the surface it seems as if they are striking against themselves - the trustees of the society. But in reality, their strike is similar to those of their colleagues working in capitalist firms, i.e., for higher pay and better working conditions. The fact that they are worker-managers makes no difference to them at all.

It should be emphasized here that the effects of the adoption of the self-management system on the hierarchical nature of the organization and the resulting industrial and labour relations are not the same in all enterprises. Certainly, as the enterprises grow larger and technically more complex, the scope for the participation of the production workers in decision making becomes more and more limited. However, in small enterprises, the wide knowledge of the work force about the operation of the firm as a whole puts them in a position where they can exercise effective control on the management organs.

One of the most important considerations, when comparing the self-managed firm and the capitalist corporation, should be the autonomy of either type of organization and the isolation in which their affairs are decided upon. Both organizations are independent of outside patronage or interference. They

are responsible for their own expansion programmes, including finding the sources of financing their investment expenditures. They decided on their own individual wage rates and market prices. In doing this, they have to take into account the market conditions, i.e., the price of similar goods, the wages of workers in other industries, etc. This independence has been further strengthened in Yugoslavia due to the existence of imperfect product and labour markets. In the advanced capitalist economies sellers' markets are less prevalent and the determination of wages is more market oriented. In Yugoslavia, however, the determination of wages is more closely linked to the performance of individual enterprises and, as such, seriously affected by sellers' markets and imperfections.

The fact that each enterprise decides on its own affairs in isolation from others underlies the development of earning differentials in Yugoslavia. When the earnings of workers are linked to the performance of their enterprises, then factors such as capital intensity, capital labour ratio, the modernity of technical equipment and processes and market imperfections will also exert influence on the earnings of the work force. As these factors vary widely from one enterprise to another and from one region to another, the ground is prepared for income differentials to appear. This, of course, corresponds to the hierarchical nature of the organization and serves the existence of an all-powerful elite of technical/managerial executives.

The relegation of full autonomy could have meant that severe differences would develop among different regions particularly in terms of the amount of resources which became available for investment out of internal resources. The less developed regions would suffer greatly as they, in no way, could raise internal resources like the more developed regions. These are the grounds for intervention by the State. Through the annual budget and special social funds for the LDRs, the State has been able to supplement the internally generated resources of the less developed regions. However, the importance of this factor should not be exaggerated, since many capitalist

countries also have strong regional development policies whereby they pump in extra resources to their less developed areas, resources that would not be generated through the normal functioning of the market system.

The implementation of self-management has reached its most alarming level in the field of investment financing. The possibility of financial investment, in the form of bonds and possibly shares, by individuals or enterprises in some form of a stock exchange is a major departure from the principle that property incomes must be gradually limited and replaced with income from labour. Another departure is allowing the enterprises to use their excess funds, jointly with other establishments, to set up a new enterprise (joint venture) and receive part of its profit as returns to their initial investment. The government's attempts to improve capital mobility requires and necessitates the possibility of financial investment to become popular and widespread. The investors, then, would have to be offered a say in the affairs of the enterprise as well as a share in their profits. Both of these requirements are contradictory to the principles of self-management and can undermine the whole system.

Another similarity of workers' self-management with the capitalist system, which also has important macroeconomic implications, is the absence of coordination between various production units. As a result of the development of self-management and the continuous decentralization of the decision making machinery, the central planning apparatus has had to be dismantled : altogether and central control over the allocation of investment resources through the social investment funds has had to be relinquished. This has meant that the development of individual firms and industries is to a large extent left to their own market position and economic efficiency. There is little opportunity left for the government to encourage or discourage the growth of particular firms or industries. The market forces, in this way, become dominant and all-decisive in the determination of the direction of development.

In the second part of the thesis the behaviour of the economy as a whole

was analysed and such areas as the long run growth pattern, the structural change and short term fluctuations were investigated. The conclusions that emerged from this part of the thesis were: the existence of conditions for rapid and sustained long term growth of the economy as well as of the rates of unemployment and inflation; the emergence of tendencies stimulating and encouraging structural change in favour of the more developed regions; the development of regional differentiations as a result of the decentralization of the economy; the consolidation and stabilization of the private sector and the recognition its permanent and complementary relation to the social sector; the existence of major fluctuations in the level of economic activity; and the emergence of serious destabilizing factors in the system of self-management.

In the post-war period as a whole, Yugoslavia has enjoyed rapid and sustained economic growth accompanied by a rise in the standards of living. But alongside these improvements, there have also appeared some adverse developments which, at times, have overshadowed the achievements of the system of self-management.

Despite the long term growth records, the Yugoslav economy has performed rather poorly in terms of providing work for its labour force. The high rates of unemployment seem to have persisted irrespective of whether the economy has been in conditions of contraction or expansion and, what is more important, the rate of unemployment has been on the increase. This, coupled with the large scale migration of the Yugoslav workers to Western Europe, passing the one-million mark by the mid-seventies, subject the correctness of the Yugoslav 'road' (and all of its institutional accompaniments) to another serious question. This basic tenet of socialism, expounded by various Marxist leaders, that every citizen has the right to work, does not seem to tally with the Yugoslav experience. The reason should be sought in the particular rigidities of the Yugoslav-type labour market and the particular structure of property rights in labour-managed firms. Strangely enough, the employment of the

Yugoslav workers abroad, instead of raising alarm among the policy makers has been welcome as it has reduced the burden of domestic unemployment on the one hand and eased the pressure of foreign exchange constraint on the other.

The decentralization of the decision making process to the republican and enterprise levels has had two major consequences. Firstly, it has reduced the ability of the federal government to determine (and, later, influence) the orientation of the economy and the direction and pace of its development. The legislation in the early seventies explicitly barred the federal government from undertaking investment projects on its own accord (except, of course, in specified and approved cases). Secondly, as the process of self-management has been bound with regional unevenness, the position of the less developed regions and their share of the national resource cake has been threatened and the inter-republican transfer of resources has been tightened. With the increase in the role of the republican authorities and enterprises, the amount of resources that flows automatically into the LDRs would have been greatly reduced had it not been for the intervention by the federal government through the Fund for the Accelerated Development of the Less Developed Regions. The resources of this fund have been used to make up for the shortfall in the internally generated resources. Even with this kind of intervention, the LDRs have not been able to grow significantly faster than the MDRs and the gap between them has continued to survive. The existence and widening of this gap has created a lot of mistrust and bitterness in the LDRs, directed not only against the MDRs but increasingly against the whole practice of self-management which, in their eyes, is politically linked with the MDRs. This bad feeling also creates conditions for furthering disillusion, apathy and dissidence towards the Yugoslav 'road' to socialism. The surfacing of sharp struggles over the question of localism and nationalism in the early seventies was only a manifestation of such developments and is to be expected on an even larger scale in future.

The Yugoslav economy, in spite of long run sustained growth, has manifested a high degree of short term instability. In fact, the fluctuations in the level of total output, industrial production and agricultural production have been sharper than those in the advanced capitalist countries or in the planned economies. The factors underlying economic instability consist of: the absence of coordination between economic units; the increased sensitivity of investment, brought about by the development of self-management, and the accompanying growth bias; the operation of various constraints in the form of ceilings and floors; external shocks (such as the expulsion from the Cominform); and the untimely government policies and economic reforms. The absence of coordination between economic units and therefore the possibility of overshooting and undershooting is the most important cause of cyclical fluctuations under self-management. The existence of ceilings and floors such as the availability of foreign exchange, the capacity of capital goods industries, the availability of skilled manpower; and the minimum level of national expenditure will then determine the timing and the amplitude of the cycles and their various phases. In Chapter Six, we showed that the availability of foreign exchange is the most important single factor determining the limits to economic growth and expansion phases of the cycles.

Unlike the capitalist economies, however, the Yugoslav government has not been able to implement effective and timely counter-cyclical policies. In fact, it has been demonstrated that the untimely application of economic reforms (1950, 1961 and 1965), in the recession phase of the relevant cycles, made the recession longer and more severe. The prevalence, until recently, of the 'balanced budget' philosophy meant that the government's fiscal policies were subject to a built-in 'destabilizer' which could only exacerbate the situation by reducing the aggregate demand in the contraction phases and increasing the pressure on prices in the expansion phases.

The implementation of self-management principles necessitated the devolution of economic and political powers (including areas such as fiscal

and monetary policies) to the constituent republics. Firstly, therefore, the resources at the disposal of the federal government, with which it could influence the level of aggregate demand, gradually reduced. Secondly, in circumstances where comprehensive national policy measures had to be embarked on, the consultation with the republican fiscal and monetary authorities and the need for obtaining their cooperation and consent, resulted in the prolonging of the administrative lags. Both of these consequences reduced the effectiveness and efficiency of the government's stabilization policies. However, the experience of the early seventies has shown that it is possible for the federal government to embark on effective stabilization policies only if it is prepared to take back, from enterprises as well as the republics, some of the powers it had granted them earlier. That is to say, if it is willing to restrict the application of self-management principles.

It should be emphasized at this point that the issue of training the workers for managerial functions has not been taken up seriously in the whole course of the development of the Yugoslav 'road'. Nor have the theories of the labour-managed firm paid any attention to this issue. These theories generally assume that managerial functions can be performed by the workers' representatives without much difficulty. While this assumption may be correct in an economy at a lower stage of social and economic development, such as a peasant economy, it is totally inappropriate in an industrial society with highly developed division of labour coupled with technically complex processes of production concentrated in large production units. The idea that workers on the production line can change their role every two years or so and fill in the managerial slots is, at this stage of the development of the Yugoslav economy, somewhat premature and naive. The technical, financial and administrative management of modern enterprises are specialist fields and the personnel required for such posts need long years of professional training and practical experience. As we pointed out in Chapter One,

the unfamiliarity of the bulk of the work force with management techniques has been the basis of the development of the existing division of labour and locus of decision making power with all the ramifications. If the workers are to be seriously involved in the affairs of the enterprises and participate actively in their running, then they must be slowly groomed and prepared for such functions. It is, therefore, necessary to develop a purpose-built long term programme for education of the work force in such areas as accounting, production management, cost control, investment analysis, etc. Only then can one talk of active and conscious participation by the workers in the management of enterprises. It is ironical to note that the question of training has been raised but recently, and then in some West European countries only -in the context of the discussion of employee participation in management.

Finally an important aspect of the Yugoslav 'road' to socialism is the nature of the social relations that have developed in the course of traversing this 'road'. Relations between the agents of production and the means of production exist, and are continually reproduced, at the level of production, i.e., at the place of work. These relations are reflected, among other things, in the nature of the division of labour between those who plan the production process and its related activities and those who put these plans into operation, ie., the direct producers. Alternatively, one can talk of the division of labour between the administrative tasks and the performance tasks or, as is common in the Marxist writings, between mental and manual labour. Under capitalism, this type of division of labour represents not only the technical but also the social division of labour and is a reflection of the existence of classes. Under socialism, while the technical division of labour will necessarily survive, the social division of labour along the above lines must begin to break down. This will be reflected in the reduction of privileges and benefits associated with supervisory and managerial tasks, in the reduction in the gap between the earnings and other benefits

received by different strata of the work force, and in the growing real participation of the production workers in the decision making process. In the writings of Marx and Lenin, this is known as the "restriction of the bourgeois rights"¹, and is regarded as an indication of the breaking up of the social division of labour. This process must, of necessity, be a conscious one which workers must consciously understand and participate in. But if conscious measures are not taken in order to begin and speed up the destruction of the old social relations, and if a strata of privileged technical/managerial elite with influential positions at the place of work take over the supervision and control of the production process, then the direct producer would be placed in a subordinate position and the old relations of domination of one group by another will be reproduced. At the same time, this type of relation at the enterprise level will give rise to and consolidate similar relations produced at the level of society. The hierarchical organizations, the higher and increasing earnings and the privileges of the upper strata of the hierarchy, the fact that the effective control over the means of production rests in the hands of this strata are manifestations of the reproduction of the old social relations and, as Bettelheim has rightly pointed out, constitutes "the objective basis of the existence of the bourgeoisie".² The economic reforms of the East European type (which have found their most extensive application in Yugoslavia) create the conditions for enhancing the position of the technical/managerial strata by expanding their control and discretion over the lower strata of the work force as well

1 K. Marx, "Critique of the Gotha Programme", in K. Marx and F. Engels (1973), Volume 3; V.I. Lenin, "A Great Beginning" and "The State and Revolution", in V.I. Lenin (1975), among many other writings. Some of the relevant sections of these works are reprinted in K. Marx, F.E. Engels and V.I. Lenin (1975), especially pp. 6, 17-22 and 35-36. Ironically, the discussion of 'the restriction of bourgeois rights' has never gained currency in the political or intellectual circles of those countries where the initial steps for the construction of socialism were taken. (The only exception to this general trend was the widely held forums and discussions on the subject in China during the decade following the Cultural Revolution.)

2 C. Bettelheim (1974), p.94

as over the means of production. They will, in effect, behave as if the means of production were their "corporate property"¹.

Alongside these developments, one can also observe other offsprings of the re-emergence of the old social relations. The interests of the powerful technical/managerial strata are served by all those measures that improve productivity, efficiency, profit and growth. The import of foreign capital, technology and know-how and the legislations sanctioning foreign investment by the capitalist multinationals are some of the measures that serve such interests. The transfer of technology and, therefore the opportunity to learn from the advanced experience of foreign firms in technical and managerial skills, help to strengthen the position of the executive strata and consolidate the relations that have hitherto developed under self-management. The fact that in this process, capitalist multinationals find a foothold in Yugoslavia and that their operations will result in the production of capitalist relations, seems not to have caused any worry or concern among the Yugoslav leaders.² As in the case of previous issues, the most serious aspect of the question of foreign investment is its growing trend over time and the fact that the government is still actively seeking the expansion of joint ventures between the Yugoslav and foreign firms.

The system of self-management has been beset with difficulties. It has not succeeded in solving problems such as unemployment and inflation. Neither has it fulfilled hopes of resolving social conflict. The developments that ensued from the implementation of self-management, have necessitated government actions which undermine the very bases of the system. Self-management, then, has not been able to act as the panacea for the social and economic ills which it was once hoped to be.

1 "Corporate property" under the Yugoslav conditions is parallel to "individual property" under capitalism. For a detailed application of this line of analysis and this concept to the conditions of the Soviet Union, see C. Bettelheim (1974), especially pp. 69-113, and (1976), especially the Preface. Also, in this regard, see P. Sweezy and L. Huberman (1964).

2 Outside Yugoslavia, however, these developments have cast serious doubt over the correctness and validity of the Yugoslav 'road' as an alternative to socialist construction, see C. Bettelheim and P. Sweezy (1971), pp. 3-14.

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The following abbreviations are used for journals:

A.E.R.	American Economic Review
E.E.E.	Eastern European Economics
E.J.	Economic Journal
ESOE	Economic Survey of Europe
J.P.E.	Journal of Political Economy
N.L.R.	New Left Review
Q.E.R.	Quarterly Economic Review: Yugoslavia
Q.J.E.	Quarterly Journal of Economics
S.T.P.	Socialist Thought and Practice
Y.S.	Yugoslav Survey

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