Managerial Structures and Practices in Manufacturing Enterprises: A Yugoslav Case Study

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Prepared by Martin Schrenk
Office of the Regional Vice President
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MANAGERIAL STRUCTURES AND PRACTICES IN MANUFACTURING ENTERPRISES: A YUGOSLAV CASE STUDY

The purpose of this paper is to explore what managerial procedures and practices have evolved in Yugoslavia's manufacturing industries under the Yugoslav system of "Self-Management Socialism," what inferences can be drawn from these observations regarding economic efficiency, and what - if any - lessons can be drawn which might be applicable elsewhere. After an overview of the principal findings, the paper first sketches the main features of Yugoslavia's socio-political system that are relevant in this context. Thereafter it concentrates on the pluralistic framework of management and decision-making (combining elected workers' bodies, union representatives, professional managers and political bodies, cooperating under a system of multiple mutual checks and balances), and on the corresponding complex features of the objective function of the Yugoslav enterprise. The paper concludes with some observations on the strengths and weaknesses of this particular pluralistic system.

This paper rests on extended discussions held during October 1978 with four enterprises of the metal processing industry located in Slovenia, the most northern republic of the Yugoslav Federation. The inexhaustible patience of their staff and the generosity with which they sacrificed long hours of their tight regular work schedules for the interviews were instrumental in arriving at a coherent understanding. We are greatly indebted to the "International Center for Public Enterprises in Developing Countries" in Ljubljana for organizing the discussion program and for commenting on the findings. The advice of the Yugoslav consultants to the survey, - Professors Bogdan Kaucic and Ivan Turk (Ljubljana University) - was invaluable for the interpretation of many observations. Errors of interpretation are of course errors of the author.

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INTRODUCTION

1. Managerial structures and practices of Yugoslavia reflect the philosophical/political premises of "Self-Management Socialism". This system has not yet matured in the sense that an unambiguous code of behavior has been established which unequivocally governs the actions of individuals and organizations, but it is still very much in the process of evolution. The most recent evolutionary leap occurred during the 1970s, when in response to a variety of unsettled social and economic issues the ideological premises came under review, resulting in a new Constitution (1974) and the subsequent complete overhaul of legislation in almost every area. While the new political and legal framework — differing substantially from that of the late 1960s which still underlies most contemporary economic analysis of Yugoslavia's system carried out in western countries — is now largely settled 1/, its full implementation may take several more years of trial-and-error during which the new formal framework and real life procedures will gradually converge.

2. As a result of the fundamental differences of the underlying ideological premises and of their impact on acceptance or rejection of specific management concepts, many of the ground rules of traditional organization theory, based on different ideological premises, do not apply readily. Many of its prescriptive concepts for what constitute "sound managerial practices" — such as individualized accountability; unambiguous and mutually adjusted lines of information, command and control through elaborately stratified hierarchical schemes; association of management with "leadership"; material and psychic rewards reflecting individual responsibilities — go unheeded or are explicitly and sometimes contemptuously rejected. This diffusion of the concepts of authority and accountability may sound as a prescription for confusion and inefficiency. However, such an assessment would only be valid if the underlying organizational and behavioral models of traditional organization theory were applicable; this is clearly not the case, particularly after the recent major changes of ideological premises. Conversely, if one accepts the validity of the proclaimed premises, the managerial structures and practices observable in Yugoslavia exhibit an impressive degree of consistency, both with the underlying premises, with the legal framework derived from these premises and with each other. The question may be raised whether the most efficient procedures consistent with the proclaimed ideological premises are being practiced. The absence of an organization theory for the Yugoslav-type system suggests that this is unlikely to be the case. But in the light of the evidence collected and evaluated in connection with this study, some of the contours of a consistent practical framework for managerial practices and procedures do emerge.

1/ The major unsettled problem is "extended reproduction", (i.e. the mobilization and allocation of investment resources). Compare Veselin Djuranovic, member of the LCY Central Committee and President of the Federal Executive Council to the LCY Central Committee, June 12, 1980, translated in FBIS (Foreign Broadcast Information Service), Daily Report Eastern Europe, FBIS-EEN-80-119 (June 14).
3. In order to set the appropriate stage for discussing Yugoslav managerial structures and practices, it is necessary to outline the particular institutional/legal framework which follows from the ideological premises of Self-Management Socialism and within which economic organizations operate in Yugoslavia. This overview of those premises can not attempt to distinguish between the rules of the game explicitly or implicitly aimed at and those actually followed today. In the present transition phase the borderlines can neither be sharply drawn at any particular point in time nor would they be particularly meaningful even if they could be drawn. For the purpose of this overview of the political environment of the enterprise we will have to assume convergence of intended and actual mode of operation unless there is proof to the contrary.

4. A particular problem has to be faced in the Yugoslav context. For many of the unique concepts a commonly understood and completely matching English terminology does not exist, and their translation into "analogous" terms would create gross misconceptions. This report tries to circumvent the problem by resorting to literal translations from the Serbo-Croatian to the maximum possible degree; these system-specific terms are capitalized throughout. A prime example of the potential for monumental semantic confusion is the term "management" itself. If "management" as a function is considered to comprise all decision-making tasks and if the enterprise as a stratified organization is presented in the usual pyramidal schematization in the Yugoslav enterprise "management" as an institution would have to be presented in three overlaying stratified pyramids by: (a) professional "Operational Management" in the narrow sense; (b) "Self-Management"; and (c) "Socio-Political Organisations," particularly the syndicate (trade union) and the Party (League of Communists). None of the seemingly fitting analogies taken from a different ideological framework—like owner-appointed professional management in a conventional private or state ownership system, stockholders' supervision and workers' participation and their interplay in a host of enterprise decisions including determination of factor income distribution—represent even approximately matching concepts. As a consequence, restricting the analysis to Operational Management would eliminate functions which are crucial for decision-making processes and are integral to both the conventional concept of management, and real-life mode of operation of Yugoslav enterprises. In particular the assumption would be totally inappropriate that "real" power would rest with Operational Management as long as it is able to satisfy the material expectations of its "constituency" (analogous to the position of management vis-a-vis an amorphous mass of mini-shareholders in a capitalist framework), and that accordingly Yugoslavia's managerial practices could be viewed as some kind of benevolent, managerial paternalism or technocratism of the Burnham or Galbraith variety. While such analogies may indeed have been valid to some degree in the late 1960s, this relevance has strongly diminished and is likely to disappear as the spirit of the new Constitution is gradually shaping reality. Conversely, if all three pyramids are included into the analysis, its scope is extended beyond that conventionally associated with "management", and it internalizes some functions which under conventional concepts of management would be regarded as external.
5. This terminological dilemma is resolved throughout this report by choosing the enterprise as the unifying concept for defining the scope of analysis rather than adoption of any particular set of functions associated with a particular concept of management. As will be shown later, even the enterprise concept has to some extent a different meaning in the Yugoslav context. The Yugoslav enterprise typically exhibits a degree of internal decentralization 1/ and simultaneously of close cooperation with other enterprises 2/ which is highly atypical for its apparent twin in most private or state or mixed ownership economies.

6. The discussion of this report frequently refers to the Associated Labor Act, 3/ which is an essential key to the understanding of the modus operandi of the Yugoslav economy. It was promulgated in November 1976, translates the more general provisions of the new Constitution of 1974 into concrete groundrules for managing the economic affairs of society in the spirit of the Constitution, and is frequently referred to by Yugoslavs as "the constitution for the economy." In spite of its formidable volume (671 Articles) it is not a lawyers' law but, due to its directness and concreteness, an essential part of the political/economic reality of Yugoslavia. The frequently quite specific prescriptions of the Act are not an irrelevant formality but they set the framework for managerial structures and practices, and all visited enterprises seem to follow them in almost every detail. Furthermore, all representatives, the line managers, and the members of Self-Management bodies and of the Syndicate and the Party organization within all enterprises demonstrated an astoundingly detailed command of the letter of the Associated Labor Act as well as of its ideological basis and its intended practical purpose.

7. A brief comment on the method applied in this analysis is appropriate. As a case study, it obviously does not rest on statistical data, nor do the observations on which it is based meet the formal requirements for significance in terms of a statistical random sample. As a case study, it rather rests on the evaluation of a large range of observations from in-depth interviews with a very few enterprises, supplemented by an evaluation of the legal provisions, of public pronouncements and of the extensive Yugoslav media discussion of several years regarding the meaning of both "Self-Management and "Socialism." For this kind of approach, few of the observations constitute "hard evidence" or lend themselves to rigorous statistical testing. The only test applicable is that of mutual consistency of observations (within each enterprise, between enterprises, and concerning the system and the economy in general) and of the plausibility and coherence of the "story" emerging from the evaluation as well as its capacity to accommodate the observations in such a fashion that they support each other's credibility. Obviously, the most one can hope for is a hypothesis as to "how the system works," which simultaneously explains and is explained by most of the observations. The possibility of alternative hypotheses of a comparable degree of internal coherence or mutual consistency of observations cannot be ruled out on a priori grounds.

1/ See paragraphs 12, 18.
2/ See paragraph 19.
8. This paper is organized as follows: Chapter 1 is an extended summary of the observations and conclusions presented and discussed in detail in the subsequent chapters. Chapter 2 sketches the premises and the contours of Self-Management Socialism. Chapter 3 presents the macroeconomic background, highlighting the particular position of the metal products industry of the Republic of Slovenia from which the visited enterprises were chosen. Chapter 4 introduces what seems to be the most important feature of management in Yugoslavia: the pluralistic framework of enterprise management, which mirrors the premises of Self-Management Socialism and which is the unifying element in the variety of managerial practices observed. Chapter 5 discusses the implications of the pluralistic management framework on the broad realm of personnel management, where the underlying philosophical premises leave their strongest imprint. Some major elements of the political model of Self-Management Socialism and its expression in organizational and institutional arrangements within the enterprise in what is referred to as the "pluralistic objective function" are sketched in Chapter 6. Chapter 7 propounds some hypotheses on possible effects of the organizational and institutional arrangements and of the pluralistic objective functions on enterprise efficiency. Finally Chapter 8 sketches some of the control mechanisms which follow from the pluralistic management framework.

9. A number of technical issues are treated in the Appendices. Appendix I sets out the basic concepts by which the ideological premises and the corresponding management procedures are reflected in a particular accounting framework and a variety of particular accounting terms. Two recent examples of Self-Management Agreements on computation of personal incomes from enterprise value-added -- a central issue around which many managerial practices are organized -- are presented and discussed in Appendix II. Appendix III evaluates and interprets accounting data for the four visited enterprises and presents some of the macro-economic propositions which are suggested or supported by these data. Appendix IV shows some indicators of social performance. These Appendices demonstrate that the enterprises visited are by no means showpieces (for either economic success or ideological progressiveness) but are probably a realistic cross-section of Slovenian industrial enterprises.
1. Enterprise Management under the System of Self-Managerial Socialism

1.1 The Premises

Yugoslav managerial structures and practices reflect the philosophical/political premises of Self-Management Socialism. In the Yugoslav perception this system transcends both private capitalism and "state capitalism." In the pursuit of the objective to eliminate alienation in social relations to the maximum degree feasible, the state as a regulator of economic affairs is to be replaced by institutional arrangements through which the affected individuals or organizations regulate matters of joint concern and interest directly among themselves. Therefore, and in the endeavor to organize social relations after the Marxian concept of "association of labor," the Yugoslav system has increasingly been reshaped by the twin strive for "decentralization" (i.e. demotion of the role of the state from central level to the lowest possible local level) and "de-etatization" (removal of the state on any level from those functions which could be regulated among the directly affected parties). Hence, the self-managing enterprise, with assets owned by society but with effective control assigned to the workers' collective, has a connotation quite different from the "public enterprise" in a mixed economy with ownership vested in the state, supervision by a state agency, and operation under management appointed by and responsible to the state or its supervising agency. And in the Yugoslav enterprise workers are not part of an internal participatory framework of power-sharing arrangement but, at least in theory, hold internally the monopoly of power, curtailed only by constraints determined by society through legal or contractual arrangements, in the formulation of which the workers collectively participate.

1.2 Organizations and Institutions

Yugoslavia's particular set of philosophical/political premises has led to a framework peculiar to Yugoslavia in which economic units are organized. The building block of the economic system is the "Basic Organization of Associated Labor" (BOAL), the smallest production unit within the enterprise which is technically identifiable and which produces a marketed or marketable output. The BOAL can be as small as 50 workers, and rarely exceeds 500 workers; most enterprises are made up of several BOALs. They are, at least in theory, the main carrier of the enterprise's decision-making power, since (a) all major enterprise decisions require consent by all BOALs, (b) the BOALs are defined legal entities with their own balance sheet and income statement, (c) the BOALs retain permanent control over all financial assets created out of their income, and (d) BOALs can, under certain conditions, choose to split off from the enterprise and either join another one or set up an independent enterprise. However, since the main function of the enterprise is to face the market, and since medium-term planning of the associated BOALs is in the domain of the enterprise, the latter's role remains stronger than the legal provisions in support of the BOAL's autonomy suggest.

1/ Throughout this report BOAL and enterprise are used interchangeably whenever topics are discussed which affect management as an institution or as a function: the distinction of BOAL and enterprise is explicitly upheld only in those instances in which the internal decentralization of the enterprise matters with respect to managerial structures and practices.
12. As a rule, BOALs cooperate within an enterprise and, frequently, enterprises with each other through medium-term contracts regulating mutual delivery conditions, formation of transfer prices, joint medium-term planning and, frequently, pooling of self-generated investment resources which normally remain, however, under the permanent control of the BOAL, which generated them initially. The basis for determining transfer prices are preagreed levels of planned personal incomes, to be realized through the transactions. With the exception of very large enterprises and/or enterprises in priority sectors, the links to the state are confined to the local Commune, the smallest political decision-making and administrative territorial unit. Since political and economic spheres are considered as being both part of a broader symbiotic relationship, they are not sharply separated, and a great number of links tie enterprises and Communes together with guidance and control in either direction. In particular, the medium-term plans of enterprises constitute a part of the medium-term plan of the Commune. Manpower planning and planning of social services on the communal level -- which are to be financed from taxes and contributions from the income of enterprises and distributed personal income of workers as the source of financing -- are the most obvious areas in which enterprise plans and social plans are integrated.

13. Within this system, the concept of the market is accepted in principle but it has distinctly different features from those within a neoclassical model. The concept of "labor market" (with labor power as a "commodity" or as one factor of production among others and commanding its "price" determined by its marginal product and scarcity) has been abolished legally and in substance because of fundamental inconsistency with Marxian philosophical premises. This is fully reflected in accounting practices: Workers do not receive wages and salaries (i.e. a fixed contractual remuneration per unit of time or physical output) which enter into costs of production. Instead the workers have a legal claim to a certain portion in that part of the residual enterprise income (after deduction of material expenditures and monetary depreciation from a gross income) for personal income payments. Similarly, the concept of a "capital market" along neoclassical lines is expressly rejected, because it implies a separation of direct control over the "surplus product" (corresponding to undistributed profits) from the workers who created it, leaving the decisions on its use to an impersonal market mechanism reflecting micro-decisions of a managerial/owner elite. Instead, the surplus product remains under the permanent control of the BOALs which created it and permanently accounts for it in its balance sheet. This greatly affects the role of banks which do not act as autonomous financial intermediaries with a profit-making potential of their own. Instead they are service agents for their members (BOALs or enterprises) who retain the right to allocative decisions, and are fully liable for all the obligations assumed in the name of the bank. Budgets of the state or state agencies are all but eliminated from both mobilization and allocation of investment resources in the economy.

14. The conditions for commodity markets are complex and still in a state of flux. BOALs and, in many instances, enterprises as well, do not act as autonomous units linked with each other through a competitive market mechanism, but to a large extent according to the medium-term contracts which reflect coordinated medium-term plans. Prices are frequently
established on the basis of planned income relationships between the contracting units; in other cases (especially social services and certain basic commodities like electric power), according to the resource requirements for the provision of defined services or deliveries. In some cases, prices are negotiated between organized groups of suppliers and recipients with a government agency as a mediating organ; while prices of some basic commodities and services (like transportation charges) are determined by decree. For a large number of consumer goods and minor industrial intermediary goods, price formation is left to the producing enterprise. The first of these arrangements (prices based on planned income arrangements between the contracting parties) seems to be by far the most important one. It largely eliminates the market mechanism as a regulator of short-term transactions, while conveying the signals of long-term changes in final demand as reflected in the expectations of enterprises, which thus serve as an input to the medium-term planning process.

Planning similarly takes on a distinctly different meaning from both that of a centrally- (state-) directed obligatory plan and an indicative plan of a mixed economy. Like the latter, planning is carried out bottom-up and starts from the expectations and ambitions of individual BOALs and enterprises, which are then iteratively reconciled for consistency. Contrary to indicative planning, however, participation in a synchronized general planning process is mandatory, and the final plans of all units as well as the agreements reached during the process of harmonization have to be set out in legally binding commitments or contracts. Furthermore, the harmonized micro-plans have to be consistent with certain basic macro-parameters. The very essence of planning, thus, is the creation of universal transparency of expectations and plans of action of all individual units and the elimination of deviations from planned (preagreed) actions unless there is consensus that external circumstances dictate changes. In both these instances the aim is the elimination of market uncertainties, and ultimately the calibration of investment through ex ante coordination rather than ex post trial-and-error.

1.3 Management Institutions

16. The philosophical/political premises of Self-Management Socialism, and the institutional and operation concepts and legal prescriptions expressing these premises, greatly affect managerial structures and practices. The function of management in the broadest sense — decision-making within and for the enterprise, and the powers of authority and control which go with it — can obviously not be vested in a hierarchically stratified, either appointed or self-perpetuating controlling group ("management" in the common sense), with or without some participation of workers (in the common connotation of sharing in some decision-making functions). The problem of consistency between ideological premises and actual structure and practices, therefore, had to be resolved in a unique way.

17. We find in all Yugoslav enterprises three coexisting stratified decision-making and controlling bodies, reaching from the lowest level to the top: Operational Management, Self-Management and the so-called "Socio/political Organizations," in particular the Syndicate (trade union) and the Party (League of Communists.) The functions of Operational Management are
essentially to handle day-to-day operations. Self-Management is in charge of policy decisions, including the key decisions connected with annual plans and acceptance of income statements and balance sheets, supervision of Operational Management, and responsibility over personnel management in the broadest sense. The Syndicate has two major functions: First, to assure compliance with the premises of Self-Management Socialism by controlling the procedures leading to the election of Self-Management functionaries and delegates; and second, they represent society as a whole in enterprise deliberations and decision-making, essentially representing the Party which does not directly participate.

18. The separation of competences and responsibilities between the three management bodies is less than clear in theory, and even more ambiguous in practice, probably on purpose. The result is not, however, continuous confrontation paralyzing the effective functioning of the organization, but the practice of consensus-searching as the normal mode of operation. Management by consensus not only is the most efficient way of management, given such a setting for multiple mutual command and control, but it is also the management philosophy regarded as most consistent with the self-management principle and its strong egalitarian (in terms of power), i.e. anti-hierarchical and anti-authoritarian thrust. Adherence to problem-solving and decision-making by consensus is enforced by the strong propagation of that thrust which makes a confrontational approach akin to anti-social behavior. The consensus approach, furthermore, accommodates fairly easily the reversal of authority which can occur (according to the specific issue) between Operational Management and Self-Management. As a result, we find that the decisive feature of Yugoslav management structures and practices is its pluralistic framework.

1.4 Management Procedures and Practices

19. This pluralistic framework relies to a considerable degree on informal or unformalized problem-solving and decision-making practices, in order to give maximum room for consensus-solutions. Conversely, many principles of what constitute "sound managerial practices" -- like structured hierarchical lines of authority, information and control; a set of rewards and penalties designed to induce compliance to the structured authority; individualized accountability, responsibility and authority, and the financial rewards, the prestige and the trimmings of status that go with it; and the mystique of leadership -- are missing if not expressly and contemptuously rejected. What dominates the observations of self-management in action is the prevalence of a tripartite setting of search for non-combative "satisfying" solutions, in which each party tends to use sparingly even those competences to which it is legally entitled.

20. These conditions do in practice favor to some extent de-facto domination by Operational Management because its members have a more permanent
position than those of Self-Management bodies and the Syndicate, and because their professional expertise and more intimate command of information may enable them to manipulate the problem-solving and decision-making process. One possible means to prevent such creeping usurpation of power from developing could have been to resort to the appointment of professional functionaries of Self-Management and Syndicates as a counter-weight. However, this solution was universally rejected because of the scope for co-option from Operational Management. There is, instead, within the enterprises an informal workers' elite of Syndicate and Self-Management activists, which is to a large extent identical with membership in the Party within the organization, and which comprises some 10 - 15% of the workers. Within this group, rotation between a variety of special functions in either organization leads to a fairly wide exposure to and realistic perception of management problems, fostered by special education programs of the Syndicate. This sizable minority of activists also establishes the "critical mass" within the workers' collective which is essential to overcome the inertia of indifference and apathy.

21. Because of the perception that the essence of the BOAL and the enterprise as organizations is the collective of workers ("association of labor") rather than the legally defined set of financial or physical assets, personnel management is in the domain of Self-Management. No less relevant in this context is the anti-technocratic streak of the recent constitutional changes and the determination to uproot the remnants of technocratic managerial power. Accordingly, Operational Management is excluded from the decision on hiring and firing, and promotion and demotion, and it has no coercive powers through a prerogative to mete out discretionary rewards and penalties, including disciplinary measures. Top operational positions are strictly temporary and reappointment requires the same procedures as first appointment. It starts with public invitations. Applications are screened by a committee composed of representatives of Self-Management, Syndicate and the Commune and proposed by consensus for formal confirmation by the workers' council. This process de facto rules out the emergence of a self-perpetuating (through co-option) top management layer. Managers of all other levels are appointed by a special commission of self-management which seems -- because of the great importance given to management by consensus rather than formal authority -- to give great emphasis to affability and peer group acceptance, with obvious priority to appointments from within. A disciplinary commission of self-management deals with disciplinary problems and has the right to mete out penalties including fines and dismissal.

22. The "Association of Labor" concept underlying the BOAL incorporates the notion of solidarity, resulting in the legal exclusion of dismissal on grounds of technological redundancy or cyclical demand fluctuations. This forces each collective to resolve the problem of redundancy within its own
confines and at its own expense rather than passing the burden on to society, unless the problems are the consequence of structural changes and cannot be solved by the enterprise. The result is a particular adjustment behavior of enterprises, inducing them to pursue an active long-term employment policy and to resort to short-term adjustment to cyclical fluctuations by varying the intensity of work and income levels rather than the number of workers. Accounting principles -- personal incomes are determined as portions of the enterprise income fund rather than absolute and fixed amount -- are fully consistent with this adjustment pattern, and, as the evaluation of enterprise data in Appendix III shows, average annual incomes can fluctuate over an amazingly wide range.

23. Personal incomes are computed in a two-stage process. First, the total amount is established which can maximally be distributed in the form of personal incomes. The size of this income fund is determined in one of the two alternative ways. Either it depends on the size and composition (by education and skill categories) of the labor force of the enterprise and on its success in comparison with some benchmark of "normal" performance. Gains from efficiency above that norm are being passed through to personal incomes but, according to a formula for distribution which progressively raises with growing size of the excess performance, the share which cannot be distributed and is to be retained in the form of undistributed profits. Or the size of the total personal income fund is the remaining net income of the organization after all investment financing commitments from contracts with other organizations have been met. The lower of these two maxima is the one actually applied. In the second stage, the total income fund is distributed among the workers. The distribution is largely based on a complex system of "points" which are assigned to tasks (according to job-specific criteria like complexity or conditions of work) and holders of tasks (according to formal educational attainment and seniority). Non-measurable individual performance is a discretionary element; its effect, however, is normally swamped by the formalized rules which are statutory for each BOAL. Personal income distribution within organizations, thus, is perfectly transparent and is largely based on pre-agreed criteria which the workers' community has adopted as part of the by-laws of "association of labor."

24. Strikes are not infrequent events in Yugoslavia. 1/ In a system of social ownership of the means of production, and of personal incomes determined not by negotiated ex ante contract but according to enterprise success or failure at the end of a period, strikes do, on strictly logical grounds, not make sense, and their systematic role within the system of Self-Management Socialism is therefore excruciatingly ambiguous. In a society ascribing to consensus and universal social harmony, and to compromise of individual, group and social interests, the occurrence of strikes challenges the validity of this self-perception. For this reason, the incidence of a strike is a source of severe embarrassment for Operational Management, Self-Management and Syndicate alike, which seems out of proportion when regarded against the actual loss of output (most strikes tend to last for hours rather

1/ The author failed to obtain a documented and reliable count; estimates and indications in the media refer to "several hundred" and on the average between 200 and 400 per year during the last couple of years for Yugoslavia as a whole and 40-50 for Slovenia.
than days or weeks). According to the scant information available, strikes are usually triggered by a severe reduction of personal incomes resulting from a business slack which is blamed by the workers on incompetence of Operational Management and poor oversight by Self-Management. Such a cause would follow logically from the adjustment of enterprises to demand fluctuations, referred to above, and in view of the empirically observed income fluctuations, periodic workers' unrest seems a perfectly plausible response. Thus, the major damage of the incidence of strikes is probably the frantic effort to avoid their occurrence by sacrificing targets for undistributed profits and resource mobilization, either jeopardizing the financial viability of contractually agreed investment programs, or inducing attempts to recover lost ground through price increases. 1/

1.5 Management Principles and Efficiency

25. The assessment of the effects of managerial structures and practices on enterprise efficiency and macroeconomic efficiency hinges on the objective function the enterprise is pursuing. There is a well-developed theory of the "Illyrian" (Yugoslav-type) firm developed by B. Ward, J. Vanek and others, which almost totally rests on, first, the behavioral assumption (postulated rather than empirically tested) that income per worker is the maximand, and, second, the institutional assumption that enterprises are autonomous in the distribution of their income between personal incomes and retained income for reinvestment. It has been demonstrated on strictly analytical grounds (in an essentially static neoclassical framework) that on the basis of these and some other more common assumptions, the economic system composed of such firms would exhibit some undesirable features, like excessive cyclical fluctuations (caused by the absence of stable micro-economic equilibrium), low enterprise savings (profit retention), and high capital-intensity combined with persistent unemployment.

26. However, it can be demonstrated that the behavioral assumption has little resemblance to actual conditions and that certain other deduced features (like chronic under-investment) do not occur. The pluralistic framework of decision-making is likely to generate a highly complex objective function which incorporates, in addition to goals of individual workers, autonomous goals of Operational Management, Self-Management, Syndicate, and the Commune. There may, in fact, be major conflicts between particular goals which are resolved by searching for a compromise acceptable to all groups. Although it is difficult to even specify the elements contained in the aggregate objective function, let alone their weight in the total, it can be hypothesized that the aggregate objective function of the Yugoslav enterprise has little resemblance to its simplistic Illyrian counterpart and that it would lead to "satisficing" 1/

1/ In essence, it seems that the social cost of stabilizing employment under pronounced cyclical conditions and without central control is a tendency to irresponsible financial behavior of enterprises and inflationary price rises.
rather than maximizing enterprise behavior. In particular, the institutional assumption of enterprise autonomy in income distribution does not hold up in reality. 1/

27. Apart from these unresolved questions regarding the appropriate analytical model of the Yugoslav enterprise, the comparative assessment of the efficiency of managerial structures and practices as revealed in macro-economic data is impeded by the lack of rigorous standards of inter-country comparison as well as by the lack of internationally comparable data. Whatever macro-economic statistical evidence there is suggests that the aggregate allocative and operative efficiency of Yugoslavia is, as a whole, not substantially different from that of other countries of comparable size and level of development which operate under a different political/economic system of management. However, by almost any conceivable statistical indicator (and computed on a comparable data base) the standard of performance of Slovenia, which is by far the most developed of republics within the Yugoslav Federation—with a per capita income of double the country average—is strikingly different in comparison with that of the lesser developed republics. This strongly suggests that the level of overall efficiency is probably to a larger degree determined by the differences in accumulated technical, managerial and administrative know-how than by the political/economic systems represented by the legal/institutional framework governing ownership, enterprise decision-making and management. 2/

28. On purely qualitative grounds a few hypotheses can be propounded on the basis of strictly ceteris paribus comparisons of the Yugoslav enterprise with a conventionally organized enterprise in either a private or state capitalist setting. The decision-making costs of the Yugoslav enterprise are obviously much higher and the reaction time to exogenous signals is greatly extended. However, in an environment where the same decision-making pattern is universal and where it creates a transparency and predictability considerably higher than in a more volatile market economy environment, these obvious drawbacks lose much of their relevance. The reduction of authority-linked coercive power for maintenance or increase of X-efficiency has, by definition, a negative impact on performance. However, the notion of solidarity and its translation into individual and group behavior, and the obvious links between the level of individual incomes and group or enterprise performance are likely to build up a compensating social coercion mechanism. The limited scope

1/ It can be shown that the Illyrian model fits more closely the quasi-laissez-faire conditions of the late 1960s and a "group ownership" (i.e. essentially cooperative) model of society which the system changes of the 1970s are to correct.

2/ There are other macro-economic aspects -- like susceptibility to inflationary pressures and external imbalance, cyclical fluctuations, income distribution and "social efficiency" -- for which the differences in the political/economic system may lead to more pronounced differences in relative country performance.
for individual incentives beyond those extended to all members of the working collective and incorporated in the statutory internal income scale, prevents a strategic use of selective incentives; again the above-mentioned social dynamics would tend to work in the opposite direction. Furthermore, the contribution of innumerable marginal changes in processes and procedures to raising X-efficiency, which are not effectively rewarded in a selective incentive scheme, is likely to be spurred by the removal of shop-floor resistance to top-down productivity drives, which in a different institutional setting would result in increased work effort rather than tangible rewards and/or redundancy. Finally, the effect of the absence of a competitive environment in the neoclassical sense is impossible to gauge in the absence of virtually all the other conditions for Pareto-optimality. There is no empirical evidence nor prima facie logical evidence which would permit any judgment as to whether a change from a limited market framework with compulsory information-centered planning, to a framework more akin to neoclassical prescriptions, would improve or worsen overall performance.

1.6 Control

29. The pluralistic setting for decision-making is reflected in a complex system of controls. Social accountability of the enterprise is largely subject to review by the social entity most strongly affected by the actions of the enterprise: the local Commune. With respect to performance accountability, Operational Management, Self-Management and Syndicate organization within the enterprise control each other, and the latter two are under control of the workers' collective at the shop-floor level. Political accountability is under permanent review by the Syndicate and the Party organization within the enterprise and their broader (communally or regionally organized) organizations. Operational Management is accountable for conformity of enterprise actions with legal provisions and with inter-enterprise contracts on policy matters. A special agency, the "Social Accounting Service," records all transactions affecting the accounts of each BOAL as well as income statements and balance sheets, and checks the adherence to legal benchmarks. Within the enterprise an elected separate Self-Management organ supervises adherence of Operational Management and Self-Management bodies to the by-laws of the organization and, in general, to the principles of Self-Management. What seems to be particularly important is that control with respect to social performance and political accountability is less a matter of a formalized periodic review process but rather an essential part of the symbiotic relationship between the parties involved, of which mutual control is an inseparable part.

1.7 Conclusions

30. Finally, the question arises whether something can be learned from the review of the managerial structures and practices as they seem to dominate in Yugoslavia. Perhaps one could advance a general hypothesis and a specific restriction. On the general level, the very fact that many of the conventional prescriptions regarding necessary conditions for efficiency are being violated or disregarded without leading to chaos within the enterprise and collapse of productivity and growth for the economy, suggests that these
conditions are perhaps less necessary than frequently held. It seems that in
a different institutional setting, based on a different social model than
that of a competitive market economy, the sufficient conditions for "reasonable"
efficiency can exist - provided this different model is consistent throughout
the system and provided it has passed through a sufficiently long period of
learning-by-doing.

31. On the more specific level, one could ask whether there are any
particular practices and techniques which could readily be applied elsewhere.
As this study attempts to show, there is a high degree of mutual consistency
between the philosophical/political premises of Yugoslavia's Self-Management
Socialism, the legal framework, the obligatory or customary organizational
arrangements within enterprises and contractual arrangement between enter-
prises, and the individual or group behavior regarded as socially acceptable.
Therefore, there are obviously no particular rules which could be taken out of
this context and would easily fit into an economic system which does not
share the same set of premises and a similar vision of how social relations
are to work. For countries which embrace somewhat comparable ideological
premises, the potential for lessons is probably somewhat larger because of
the accumulated Yugoslav experience of three decades of, often costly, evolution by trial-and-error.

1.8 Some Further Observations

32. Two of the Appendices may be of some general interest. Appendix II
presents two Self-Management Agreements on Personal Incomes. The differences
in complexity, thrust, and presentation are striking. Given the fact that the
two branches covered have a great deal of similarity, and that we deal with
one and the same republic within the Yugoslav Federation, one can hypothesize
that there is no simple standard format for such Agreements issued by decree,
in which merely specific numerical assumptions are inserted. Appendix III
presents time series of a number of coefficients computed from enterprise
balance sheets and income statements. They exhibit stunning variations
over time of growth rates of productivity and average real income paid out
to workers; these cyclical variations are neither synchronized with each
other, nor with overall business cycles in Yugoslavia; and average incomes
differ greatly between the enterprises. These observations support the
institutional hypotheses that workers are indeed strongly affected by the
performance and the fate of their enterprises, and that Yugoslav enterprises
adjust to outside shocks by adjusting intensity of work and size of average
incomes, rather than by adjusting employment. And the differences between
enterprises regarding average workers' incomes and profit rates suggest that
the Social Compacts and Self-Management Agreements do not impose uniformity
but leave, in fact, a surprisingly wide scope for choice.
2. Premises and Contours of Self-Management Socialism

2.1 The Framework

33. Over the last three decades Yugoslavia has developed a unique framework for managing its political, social and economic affairs. It is firmly rooted in Marxian political economy. However, with the expulsion from COMINFORM (the new defunct Soviet-dominated coordination body of communist parties) in 1948, Yugoslavia took a unique route towards establishing a socialist society. The evolution proceeded in leaps and bounds: the country has passed through three constitutions since 1946 and various changes of direction from one constitution to the other and during the validity of each. In retrospect, however, the consequent pursuit of one overriding theme was manifest: the creation of the conditions for a maximum degree of political and economic decision-making from the bottom up, and for a gradual "withering away of the state" (as stipulated by Marx for the genuinely communist society) starting here and now, rather than in some distant millennium. The replacement of hierarchical decision-making structures (which are, apart from ownership of the means of production, considered as the major source of alienation) by organizational and institutional arrangements which permit the widest possible control by the most affected members of society, is the very essence of Self-Management Socialism.

34. Apart from the self-evident implications in terms of solidarity, Socialism implies in the Yugoslav perception "social ownership" \(1/\) of the means of production. This is clearly distinct from "state ownership", regarded as a "lower stage" of Socialism. While state ownership leads to state authority and state control, social ownership assigns control to the actual users of the socially owned assets (the enterprise workers) for both their own benefit and acting as the trustees of society. "Self-Management" - applying to both political and economic matters - designates direct democracy in the literal and dual sense: decision-making powers assigned to those individuals or groups who are directly involved in or affected by their implementation, and these individuals or groups exercise their power directly, i.e., without autonomous, intermediaries acting in their name either elected by the affected individuals or groups but autonomous in the decisions they take, or appointed by and accountable to another authority. It follows that Self-Management in economic matters extends beyond the concepts of "workers' participation" or "codetermination", which both imply sharing of power between owners and/or their representatives and workers. Self-Management also excludes any direct or indirect intervention of the state in enterprise management by reserving all micro-policy decisions and all controls to the workers' collectives or their elected organs, and it includes into their prerogatives that of appointment and dismissal of both peers and professional and administrative managers.

\(1/\) The private sector is restricted to artisan workshops employing five or less workers and family farms with less than 20 hectares of agricultural land. About 85% of all agricultural land is privately held.
35. To make Self-Management a meaningful concept in day-to-day life, it has to operate in a highly decentralized setting, i.e. it has to refer to relatively small collectives with which the individuals can easily identify, and within which they have fairly homogeneous views and can easily develop formal and informal communication among each other. To ensure this condition, Self-Management is in the economic sphere assigned to Basic Organizations of Associated Labor (BOAL), the smallest self-contained technical unit which produces a marketed or marketable output. 1/ BOALs, in turn, are broken down into "work groups" of usually 10 to 30 workers who jointly perform particular tasks.

36. To make Self-Management an efficient concept, an institutional basis for coordination of decision-making among these building-blocks has to be designed which does not violate the previous condition. The "delegate system" is to serve that purpose: the collectives of the smallest units elect among their members "delegates", who in turn elect among themselves delegates to decision-making bodies of larger organizational units comprising several of the smaller ones, etc. This step-wise election process can extend over several stages, and it reaches from workers' collectives into the political realm, and from the work group up to the Federal Assembly. Delegates are, in contrast to elected autonomous representatives, required to solicit the views of their respective constituency for any specific decision, to act accordingly, and to report back on the outcome; although elected for a specific term, they can be recalled by their constituency if it feels that they failed to represent its views.

37. Complementary to the concept of Self-Management is the principle of equality in terms of stratification of power. It carries a strong anti-authoritarian and emancipatory connotation, which translates into the endeavor to structure social relations without recourse to clearly defined hierarchical relationships. In addition, it implies that decisions imposed by majority are inherently violating the Self-Management rights of the overruled minority. Consensus, thus, is the preferred form of decision-making among equal parties, and institutional and organizational arrangements are to be patterned accordingly to the maximum degree feasible.

38. A system based on Self-Management is inherently in conflict with "the state" in the traditional sense (government and administration, operating through top-down lines of command and control and bottom-up lines of

1/ For example, a tractor factory might consist of a BOAL each for casting, forging, metal processing, general machining, machining and assembly of engines, final assembly, and after-sales services.
information). This inherent conflict is evidenced by the fact that the term "state" itself is, in the Yugoslav system discussion, almost universally used with a negative connotation, and at best the state is seen as a necessary evil which has to be accepted temporarily for expediency reasons to cope with particular problems, to be replaced as soon as a genuinely Self-Management arrangement has been found. Thus, the corollary of increased Self-Management is the reduction of the traditional role of the state. "Decentralization" (i.e. transfer of state functions from the level of the Federation down to that of the Republic and further to that of the Commune) 1/ and "de-etatization" (i.e. transfer of functions at any of these levels of the state to arrangements between the directly affected parties) as the thrust of the system evolution are, in fact, the mirror-image of the strive for Self-Management.

39. In one area, however, the role of the state has been maintained. The assembly (parliament) of the Socio-Political Communities (Federation, Republic and local Commune) 1/ is the forum at which the aspirations and interests of various groups of organizations confront each other and when a consensus for a socially acceptable compromise has to be found. 2/ The assemblies, therefore, have ultimate executive power. "De-etatization" thus is predominantly the demotion of power and control of state administration. The strong position of the assemblies is reconciled with the Self-Management principle through the delegate system which reaches from Work Groups within enterprises to the assemblies of the Communes, the Republic and ultimately the Federation, consistent with the principle of decentralization. The Commune is the first, and for most enterprises the only counterpart when it comes to compromising its aspirations with the common interest, and it is usually the only layer of the state to which direct contacts exist. Only for certain macro-policy matters (such as import policy or monetary policy), or in connection with medium-term (investment and growth) targets for specific priority activities (like power generation, iron and steel, basic chemistry) are enterprises in direct contact with organs of the Republic or -- even more rarely -- the Federation. For this reason, this report will refer to "Socio-Political Community" and "Commune" interchangeably, although in exceptional cases this identity does not hold.

40. Strong cohesive elements are maintained in the system, otherwise dominated by decentralization and de-etatization, by the "Socio-Political

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1/ The Yugoslav Federation consists of six Republics and two autonomous Provinces (of comparable status). Communes are the smallest territorial units with clearly delineated autonomy; Yugoslavia has some 500 Communes with an average population of 40,000 inhabitants.

2/ The role of Socio-Political Communities in economic affairs is summarized in the Associated Labor Act as: "Organs of Socio-Political Communities shall be bound ... to create conditions making it possible ... to develop ... income earning relations in associated labor, and to bring the particular interests ... into accord with (the) collective interests", compare Article 156. Paragraphs 98-100 elaborate further on the impact which the relationship with the Commune has for the enterprise.
"Organizations", predominantly the Socialist Alliance, the League of Communists (LCY) and the Syndicates (Trade unions). The Socialist Alliance, whose membership approximates the size of the adult population, and which is to function as the link between the citizens and the assemblies, has no recognizable influence within the enterprise or on the enterprise’s proceedings and decisions. The function of the Syndicate, under Self-Management Socialism with social ownership and worker's income as part of the residual income of the enterprise, 1/ obviously cannot be to represent the interests of wage earners against those of the private or public owners of the means of production in the distribution of income between labor and capital. The Syndicate rather represents the views of Socio-Political Organizations in enterprise decision-making. As a part of this role it organizes Self-Management within the enterprise and, most prominently, controls the nomination of candidates for the election of delegates to all Self-Management bodies. 2/ The LCY, as "the organized force of socialist consciousness", plays an indirect but decisive role in all economic decisions which either reflect prior political decisions or have political repercussions, apart from practices and decisions directly affected by ideological premises. Since the LCY embraces the principle of "Democratic Centralism" (which obliges all members to act, in whatever capacity and position, in accordance with the resolutions of the LCY), and since LCY membership (equivalent to about 15% of the adult population) includes the most active and activist segment of the population, any position taken by the LCY strongly affects the decisions taken by the assemblies of the Socio-Political Communities, by the other Socio-Political Organizations, in particular the Syndicates, which one way or the other ultimately affect the enterprises.

2.2 Economic Organizations and their Mutual Relations

The enterprise 3/ in most instances is broken down into the previously mentioned BOALs, the smallest identifiable technical units which produce a marketed or marketable output of goods or services. 4/ The division of competences between BOALs and enterprise and the delineation of areas of primary responsibility is not strictly formalized, neither by the Law nor by the by-laws of the BOALs and enterprises. On the one hand, the law 5/ and all pronouncements about the spirit of Self-Management, 6/ leave little doubt that the BOALs rather than the enterprise are considered the foundation of the system, and that the protection of the far-reaching rights of the BOALs is given particular weight in fending-off workers’ alienation regarding their central position due to encroachment by "managerial" or "technocratic forces." For example, the BOALs are autonomous legal persons and have their own balance sheets and income accounts, whereas those of the enterprise are merely an aggregation. Financial assets built up from undistributed profits are and remain permanently those of the BOALs which generated the surplus

1/ Compare paragraph 49.
2/ Compare paragraph 70.
3/ The enterprise as considered in the report corresponds closely to the Yugoslav concept of "work organization."
4/ See Paragraph 11.
5/ See, for example footnote 1 paragraph 44.
6/ BOALs were introduced only in 1970, and this is frequently considered as a centerpiece of the new Constitution.
and not those of the enterprise. If they are made available to other BOALs within or outside the enterprise, they remain on the books of the originating BOAL and are to be used and eventually to be returned according to specific agreements. BOALs are linked with each other within the enterprise through "sharing of joint revenues" which comes in effect to a system of internal relative prices, the absolute levels of which are determined by the realized sales revenues. All BOALs have to agree to the annual enterprise plan which specifies, among other things, the schedule of income targets which determines the internal relative prices. And the link to political decision-making -- vested in the assemblies of the Socio-political Communities -- extends from the BOALs and not the enterprise (unless it is not subdivided into BOALs). Most important is the right of BOALs to split off from the enterprise and either constitute itself as an independent enterprise or join another one. The evidence suggests that this prerogative is used sparingly but sufficiently to make it a serious option.

42. On the other hand, all commercial transactions are normally carried out by specialized units within the enterprise and for the enterprise as a whole. Moreover, the law specifies a number of internal functions which are to be carried out by "Work Communities," specialized units for the enterprise as a whole, in particular in the fields of planning and analysis, bookkeeping and statistics, and general administration. How the sum total of these provisions determine actual dominance -- whether a coalition of BOALs or whether the enterprise is the ultimate locus of power -- is impossible to judge, and many, in fact have been left open deliberately by the law to permit a dynamic solution appropriate to the specific circumstances. The evidence from interviews, for obvious reasons more ambiguous on this issue than for many others, suggests that there is indeed no general rule as to how the balance "normally" works out, but that it depends very much from the specific circumstances, among which the personality of the head of Operational Management of the enterprise, the "general director," is an important factor.

43. In the great majority of cases enterprises have some permanent contractual links with others, often in the form of a "Composite Organization of Associated Labor". Such links can either comprise a number of enterprises operating in the same field of activity or vertically linked with each other, and in most instances they extend over the republic rather than the Federation. The contractual links almost always set principles for distribution of net income between workers' incomes and accumulation, frequently

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1/ Annex I presents a simplified format of income computation in the Yugoslav BOAL/enterprise and discusses the most relevant accounting concepts in some detail.

2/ Compare paragraph 66.

3/ See Annex I.
include pooling of investment resources among the member organizations in an "internal bank" and joint financing of investment programs, and either set out specialization of production programs or mutual deliveries. The relations between cooperating enterprises are analogous to those ruling the cooperation of BOALs within enterprises.

44. As mentioned above, the cooperation of BOALs within enterprises and between several enterprises frequently extends beyond "pooling of labor and resources" and "sharing of joint revenues" and includes joint investment planning and integrated investment financing ("pooling of resources"), either directly, or through an "internal bank", or through business banks. This extended form of self-financing is deemed most consistent with the Self-Management principle because through this arrangement the "producers of surplus" (the workers of the BOAL which generates investible resources in the form of undistributed profits) retain the right to permanent control over its use, thus eliminating a major source of "alienation" in private or state capitalist systems. Pooling of resources can either be arranged through conventional credit relationships with a contractual repayment schedule and a preagreed interest rate. Increasingly more important, is pooling in the form of a quasi-joint venture arrangement by which the lending organization shares income and risks with the borrowing one. Such joint ventures, however, can not establish any permanent claims to income (which would be inconsistent with socialist premises) but have either to be limited in time or to the initial amount plus some preagreed "compensation" for the lending unit. The reconciliation of this form of temporary sharing of the lending unit in the income of the borrowing one, which may increase personal incomes in the lending organization, with socialist premises follows from the Self-Management principle: Control over the economic surplus is to remain with its producers, 1/ and the producers act as the trustees of society which appropriates formal ownership of the surplus. Workers of the lending organizations are entitled to some of the income from investment as the reward for the risk they take of losing control over resources they generated and which may be essential to secure the long-run growth of their own organization. The Associated Labor Act sums up the claim for income from resources as follows: "A worker's personal income shall be determined according to the contribution he has personally made with his current labor and the management of and doing business with social resources, as his own and social past labor..." 2/

1/ "Socially-owned resources shall be the common material base for the maintenance and development of socialist society and self-management relations, and shall be managed by workers in basic organizations..." (Associated Labor Act).

2/ "Past labor" is in the Marxian terminology equivalent fixed or working assets, respectively their monetary equivalent.
The notion that any surplus value created should remain permanently under the direct control of the workers' collective which created it, strongly affects the status and the role of banks. Their legal status of "Work Community" as against "Organizations of Associated Labor" such as enterprise BOAL or Composite Organizations, points to a decisive difference: the role of banks is "the performance of common affairs" for their "members" -- BOALs and enterprises which use the services of the bank as depositors or borrowers -- and they are reimbursed by them for their expenses including the incomes of the employees; they have no mandate to create and accumulate surplus in their own name. If an unplanned surplus should materialize by the end of a business year, it is normally to be distributed to the members. A committee elected by the members is in charge of all credit decisions. The aforementioned notion of "pooling of resources" through direct arrangements among BOALs and enterprises results, furthermore, in a growing share of resources which are earmarked by the depositors, limiting the scope for conventional financial intermediation. This reduction of the importance of banks in comparison with the role they had in the late 1960s is expressly aimed at: independent decision-making rights of banks over the allocation of "alienated surplus" are considered to be inconsistent with the principles of Self-Management Socialism.

A unique self-managing organization is the Community of Interest, which brings together all suppliers and consumers of certain services or commodities. Both groups decide jointly and on an equal footing on all matters affecting current supply and demand, including prices, as well as on investment, including all long-term financial transactions among the members related to investment in the particular area of activity. Communities were first introduced (and are now mandatory) for all social services (like health, education, science, social insurance, etc.). 1/ The very same concept is now being extended to basic commodities and services 2/ for which the market is regarded as unsuitable to match supply and demand and to arrive at adequate prices and investment programs, such as for electric power generation and distribution, water supply and sewerage, railways and highway construction and maintenance. In either case, Communities substitute in effect for both, the market (as a self-regulating mechanism) and the state (as supplier or through regulatory or administering agencies).

All enterprises are mandatory members of an "Association" covering the particular sector or branch of activity, and these Associations form "Economic Chambers", organized on both the Republic and Federal levels. Both the Associations and the Chambers have self-management status (i.e. are

1/ As a consequence, financing of these services is arranged by the directly affected parties and outside the budgets (with the exception of moderate subsidies extended for some special cases), reflecting the autonomy of the Communities of Interest from the state as intended by "de-etatization".

2/ Strictly speaking, there are "Communities of Interest" and "Communities". The differences are, however, insignificant within this sketch, and both are referred to jointly as "Community".
autonomous from the state) and they provide a forum for (a) formulating common positions of the members on matters of economic policy for the dialogue with the assemblies and administration of the Socio-Political Communities, (b) initiating, negotiating, and signing of Social Compacts \(^1\) in the name of their members with the Socio-Political Communities, and (c) "harmonizing" \(^2\) the views and plans of individual members in connection with the Five Year Plan preparation. Although the Economic Chambers function like a parliament, with delegates representing enterprises as voting members, neither the Chambers nor the Associations can take majority decisions which oblige dissenting individual enterprises.

Most medium and long-term relations within and among enterprises are regulated by the unique legal instruments of Social Compacts and Self-management Agreements. Social Compacts deal with relations among Socio-Political Communities or the Syndicate and Economic Chambers (negotiating and signing the Compacts upon authority of their members). Social Compacts regulate general economic matters, such as overall targets and priorities of the medium-term social plans, principles and criteria for price, employment and trade policies, and guidelines for distribution of enterprise income between personal incomes and accumulation (undistributed surplus). Social Compacts have the force of law or are a surrogate for policies conventionally determined and executed by administrative discretion which would be in conflict with the letter of Self-Management. Self-Management Agreements usually regulate relations among a more limited number of economic organizations, pertaining to specific matters affecting only them, and they have the character of civil contracts with penalty clauses for violation. \(^3\) Common to both Social Compacts and Self-Management Agreements is that they have to be negotiated publicly, have to be published after conclusion and can be contested by other parties who consider their interest being violated. While violations of Self-Management Agreements can carry severe financial penalties, adherence to Social Compacts is not enforceable by recourse to penalty or criminal prosecution, but a high degree of adherence is assured by force of political and social persuasion brought upon offenders who "shall be socio-politically responsible for non-performance of obligations from such Social Compact". \(^4\)

\(^1\) See paragraph 48.

\(^2\) See paragraph 52.

\(^3\) Examples of Self-Management Agreements are presented in Appendix II which deals with Agreements on a joint income policy by members of Associations.

\(^4\) Compare 582 Associated Labor Act.
2.3 Market and Planning

49. The Marxian philosophical/political premises of Self-Management Socialism rule out the notion of labor (labor power) being "purchased" and "sold" at its "price" (wage) at its respective "market" as if it were just one "commodity" or "factor of production" among others. 1/ This position has been fully translated into the legal prescription for recruitment and dismissal 2/ and into the conventions of accounting personal incomes received by workers. Wages, as contractual claims established ex ante for specified payments per unit of time or work, do not exist and instead the workers hold a claim to receive remuneration in the term of a certain share of enterprise income, i.e. the residual after deducting material costs and depreciation from revenues. 3/ The remuneration for work, thus, is determined ex post and jointly by enterprise plans and realized performance. As a corollary, the concept of "labor cost" is inapplicable, and a "labor market" in the neoclassical definition does not exist. 4/

50. The notion of "capital market" in the neoclassical definition does not exist either. According to Marxian philosophical/political premises capital is not an independent "factor of production" but merely "past labor", and the loss of control by the "direct producers" (the workers) over the surplus constitutes alienation; the consequences for financial intermediation were sketched above. 5/ The rejection of a market concept for both labor and capital as a regulating mechanism have far-reaching policy implications and make inapplicable all those traditional policy tools which rest on a market model for either.

51. For goods and services a diverse and still unsettled 6/ position is assigned to the market. In first approximation, the vast variety of cases can be categorized in four distinct models:

1/ According to Marxian concepts a model of social relations characterized by these market concepts institutionalizes "alienation" of the labor.


3/ Compare Appendix I for terminology on income and the associated accounting conventions.

4/ The interviews revealed a good deal of evidence that there is some form of quasi-labor market, with scarcity premia for certain crucial skills. For example, some resources from the Common Consumption Fund -- intended for income redistribution among the workers who generated these resources -- are in one enterprise set aside for the financing of apartments for newly recruited professionals who would not join without this additional benefit.

5/ Compare paragraphs 45-46.

6/ A new Law on Prices is still under preparation which may change the situation.
First, for those goods and services for which a Community of Interest has been established the market has by definition ceased to exist. 1/

Second, for those goods and services which are exchanged among BOALS (within enterprises) or among enterprises (within integrated inter-enterprises organizations), the underlying Self-Management Agreements (usually valid for at least the Five Year Plan period) determine both physical deliveries and criteria by which the internal or transfer prices for the deliveries are established, frequently as a part of a wider cooperation agreement. The most common form is sharing of "joint revenue and risks", 2/ i.e. the sales revenues generated at the final stage determine the financial transactions between the final and all preceding production stages. Other considerations may be reflected in the transfer prices if the contracting units so decide. These internalized or quasi-markets 3/ frequently reach forward into the trade stage and are mandatory in the case of foreign trade enterprises, with the effect that trade enterprises are agents receiving a certain fee (dependent on the final result) for their services.

Third, for certain goods and services which are regarded as basic or strategic, prices are controlled administratively, although in most instances the affected parties participate in the proceedings which lead to the determination of prices. In this case, as in the preceding one, international prices frequently provide an important point of reference. 4/

Finally, for those goods and services for which any of the preceding arrangements are inapplicable or would be too cumbersome to organize or to administer, the prices are completely free.

In sum, for goods and services (with the notable exception of the first case), supply and demand are "organized" to some degree with the effect that the market in the traditional sense has little reliance on short-term transaction, an important role by picking up the signals of long-term shifts of the structure of demand and conveying them back to the producing enterprises.

1/ See paragraph 47.

2/ Compare paragraphs 41-43.

3/ The determination of transfer prices is obviously crucial for the stability of these internal markets. As will be shown in paragraphs 75-75a, these prices are imputed through a pre-agreed personal income formula, and the computation of such prices is a - if not the - most important function of the annual plan (compare below). The internal market could also be organized (the Associated Labor Act is sufficiently flexible) by a sharing of gross sales revenue formula. None of the four visited enterprises, however, chose this alternative arrangement.

4/ Cases two and three are not strictly alternative but can appear in combination; for example, prices of some stages of production may be fixed by direct control, and forward or backward prices are linked to this controlled price.
52. In the wake of the new Constitution of 1974 Yugoslavia has also adopted a new system of planning, frequently referred to as "Self-Management Planning." Its main elements can be summarized as follows: First, planning is carried out by both economic organizations (starting at the level of the enterprise) and Socio-Political Communities, and participation in the planning process is compulsory for all of these "planning agents." Second, the planning agents describe their present conditions, their expectations, and their intended plan of action through a standardized set of indicators. Third, planning agents which are either vertically linked (i.e. whose intended plans of actions are interdependent) or which are competing on the same output markets, exchange their respective plans and indicators. Fourth, the planning agents are under the obligation to "harmonize" their respective plans, that is to say, to enter into consultations and negotiations (either individually and/or in horizontally or vertically organized groups) aimed at coordinating their respective plans and making them mutually consistent. The previously mentioned Associations and the Economic Chambers are the main forum for this process. Fifth, for priority activities harmonization has to be continued (within a certain time frame) until complete coordination is achieved and agreed upon by all parties, which is then codified in Social Compacts or Self-Management Agreements. If deadlocks arise, they would be broken by ruling of the assemblies of Socio-Political Communities or by government agencies within terms of reference established by the assemblies. In all other cases (non-priority activities) complete coordination and codification, although deemed desirable and definitely advantageous for enterprises by improving chances for realization, is not compulsory. Sixth, the planning agents are obliged throughout the planning process to take into consideration certain macro-parameters (such as overall growth rate, national savings rate, foreign exchange constraints) which are established at an early stage of the planning process by the Assemblies of the Socio-Political Communities, and in most instances are set out in Social Compacts.

53. Several principal features (realized to a varying and uncertain degree) can be assigned to Self-Management Planning. First, harmonization - the fact that agreements reached through harmonization are codified in legally binding Self-Management Agreements and Social Compacts make the actions of all planning agents with respect to long-term decisions highly predictable. Third, transparency and predictability reduce the level of uncertainty and provide for more efficient long-term plans through reducing the requirements for technical and financial contingency planning. Fourth, the intensive involvement of planning agents in a "bottom-up" process and the reliance on consensus as the basis of compromise, and the restriction of political bodies to the role of arbiters of last resort tend to establish a strong sense of commitments for realization. Fifth, the search, as implied by harmonization, for a medium-term ex ante equilibrium could tendentially lead towards an efficiency optimum because of a unique feature: in principle it resembles universal forward contracting in medium-term quasi-forward markets for all goods and services reflecting consumer preferences (as perceived by the
planning agents). 1/ This avoids some of the costly trial-and-error (ex post) adjustments of pure market economies or the pitfalls of centrally planned economies with their need to establish a great number of targets outside the realm of economic relations between planning agents.

54. The preceding observations refer largely to the medium-term (5-year) plan, with the planning period of all organizations synchronized with that of the Federation. In addition, enterprises have fairly elaborate annual (operative) plans. 2/ They are of special importance for the links among BOALs within enterprises, and for inter-enterprise links involving "joint revenue and risks" 3/ because the determination of transfer prices - which eventually determine personal incomes - is a key part of the planning exercise. 4/

3. The Macro-Economic Environment of Slovenia's Metal Products Industry

3.1 Yugoslavia's Economic Development in Retrospect

55. Yugoslavia's long-term economic growth has persistently been impressive, as indicated by the following overview:

<table>
<thead>
<tr>
<th>Table 1: ECONOMIC DEVELOPMENT INDICATORS (1953-1976)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rates of GMP 5/</td>
</tr>
<tr>
<td>Growth rates of GMP per cap.</td>
</tr>
</tbody>
</table>

Source: Annex Table 1.


2/ There are no annual plans in the strict sense for the Socio-Political Communities (instead there are what is frequently referred to as "annual resolutions", setting out some operational priorities). The absence of strictly operational plans reflects the fact that "the state" does not operate any organizations which produce goods or services.

3/ Compare paragraphs 41-45.
5/ "Gross Material Product" comprises value added in production of goods and "productive services", i.e. excluding education, health, administration, rental services. GMP data 3-year averages.
In 1965 Yugoslavia introduced a series of major reforms, at that time frequently referred to as "market socialism", 1/ which were followed by a difficult adjustment period of three years. Although the growth momentum in the second subperiod was markedly lower than in the first, this does not per se suggest a decline in economic performance. Some decline of the growth rate was the intention of the reforms which were supposed to reduce the investment rate. Further, growth rates were bound to decline due to the higher absolute levels reached by then, and the end of the second subperiod includes the worldwide recession. By 1975, commodity exports (90% of which were of industrial origin) reached 13% of GNP and commodity imports were equivalent to 24% of GNP. It is also worth noting that by 1977, Yugoslavia's GNP per capita is estimated to approach $2,000, which puts Yugoslavia into the border group of rapidly industrializing countries between LDCs and developed industrialized countries.

56. Yugoslavia's economic development was propelled by the expansion of the industrial sector, 2/ the share of which in GNP rose from 22% in 1953 to 38% by 1976. The main features of the industrial growth momentum are highlighted below:

---

1/ The rather loosely used term does imply close resemblance to the Lange-Lerner model of "Market Socialism", without, however, meeting many of its rigorous assumptions.

2/ In Yugoslavia's industrial nomenclature mining and processing are not separated and mining and quarrying are counted within the industrial branch which processes their output. Similarly, electric power generation, crude oil and natural gas extraction are included. The sector "industry" as referred to subsequently always includes these activities.
Table 2: INDICATORS OF INDUSTRIAL DEVELOPMENT (1953-1976)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate of GMP 1/</td>
<td>12.0</td>
<td>7.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Growth rate of employment</td>
<td>7.6</td>
<td>4.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Growth rate of fixed assets</td>
<td>10.0</td>
<td>7.9</td>
<td>9.0</td>
</tr>
<tr>
<td>Growth rate of productivity 1/ 2/</td>
<td>4.1</td>
<td>3.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Average capital-output ratio 1/ 3/</td>
<td>3.04</td>
<td>2.99</td>
<td>3.02</td>
</tr>
<tr>
<td>Growth rate of average capital-labor ratio 4/</td>
<td>2.9</td>
<td>3.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Average incremental COR I 1/ 5/</td>
<td>2.64</td>
<td>3.18</td>
<td>3.15</td>
</tr>
<tr>
<td>Average incremental COR II 1/ 6/</td>
<td>3.39</td>
<td>4.16</td>
<td>4.36</td>
</tr>
<tr>
<td>Investment/GMP 1/</td>
<td>32.1</td>
<td>29.6</td>
<td>31.1</td>
</tr>
<tr>
<td>Investment/fixed assets</td>
<td>10.9</td>
<td>9.9</td>
<td>10.5</td>
</tr>
</tbody>
</table>

1/ 3 year averages for GMP.
2/ Productivity:GMP/worker.
3/ Fixed assets/GMP.
4/ 3 year averages for CLR.
5/ ICOR calculated from increments in fixed assets.
6/ ICOR calculated from investment.

Source: Annex Table 2.
The efficiency performance of industry appears to have somewhat declined after 1965. The rate of productivity increase dropped markedly, but it appears respectable by international standards and is in fact higher than shown in the presented rate because of the marked decline of average number of hours per worker per year after the mid-1960s. Some indications of efficiency performance can be found in the capital output ratios (COR). The average COR remained remarkably stable over the whole period. The incremental CORs rose somewhat, indicating some worsening; their rise, however, is probably too slow to permit strong conclusions on the underlying efficiency of the use of capital.

No less important than the look at these time series for Yugoslavia which show changes but from levels which cannot be assessed directly, is the inter-country comparison. For this purpose the table below compares, for those countries for which consistent data are easily available, the ICORs of a bundle of "productive activities" (comprising ISIC groups 1-4, i.e. agriculture, mining, manufacturing and electricity, gas and water; data for investment in fixed assets): 1/

<table>
<thead>
<tr>
<th>Country</th>
<th>ICOR</th>
<th>Country</th>
<th>ICOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>7.5</td>
<td>Yugoslavia</td>
<td>2.8</td>
</tr>
<tr>
<td>U.K.</td>
<td>6.2</td>
<td>Belgium</td>
<td>2.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.3</td>
<td>Portugal</td>
<td>2.6</td>
</tr>
<tr>
<td>Ireland</td>
<td>4.5</td>
<td>Greece</td>
<td>2.3</td>
</tr>
<tr>
<td>Italy</td>
<td>4.0</td>
<td>Korea (R.O.K.)</td>
<td>1.5</td>
</tr>
<tr>
<td>Finland</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


1/ In principle an even finer breakdown would have been preferable, but the lack of consistent statistical definitions rules out a closer look.
The data -- covering a period of almost uniformly favorable conditions in all countries -- show that under the international conditions of that period, the ground rules under which the economy operated during these years secured a fairly favorable comparative position for Yugoslavia, at least on the basis of this limited yardstick.

3.2 The Republic of Slovenia

59. Slovenia, where the four interviewed enterprises are located, is Yugoslavia's most northern republic, bordering Austria, Hungary and Italy. In 1977, its population was around 1.8 million, out of a total population of 21.8 million. Slovenia's industrial development had already started by the second half of the 19th century, 1/ long before the creation of independent Yugoslavia in 1918. This early start -- around three generations before industrial development was initiated in most parts of the southern republics -- gave Slovenia a lead in economic development which is clearly shown below.

1/ One of the interviewed enterprises dates its direct predecessor with an essentially unchanged product line of sophisticated equipment back to the 1840s when it was already a technology leader in its special field.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia</td>
<td>194</td>
<td>3,800</td>
<td>40.2</td>
<td>18.4</td>
<td>192</td>
<td>8.3</td>
</tr>
<tr>
<td>Croatia</td>
<td>128</td>
<td>2,500</td>
<td>27.9</td>
<td>10.1</td>
<td>124</td>
<td>20.9</td>
</tr>
<tr>
<td>Vojvodina</td>
<td>122</td>
<td>2,390</td>
<td>25.7</td>
<td>9.1</td>
<td>103</td>
<td>9.2</td>
</tr>
<tr>
<td>Serbia proper</td>
<td>96</td>
<td>1,880</td>
<td>23.5</td>
<td>8.8</td>
<td>89</td>
<td>25.1</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>67</td>
<td>1,310</td>
<td>18.0</td>
<td>7.1</td>
<td>73</td>
<td>18.8</td>
</tr>
<tr>
<td>Montenegro</td>
<td>74</td>
<td>1,450</td>
<td>19.7</td>
<td>5.6</td>
<td>102</td>
<td>2.6</td>
</tr>
<tr>
<td>Kosovo</td>
<td>30</td>
<td>590</td>
<td>10.1</td>
<td>3.4</td>
<td>44</td>
<td>6.9</td>
</tr>
<tr>
<td>Macedonia</td>
<td>66</td>
<td>1,290</td>
<td>20.4</td>
<td>7.3</td>
<td>73</td>
<td>8.3</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>100</td>
<td>1,960</td>
<td>23.7</td>
<td>9.0</td>
<td>100</td>
<td>100 (=21.8 million)</td>
</tr>
</tbody>
</table>

1/ Data for 1975, unless indicated otherwise.
2/ Republics/Autonomous Provinces arranged roughly in the North-South order.
3/ Estimated by national GNP and relative differences of GMP per capita.
4/ Workers in the social sector/population.
5/ Workers in industry/population.

Source: Statistical Yearbook Yugoslavia; Statistical Bulletin; various issues.
The indicators demonstrate a steep gradient of the respective stage of economic and industrial development running from North to South, with Slovenia ranking way out on top. Both the ratio of employment in the (modern) social sector to population, and of industrial workers in total population suggest the line of causality. The relative size of the modern sector largely determines the average income levels: it is vastly superior in capital endowment and productivity in comparison with the private sector, which is mostly engaged in traditional small-holder agriculture. In spite of great sacrifices of the four developed regions over the last two decades -- one of the transfer schemes which prescribes obligatory loans out of undistributed profits from enterprises is equivalent to around 10% of total enterprise investment -- the disparities tended to widen even in relative terms.

60. As striking as the interregional differences for total development are those revealed by performance indicators.

**Table 5: INTER-REPUBLICAN PERFORMANCE INDICATORS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia</td>
<td>145</td>
<td>111</td>
<td>117</td>
</tr>
<tr>
<td>Croatia</td>
<td>108</td>
<td>107</td>
<td>111</td>
</tr>
<tr>
<td>Vojvodina</td>
<td>110</td>
<td>111</td>
<td>105</td>
</tr>
<tr>
<td>Serbia proper</td>
<td>92</td>
<td>99</td>
<td>93</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>74</td>
<td>87</td>
<td>86</td>
</tr>
<tr>
<td>Montenegro</td>
<td>110</td>
<td>72</td>
<td>99</td>
</tr>
<tr>
<td>Kosovo</td>
<td>48</td>
<td>82</td>
<td>85</td>
</tr>
<tr>
<td>Macedonia</td>
<td>70</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

1/ Ratio of depreciation plus retained enterprise profits to fixed assets in industry.

2/ GMP per worker in all productive activities.

3/ GMP per worker in industry and mining.

Source: Statistical Yearbook of Yugoslavia.
The disparities of gross profit rates — expressing the capacity to generate resources for expansion — are wide indeed. The productivity data are, of course, dependent from the industrial structure, 1/ with capital-intensive basic industries exhibiting higher ratios than labor-intensive ones due to the higher depreciation incorporated in the former. However, Yugoslavia's less developed Republics (with the exception of Macedonia) have a higher than average share of basic industries; the comparative data above are thus already biased in their favor. What emerges from these data is first, that the intractable problems of unequal stages of economic development can be observed within Yugoslavia, exhibiting many of the same features and unsatisfactory results from attempts at correction as other countries. Second, the great disparities between the performance of the republics establishes that country average data can be totally insufficient to compare the performance potential of one particular country, or of one particular set of policies or of one particular economic/political system with another one. What is evidently more important, at least in the case of Yugoslavia, is the difference in the accumulated technical and managerial know-how from the history of economic development.

61. The metal industry accounted in 1977 for 31% of industrial output of Slovenia (20% for total Yugoslavia). Slovenia's share in the total Yugoslav output of the metal products industry was 30%; for machinery and transport equipment alone it came to 36%. The performance of Slovenia's metal products industry was markedly above that of total Yugoslavia: output per worker (productivity) was 16% higher, remuneration per worker 11% and profitability 30% above the average. The difference is even wider than indicated by these ratios because Slovenia's performance and size pull up the country averages by considerable margins.

62. What emerges from these data is that Slovenia is the powerhouse of economic development in Yugoslavia, with great emphasis in the industrial structure on sophisticated growth industries like industrial equipment and electronics. The standard of living is approaching the level of Western Europe. Actual employment is well above the full employment level, as evidenced by the fact that workers from other Yugoslav nationalities (in many instances not permanently settled in Slovenia) are now estimated to be in the order of 20% of total employment in Slovenia. As a result of this particular economic situation, and in part due to historical circumstances, Slovenia also tends to be ahead of the rest of Yugoslavia in trying out new institutional arrangements. Another, though not less important fact, is that the cultural-ethnic diversity of the Yugoslav Federation and the high degree of autonomy permitted the individual republics, may leave considerable room for institutional and motivational diversity. In sum: Slovenia is certainly in

1/ The possible structural component in both gross profit rates and productivity has much less importance than one would imagine. Considering the two extreme cases (Slovenia and Kosovo) the combination of the subsectoral gross profit rates with the inverted subsectoral composition of fixed assets merely reduces the rate for Slovenia from 21.6 to 19.6% and increases it for Kosovo from 11.2 to 12.0%.
many aspects not typical for Yugoslavia. For example, the absence of unemployment, which reaches sizeable proportions in some of the less developed republics, determines a different frame of reference for many employment-related enterprise decisions and managerial practices. On the other hand, Slovenia exhibits today many institutional arrangements and approaches which -- although less typical elsewhere in Yugoslavia today -- will more likely than not be typical for all of Yugoslav tomorrow. Both these constraints will have to be kept in mind when we turn to the main topic: managerial practices in Yugoslavia's self-managing enterprise.

4. The Pluralistic Framework of Enterprise Management

The enterprise constitutes a part of a complex political/legal/social/economic system, into which it is integrated by multiple links. The subsequent exposition is an attempt to look at the most relevant relationships in a systematic fashion. We are dealing with three institutionalized "agents" within the enterprise:

- Operational Management
- Self-Management
- Syndicate (including other Socio-Political Organizations)

In addition four agents external to the enterprise are particularly relevant

- Other enterprises singularly
- "Economy" (Ec-Chamber, Associations)
- Socio-Political Organizations (Syndicates, LCY, etc.)
- Socio-Political Communities (Commune, Republic, Federation)

Within the enterprise three "levels" can be distinguished:

- Enterprise
- BOAL
- Work Group

The most important links in connection with enterprise decision-making which exist between the enterprise and external agents and among levels within the enterprise schematized as follows:
64. The following features are particularly important and will be discussed subsequently:

- Within the enterprise, Operational Management, Self-Management, and Socio-Political Organizations are organized in an analogous fashion on all three levels. A great variety of formal and informal links exists for each level among the three agents, for each agent among different levels, and across levels and agents.

- Each of three agents within the enterprise has specific and distinct links to the Socio-Political Community.

- For each level relatively few specific functions are the exclusive prerogative of one of the agents, if not formally, then de facto.

- Numerous control links exist among the internal and external agents.

The complex interdependencies highlighted in the subsequent analysis, exhibit a great variety of mutual checks and balances, and what seems almost a deliberate disregard for clear-cut lines of centralized authority and responsibility. In essence, it represents a genuinely pluralistic framework for decision-making of the Self-Managing Enterprise.

4.1 Operational Management

65. The tasks of Operational Management are executive for short-term operational decisions affecting production, procurement and distribution. The Associated Labor Act delineates the tasks of Operational Management at the level of the enterprise and the BOAL as follows: (Operational Management) "shall manage the business of the organization, organize and coordinate the labor process ... propose business policy and measures for its implementation, execute decisions and conclusions adopted by the workers (and) ... the Workers' Council, ... consider, prior to adoption, the draft plan ... (and) give his opinion and proposals (related to) ... the implementation of the plan." To carry out the tasks, top Operational Managers have "the right and the duty to take part in the work of the BOAL's (respectively the enterprise's) Workers' Council without any decision-making rights." (Article 514). Among the tasks from which Operational Management is excluded, even in operational decisions, is most prominently the whole gamut of personnel management, 1/ which is in most private or state capitalist systems the lynchpin of managerial authority. The dividing line between operational decisions and policy decisions is in the case of financial transactions drawn by the rule that transactions "on the sale of goods and services which do not provide for ... to sharing of income ... nor for joint risk sharing ...", 2/ that is those not regulated by Self-Management Agreements and integral to comprehensive cooperation, are fully under the competence of Operational Management.

1/ Compare Chapter 5.
2/ Associated Labor Act, Article 587.
66. Operational Management of all four visited enterprises was headed by the "General Director"; reportedly some large enterprises are headed by a directorial board with an appointed chairman as General Director. He has proxy for signing business contracts in the name of the enterprise, but no such proxy if legally possible for Self-Management Agreements which regulate all medium-run and a great variety of short-run arrangements among the BOALs of the enterprise or with other enterprises. The Workers' Council, which has to satisfy all Self-Management Agreements can, however, give a specific mandate for negotiation to the General Director 1/. In all enterprises the General Director supervises the "Work Community" for general staff functions, like planning and accounting. The Work Community is by law not by itself a BOAL, regardless of its size, but carries out its functions (provision of services) for all BOALs jointly. 2/ The central staff function of the Work Community is obviously one of the pillars of the General Director's influence on policy and strategy decisions through his direct operational authority for the technical analytical preparation of choices.

67. The position of the General Director is particularly strong in the so-called "Collegium," a top-level deliberation body meeting on a regular schedule for an informal discussion of almost any conceivable short- and long-term issue affecting the fate of the enterprise and its course of action. All enterprises have such a body, although not all under this particular name. The Collegium usually consists of the General Director himself, operational managers of some BOALs and technical experts (both according to the issue at hand), the president of the Workers' Council and the chairman of the Syndicate organization. 3/ What is important in this context is that the non-regular participants are invited by the General Director to attend, which gives obvious possibilities to affect the direction and thrust of the deliberations.

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1/ One of the visited enterprises gave an interesting example of the extension of Self-Management into business negotiations with third parties, which could be regarded as the prerogatives of Operational Management. The enterprise supplies heavy equipment, contracting in exports frequently on a turnkey basis or for very large blocks of equipment. The Operational Management carries out the negotiations with potential foreign customers: its mandate for discretionary decisions (the lowest price bid and shortest delivery date) is defined in advance jointly with Self-Management, and if any of the preagreed parameters cannot be met during negotiation, the mandate has to be formally amended before Operational Management can agree to any obligations binding the enterprise.

2/ Compare paragraph 42, 45. The lower legal status results from the condition that BOALs are defined in terms of having a marketed or marketable output from which they generate income, whereas this is not the case for a Work Community which cannot "sell" its services to BOALs but merely has the right to Compensation of costs incurred and personal incomes.

3/ See paragraphs 72 and 83 for further discussion.
68. In none of the enterprises visited were any intermediate organizational levels of Operational Management—the same applies to Self-Management and Socio-Political Organizations—identified between the BOAL and the Work Group. That is not to state that they do not exist as a matter of principle; but representatives of all three subsystems found intermediary stratification too insignificant to bother, or were unable to discuss it because it was sufficiently transparent only to the directly affected workers. Enterprise organization charts, produced as a matter of routine, emphasize interaction between the agents rather than stratification, let alone an elaborate multi-layer hierarchical stratification common elsewhere for the description of organization structures. Significant of the low regard (and on occasions open contempt) for hierarchical stratification is that, with the exception of the General Director and possibly his deputy, no hierarchical titles are being used (and in these cases obviously mainly for legal reasons related to contracts with third parties), whereas the use of academic titles is common practice. The low profile of Operational Management is consistent with the relative importance of group decisions by consensus, extending, at least at the shopfloor level, into the realm of operational decisions, with the peer group promotion pattern 1/ and with the small personal income differentials derived from formal position. 2/

4.2 Self-Management

69. With the exception of short-run operational decisions regarding production, procurement and sales, enterprise decisions are made by the Workers' Council of the enterprise or BOAL, or by some other self-managing arrangement such as assembly of all workers. The latter form is obligatory for all decisions affecting basic rights of workers, for example, allocation of income. The Workers' Council is the major organ through which Self-Management operates in decision-making. For the BOAL, its tasks are summarized by the Associated Labor Act as follows: "... determine draft guidelines for the BOAL ... (for public discussion by the workers' collective); ... adopt the plan of the BOAL; ... determine measures for the implementation of the business policy and plan; ... decide on credits in connection with day-to-day business; ... draw up balance sheets; ... elect, appoint and relieve from duty executive and business-managing organs (i.e. all members of Operational Management); ... issue guidelines and instructions to (Operational Management) and exercise supervision over their work; ... (and) other affairs determined by the by-laws (of the BOAL) and by (Self-Management)." Decisions on affairs which are by Law, or by the by-law of the BOAL or by Self-Management Agreement the prerogative of the Workers' Council "may not be entrusted to (Operational Management)." 3/ The tasks of the Workers' Council of the enterprise are largely analogous to those of the BOAL, however with one major exception. Decisions related to the plan of the enterprise and other important decisions require adoption by the Workers' Councils or referendum of all BOALs. Thus, the requirement of consensus is built formally into the Self-Management of enterprises.

1/ Compare paragraphs 97-98.
2/ Compare paragraphs 104-109.
3/ Article 495.
70. Particularly important is that the tasks as delineated above reflect much less of a clear-cut distinction between operational and policy decisions as specified for Operational Management. This is clearly evident in the references to short-term (i.e. trade) credits linked to current business transactions, and to measures for implementing rather than merely selling the (short-term) business policy and plan. Unquestionably this can lead to a considerable overlap of competences with the accompanying potential for confrontation and stalemate. However, representatives of all three agents maintain that the spirit of consensus does regularly prevail and that no such conflicts ever arose in the past. Provided this pattern of problem-solving does work as it is claimed to work and produces rational decisions, the lack of precision in the delineation of areas of competence may actually be a deliberate choice to enforce consensus-finding over singular decisions. An example of the sometimes blurred dividing line between operational and policy decisions is the rule prevailing in all four enterprises that business trips abroad require prior approval by Self-Management, and debriefing by Self-Management after return, including those of the general director on purpose and result.

71. The Workers' Council as the major organ of Self-Management is complemented by a number of other organs. There is no size limit for Workers' Councils, and the most common provisions that every Work Group (generally less than 30 members) should be represented by at least one delegate in the Workers' Council of the BOAL, and that there should be one delegate for every 50 or every 100 workers in the Workers' Council of the enterprise, could in large enterprises easily produce a very large membership (in one case 68). Due to the principle that delegates should act according to the specific guidance given by them in advance by their constituency, a large Workers' Council can be a very unwieldy and slow decision-making organ. This would tend to raise the costs of decision-making both in terms of working hours lost and delayed reactions to external challenges which require quick response, to prohibitive levels. To keep these costs down all visited enterprises have on the level of both the BOALs and the enterprise a small Executive Committee elected by the Workers' Councils of the BOALs. Although formally an advisory body to the Workers' Council, it operates in fact as the representation of Self-Management, on the basis of periodic confirmation of the Workers' Council. The executive function assumed for reasons of expediency by the Executive Committee is evident in the apparently common practice of giving it the authority to decide over "minor investment." 1/

1/ In one of the visited enterprises the upper limit was as high as about $12,000. It is worth noting that the limit is that of the Executive Committee, not that of Operational Management which has no decision-making power at all on investment matters.
72. Further, in all enterprises the president of the Workers' Council, elected by all its delegates is, in a great number of instances when even the small Executive Committee would be a too cumbersome organ, the representative of Self-Management in the early steps of decision-making. The obvious example is the participation of the president of the Worker's Council in the Collegium. 1/ In view of the wide range of topics considered and decided co-equally by one or the other organ of Self-Management, one would expect heavy over-representation of medium-level professional staff in the major Self-Management organs or positions, and/or the emergence of a professional (full-time) Self-Management elite. Neither was the case in the visited enterprises. Blue-collar workers seem to dominate in most of them on the top Self-Management level, at least in numbers, and none had any full-time Self-Management functionaries. This raises the question whether under these circumstances an effective contribution to decision-making can be expected from Self-Management. As shown below 2/, the fact that a limited number of activists seems to be rotating between positions of influence in Self-Management, the Syndicate, and the LCY, creates a pool of qualified and experienced candidates with broad exposure to a variety of economic, political, and managerial functions. Further, the Syndicate has an active education program for Self-Managers and Syndicate members on various aspects of enterprise management.

73. Several other organs of Self-Management are also quite important. A "Cadre Committee", elected by the Worker's Council is in charge of all appointments and promotions from within and from outside the enterprise, with the exception of the General Director and the heads of the BOALs. 3/ However, appointments and promotions are apparently rarely decided against the advice of Operational Management, but neither are such negative recommendations frequent because of their image as obstructing Self-Management. A "Disciplinary Committee" elected directly by all workers reviews disciplinary complaints initiated by Operational Management or Self-Management; the penalties it rules can reach from reprimand to dismissal. 4/ Every enterprise and BOAL has a "Workers' Supervision Committee", elected directly by all workers. Its sweeping competence covers "implementation of the by-laws and of Self-Management Agreements and Social Contracts". The Committee does, among other matters, watch over "responsible and socially and economically appropriate use and disposition of social resources" and over "implementation of the principle of income distribution according to work performed", 5/ and its control is directed towards actions and decisions of Operational Management, Self-Management and particular interest groups of workers.

74. Self-Management has also its own institutional link with the Socio-Political Community. The workers of the BOAL and of enterprises which have no separate BOALs elect a delegation for representing the BOAL in the first of the three chambers (Chamber of Associated Labor) of the assembly of the Commune, which is made up entirely from delegates of BOALs. The BOAL is tied by a second link into the social/political life of the Commune. It sends

1/ Compare paragraph 67 and 83.
2/ Compare paragraph 78.
3/ Compare paragraphs 97-98.
4/ Compare paragraphs 100-101.
5/ Associated Labor Act, Article 556.
delegates into the assembly of the Local Community 1/ in the area where it is located; this assembly nominates the delegates for the second chamber (Chamber of Local Communities) of the Communal assembly. Little is known about what these links, which extend from the level of the Commune further to the level of the Republic and ultimately to the Federation, mean in practice for the decision-making of enterprises. The principle, however, which certainly affects reality to some extent is quite clear: By integrated Self-Management into the decision-making of the Socio-Political Community, it is induced to consider enterprise plans and actions not only in respect to the workers' collective, but at the same time how they affect the Commune. This dual reference is to minimize any antagonism and conflict which could arise with respect to certain decisions. A case in point is the determination of contributions from the income of organizations 2/ which finance many of the social services of the Commune through Communities of Interest through contributions from enterprises, reducing Net Income available for distribution to the workers. 3/

4.3 Socio-Political Organization/Syndicate

75. In contrast to Operational Management and Self-Management, the tasks of the third subsystem, Socio-political Organizations, are not legally defined on the level up to the enterprise by any accessible source with one exception, to be discussed subsequently. From numerous discussions a number of inferences can be made. First, only two of the Socio-Political Organizations -- the Syndicate 4/ and the LCY -- are relevant in this context. Second, the self-perception of the Syndicate is not only that of an organization oriented towards the struggle for the economic advancements of its members within the enterprise and/or industrial branch vis-a-vis either the owner of the means of production (private, or state), or directly vis-a-vis society at large. On the contrary, representatives of the Syndicate tend to circumscribe its mandate as guarding society against any misuse of economic power of the enterprise by Self-Management or Operational Management. This permanent social control against exploitation of society by the enterprise is established by participation in the decision-making from within, rather than by formalized control procedures from outside the enterprise or BOAL.

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1/ The Local Community, a subdivision of the Commune, can comprise a number of urban blocks, a suburban subdivision, or a village, and can comprise from a few hundred to several thousand residents.

2/ Compare Appendix II.

3/ Compare paragraph 46 on Communities of Interest. Paragraphs 121-123 and 127 discuss the relationship between enterprise and Commune in greater detail.

4/ The Syndicate is not in a unitary organization but is organized by broad areas of activity. Slovenia, for example, has 14 separate syndicates. However, each BOAL is organized by one syndicate only, in the majority of cases all BOALs of each enterprise are organized by one syndicate, and in view of the subsequent analysis the question whether one or several syndicates are involved is immaterial.
76. Such a task is by its very nature an eminently political one, and representatives of the Syndicates imply that they see this mandate in these terms. Although the LCY has in principle the role of an independent political force, its active involvement in the enterprises' operations would overtax its capacity for guiding social/political development at large by absorbing its energies in operational and managerial details. The Syndicates are a perfect proxy to take over this function, in particular since the traditional trade union function, referred to above, is invalidated by the premises of Self-Management Socialism. The close correspondence of the political mandate of the two Socio-Political Organizations is also evidenced by the almost perfectly congruent areas of concern for which both the Syndicate and the LCY organizations within the enterprise have set up special committees, such as for culture, social questions, ideological questions, economic questions, development of cadres, self-management and national defense. This could point to excessive duplication of effort, if not to a potential for rivalry between the two Socio-Political Organizations. However, representatives of both organizations are eager to emphasize that this is not the case 1/ for two reasons. First, membership in the two organizations is additive, i.e. LCY members (in the order of 10 to 15% of the workforce of the enterprise) are not only members of the Syndicate (as almost all other workers), but they tend to be its most active members, and the functionaries of the Syndicates are in most instances party members, due to the obligation of the LCY to actively participate in the social, political and economic life in their place of work and residence. Second, any wider concerns, like those mentioned above, are not pursued autonomously by both organizations but usually in close cooperation and, if both organizations are active, generally under the guidance of the LCY. There is one area, however, where the Syndicate clearly has an autonomous function: The creation of the Self-Management bodies.

77. The instrument by which the Syndicate controls the composition of Self-Management is its control over the process of nomination of candidates, which is by law the domain of the Syndicate. For the preparation of candidate lists, the Syndicate Conference (i.e. its elected governing body) at the level of the BOAL receives suggestions from its members. However, it establishes candidacy only after what is sometimes referred to as "moral-political assessment" by the Syndicate; the candidate list is apparently not restricted to names brought forward by direct initiatives but can be complemented by the Syndicate Conference itself, whereas no candidates can be put up for election without its approval. Syndicate representatives stress that the candidate lists contain more names than the number of election slots; the excess of candidates, however, tends in the majority of cases to be symbolic. This control over the composition of Self-Management through the process of nomination of candidates, combined with the relatively short tenure for Self-Management positions of only two years with one permitted re-election, prevents the emergence of a self-perpetuating Self-Management elite independent of the Syndicate and with its loyalty restricted to the Workers' Collective.

1/ On the assumption that this claim is justified, the subsequent discussion is restricted to the Syndicate, leaving aside the question of the relationship between the two organizations.
78. A detailed analysis of the interrelation of membership in the LCY and Syndicate organization and in Self-Management organs is beyond the scope of this overview. However, there is sufficient evidence to hypothesize that membership in these three organized groups largely overlaps. Furthermore, the Yugoslav estimates that some 15-20% of the workforce are at any point in time active in one of the three groups probably refers largely to the same individuals. While tenure of particular positions is limited, individuals within this set of activists rotate between positions within and between the three organized groups, so that in balance the cohesion is probably much stronger than the sheer complexity of the institutional setup suggests. There is a clearcut political and practical advantage in having one integrated active group within the total workforce; it greatly reduces the learning problem arising with positions which require considerable efforts for acquiring sufficient command. Since the positions of functionaries and delegates tend to rotate within a relatively closed group, all its members acquire cumulative knowledge from the continuing exposure to all aspects of enterprise operation and to all enterprise functions. Last but not least, the rotation of functions and positions within this integrated broader activist group, and the exclusion of professional delegate or functionary positions within the enterprise (or of functionaries brought in from the outside) is to prevent isolation of the activist group from the Workers' Collective at large.

79. The Syndicate organization of the enterprise is tied into the wider context by its membership in the Syndicate Conference (across branch syndicates) of the Commune, of the Republican, and ultimately the Federal Syndicate Conference. In the case of the Commune the Syndicate organization of the enterprise participates through the communal Conference in the nomination of delegates to the third chamber (the Socio-Political Chamber) of the assembly of the Commune. In the case of the Republican or Federal Syndicate Conference, it participates in the coordination on the branch level and its codification in Social Compacts and Self-Management Agreements. In either case, however, guidance flows in the opposite direction as well. This is obvious with respect to computation and distribution of enterprise Net Income. The Commune has for obvious reasons a strong interest in avoiding excessive income disparities between different enterprises on its territory. In the absence of income subsidies and of a well-defined legal framework for direct interference, this amounts to social/political pressures for constraints on the income distribution policy of those enterprises which are, on the basis of their income situation and the rules of Self-Management Agreements in principle, able to pay above average personal incomes.

1/ The Syndicate has by law to be a cosignor of all Compacts and Agreements touching upon personal income.
80. Some such influence is evidently directed towards top Operational Management which for a number of reasons has only a limited capacity for resistance. 1/ Similar pressure for restraint probably is transmitted through the Syndicate. No less important is the role of the Syndicate in the formation of Self-Management Agreements on income distribution 2/ for which it is, together with Self-Management, a co-signer for the enterprise. In effect these agreements set a maximum portion of earned net income of the enterprise which can be distributed in the form of personal income, and may in addition set guidelines for maximum absolute income levels for certain categories of workers. In both instances the restraint is imposed for the sake of the long-term benefit of the present workers of the enterprise or in the name of the benefit of society as a whole. In either case a significant part of the function of the Syndicate is to explain the need to some short-run sacrifice to the workers and for their own or society's long-term benefit in order to obtain their consent; in either case this role of the Syndicate lends support to the earlier hypothesis 3/ that Syndicates are the political guardian of the interests of society as well as the spokesman for the views of its present members within the enterprise.

81. The significance of this educational role of the Syndicate (and equally the LCY) is highlighted by the persistent laments of the political leadership about the failure of the Socio-Political Organizations to provide effective guidance, as evidenced by violation of Social Compacts and Self-Management Agreements, strikes, and group-ownership" tendencies. 4/ One of the visited enterprises gave a concrete example of what the educational mandate means in practice: prior to referendum about a joint venture agreement, the Syndicate, the LCY, the Youth Organization and the Veteran Organization, which had all supported the move, carried out an extensive "campaign" in the enterprise in order "to create the right climate" as the Syndicate spokesman put it. There is a good deal of evidence that such campaigns, usually in the form of individual or small group discussions organized right at the work place, are quite typical for Self-Management decision-making processes at the grass-roots level, whereas the relatively rare large meetings of the whole Workers' Collective -- with or without the act of formal voting -- tend to merely confirm the success (or failure) of the preceding campaign.

4.4 Interaction between Operational Management, Self-Management and Syndicate

82. As mentioned before, on every level within the visited enterprises exists a corresponding tri-partite structure. On the level of the Work Group we find the "foremen" (representing Operational Management). The Work Group constitutes simultaneously the electoral unit which elects one of its members as the delegate to the Workers' Council of the BOAL and to which the delegate reports back, and it constitutes, thirdly, the smallest Syndicate unit with its elected "shop steward." The representatives/delegates of the

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1/ Compare paragraphs 89-96.
2/ See Appendix II.
3/ Compare paragraph 76.
4/ Compare paragraph 109.
three subsystems closely cooperate as a team in almost all issues affecting work arrangements and relations within the Work Group. On the levels of the BOAL we find the head of Operational Management, the president of the BOAL's Workers' Council and the chairman of the basic Syndicate organization 1/ and on the enterprise level the General Director, the president of the Workers' Council and the chairman of the Syndicate.

83. The most convincing example of the pluralistic management pattern is the previously mentioned "Collegium". All four enterprises had under various names such a core unit for an integrating approach to problem-solving and decision-making, and similar arrangements are reported to exist in most Yugoslav enterprises. In the Collegium the General Director, the president of the Workers' Council and the chairman of the Syndicate, joined in most instances by some heads of BOALs or senior technical staff experts invited by the General Director, meet on a frequent, regular (in three cases weekly) schedule for an informal exchange of views on whatever short- or medium-run issues the participants deem relevant. The lack of formality (the Collegium does not have any defined legal status and its deliberations are therefore non-committal and the agenda is open-ended) is seen as the major asset. It promotes an unrestricted probing of conceivable courses of action (in one case the enterprise representatives referred to the Collegium as the "brain trust" and "generator of new ideas") as to their economic, technical and political feasibility. In three enterprises the implication was that such informal feasibility testing, preceding formal analytical or decision-making procedures, may actually be the first and most important step in decision-making, by defining the options which are to receive further attention. The importance attached to the Collegium in spite of the absence of legal status is also telling by itself. Further, the Collegium as an institution is not required by law, as may have been the case for some other institutions, but reflects evidently the collective judgment within the enterprise that there is the need to have such a platform. In no case was there any sign of concern that the Collegium could be misused for cooption or collusion. 3/

1/ The LCY organization may in fact be a fourth party to the tri-partite structure, but is—as mentioned before—excluded from the analysis because of the symbiotic relationship with the Syndicate. Note: there is no LCY organization on the level of the enterprise; the reason given for this conspicuous omission is avoidance of overidentification of the party unit with the workers' collective in the enterprise.

2/ Compare paragraphs 67 and 72.

3/ Interestingly enough, in one enterprise one of the senior Operational Managers referred, in the presence of members of Self-Management, to an obvious case of collusion: the enterprise opted in its draft balance sheet, proposed to the workers' collective and adopted by referendum, for sizeable voluntary depreciation and low allocation to business funds (undistributed profits) because it was felt that this was the best method to discourage claims for higher personal incomes from the rank-and-file.
84. From the preceding presentation it has become evident that "management" in the broadest sense is the joint domain of the three formally separate and independent sub-systems: Operational Management, Self-Management, and Syndicate (representing the Socio-Political Organization). As already indicated and as will be shown in greater detail, numerous formal and informal guidance, control and information links exist on each level (among the three sub-systems), within each sub-system (among levels) and across the borderlines of both. The direction of these links can change from issue to issue up to the point of reversal of authority (guidance and control) among a defined set of individuals. Further, given this complex system of interdependence, it is not even possible to unambiguously define what clearly constitute "Operational" and what "Self-Management" issues, or on each level who is specifically in charge of which decisions, or -- if more than one agent is involved -- how decisions are arrived at. This seems to point to a deliberate disregard of what is conventionally considered as "sound managerial practice", such as clearly assigned individual accountability, corresponding to clearly drawn lines of command, control and information within a clearly defined hierarchy of authority empowered to mete out rewards and penalties to induce adherence, and reflected in elaborate procedural rules of competence and decision-making. On no level is dominance of one of the three sub-systems clearly institutionalized across the board, which leaves a considerable scope for both equality or actual dominance according to the personalities involved. This somewhat dizzying complexity and vagueness of responsibility and interaction found in Yugoslav enterprises might appear as a pervasive prescription for never ending confrontations and stalemate and, ultimately, inefficiency.

85. The discussions revealed that this potential for management anarchy and voluntarist action is largely checked by a great variety of informal arrangements. For all three levels the evidence is persuasive that the preferred form of decision-making is consensus, irrespective of formally defined rules of competence, for a number of reasons. First, consensus is universally considered as the solution to conflicts of opinion and interest which is most compatible with the principles of Self-Management Socialism. As a corollary, personal inability to operate effectively through a consensus approach is obviously regarded as evidence of social/political misconduct, potentially carrying the penalty of exclusion from appointed or elected positions. One might add that many Yugoslav interlocutors exhibited an unrestrained contempt for "remnants" of hierarchically structured procedures and an almost mystical belief in the existence of compromise and consensus among reasonable and responsible individuals for all decision-making problems. Second, once a pluralistic framework is instituted for ideological considerations, including the separation of authority from the prerogative to hand down rewards and penalties, consensus may be the most efficient, if not logically the only solution to organize decision-making effectively. Third, the incidence of reversal of authority and control between Operational Management and Self-Management, and with peer group relations strongly affecting appointment

1/ Some observations and comments seem to suggest that clearly defined rules of conflict-resolution are deliberately omitted in order to make Self-Management work itself out through consensus-finding.
procedures on operational positions below the level of the BOAL head, all but eliminate the scope for an authoritarian management style. Reversal of authority certainly will deflate all temptations to use formal competence to its outer limits in a particular situation of conflict.

86. Discussions about formal and informal procedures for consultation and consensus-finding in the relations among enterprises or between enterprises and Socio-Political Communities -- most notably in relation to planning -- indicated that the obvious drawbacks of decision-making by consensus are less pronounced in the Yugoslav setting than they would be in a competitive market system without compulsory or at least commonly accepted ex ante coordination. For example, slower individual response to unexpected challenges carry much less of a penalty in an environment in which all organizations follow a similar pattern of response. 1/ The transparency and predictability of the economic environment is relatively high, due to the comprehensive information approach to planning and reduces the occurrence of problems for which quick response is crucial. In the absence of elaborate rewards and penalties for managers linked to profits and/or sales as they are typical for competitive market systems, and in the absence of management rewards and penalties linked to imposed targets as they are typical for the many centrally planned economies, consensus and the participation in consensus-finding are likely to have a considerable impact on motivation.

87. The obvious consistency between the expression of the high regard for consensus (and the corresponding low regard for personalized accountability and authority) and the philosophical/political premises of Self-Management Socialism could give rise to the suspicion that these statements and the observations supporting this conceptual consistency might be demonstrations of political faith rather than statements about reality. The discussions with enterprises provide no reason to suspect that any staging to that end had actually taken place. Most persuasive were the following observations. First, only one of the four enterprises had ever received foreign visitors for discussing the modus operandi of management, as evidenced by the rather circuitous and sometimes muddled presentation of actual procedures. Second, the consistency of the framework was in no case expressed or intimated coherently or in a programmatic fashion, but it emerged rather gradually and out of discussions of a variety of topics. Third, the three enterprises which had no comparable previous exposure produced organization charts of the enterprise drafted in terms of Self-Management, with Operational Management figuring only on the enterprise level and as an appendix to the Workers' Council, obviously in the belief that this was the schema which really counted. Most persuasive was the observation of the interaction between representatives of Operational Management (including the General Director) and those of Self-Management, the Syndicate and the LCY in joint meetings. In three out of four cases the

1/ In cases where more prompt response is essential, pragmatic rules can be devised to assure flexibility; compare footnote 1, paragraph 66.
latter were no less articulate as to their role of and position regarding management of the enterprise than top Operational Managers, they had an obvious grasp as to the problems faced by the enterprise and of its tactical and strategic options for response, and they exhibited an astoundingly detailed knowledge of their legal and political rights and obligations. Last but not least, there was an almost universal absence of the inhibitions to "speaking up" in the presence of formal "supervisors" which is characteristic for authoritarian relationships.

5. Personnel Management Practices

88. An area for which the pluralistic framework is particularly relevant is personnel management in the broadest sense, comprising the following functions:

   a) Appointment/reappointment/recall of top Operational Management
   b) In-line promotion/demotion of medium/lower Operational Management
   c) Recruitment and dismissal
   d) Disciplinary action
   e) Internal income scale

5.1 Top Operational Management

89. To prevent the emergence of a self-perpetuating managerial elite, commonly referred to in Yugoslavia as "technocratic forces", 1/ the restriction of the decision-making power of Operational Management to narrowly defined executive decisions, based on policy decisions by Self-Management, is only one means of control. A second, more subtle but no less effective one is the procedure for appointment and recall of top Operational Management (the general director and heads of BOALs). Since Operational Management itself is not a participant in this process, co-option is effectively prevented.

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1/ The public concern about the emergence of de facto domination by technocratic elites has unquestionably some real causes, and in the late 1960s there was some drift in this direction. An important provision of the Constitutional Amendment of 1968 which permitted Self-Management to yield its power to Operational Management is a case in point. There can be little question that Self-Management and technocratic decision-making are philosophically and in practice mutually exclusive.
To emphasize that there can be no guaranteed permanency for an appointed position of power and influence, the tenure for top Operational Management is limited by law to four years. There is no limit to the number of reappointments, but the holder of the office has to pass through the same application/nomination/approval procedure as any other candidate. However, in all four visited enterprises the interviewed general directors and heads of BOALs were at least in their second term and reappointment is not expected to be a matter of serious doubt. Discussions point to the view commonly held by both top Operational Managers and functionaries of Self-Management and Socio-Political Organizations that reappointment should be denied not only in case of blatant mismanagement or professional incompetence, but also when unwritten rules of conduct reflecting the pluralistic setting have been persistently violated, as evidenced by a history of conflicts with Self-Management, Socio-Political Organization or the Socio-Political Community (Commune). Refusal of reappointment is, in fact, equivalent to recall. 1/ The corollary of such a periodic reappointment pattern is that a refusal of reappointment is an act of semi-public censure which may shatter the career prospects of the effectively deposed office holder.

The law prescribes public invitation of applications. The formal applications are reviewed by a Competition Commission composed of representatives elected or appointed by Self-Management, the Local Syndicate organization, and the Commune. The Commission concludes its deliberations by drawing up recommendations for "one or more" 2/ candidates proposed to the Workers' Council for the formal decision. As in every instance of a "closed list", the nomination of candidates (the short list) is the decisive step in the process. In particular, if the list is reduced to one name, or if the preferences of the Competition Commission (its proceedings are reportedly public) are not a matter of doubt, the formal vote by the Workers' Council would be acclamation rather than choice. For obvious reasons, comments received about this matter were somewhat circumspect but in balance seem to support the hypothesis that the Competition Commission for all practical purposes settles the choice.

As to the position held by top Operational Managers prior to first appointment to their present position, all four general directors were appointed from outside the enterprise. In two cases the Commune played a decisive role, whereas in the other two cases no particular pattern of backing was recognizable. Some of the interviewed heads of BOALs had a prior professional career in other enterprises and some did not. Little doubt was left that in-house appointments were preferred in principle because of their integrating effect on the workers' collective. Given the size of the sample and the limited additional quantitative and qualitative evidence, generalizations would obviously be highly conjectural on this matter.

1/ Compare paragraph 93 below.
2/ Associated Labor Act, Article 506.
93. Top Operational Managers can be recalled before their term has expired on grounds of mismanagement, incompetence, violation of the law or of by-laws of the organization, or by what could be called "political misconduct", which is circumscribed by the Associated Labor Act ... "if through their (i.e. Operational Managers's) acts or omissions they have rendered impossible the realization of workers' self-management rights, or have contributed to a disruption of self-management relations ... or have caused major harm to social interest ..." 1/ The carefully balanced rights in connection with recall are particularly significant for the political dimension of the process. Recall can be requested by any group of workers, but the decision is to be made by the Workers' Council which has, however, to "hear the opinion" 2/ of the assembly of the Commune and of the Syndicate organization before acting. Conversely, recall can be requested by one of the latter, which obliges the Workers' Council to initiate recall proceedings. If the Workers' Council refuses to act upon the request, the initiating bodies can request legal proceedings before the "Court of Associated Labor".

94. The significance of these rules can hardly be overemphasized. They highlight the pluralistic structure of decision-making powers more clearly than almost everything else. In a nutshell: a coalition of three organized groups co-options a fourth member, and the process functions by consensus among the three. The law expressly permits majority decisions in the nomination process. But there is little doubt, and the discussions left little doubt, that outvoting of any of the three parties by the other two would be considered as a major violation of the unwritten rules of conduct of the pluralistic setting (i.e. avoidance of confrontation and search for consensus), so that controversial candidates would never have a chance. Underlying this quest for unanimity are, besides consistency with the premises of Self-Management, eminently practical considerations. Agreement by the Commune demonstrates that the candidate is considered sufficiently amenable to the interests of the Commune; these interests range over a great variety of issues from provision of jobs to participation of the enterprise in financing a great variety of social services. 3/ Given the Commune's important control functions, 4/ respect for its position is evidently a matter of prudence. Agreement by the Syndicate organization effectively introduces what is frequently referred to as "moral/political assessment" of the candidate. A clean bill on this score is of critical importance since active commitment to

1/ Article 520. Note the symmetry between these statements and those quoted in paragraph 69 (on Self-Management) from Article 495.
2/ Associated Labor Act, Article 521.
3/ Such as contributions to operation and extension of education and health facilities, public utilities, communal housing and infrastructure. Compare paragraphs 121-123 and 132.
4/ Compare paragraphs 123 and 145.
the ideological premises of Self-Management Socialism is regarded as a precondi-
tion for holding any position of some public relevance, and any doubts on this score would seriously cripple the effectiveness of top Operational Managers in obtaining and maintaining public support. Membership in the LCY is not a formal requirement but may, because it implies moral/political approval by the LCY, be too important to be disregarded. Agreement of Self-Management to the nomination is a self-evident necessity, given the finely honed checks and balances in the rules of enterprise management.

95. Top Operational Management is evidently the weakest member in the coalition. It is the weakest not only because it is formally co-opted by the other coalition members, but as the junior member it is also the most expendable one. The three collectives are permanent, and so is their need for a harmonious relationship arising from the interdependency of their competences and actions, whereas the person of the top Operational Manager is exchangeable; under these conditions conflicts are most likely to be resolved by sacrificing disputed appointments. This by itself is likely to affect the perception of top Operational Managers as to the extent and the limits of their influence, of their authority, and of the appropriate management style. It is reinforced by the quasi-public nature of the processes of appointment, reappointment and recall is (except in the case of professional incompetence) much more likely to destroy the reputation of rejected or dismissed Operational Managers and seriously damage their chances of succeeding elsewhere, than the corresponding event would be for a professional manager fired by his board of directors in a capitalist enterprise, exactly because of the social and political connotation implied by the very nature of the rejecting bodies. In a small and tightly-knit ethnic-political community like Slovenia, with a population of only 1.8 million, such expression of public mistrust is bound to be particularly severe.

96. The third line of defense against any gravitation of influence and authority towards Operational Management -- apart from restrictive formal checks and balances designed into decision-making rules, and apart from an appointment/recall system which prevents a drift towards emergence of a technocratic elite perpetuating itself through cooption -- is the exclusion of Operational Management from the most sensitive parts of personnel management. As shown subsequently, all policies and practices in this realm which could imply any coercive power through the capacity to mete out discretionary rewards and penalties for adherence to Operational Management authority, including the ultimate power to hire and fire -- the backstay of effective management in a traditional management philosophy -- are carefully excised from the domain of Operational Management and assigned to Self-Management.

5.2 Medium/Low Operational Management

97. Decisions on in-line appointments (and demotion) are handled by the Cadre Commission, elected by the workers in conjunction with the election of all other Self-Management organs. Evidently it was the policy of all visited enterprises to have to the degree possible in-line supervisors below the top Operational Management level appointed from within. Apart from the perceived positive integrating effect on the workers' collective,
this approach seems to match best the perception of the role of low and medium level Operational Management in day-to-day operations. In line with the low regard for strict lines of authority reflecting clearcut accountability and responsibility within a well-defined hierarchical order, low and medium level Operational Managers are apparently seen predominantly as "organizers of work", as several Yugoslav interlocutors put it, and as advisors to both the staff they are supervising and their own supervisors, with emphasis on problem-solving by professional authority and mediation rather than formal authority. This would obviously be much in line with the strong preference for consensus over guidance, and the view that consensus is more compatible with the principles of Self-Management.

98. The Cadre Commission draws its candidates for promotion from an internal posting system, from consultations with workers of the unit for which a supervisor is being sought, and from recommendation by in-line supervisors, and most probably from a combination of all three. Nominations are related to the particular position to be filled rather than drawn from an established pool of promotable workers. To put it simply: promotion originating from out of the group itself for which the supervisor is to be appointed, on the basis of peer group consensus, checked against assessment by in-line supervisors for professional standing, and assessed by the Syndicate for "moral/political" standing, appears as the favored approach. This may or may not be a universally valid generalization, 1/ but in any event it would be the one most consistent with the presumption that consensus rather than authority ascertains effective coordination and efficient operation. 2/ In the absence of any thorough understanding of how the interaction within small groups works under the Yugoslav ideological premises, it is impossible to judge whether this presumption is a valid one if translated into day-to-day operations, given the large number of minute problems requiring decision (and frequently prompt decisions) at the lowest level, and what this means in terms of efficiency. There can be less doubt, however, that once the institutionalized power for meting out rewards and penalties is removed as the backstay of formal hierarchical authority, guidance by persuasion becomes the obvious if not the only substitute. Persuasion and consensus, in turn, rely essentially on the demonstrated solidarity, attitude and participatory approach of first-line supervisors to problem-solving. In sum, the relatively large role given to peer assessment may be the approach to appointment which under the given rules of accepted social behavior, makes for both most effective and most efficient management.

5.3 Recruitment/Dismissal

99. Since "free association of labor" is regarded a basic concept of Self-Management Socialism, and since the BOAL -- its cornerstone -- is built

1/ This is clearly a case where only a systematic inquiry through sample survey could permit inductive conclusions.

2/ "Efficiency" in this context would be X-efficiency in the Leibenstein sense and not allocative efficiency in the neoclassical meaning. Compare paragraph 134.
on the concept of "pooling of labor", recruitment is not regarded as a business transaction of "purchasing" an "input" but as co-option into an existing community or (in legal terms) as entry into an existing Self-Management Agreement on association of labor. Uncompromising control over recruitment, therefore, is regarded as a fundamental prerogative of Self-Management. 1/ It is handled by the Cadre Commission which for this task is bound by law to act upon public announcements of openings. The screening procedure seems to rest heavily on formal criteria, such as graduation from general or vocational education and post-graduation training programs, age, and years of professional experience. The reluctance to rely on subjective assessments or to venture into discretionary criteria, which is revealed by this preference for "objective" criteria, may be the result of the emphasis on workers' solidarity, because of the easily contestable nature of such judgement and the potentially damaging effect this might have for the proponent. As a corollary there is also a heavy reliance on probation clauses which during an extended probation period permit dismissal of workers whose professional standards have been found wanting by the collective of peers.

100. The same "free association of labor" concept with "socialist solidarity" as one of its ingredients governs even more decisively dismissal. Dismissal is only possible in the event of:

- gross violation of the disciplinary rules;
- refusal to carry out assignment which corresponds to education and skill;
- refusal to acquire new skills;
- incompetence or prolonged failure "to achieve results normally achieved" 2/ and if a downgrading is refused;
- physical incapacity;
- mandatory retirement;
- criminal penalties exceeding six months of imprisonment;
- bankruptcy of the organization and lack of alternative employment possibilities.

Remarkable in this catalogue are three cases: (a) the inclusion of the duty for a change of skills, aiming at the prevention of feather-bedding on the basis of outdated skills, (b) the right to refusal of downgrading unless a strong case is being made for persistent failure, and (c) bankruptcy of the BOAL or enterprise as a valid reason for dismissal, introducing the risk of a loss of job as a corollary of the prerogatives assigned to the worker's community through the rights for, or derived from, Self-Management.

101. Most telling is the catalogue of explicit or implicit exclusion from the causes for dismissal, in particular:

1/ A corollary of this perception is the explicit rejection of the notion of a "labor market" with the contractual wages as "prices" for the "commodity" labor power as a "factor of production" among others as tantamount to "alienation". Compare paragraph 49.

2/ Associated Labor Act, Article 215.
- business fluctuations;
- redundancy of the particular skill;
- redundancy from labor-saving technological advance;
- redundancy due to mergers or organizational changes.

All four exclusions reflect the proposition that "solidarity" is inseparable from Socialism. The first exclusion follows straight-forward from the refusal to accept the "commodity" notion of labor power. The implication -- adjustment to cyclical fluctuation of demand through changes of working time and/or remuneration instead of employment -- is fully integrated into managerial practices by the fact that contractual wages are replaced by residual personal incomes. 1/ The second and third exclusions are in effect a prohibition of direct technological unemployment. They do not force enterprises to maintain outdated jobs, but they oblige them to generate alternative equivalent employment for displaced workers either within their own or in other organizations, and to provide additional training to that end if necessary. This forces modernizing enterprises to bear the full social cost for increasing productivity through technological progress by burdening them rather than society at large with the financial costs. Since these financial costs reduce the enterprise income available for distribution as personal income, the remaining workers cannot benefit from dismissing their weaker peers. This bold solution to a problem which is almost intractable in most other economies, is obviously controversial. On the one hand, it effectively prevents any enterprise policy of boosting productivity through raised capital-intensity for the sole purpose of increasing the personal incomes of some workers although expense of others. 2/ This can and, according to the law is supposed to have major implications on conscientious enterprise planning. 3/ It may, however, in some instances block technological progress if the financial costs are prohibitively high (as would be the case if there simply is no other employment opportunity at the same location or within commuting distance). Further, the salutary effect is limited to only those redundancies which occur within the enterprise itself, while doing nothing for the effects -- in the extreme case bankruptcy, which is grounds for dismissal -- elsewhere. It seems that a solution is normally sought, and reportedly is being found in most instances, by the pressure of Communes on Operational Management and Self-Management of successful local enterprises to merge with sickly ones. Such a solution, while socially desirable by spreading the benefits of success, may drag down high-performance enterprises as well, while those reaping the windfall gains from rapid technological progress and located elsewhere may remain unaffected.

1/ This adjustment mechanism has obviously very important macro-economic implications, such as absence of cyclical unemployment and rising inflationary pressures associated with the cyclical downswing, which fall, however, outside this analysis. For the effects of adjustment to cyclical fluctuations through fluctuations of income levels compare paragraph 117 and the numerical evidence presented in Appendix III.
2/ Such behavior of enterprises had been predicted by the proponents of the Illyria-model of the Yugoslav system. Compare paragraph 111.
3/ Compare Associated Labor Act, Article 213.
5.4 Disciplinary Action

102. Disciplinary action is another unimpingable prerogative of Self-Management, and for essentially the same reasons which have been named before. Typical disciplinary problems frequently quoted are drinking during working hours, brawls, unpunctuality, refusal to carry out assigned work. The Disciplinary Committee can open proceedings on the basis of requests by Operational Management, Self-Management or groups of workers. The proceedings are held according to procedural rules resembling regular court proceedings. The penalties can range from reprimand, to fines (deductions from income), transfer to a lower paid category and, ultimately, dismissal. One of the penalties which, although sparingly used, is regarded as a very effective one, is the right of the BOAL to claim compensation from individual workers for loss of income due to intentional or gross negligence. 1/ 

103. While disciplinary actions are by no means rare events, few seem to result in severe penalties. 2/ This may reflect the fact that few of the events which triggered the disciplinary proceedings were serious matters in the first place. It may also reflect, and reportedly does to some degree, misplaced shop floor solidarity. Representatives of all three sub-systems of the enterprise were understandably somewhat unspecific in commenting on this point and some evidence surfaced which would indicate that at least two of the enterprises had a history of persistent disciplinary problems.

5.5 Internal Income Scales

104. The determination of internal scales for personal income -- the distribution of the total fund for personal income, as determined by Self-Management Agreements on Personal Income 3/ and/or financing of investment, among the workers -- is another fundamental right of Self-Management. Contrary to what one might expect, however, all four visited enterprises consistently maintained that the procedures left little room for discretionary actions and therefore hardly ever caused serious disputes. The validity of this claim is impossible to fathom, but the legal prescriptions which apply to this matter give it some credibility.

105. The Associated Labor Act determines that the Self-Management Agreement among workers to associate in a BOAL is to be supplemented by another

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1/ Associated Labor Act, Article 205.

2/ In one of the visited enterprises, at the last bimonthly meeting of the Disciplinary Committee some 30 cases were being disposed of within less than 3 hours (about 5 minutes per case). This rapid processing is made possible by the careful preparation by an enterprise lawyer which left, at least in all minor cases, nothing but the formal vote to the Disciplinary Committee. In this enterprise of some 1,400 workers, the number of dismissals by the Disciplinary Committee is estimated to come to 3-4 per year.

3/ See Appendix II for examples of such Self-Management Agreements.
one "regulating labor relationship". Among the items to be regulated are "grounds and scales for the allocation of net income" and "grounds and scales for the evaluation of labor with respect to the allocation of resources for workers personal incomes". 1/ Self-Management decisions on internal income distribution are thus decisions laid down in the statutes of the BOAL, which consequently contain detailed formalized criteria. Judgmental factors are not excluded, but their scope and their effect in income payments is very limited and to the degree possible also linked to formalized criteria. The heavy reliance on formalized criteria (such as general and vocational education, exams and grades, adult general and vocational exams and grades, age, years of professional experience) 2/ clearly has one major effect: By minimizing the impact of judgmental and discretionary factors (reflecting non-quantifiable performance components), conflict arising out of disputes over these matters is minimized as well. This is an important condition to ensure that the process of consensus-finding within the pluralistic setting is not jeopardized by corrosive conflicts about personality rating. The low role assigned to judgmental factors also works as a safeguard against one aspect which is conspicuously left unregulated by the law: The designation of the responsibility for making such judgements, either by in-line supervisors or by peers. The confusing position taken by representatives of either were conclusive only in two respects: (a) management practice has not clearly led to the prominence of either of the two, but "somehow" both are relevant; and (b) the level of possible divisive conflicts arising about this issue, which would go right to the heart of the question of the legitimate roles of Operational Management and Self-Management, is contained by giving judgmental factors such a low role that they are simply not perceived as an important issue. What this does to quality of work and to efficiency 3/ is impossible to judge.

106. Planning and computation of actual individual personal incomes, or rather the individual shares of total enterprise Net Income 4/ are regulated generally by a "point system" 5/ which is part of the Self-Management Agreement on association of labor constituting the BOAL. The essence of the point system is expressed in the equation:

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1/ Article 179.
2/ An important aspect is how defined formal education and skill translates into income. Evidently this problem is resolved in Yugoslavia by the widespread recourse to labor-time equivalents ("points") commonly the unskilled worker is taken as unity and all higher grades expressed as multiples, for example highly-skilled workers 3 and university graduates 5. The basis for these relations, which can also be part of Self-Management Agreements, is intractable. Most probably it is some mixture of conventional wisdom of what is "normal", backed up by some econometric work on actual conditions, blessed by a faint resemblance with a Marxian approach to measurement of inhomogeneous labor within a labor theory of value. See paragraph 106 for further discussion.
3/ X-efficiency in the Leibenstein sense; see paragraph 134.
4/ For the terminology and determination of Net Income compare Appendix I.
5/ The subsequent description grossly simplifies the procedure. It seems that each enterprise has its own system which can substantially deviate from the general principle sketched below.
\[(P_i \times h_i) \times w = Y\]

\(P_i\): points per hour of workers of the category \(i\);

\(h_i\): number of hours worked by workers of the category \(i\);

\(w\): payment per point;

\(Y\): enterprise Net Income available for distribution.

The equation is used, firstly, for planning purposes: labor input is planned in terms of \((P_i \times h_i)\), i.e. in points as unit of measurement. Through \(Y\) all internal prices \(1/\) between BOALs are planned in such a fashion that a pre-agreed value of \((w)\) would result which is part of the Self-Management Agreement on "pooling of labor and resources." \((w)\) may differ between collaborating BOALs, but in the planning stage differences tend to be minimal. Planning of the items in the equation, and the internal prices which permit realization of planned \((P_i \times h_i)\) and \((w)\), are the major purpose of annual plans. And because of the effects of these annual plan targets on ex post payment of personal incomes, the annual plan exercise is a matter of great relevance. The same equation is used ex post for actual distribution. Realized \(Y\) (on the basis of the planned internal prices) is divided by realized \((P_i \times h_i)\), and the resulting realized \((w)\) is then applied to compute the income of each worker. Ex post, the values for \((w)\) can differ between BOALs as well as between enterprises which have a common Self-Management Agreement on income, but by a degressive scale. \(2/\)

107. \(P_i\) (planned) is largely determined by four considerations: (1) "Complexity of work," measured by professional or vocational degree as a proxy, (2) "Quantity of work done," measured on the basis of some technical standard (only applicable if quantity is directly measurable); (3) "Quality of work," where applicable; (4) "Effectiveness" (an unexplained concept somehow expressing the way equipment and material is used) of work units rather than individuals. In addition, there may be (and usually are) adjustments for age and/or number of years with the organization and intangibles (like work conditions) usually for whole groups, as determined by Self-Management Agreements. Only "Quality of work" is a truly discretionary item for which in-line supervisors can make an assessment; it seems that in the total its

\(1/\) Actual planning is in most instances carried out by determining a formula by which sales revenues are split up between participating BOALs, but logically this comes to the same thing as settling on internal prices.

\(2/\) Compare Appendix II.
weight $1$ is largely swamped by the other factors which are all determined by one or the other Self-management Agreement. Apparently some enterprises do also differentiate $h_i$ according to individual quantity of work, so that a particularly efficient worker might for income computation have a value for $h$ which is higher than the actual number of hours spent at the work place. Since most components of the computation are formalized, the implementation is largely an administrative task, carried out by specialized units in the Work Community $2$ of the enterprise. For discretionary elements, however, a committee of the Workers' Council settles any disputes that may arise. Actual monthly payment is made on the basis of the number of realized $(P \times h_i)$ and planned $w$; quarterly $w$ is adjusted to realized $Y$. The final $1$ settlement is concluded in conjunction with the annual income statement and balance sheet of the BOAL, which the Workers' Council and the full Workers' Assembly have to pass by the end of February of the next business year; if too high personal incomes have been distributed, the deficit is carried forward to be corrected in the new business year.

108. Three aspects are particularly important in this connection. First, there is complete transparency of personal incomes for all grades and positions. This transparency, as was stressed by one of the enterprise, is the major factor for income-related job fluctuations ("workers only have to look up the Self-Management Agreement to find out what income to expect", as one interlocutor put it). Second, the heavy reliance upon objective factors and the absence of discretionary factors of significance (with the exception of output related scales) do not permit flexible and "strategic" incentives, let alone the imposition of an incentive system upon the enterprise from the outside. Third, while education and documented skills weigh heavily, hierarchical positions (or responsibility/accountability), though not disregarded, have clearly a secondary effect due to the pluralistic organizational approach to the management function. For example, technical experts who combine high-ranking formal education, experience and scarcity $1$ can earn higher personal incomes than top Operational Managers.

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1/ Obviously the quality component is in many instances linked to the task (i.e., is quasi-statutory) and not to the holder of the position, and the notion of "solidarity" was quoted in the interviews as an obstacle to proceeding differently.

2/ Compare paragraphs 42, 45.

3/ Scarce skills, mostly in advanced engineering, can evidently expect a high rating. Indicative for this "market element" in the formal income grading, and how it reaches beyond income payments, is the practice of one enterprise to offer low-cost rental apartments or housing credits to newly recruited engineers. These are financed from resources of the Common Consumption Fund, which conceptually should be for the workers who are already part of the Workers' Collective and which are intended for redistributive purposes in favor of those most in need.
109. Strikes -- in Yugoslavia frequently referred to somewhat euphemistically as "work stoppages" -- have to be mentioned in the context of personal incomes. They are by no means infrequent; for the last couple of years, the media referred to "several hundred" strikes per year and alluded to a rising frequency. Although strikes are, in the absence of any reference in the law, implicitly accepted, the interviewed Operational Managers, Self-Managers and Syndicate functionaries were obviously not at all at ease about their occurrence, although all enterprises claimed to have been spared this embarrassment. So far the cause of the unease is not only disguised concern about possible future occurrence. More importantly, it reflects the difficulty of defining a plausible social function of strikes which would be consistent with the ideological premises of Self-Management Socialism. Strikes can obviously not be a "normal" form of wage dispute; after the replacement of contractual ex ante wages by success-related personal incomes there would logically be no grounds for strikes because the total income sum available for distribution is already determined. 1/ If and when they occur, strikes are usually rather an expression of serious discontent of workers with stagnating or falling levels of real personal income (a situation which all four visited enterprises suffered repeatedly during the preceding decade) for which rightly or wrongly Operational Management's incompetence is blamed and/or careless oversight by Self-Management, or disadvantageous Self-Management Agreements 2/. Strikes are generally interpreted as the outward sign of a breakdown of the highly cherished universal harmony between Operational Management, Self-Management and Syndicate on the one side and the collective of workers on the other, in the final analysis, equivalent to a failure of each of these three to establish its legitimation. Strikes are therefore considered as a serious threat to self-perception to be fended off at almost any cost, as evidenced by hints that -- regardless of what Social Compacts or Self-Management Agreements may specify 3/ -- strict adherence may have to be compromised in tight situations in order to avoid labor conflicts. 4/

6. The Enterprise Objective Function: An Organizational Approach

110. The description of the pluralistic framework of enterprise decision-making, and of the multiple checks and balances which determine the inter-dependence of the parties, has provided the essentials for propounding some hypotheses on the objective function of the enterprise within the Yugoslav setting of Self-Management Socialism. However, before doing so, the conventional hypothesis will have to be reviewed briefly and some subsidiary issues clarified.

1/ Compare paragraph 23.
2/ Compare Appendix III.
3/ See Appendix II.
4/ This concern for legitimation may be one of the reasons that in spite of Social Compacts and Self-Management Agreements cost-push forces from personal incomes persist in supporting an inflationary momentum.
6.1 The Conventional Hypothesis

Almost all micro-economic analysis of the behavior of the firm in a Yugoslav-type (if not expressly in the Yugoslav) setting postulates axiomatically rather than deducted from any empirical evidence that personal income per worker is the maximand of the objective function. Some models developed on this basis exhibited a number of perverse features, such as a negatively sloped (static) supply curve with its inherent potential for market instability, the quest for excessively capital-intensive investment and corresponding high unemployment, and rates of return greatly exceeding the rate of time preference of consumption, as a necessary condition for financing investment from own resources. These models have gained some notoriety for a negative assessment of the allocative efficiency, the stability and the equity of Yugoslavia's economic system, and the roots of these defects in enterprise motivation and managerial practices dictated by its groundrules.

The postulate that personal income per worker is the maximand of the objective function rests on three assumptions. First, the "utility function"
of individual workers contains only paid-out personal income. 1/ Second, enterprises as organizations adopt the very same utility functions postulated for individual workers. Third, enterprises are autonomous in all decisions, and particularly the ones most relevant in this context: on the distribution of enterprise Net Income between total personal income fund and accumulation. 2/ The validity of the first assumption is categorically rejected by Yugoslav theorists who maintain that it demonstrates a preconceived individualist presumption on human motivation on the part of western theorists and that it is superceded by the advent of Socialism. The validity of either of these behavioral propositions is obviously beyond proof; however, the lack of validity of the second assumption makes the first one immaterial either way. As has been shown above, and as will be discussed further, the decision-making in a pluralistic framework, within which the Socio-Political Organizations (considering themselves as advocates for society at large rather than the actual workers' collective) and the Socio-Political Community (in particular the Commune) strongly affect motivation of Operational Management and Self-Management; therefore, identification of either of these two organized groups exclusively with "the workers" of the enterprise is unsupportable even on logical grounds. Further, there is considerable evidence that the pluralistic framework not only prevents crass "group ownership" (i.e., a worker's collective exclusively caring for the benefit of its members) 3/ to become a dominating motivational force, it may also introduce more social concern into decision-making than strictly economic (allocative) efficiency criteria would dictate. It is worth noting that "group ownership" is explicitly listed in the introduction of the Associated Labor Act 4/ as one of the distortions of genuine Self-Management Socialism and is declared unlawful. The conventional hypothesis is, in fact, a theory of the firm based on group ownership, i.e. it is a theory of a cooperative model of society.

113. Employment is a case in point. The Illyrian model predicts that the postulated choice of maximand induces a massive tendency to over-substitute capital for labor, hurting the growth of both output and employment. There is, of course, anecdotal evidence in support of this contention, but the obverse anecdotal evidence of overstaffing in response to social pressures

1/ For simplicity we disregard the need to consider time streams of income rather than income per year thus avoiding the question of what the relevant time horizon would be and how time preference enters into the discounting, both requiring a dynamic analytical framework.

2/ Compare Appendix I for concepts, definitions and accounting procedure.

3/ Compare paragraph 114.

4/ Article 3.
emanating from the Commune is in balance at least as persuasive. 1/ Further, the aforementioned legal provision that labor-substituting enterprises are financially held accountable for the costs of labor displacement 2/ works as a strong disincentive against socially undesirable substitution. More persuasive is the statistical evidence of low and declining growth rates of productivity. 3/ It is worth noting that one of the strongest motives of top Operational Management (maintenance of position and promotion of career) depends, due to the regulation of candidacy, appointment and reappointment 4/ at least as much on "social approval" than on approval by the Workers' Collective, which makes their support for a reckless drive for productivity and personal income for the collective of the present workers an unlikely event. Another example is investment. While the Illyrian model predicts chronic under-investment, no such state of affairs can be observed statistically. In fact the opposite is true: the investment rates (for fixed assets only) in GNP were almost continually above 30%, and in 1978 they reached a truly breath-taking 36%. 5/ The fact that the rates were in many years considerably higher than planned, and that "investment mania" was repeatedly blamed officially as a major inflationary force, adds weight to the point. 6/

114. The third assumption reflects one of the most persistent misconceptions of the principles of Self-Management Socialism, as well as of the reality of enterprise management. 7/ Constrained enterprise autonomy in both price formation and (factor) income distribution (between personal income and accumulation) may have to some degree existed between 1965 and 1970, but even then probably more by default than by design. By 1972 this autonomy had, transgressions by individual enterprises notwithstanding, been eliminated for a number of ideological and practical reasons. By 1972 discretionary rulings on prices and personal incomes became stop-gap solutions, and the first Social Compacts and Self-Management Agreements dealing with these matters, were introduced. "Group ownership" -- workers' monopoly control over the formally social means of production with the monopoly rent accruing to the enterprise workers in an essentially laissez-faire setting 8/ -- was clearly rejected by

1/ This is particularly true for other parts of Yugoslavia, where unemployment tends to be high.
2/ Compare paragraphs 100-101.
3/ Compare paragraph 56.
4/ Compare paragraph 91.
5/ The investment rate in terms of GNP would be somewhat lower (33% in 1978).
6/ Obviously there is no simple one-to-one correspondence between investment rate and income policy of enterprises, but the latter is a major determinant of the former.
7/ This misconception is not only the result of carelessness in formulating the assumptions of formally persuasive analytical models, and of uncritical generalization of the deductions -- Yugoslavia clearly is not Illyria for every thorough observer -- the misconception has at least in part been invited by propagandistic "over-selling" of Self-Management.
8/ In this particular sense -- describing an essentially cooperative (instead of socialist) model of society -- the Illyrian model did have some relevance for what is now considered in Yugoslavia as a perversion of the Self-Management concept.
the dominating political forces of the country as a threat to the very essence to Socialism. Not only is group ownership regarded as philosophically un-
acceptable, it is also regarded as economically disruptive if practised with
any resemblance of consistency and is in fact blamed for many of the problems
which gradually emerged after 1970, like rampant inflation and balance-of-
payments crises. The Associated Labor Act sums up unambiguously the position
on autonomy of enterprise decisions regarding personal incomes which had
already clearly emerged in theory and practice in the preceding years:
"Self-Management Enactments which determine grounds and scales for the alloca-
tion of resources for personal incomes shall be adopted (by the Workers' Counci
ls of BOALs) in conformity with the Self-Management Agreements on common
grounds and scales concluded with other basic organizations within the same
work organization (i.e. enterprise). Such Enactments may not be contrary to a
Self-Management Agreement .... with .... other basic organizations ....
outside the work organization .... (These) may not be contrary to Social
Compacts concluded or acceded to by the basic organizations." 1/ Self-
Management Agreements and Social Compacts, thus, set clear limits on the right
of workers to determine distribution of Enterprise Income in individual
enterprises or groups of enterprises, and restrict the claim of complete
workers' control over distribution of income to the strictly macroeconomic and
rather unrevealing statement that the savings/investment ratio of society is
to be based somehow on a social consensus working itself through the system
from below.

115. Appendix II presents two recent examples of Self-Management Agree-
ments on income distribution which demonstrate the practical relevance of
the limits to enterprise autonomy. Although the Agreements, by determining
the total income sum which can maximally be distributed rather than income
per worker, leave some incentive not to voluntarily dilute income levels by
recruiting additional workers unless required by the short run (annual)
production plan, they leave little room for the design of an enterprise
strategy geared to maximization of personal income per worker. Further,
the enterprise may be obliged by Self-Management Agreements on investment to
set aside certain amounts for financing of investment which may determine the
total fund available for personal incomes residually and at levels below the
maximum determined by Self-Management Agreements on income distribution.
Finally, the integration of medium-term enterprise planning with social
planning on the level of the Commune or the Republic effectively would check
any attempt to pursue an employment minimizing strategy. In particular, the
social pressures emanating from the Commune would block any tendency for
widening inter-enterprise and inter-sectoral income differentials even in an
area like Slovenia where unemployment is not a problem.

116. The question of what might constitute a reasonable approximation
to the "typical" objective function of the Yugoslav enterprise obviously
is a crucial one even after rejection of the relevance of the simplistic
Illyrian model. As the interviews have vividly shown, the objective function
is likely to be highly complex, comprising aspirations of the members of the
workers' collective and operational managers, in both instances affected by
the aspirations of society in the narrow sense (the Local Commune) and in the

1/ Article 125.
widest sense (the Party and the syndicate) all of which are somehow integrated into the objective function of the enterprise. Before addressing that formidable issue, a few supplementary issues have to be clarified.

6.2 Motivation and Incentives

117. Monetary rewards as a basic and universal motivational force have never been in dispute in Yugoslavia on ideological grounds, and "income" is the focus of all economic activity both for the Constitution and for the Associated Labor Act. The principles of income computation and income distribution -- personal income not as a contractual claim to a determined remuneration per unit of time or output (as wages and salaries), but as a claim to a portion of enterprise Net Income according to a statutory income scale of the organization 1/ -- imply that all personal incomes contain an incentive element of undefined size. Actual levels can differ within a certain band according to enterprise performance but relative personal incomes remain constant within the enterprise. This collective incentive system is rigid in the sense that the statutory income scale implies a fixed scale for internal income distribution. Within this framework the scope for selective incentives (determined "strategically" so that the effect of a defined total amount of incentive payments on some target variable is maximized) is nil. 2/ The only way to change the incentive built into the income scale would be to change the scale itself, i.e. to redraft the Self-Management Agreement of association (of all workers) which constitutes the BOAL. The collective incentive reflects perfectly what in one instance was referred to as the "collective responsibility for work performance," considered integral to Self-Management.

118. The representatives of enterprises exhibited an unshakeable confidence that their income scales are as "fair" and "just" as the spirit of the Constitution requires them to be, implying that any change would run counter to that purpose. In the words of the Associated Labor Act "A worker's personal income shall be determined in accordance with the results of his labor and according to the contribution he has personally made with his current labor". 1/ This concept of remuneration according to "work personally performed" is obviously inconsistent with a concept of remuneration according to both direct (personal) and indirect (effective by managing the work of subordinates) contribution to profit 2/ with a steep premium for the latter (as implied in particular to selective incentives to management personnel) and its bias in favor of hierarchical position. If the monumental problems of developing operable measurements for either form of contribution could be resolved somehow, the resulting alternative income scales are unlikely to have much similarity except by accident. A particularly instructive example is the effect on the initiative of top Operational Management towards a major

1/ Compare paragraphs: 104-108. See Appendix I for concepts and computation. Appendix II for examples of Self-Management Agreements on income.

2/ Strictly speaking, in this framework the concept of "incentive", as a payment over and above some standard reward for performance over and above some norm, becomes meaningless because absolute income standards do not exist and because the performance related income from the distributed enterprise income fund is the only income component there is.
innovation which is burdened with technological or market risks. 1/ In the case of failure the Operational Manager may lose his job, his reputation as manager, and may be subject to legal proceedings. In the case of success, the only material reward would be a modest effect of the total enterprise Net Income increase on his personal income, working through the existing internal pay scale and not different (in percentage terms) from the reward of any other worker. Repeated media campaigns in Yugoslavia about negative effects of "pay leveling" on productivity point to the fact that the two concepts to some degree conflict with each other and that this conflict is perceived. No trace of such concern, however, surfaced in discussions with enterprise representatives who were in fact uniformly indifferent to the issue. In sum, a collective indiscriminate incentive scheme (i.e. applying to all workers of the organization equally in relative terms) is a constituent feature of managerial practices under Self-Management Socialism, and a shift towards a more flexible, selective "strategic" incentive system is, although not expressly excluded legally, essentially inconsistent with the accepted ideological premises.

6.3 Innovation and Risk

119. An intriguing question is how innovation and risk might affect managerial practices under Self-Managing Socialism. If we consider "innovation" as any major departure from established output characteristics, process features or marketing pattern, and "risk" as comparing both technological risk and market uncertainty, then innovation and incentives of some kind or other are relevant whenever there is some indetermination with respect to the expected financial effects of innovation. 2/ Loss of assets, reduction of personal income, and loss of job are the material contents of risk. 3/ The loss of assets by itself is no major deterrent: the wealth which is to be written-off in case of failure is that of society in general rather than any particular group.

120. With respect to reduction of income and loss of employment, the possible impact depends greatly on the conditions. For example, workers who see no difficulty in finding alternative jobs would disregard either of these risks and would tend to focus on the positive effects of success. However, those workers who do not see an easy escape from the effects of failure -- generally older workers without skills or with abundant skills, or in areas where the chances for alternative employment are low -- would be very receptive to these risks and would tend to be unimpressed by the prospects of success. Communes will obviously be very much affected if failure causes unemployment and reduction of tax revenue and of contributions for social services. But if full employment does presently already prevail, they are unlikely to be overly concerned because the assets lost are not theirs.

1/ Compare paragraph 119.
2/ Innovations without risk are for obvious reason a trivial case.
3/ Reduction of personal income follow from the procedure for determination of personal income (compare Appendix I), loss of job is a real risk since in case of liquidation or bankruptcy there is no legal claim for an alternative job or compensatory income support (see paragraph 100).
unless resources of the commune have been used in the attempt to stem bankruptcy. As mentioned before, Operational Managers will probably lose their jobs, suffer some loss of reputation (putting their further career at stake, regardless of the circumstances) and in the event of failure they may even be liable for compensation for losses (in the case of professional incompetence or professional negligence), whereas their gains from success are quite moderate. How all these forces balance is impossible to generalize.

6.4 The Role of the Socio-political Communities

121. The relationship between the enterprise and the Commune 1/ is necessarily an intricate one. As pointed out above, from its incipience Self-Management had an anti-statist connotation and "the state" is accepted primarily as an arbiter of last resort in the event antagonistic group interests cannot be reconciled otherwise, or if a compromise between narrow group interests violates wider social interests. 2/ This relationship needs some further elaboration, because it affects the formation of the objective function of the enterprise in a significant way. It cannot be overemphasized, however, that this symbiotic relationship between enterprise and Commune 3/ has hardly any resemblance with the traditional and strictly hierarchical relationship between the public sector enterprise in a mixed or state-controlled economy and "the government."

122. The most clearly specified relationship centers on the financial health of the enterprise. Since bankruptcy and liquidation vitally affect the well-being of the Commune both directly (loss of employment) and indirectly (loss of taxes and financial contributions which finance the social services organized as Communities of Interest on a communal basis 4/), financial oversight is considered very much as the legitimate concern of the Commune. In fact it is precisely this case where "society" as the owner of the means of production is represented by the Commune as its guardian, and with its own obligations and rights. The law prescribes that in the event an enterprise cannot meet obligations, the Commune is obliged to extend assistance (including financial assistance) to the troubled enterprise and to initiate measures for "rehabilitation." If these should fail, the Commune can initiate proceedings for bankruptcy and liquidation. However, if the assets have to be written-off in the process, the loss is not shouldered by the Commune but is carried by society at large. More specifically, this occurs if the enterprise is unable

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1/ In most instances the Commune is the only socio-political community with which the enterprise has close links. Therefore Socio-Political Community and Commune are subsequently used interchangeably, although in some instances the Republic or even the Federation may be directly involved.


3/ Compare also paragraph 74 which highlights the reverse line of guidance and control, i.e. from the enterprise to the Commune.

4/ Compare paragraph 46.
to pay personal incomes above the legal minimum, 1/ or if no sufficient depreciation can be calculated which would assure maintenance of the stock of assets, or if the continuity of the operation is in doubt, or if the enterprise cannot serve its payment obligations. If the enterprise does not by itself come up with a recovery program, the Commune has the right and the duty to urge preparation of a program of financial rehabilitation. If this request is not heeded, the Commune can impose a program itself, 2/ or, alternatively, initiate liquidation upon bankruptcy. This case, incidentally, illustrates the general perception of the legitimate role of the state: it should take initiative only when the possibilities of the directly affected parties for resolving a problem have been exhausted.

123. If a troubled enterprise continues to operate, or if an enterprise does not fulfill its plan -- which are an integral part of the social plan of the Commune -- the damage done to the economic and social well-being of the Commune can be substantial. Therefore the Commune receives some major prerogatives. First, it participates as one of three parties in the appointment, reappointment and recall of top Operational Management. 3/ As pointed out elsewhere, given the preference for decision-making by consensus, this is for all practical purposes equivalent to veto-power (for appointment and reappointment) or to the prerogative to request dismissal. Second, BOALs and enterprises are obliged to submit to the Commune the income statements and balance sheets, complemented by a number of obligatory performance indicators for assessment ("to determine, consider and assess the results of worker's labor and of the business of basic organizations and, on this basis, take appropriate measures" 4/). The assembly of the Commune reviews formally these documents. It is not entirely clear what precisely the implications are; most likely the Commune will act upon the findings by putting suasive pressures on enterprise representatives in the assembly if it considers its interests being violated and it may use its prerogative to initiate procedures for dismissal of Operational Managers as a leverage. 5/ It is clear, however, that there is only very limited, if any, room in the Yugoslav setting for enterprises to run persistently large operating losses financed from inexhaustible and uncontrolled budgetary resources under the discretionary control of "the government." Third, the Commune can in its social plan superimpose social (communal) targets on enterprise planning.

1/ This minimum is not a "normal" level, with remuneration only in particular cases above the scale, but rather subsistence pay below which personal incomes cannot fall because the enterprise's or common reserve funds will provide for its maintenance.

2/ Imposed merger with more successful enterprises, which are granted additional credits and temporary relief from taxes and contributions as sweeteners, are the most frequently prescribed cure.

3/ See paragraphs 89-94.

4/ Associated Labor Act, Article 144.

5/ It is also possible -- available information does not permit any firm conclusions -- that the recognition of enterprise data by the Commune are not only a part of its participation in the form of "management by exception," but that they are also intended as a major, if not the only step toward social accountability of the actions of enterprise.
6.5 Elements of a Pluralistic Objective Function

124. The preceding discussion has shown that the objective function of the enterprise must be a pluralistic one in the sense that it must integrate somehow the particular objectives of a variety of "agents" (individuals, organizations, or institutions) which enjoy at least some degree of autonomy from each other. The discussion has further shown that each agent may consider a variety of at least partially independent goals which need not be mutually consistent, and that in the total the degree of consistency is likely to be lower than for each particular agent. In a dynamic process of compromise and consensus-finding the multitude of elements is somehow consolidated into what one could call (by stretching the terms to its limits) a "pluralistic objective function." Summarizing the observations from the interviews, one can expect the following partially overlapping elements to be most relevant in the pluralistic objective function:

<table>
<thead>
<tr>
<th>Agents</th>
<th>Goals</th>
</tr>
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<tbody>
<tr>
<td>1. Worker</td>
<td>1.1 Personal income; time stream over individual time horizon</td>
</tr>
<tr>
<td></td>
<td>1.2 Personal income; growth rate over the time horizon</td>
</tr>
<tr>
<td></td>
<td>1.3 Personal income; stability over time</td>
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<tr>
<td></td>
<td>1.4 Fringe benefits (Common Consumption)</td>
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<td></td>
<td>1.5 Social services (health, education, etc.)</td>
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<tr>
<td></td>
<td>1.6 Work environment with a minimum of institutional pressure</td>
</tr>
<tr>
<td>2. Top Operational Manager</td>
<td>2.1-2.6 1/ as 1.1-1.6</td>
</tr>
<tr>
<td></td>
<td>2.7 Career stability and progress within the enterprise</td>
</tr>
<tr>
<td></td>
<td>2.8 Recognition within the enterprise for enterprise growth and success</td>
</tr>
</tbody>
</table>

1/ These apply with respect to the status as workers within the enterprise.
Agents | Goals
--- | ---
2.9 Public recognition for enterprise growth and success
2.10 Fostering further professional or political career

3. **Self-Management**
3.1-3.6 1/ as 1.1-1.6
3.7 Peer group recognition for representation of peer interest
3.8 Public recognition (by Socio-Political Organization and Commune) for effective representation of public interest through (a) promotion of Communal well-being, and (b) growth and success.

4. **Syndicate (LCY)**
4.1 - 4.6 1/ as 1.1-1.6
4.7 Organizational recognition for representation of organization's position

5. **Commune (Assembly)**
5.1 Employment
5.2 Harmonious development of the Commune
5.3 Financial resources (from taxes and contributions) for social services/"public consumption"/Communities of Interest.

Most of the elements are self-explanatory or have already been discussed. Subsequently a few additional observations mostly from interviews with enterprises are discussed briefly.

1/ These apply with respect to the status as workers within the enterprise.
125. For individual workers the time profile of the stream of income over some time horizon must, at least notionally, be integrated into some kind of "present value" which reflects as an additional parameter the time preference for consumption. In addition, the relevant time horizon is likely to differ over a very wide range depending on age and mobility of the individuals. A number of observations throw a little more light on the issues touched upon by this context. First, three out of the four visited enterprises showed -- as most Yugoslav enterprises reportedly do -- sizeable voluntary depreciation 1/ over and above statutory minimal depreciation in their annual balance sheet, although in principle the same accumulation (and same level of personal income) could have been reached by accounting only obligatory depreciation and allocating a higher portion of the (higher) enterprise net income to Business Fund. Apparently tax savings play some role, but more important is the view of Operational Management and Self-Management that to show lower enterprise Net Income constitutes sound management practice, because it blunts workers' claims or expectations for an increase of personal incomes (from the higher reported Net Income of the enterprise). This demonstrates that Operational Management and Self-Management have a different perception of time preference for consumption and/or a different time horizon than the majority of workers, and are pushing for a higher savings/investment rate 2/. Coalition between Operational Management and Self-Management to that end is the only plausible interpretation, because representatives of Self-Management are too sophisticated and the accounting alternatives too transparent to assume successful attempts by Operational Management to outwit Self-Management. Further, Self-Management demonstrated in two cases clear knowledge of the purpose of the accounting operation. Second, this problem was referred to in one enterprise as "workers expect some increase of personal income" 3/ with the clear implication that to disappoint this expectation

1/ Compare Appendix I for concepts and computations, Appendix III for specific data. The absence of voluntary depreciations for most years in case of the fourth enterprise may have been the result of the precarious economic position which left no room for more but the obligatory depreciation.

2/ An alternative explanation would be that while workers value only personal income, Operational Management and Self-Management value accumulation (from Allocation to Business Fund and voluntary depreciation) as well, because enterprise growth is a sign of success from which they derive satisfaction or for which they earn recognition. In the final analysis there is obviously little difference between the two models.

3/ Although this proposition was not phrased that way, it obviously implied a "real income" concept. As the evaluation of enterprise data performance indicators show, no enterprise exhibited a smooth path of real income increase. On the contrary, personal income levels fluctuated, and in some instances to a truly dramatic degree, probably reflecting the adjustment to business fluctuation by adjustment of personal income rather than employment. Compare Appendix III.
may cause troublesome strikes. The implication was also that in the case of conflict between this expectation and obligations from Social Compacts and Self-Management Agreements, it would be prudent to find a way around the latter rather than to disappoint the former. 1/ This again points to a different perception of time preference and, in addition, to workers' concern about actual intertemporal income differentials independently from their impact on the present value of the time stream. As can be deduced from the enterprise data -- in 42% of all covered annual income computations the average personal incomes declined against the preceding year, and in 25% the rate of decline exceeded 5% -- the very large annual fluctuations of average personal incomes make it highly plausible that workers have indeed such an autonomous objective.

126. A largely unexplored issue is the valuation of fringe benefits by workers. The interviews indicated that allocations from enterprise net income for personal income and Common Consumption were largely alternative and not additive, 2/ although there is some more general evidence that enterprises in a favorable position provide for better fringe benefits because differences are less conspicuous as differences of take-home pay. Thus, there would be a trade-off between the two. If and to the degree neither legal provisions nor rules from Social Compacts or Self-Management Agreements affect the choice, the actual allocations would represent the choice of the decision-makers as to the respective benefits they draw from the two components. If and to the degree the allocations are the reflection of these broader determinants, they represent a social choice to which the decision-makers have to adhere. However, the observations from interviews defy such straight-forward assessment. As we have seen before, the Associated Labor Act 3/ explicitly refers in this connection to solidarity income redistribution within the BOAL, but does not stipulate any particular rule. Self-Management Agreements determine upper limits for allocations to Common Consumption or to the sum of allocation to personal income and Common Consumption, but no case of minimum requirements was quoted. The discussions with representatives of Operational Management, Self-Management and Syndicate gave the impression that what determines actual procedures is - a mixture of an accommodation to the unspecific redistribution mandate (usually referred to as "solidarity"), a hazy notion that Common Consumption is somewhat more socialist than private consumption (from paid-out income), and of time-honored traditions which are being followed without challenge. In addition, it seems that the choice of a specific mix of uses within the Common Consumption Fund for blending into specific programs of the Commune creates some possibilities for increasing the sum of the two income components.

1/ The grossly differing income distribution between enterprises and between years for each enterprise demonstrate that some compromising must indeed have been a part of the enterprise strategy; compare Appendix III.

2/ Allocations to the Common Consumption fund fluctuate between enterprises and -- because of some degree of interdependence with Communal programs -- between Communes. For the interviewed enterprises they varied between 5 and 15% of gross personal incomes.

3/ Article 126.
127. Social services enter explicitly as workers' objectives because of the dual effects of the collection of resources for financing these services ("Common Consumption") on personal incomes. Taxes and contributions from enterprise income reduce enterprise net income from which personal income is allocated subsequently. In addition, the heavy and largely proportional burden of personal taxes and contributions on gross personal incomes reduces the size of net personal income. If the allocation of resources were simply stipulated by "the state," and their collection part of the overall tax collection, this would not affect the objective function. However, it is one of the highly cherished features of Self-Management Socialism that it bridges the gulf between the individual worker/citizen and the state, and that it prevents the state from acting as a remote and unassailable authority. Social Services are organized as autonomous "Communities of Interest," which are not part of the state superstructure: their decision-making body, can (subject to certain legal standards) decide autonomously on the services rendered and their financing from specific contributions of the beneficiaries rather than general tax revenues. The enterprise is represented in the Communities of Interest through its delegate who has -- as any other delegate -- to solicit the views of his constituency on the specific issues. Similarly, delegates from enterprises make up one of the three and affect the composition of the other two chambers of the assembly of the Commune, which in turn nominates the delegates for the Republican and Federal assembly. In addition (and probably at least as importantly) the obligation of Communes to care for the economic viability of enterprises and their right of control over enterprise activities, as well as current contacts on a multitude of issues, provide for a continuing dialogue between enterprise and Commune. Thus, at least in theory, workers have some direct control over enterprise and personal taxes and contributions, and through this control they affect the trade-off choice for the respective sizes of personal consumption and Collective Consumption.

128. The strive for a working environment with a minimum of institutional and hierarchical pressure reflects the high regard given to consensus and the low regard for authority along hierarchical lines. In particular, the separation of whatever rewards and penalties there are from the vestiges of line-authority implies an obvious welfare gain for workers, so that the consolidation and extension of this gain becomes an element in the workers'-objective function. In this context the difference cannot be exaggerated between the Marxian perception of man as a social being, of labor as the very essence of social relations, and -- once alienation has been completely

1/ Compare paragraph 75.
2/ Compare paragraph 46.
3/ Compare paragraph 36.
4/ Compare paragraphs 122-123.
abolished — as the basis of human creativity and fulfillment 1/ on the one hand, and the neoclassical tradition on the other hand for which labor is a means to material ends i.e. an individual burden the disutility of which is to be weighed individually against the utility gained from the rewards received. What this means in practice is that in the Yugoslav setting the "quality of life" notion automatically includes work and work conditions and is not restricted to the enjoyment of the fruits of labor. This turns work relations from a matter of human-relations engineering for the sake of productivity into an end by itself.

129. For top Operational Managers "career stability and progress" and "recognition within the enterprise" and "by the Commune" "for enterprise growth and success" are obviously interrelated. The discussion of the procedures for appointment and reappointment and for dismissal of top Operational Management 2/ has already shown the dependence of top Operational Management from consent of Self-Management, Syndicate and Commune. Repeated reference was also made to the fact that in the closely-knit political/ethnic community of Slovenia, denial of reappointment or dismissal would tend to be equivalent to an effective ruin of the managerial career. The aforementioned concern about strikes 3/ does also show that not only formal recognition is highly valued, but informal recognition by the workers as well. As was shown in the discussion of incentives, 4/ the concern about career stability and progress does not center on financial rewards for managerial success.

130. For the functionaries of Self-Management, recognition by peer workers for successful presentation of their interest is an obvious source of gratification by itself, apart from its effect on future nomination for candidacy and election for other functions within Self-Management. This does not mean that Self-Management only and exclusively represents the objectives of the workers. As the discussion on time preference of consumption has shown, 3/ Self-Management and top Operational Management might well share a perception quite different from the rank-and-file workers, and the occurrence of strikes and its connotation of an underlying breakdown of communication referred to above is probably even more embarrassing for Self-Management than for top Operational Management. The recognition by the

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2/ Compare paragraph 90-91.
4/ Compare paragraphs 117-118.
5/ Compare paragraph 125.
Syndicate (or LCY) is relevant in the very same connection. The recognition by the Commune is presumed essentially for the gratification it provides. Two points are worth re-emphasizing: The scope for developing a professional career out of an active participation in Self-Management is minimal, and the interest in active involvement is strictly non-material. Functionaries of Self-Management do not receive special rewards over and above income from their regular work assignment. And as none of the visited enterprises practiced any other but partial release from regular work assignment, the repetitive claims that to be active Self-Management constitutes a genuine sacrifice in terms of leisure time sounded convincing.

131. As to the Syndicate, to surmise on its objectives would be highly speculative. However, one could conclude from the fact that its mandate is essentially a political one and would largely coincide with the political program of the LCY, that realization of the ideological premises of Self-Management Socialism in the procedures and the style of management of the enterprise, are obvious objectives of the Syndicate, as are faithful adherence to the spirit and the letter of the Constitution and the Associated Labor Act regarding all work relations. As we have seen before, guiding the process of formation of opinions and views among the workers and Self-Management, including an "educational function" in case of conflicts between their particular short-term interest, and their long-term and society's interest is an important case for which the political objective may be of major relevance. It would follow that success in accordance with these broad outside objectives would be a major objective of the representatives of the Syndicate within the enterprise decision-making. As in the case of Self-Management, the avoidance of strikes -- because of embarrassing breakdown of communication they indicate -- is a concrete objective for the current activity.

132. The objectives of the Commune are evident: the harmony of social development, and the achievement or maintenance of a high level of "Public Consumption" (social services etc.). Unemployment and large income differences among enterprises are obvious sources of discontent, and taxes and contributions collected from enterprises provide the means for supporting public consumption. The potential for conflicts with the workers' objective of private consumption and its impact on Self-Management and Operation Management is obvious. However, it is at least in part balanced by the strive to eliminate the sharp dividing line between the status of the individual as worker of the enterprise and as citizen of the Commune, expressed by the direct links between Self-Management and the Commune through the direct presentation of the enterprise in the assembly of the Commune. The obligations and the rights of the Commune vis-a-vis the enterprise attest to the strong position of the Commune in a similar way as was discussed for the appointment of Top Operational Managers. Further, Communal control of operational results, and Communal supervision in planning provide for effective tools to induce receptivity of the enterprise to the objectives of the Commune.

1/ It is probably zero within the enterprise itself, due to the strong role given to formal criteria, like education and age.
2/ Compare paragraphs 79-81.
3/ Compare paragraphs 74 and 121-123.
PERFORMANCE AND EFFICIENCY

The principles of personnel management and the complexity of the pluralistic objective function of the enterprise raise the question of the effects of managerial practices which reflect these complex relationships, on enterprise performance. There is, of course, no well defined yardstick (absolute or comparative) and no operative or unambiguous unit of measurement.

Macroeconomic considerations suggest that Slovenian enterprises should, at the average, compare fairly well with enterprises in developed countries. However, the analytical and the data basis of this cross-country/intra-country assessment are far from persuasive, and even if the assessment were robust for the considered period (1968-1973), changing managerial practices thereafter could affect the assessment. In fact, a basic change of the ideological, political, and legal environment for enterprise management is precisely what happened in Yugoslavia. Most of the sweeping system changes discussed elsewhere were gradually introduced after 1970, and because of the inevitable time lag between formal introduction and translation into managerial practices, the ground rules only started to change by around the end of the considered period (1968-1973). An intertemporal comparison for Yugoslavia cannot provide conclusive evidence either, because after 1973 the country was severely hit by external shocks. Stop-gap measures to mollify the worst symptoms of the combined balance of payments/inflation crisis makes the intertemporal comparison even more precarious.

As an illustration: the industrial producer price index accelerated from 1% for 1968 to 29% for 1974, dropped to 6% by 1976 and accelerated again to an annual rate of 13% by the fall of 1979. And as the data of Appendix III amply demonstrate, enterprise data reflect a great variety of specific conditions which are unrelated to both macroeconomic conditions and changes in management ground rules, and they are therefore even less suitable as a basis for comparison, apart from the fact that the timing of organizational and procedural changes is unknown and that the lags are intractable with which these translate into changed managerial practices and ultimately measurable performance effects. No less important is the fact that cyclical downturns are not accommodated by employment changes, but by changes of levels of personal income and -- as the enterprise data of Appendix III seems to suggest -- changes of other coefficients as well in such a way that personal incomes are to some degree protected against fluctuations, although none of the four enterprises was very successful in this respect. Therefore, little else is possible but to sketch the likely direction of the hypothetical effects which some of the observed or hypothesized Yugoslav managerial practices might cause if they were introduced individually in a stylized

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1/ This conclusion emerges if the results of the international ICOR comparison (paragraph 58), where Yugoslavia takes a somewhat average position, are combined with the results of the inter-regional performance comparison which shows a strong leading position in Slovenia within Yugoslavia (paragraph 60).
conventionally managed enterprise which is operating in a stylized conventional private or state capitalist environment and geared-up optimally for performance.

134. The choice of this somewhat cloudy standard of comparison has an additional advantage: it circumvents the need for a rigorous definition of "performance" as the measure by which the effects of managerial practices are gauged. It suffices to stipulate that we are considering a variety of unspecified financial, technical, or technical/financial variables or coefficients of essentially micro-economic characteristics which all refer to the relation between output and input, and thus to "efficiency." The efficiency concept applicable in this context is only to a very minor degree "allocative efficiency" in the conventional neoclassical sense (i.e. in terms of a simple two-factor one-product model: movements along the highest technically possible production indifference curve for a given mix of physical inputs). What we rather have in mind is X-efficiency as defined by Leibenstein: movements within the area below the frontier of the technically feasible maximum, i.e. movement within an area where concepts like motivation, incentives, organizational slack, interpersonal conflicts of objectives, etc., rule. In Leibenstein's words: "One idea that emerges is that firms and economies do not operate on the outerbound production possibility surface consistent with their resources (and with most advanced knowhow). For a variety of reasons people and organizations normally work neither as hard nor as effectively as they could. Two general movements are possible. One is along the productive surface towards greater allocative efficiency, the other is from a lower surface to a higher. The data suggest that in a great many instances the amount to be gained by allocative efficiency is trivial, while the amount to be gained by increasing X-efficiency is frequently significant." 1/ The subsequent discussion does, unless specified otherwise, refer to X-efficiency.

135. For the approach to assessment mentioned above, a variety of specific features can be enumerated by which an enterprise operating in a stylized Self-Management Socialism setting differs from a comparative enterprise operating in a stylized private or state capitalist setting. They will subsequently be introduced and commented upon one-by-one according to their most likely impact on efficiency. For obvious reasons -- the importance assigned to each effect is highly judgmental and even its direction may be disputed in some instances, and the respective weights in the total are impossible to judge -- the assessment of the aggregate effect, or even the likely direction of the resultant overall deviation from this fuzzy yardstick, is beyond the scope of this analysis. Most importantly, as stressed in many discussions and as implied in the discussion of the ideological premises of Self-Management Socialism and their effects on institutional and operative procedures, narrow technical/economic efficiency is regarded

1/ "Beyond Economic Man; A New Foundation for Micro-Economics" pp. 46-47.
by Yugoslavs as an important, but by no means as the dominating, let alone the only, category of assessing performance, and they maintain that "performance" should rather include a variety of non-economic aspects as well. 1/ Appendix IV sets out a few observed parameters which - according to the Yugoslav perception - are all part of "social performance."

7.1 Efficiency-Retarding Effects

136. Decision-making costs: As mentioned earlier 2/, decision-making in a pluralistic setting and resting to a large degree on consensus, is bound to be a slow process. Slow response to external challenges can be a cause for lowered efficiency if opportunities are lost or if adjustment to new conditions, causing secondary costs dependent on the length of response lag, is delayed. However, where all units respond in the same sluggish way to outside causes, and within an environment where transparency and predictability is high due to continuous unrestricted information exchange both vertically and horizontally 3/, these drawbacks are much less severe than in a conventional competitive market model, and may in many instances not matter at all. A related factor is the direct cost of decision-making: the search for consensus in a pluralistic setting is keeping more people involved for a longer period of time than it would take for a singular decision-maker. Enterprise representatives are keenly aware that there may be serious costs involved, as evidenced by the frequent and in all cases unprovoked assurances that this was not the case and that most of the self-management duties were carried out entirely in off-work time. 4/ This problem was also the cause of considerable public debate in Yugoslavia some years ago when a sociological case study reportedly revealed that in one of the most successful enterprises of the country the loss of worktime for self-management and related matters was in excess of 10% of the number of total working hours. Improved management practices may have reduced these costs to a considerable degree -- time required for self-management affairs was bound to be higher initially since untried procedures had still to be worked out -- but, as the frequent apologetic reference to the avoided costs of prolonged strikes in capitalist countries suggests, these costs are by no means negligible.

1/ The Marxian position of regarding economic relations as part of social relations, thus integrating the conditions of social labor and power relationships into the objectives inevitably leads to a wider standard for assessment of welfare than economic performance. This aspect is also stressed by the analysis of Deborah Milenkovitch ("The Case of Yugoslavia," AER Papers and Proceedings, 1977 p) with which this paper shares the approach of assessing the Yugoslav system.

2/ Compare paragraph 86.

3/ Compare paragraphs 53-54.

4/ Ironically, in one instance the enterprise representatives excused themselves shortly after having made that point because they had to attend a meeting of all workers which started one hour before official close of the working day.
137. Performance coercion: The separation of personnel management authority from Operational Management has all but eliminated coercion for performance by means of discretionary rewards and penalties extended along hierarchical lines. This, almost by definition, reduces X-efficiency. The transfer of these powers to Self-Management and the link between overall income level and overall performance is bound to create some compensating coercion mechanisms, 1/ which may or may not be as effective as the individualized approach in a more authoritarian setting would permit. 2/ In particular, peer solidarity (which critical Yugoslavs tend to consider as misguided) can reduce the scope for coercive power which would be consistent with the premises of Self-Management to a comparatively blunt instrument. It is argued that lack of individual performance does, by affecting total enterprise net income for distribution, reduce personal income of other workers. Such tangible effect may, however, be fairly small and swamped by business cycle effects so that peer solidarity may well prevail. However, in one of the visited enterprises there were hints that precisely the opposite had happened: workers threatened to go on strike if no decisive disciplinary action was taken against the worst violators.

138. Instrumental Incentives: As pointed out above, 3/ the principle of personal income "according to work personally performed" and its translation into an elaborate and statutory point system leaves virtually no room for "instrumental" incentives: i.e. discretionary rewards for effective internal management within a hierarchical system, tailored to the effects of efficiency coercion on profitability (or some other maximand). Not only are such special performance incentives for Operational Managers or members of Self-Management, nonexistent, it is also difficult for their acceptability to be perceived within the adopted ideological premises because they are so pointedly identified with the ideological premises of private or state capitalism. Logically the most consistent solution would be to design an internal income scale which would be optimal with respect to some enterprise variable. But apart from conflicting with the Marxian principle of "income according to work performed", the egalitarian (in terms of power) thrust of Self-Management Socialism inevitably would make such income-scaling appear unfeasible. While there is some public concern about the effects of pay-leveling (i.e. excessive income homogenization) on productivity, 4/ indicating that problems on this score are perceived to exist, there is a distinct lack of perception on the enterprise level.

1/ Compare paragraph 140 below.
2/ In the Marxian approach, the lack of coercive instruments excludes the effects of the "industrial reserve army" on wages and working conditions, and the price paid in terms of efficiency is considered well worth the gain in workers' satisfaction. Compare paragraph 128.
3/ Compare paragraph 117.
4/ Compare paragraph 118.
Pluralistic Objective Function: In comparison with the objective function of an enterprise where "the entrepreneur" (the owner, or the owner-appointed top manager) can issue the operational objectives with a considerable degree of clarity and determination, the pluralistic objective function is both vastly more complex, more vague, and inevitably less consistent internally. In some instances mentioned elsewhere \(^1\) the conflicts between elements of the composite objective function may in fact be quite severe, and some degree of obfuscation may be essential for maintaining stability of the decision-making coalition. Thus, the scope for formal operative decision-rules may be somewhat restricted, and this would tend to militate against efficiency.

7.2 Efficiency Strengthening Effects

Universal Incentive: The relationship between personal income and organizational performance, even though it is blunted by a "progressive" rate of appropriation of the achieved gains, by society \(^2\), is bound to set into motion performance-oriented group dynamics. If personal incomes are uncertain ex ante with positive or negative surprises as the rule \(^3\), if the formation of income expectations is an integral part of participatory microplanning, and if realization of these expectations is perceived to be at least in part under control of the organization itself, it probably does not require much suasion to introduce the notion that "it matters" what each individual member of the collective is doing, if not measurably then at least morally. In effect some level of peer group control against wasteful practices and evasion of effort is likely to build up over time, counteracting misguided workers' solidarity. In particular, the pervasive built-in resistance to efficiency-geared changes, which is typical for collectives of fixed wage earners who consider themselves ultimately affected only by tightened work standards and/or redundancies of some of their peers or themselves, is effectively removed. The disincentives of heightened efforts and the ultimate disincentive of the threat of redundancy do not have to be broken down by means of high discriminating selective managerial incentives combined with extended coercive hierarchical pressures which inevitably cause some immeasurable loss of efficiency potential of their own. Further, the evolvement of a performance-geared shop-floor attitude is greatly enhanced by the fact that the 15 to 20% of workers which can be considered as activists, probably constitute the "critical mass" necessary to overcome shop-floor indifference.

\(^1\) Compare paragraphs 124-132.
\(^2\) See Appendix II; both examples of Self-Management Agreements show that the higher the increment of productivity over the norm, the lower the incremental gain to the workers.
\(^3\) The wide intertemporal differences shown in Appendix III show that the surprises must have been traumatic on occasions.
Shop-floor hostility and indifference are probably an important barrier to the improvement of X-efficiency, because its improvement is the result of an almost infinite number of minor technical or process modifications, which only in a limited number of cases are sufficiently distinct to warrant special rewards. Only to a limited degree can these changes be generated outside the work process itself and imposed upon it; some sizable portion has to come from within. The realization of this potential requires a creative spirit for which peer group recognition is a precondition. This supports the presumption that the Yugoslav practice is probably comparing fairly well on this particular score.

Consensus: Yugoslav representatives stress the need to search ex ante for a consensus among the parties of the decision-making coalition as a major strength of Self-Management Socialism. Its result is that all parties must be reasonably satisfied with the compromise attained by the consensus, which creates a strong and consistent determination of all parties to do everything in their power to adhere to the consensus. Most prominently, the avoidance of protracted strikes, i.e. the dispute over future shares in the generated value added, is mentioned as a major contribution to average performance. Although these arguments are very plausible, and probably relevant in a great number of instances, its universal relevance is far from certain. In addition, it is far from certain that the consensus of the coalition reflects more than the established power position of its members which, for obvious reasons, may be quite different from the social welfare implications to all affected parties which are not part of the consensus.

7.3 Indeterminate Effects

Competition: Under Yugoslavia's Self-Management Socialism a high degree of vertical coordination (with suppliers and customers) as well as horizontal coordination (with actual or potential competitors) is established through comprehensive exchange of information in connection with planning. This may -- and in many instances does include -- arrangements for medium-term cooperation codified in Self-Management Agreements on delivery relationships, price formation, specialization (among competitors) and joint investment. While this does not exclude competition, at least in the long run, it certainly reduces its vigor and eliminates many of the features assigned to competition in a neoclassical framework. On strictly theoretical grounds, a competitive system which meets all the requirements for Pareto optimality in a perfect competition model would, on analytical grounds, win hands down over real world Yugoslavia characterized by such conditions as imperfect foresight, high information and decision-making costs, lagged relationships, indivisibilities, increasing returns to scale and institutional rigidities. Conversely, a strong case can be made on analytical grounds for the superiority of a pure

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1/ The Associated Labor Act foresees special rewards for workers "who through innovations, rationalization and other forms of creativity ... contribute to a rise in income of a BOAL." (Article 130.)

2/ Compare paragraphs 52-53.
model of Self-Management in comparison with a competitive system in a semi-industrialized, less-developed country which for structural reasons lacks just about all the necessary conditions for Pareto-optimality. Neither of these theoretical exercises is particularly relevant for the question whether -- under the actual conditions of Yugoslavia and in an environment where all enterprises follow rules of the game which give a lower regard for a competitive market model -- a cooperative outlook has in balance a negative or a positive impact on enterprise performance in comparison with a combative outlook.

8. Control

144. Yugoslav Self-Management Socialism has created an intricate control structure. First, the enterprise (or rather the BOAL as the units for which the basic accounts are kept) is under permanent control of SDK ("Social Accounting Service"). All transactions involving at least one social sector organization have to be recorded daily to SDK, which keeps a computerized country-wide system of control accounts of all social sector organizations. SDK maintains a total of 150,000 individual sets of accounts classified by 30 categories of payments. SDK's control of current transaction focuses on adherence to formal rules, liquidity position, and maintenance of certain benchmarks related to liquidity. In addition, SDK receives the quarterly and annual income statements and balance sheets of all organizations and checks them for consistency with the legal requirements without, however, auditing them, formally. SDK also checks the "indicators" which enterprises are required to calculate annually for information of and control by the Commune. 1/ Unique among countries is not only the speed, depth and completeness of coverage of all monetary flows occurring in the economy; not less unique is that none of the information covered is privileged. It is not only used statistically, it is also made available (routinely or on request) to all organizations which have a legitimate interest. The absence of privilege of information is completely analogous to the information approach to planning, referred to above. It further greatly improves the effectiveness of other controls, referred to subsequently.

145. Second, the enterprise submits annual income statements, balance sheets, and performance indicators to the Commune, as the corollary of the Commune's rights and obligations in the case of enterprise failure. 2/ It is the Commune to which the enterprise is most thoroughly accountable, and the Commune's control is not for control's sake but very much in the interest of the Commune itself and as part of the ongoing dialogue between enterprise and Commune. The level of planning, the medium-term plan of the enterprise is an

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1/ See below.
2/ Compare paragraphs 121-123.
integral part of the medium-term social plan of the Commune. As to the aforementioned indicators, the following coefficients are prescribed by law: 1/

(1) Enterprise income per worker;
(2) Ratio of enterprise income to fixed and working assets;
(3) Enterprise net income per worker;
(4) Ratio of accumulation (voluntary depreciation plus allocations to the Business Fund and the Reserve Fund) to enterprise income;
(5) Ratio of accumulation to enterprise net income;
(6) Ratio of accumulation to fixed and working assets;
(7) Ratio of personal income and allocation to Common Consumption fund per worker;
(8) Net personal income per worker.

146. Another unique feature of Self-Management Socialism is mutual control of enterprises. 2/ For example: Through the legal requirement that Self-Management Agreements are negotiated publicly and have to be published as a condition for effectiveness 3/. Enterprises who are not a party to the Agreement have the opportunity to object if their interests are seriously violated, and it is up to the enterprises themselves to scan the published Self-Management Agreements to that end. Further, parties to Self-Management Agreements have the right to request from each other all internal information pertinent to the issues agreed upon. If the Agreement includes "pooling of resources" (i.e. joint venture type financing of investment) 4/ all aspects of the business policy of the recipient enterprise are subject to scrutiny by the financing enterprise.

147. In addition to these arrangements for control from the outside, there is another control link whereby outside control is internalized through the legal obligations of the top Operational Manager. If the Workers' Council or any other organ of Self-Management is taking any action which violates the law or valid Social Compacts or Self-Management Agreements or the plan of the enterprise, the top Operational Manager has to abstain from compliance and has to advise against such action. If Self-Management persists nevertheless, the top Operational Manager is obliged to inform the Commune of the violation. 5/

1/ Associated Labor Act, Article 140. Compare Appendix I for terminology and computation.
2/ This principle of mutual control follows from the premise that the role of the state should be minimized by turning over a maximum of functions to the affected parties themselves.
3/ Compare paragraph 48.
4/ Compare paragraph 44.
5/ Associated Labor Act, Article 519.
Finally, there is a special control body within Self-Management: the Self-Management Workers' Supervision Committee. It is elected in direct vote by all workers. Subject to its control are both Operational Management and Self-Management, and issues falling under the right to control are, inter alia, implementation of Social Compacts and Self-Management Agreements, adherence to the bylaws of the enterprise, "responsible and socially and economically appropriate use and disposition of social resources", and implementation of the "principle of income distribution according to work performed". 1/ The Supervision Committee has the right to extend its supervision to other organizations as well if the issue is related to "sharing of income and risk" or "pooling of resources" between the organizations. For carrying out its control function, the Supervision Committee can request the collaboration of Operational Management of the enterprise and can employ independent outside council. If the issue refers to relations with other enterprises, it can through their Supervision Committee request collaboration of Operational Management of that enterprise as well. While these sweeping powers are formidable indeed, reality seems not to have caught up to their potential for effective control; all four visited enterprises did have a Supervision Committee, but in no case did major events take place in this realm.

1/ Associated Labor Act, Article 556.
ANNEX Table 1: Yugoslavia - Total Economy
(GMP in 1972 prices)

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1/ Three years averages.

Sources: Statisticki Godisnjak Jugoslavije, 1979
# ANNEX Table 2a: Yugoslavia - Industry and Mining

(All value data in 1972 prices)

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<th>Year (b D)</th>
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1/ Three years' averages.

2/ Productivity: GMP per worker.
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<td>1967</td>
<td>2.92</td>
<td>131.2</td>
<td>6.6</td>
<td>&lt;0</td>
<td>11.0</td>
<td>&lt;0</td>
</tr>
<tr>
<td>1968</td>
<td>2.96</td>
<td>141.0</td>
<td>3.7</td>
<td>&lt;0</td>
<td>6.6</td>
<td>&lt;0</td>
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<tr>
<td>1969</td>
<td>3.01</td>
<td>148.9</td>
<td>3.5</td>
<td>369</td>
<td>4.1</td>
<td>427</td>
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<tr>
<td>1970</td>
<td>2.95</td>
<td>154.6</td>
<td>2.4</td>
<td>316</td>
<td>3.4</td>
<td>451</td>
</tr>
<tr>
<td>1971</td>
<td>3.02</td>
<td>162.6</td>
<td>3.8</td>
<td>315</td>
<td>3.8</td>
<td>311</td>
</tr>
<tr>
<td>1972</td>
<td>2.99</td>
<td>165.0</td>
<td>2.6</td>
<td>209</td>
<td>3.8</td>
<td>297</td>
</tr>
<tr>
<td>1973</td>
<td>2.97</td>
<td>172.3</td>
<td>2.7</td>
<td>412</td>
<td>3.2</td>
<td>493</td>
</tr>
<tr>
<td>1974</td>
<td>2.93</td>
<td>174.7</td>
<td>2.5</td>
<td>220</td>
<td>3.8</td>
<td>331</td>
</tr>
<tr>
<td>1975</td>
<td>3.01</td>
<td>180.9</td>
<td>4.1</td>
<td>292</td>
<td>5.4</td>
<td>379</td>
</tr>
<tr>
<td>1976</td>
<td>3.08</td>
<td>189.3</td>
<td>4.1</td>
<td>401</td>
<td>5.8</td>
<td>568</td>
</tr>
<tr>
<td>1977</td>
<td>3.11</td>
<td>196.0</td>
<td>3.6</td>
<td>340</td>
<td>4.7</td>
<td>447</td>
</tr>
</tbody>
</table>

3/ Fixed Assets /GMP.
4/ Fixed Assets/Employment.
5/ Increment of F.A. /Increment of GMP (no time lag).
7/ Investment/Increment of GMP (1 year time lag).
8/ Investment/Increment of Employment (1 year time lag).
9/ Investment/GMP.

Sources: Statisticki Godishnjak Jugoslovi 1979
INCOME; CONCEPTS AND COMPUTATION

To match data generation from actual enterprise operations with the ideological principles of Self-Management Socialism, Yugoslavia has introduced its own system of accounting concepts. Some of them match those used elsewhere, but some differ substantially. Since these concepts reflect the reality of day-to-day operations, and since quantitative enterprise objectives as well as performance indicators are expressed in terms of the accounting concepts, they are briefly introduced in this Appendix. The attached table sets out the terms and gives references to the articles of the Associated Labor Act most relevant in this connection. The schematic presentation of the table summarizes the accounting steps taken for the computation of income of organizations and its distribution for specified purposes. Except for those items for which the definition is unambiguous, they are briefly set out and commented on below. One has to keep in mind that the scheme is strictly speaking valid only for a BOAL (the income computing units within enterprises) for which it is defined by the Law. 1/ The scheme which would apply to the typical enterprise consisting of a number of BOALs is summarized briefly at the end.

Income Generation and Distribution for a BOAL

\[ S \text{ (Sales): BOALs may sell directly to customers outside the enterprise. In many instances, and always when there is an independent BOAL for marketing operations, the latter accounts for the external sales act and passes a portion of the revenues back to the units contributing in their production.} \]

\[ T \text{ (Transfer Income from Pooling of Labor and Resources): These transfers for deliveries to other BOALs (mostly within the same enterprise) reflect explicit or implicit internal prices which are determined as a part of the joint annual production plan of the associated BOALs and usually enter into Self-Management Agreements. In periods of high inflation rates these prices can periodically be adjusted upwards within the plan year, usually by a ratio representing the price rises of the final output. While internal prices seem to be used in some enterprises, others use instead predetermined shares} \]

---

1/ The Associated Labor Act states categorically: "Income ... shall be earned solely as the income of the basic organizations ..." (Article 14) and all income relations beyond BOALs, i.e., within and between enterprises, require consent of the workers of each participating BOAL.
of total (final) sales revenues allocated to each BOALs participating in the production process.

\[ T^+ \text{ (Transfer Income from Pooling of Resources)}: \text{ These revenues are received from investment of financial resources generated by the BOAL (and ultimately to be returned) in other BOALs within the enterprise or elsewhere, where the transfer is accounted for as } T^- 2. \text{ Since both organizations "share income and risk", such transfer payments are only received if the financed investment generates sufficient surplus.} \]

\[ Dm \text{ (Mandatory Depreciation): Since taxes levied on profits are minimal, there is no built-in incentive for computing the highest possible depreciation. To avoid under-depreciation, standard depreciation periods are issued by decree which determine the minimum depreciation rates to be applied to the book values through fixed assets. The latter are by law updated to "replacement value" by adjusting the book values through statistical adjustment factors (partial deflators) computed and issued by the Federal Institute for Statistics for a great variety of specific categories.} \]

\[ T^\text{-} 2 \text{ (Transfer Payments for Pooling of Resources): This item corresponds to } T^- 2 \text{ above. These payments for the use of resources under the permanent control of some other BOALs become due once the subitems of Net Income (NY; compare below) reach some preagreed or "normal" level. The transfers are, thus, no absolute claim with priority over all items of income utilization (as conventional debt service payments would, to be included in item CO) but are in effect a residual of a residual (NY). For consistency reasons losses suffered by the BOAL would equally have to be counted as } T^- 2. \]

\[ Y \text{ (Income; "Dohodak"): Income is the central category } 1/ \text{ for income computation and allocation for various purposes or recipients; conceptually related to net value added. Income is distributed first in terms of "secondary income distribution" } 2/ \text{ (between the BOAL and society) for computation of Net Income, and then in terms of "tertiary income distribution" (distribution of Net Income between direct benefits for the workers and retained resources.)} \]

1/ "Income is that part of society's total product which workers in basic organizations earn in monetary form as the social recognition of the results of their own ... labor ... and which they manage in basic organizations." (Associated Labor Act, Article 45.)

2/ By implication "Primary income distribution", thus, is the distribution of social value added between the BOAL and other economic organizations, as implied in sales and purchase prices.
CO (Contractual Obligations): This item comprises various components which the BOAL has to pay on the basis of various contracts, such as interest, support of Work Communities (general service units within the enterprise), membership fees for Economic Chambers.

Dv (Voluntary Depreciation): In addition to mandatory depreciation (Dm), enterprises are permitted to set aside additional amounts up to certain limits. Their volume may be determined by technological considerations regarding "economic" (as compared to "physical") life span of assets, or by considerations of resource mobilization for investment programs. As to the latter purpose, the same effect could be obtained by increased allocation to permanent resources BF, but two differences lead commonly to a preference for a mixed resource mobilization strategy: (a) A reduction of net Income NY (through prior deduction of voluntary depreciation) may help to resist the rank-and-file pressure to increase personal incomes PI from NY, by increasing the ratio of PI/NY (in smaller total of NY), (b) since some taxes and contributions (in CI and LO) are computed on the basis of NY, computation of Dv reduces total tax incidence.

CI (Contribution from Income): This item embraces a host of enterprise contributions to a variety of investment and operating cost for a variety of general social services (like education, health programs, utilities, etc.). Most of the contributions are for services provided by special organizations (like Communities of Interest) on the level of the Commune. Due to the fact that these services are neither provided for by the state nor financed from its budgets, the contributions tend to be sizeable and represent the most relevant link of interest between Commune and enterprise.

LO (Legal Obligations): Legal obligations are equivalent to taxes and are for the financing of needs not covered by contributions (like for defense and general administration).

PWC (Payments to the Work Community of the Enterprise): The Work Community (for an array of internal services) of the enterprise receives contributions from all BOALs making up the enterprise.

NY (Net Income "Cist Dohodak"): This residual item enters into what could be referred to as "factor income distribution". Its most remarkable feature is that remunerations to the workers are not based on contractual claims for specific payments per unit of time or output (as wages) but reflect a claim to a portion of the enterprises residual which is (both as a share and an absolute amount) undetermined ex ante. However, Personal Income cannot be reduced below a legal minimum (ARF or a General Reserve Fund would be used to supplement insufficient current resources), and for all practical purposes it cannot be easily reduced below some expectation level above the legal minimum without running the risk of workers' unrest.

PI (Personal Income): PI has to be looked at under two, although interdependent, clearly distinct aspects: (1) determination of the total income fund, and (2) distribution of the income fund among individual workers. The first aspect is to a large degree regulated by Social Compacts (e.g., on linking rises of real personal income to rises in productivity) and Self-
Management Agreements (in most instances concluded among enterprises within a certain industrial branch, compare Appendix II). With respect to the second aspect, BOALs have in principle greater latitude of self-regulation. Nevertheless, the transparency of enterprise practices, the egalitarian streak which is imminent in decision-making on internal income scale - which is entirely in the domain of Self-Management - and the influence of the Communes on income policy lead to both considerable uniformity (within Communes, Republics and the Federation, probably in this order) and fairly narrow spreads.

ACF (Allocation to Common Consumption Fund): A great number of "fringe benefits" to the workers are financed from this fund, like housing at subsidized rents, housing credits at subsidized interest rates, construction of holiday facilities, and current subsidies like holiday premiums and coupons for subsidized grocery bills. Much of these are granted in place of income payments in cash out of entrenched social habits, but in a number of instances income redistribution towards some needy categories of workers seems to be a rationale, at least an implicit one.

ARF (Allocation to Reserve Funds): Legal provisions prescribe for each BOAL the build-up of reserve funds up to a certain limit (in relation to average enterprise income over the last three years). This reserve fund is the first line of defense in case NY does not cover PI above the legal minimum. In addition funds are being paid to a Common Reserve Fund, established at the Republican level which is de facto some kind of mutual insurance maintained by enterprises for distribution of minimum personal incomes.

ABF ( Allocation to Business Fund): These represent the Yugoslav equivalent of equity. It can only be distributed (and only to other BOALs) in the case of bankruptcy.

Income Generation and Distribution of enterprises and Composite Organizations

For an enterprise or other organizations, consisting of two or more BOALs which deliver goods and services to each other, the income schemes for all constituent BOALs are to be aggregated and consolidated. That way all internal deliveries in $T_1^+$ and $M$ would be netted out, and item PWC disappears. Similarly, only that part of $T_2^+$ and $T_2^-$ would remain which reflects financial arrangement beyond the confines of the aggregate.
### Income Computation and Distribution of a BOAL

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Article in the Law on Associated Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>S + ( T^+ ) (_1)</td>
<td>Value of Sales</td>
<td>60</td>
</tr>
<tr>
<td>+ ( T^+ ) (_2)</td>
<td>Transfer revenue from pooling of labor and resources (shares in joint revenues)</td>
<td>61, 63, 56, 64, 67, 68, 69</td>
</tr>
<tr>
<td>( = G_Y )</td>
<td>Gross Revenue (Ukapan Prihod)</td>
<td>48, 49, 104</td>
</tr>
<tr>
<td>- M</td>
<td>Material Costs</td>
<td>105, 48, 49, 104</td>
</tr>
<tr>
<td>- ( D_m )</td>
<td>Mandatory depreciation</td>
<td>106, 48, 49, 104</td>
</tr>
<tr>
<td>- ( T^- ) (_2)</td>
<td>Transfer pay for pooling of resources (shares of others as for ( T^+ ))</td>
<td>as for ( T^+ )</td>
</tr>
<tr>
<td>( = Y )</td>
<td>Income (Dohodak)</td>
<td>48, 104, 49, 57, 81, 110</td>
</tr>
<tr>
<td>- ( C_O )</td>
<td>Contractual obligation</td>
<td>53, 54</td>
</tr>
<tr>
<td>- ( D_v )</td>
<td>Voluntary depreciation</td>
<td>110</td>
</tr>
<tr>
<td>- ( C_I )</td>
<td>Contributions from Income</td>
<td>53, 54, 110</td>
</tr>
<tr>
<td>- ( L_O )</td>
<td>Legal obligations</td>
<td>53, 54, 110</td>
</tr>
<tr>
<td>- ( P_{FWC} )</td>
<td>Payments to the Work Community</td>
<td>400-408</td>
</tr>
<tr>
<td>( = N_Y )</td>
<td>Net Income (Cist Dohodak)</td>
<td>51, 110, 117, 57, 114-124</td>
</tr>
<tr>
<td>- ( P_{I} )</td>
<td>Personal incomes</td>
<td>51, 57, 82, 114-117</td>
</tr>
<tr>
<td>- ( A_{CF} )</td>
<td>Allocation to Common Consumption Fund</td>
<td>51, 57, 82, 114-117</td>
</tr>
<tr>
<td>- ( A_{RF} )</td>
<td>Allocation to Reserve Fund</td>
<td>51, 82, 114, 119, 121-123</td>
</tr>
<tr>
<td>- ( A_{BF} )</td>
<td>Allocation to Business Fund</td>
<td>51, 82, 114, 116, 119, 120</td>
</tr>
</tbody>
</table>

1/ Articles of central relevance are underlined.

Sources: Enterprise interviews

SELF-MANAGEMENT AGREEMENTS ON PERSONAL INCOME 1/

In general the total amount of Net Income which an enterprise or BOAL can maximally distribute as personal income 2/ to its workers is regulated by a Self-Management Agreement on income concluded by all enterprises within the industry branch. Two examples of these agreements - one for branch X in force in 1978, one for branch Y drafted for 1979, both for the Republic of Slovenia - are summarized and evaluated below. The algebraic presentation is slightly simplified, but contains all the essential elements.

Branch X (1978)

Analytical Framework

"Maximal Personal Income" fund MPI is determined as:

(1) $MPI = a \cdot \overline{PI}$

($\overline{PI}$: "Normal Personal Income Fund")

(a: correction factor)

(2) $a = 1 + b$

(b: correction factor)

(3) $b = b \cdot (c-1)$

(c: "successfulness factor")

(4) $c = \frac{NY}{NY}$

($NY$: Net Income of the organization)

($\overline{NY}$: "Normal Net Income")

(5) $\overline{NY} = \overline{PI} + ACF + ABF$

($ACF$: "Normal Allocation to Common Consumption Fund")

($ABF$: "Normal Allocation to Business Fund")

1/ See Appendix I on the terminology and concepts of income components.

2/ The upper limit of the total fund for personal incomes as established by Self-Management Agreement on Income distribution can be overridden by a Self-Management Agreement on investment which specifies financial contribution to financing of investment, leaving for personal incomes the residual part of Net Income.
(6) $\bar{\Pi} = L \times \bar{\Pi}'$

$L$: amount of Labor, in hours

$(\bar{\Pi}': "normal" personal income per unit of labor, in Din/h)$

(7) $\bar{\Pi}' = \bar{\Pi}^* \cdot (1 + d + e + g)$

$(\bar{\Pi}^*: "typical" \bar{\Pi}' for Slovenian industry branch X)$

$(d$: factor for complication of work)

$(e$: factor for conditions of work)

$(g$: factor for local conditions)

(8) $L = W \times wh$

$(W$: number of workers)

$(wh$: number of work hours per year)

(9) $ACF = h.\bar{\Pi}$

$(h$: factor for determining allocations to Common Consumption Fund)

(10) $ABF: k \cdot BF$

$(k$: factor for allocation to Business Fund = "minimum accumulation")

Functional Relationship (3) is standardized for all enterprises. According to the short-hand version included in the Agreement, the effects of differences between unity and $c$ decline with growing levels of differences; e.g., while $c = 5\%$ leads to a correction factor $a = 4.6\%$, $c = 20\%$ raises $a$ to only $9.4\%$. 1/

Thus, the enterprise workers share the benefits (costs) from above (below) normal performance with society, but at a sharply degressive scale. Parameter $\bar{\Pi}^*$ is the planned value for enterprise A, the biggest enterprise of the branch

1/ The "short-hand version" (computation table) resembles a power function $Y = bx^m$ with $0 < m < 1$; attempts to verify the parameters, however, failed, suggesting that the $x/y$ scale was established on a different basis.
within Slovenia. Parameter $h$ is the Slovenian average ratio of $\text{ACF}/\text{PI}$ in the preceding year. Parameter $k$ is the Slovenian average ratio $\text{ABF}/\text{BF}$ for the last five years. The parameters $d$, $e$ and $g$ are defined for each enterprise and constitute part of the Agreement. $W$ is not counted in actual numbers, but the workforce is broken down into six educational attainment categories, and the number in each category is multiplied by a specific factor (e.g. 1 for unskilled workers, 5 for second-degree university graduates); $L$, thus is measured in some kind of "standardized" worker unit.

Assessment

For a given enterprise position, the total amount available for personal income payments (and all fringe benefits) is unequivocally determined by (a) some measure of "normal" enterprise practice with respect to the host of fringe benefits and accumulation (undistributed profits), and (b) the plans for personal income payment by the "branch leader". It is unknown whether the branch leader is first planning his personal income levels autonomously, which then become through the Self-Management Agreement the standards for everybody else, or whether the requirement for negotiating and unanimous agreement of all co-signers integrates de facto the income planning of all enterprises. The circumstantial evidence strongly supports the conclusion that the latter is the relevant interpretation. In this case, the Agreement, established on the basis of enterprise expectations on external and internal conditions, determines indirectly the amount of expected resource generation, in total and for each enterprise. Thus, in principle, the co-signing enterprises could tailor their income distribution policy to the investment plans they have individually and jointly. Although formally a residual, accumulation could de facto be planned as a target 1/ with the income distribution policy serving as the instrument to determine personal incomes consistent with the financing plans for investment plans and with market and internal performance expectations. 2/ The link to investment plans "individually and jointly" is established, at least in principle, by a separate Self-Management Agreement between the member enterprises of branch X on the formation of a Composite Organization of Associated Labor 3/ (largely responsible for "joint production planning") within which an "internal bank" is set up. The internal bank is the vehicle for "pooling of resources", 4/ i.e. investment financing arrangements among enterprises covered by the Agreement through temporary joint ventures.

1/ The portion of accumulation resulting from above normal performance would remain a genuine residual. It appears that the converse is not true: a corresponding shortfall of accumulation against target (due to below normal performance) would apparently not be tolerated but be made up by reduction of personal incomes.

2/ It remained unclear whether in fact any explicit considerations along this line went into the design of the analytical framework, and/or whether the framework was actually used in this particular way.

3/ See paragraph 43.

4/ See paragraph 45.
Branch Y (draft for 1979) 1/

Analytical Framework

(1) \( MPI = PIP \times F \)  
(subscript p: "planned")  
(subscript r: "realized")  
(F: aggregate correction factor)

(2) \( F = F_1 + F_2 + F_3 \)  
\((F_1): \) partial correction factor

(3) \( F_1 = K \times X \)  
\((F_1): \) correction factor for generated Income per worker

(4) \( K = \frac{Yr}{Y_p} \frac{WP}{Wr} - 1 \)  
\((K): \) performance factor

(5) \( X = \frac{(2K) - 10}{K - 9} \)  
\((X): \) multiplier

(6) \( F_2 = \frac{NYr}{NY_p} \frac{WP}{Wr} - 1 \times 0.4 \)  
\((F_2): \) correction factor for generated Net Income per worker

(7) \( F_3 = \frac{Yr}{Y_p} \frac{Ap}{Ar} - 1 \times 0.2 \)  
\((F_3): \) correction factor for generated profits

\((A): \) assets used by the enterprise

All planned items (with subscript p) are those of the individual enterprises.

Assessment

Correction factors \( F_1 \) and \( F_2 \) consider each some measure of realized value productivity gain (loss) versus the planned level; the rationale for using two different measures (the results of which are combined) rather

\(1/\) Branch Y has for 1978 an analytical framework which reportedly has little resemblance to the one sketched and analyzed below nor with the one presently valid for branch X. The new analytical framework was summarily characterized as "more consistent with Self-Management".
than one is unknown. $F_3$ considers any excess (shortfall) of the realized profit rate over the planned one. In all three cases the realized ratios are weighted; in the case of $F_1$ by a factor determined by the ratio itself, in the case of $F_2$ and $F_3$ by a constant of equal weight equal for all enterprises.

In contrast to the Self-Management Agreement for branch X, that for branch Y does not contain any normative parameter at all, neither directly nor indirectly (e.g. through prescriptions for the computation of planned variables or minimum accumulation); deviations between plan and realization for each enterprise separately are all that counts. If there were complete enterprise autonomy, the framework could be an open invitation to boost personal income levels by setting unrealistically low plan targets for Y and PY and/or unrealistically high plan targets for employment and assets. However, the potential for such misuse appears too evident to support the assumption that such potential was either overlooked or deliberately built into the mechanism by its designers. A more plausible interpretation is that the potential for misuse does not exist because the assumption of complete enterprise autonomy is invalid. There is in fact considerable evidence that enterprises are not autonomous as far as their investment plans are concerned, and that these plans are rather to a considerable degree consolidated (a) with each other (particularly through Self-Management Agreements on deliveries or on specialization and complementary) and (b) with the social plans of the Communes, either of the two (or both) determine investment plans, and through financing plans income distribution plans for each enterprise separately. Thus, what might appear at first glance as either blunder or cartelization, might well have a tight rationale, according to which performance differences are the only causes for increase (or reduction) of personal incomes against targets. As in the case of branch X, accumulation appears formally to be a residual but more probably is a target, in turn determining other plan targets, including those for personal incomes.

Summary

The analytical frameworks of the discussed Self-Management Agreements of the two branches have formally little in common except that they both aim at determining for a specific year the total sum available for distribution to workers in the form of personal income. The fact that the present analytical framework of branch Y has no more resemblance to either of the two discussed above, and that the definitions of branches X and Y overlap to a considerable degree (making classification for some enterprises indeterminate) lend support to the Yugoslav contention that there is in fact no predetermined general framework for such agreements except the commonality mentioned above, and that each contracting group can tailor the specifics according to its specific conditions and requirements. Although this assessment does not prove the Yugoslav contention that the macro-decisions on the respective share of consumption
investment are in fact truly social decisions filtering up from the Self-Management procedures on the enterprise level (and are not simply an ex post result), it does show that formally the Agreement could well have accomplished that task whether designed for this purpose or not.
To gain some feel of the history of the four visited enterprises, they were asked to provide a standard set of data, most of which were contained in annual income statements and balance sheets. The information is summarized in the following indicators presented in the attached table:

1. **Enterprise Income Per Worker** (in 1968 Prices)

   Enterprise Income corresponds to value added net of mandatory minimum depreciation. The current price data were deflated by the corresponding industrial producer price index.

2. **Productivity Growth**

   Computed from 1. In the absence of physical productivity data, the growth rate of value productivity is used as a proxy; actual productivity growth may have been a little higher, because the normal working hours per year declined over the period covered.

3. **Average Personal Income** (in 1968 Prices)

   The current price data, which include Allocations to Common Consumption Fund were deflated by the cost of living index.

4. **Growth Rate of Average Personal Income** (in 1968 Prices) Computed from 3.

5. **Profit Rate** ("Rentability of Business Assets")

   Accumulation (addition to enterprise funds) plus Voluntary Depreciation as a percentage of value of fixed and current assets. 2/ This ratio serves as a proxy for the profit rate after taxes as commonly defined.

6. **Gross Surplus Rate**

   Enterprise Income minus Personal Income and allocation to Common Consumption Fund, as a percentage of Enterprise Income. The ratio indicates what percentage of value added is available for other purposes but personal incomes.

---

1/ For definition of terms and computation compare Appendix I.

2/ All enterprises reported a series of revaluations of fixed assets carried out on the basis of detailed price indices for numerous categories of investment goods. The fixed asset data, thus, can be assumed to constitute a reasonable approximation to replacement value.
7. **Voluntary Depreciation Rate**

Voluntary Depreciation (above legal minimum) as a ratio of the sum of Voluntary Depreciation and Accumulation. The ratio shows what contribution to total resource generation is accounted for in the form of voluntary depreciation.

8. **Tax Rate on Personal Income**

Taxes and contributions paid from enterprise Income as percentage of gross Personal Income and allocation to Common Consumption Fund. In addition, there is personal tax paid from gross personal income.

9. **Tax Rate on Profits**

Taxes and Contributions on Enterprise Income as a percentage of Taxes and Contributions on Enterprise Income plus Accumulation.

10. **Personal Tax Rate**

Taxes and contributions paid (by withholding) gross Personal Income as a percentage of gross Personal Income.

11. **Coverage of Assets**

Total enterprise funds (equity) as a percentage of fixed and current assets.

**Summary Observations**

The first and foremost observation is the bewildering instability (over time) of many of the indicators for all four enterprises, with the Personal Tax Rate as the only exception. But even in this case some of the year-by-year changes are quite significant, and contrary to what one expects, the patterns of change as well as the levels differ significantly between the enterprises. The explanation for this particular phenomenon, which is evident even more drastically in the Tax Rate on Personal Income and the Tax Rate on Profits, is that a sizeable portion of those contributions (in both Enterprise Income and Personal Income) is raised strictly locally, i.e. within the Commune, and is strictly earmarked, i.e. raised for a particular program or project on the Communal level. 1/ These irregularities, thus, support strongly the observation that Communes have a vital interest in the actions and the successes and failures of enterprise located within their boundaries. As a corollary, the fluctuations of the burden of taxes and contributions on both Enterprise Income and Personal Income match only by accident the fluctuations of the base, so that the effects of the changes of tax burden do in many instances amplify rather than dampen cyclical income fluctuations.

---

1/ The tax rates shown are the averages of a great number of specific taxes and contributions, many of which are determined in rates on a different basis than used in the coefficients, or in absolute terms.
Most significant, and in their extent startling, are the fluctuations of enterprise income per worker and of average personal income, amplified in the respective growth rates. Whereas the former may in part have been caused by a mismatching deflator, 1/ the second are unquestionably genuine. Both sets of time series show weak signs of a positive trend, the trends of growth of average personal income are markedly below the productivity growth rates. 2/ The correlation between the two sets of trends (absolute):

\[
\begin{align*}
\text{Alpha:} & \quad r^2 = 0.6905 \\
\text{Beta:} & \quad r^2 = 0.9476 \\
\text{Gamma:} & \quad r^2 = 0.2427 \\
\text{Delta:} & \quad r^2 = 0.8063
\end{align*}
\]

is in three out of four cases significant, i.e. the fluctuations in average personal incomes corresponds to some degree to the fluctuations of productivity.

In none of the four enterprises was any major event made responsible for these patterns. Apparently a combination of enterprise-specific conditions 3/ — such as fluctuations of demand and of output mix, changes of input mix induced by changing output mix, uneven impact of price changes of inputs and outputs, process changes — accounted for these fluctuating patterns; the fact that no reference was made to these fluctuations and their specific causes during the discussion of the history

1/ Deflation by the general industrial producer price index disregards both product-specific price trends and short-term fluctuations around the product-specific price trends which the enterprise might have actually initiated in response to particular market conditions and regulatory measures. However, these fluctuations are recognizable for some years even in the undeflated time series in spite of high inflation rates.

2/ See Table for average growth rates and for exponentially fitted trends.

3/ General conditions can be ruled out because the patterns of the four enterprises show little temporal synchronization with each other.
of the enterprises seems to indicate that they were not considered in any way "abnormal," and certainly not as traumatic. Closer inspection of enterprise data, however, revealed that one specific condition is underlying both oscillating trends: the fluctuations of total employment are minimal and their short-term trends are almost disconnected from short-term output trends. What evidently did take place in all four enterprises -- and can be surmised to be valid for all Yugoslav enterprises -- is that adjustment to demand fluctuations was carried out by changes in workers' incomes and/or working time rather than changes in numbers of workers (with fixed incomes and/or unchanged working time). This peculiar adjustment pattern is perfectly consistent with (a) the principle of Socialist solidarity, and (b) the present regulations for recruitment and dismissal 1/ which were in a similar form already in force for some time. The price to be paid for stabilized or smoothly growing employment in an environment with strong enterprise-specific or overall business cycles are the quite massive fluctuations in real incomes. In the least affected enterprise, real average incomes declined during three out of nine years (and in one instance by almost one quarter), and in the worst case during five out of nine years. 2/ However, the fairly high rates of inflation prevented in almost all cases any nominal decline of income. Needless to say, this high price of absorbing all unfavorable market conditions into fluctuating personal incomes -- given the historical experience and the vivid perception of the comparatively smooth trends in adjacent countries regardless of their political/economic system -- are not easy to accept socially. These conditions strongly support the proposition that stability of personal income has to be considered an essential part of the composite objective function of the enterprise, 3/ and that there is universal concern of Operational Management, Self-Management and Syndicate about strikes in case of disappointed income expectation, 4/.

Comparing the four enterprises, a major pattern emerges, as indicated by the figures below:

<table>
<thead>
<tr>
<th></th>
<th>Average Productivity Growth</th>
<th>Average Personal Income (1000 din.)</th>
<th>Average Profit Rate</th>
<th>Gross Surplus Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>7.6</td>
<td>19.4</td>
<td>24.5</td>
<td>9.2</td>
</tr>
<tr>
<td>Beta</td>
<td>1.4</td>
<td>21.8</td>
<td>22.8</td>
<td>6.1</td>
</tr>
<tr>
<td>Gamma</td>
<td>2.6</td>
<td>20.5</td>
<td>20.3</td>
<td>13.4</td>
</tr>
<tr>
<td>Delta</td>
<td>4.2</td>
<td>29.6</td>
<td>33.0</td>
<td>2.6</td>
</tr>
</tbody>
</table>

2/ Even if there is a clear rising trend -- as in Alpha -- the fluctuations are probably so large that they swamped any perception of a real income decline.
3/ Compare paragraph 125.
4/ Compare paragraph 109.
One extreme strategy was being pursued by Gamma. Average income levels stagnated and had by the end of the period, fallen to the lowest of all four enterprises, 1/ but profit rates and surplus (over personal incomes) generation were both very high. 2/ On the other end of the spectrum is Delta with by far the highest and next to Alpha the fastest growing average income level, but with dismal profitability and surplus generation. 3/ Alpha had succeeded in striking a relatively favorable balance, helped greatly by the high productivity growth achieved. Beta's strategy was directed towards a similar "balanced" result, but due to the miniscule productivity growth, did not perform well by any standard.

1/ The composition of the workforce, however, has a considerable impact. A large part of Gamma's workforce is semiskilled and unskilled, and a considerable portion of the workforce consists of migrant workers from the less-developed Republics of Yugoslavia, whereas most of Delta's workers are highly skilled. This confirms, nevertheless, that Gamma is in its mainstream activity out of tune with the social and economic conditions of Slovenia. Furthermore, Gamma was locked into a production program which relies heavily on export, while on the main export markets the competition from low-wage countries tends to squeeze out any Yugoslav suppliers; Gamma is presently in the process of diversifying fundamentally its product and market profile.

2/ Gross profit rate would be even more out of comparison than the net profit rates shown above because of the high portion of taxes and contributions, indicated by the high Gross Surplus Rate.

3/ By the same token as in the case of Gamma, the Gross Profit Rate would be even more dismal.
### Appendix III

#### ENTERPRISE PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Industrial Producer Price Index</strong></td>
<td>120</td>
<td>103</td>
<td>113</td>
<td>130</td>
<td>144</td>
<td>163</td>
<td>211</td>
<td>258</td>
<td>273</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Living Price Index</strong></td>
<td>100</td>
<td>108</td>
<td>120</td>
<td>136</td>
<td>161</td>
<td>193</td>
<td>233</td>
<td>290</td>
<td>324</td>
<td>372</td>
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</tbody>
</table>

1) Coverage of Assets Alpha 42

<table>
<thead>
<tr>
<th>Year</th>
<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
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<tbody>
<tr>
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<td>1970</td>
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<td>39.2</td>
<td>33.6</td>
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<td>1971</td>
<td>29.0</td>
<td>39.8</td>
<td>31.9</td>
<td>30.2</td>
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2) Productivity Growth ($)

<table>
<thead>
<tr>
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<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
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<td>1968</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>1969</td>
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<td>1970</td>
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<td>19</td>
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<tr>
<td>1971</td>
<td>37</td>
<td>-20</td>
<td>-8</td>
<td>7</td>
</tr>
</tbody>
</table>

3) Average Personal Income (1000 Din, 1968 prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>21.6</td>
<td>20.4</td>
<td>23.3</td>
<td>21.6</td>
</tr>
<tr>
<td>1969</td>
<td>21.6</td>
<td>20.4</td>
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<td>1970</td>
<td>20.0</td>
<td>22.0</td>
<td>19.4</td>
<td>20.6</td>
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<tr>
<td>1971</td>
<td>26.6</td>
<td>27.5</td>
<td>35.4</td>
<td>37.8</td>
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</table>

4) Growth Rate of Av. pers. Inc (Δ)

<table>
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<th>Gamma</th>
<th>Delta</th>
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<td>2</td>
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<td>-8</td>
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<tr>
<td>1969</td>
<td>-5</td>
<td>14</td>
<td>-7</td>
<td>16</td>
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<td>1970</td>
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<td>1971</td>
<td>35</td>
<td>-22</td>
<td>-10</td>
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5) Profit Rate ($)

<table>
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<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
</thead>
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<td>6.9</td>
<td>12.5</td>
<td>11.6</td>
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<tr>
<td>1969</td>
<td>7.7</td>
<td>7.7</td>
<td>6.4</td>
<td>11.9</td>
</tr>
<tr>
<td>1970</td>
<td>14.6</td>
<td>16.6</td>
<td>11.1</td>
<td>12.5</td>
</tr>
<tr>
<td>1971</td>
<td>24.4</td>
<td>3.0</td>
<td>9.7</td>
<td>4.7</td>
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</table>

6) Gross Surplus Rate ($)

<table>
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<tr>
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<th>Gamma</th>
<th>Delta</th>
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<td>1968</td>
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<tr>
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<td>33</td>
<td>36</td>
</tr>
<tr>
<td>1971</td>
<td>10</td>
<td>17</td>
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7) Voluntary Depreciation Rate ($)

<table>
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</thead>
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<td>1968</td>
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<td>6</td>
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<td>12</td>
</tr>
<tr>
<td>1969</td>
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<td>0</td>
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<td>1970</td>
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<td>55</td>
<td>21</td>
<td>50</td>
</tr>
<tr>
<td>1971</td>
<td>18</td>
<td>13</td>
<td>25</td>
<td>17</td>
</tr>
</tbody>
</table>

8) Tax Rate on Personal Income ($)

<table>
<thead>
<tr>
<th>Year</th>
<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
</thead>
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<tr>
<td>1968</td>
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<td>1969</td>
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<td>7.1</td>
<td>7.5</td>
<td>1.7</td>
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<tr>
<td>1970</td>
<td>12.3</td>
<td>12.0</td>
<td>13.7</td>
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<td>1971</td>
<td>7.9</td>
<td>7.1</td>
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<td>1.7</td>
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9) Tax Rate on Profits ($)

<table>
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<tr>
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<th>Delta</th>
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<td>1968</td>
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<td>34</td>
<td>48</td>
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<tr>
<td>1969</td>
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<td>6</td>
<td>34</td>
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<td>1970</td>
<td>15</td>
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<td>6</td>
<td>34</td>
</tr>
<tr>
<td>1971</td>
<td>60</td>
<td>54</td>
<td>51</td>
<td>25</td>
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</table>

10) Personal Tax Rate ($)

<table>
<thead>
<tr>
<th>Year</th>
<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>36</td>
<td>27</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>1969</td>
<td>27</td>
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<td>23</td>
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<tr>
<td>1970</td>
<td>23</td>
<td>30</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>1971</td>
<td>18</td>
<td>13</td>
<td>25</td>
<td>17</td>
</tr>
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</table>

11) Coverage of Assets Alpha

<table>
<thead>
<tr>
<th>Year</th>
<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>42</td>
<td>42</td>
<td>39</td>
<td>49</td>
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<tr>
<td>1969</td>
<td>37</td>
<td>38</td>
<td>36</td>
<td>34</td>
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</tbody>
</table>

---

1/ For definition of terms compare section Indicators.
2/ Growth rate computed for exponential trends of the absolutes; r in brackets.
3/ Standard deviation in brackets.
We collected also data for the computation of a number of coefficients which express "social performance" as frequently perceived in Yugoslavia (compare table attached). In addition, information on the number and the breakdown (by category) of Self-Management Agreements is shown in the same table. Most of the indicators are self-evident, and only a few comments are appropriate.

Workers' satisfaction would probably be most clearly expressed by number of disciplinary disputes, fluctuation rate and sick leave rate. Unfortunately, with respect to the former, the difficulty to draw a clear line of what is and what is not to be covered, make the collected data useless. As to the other two, enterprise Beta clearly has the poorest record. The similarly poor record of Delta, with its superior performance, is a little surprising. The explanation is presumably, that personal incomes tend to be higher in the city of Ljubljana (where Delta is located) with its ample availability of alternative jobs. Gamma has a markedly lower sick leave rate (although it has by far the least attractive working conditions), probably reflecting an "attendance premium" included in its benefits. The fluctuation rate of Alpha is extremely low (and the average length of employment highest), obviously became Alpha is virtually the only industrial employer within commuting distance. With respect to provision of low-cost housing, neither Alpha nor Beta have much to show, whereas Gamma provides such housing for a fifth of its workforce; another fifth of Gamma's workforce received credit from the enterprise for financing private accommodation. The number of recent credits in comparison to the stock shows for Alpha and Beta that credit arrangements affect a much greater percentage of workers than inexpensive rental units. In either case, the data disprove the popular notion that access to subsidized housing is a standard benefit in Yugoslavia. Similarly, the holiday facilities are by no means as generous as widely believed; assuming that the holiday trips in most instances comprise the whole family, clearly only a very small fraction of the workforce could have benefitted from the facilities. However, it seems that some enterprises offer some holiday supplement to regular pay, and may thus encourage the choice of more popular but more expensive individual arrangements. The differences in average personal incomes do not match those shown in Appendix III (up to 1977); it seems that a great deal of catching-up occurred during the last two years or so, reducing the premium of the highest paying enterprise (Delta) over the lowest paying (Gamma) from 63% to a mere 24% by 1978. In considering the income spreads within enterprises, the ranges in net terms are almost identical to those in gross terms (shown in the table), since only a very few top income earners — if any — are subject to progressive taxes and contributions.
### Social Performance Indicators 1/

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Alpha</th>
<th>Beta</th>
<th>Gamma</th>
<th>Delta</th>
</tr>
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<tbody>
<tr>
<td>1) Participation in Self-Management (% of employees)</td>
<td>67</td>
<td>26</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>2) Fluctuation rate 1978 (% of employees)</td>
<td>4.2</td>
<td>12.6</td>
<td>9.2</td>
<td>12.6</td>
</tr>
<tr>
<td>3) Sick leave rate (% of normal work hours)</td>
<td>8.2</td>
<td>8.9</td>
<td>4.7</td>
<td>7.0</td>
</tr>
<tr>
<td>4) Personal Income (dinar per month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) average</td>
<td>4,880</td>
<td>5,970</td>
<td>5,450</td>
<td>6,075</td>
</tr>
<tr>
<td>b) lowest</td>
<td>3,200</td>
<td>3,000</td>
<td>3,250</td>
<td>2,800</td>
</tr>
<tr>
<td>c) highest</td>
<td>13,500</td>
<td>12,680</td>
<td>15,750</td>
<td>17,370</td>
</tr>
<tr>
<td>5) Apartments owned (% of workers) 2/</td>
<td>2.6</td>
<td>3.4</td>
<td>19.6</td>
<td>14.5</td>
</tr>
<tr>
<td>6) Housing credits extended (% of workers)</td>
<td>2.7</td>
<td>4.6</td>
<td>19.0</td>
<td>3.3</td>
</tr>
<tr>
<td>7) Holiday facilities (beds per 100 workers)</td>
<td>4.4</td>
<td>4.6</td>
<td>4.8</td>
<td>4.2</td>
</tr>
<tr>
<td>8) Average length of employment (years)</td>
<td>14.5</td>
<td>12</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>9) Number of Self-Management Agreements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) within the enterprise</td>
<td>11</td>
<td>3</td>
<td>34</td>
<td>29</td>
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<tr>
<td>b) with suppliers</td>
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<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>c) with customers</td>
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<td>4</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>d) with producers of similar items</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>e) other</td>
<td>0</td>
<td>16</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>f) total (net of multiple Agreements)</td>
<td>22</td>
<td>27</td>
<td>106</td>
<td>79</td>
</tr>
</tbody>
</table>

---

1/ All data for 1978.
2/ Stock figure.
3/ Cumulative.