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THE SOVIET ECONOMIC SYSTEM

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TRANSLATED FROM THE FRENCH
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By

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FOREWARD

The Centre for East European Economics of the Gokhale Institute of Politics and Economics was established by the University Grants Commission under its Area Studies Programme in 1977-1978. As part of its academic commitments, the Centre is required to periodically prepare teaching and research materials in the area of Socialist Economics in general and the study of centrally planned economies in particular. The present work, which originally appeared in French, was translated by Dr. Ramnath Narayanswamy of the Institute for the purpose of introducing it to the students in the M.A. course in Socialist Economics of the Gokhale Institute, but it may be of interest to the general reader as well. The usefulness of the text is heightened by a Glossary of Key Economic Terms and a list of essential readings on the subject compiled by the translator.

Prof. V.S.Chitre
Director

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INTRODUCTION

At a time when capitalist economies, both in the developed countries as well as in the Third World, are going through the most severe crisis since the Great Depression of the thirties, the socialist systems are faced with major economic difficulties. The Soviet Union in particular is experiencing its lowest rates of growth since the establishment of centralised planning. Several indices confirm the existence of an open economic crisis : succession of bad harvests, recession in different industrial branches, intensification of shortages, rationing of food stuffs in the cities, growth of the parallel economy, the list is long, and the country's leaders themselves make no effort to deny the phenomenon of blockage that has accentuated these last years. The traditional difficulties of the system, especially in the field of economic efficiency, have intensified in a visible manner.

Today, the great ideological battles concerning the economic superiority of capitalism or socialism are hardly of current interest, and understandably so. The time is perhaps propitious for a critical reflection on the nature of the great economic and social systems of the present day, their dynamics and their real contradictions.

Capitalism is a familiar reality that many suppose - and wrongly - they know and understand well. In contrast, the Soviet economic system often appears as a strange phenomenon that defies any form of concrete analysis. Would studying it, be something other than a scrutiny of "the anatomy of a spectre" (Alain Besancon)?

Although the tendency to lend the Soviet system a rationality that is in essence superior to capitalism is only found in a minority of irreducibles, current opinion views it as the universal region of economic irrationality. But the reality is different. From apparent disorder emerges a certain order, from visible anarchy is born a stable system which reproduces itself. No doubt there is no invisible (or visible) hand that can regulate or control such a process that is marked by contradictions even more than by harmony. But the system has both a certain rationality and several irrationalities. Let us not forget that this is true of capitalist economies as well. Understanding the original forms of rationality and irrationality by a study of structures, behaviours and their conflicts which result in specific modes of regulation - is the aim of this problematic viewed in terms of economic systems.

The object of this book is to provide a short-and necessarily simplified - account of the present Soviet economic system, and its contradictory logic. */ Two essential dimensions to its understanding have been deliberately presupposed and have therefore not been treated as such : history, on the one hand, and the political system founded on the basis of a single-party on the other. As far as statistics cited are concerned, their usually approximate character must be taken

* For their remarks and criticisms, I wish to thank : Charles Bettelheim, Marcel Drach, Giovanni Graziani, Basile Karlinsky, Sylvie Mouranche, Henri Nadel, Thierry Paquot, Jacques Sapir and Patrick Tissier.

into account and at times - their lack of reliability. Major references are indicated in the bibliography at the end of the work.

GLOSSARY OF KEY TERMS

1. Accumulation - Capital formation, or that part of national income which is produced but not consumed during the period concerned, consisting of productive investments, non-productive investments, stocks of goods and the balance of trade.
2. Autarky - A set of policies designed to promote self-sufficiency by an exclusion from the international division of labour.
3. Bilateral clearing - A system of payment between two countries where settlements are reached not by means of convertible currency but through central institutions (as Banks) obtaining in the two countries.
4. Bilateral trade agreement - An agreement reached between two countries for a stipulated period of time with a view to balance the value of exports and imports between the two countries. These include quotas of goods to be traded and details relating to methods of payment, transport, tariffs, etc.
5. Bonus - The payment of incentives to individuals or groups of workers or managing officials to improve fulfilment of stipulated targets (production), efficiency and productivity. The funds are usually based on enterprise profits.
6. Buyer's market - A situation where aggregate supply of goods and services tends to exceed, or grow faster than, aggregate effective demand at prevailing prices. Characteristic of

western capitalist economies embodying consumer sovereignty.

7. Capital charge - A more or less permanent charge or levy imposed on statised enterprises in the form of an interest rate of 5 to 6% p.a., that is payable to the state budget. It is meant to discourage excessive possession of capital and its under-utilisation.

8. CMEA (or COMECON) - The Council of Mutual Economic Assistance founded in 1949 with its head office in Moscow. Composed of Bulgaria, Czechoslovakia, the GDR, Hungary, Poland, Rumania, Cuba, Vietnam, Mongolia and the USSR. Associate members include Yugoslavia, Finland, Iraq, Mexico and Angola. It is designed to promote economic co-operation and integration among the member countries.

9. Constant capital - Forms a part of the Marxian theory of value ($c+v+s$) and refers to that part of capital in the process of production that assumes the form of materialised labour as raw materials, tools, equipment, buildings, machinery, fuel, power and semi-finished products. It is called constant because its value does not change in the process of production but is 'transferred' to the output.

10. Democratic centralism - A theoretical principle advanced by Lenin to ensure participation and control by the masses in a system of centralised planning and administration. In actual practice, it remains a theoretical construct.

11. Department I and II - The total production of a country divided into means of production (I) and means of consumption (II).

12. Director - The Soviet version of a manager- the chief executive of a statised enterprise.
13. Extensive Growth - Economic growth dependent on increases in the factors of production as capital and the labour force. Strongly marked the economic growth of the socialist countries and continues to remain dominant despite efforts to achieve a transformation to an essentially intensive one.
14. Fetishism of commodities - The process by which relations between men or persons, under conditions of generalised commodity production, assumes the phantasmogoric form of a relation between things.
15. Fetishism of production - Where production degenerates into an end in itself in which it is not the quality of goods produced that counts (or suitability or desirability conceived in social terms) but the exceeding of production targets.
16. Forces of production - Refer mainly to the factors of production - labour, capital, technology, etc.
17. Gosbank - The Russian term for the State Bank of the USSR.
18. Gosplan - The Russian term for the State Planning Commission.
19. Group A and B - The division of industrial output into producer goods (A) and consumer goods (B).
20. Intensive growth - Economic growth dependent on increasing labour productivity through greater specialisation, effective incentives and technological application.
21. Inter-branch balancing - The description of in-out-output analysis in statist economies designed to ensure effective coordination of production and distribution plans at various levels and stages.

22. Khozraschet- The Russian term for "cost-accounting", or what is otherwise known as "economic accountability".
23. Kolkhoz - The Russian term for collective farm where land is collectively owned and cultivated.
24. Means of production - Material factors of production -land and capital but excludes labour.
25. National Income - The total number of goods and services produced annually and expressed at realised prices. Also known as 'net material product'.
26. Norm - A regulation specifying the amount of working time.
27. Optimisation - Attainment of anticipated effects (production, consumption, investment) with the smallest possible efforts from a given outlay of resources.
28. Organic structure of capital - The capital-labour ratio, or the relation between constant capital (c) and variable capital (v) i.e. c/v.
29. Prime cost - The cost of production borne by the enterprise which does not include capital charge but includes wages, interest, materials used and depreciation of fixed capital.
30. Procurement prices - Prices paid by the state to collective farms and private farms for the delivery of farm products to the state.
31. Productive - Contributing directly to material production : capital (working and fixed capital engaged in production); services (transport, trade and paid-for services rendered to enterprises engaged in production); consumption (utilisation of raw materials and intermediate goods in the process of material production).

32. Relations of production - Social and economic relations established by men in the process of production that are according to Marx in turn determined by the prevailing level of development of the productive forces. Reciprocally, they can also determine the development of the productive forces.

33. Rentability - Can also mean 'profitability'. It is the percentage ratio of profit to the prime cost. In practice, the distinction between profitability and 'economic advantage' is indeed slim.

34. Reproduction - The continuous process of production involving production, consumption and investment. 'Extended' reproduction signifies economic growth on a rising scale of production involving positive net investment. 'Simple' reproduction is characteristic of a stationary economy where used-up capital is merely replaced; in socialist economics, its use is heuristic.

35. Seller's market - A condition prevailing in the market where aggregate effective demand tends to exceed supply at existing prices so that producers and sellers are in a dominant position over buyers. Usually associated with socialist economies.

36. Socialisation - Expropriation of privately owned enterprises by the state, as a rule without compensation. It is arguable whether this is what Marx had in mind when he used the term but in Soviet economic theory, it is definitely synonymous with statisation.

37. Socialised sector - The sector owned by the state and dominated by its ownership, usually identified with society.

38. Sovkhoz - The Russian term for state farm owned and operated by the state. Workers in these farms are paid wages and treated in a manner similar to their counterparts in industry.

39. Surplus value - A portion of value created by labour and appropriated by the capitalist. It consists mainly of profit but it might also embody elements of rent and interest. In the Marxian formula, $c+v+s$, it is represented by 's' (c - constant capital, v - variable capital). In Soviet theory it is called 'surplus product' and is partly retained by the state and partly by the enterprise in which it was created.

40. Variable capital - In the Marxian theory of value ($c+v+s$) that part of total capital in the process of production which is spent on wages. In the formula, it is represented by v and it is the only element contributing to the creation of new value, in contrast to constant capital.

41. Vertical planning - A system of command planning in which there is little participation from below. Instead, targets and even their method of implementation are imposed by directives from above, characteristic of socialist economies.

(Compiled by adaptation from the works of several authors, notably, J. Wilczynski, A. Nove, J. Kornai and C. Bettelhem - Translator.)

TRANSLATOR'S NOTE

The term "labour-power" and "labour force" have been translated interchangeably since its use in French, (force de travail) can be taken to mean either. In a similar vein, the

term penurie is used here to denote shortage - a situation where individuals having a legitimate claim over existing resources cannot procure what they want or need even if they have the means - and not scarcity - a situation where supply cannot be substantially altered/improved/increased even if prices rise, or, a situation where demand unlimited by any other factors, exceeds supply. This does not of course, refer to the usage of terms as 'manpower shortage', etc. I also wish to gratefully acknowledge the help rendered by Mrs. Ogale in providing useful points of clarification on several occasions. References to those books available in English have been indicated and when not available have been retained in the original. A Glossary of Key Terms has also been provided.

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I. WAGE LABOUR:

According to official soviet doctrine, wage labour was abolished by the establishment of "socialist ownership". In reality, there rather took place, a generalisation of wage labour following the social transformations consecutive to the "revolution from above" in the beginning of the 1930s. The question therefore lies in an analysis of the specifically original form of the system of wage labour that predominates in the Soviet Union and which constitutes a determining aspect of the totality of its economic and social organisation. This will thus be our point of departure, recognising however that several other features of the labour force will be clarified later when we analyse the fundamental problems of the economic system.

1. The features of the labour market

The USSR today has a population of 270 million inhabitants of whom 64 per cent live in the cities. The global background of shortage in manpower which characterises the country, is aggravated by the decline in population growth. Since the 1960s, the importance of existing reserves in the labour force (rural, female...) had led the leadership to consider manpower as an abundant resource. This period has today come to an end and problems of population will remain sharp until the end of the century. The rate of population growth which attained 1.8 per cent at the end of the 1950s, is presently 0.8 per cent and will probably be 0.6 per cent in twenty years. This general tendency affects the various regions, in a very unequal manner, the Russian Republic (RSFSR) progressively approaching zero

growth, while Central Asia, for example, has an increasing rate of population growth.

The rate of activity - ratio of the working population to the population in the working age (groups) - is exceptionally high : more than 90 per cent. It is unlikely that this will increase in the future. This is testified by the already exceptional participation of women in the labour force (51 per cent of manpower) and by the frequent resorting to retired persons to mitigate the relative lack of labour power.

A large majority of the soviet population is located in the European part of the country : 70 per cent of employment is still concentrated on 20 per cent of the entire territory. Development projects, (several of these are located in the East), make migrations necessary. Nevertheless, despite the advantages offered, recruitment and settlement of manpower in pioneering regions as Siberia are known to be difficult. Geographical mobility of the labour force remains important, but does not necessarily correspond to the objectives of regional development.

The rural population is still on an average of 36 per cent of the total, along with regional inequalities - R.S.F.S.R. 29 per cent and Tadzikistan 66 per cent. Agriculture represents 20 per cent of the active population, as against 39 per cent in industry and 41 per cent in other sectors. In comparison with the western countries, we can note the relative importance of rural employment and the lesser number of persons engaged in commerce or working in services, although the latter sector has

been expanding since the last twenty years. In terms of manpower and investment, the most important industrial branch is that of machine construction and transformation of metals. It represents about 40 per cent of industrial employment, more than 2.5 times of the second branch in the order of importance: light industry. A third of its production is estimated to go into defence. Its growth is the most rapid, followed by chemicals and petrochemicals.

Female participation in economic activity is a specific trait of the system. The effects of the second world war have for long imbalanced the distribution of the population among the sexes by a predominance of women. The part played by female employment is higher compared to other industrialised countries. This phenomenon is also reproduced as a result of the shortage in manpower and due to the necessity of a supplementary wage for many families. On the one hand, we find that the percentage of women, among specialists endowed with secondary or advanced training, exceeds men - although the number of women in management posts remains low. On the other hand, it appears that women are highly concentrated in a majority of less lucrative jobs and in sectors with low wages as health, commerce, teaching, communications, textiles and manufacturing foodstuffs. On an average female wages can be estimated to be around two-thirds of male wages. Finally, the double working day is practically the lot of all working women, the burden of domestic work being shared very little or not at all by men. The negative impact of strong female activity on fertility has

led the authorities these last years to introduce measures to raise the birth rate.

The system of technical education has improved considerably since the last quarter of the century but it today still remains relatively ill-adapted to the needs of the economy. It is common to find gaps between those engaged in jobs and the real qualifications of the worker. The education of qualified workers in technical schools (P.T.U.) is insufficient or inadequate. About three quarters of workers engaged in the major professions acquire their qualifications on the job in a period not exceeding six months, with results that are hardly satisfactory. In various branches, it is frequent to find an excess of unqualified or semi-qualified workers, especially in auxiliary tasks, alongwith a lack of qualified workers and specialists. However, globally, there is an overproduction of engineers and of specialists with university degrees. 20 to 40 per cent of specialists actually work as workers : this "over qualification" reveals a deficiency in efficient co-ordination between the system of training and the structure of available employment.

The proportion of manual and unqualified labour remains high: we can estimate it close to half the industrial manpower in 1980. Mechanisation is slow. The number of persons employed in auxiliary or peripheral tasks is very high and efforts to reduce it until the present have hardly had any effect. Branch-wise, auxiliary workers represent 30 to 50 per cent of the whole and are more than two times the proportion in the USA; their productivity being estimated at 20-25 per cent to American

auxiliary workers - as against 70 to 75 per cent for a normal worker.

The major conditions required to confer a commodity character to labour power are present in the USSR : workers exchange their labour power against a monetary wage, thanks to which they can obtain their means of subsistence and consumer goods, themselves commodities; on the other hand, this labour power is brought into use in the production process, under the direct administrator of the means of production, the director of the enterprise, that is to say, the soviet manager. The buying-selling of labour power and therefore the presence of a genuine labour market are evident, regardless of what is held by the more dogmatic partisans of the "political economy of socialism". We shall be concerned here with the original features of this market. Let us note straightaway that it represents without doubt, one of the areas which escapes most from the influence of planning, as we shall see in the context of the mobility of the labour force, the forms of hiring labour, and wages.

The "right to work" inscribed in the Constitution of 1977 has as a compensation, the obligation to work, Measures against "social parasitism" make not working for more than three consecutive months, an offence: such a system can appear strange at firstsight to an unemployed American or European. The right to work explicitly includes the freedom to choose one's profession. Denied of rights acquired by the western workers' movement - right to strike, right to organise unions that are independent of the political or employer's power, the

right to expression - soviet workers frequently use the right to choose their job and change it. The authorities even think they abuse it. But this is made possible only due to the shortage in manpower, the corollary of which is quasi full-employment and competition among the enterprises to hire workers, which enables the worker to quit his job and find another with relative ease. While the western worker, threatened by unemployment asserts the right to a job, the soviet workers, searched by various potential employers, defends his "right" to mobility. So much so that labor turnover appears as a social barometer, and represents a formal means of pressure towards the employers.

Since the 1930s, the soviet economy has known a high degree of mobility of manpower which earlier resulted from the rural origin of workers and the extremely hard conditions of industrial labour and urban life during the period of the first five year plans. Between 1940 and 1956, repressive laws made quitting work without official permission a criminal act : this was then practically a system of forced labour. But the system fell into abeyance towards the end of the 1940s and was formally abolished in 1956 and since then, the worker is legally allowed to voluntarily quit his job. That year, 38 per cent employed in industry changed jobs or were laid off for contravening regulations. From 1959 to the present, the rate of labour turnover got stabilised around a particularly high number of 20 per cent per year - comparable to the United States.

About 40 per cent of workers who abandon jobs also change their specialisation. The time lost between the two

jobs, is short : about one and a half months, which indicates the relative ease in finding a new job - except in the big cities of Moscow, Leningrad and Kiev where the right to settle is extremely restricted and controlled through a system of registration, (compulsory throughout the country), of every citizen at the militia of the city where he lives. On an average, a worker remains in the same enterprise for about 3.3 years, and for 3.2 years in the same specialisation. Mobility affects especially the young : two thirds of the turnover involve workers of less than thirty years. They not only complain about conditions of work but also about conditions of life as housing, social services (especially in the new industrial zones where rotation is high) and finally, of wages. Branches where mobility is particularly high include services, commerce, urban transport, food industry, construction, (for many of the rural population, construction works represents a transition to industry). In strategic or priority branches employment is more stable than the average.

In the absence of independent unions taking charge of their immediate interests, absenteeism and mobility appear as means the workers use for either exerting pressure or defending themselves. The threat, certainly individual, of quitting his job, often compels the management to think twice since the latter is in general interested in conserving a reserve of manpower as a margin of security. What we witness there is a means of negotiation and informal bargaining for working conditions, and wages, which generally grow faster than those

estimated by the plan. The party leadership has always deplored the excessive rotation of manpower. Stalin advocated a strong wage differentiation to reduce it while Khrushchev was often heard criticising the "migratory birds" of the economy. Yet again in January 1980, a decree sought to urge soviet workers to change their jobs less frequently.

In industry, the state is formally the only employer. Consequently, it seems to benefit from a rigid monopoly for the demand in labour power. Actually, the state sector experiences a veritable competition (which increased with the shortage in manpower) between different enterprises and economic administrations to hire labour. With the exception of those personnel for whom definite jobs are reserved at the end of their education, the large majority of workers and specialists are recruited directly by the enterprises. Despite the increase of Offices of Information and Employment in large cities in the last ten years, the direct hiring of labour, which represented more than 90 per cent of the total during the 1960s, has not significantly declined. Most enterprises or offices have advertisements stuck to their doors announcing various kinds of jobs. Advertisements emphasise not only wages but sometimes also lodging facilities, social services, vacations, etc. This is a supplementary evidence of the fact that labour power is often considered as a rare commodity by the employers.

2. The organisation of labour

The fifty thousand (approximate) industrial enterprises in the USSR are based on a strong division of labour and upon a hierarchical structure that does not have formal counter-powers

or provisions favouring workers. The division here between manual and intellectual labour and between the management and the execution of labour is profound.

At the summit of the power structure in the enterprises lies the director. Nominated by the ministry on which the production unit depends, he is responsible for its management only to this higher authority and not vis-a-vis the workers. Forms of co-management and a fortiori self-management would be contradictory to the rigid tutelage of the state with respect to the enterprise and to centralised planning, as was shown by the Polish unionists of Solidarity in 1981. Factory despotism, and not workers' participation, is by tradition the only form compatible with socialist economic organisation as it is conceived by the soviet leadership. This is expressed in the principle of "one-man management" and the centralisation of power in the hands of the director, called natch or the boss, by the workers. All managers come under the nomenklatura - the list of responsible posts controlled by the communist party.

The director is assisted by a chief engineer, and assistant directors in the fields of finance and economic analysis, personnel, as also in material and technical questions - material supply, sales, transport. The bureaucratisation of management and the weight of administrative tasks linked to planning is expressed by the relatively high number of persons employed in economic administration. A number of engineers and technical personnel can be found occupied in purely administrative affairs.

In the shopfloor, authority over the workers is assumed by the foreman (master) who plays an important role in the organisation of labour. Nominated by the manager, he distributes work and assigns workers to different posts which also has repercussions upon wages. He awards the bonus, educates apprentices and controls discipline. He is the intermediary between the management and its services, and the workers.

Soviet trade unions are characterized by their dependency on political power and the power of the employers. Their function of defending workers' interests is severely restricted - their role in the enterprise is limited to ensuring the implementation of the labour contract and the right of the workers to a proper wage, as also the arbitration of petty labour disputes. But when the protection and defence of workers' interests comes in conflict with the basic objectives assigned to the unions, i.e. productivism, discipline and emulation, the latter logic soon comes to prevail. Organised vertically through branches and horizontally through regions, federated on the national level, the unions include all sections of the working population : thus the director and management personnel are generally members along with the rank-and-file workers. In practice, elections of union representatives are manipulated by the management and the secretary of the local party organisation. The union management of the enterprise is objectively and subjectively alienated from the workers - along with the management and the party committee, it represents one of the poles of the power structure in the enterprise, although its diverse functions are more shrouded in ambiguity. The Polish union,

Solidarity, has contrario but indisputably shown how union officials form a decisive link in the reproduction of a system of domination within a soviet-type society. Since 1978, attempts to create free unions in the USSR remained in the minority and have been thwarted by systematic repression.

While trade unions in the western countries in general assume responsibility in wage negotiations as well as for better conditions of work, soviet trade unions cannot intervene in the determination of the former : the collective contract does not include incomes and, according to soviet workers, neither does it concern the latter which is often neglected. The unions look after Social security and Work inspection at the federal level, which accounts for their state character and their bureaucratic structure. Union subscription is at the same time a subscription to social security, representing 1 per cent. of the monthly income and is deducted at source. At the level of the enterprise, social services are managed by the union committee and these include the canteen, creche, vacation resorts, ... About 99 per cent of soviet workers are unionised.

Wage-labour conditions are not only characterised by "one-man-management" by the director and the absence of independent organisations of workers - they also include striking analogies of organisational forms of production familiar to the western worker, and theorised by Fayol, Taylor or Ford : division of labour, unity of command, a hierarchy of power, labour discipline, parcelling of tasks, group work, productivity norms, foremen, assembly-line production, etc. The organisation of production within the enterprise has remained surprisingly

stable through economic reforms, despite the willingness displayed to increase motivation and participation among the workers. But the analogy has its limits, to the extent where the soviet economy has appeared as structurally unfit for setting into motion an equivalent of what was known as Taylorism or Fordism, as modes and forms of economic regulation in the western countries. We shall return to this very important question which we encounter here in the context of labour organisation.

The major features of the process of industrial production in the USSR consist of a tendency towards irregularity and discontinuity. Its main cause lies in the contradictions of the system of planning and particularly in the perturbatory effects of the centralisation of material supply and the forms of shortage, characteristic of economic regulation. Supplies to enterprises in raw materials, means of production and semi-finished goods, are seldom delivered on time or according to the requisite specifications. These are followed by declines, if not halts in production, which often affect one sector after the other within the enterprise, and one enterprise after the other. A lot of time is lost in the beginning of the planned period (month, quarter, year) since breaks in supplies or stocks are then more frequent. On the other hand, the last ten days of the month, or the end of the year, are marked by *chturmovchtchina*, the "tempest" or "assault", that is to say, an acceleration of the rhythm, increase in overtime, suppression of leave, in order to catch up with the delay and fulfil

the targets outlined by the plan. The time lost in the dis-organisation of work is estimated to be 15 to 20 per cent of the total, sometimes more. It is precisely in anticipation of these periods that the directors try to build a reserve supply of extra manpower, resulting in overemployment within the production unit. This busy period is marked by an increase in nervous tension, sicknesses, absenteeism, alcoholism, as also by a weakening of quality control over products and an increase in the neglect of the means of production, wastage and scrap. When the date of production is indicated, the consumer is in general mistrustful of commodities produced at the end of the planned period.

The irregular character of work and production has led to a demoralisation among the workers, and along with the absence of any control or participation in the process of management, has given rise to a sense of frustration in the execution of work, which in its turn, affects not only the attitudes of workers but also their productivity. Slack periods are frequently spent in the pursuit of extra-professional occupations or in activities connected to the "second economy". The causes of alternation in a first week and then strong intensity of labour time appears as something exterior to the enterprise - emulation here increasingly loses its stimulating potential. With respect to the discipline engendered by Taylorism, it finds its substitutes in propoganda, socialist competition (or emulation), the control exercised by social organisations (Komsomol, Unions) and the Party, if not repression. The resistance to the prevailing organisation of work also assumes original forms.

Considered with respect to the organisation of production, Taylorism or Fordism presuppose the existence of several factors which are seldom to be seen in the soviet economy, especially in the regularity of supplies, rational use of stocks, systematic division and synchronisation of tasks. The industrial time in western factories is relatively homogenous and continuous. It contributes to the rationalisation of producing several alienating effects. The time in the soviet enterprise in contrast is rather heterogenous and discontinuous, giving rise to particularly alienating effects in the labour process as well as creating a potential for resistance from the workers. It nevertheless constitutes a serious obstacle to the establishment of more rational and more stable production norms.

The recent period has witnessed the emergence of contract brigades, a system invented by the foreman ~~g~~lobin in 1970 in a construction enterprise. This involves semi-autonomous groups constituted around definite objectives of production which give way to a contract effected with the enterprise, autonomously organising and planning work, and in which remuneration is linked to results. With forty to eighty persons, a brigade is led by a council formed by the head of the brigade, party functionnaires from the party and the union, and some workers, usually about ten persons according to the importance of the group. The council allots tasks and distributes bonuses, thus controlling the distribution of income, linked to the fulfillment of the contract. The Eleventh Plan (1981-1985) anticipated a generalisation of brigades but one cannot help being sceptical of the possibilities of resolving the contradictions of labour organisation through this method.

under the cover of /self-management the objective remains productivist, and it appears that the workers sometimes resist this system that they see as a means of coercion or collective self-discipline, which can improve neither the content nor the control of work. In particular, the brigade system cannot in fact be generalised, so long as the global structure of industrial organization, modalities of planning and problems of regulation, remain unchanged. The instability of the conditions of production cannot be done away with, without profound institutional reforms which transcend or go beyond the enterprise. Either the real brigades remain, for industry considered as a whole, relatively few, or they will have to confront difficulties similar to those obtaining in enterprises, in relation to those resulting from the uncertainty to their environment, and they will continue to reproduce the protective and adaptive behaviour of the managers, along with the traditional disturbances they result in.

3. Wages and conflicts of distribution

Piece wages are the dominant mode of remuneration. Denounced as a form of exploitation in the West, it is allegedly transformed into a mode of "distribution according to work" in a socialist economy. The testimony given by the Hungarian, Haraszti, (salaire aux pieces), effectively disposes this sophism and shows how this system oppresses and atomises the workers. In the Soviet Union, three quarters of the workers in industry had piece wages in 1956. Even now, more than a half of the labour force in industry receive piece wages,

calculated on the basis of different formulas. We must, however, underline that the difference between piece and time wages is less important than what one might suppose. On the one hand, there is often a consensus in the enterprise that piece wage earners receive a stable pay each month. On the other hand, time wages are also calculated according to average productivity. In 80 per cent of cases, these norms are formulated in an empirical manner, from statistical approximations, and are based upon the experience of the enterprise rather than upon rigorous calculations. Modification of norms (number of units produced or the volume of work that a worker must show in one hour or one day) is an issue of conflict - or compromise - between the workers and the management. We have here an essential element of the "class struggle in production" in the Soviet Union. To the extent where he is constrained by the "tension" of the plan to increase the intensity of work, the manager pushes for an increase in norms, which is resisted by the workers either directly or by a decrease in the rhythm of work or by still other diverse practices of wastage. What is known as "socialist emulation", one of the tasks assigned to the trade union apparatus, is especially related to an increase of norms, and hence of worker's surplus-labour. It goes back to the famous Stakhanovist movement in the 1930s.

Effective real wages today consist of approximately 65 per cent for the basic wage, 20 per cent of additional wages for exceeding norms, and 10 to 15 per cent for individual or collective bonus. But supplementary wages and bonuses - financed in large measure from the planned wage fund! - are in general

automatic and are considered as guaranteed, being an integral part of the normal wage. As a result of the above, the incentive function which is attributed to them in principle, is inhibited.

The salary range which was considerably wide during the Stalinist period, was narrowed after 1956. From this time, a minimum wage was also instituted (which progressively increased from 30 roubles per month in 1956 to 70 roubles per month since 1975 - the Eleventh Plan anticipates attaining 80 roubles) and was extended to agriculture in 1980. The relative equalisation of distribution was realised at the same time by an important increase of very low incomes and a freezing of high incomes. In the process of reducing the gaps in income, these belonging to the categories of workers were those who relatively gained the most, especially those who were lesser paid, while employees in general suffered relative losses. Their pay is often inferior to the former.

Income data are limited and often concealed by official statistics, which makes a proper estimation difficult. We can nevertheless accept that the legal income range within the state sector has narrowed by more than half between the 1950's and the 1970's.

The average wage of workers and employees, was 177 roubles per month in 1982. Its annual growth on an average is currently about 2 or 3 per cent - a rate which has been declining with each quinquenium. Although wage disparities between branches have been reduced these last years, they have not been eliminated and remain strongly marked by the traditional

priority to the productive sector over the non-productive sector, to equipment industries over consumer industries, etc. The highest average wages are to be found in transport, construction and industry, and the lowest in medical establishments, social security and artistic organisations. In industry, workers in metallurgy, coal-mining and energy are relatively better paid as well as those in mechanical construction and chemicals. There are geographical differences too. Wages in the great North, Siberia and the Far East are increased by 15 to 100 per cent according to regions, to which are added various other advantages : installation bonus, retirement benefits, etc. Global distribution of income is further modified by the parallel economy, to an extent which is difficult to evaluate but ^{is} by no means negligible - we shall return to this subject.

The highest salaries (highly placed government or political officials, academicians, ...) are between 750-800 roubles, which provides a global variation of about 1 to 11 over the minimum wage. However, the real difference is very much more : it is necessary to include bonuses, allowances and "envelopes", more or less hidden and especially the several advantages in kind (which are strongly hierarchical) attached to the nomenklatura, such as official cars, better housing, dachas or country homes, "reserved" stores and service enterprises, etc. (see, M. Voslensky).

Social funds of consumption, which correspond to transfer payments - pensions, social security, family allowances, scholarships - and to social advantages - free education and medicine, subsidised rents, reduced rates of transport - represent

the equipment of more than one-third of both the average wage, and household consumption. This "social wage" that is above all managed by the union bureaucracy, is advanced to about three quarters by the state, 20 per cent by the enterprises and the remaining 5 per cent by the kolkhoz. Since 1960, it has grown faster than the monetary wage. This phenomenon was accompanied by an increase in employment in sectors producing goods and services concerning the social wage. We must, however, underline the qualitative deteriorations observable in this domain during the preceding years. Thus, health services have appreciably deteriorated, which no doubt explains in some measure (with the increase in alcoholism) the recent growth of general mortality, as well as the rapid increase in the rate of infant mortality during the 1970s - a unique phenomenon in the history of a developed country.

Distribution of social funds of consumption appears to perpetuate imbalances and differences in the standard of living instead of reducing them. Thus, the social wage managed by the enterprises rewards the most productive, the pension system is directly linked to earlier wages, and most collective benefits are distributed independent of the level of income. This reproduction of inequalities through the indirect wage contrasts with the more egalitarian tendency which marked the evolution of the monetary wages structure since the 1950s. We must add that the income tax does not have a redistributing effect. Recovered at source once a month (in the state sector) it only increases between 70-100 roubles of the monthly

Table I : Wages in Leningrad in 1978

	Per month Roubles
Worker in chemicals (woman)	185
Docker	200 to 250
Turner	140
Unskilled worker	100
Industrial designer	120 to 150
Engineer working on electronic machines	130 to 145
Store salesman	75 to 90
Store cashier	70 to 85
Postal employee	100
Accountant	110
Typist (female)	105
Doctor	150
Cleaning woman	75

Source: Panorama de l'URSS.

Table II : Wages in Mechanical Industry in 1975

Director	150 to 330 according to the enterprise
Engineer	95 to 165
Technician	70 to 115
Foreman	135 to 155

Source: A. Kahan, B. Ruble, Industrial Labour in USSR

income and is henceforth limited to a rate of 13 per cent, patently favouring high incomes.

Apparently, the "Centre" and planners should be capable of efficiently controlling the evolution of wages. The reality is however different. Formally, the total amount of the global wage fund is established by Gosplan and subdivided between branch ministries. The state Bank controls and makes the payments to enterprises for wages. In addition, wage scales according to qualifications are fixed at the national level. The principle which theoretically governs official policy is that the growth of the average wage must not exceed the growth of labour productivity. Nevertheless, the system is characterised by a constant tendency towards an increase of wages for which are responsible not only the wage-earners, but also managers of the lower and medium echelons of the economic hierarchy. This tendency is - to a certain extent - limited by the macro-economic fixation of the wage fund and the arbitration of the political leadership between accumulation and consumption, but its effects are far from negligible. In the first place, workers, through their own mobility, partly motivated by the search for better wages, exercise pressure upon the managers : the enterprise giving a better pay is in a better position on a labour market characterised by shortage. Mobility is moreover a major cause of spontaneous distortions within the planned social wage fund, since a change in jobs implies different remuneration. To this can be added the constant pressure from below for an increase in wages, something inherent to the social contradictions of

wage labour, but which here give rise to original effects. In effect, this pressure, instead of being directly confronted with the resistance of the managers, is on the contrary transmitted by the latter to the higher levels of the economic administration. We can thus observe here an element of de facto complicity between the managers and the workers vis-a-vis the higher authority. For the director, the wages paid are a cost, but as opposed to his western counterpart, costs are far from being a major preoccupation for him. He desires an increased wage fund, which will permit him to hire more labour or to increase the wages of existing personnel, or do both, since by doing so he is put in a better position to realise the plan. During the different bargaining processes with his ministry, which constitute the elaboration of the plan, the director thus presses for an increase in his wage fund, or utilises short-term credits which the Bank often makes available to him, with the approval of the ministry. The latter in its turn exercises pressure over the centre for a bigger wage fund for the branch.

In addition, for a planned wage fund of a given level, the director retains a noticeable margin of action. In particular, he can manipulate real wages by fixing production norms, by increasing bonuses, financing these latter through various accounting procedures and especially by attributing higher qualifications than the real ones. Consider for example this caption of a satirical comic and Krokodil : "She is an excellent secretary, I have therefore categorised her as a fifth grade turner."

Finally, there is a systematic gap in the field of wages between planned figures and effective results. The actual development of the average wage in general exceeds the increase anticipated by the plan. In particular, we can note that the principle basic to the estimates of Gosplan, according to which wages should not grow faster than productivity, (whose statistical calculations are approximate and are marked by various distortions), is not respected in practice. Thus, during the four five year plans that have elapsed since 1960, the nominal average wage grew faster than the national income produced per worker.

A ministry is above all preoccupied with the realisation of the production plans of the enterprises it controls - it is less concerned with the surpassing of wage plans by the directors, which are a means of attaining more easily the former. The central planners for their part, are caught in a dilemma: either restrict wage increases to remove further imbalances in the consumer goods market by permitting a growth in demand, or display a certain measure of tolerance to enable enterprises to stimulate better the workers to attain production targets.

In any case, the entire process is clearly not controlled by the centre. When shortages in consumer goods intensify in a pronounced manner, it is common to hear of appeals to "restore discipline in wages" and for restrictions to be effected in short-term credits to enterprises.

The wage system consequently experiences different phenomena which ^{escape} in varying degrees the control from the

Centre : supply and demand of labour power, structure of employment and adequacy of qualifications, and the evolution of wages. Between the employers and employees, and between the directors, the ministries and the "centre", several conflicting or converging relations establish themselves, whose complex interaction influences the modalities of global economic regulation in a decisive manner.

4. Evolution of consumption

The Brezhnev period represented a relative improvement in the standard of living of the soviet people, more or less until the 1970s, after which internal economic difficulties and the growing weight of military expenditure began to restrain the growth of consumption. But the situation of the average consumer remained paradoxical : if his equipment in durable consumer goods is today fairly high, his basic needs, (food, clothing, housing..) are far from satisfied and represent a permanent source of concern for him.

The development of consumption these last fifteen years recalls the situation in the western countries after the second world war : a reduction in food expenditure and an increase in the consumption of industrial products. In 1979, a working class family spent about 32 per cent of its income on food (as against 38 per cent in 1965), 16 per cent on clothing, 7 per cent on durable goods, 24 per cent in services of which 14 per cent went in health and education, and less than 3 per cent on housing. Consumption in articles of clothing, durable goods and semi-durables has grown noticeably in the 1970s - the rate of possession of equipment in household

electrical items as refrigerators, washing machines and televisions is approaching the level of a country as France. However, the increase in quantities consumed has not been followed by a better quality of products, and in certain committees and models, there is a co-existence of shortage and unsold stocks refused by consumers.

On the other hand, a comparison with the increase in mass consumption which accompanied western Fordism brings out the weaknesses of the driving forces behind economic growth, which in the latter case, has been automobiles and housing. Despite obvious progresses in construction, 20 per cent of the urban population still live in communal apartments and the area as well as the quality of lodging are notoriously inadequate - about 12m² useful surface area per inhabitant. The highly subsidised rents, it is true, are particularly low. Automobiles, whose production clearly increased during the 1970s and decelerated since, remains a rare and prohibitively expensive commodity (about 30 to 90 times the average monthly wage) accessible after being on the waiting list for at least two years. The purchase is made even more difficult by the absence of a well-developed system of credit in consumption - whose role in the western economies is well known. The number of private cars is about 25 for every 1000 inhabitants, less than one-tenth of what prevails in France.

The consumer does not have an easy life. A number of products essential for daily living are difficult to obtain both in quantity and quality. The average soviet citizen uses a lot

of his time and energy in a hostile world dominated by tendencies towards shortage, queues, disorganisation and inefficient distribution. About three quarters of leisure time is spent in running round stores. The customer is clearly not the king here, but is rather in search of a seller stocked with supplies and goodwill - he is put in an aggressive and demoralising competition with his fellow-partners. The "second economy" whose importance is decisive in the daily life of citizens, eases all this, at the expense of more time, resourcefulness and often of "each one for himself".

The food situation, dependent on agricultural fluctuations, has entered into an open crisis since 1980. A special "food programme" has been declared top priority upto 1990, and Brezhnev declared at the Twenty-Sixth Congress (1981) that it constituted the core of the plan. Some days after his death, his successor, Andropov, reaffirmed its central importance and the priority for the agro-food sector. These last years have witnessed a growth in shortages and the re-introduction of rationing, even in priority cities. There is in effect a hierarchy of cities for food supplies, with Moscow at the top, followed by Leningrad and other "heroic cities" of the war, and finally the capitals of the Republics. Not only the events in Poland but also their own experiences, have led the soviet leadership to be particularly sensitive to the development of consumption, or rather to the intensity of popular feeling in this domain. But compromises with the consumer are made more difficult due to the growing weight of military expenditure in a context of crisis. Despite everything, the retail prices of

essential necessities which are highly subsidised (bread and bread-making, edible pastes, oil, fish, meat, sugar ...) are maintained. Echoes of incidents linked to difficulties in obtaining foodstuffs, although they remained isolated, have increased these last years. The scenario is often the same : workers go on strike or the population demonstrates in the streets to protest against rising shortages, and the authorities react promptly by massive deliveries of missing goods, thereby restoring calm. The big revolt of Novotcherkask in 1962, recounted notably by Solzhenitsyn, had its origins in the reduction of piece wages (i.e., an increase in norms) in the locomotive factory of the city and an announcement doubling the prices of meat and milk products. More than sixty deaths resulted following the repression let loose by the army. The strikes or demonstrations that have taken place at that time in different cities were neither organised nor co-ordinated. The soviet leadership wishes to avoid such acts of open defiance, especially their aggravation "to the Polish example", but they are condemned to react every time they reappear as long as the deeper causes of these difficulties are not overcome.

One of those rare products which is never in short supply is vodka, which is a basic feature of the soviet way of life. Although statistics in this field are generally secret, the country probably has the highest consumption of hard liquor per person (more precisely, in the Slavic population unlike the Muslim republics), if we take into account "official" vodka and the growing quantities of samogon, the vodka distilled clandestinely. Occasionally, the state

Table III : Retail Prices in Moscow in March 1979

(The average wage was about 165 roubles at that time)

Foods (per kg.)	Rouble
Potatoes	0.10
Onions	0.12
Apples	0.60
Beef	2.00
Pork	1.90
Sausages (Pork)	2.20
Butter	3.60
Wheat flour	0.42
Sugar	0.90
Milk (one litre)	0.28
Vodka (0.5 litres)	5.77
<u>Various consumer goods</u>	
Shirt (for men)	9.60
Stockings (one pair)	1.70
Shoes (for men)	30.00
Suit (for men)	61.80
Car (average size)	9448.00
Car (small)	5635.00
Petrol (10 litres of super)	2.00
Bus, metro	0.05
	(5 kopecks)
Refrigerator	295.00
Washing machine (cheap)	360.00
Black and white T.V.	230.00
Rent (for 50m ²)	11.39
Cigarettes (ordinary, 20)	0.35

Source : K.Bush, Retail Prices in Moscow and Four Western Cities in March 1979, in L. Schapiro and J. Godson (Ed.), The Soviet Worker.

increases the price of the bottle - but sees to vodka being always available. The struggle against the consequences of alcoholism, a mass phenomenon, therefore, assumes a paradoxical character. Its effects are considerable, both socially (health, mortality, work accidents, divorce) and economically. An

editorial in Pravda deplored the fact that "the factories in the USSR woke up only on Tuesday and not on Mondays as in the case the world over". The buying of alcoholic drinks represents an average of about 10 per cent of the family budget, while taxes for alcohol, constitute 12 per cent of the budgetary receipts of the state. Vodka is no doubt the "commodity number one" of the USSR.

5. Shortage of manpower and over-employment

The system of employment in the Soviet Union has a completely paradoxical character - there is a lack and at the same time an excess of manpower. Shortage in the labour market considered globally co-exists with a chronic excess of manpower in production units.

Since the "great leap" of the thirties, there dominates an economic model of extensive development, based principally on a quantitative increase of capital and employed labour. From the first five year plan, open unemployment has practically disappeared, rapid industrial expansion absorbing as in a pump, enormous quantities of manpower. Until the 1960s, reserves in the existing labour force (rural, female, youth, retired persons), permitted the pursuit of this extensive growth of employment. Since then, as we have already noted, these reserves have been exhausted. Rural exodus has declined, the rate of female activity is already very high and the decline in population growth has relatively reduced the share of the new labour force. We may recall that in 1980, about 30 per cent of retired persons continued to be engaged in some

professional activity or the other, representing more than 5 per cent of the working population. With respect to the recourse to immigrant workers, although on the increase, it remains low (some 50,000 persons from Eastern Europe and a certain number of Vietnamese), and is hardly capable of increasing any further, as most of the countries they come from, themselves suffer from a lack of manpower.

Given the reproduction of several kinds of behaviour and mechanisms of extensive development, even when the sources of such a development have been depleted, the soviet economy has entered, as the other East European countries with the exception of Yugoslavia, into a period characterised by a relative shortage of labour. One of the causes for the semi-obsessional insistence on the necessity for a transition to an intensive form of development, based on a more rational utilisation of men and machines by emphasising the more qualitative aspects of growth, is to be found here. An official declaration indicated that in 1980, about two million jobs were kept vacant, for want of applicants.

Table IV: Food Prices in State Stores and in the Kolkhoz Market, in Leningrad in November 1977

For one kg.	State stores	Kolkhoz Market
Potatoes	0.10	0.25 - 0.30
Onions	0.50	2.50
Apples	0.80-1.20	1.00 - 1.20
Beef (with bones)	2.00	5.00
Pork (with bones)	1.90	3.50 - 5.00

Source : Panorama of the USSR

The medal however has a reverse side : the obvious excess in the number of workers in enterprises and over-employment within economic units. On the one hand, economic redundancies are practically non-existent. Experiences in this direction, such as the famous case of Shchekino, despite calls from a section of the leadership, remain isolated instances. More importantly, the existence of a job guarantee for the large majority of workers, linked to the global shortage of labour, is a central feature of the compromise prevailing between the regime and the soviet people : as it appeared in the context of attempts at economic reform, both protagonists are clearly aware of the implications. Contrary to western economies, the level of employment does not therefore play the role of a major regulating variable. It must be emphasised that "full employment" does not result from a policy but from the system and the mode of regulation which implies, a certain shortage of labour. What the occasionally contemplated reforms tried to avoid was the radical questioning of such a phenomenon. The difficulty comes in recognising that those aspects that are considered positive - full employment - are in reality inseparable from its negative aspects - the relative lack of manpower ...

However, over-employment in the enterprises is above all explained by the practices of the managers. First, the volume of the employed labour force influences the basic wages of the director, his assistants and the workers - but this is not the major factor. - As indicated above, the director has a tendency to hoard stocks of manpower in

anticipation of period of such, when it will be necessary to compensate for accumulated delays. A section of workers are then assigned to the auxiliary personnel, or they remain partially unoccupied in varying degrees according to periods. A comparison between soviet and Western enterprises shows higher manpower in the former; for example; 30 to 50 per cent more in mechanical construction. An individual has a job that is - often badly - remunerated. But he can also find himself concretely under-employed- a sort of unemployment on the job. This is "disguised unemployment". The analogy appears with the unemployed in the West who are without work but eventually paid through an allocation by the state. However, the two forms of under-employment are clearly very different and are based on two opposed modes of economic regulation.

A general shortage in labour and a local excess in manpower are thus simultaneously present. More importantly, they reciprocally reinforce one another, creating one of the many vicious circles characteristic of the soviet economy. The tendency of the directors to hoard reserves of manpower increases the shortage in the labour market, and the growing intensity of shortage reinforces in its turn this very same tendency.

The excess of labour demand over supply (causing a situation of semi-full employment), enables the workers to be conscious of the relative ease in changing enterprises, and results in a strong mobility of labour - the labour market resembles a "seller's market". Let us recall that we distinguish two cases of market asymetry, according to that of

the sellers (on the supply side) or the buyers (on the demand side), benefiting from a favourable balance of forces. In a western capitalist economy, the labour market is in general a buyer's market, since there exists an important potential reserve of labour and chronic under-employment and consequently, a competition among the workers, the suppliers of labour. The employers are in a relative position of strength while those seeking employment are in a relative position of weakness. In the Soviet Union on the contrary, competition is strong between the buyers and weak among the sellers (who are nevertheless atomised) since the pressure of unemployment is absent.

Deprived of the means of a collective or organised defence of his interests, the soviet worker can however effect a certain pressure vis-a-vis his present or future employer, since his labour power is a relatively sought after commodity. His behaviour and his resistance to a system which remains profoundly foreign to him, is linked to the social and economic conditions in which he is placed, whether this involves the organisation of work, wages, or consumption. One of the main reasons for the low work discipline which often plagues the leadership, and the chronic insufficiency of productivity, is to be sought here.

II. ORGANISATION AND PLANNING OF INDUSTRY:

1. Three hiererchical levels

The Soviet industrial structure is fairly complicated. If a simple scheme is to be provided, it includes the following three levels: 1) the "Centre", 2) the ministries, and 3) the enterprises.

The Centre represents the summit of the hierarchy where major macro-economic decisions are taken. Fundamentally this is related to the direction of the Communist party, that is to say, the dominant political apparatus. The summits of the state apparatus, the government in other words, the Council of Ministers, are also a constituent element of the Centre. We can finally include Gosplan, the central body of planning, which depends on the Council of Ministers, but does not have direct hierarchical power over the lower levels.

The second level, the ministerial system, is actually decisive in many respects. The ministries are constituted on the basis of a sectoral principle by economic branches : there are more than fifty of them. All enterprises producing given types of products theoretically come under the authority of the branch ministry. The latter formulates the operational plans of the enterprises, nominates the directors and controls the results of their management. Just as the director is both the boss of the enterprise, its chief, and in certain respects the representative of some of its collective interests vis-a-vis the ministry, the super-chief of the branch, the hierarchical authority to which enterprises are subject, and also the head of the sectoral lobby in the competition for central allocations and conflicts with other ministries or state bodies. In the structure of the three levels, the ministerial system is traditionally a place of concentration of economic power, not only vis-a-vis the enterprises, but also in relation to the Centre.

With respect to the last level, that of enterprises, it is as we know personified by the director, placed on the one hand, under the control of the Ministry and, invested, on the other with "one-man management" of the unit he has been charged with.

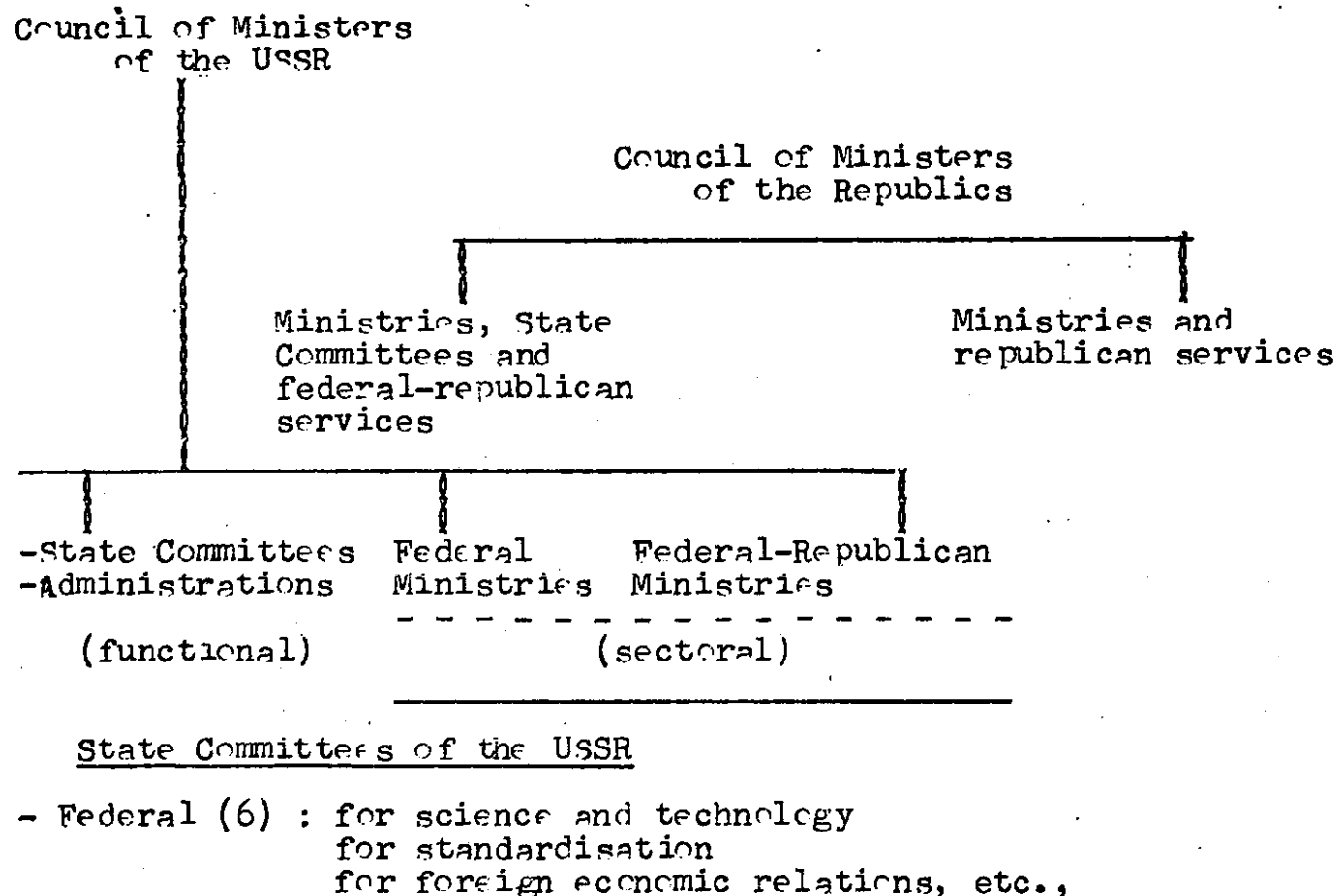
Retaining the scheme of three levels, let us proceed to examine the complexity of the structure in greater detail in order to arrive at a better understanding of its functioning.

At the level between the first and the intermediate second, are several State Committees having inter-branch responsibilities. Their principle of functioning is therefore not sectoral but functional. They include Gosplan, (classified above under the first level), Gosstroj, the Committee for construction, the Committee for labour and social questions, the Committee for prices, etc.. We can incorporate Gosbank (the State Bank of the USSR) to this structure. The operational functions of these various administrations leads to their classification in the ministerial level rather than the central (with the exception of Gosplan) but their interests and their logic are often different from those of ministries. Their leaders are members of the federal Council of Ministers.

Similar to functional state committees, sectoral ministries are organised according to various degrees of territorial centralisation. An economic administration can have a federal character (pan-Soviet), federal-republican or republican, according to its jurisdiction extending all over

the USSR directly, or through the intermediary of ministries constituted by republics - the latter have their own Council of Ministers - or still others that can be controlled only at the republican level. Situations vary according to administrations and according to republics, and reorganisations are frequent. Gosplan, Gossnab and Gosstroj are thus federal-republican. Ministries of mechanical construction, chemical industries or automobiles for example, are federal : they directly control all enterprises of their branch located upon Soviet territory; on the other hand, Ministries of Metallurgy, Coal or Foodstuffs, are federal - republican.

THE ECONOMIC ADMINISTRATION



- Federal - Republican (12) : : For Planning (Gosplan)
for construction (Gosstroj)
for material and technical
supplies (Gossnab)
for prices
etc.

Administrations

- State Bank
- Central Statistical Board

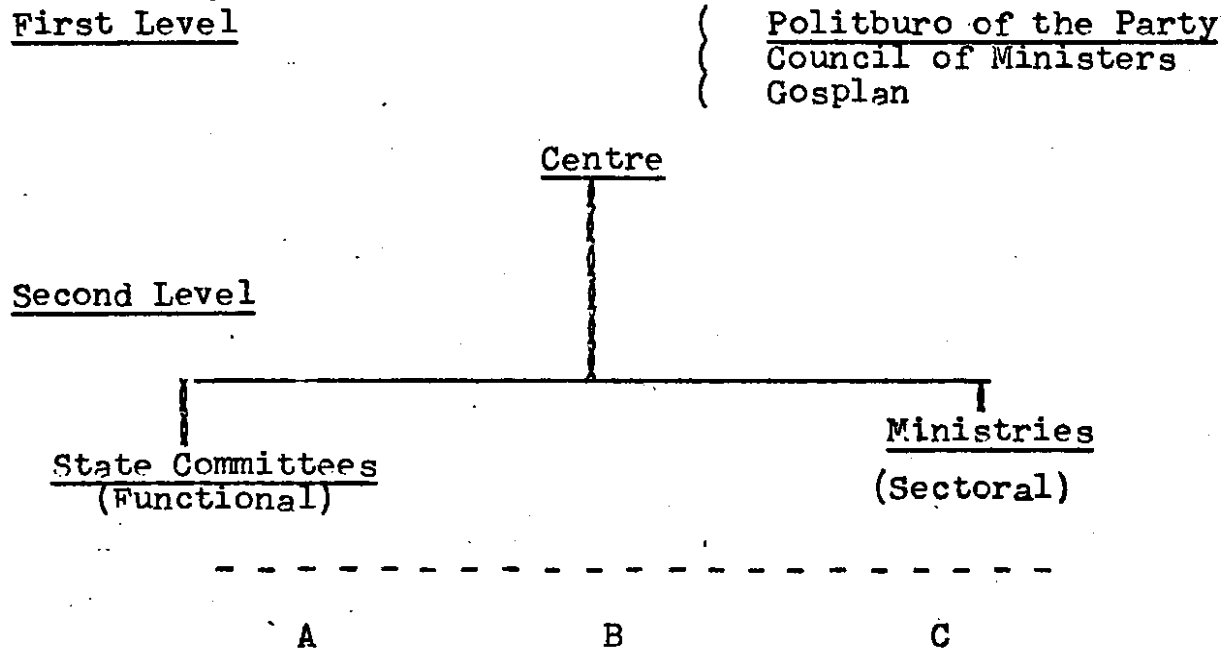
Ministries

- Federal (33) : Foreign Trade Mechanical Constructions
Defence Chemical Industry
Electronics Industry etc.
- Federal-Republican (31) : Food Industry
Agriculture
Energy and Electrification
Finance
Trade
Construction
Siderurgy
etc.

Sources : M. Lavigne, Les economies socialistes
M. Lesage, L'administration sovietique

Finally, between the second and third level are associations or unions. Production unions are big enterprises often formed through a concentration of smaller units. At a higher level, industrial unions federate production units, research organisations and departments - they normally replace the former directorates (Glavki) of ministries. They actually remain an administrative subdivision of the latter. There is no unified structure of organisation by associations. The situation varies according to the branches, the different degrees of centralisation - federal, federal-republican, republican - complicating the situation even further.

A simplified chart of the three levels is provided in the following table which omits the complication introduced by the federal-republican system.



Third Level

Production unions
and enterprises

Among the causes of the difficulties of managing and planning the Soviet economy is the important gap that exists in reality, between administrative branches of sectoral ministries and effective economic branches. It is a problem of the despecialisation of ministries and enterprises. It is common for a ministry to control only a certain production of the production of commodities theoretically constituting its branch - conversely, it also manufactures in its enterprises, products which belong to other branches and thus, other

ministries in principle. Despecialisation consists in producing in a Ministry, backward equipments, spare parts, raw materials, necessary for its own production although these supplies belong theoretically to the jurisdiction of other ministries. This represents obviously a protective behaviour vis-a-vis the uncertain character of centralised allocations. Thus, one half of construction materials and one-fifth of mechanical construction are produced in enterprises dependent on different ministries than those who are specialised in these fields. The manufacture of machine-tools for example, is not limited to the concerned ministry alone, but is equally dispersed between twenty other ministries. In addition, we can observe a growing forward despecialisation, especially in consumer goods. A considerable dispersion appears equally in this field. Household durables for example, (televisions, refrigerators, etc.) are produced only upto one-fourth in the competent ministry while three-fourths are produced in fourteen ministries of heavy industry. In 1977, the latter provided about 30 per cent of consumer goods. This despecialisation eases to some extent, the tensions in the field of consumption - it nevertheless responds to a decentralised logic of accumulation which is contradictory to the existing system. Despecialised production, forward and backward, partly escaping the control of the centre and of specialised ministries, sometimes lead to irrational though necessary duplications, and in certain cases, to substitutions or embezzlement of resources or equipments. It illustrates the tendency of the Ministerial system towards relative autonomization, towards particularism and sectoral autarky and to the

establishment of "independent kingdoms". Despecialisation logically derives from original forms of competition, monopolistic or corporative, and from the productive behaviour of the middle and lower levels of the hierarchy, in the face of contradictions springing forth from centralisation. It eases or bypasses at the same time these contradictions by introducing a greater flexibility in economic relations. However, in differentiating the real structure from the administrative organisation based upon a sectoral logic, despecialisation reduces at the same time the control of the centre and in many fields, virtually limits efficiency of central planning.

2. Uncertain Material Supplies

In all complex and developed industrial economies, characterised by a high degree of socialisation of production, the majority of products are intended for manufacturing other products. For example, in the Soviet Union, some three quarters of the total production consists in producing means of production. In a commodity-capitalist economy of the western type, production and exchange are effected through commodity relations directly established between different production units, that is to say, in a decentralised manner. In the Soviet system, on the contrary, relations of production and exchange between enterprises are not directly established horizontally, but pass through the intermediary of vertical centralisation. This is related to a system of material supply which plans and controls the circulation of commodities. This is fundamental element of the originality of the Soviet economy.

The enterprise does not only receive orders about what it should produce and how much. It also receives precise instructions on the destination of the commodities it produces: their buyers and users are intimated by the planning bodies. Also, its own supplies in raw materials, semi-finished products and equipments, the inputs of its production are likewise planned with respect to their origin, quantities and specifications, as well as the date of delivery. Thus, a large part of inter-enterprise exchanges are controlled and organised by the administrative apparatus situated, above and outside the respective units.

The system of material supplies thus appears to be an organised rationing of the means of production. Along with the centralised character of planning production, it consequently leads to a predominance of vertical links in the economy in relation to horizontal links, or more precisely to a preponderant character of vertical mediations in the relations between basic units. Now this system constitutes a weak link of economic organisation and is at the root of various and repeated forms of dysfunctioning.

It is first of all necessary to emphasize the enormity, complexity, and the fundamental impossibility of tasks which consist in searching for means to coherently organise and control all the innumerable exchanges which continually take place between enterprises, branches and sectors of production and in which regularity and proportionality condition, in principle, the smooth functioning of the economy.

Such work in itself already implies a considerable bureaucracy at different levels of organisation. In addition, it is often found that state apparatuses in-charge of material supply are not wholly unified, giving rise to problems of consistency and coordination. Gossnab incontestably plays an important role in the field of material supply : it manages more than 13,000 kinds of intermediary goods. But many ministries retain their own system and network of material supply expressing again here strong "departmentalist" tendencies.

The interdependence between production and material supplies is obvious. The output of one enterprise forms the input of one or several others. We can thus characterise Sector A of industry, which produces the means of production, as a huge network of enterprises interconnected by planned buying-selling links where each unit receives its material supplies from other units and transforms the latter, through the process of production, into products that are distributed to other enterprises, in which these form its supplies, and so on. If some part of anticipated production is disturbed, planned supplies of other enterprises become a problem. Now all production implies a combination of several material and labour factors in determined proportions. If sheet metal, produced by an enterprise depending on the ministry responsible for the transformation of metals to be eventually used in a factory producing cars, is not delivered on time in either the requisite quantity or quality or according to the necessary specifications, planned production of automobiles is bound to be

delayed, even if all the other necessary inputs are available in the qualities and quantities planned. Further more, these disturbances are obviously cumulative, especially in Sector A, and begin to affect others one after another. A bottleneck, that is to say, an under-production backward link even if temporary, is carried forward creating a chain of successive repercussions in the process. As all the branches are interconnected, the effects are multiplied even further. In a system of commodity relations dominated by horizontal links, an unhappy customer can exercise important means of pressure vis-a-vis a deficient supplier; he can in particular, directly establish relations with alternate suppliers. But the Soviet director cannot take recourse to such means due to institutional reasons, reinforced by the conditions of shortage. "Direct links" anticipated by the 1965 reforms remained extremely restricted, and he is not really capable of independently seeking a commercial partner. He is compelled to pass through vertical links of a system of centralised material supplies. Or else, he must take recourse to informal ties between enterprises i.e. to the tolerated and parallel market of the means of production, which lubricates the wheels of the economy, but distances even more the latter from the logic of centralisation.

In so far as the means of production are concerned, the adaptation or matching of supply to demand is thus realised according to modalities that are very different from a traditional commodity system. Based upon a sui generis system

of rationing they tend to reduce the retractive effect of demand over supply. The forms of regulation and crisis that accompany them are also original. Planning and centralisation of the process of material supply here imply that the latter remains chronically disturbed and marked by irregularity as also by relative unpredictability, which has a decisive influence over the behavior of the directors. What we see here is a paradox that is commonly found in centralised planning: it is because the system of material supply is subjected to centralised control that it tends to escape the control of the planning organs. The traditional criticism of the market emphasizes that the latter is a source of anarchy as it represents a mechanism that is incapable of being controlled or organised; in the case of the Soviet economy on the contrary, it is precisely because the process of production and circulation is subjected to a plan, that it gives rise to original forms of anarchy and spontaneity.

3. Contradictions of Planning

What is "planning"? Approaches to planning are as simplistic and unrealistic as many common views of the "market". In the Soviet Union, "the plan" is a sum of several plans organised hierarchically, forming an entire network of directives and projects that are in principle compulsory - addressed from various levels of the economic hierarchy towards the lower levels. Planning must be understood as an uninterrupted and complex process that is both mobile and contradictory, as a network of economic relations which are established and reproduced between the many agents of the

economic structure, in which the different plans are but a moment, important but transitional, and partly conflictual and flexible. The national five year plan, for example, is from the very beginning divided into annual periods. But the real annual plans - those which have an actually operational character - take into account those which have already been realised, the emergence of new problems, and bottlenecks, subsequent changes in priority by the leadership, etc.. They thus necessarily and progressively move away from initial projects. At another level, we can observe a similar phenomenon within the annual plan, in the quarterly or monthly plans of the enterprise.

In analysing the process of planning, it is usual to differentiate between the working out and the implementation of plans. But this useful distinction has the difficulty of congealing the plan, without actually questioning either its coherence or its stability. Rather than examining the formal process of planning, we will attempt to outline the real process, dominated by institutionalised or non-institutionalised relations of power, bargaining and various contradictory forms of motivations and behavior among economic agents at different levels.

We shall begin with the formulation of the enterprise plan which undergoes a kind of negotiation process with the ministerial authority. The director usually attempts to minimise the tasks he will have to realise, and to inflate his needs in supplies, fund investments, etc.. The information he transmits is therefore in general doubly biased: under-

estimated in the case of capacities and overestimated in the case of necessary resources. The Ministry which has a large number of enterprises under its authority, is unable to control the entire information with exact precision, which in certain respects also presupposes detailed technical knowledge of the production unit, which only the director can have. The behavior of the director is motivated by the fact that he will be judged above all by the implementation of the plan. It is only logical that he seeks to protect himself from the instability and uncertainty of the environment surrounding the enterprise, by attempting to influence, through his own information, the orders he will eventually receive from above. Moreover, he knows from experience that the higher authority is perfectly aware of this behavior, that the latter anticipates in its turn by reacting in the opposite direction. The director thus himself anticipates this anticipation, and reciprocally, and so on. Consequently, if the director, in the course of bargaining, seeks to obtain a "loose" plan which he can realize more easily, and the various reserves which will help in the same sense, the Ministry aims on the contrary to establish a "taut" plan, constraining the enterprise to use its internally hidden reserves. The balance of forces which is established between the protagonists and which will lead to the final plan is a result of several factors as the size of the enterprise, national or local political influences, the weights of different lobbies, etc. If the enterprise depends on its Ministry, the latter depends in its turn on its enterprises - it also has its own plan to fulfil, which concerns its whole sector.

If it desires to reproduce and extend the latter, it must be equally realistic. If a director rarely realising his enterprise plans risks being recalled by the Ministry, a minister who fails regularly for the objectives conferred on his branch will find his position threatened.

In the working out of its plan, the Ministry thus finds itself engaged in various kinds of vertical bargaining with the enterprises and different horizontal arbitrations between these latter, since resources at its disposal are limited. But on what do these resources depend? On the national plan, itself the result of a near competition between Ministries and the bargainings they have with the Centre. What we have here is an important element of "centralised pluralism" (A. Nove) characteristic of the Soviet system. In certain respects, relations between the centre and the Ministries resemble those existing between ministries and their enterprises, with contrary and reciprocal tendencies to underestimate and overestimate aims and needs in order to realise the latter. (As a matter of fact, the ministry is both an input and output maximiser). But the protagonists as also power relations, undergo a change here. The arbitrations which the centre (i.e., the political authority) has to effect, are final and will determine the further arbitrations within the various branches. The director seeks to implement his production plan and maintain his enterprise - and thus himself - in a good position; the minister often aims to be more independent and extend his industrial empire.

But the Centre aims at development and global balance objectives, it seeks to realise sectoral priorities. Choices which were external for an enterprise or a ministry (as the choice between investment and consumption for example), are internal choices for it.

But what is the "Centre"? On the one hand, the central planning authority, Gosplan, whose logic consists especially in a need to obtain a balanced growth and a coherent plan, and whose function lies in analysing the various hypotheses of the plan and prepare them for discussion by the political leadership. On the other hand, and this is essential, it represents party leadership whose motivations are many and complex. Nevertheless, this leadership, as well as that of the state strictly speaking, is itself composed in large measure by people who are officials in charge of the great economic administrations or involved in their control. The near competition which opposes the latter on the economic level, therefore also takes place inside the centre and influences the compromises or arbitrations that are finally arrived at.

There is thus a sort or kind of competition which takes place between branches whose aim consists in obtaining maximum funds from centralised allocations. Such a form of "monopoly" or "corporate competition" mainly concerns the distribution of social surplus value and capital concentrated by the state, and not directly by production, since a specialised ministry hardly has a rival competitor in this field. It is not a

competition to sell, as a competition by quantities or by prices, but it is above all a competition to increase the portion of social capital under its own control and under its management. In this process, the weight exercised by several ministries is obviously variable. It depends on the size in men, in enterprises and in capital, as also on the kind of production engaged in. The branches which produce the means of production in particular, on which other branches and ministries, consequently depend, benefit from a more favourable balance of forces than the consumer goods industry. To this can be added current sectoral priorities decided centrally, as also the weight exercised by various lobbies and pressure groups - military, industrial, regional or urban - who are present within the economic and political bureaucracy.

We are now in a position to catch a glimpse of the complexity of the process of plan formulation and how the latter, far from expressing a consistent social rationality as supposed by an ideal vision of a "planned economy", results from the interaction of contradictory logical processes and original forms of competition within the very state sector. It is true that the political logic of the system, i.e., the reproduction of the system and the reinforcement of its international power, prevails at the level of the high ranking leaders of the party, and influences final decisions.

Once the national plan has been formulated, each ministry divides its branch objectives in the form of final directives to its enterprises, from which emerge, again

through various forms of bargaining, the plans of the production units with a whole list of precise orders : indexes of production, profitability, wage fund, budget payments, centralised investments, supplies; etc. There is thus a passage from an aggregated macro-economic plan to a sum of disaggregated micro-economic enterprise plans. The totality of micro-economic plans logically builds up the macro-economic plan. But such a logic finds itself systematically opposed for two reasons. Firstly, the plan at the different levels are relatively inconsistent both in themselves, as well as in relation to other plans. Even under ideal conditions, all the objectives of a given plan or all the plans considered as a whole, cannot be simultaneously realised. Secondly, economic conditions for the realisation of the various plans exist only partially or are changed or questioned even during the process of implementation. The question that therefore arises is, what are the reasons for this inconsistency and instability in the plans?

First of all, we find problems of information. The latter should in principle be both precise and reliable so that plans formulated upon this basis be coherent; now these conditions are not fulfilled. In the first place, the aggregation of information, necessary at the various levels of centralisation, implies by definition a loss of information i.e. simplifications and distortions. This involves a classical statistical and economic difficulty, but it is aggravated by the incredible quantity of data that a centralised and detailed system of planning must collect. Moreover, as

we have seen, the various managing officials tend to distort information vis-a-vis the higher levels. This being an important element in the bargaining which accompanies the plan, it is not surprising that it tends to be manipulated and biased. This results in a high degree of uncertainty of economic information. An element of irrationality is thus introduced into planning, but it results from the rationality that the system tends to impose over its agents : realise the plan at all costs.

But there are other reasons for the incapacity of the leadership to formulate consistent plans for the entire economy. They follow from the methods which are employed for their formulation. The most important remains material balances, established for major productions. A balance is a table of two columns : resources (production, imports, stocks at the beginning of the period), from which a balance must result. This method gives rise to several problems. Firstly, balances do not include all products, but only those which are considered as the most important (at the central level, Gosplan establishes about 2000 while there actually exist millions of products). Moreover, they are incomplete to the extent where they are based on a sectoral logic and that the administrative branch (Ministry) and the economic branch (products) often coincide very imperfectly thanks to despecialisation. In addition, they are based upon technological hypotheses - "average progressive norms" connecting inputs and outputs - that are hardly realistic, taking into account the heterogeneity of enterprises in this respect. Above all, balances

do not constitute an integrated and coherent system reflecting relations between branches; they are on the contrary linked to the principle of "leading links" of the plan, i.e., priority products of the moment. Production is thus organised into a hierarchy and priority branches are first given supplies and in a manner that is complete and through while the others are supposed to adjust and adapt their production. The planners therefore start from objectives for pilot products and adjust necessary direct and indirect supplies. In reality only a method consisting of a table of inter-industrial (input-output) would allow, theoretically, through various iterations, a calculation of the repercussions over all other sectors of production, of the change from one or the another. Now this method is not used by soviet planners for reasons of a statistical and technical nature.

Iterations, i.e. adjustment calculations, effected upon priority balances, are insufficient in number. As a result it is thus logical that the final plans be partly inconsistent. Even if the information was perfect and even if there were no particular difficulty at the level of control or motivation among economic agents, the method of balances - i.e., of priorities, with empirical adaptation of "secondary" production - would in itself imply the systematic emergence of adjustments, bottlenecks and a chain of repercussions from the latter.

When the importance of tasks associated with planning is taken into account, it is understandable that the various

competent organs are in general overburdened with work. Operational plans - i.e., mainly annual plans - are regularly communicated to those who must implement them when the planned period has already started. In addition, plans are frequently changed during implementation, depending upon the appearance of bottlenecks or as a result of a change in priorities, or as a result of pressure from various local political or administrative apparatuses. Or again, a reduction of targets is often effected by the ministry during the planned period, in order to bring the "plan" nearer to the expected level of realisation by the enterprise; this allows the ministry to obtain a better accomplishment of its own "plan". Such a practice was criticised in the "reform" decree of 1979. Planning is thus not only marked by a relative inconsistency but further manifests a definite instability. The reasons why directors display protective forms of behaviour, in such a situation are consequently comprehensible.

The formulation of plans by different responsible organs is often based on routine methods : this is planning "from the attained level". The results of the last period for major indices are taken as the base and are affected by a more or less arbitrary rate of growth from which results a new plan. Secondary indices are supposed to adapt themselves to variations of the principal indices, the same as secondary productions are supposed to adapt themselves to modifications in priority sectors. At the level of major macro-economic decisions, those which concern major aggregates (production, investment,

consumption), it is common to find that planned provisions are not really different from results obtained in the last planning period, the growth rate being simply changed by political decisions of the leadership, more than by econometric simulations by technicians of planning.

We are in a better position now to understand the prevailing ambiguity behind the idea of a "planned" process : this can signify that it is subjected to planning or - which can be very different - that its real development conforms to a plan. Thus, the "Soviet planned economy" is subjected to a plan but its real development does not conform to this plan, it is spontaneous and uncontrolled. The form of anarchy which dominates this economy can be understood only because it is subjected to planning. While the market economy is anarchic because it is not organised, the planned economy is anarchic because it is the object of a certain kind of organisation. This does not mean that planning has no effects; it obviously has, especially upon the modalities of economic regulation considered as a whole. But these are in large measure blind and uncontrolled.

4. Overinvestment and Obstacles to Innovation

The Soviet economy is marked by a strong tendency towards excessive accumulation which co-exists along with constant brakes in technical progress. These are some of the characteristic traits of extensive forms of development.

In actual practice, it is the ministries who exercise an important control over investment of which a sizable portion is centralised. The director is a demander for investment

vis-a-vis his ministry and the latter is a demander vis-a-vis the centre which must perform the arbitration between branches. Here again, enterprises and ministries tend to overestimate their needs, while the centre and ministries seek to impose a rigid or "taut" plan upon the lower level.

The causes of investment hunger generated by the system are linked to the expansion drive among the various agents, to the general condition of shortage, as also to the forms of redistribution of social surplus value. Allocated centrally, according to vertical lines, investment funds do not represent the same costs and risks to their allocatories, as to the western investor. The profit criterion loses its relative importance here. The link between surplus value realised in one branch or in one enterprise, and accumulation is broken; it remains at the social level. The state thus manages a kind of generalised and original system of credit capital. Until 1965, capital was free for the enterprises and the introduction from this date, of a tax of 6% over productive funds has not basically changed anything for the director, as it is passed on to wholesale prices. On the other hand, the enterprise does not maintain competitive relations with the others and the threat of bankruptcy is excluded. The selfishness of the enterprise or the branch, that is linked to the search for expansion at all costs resulting from the application of taut plans, and the weakness of the monetary constraint among the directors, consequently leads to an almost insatiable hunger of investment. The search for a protection against the

uncertainties in material supply, and thus the tendency to hoard the means of production, pushes in the same direction.

As economic interest groups, the ministries seek to extend their industrial empire and therefore to increase the number of enterprises under their control. They try to open new building sites, to start new constructions, thereby perpetuating a habit contracted during the epoch of extensive industrialisation. This leads to a chronic dispersion of resources, a phenomenon that is continually denounced by the political officials from the centre. Aggravated by difficulties specific to the construction industry (problems of material supply, lack of manpower), the multiplication of construction sites beyond actual capacities inevitably leads to their not being completed within the delays stipulated, to which the frequent excesses in estimates of costs can be added. The construction period is usually double the planned norms, these themselves being two times higher than real delays in the west. Huge resources are thus permanently frozen while waiting for the final completion of installations. The ministries know that it will be more easy to obtain additional funds for work that has already been started, and they act accordingly. As a result, global economic efficiency suffers from such forms of overaccumulation and from the related slowing down of the rotation of social capital.

Since 1976, official policy has sought to make investment more selective. The orientation towards a reduction in the growth of investments has again been reinforced in the Eleventh Plan. We can legitimately ask whether there exists or not an

original investment cycle characteristic of soviet-type economies, where hungry investment demand by the lower and middle levels of the hierarchy leads periodically to an aggravation of shortages, to which the authorities react by a reduction in growth funds allocated centrally; the tension then eases in this investment sphere, but the behavior of demanders being reproduced, the cycle starts once again towards the higher levels and so on. The Soviet Union was at the beginning of 1980s in a phase of contraction. We have in any case, a tendency here, no doubt complicated by the presence of "political" investment cycles, linked to variations of sectoral priorities of the centre and to fluctuations in the balance of forces between branch lobbies. The intensity of the militarisation of the economy plays a decisive role here.

The forms of regulation and crisis characteristic of the soviet economy depend much upon this chronic tendency towards overinvestment. The western investor, whose "animal spirits" are determined by a different structural and institutional context views investment as a risky and costly process - he encounters fairly precise limits to his investment demand. In the context of classical capitalism, Keynes noted that investment often needs to be stimulated since its insufficiency can reduce effective demand and thus increase unemployment. The soviet investor on the contrary must be checked in his constant demand for investment. However, the system appears to be as deprived of the means of remedying its own tendencies towards towards a crisis as its capitalist competitors. Let us also

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add that the experiences of the various soviet-type economies proves that the phenomenon of overinvestment is without doubt accentuated in periods where the state puts forward a policy of rapid growth, but that it continues to exist even when objectives are reduced to more modest proportions. This consequently involves a characteristic trait of the economic system.

The cult of technical development has for long constituted one of the major pillars of official soviet ideology, especially since the regime decided (it has been more than fifty years now) to "catch up with and overtake" the advanced capitalist countries. But the irony today consists in the fact that the Marxian hypothesis according to which production relations restrain the development of the productive forces, is incarnated particularly forcefully in the soviet economy itself.

The USSR has a profound gap between its scientific apparatus, whose importance is considerable, and its productive system. For instance, opposed to the American system, a large part of fundamental research, and of research and development, is carried out outside industrial units (at the level of ministries, industrial unions, universities, Academy of Sciences, etc.). Planning of scientific and technical progress - but can the latter be planned? - has only a limited and relatively slow impact upon production, with the exception of the military sector which has a specific system of planning ("by objectives") and quality control.

Most of the attention of the managers is concentrated on the short-term: the implementation of the plan in progress. Now, technical progress presumes a vision beyond the short term. In addition, most innovations imply a risk and the latter is in fact neither stimulated nor recompensated here. A technological change leads to a temporary disturbance of the process of production, which can compromise the plan. Finally, the preeminence of quantitative indices is not favourable for improvement in quality. If we add to this the rigidity of the price system which stands opposed to the enterprise benefiting directly from a gain in productivity, and the weak influence of the enterprise as consumers demand over production, , we are in a better position to understand why the impetus to innovate tends to get inhibited among the managers of the production units. In contrast to western economies, the accumulation thirst tends to be dissociated from the stimulation to renew technology. Technical conservatism can also be found at the level of the ministerial bureaucracies. It is finally left to the political authority alone to remedy accumulated sectoral delays, as it has been the case with gas and petrol, the chemical industry and computers. Excessive centralisation also stands opposed here to the rapid adaptation of the productive system to newer opportunities and still newer needs.

The relative shortage of investment goods, as also the possibility of enterprise financing "repairs in capital" on their own depreciation funds, leads to situation where existing equipment is regularly repaired and maintained, even if it is

largely obsolete. The sector of maintenance and repairs within the enterprises is hypertrophied, which results in a huge wastage of resources. Repairs and the manufacture of spare parts occupy about seven million workers and one-third of the total number of machine tools. The lifespan of machines is considerable and is superior by about three or four times to that of the U.S.A. The percentage of equipments aged more than ten years has grown from 20 per cent in 1971 to 28 per cent in 1980. Equipment of enterprises and branches is therefore very diversified by age and we can find a coexistence in production units of very recent machines and others which are twenty years old or more. This technological heterogeneity is an impediment to the generalisation of advanced production norms and complicates the effects of planning still further. Such a situation is characteristic of a predominantly extensive form of development in which there is a coexistence of an emphasis on new constructions and a relatively slow modernisation of existing units.

5. Rigid prices and passive money*

The soviet economy is based upon a system of commodity production and exchange. The quasi-totality of goods produced, means of production as well as objects of consumption, can only be consumed by their users if they have first been exchanged through an act of purchase-and-sale realised in a monetary form. When dealing with the system of wage labour, we have already considered the character of this monetary exchange in relation to the labour force. Official soviet theory otherwise known

* The reader who is not familiar with the area may skip the pages that follow which are concentrated on more difficult questions.

as the political economy of socialism, has for a long time affirmed that only consumption goods and products circulating between the state sector and the Kolkhaz sector were genuine commodities, while the means of production manufactured and used in the state sector did not have the same (commodity) character. (See, B Chavance, Socialist Capital). This dogma was abandoned after the 1950s and most of the socialist countries today admit the commodity and monetary character of prevailing economic relations, including those obtaining within the state sector. On the basis of the doctrine of "socialist ownership", it is nevertheless maintained that labour power is not a commodity. Such a denial is hardly compatible with the existence of the category of wages, but it is indispensable for the apologists of the system to maintain the idea of an opposition of principle between capitalism and soviet "socialism". Actually, according to the Marxian explanation, capitalism is nothing other than a system combining commodity production and wage labour.

On the other hand, in western analyses it is frequent to find a denial of the commodity and monetary character of the soviet economy due to the lack of competition, of the free play of supply and demand and the unrestrained action of market forces. Such an approach is based on a confusion. A system of commodity production and exchange is an economic organisation where the majority of products in order to pass from production to consumption, must be exchanged against a certain amount of money. It is precisely this that confers the

commodity character over products. A generalised commodity economy thus witnesses a universalisation of exchange - it is a monetary economy, excluding the generally marginal cases of barter. This is the basic definition of such a system. What is secondary in the definition - but which is by no means unimportant, is the rate of exchange, the price according to which purchases and sales are realised and the manner in which it is determined. The same remarks apply for the quantities produced and exchanged according to these prices. The various forms of the commodity system, which have monetary exchange in common, are precisely distinguished through the specific modalities in which prices and quantities produced and exchanged are fixed, as also by the relative influence of money. Leaving aside the case of simple commodity economy composed of independent petty producers-exchangers, we can thus schematically distinguish three well known types of the commodity system: the classical competitive capitalist market, the developed western economies of today that are dominated by oligopolist or monopoly forces and a strong influence of the state, and the systems of the soviet type. Each major type has also its own particular form of wage labour and thus of a "labour market". The confusion noted above consists in identifying all commodity systems with one particular form, which most often happens to be that of the free competitive market.

According to our definition, the soviet economy is indeed a commodity system. But just as for wage labour, what interests us here is not really this general and abstract

characterisation, but the original forms of the system which distinguish it from the commodity system of the competitive or the state-oligopolist type. We shall then successively examine the fixation and influence of prices and the passive character of money.

In the soviet union, the large majority of prices are fixed in a centralised and authoritarian manner. The state committee of prices, a functional administration dependent on the Council of Ministers and organised upon a federal-republican structure, fixes about 85 per cent of whole-sale prices in heavy industry, 50 per cent of wholesale and retail prices for consumer goods manufactured by industry, and 70 per cent of food prices. A number of other prices are fixed by republican price committees. For their part, ministries fix the transfer prices within their production unions, and the price of the means of production produced and exchanged within their branch. On the other hand, they submit to the State Committee of prices, prices for new products which must be approved by the latter. The task of the central administration of prices, which not only fixes but controls more than 20 million prices, is obviously very difficult and complex. With respect to the soviet enterprise, it comes close to the enterprise in a competitive market in that it receives its prices from outside without being able to significantly alter them.

The rule for fixing prices is as follows. Enterprise wholesale prices are calculated upon the average cost of the branch, to which a profit is added, constituted by a percentage

of this cost that varies according to branches. If the average cost (equipment and raw materials, wages, depreciation) of any product is 100, and the profit rate (profit over productive funds) attributed to the branch is 20 per cent, enterprise wholesale prices will be $100 + 20 = 120$. To this figure will be added the commercial margin of wholesale distribution organisms and the turnover; we then obtain the industry wholesale price. Finally, if a consumer good is involved, the addition of the margin for retail trade leads to retail prices. In simple terms, by omitting commercial margins, we can say that the difference between wholesale and retail prices, is the turnover tax - which is finally paid by the consumer. This is summarised in the scheme provided below.

PRICE OF AN INDUSTRIAL PRODUCT

	Production cost	Profit	
Wholesale prices of enterprise (100)	85	15	Wholesale margin Turnover tax
Wholesale prices of industry (125)	5	20	Retail trade margin
Retail prices (140)	-	15	

(Source : Cf. M. Lavigne, Les economies socialistes)

SIMPLIFIED SCHEME

Abstracting from margins of the trade system

	Cost	Profit	
Wholesale prices of enterprise			
Retail prices			Turnover tax

It must be emphasised that the fixing of wholesale prices is effected according to a method and a logic that is different from that which governs the retail prices policy. While the former are calculated according to this method of average "const+profit", retail prices are fixed, without having a direct relation with production costs, with a view to channel demand according to the preferences and decisions of the authorities who in addition are preoccupied in protecting certain stability in the index. The difference between wholesale and retail prices i.e., essentially the turnover tax thus constitutes a "tax by difference", which varies according to products. An increase in wholesale prices thus does not necessarily affect retail prices, the turnover tax being reduced in the same proportion. Similarly, retail prices can be increased or brought down without affecting wholesale prices, the difference being absorbed by the tax (whose rate thus varies as a consequence). As J.C.Asselain observes, what we have here is a system of "double prices" where consumption prices are disconnected from production prices with positive (turnover tax) or negative (subsidies) gaps, reflecting the uncontrolled separation between two systems of evaluation.

It is thus that traditionally most production goods do not pay the turnover tax (with the exception of fuel, gas and chemical products) as opposed to consumption goods which are moreover themselves unequally taxed. A large part of this tax is provided by ordinary consumer goods : alcohol, sugar, tobacco and cloth. Prices of the means of production are therefore traditionally low, while those of consumer items are

relatively high (with the exception of essential foodstuffs which which are stable and maintained at a low level thanks to state subsidies). The origins of such a policy lies in the old monetary illusion according to which low prices for equipment will stimulate technical progress. In any case it has resulted in a situation where real costs are strongly distorted and hidden.

There is a close link between the inconsistency in the price structure, the diversity of prevailing policies for wholesale and retail prices, and the state centralisation/redistribution of a large part of social surplus value.

The disparities existing between the level of prices, and therefore between the profit rate according to branches, or even according to enterprises, whose technical equipment is highly differentiated, are compensated in large measure, as a sizable portion of surplus value is centralised in the state budget and later redistributed to the economy. The enterprise actually retains only a part of the profit that it acquires from its sales. Let us note that there are in reality two levels of centralisation/redistribution of profits and losses : at the branch level (ministry) and in the economy considered as a whole (state budget). Thus a gigantic socialisation of profits and losses is effected which allows, as we have seen along with the centralisation of investment, a dissociation of profit realised in a branch, and accumulation which can here be effected. Its extension is much wider than redistributions which take place in a western capitalist system, through competitive mechanisms ("pure" or oligopolist), and state

intervention in the price fixing in centralisation/redistribution of a part of social surplus value.

The soviet state budget represents more than 60 per cent of national income, a figure which far exceeds those obtaining in western economies (about 20 to 35 per cent). Budgetary receipts coming from the economy represent more than 9/10 of the total and their source is approximately for one third from various taxes, one third from turnover tax and one third from the deduction on enterprise profit. One part of the net income of the state is thus deducted at the level of wholesale enterprise prices (deduction on profit), another at the level of retail prices turnover tax. If one assumes an increase in wholesale prices without a corresponding increase in retail prices, the turnover tax will be reduced, but the state can then deduct more from profits made by the enterprises. Schematically, this is what occurred after the 1965 reform.

The crucial problem posed by the structure of soviet industrial prices is linked to its heterogeneity and its irrationality, which renders the continuation of centralisation of management and planning necessary, while the latter produces and reproduces the inconsistent character of the price system. This is a vicious circle which many reformers have referred to. As the economist Novozhilov wrote in 1966 ; "If prices cannot provide the necessary information for economic decisions, the missing information must be given under the form an administrative directive". In order that the directors strive harder to take into account the indexes of prices,

profit and rentability, while preoccupying themselves with needs expressed by consumers it would be necessary that the whole price system be rendered more logical and consistent. We can see here one of the reasons responsible for the failure of the reforms. In reality, a decentralisation of planning and investment would lead to a profound imbalance of the latter, in relation to the prevailing industrial structure and to political priorities, since the funds disposed by the enterprises or industries would vary considerably according to administered prices and thus of profit rates.

In traditional capitalist systems, accumulation is realised in a decentralised form, since the relative mobility of capitals, the constant deformation of structures of relative prices, the modes of determination of the profit rate, the credit system, generally allow the process to be governed by the relatively independent activity of enterprises. The latter disposes of a sizable portion of surplus value (in the form of profit) realised in their production and thus retains an autonomy to accumulate. Let us bear in mind that this process has its own contradictions and its own forms of irrationality. But the price system constitutes an active element of the entire process of production which renders the decentralised nature of the latter possible. In an economy of the soviet type on the contrary, the price system is a relatively passive element in the process, and it implies centralisation.

The heterogeneous character of the price structure stems above all from the disparate nature of "historical

prices" inherited from Stalinist industrialisation and from the huge dispersion which resulted in the branch profit rates : thus, for example, before the 1967 reform, coal mining had a negative profit rate of -5 per cent and light industries a rate close to 40 per cent. The reform of 1967 did succeed in reducing the gaps but it did not do away with them. The same can be said after the change in wholesale prices in 1982, mainly directed to increase the price of raw materials. On the other hand, not all wholesale prices are actually fixed according to the principles outlined above, or they are, but according to variable modalities, for the taking into account of transport costs. The relative influence that enterprises and ministries can have on the formation of prices is limited to the estimation of average costs : we can note that these have a tendency to be overestimated according to a logic already observable in other fields. To this can be added the manipulations for prices of new products - which do not escape the western consumer either. Finally, the residual and variable role of the turnover tax further complicates the picture.

Finally, the price system is a product of several heritages and contradictory influences, providing neither consistent information nor stimulation to the various economic agents. The behaviour of the latter is in fact hardly influenced by prices or at least to a considerably lesser degree than what occurs in a western economy. Adjustments by quantities thus predominates over adjustments by prices,

not only because the latter are rigidly maintained by the authorities, but also because of their weak influence upon behaviours. At the central level, physical planning is preponderant vis-a-vis value planning. On his part, the director hardly reacts to price changes of his supplies, since his cost is directly passed on to wholesale prices (i.e. his selling price); on the other hand, he is more sensitive to changes in the prices of his production, which explains his efforts to manufacture more profitable goods, but which are some times outside the plan. Finally, it is the consumer who is most concerned by changes in prices - which explains the search for stability by the authorities - but in the general background of shortage, a possible change in relative prices has little effects upon his behaviour.

The absence of open inflation is often credited to the socialist systems as also the absence of unemployment. There exists, however, a difference between these two phenomena : while the latter is not the effect of a deliberate policy of the state, but results from profound tendencies of the economy and specific modalities of economic regulation, which, therefore, tends to be reproduced spontaneously, the former necessitates constant interventions and controls, consciously carried out by the "Centre". In reality, economies of the soviet-type have profound in-built inflationary tendencies. We have already noted several manifestations of important distortions between real and monetary processes, characteristics of a "hidden" or "repressed" inflation. Thus, investment

demand in monetary terms exceeds actual possibilities, from which arises the lengthening of delays in building construction, and the increased time necessary to ^{recover} / investment. The increase in monetary income beyond expectations, and particularly in relation to productivity, caused by the wage push and bonus growth, also leads to an excess of income in relation to the real availability in consumer goods. This results in price increases in the free market, lengthening of waiting lists and a growth of savings. The latter grew from 13 to 14 per cent on an annual average from 1965 to the end of the 1970s while a very clear decline can be observed during these last years. In 1981, the average deposit in savings bank accounts was 1120 roubles. An increase in prices could perhaps help to reestablish a balance of supply and demand though this is open to doubt if the structural character of shortage tendencies is taken into account. But the relative stability of retail prices is a fundamental principle of state policy and is a central element of the compromise existing between the leadership and the population. The Polish experience of the 1970s is a standing a contrario example. It is true that the official retail price index which has practically not changed between 1962 and 1977 (since 1978 it has increased yearly by about 1 per cent), is calculated according to a method which has not been made public and is hence doubtful. There have certainly been open, official, and disguised price increases (as with certain new products) - this holds for wholesale prices and certain retail prices. But it is clear that in the case of

the latter, inflation remains globally contained. Hungary is the only country in the soviet orbit which has introduced a greater flexibility in price formation and tolerates an open inflation; but even in this case, state policy is relatively vigilant with respect to the evolution of consumption. As far as imported inflation is concerned, the Soviet Union is less affected by this phenomenon than its partners in the Comecon who are more open to foreign trade.

We must add that the relative rigidity of prices imposed by the economic administration also has negative consequences on the entire system of economic regulation as we have noted above. The control exercised upon prices has a high cost for the system, through a considerable loss of information, about real costs, the state of demand, etc., for the planners as much as for the managing officials. It stands opposed to all reforms aimed at decentralisation which alone could introduce a greater flexibility and dynamism into the working of the economic system.

Soviet currency, the rouble, is dissociated in its internal functioning in the economy from its function in international trade. Issued by Gosbank, the State Bank of the USSR, it is inconvertible and separated from the outside by the State monopoly of foreign trade.

Within the national economy, money circulates through two distinct but not independent channels. All state economic organisations have an account in Gosbank, in which sales and purchases are recorded. This deposit-money circuit which works

by credit and debit has as its original feature the fact that it is exclusive, allowing Gosbank to control all monetary operations of enterprises and other institutions. In the second circuit, which is also exclusive, there is a transformation of deposit money into fiduciary money : this concerns payment of wages by state organisations. The latter practically do not handle fiduciary money; conversely, wage earners do not have access to deposit money : they can neither have an account at Gosbank nor have a cheque-book; all their purchases must be realised in cash. On the other hand, they have the possibility of depositing their money in accounts in Savings Banks, managed by Gosbank, which gives an interest of 2 to 3 per cent on deposits.

Monetary exchanges are therefore effected in the form of deposit - or bank-money between state units and a fiduciary form between the latter and wage earners - the same as between individuals themselves. This had led some to conclude that Soviet money is not real money, remaining in a way inconvertible from one circuit to another. Actually what we are confronted with here is a particular form of the monetary system and not a demonetised or semi-monetised economy. Money fundamentally fulfills the same functions as those prevailing in other commodity-wage labour economies, but these are realised under very original institutional modalities. Deposit-money and fiduciary money are but two forms of the same money : the rouble. The two circuits are no doubt distinct, which has a decisive importance, but they are not water-tight : fiduciary money which is used for wage payments represents a transformation of

deposit-money figuring upon the accounts of Gosbanks; when wage-earners in their turn buy commodities in the state sector, this money makes a return to the state banking system and is eventually transformed in deposit-money and so on.

The soviet monetary system thus has a very specific character, in its institutions as in its contradictions. It is clear for example that the relative importance of purely monetary factors in the dysfunctioning of the system is less than in a western economy. Within the state sector, money has a particularly passive character. The supply of money by the Bank tends to adapt ^{itself} / passively to the variations of real processes in the enterprises, especially through the lax and often semi-automatic character of short-term credits. Periodically the state reacts by putting forward a more restrictive monetary policy. We have here a condition conducive to the behaviour of directors as the tendency to hoard excess stocks of raw materials, equipment and manpower. The passivity of money signifies in addition that the quantity of money which the director knows he can dispose at a given moment, does not constitute a determinant element of his real behaviour, and this distinguishes him radically from his western colleague. In reality he knows that his patron above will hardly refuse him an "additional" monetary payment; the constraints which he encounters are above all real, and these are shortages in material supplies, physical bottlenecks, etc.

The passivity of money in relation to micro-economic behaviour however, often does nothing more than displace certain

fundamental contradictions of the system, whose manifestations appear at the macro-economic level, shortage, investment hunger, the hoarding of supplies and labour power are some examples of these contradictions now familiar to us. In the sphere of household consumption, money is more active and we have noted above some dysfunctioning effects (price increases in the free or black market, variations in savings, etc.).

Finally, the soviet economy is a well established but original form of the commodity and monetary system. The institutional modalities of the system and the dominant agents' behaviours lead to contradictions whose manifestation is more real than monetary. However, monetary phenomenon are not unimportant elements of the process which results in these contradictions. Monetary economies in general have contradictions between use value and exchange value. The soviet system in its fashion, encounters similar difficulties. The originality of the system is also evident here, whether it concerns use value as a support of exchange value (decline in the quality of products, linked to practices of "prevalidation" of exchange value, and to the context of shortage), or the profound inadequacy of production to social needs, which manifests itself in particular in the co-existence of intense shortages, and excess stocks (means of production stocked by enterprises, consumer goods rejected by consumers due to their deficient quality or again, unsold commodities following defects in the system of material supply or distribution).

6. Are reforms impossible?

The successive reforms, whose scope and extent were variable, of economic organisation which followed the process of destalinisation are particularly significant. They first of all illustrate the fact that the soviet leadership is aware of the profound deficiencies and contradictions of the existing system of planning and management as also its negative consequences in an epoch of greater international rivalry and competition. But at the same time, they also manifest their incapacity to effect a whole network of coherent and effective changes in economic institutions and behaviour, in other words their failure to realise a reform of the existing model of organisation, which indefinitely produces and reproduces the same difficulties, instead of carrying out modifications within the same model.

The first reform, and undoubtedly the most radical, was the work of Khrushchev. It was aimed at the ministerial system as such. The industrial ministries, accused of building independent empires and of departmentalism - let us note that they formed a fief of the political adversaries of the first Secretary - were removed in 1957 and suddenly replaced by Sovnarkhoz or regional economic councils. The vertical organisation of branches linked to the ministerial system was then followed by organisation and planning according to the territorial principle, each Sovnarkhoz having under its control the totality of enterprises, and therefore, the branches of the region. The deficiency, which soon appeared in this reform was that it disturbed interbranch exchanges operating between

different Sovnarkhoz i.e., a sizeable portion of economic relations considered as a whole. The autarkical tendencies of the branch ministries, pushed by sectoral bureaucracies gave way to localism and departmentalism, i.e., to autarkical tendencies in the regional bureaucracies. Let us also incidentally note a similar phenomenon in a decentralised system as Yugoslavia where the "national economies" of the republics tend towards autarky. The swing of the pendulum, i.e., the gradual process of recentralisation was not long to appear, with the emergence of central sectoral organisation, getting as a kind of substitute to ministries functioning in the old manner. With the fall of Khrushchev in 1964, the system had become particularly chaotic and had to be clearly reorganised. The experience of the Sovnarkhoz, following the example of the ministries, clearly shows that autonomisation and the autarkical behaviour of the intermediary organs between the centre and the enterprises (the second level of the hierarchy) are a structural trait of the system regardless of whether they are based upon a sectoral or regional principle of organisation, the causes of which not only lies on the self-seeking interests of this or that apparatus within the bureaucracy, but also in the inability of the center to impose totally the logic of centralisation, which involves an efficient control over relations between branches, regions, between production and needs, etc.

The "grand soviet reform" of 1965 is also exemplary in its limits as well as in its failure. It abolished the Sovnarkhoz and effected a return to the system of branch

ministries, while making every effort to better centralise the entire network of the system of material supply under the control of Gosstab, a functional administration. But according to Kosygin, this did not merely involve a simple return to the state of things that existed earlier - the objective lay in reducing the "petty tutelage" of the economic administrations by much greater enterprise autonomy, and in increasing the initiative of the managers, and the workers, by a system of stimulation based upon monetary criteria and not on physical criteria, in order to satisfy the needs of the consumer in a better manner, both in quantity as well as in quality. The number of compulsory planned indices for the enterprise was considerably reduced and production sold became, along with profitability, a primary success indicator, instead of the traditional indicator of gross production. Three kinds of stimulation funds were created at the level of the enterprise and put at its disposal by deductions over the profit, (which implied a reduction of central deduction) : a material stimulation fund (for bonuses), a fund for social and cultural measures (housing, leisure, creches) and a fund for extending production (for petty investments). In 1967 a reform of wholesale prices completed the picture : the latter were increased on an average by 8 per cent (15 per cent for heavy industry), reducing the number of enterprises in "planned deficit" and leading to a decrease in the dispersion of profitability between branches, without however removing it totally. Retail prices continued to remain the same.

It did not require more than five years for the entire network of these measures to reveal their incapacity to resolve basic problems and to do more than to introduce greater flexibility in a system that remained fundamentally unchanged. As in the other socialist countries where similar transformations had been introduced during the same period, the 1970s in the USSR was a period of general retreat of reforms, signifying another swing of the pendulum.

The measures of 1965 were inadequate and inconsistent from the very outset. The logic of greater enterprise autonomy and of stimulating the initiative and efficiency of enterprise directors - since introducing any workers' participation was never thought of except in very narrow limits, some profit sharing - this logic inevitably collided with the maintenance of the centralisation of material supplies, and the reproduction of the fundamentally rigid and inconsistent system of prices. The several and complex rules governing the planning of production, the allocation of products and the stimulation of initiative among the directors were in no way harmonised, and reciprocally contradicted themselves or found themselves paralysed.

The network of success indicators after the reform remained on the whole cumbersome and contradictory, forcing directors to choose these plan indexes which they could fulfil better, taking into account the expectations of the ministerial authority; and to move inevitably away from the realisation of other "secondary" indicators. Profit appeared as fairly different

from the "synthetic" indicator it was supposed to be. In addition, it hardly played the role of a stimulant, being thwarted by the price system and its rigidity. The index of production sold was better than gross production (val) to the extent that it excluded in principle stocks unsold due to deficiencies in quality, etc., but it shares with it the deficiency of being a "gross" index, i.e., including costs. The manager who reduced his costs would see a decline in the gross value of his production sold and would therefore be unable to fulfil his objectives. Such an index was thus adverse to the economy in inputs. Moreover, val itself was progressively reintroduced, actually stimulating the "chase after intermediary results" criticised by Brezhnev. The multiplication of new indexes and the return to a pre-eminence of physical indicators over those in value, characterised the post-reform period and several of them have in common with val, a tendency towards counter-efficiency. We can mention well known examples of plans expressed in tons and thereby stimulating production of more and more heavy commodities, or again, indexes in tons-kilometres for transport, actually rewarding the longest routes. It is common to find success indicators favouring behaviours of producers who either stand opposed to consumer needs or ignore them, or even lead them away from needs such as the central planners view them. The major preoccupation of those in charge continued to be restricted to the current plan, from which resulted a management unilaterally concentrated on the short-term, along with all its classical consequences.

The decentralisation of control of a part of social surplus value remained limited in reality and did not give the results anticipated. It is common to find that the deduction of enterprise profit is of the same order as existed before the reform i.e., about 60 to 70 per cent. In 1977, an enterprise retained on an average 44 per cent of its profit, 9 per cent for financing some investments, 18 per cent going to stimulation funds and 17 per cent to various other services. The payment made to the budget is in fact planned so that it is enterprise funds that appear as residual, thus inverting the logic of 1965. It is mainly the managing officials and not the workers who profit from bonuses provided by the funds for material stimulation. With respect to production funds, they remain quantitatively limited, and it is frequent to find that corresponding sums are in reality centralised by the ministry and go beyond the control of the enterprise. The project of increasing self-financing and developing decentralised investments has not been successful; it was in any case contradictory to the centralisation of material supply. "Direct links" between enterprises, i.e. horizontal links continue to be of slight significance - except when it comes from the "second economy", outside the official framework and even because of the problems obtaining within : taut barter agreements for various supplies, "face to face" (bilateral) credits, that are in principle illegal, etc. Commodity relations remain mediated in large measure by vertical economic links.

The 1973 reform was restricted by its very object :

through the creation of associations, it sought to reduce the number of units to be planned, simplify the management structure and encourage specialisation, while aiming for a new reduction of ministerial authority by the introduction of more effective countervailing powers at the level of enterprises. Even here, these aims were hardly realised, the resistance of the ministerial system to any reduction of its power once more coming to the surface. As for the simplifying effects anticipated from the concentration, they were transformed into their opposite through the multiplication of complicated and sometimes fictitious statutes for regrouping enterprises. The organisation of industry has therefore become in fact more heterogeneous, with considerable degrees of variations in concentration and subsequent complications in problems of management.

Finally, the series of measures taken in July 1979 signify as Marie Lavigne wrote - the failure of the earlier principles of the 1965 reform". Enterprise autonomy is no longer on the agenda and with respect to stimulation based upon monetary indicators it has been considerably checked. The index of net production (added value) replaces that of production sold. This is a progress compared to gross indexes, like val, but the technical definition of the index, based on average norms, makes it difficult to anticipate its efficiency. We no longer hear the synthetic indicator of rentability being spoken of i.e. profit, which goes into the background. The logic of the reform consists in a return to greater centralisation, assuming the fact of enterprise autonomy, and the

subordination of value planning to physical planning. It overburdens the organs of central planning even further and increases the rigidity of the system. It is clear that it cannot result in any serious improvement in the functioning of the economy as is already evident by simply observing the crisis in which the latter is today plunged in.

The reasons for the failure of most of the major attempts to reform the soviet economic system can be classified under two headings : "systemic" causes on the one hand and political and sociological causes on the other. Before considering them, it is necessary to underline the fact that the leadership are aware of the problems posed by the inefficiency of their economy, especially during the open crises of the latter and the growing difficulties at the international level. It will be an error to think that the evident conservatism of the system is nothing but a consequence of the interests of one hegemonic fraction of the ruling class, since it also has very high, and today, a growing price for maintaining the very stability of the power apparatus. The failure of the reforms is only explicable by a totality of complex factors, each of which interact one over the other.

As far as systemic causes are concerned, we have noted them on several occasions : there is a logic in centralisation whose negative effects cannot be reduced in the absence of an entire network of articulate measures enabling the system to cross the threshold of exit from the model. If such measures are not carried out, all partial reforms will remain paralysed

and thwarted by an inevitable return of the pendulum in favour of earlier structures and behaviours. We have seen the correlation obtaining between the authoritarian and micro-economic character of planning, the centralisation of the system of material supplies, the centralised management of investment, the rigid structure of prices, the state centralisation/redistribution of social surplus value, etc. A real reform that will allow these glaring contradictions of the system to be bridged must simultaneously react upon the entire network of these structural forms, or it is doomed to failure. This is what the experiences of all the reforms of the sixties in a soviet-type system reveal, those which failed were due to their limitations and their inconsistent character while the only reform which was partially successful was the Hungarian reform of 1968. Beyond its contradictions and its steps backward, the latter was a reform of the soviet economic model and not a reform within the model. This required not only a conjuncture and a history which are exceptional in many respects, but also an entire network of co-ordinated measures which affected the majority of the fundamental traits of economic organisation and were concentrated in a small number of years.

With respect to the political causes of the weakness or the incapacity of economic reform in the USSR, these are rooted to the apprehensions of the political leadership in triggering what might prove to be an uncontrollable process that could eventually threaten the power structure. The gerontological character of the summits of the apparatus is

definitely not conducive to a spirit of initiative and imagination, but that is not the most important factor. There are no dearth of factors fighting for maintaining centralisation. Suffice to mention the priority of the military sector, the importance given to the development of Siberia (to supply the country in fuel and raw materials, and for export also linked to strategic reasons concerning the Chinese question) - such a project, whose cost is huge, presupposes a high degree of concentration of resources. In addition, the sectoral organisation of ministries is conducive to Russian domination over the Soviet Union in a period where the influence of non-Russian nationalities is growing. The position of a super power occupied and asserted by the USSR within the socialist camp and on the world scene, makes its leadership particularly apprehensive of the centrifugal risks inherent in all reform.

Even within the country, there has formed over the years, a coalition of various interests whose influence has been decisive in maintaining the existing state of things. The ministerial bureaucracy composed of hundreds of thousands of officials, is an obvious obstacle to attempts at changing the existing structure since the latter invariably threatens its own power as we have seen after 1957 and 1965. On the other hand, the party has a structure which doubles the economic hierarchy at all levels in order to control it (a control which is moreover not very efficient). Several officials belonging to the middle or lower levels of the party remain apprehensive about their influence or indeed the very

existence of their functions, in case of growing independence conferred on economic units. Among the directors themselves we can observe very diversified attitudes : many prefer the prevailing system whose functioning is familiar and characterised in certain respects by a definite routine to a situation where risks will be higher, and where the paternalism of the ministry vis-a-vis enterprises under its command will diminish or cease. A more or less favourable position towards reforms on the part of the directors equally depends on the position of the enterprise, if the enterprise is "competitive", capable of independence taking into account its potential profits, its degree of concentration, the extent of virtual competition on the market, it will profit more from decentralisation - such a point of view can even be shared by the workers. Among the latter too there are cleavages, the majority of less qualified workers fear the reemergence of unemployment, retrenchment or dismissal and wage differentiations and increases in prices, which to them are synonymous with reform. On the other hand more qualified workers and a section of technical officials have a more favourable attitude. Finally, it should be underlined, the history of the Soviet Union makes it very difficult to envisage a convergence of various interests and different social groups towards a programme of profound institutional reforms of the kind that was provided by Czechoslovakia in 1968 or Poland in 1980-81.

Only the future can say whether the existing framework will one day be questioned and transformed. As it stands today,

the Soviet leadership appears to be resolved in maintaining prevailing contradictions which have become particularly sharp and acute these last years instead of embarking on a perilous road filled with all sorts of traps at the level of ideology, social stability and internal policy, as much as in international relations - the road leading to a reform of the economic system. Will they perhaps one day regret conservatism when - who can tell? - it will be time to introduce necessary changes under some unexpected pressures?

III AGRICULTURE:

The immense breadth of the territorial boundaries of the Soviet Union contrasts with the low proportion of its arable land : 10 per cent of the total area. The predominantly continental character of the climate and the high latitudes are at the root of the natural constraints which weigh upon agriculture : cold, drought, to which the irregularity of rain may also be added. About 69 per cent of its ploughing is done under uncertain cultivation conditions, with strong fluctuations in the harvests. The agricultural sector is therefore considerably dependent on climatic conditions for its results. In such a situation, problems of organisation (traditional in this sector) obviously multiply their effects. The paradox is well known : the biggest state on this planet, having the widest agricultural area at its disposal, the world's leading producer of wheat, oats, beet, sugar, potatoes, and also of tractors, combine harvesters and mineral fertilisers - this state is unable to feed its population by itself and is dependent upon imports of food-stuffs and grain secured from the western countries. Despite the progress accomplished since the 1960s, agriculture remains a weak and sick sector, whose contradictions weigh heavily upon the rest of the economy.

The rural population accounts for 36 per cent of the total, and 20 per cent of the working population are employed

-in agriculture. Globally, these are high figures for an industrial country. The drift from the land, facilitated by the loosening of the system of internal passports since the 1970s, continues despite the relative improvement in the conditions of life of the peasants. The drift consists mainly of more qualified persons and the youth, which contributes to a rise in the average age of the rural population and often accentuates the unequal distribution of labour power, by certain regions having a real shortage in manpower - Siberia is not the only example in this respect. Thus, every year several millions of persons are mobilised from the cities to give a hand for the harvest. In 1979, the number grew to over fifteen million, of which a half were workers from the productive sectors, besides members of the Komsomol, students, soliders, etc. This regular tapping of urban manpower reinforces the tendency of enterprise directors to hoard labour power.

1. Kolkhoz, sovkhov, private peasant plots

Land is formally owned by the state - known as ownership of the whole people. State farms or sovkhov, are set up directly under this form of ownership. The kolkhoz are

collective farms that are organised on lands given to them by the state which they occupy in permanent tenure. The means of production and the produce are the property of the kolkhoz, that is to say, collective. This latter is considered as a lower form of "socialist ownership" and as the Constitution recalls, must be progressively brought closer to state ownership. Finally, peasant plots or the "auxiliary economies", that are in fact a form of private ownership. Kolkhoz, sovkhov, and private peasant plots form the three types of agricultural organisation in the USSR which originated from the collectivisation of land at the turn of the 1930s which, at the price of a near civil war of state power against the peasantry, irreversibly overhauled the agrarian structure of the country. Since this "revolution from above", the kolkhoz have witnessed an increase in their size, a decrease in their numbers and some of them have been transformed into sovkhov - especially towards the end of the 1950s. Today, there are 26,000 kolkhoz, and 20,000 sovkhov, each exploiting approximately a half of the cultivated land of the country. The huge size of the sovkhov have led some to speak of gigantomania : on an average each represents 17,000 hectares of serviceable agricultural area (of which 5,400 represents sown area) against 6,600 (of which 3,700 represents sown area) for a kolkhoz. These figures conceal huge regional disparities.

An average kolkhoz re-groups several villages and includes about five hundred families. It is led by a president, in principle elected by an assembly by members belonging to the

kolkhoz but actually nominated by the local party organisation on the nomenklatura. Work is organised by brigades. A part of kolkhoz production goes as compulsory deliveries to the state, that the latter pays for according to procurement prices differentiated by zones. For supplementary sales above state quotas, prices are raised by 50 per cent. All these sales along with the surplus sold on the kolkhozian (free) market, form the revenue of the collective, along with the remaining part of production in kind. Once the deductions for various economic and social funds are made, the residual revenue is the source of individual revenues paid to peasants for collective work. Until the 1960s, remuneration of kolkhoz members was made on the basis of the principle of ^{work} / king-day units. Revenue from collective work was quite often very low since it was dependent on the results of production and especially on state levies which were extremely heavy (very low prices for compulsory deliveries) during the Stalinist period. Since then, a minimum revenue has been introduced, as well as the wage form for work done, which is similar to piece work. Wages depend on labour time or work done, with bonuses for exceeding plan targets. They are paid on a monthly basis, principally in a monetary form, but with a portion of production in kind (about 10 per cent) and with an adjustment according to the results of the kolkhoz at the end of the year. The average wage still being dependent on the revenue of the collective farm, incomes vary considerably from one region to another and even within the same region.

In recent years organisation of autonomous teams were encouraged within the kolkhoz. The zveno is generally entrusted with a piece of land and the means of production, and is left free to organise his labour. Remuneration is linked to collective results and is shared between the workers. This form is related in certain respects to the brigades in industry and construction, and has witnessed an obvious increase. In 1978, a quarter of the agricultural area of the RSFSR was organised in this fashion with an average productivity that exceeded other units by about a fifth. Such a phenomenon shows the absence of motivation among the majority of peasants within the traditional collective structure of the kolkhoz.

The sovkhoz, on the other hand, is a state enterprise organised in a manner similar to an industrial unit. The director is nominated by the administration. Wages are similar in form to that of industry : they are dependent on national wage scales and not directly on production results as in the kolkhoz. In general, a sovkhoz is not only bigger but better equipped and more specialised than a kolkhoz - often in cattle-breeding, and around the cities where it contributes to deliver milk, vegetables, etc.

As for the famous peasant plots or family farms, they constitute a central feature of the agrarian system, despite their low area : 3 per cent of the cultivated area of the USSR, (but 7 per cent in the Ukraine and 21 per cent in Georgia). Private production still represents, according to official figures, more than 25 per cent of total agricultural production.

In 1980, it provided 64 per cent of potatoes, 42 per cent of fruits, 23 per cent of vegetables, 32 per cent of eggs, 31 per cent of meat, 30 per cent of milk, 21 per cent of wool, produced by soviet agriculture. Private plots play an important role in the economy and in the rural way of life. They are owned not only by thirteen million kolkhoz households, and the million sovkhos households, but also by about ten million workers and employees from other branches. The average size of a plot owned by a member of a kolkhoz is 0.31 ha, and the maximum legally permissible is 0.5 ha. The private plot accounts for about a quarter of the total revenue of the family, an undoubtedly important figure but nothing compared to the Stalinist period where income from labour upon the collective lands was extremely low. A sizable part of the produce from a private plot goes in self-consumption while the rest is commercialised on the "kolkhoz market", which has free prices though it is closely regulated by the state. Cultivation in private plots is particularly intense, little mechanised and rests above all upon female labour and also upon the labour provided by retired persons and children. Most fodder comes from the agricultural collective. The private sector thus depends on the collective sector ; its fate is especially dependent on the more or less restrictive policies of the state and the history of the Soviet Union has known considerable variations in this domain. The recent period has witnessed a greater tolerance by the authorities who appear to be more appreciative of the contribution of private plots and their potentials in a period of acute food crisis. We also witness the development of farm enterprises,

dependent on factories, which provision their canteens and cooperative stores for the workers.

Mention must also be made of the recent development of specialised unions between kolkhoz and sovkhoz and agro-industrial complexes integrating different activities and presented by the authorities as being part of the process of bringing together the town and countryside.

Taken together, the numerous organs of agricultural management (the party at different levels, Ministry of agriculture, Ministry of material supply and stocks, etc.) subject this sector to a rigid control that is not always consistent. The absence of coordination between the Offices and the Ministries has particularly negative effects. The "petty tutelage" vis-a-vis production units is no less than in industry, and interferences in daily management also constrain the managers to concentrate upon the short-term, on the plan or the campaign in progress, to the detriment of a more distant or long term vision. The reforms of 1965 have loosened the control on agriculture but without entirely doing away with the heritage of the past. The basic plan indicator, is the deliveries to be made to the state.

2. A priority but sick sector

Agriculture has been one of the major priorities of the leadership since the 1960s and the sector has witnessed a number of successive measures and campaigns to improve its functioning. On an average, investments in the agricultural sector have changed from 15 per cent of the total during the

1950s, 18 per cent in the 1960s to more than 26 per cent during the 1970s and the authorities foresee pursuing these costly efforts. Especially purchasing prices of agricultural products by the state - in particular those that the state pays for kolkhoz deliveries (about a third of the harvest) have been regularly increased. The leadership has progressively succeeded in putting an end to the situation of exploitation that agriculture suffered under Stalin, by effecting a reversal in the relation of this latter with the rest of the economy, for which it now represents a burden. The cost of this policy has been high, notably from the fact that the leadership keeps the retail prices of food products frozen, while simultaneously increasing the buying price of agricultural products. The state is thus compelled to advance heavy subsidies for products as milk and meat. The real cost of beef is 3.50 roubles per kilo, while its retail price is 2 roubles - the same as butter which actually costs 5 roubles, but is sold at 3.50 roubles.

One of the major consequences of such a policy has been a gradual improvement in the standard of living of the peasantry which, low in the beginning, is today approaching an average urban standard whose growth was less rapid. This phenomenon was accompanied by a process of establishing a form of agricultural wage labour, a guarantee of minimum income and the granting of retirement benefits and social security to the members of the kolkhoz. The average income of a kolkhoz member from collective work represents 60 per cent of the

average wage in industry, while that of a sovkhos member is about 80 per cent. To this can be added the incomes from private peasant plots. However, the disparities between the regions are considerable in the kolkhoz sector (from 2 to 7 according to the zones). These have cumulative effects on the social differentiation in the countryside, with a majority of peasants without qualifications, whose work remains essentially manual, the distinct group of qualified workers (tractor drivers, ...) on the one hand, and a differentiated ensemble of rural notables : party functionaries, management personnel, specialists, accountants, agronomists, doctors ... on the other. The summit of the hierarchy is made conspicuous by access to an education, to diplomas, by conditions of life and especially by the relationship to the political authority. More than 90 per cent of kolkhoz presidents and about half the specialists are members of the party.

The constant and recurring difficulties visible in soviet agriculture are not exclusively related to the huge delay accumulated during the Stalinist period, which progress, recently registered, helped to sizeably reduce. These difficulties are also explained in a large measure by the contradictions of the industrial system itself and its relationship with the agrarian economy.

Production of different equipments for agriculture is carried out under the responsibility of several industrial ministries for whom the production of these equipments sometimes assumes secondary importance. The State Committee in charge of

distribution of equipments is often negligent of the quality of material provided. As in industry, there is a chronic shortage of spare parts for agricultural machines, and maintenance services are notoriously deficient. About a quarter of the total number of tractors and machines are rendered constantly immobile due to this fact alone. Such a tendency reduced the efficiency of mechanisation efforts since the 1960s. In fertilisers, more than 15 per cent of deliveries are lost due to bad conditions of transport, packaging and storage. An analogous problem is posed at a bigger level in the case of grain where losses are considerable. An important reason is the absence of implements to harvest, due to either a lack of machines or of an adequate labour force within the limited delays imposed by the climate. But losses can also be observed during transport, stocking and transformation where capacities are insufficient, so that the proportion of losses increase during good harvests. Preserving of agricultural products thus suffers in general from the contradictions of management and planning in industry, transport and trade. N. Tikhonov raised this problem at the Twenty-Sixth Congress of the CPSU, emphasising that this not only concerns grain, but also vegetables, potatoes, meat, milk and fodder. Finally, we can observe, as in industry, the profound gap between the extent and level of technical and agronomic research and the actual realisation of the transformations effected in agriculture.

The results of soviet agriculture in the last two

decades are far from being entirely negative - different productions have considerably increased, after having started from quite low levels. The annual (average) production of grain, which was 130 million tons in the 1961-1965 quinquennium, reached 180 million tons in 1971-1975 and 205 million tons in 1976-1980. However, the increase remains extremely irregular and the climate is not the sole factor determining the process.

PRODUCTION AND IMPORTS OF GRAIN

in millions of tons

Harvest years	Production	Net imports
1960-1972 (annual average)	150	-3
1972-73	169	21
1973-74	222	5
1974-75	196	0.4
1975-76	140	25
1976-77	224	8
1977-78	196	17
1978-79	237	13
1979-80	179	30
1980-81	189	34

Source: US Department of Agriculture (cited in Financial Times, 28/6/82).

Note : From 1981, Soviet annual statistics have stopped giving figures of grain production. While the annual objective of the five year plan is 239 million tons, Western estimates record 170 millions for 1981, and 170 to 180 million tons for 1982, which was thus the fourth consecutive year of bad harvest.

The recurrent and not inconsiderable disparity between planned objectives and results is an index of the failure of state policy towards agriculture, if we take into account the extent of the effort in favour of agriculture: investments, subsidies, etc. The development of this sector remains essentially extensive and with a growing cost. Labour productivity remains very low when compared to the western countries, where a farmer feeds a number of non-farmers two to five times higher than the soviet farmer. We can reasonably estimate that the USSR will maintain gross imports these coming years of about 40 million tons of grain from the western countries (USA, Canada, Argentina...). These latter, including mainly fodder for livestock, as well as imports of food products, are a revealing indication of the crisis in soviet agriculture, the same as food shortage in the cities, which has aggravated these last years.

IV. FOREIGN ECONOMIC RELATIONS:

1. Monopoly, non-convertibility, bilateralism

Relations between the soviet economy and the outside world are linked in their structure as much as in their functioning, to the internal organisation of the system. The subjection of national production to administrative planning, centralisation of the process of material supplies and deliveries of enterprise, and the forms and particular functions of money and prices in the USSR, do not allow a direct and non-mediated opening to international exchanges. The soviet leadership has for a long time been dominated by a theory which emphasises the dangers for a backward economy, to enter into "free trade" with the developed countries. To this can be added the "mistrust vis-a-vis trade" and the political and military objective of removing any form of essential dependence on the western world. Since 1971, the Soviet Union has consequently known a state monopoly of foreign trade. All enterprises and sectoral ministries interested in either exports or imports, must go through the intermediary of the Ministry of Foreign Trade, and its organisations, as well as Gosplan. Exports and imports of the various branches are integrated into internal planning. The differences in the modes of regulation between the western economies and the soviet economy also have their effects in the domain of international exchanges : while the former generally witness a production dynamic which leans towards exports, the latter tends to distinctively lean towards imports, and exports to

finance the latter.

The system of wholesale prices prevailing within the USSR has its own peculiar logic - or if one prefers, its own illogicality, as well as its own structure. It has to be and actually is disconnected from prices prevailing within world markets, whether these are capitalist or socialist. The state monopoly of foreign trade makes possible this independence of internal and external prices. Similarly, the internal rouble is dissociated from the rouble used in foreign trade to evaluate imports and exports, these having been effected at prices which vary according to the respective countries : "world" prices for exchanges with the West, which are realised in hard currencies, and prices close to world market prices for exchanges within the Comecon, realised in "transferable roubles". The foreign trade rouble or rouble-currency, and the transferable rouble essentially have a function of accountability. What is important here is that the internal rouble remains non-convertible. This circumstance, combined with the fact that prices do not have a function of allocation, explains the essentially bilateral character of the exchanges of the Soviet Union with various countries. The moment internal production is subjected to planning and all commodity exchanges get mediated by vertical links, foreign trade must be rendered coherent with the system. Imports as well as exports must be integrated into material balances and to the centralised mechanism of deliveries and material supply.

A multilateral trade presupposes convertibility of money and a relation between national and international prices, so that deficits and surpluses vis-a-vis the different countries compensate themselves. It also implies that relative prices influence the structure and composition of exchanges - access to the external market must also be possible for national enterprises to effect their purchases and sales. All these factors are absent in the case of the Soviet Union. Trade is, therefore, conducted upon the basis of planned instructions, which seek a balance in relation with each country and not with all the trading partners considered globally. The state monopoly not only allows for a socialisation of profits and losses of foreign trade through the budget but it also allows a control of the balance of imports and exports. All enterprises involved in exchanges abroad conduct these transactions at internal wholesale prices, while the positive or negative difference with international prices are appropriated at the state level.

Monopoly, bilateralism, non-convertibility, and planning of foreign trade, certainly have their drawbacks - an obvious rigidity in international economic relations and a relative inefficiency of short-term planned choices (by lack of information and time). Dependent on the internal organisation of the economy, they nevertheless present certain protectionist advantages, but whose secondary effects can prove to be undesirable.

The Soviet Union is distinguished from its socialist

partners of the Comecon by the low weight of foreign exchanges in its economy, calculated to be about 7 per cent of the total production. Conversely, the share of the country in world trade remains particularly small if its economic power is taken into account. This relative autarky is made possible by the immense size of the country and its resources. However, one must not neglect the qualitative importance of exchanges, whose volume grew considerably at the end of the 1960s and especially during beginning of the 1970s, notably in imports of grain, foodstuffs and technology.

2. Hegemony over Comecon

One half of soviet imports and exports are accounted in exchanges with the Comecon or the CMEA - the Council for Mutual Economic Assistance, comprising Bulgaria, Hungary, Poland, GDR, Romania and Czechoslovakia in Europe, and Cuba, Mongolia and Vietnam, elsewhere. Inside this "international socialist market", the soviet giant occupies an indisputably dominant position not only from its sheer size (2/3 of the total population of the socialist countries of Europe) but also by virtue of a particularly complex and original structure of dependence which relates it to its partners. (cf. G.Graziani).

Relations are dominated by bilateralism, and exchanges are conducted on the basis of barter agreements, resulting from laborious bargaining. Prices for the same product can thus vary in the exchanges with different countries. Further,

currencies are not convertible, and a conventional currency - "the transferable rouble", is used to account imports and exports. A multilateral clearing is in principle operated by the International Bank of Economic Cooperation, but the "transferability" of the international rouble hardly has any significance - exchanges, which remain principally bilateral, being first planned in physical or material terms, then expressed in money. The heterogenous character of national price systems is thus combined with diversity in international prices and multiple exchange rates according to the countries. Under these conditions, only an administrative control is capable of preserving a certain volume and a certain structure of trade. In a manner similar to what can be observed in the internal economy, the price system along with the planning of exchanges, is a fundamental obstacle to all reforms directed towards horizontal links, since the latter will imply a minimum degree of multilateralism and convertibility.

The structure of exchanges between the Soviet Union and the European countries of the Comecon has a specific character - a parallel can be observed here with the underdeveloped countries - since it exports mainly raw materials and fuel and imports transformed products as equipment and consumer goods. Export prices of raw materials, which have been lower than world market prices for a long time, have been brought closer since 1975, by an annual revision on the basis of an average of world market prices of the five preceding years, enabling the USSR to profit from the increase in international

prices, especially for oil.

But the phenomenon of dependence in the Comecon is not only restricted to commercial exchanges, but also includes the coordination of economic actions taken together, where despite nationalist resistance and the absence of supranationality (the principle of unanimity for common decisions), Soviet hegemony goes unchallenged. The principle of coordination of plans which is derived from the principle of "socialist integration", relates to planning in the medium and long-term, and not operational planning, that is to say, annual. Common planning in the strict sense would imply a supranationality which is actually excluded, contrary to military decisions of the Warsaw Pact. Coordination is effective only in certain basic sectors (energy, metallurgy, chemicals, mechanical construction and transport) and it very often remains bilateral. Specialisation agreements depend on the international division - called "socialist" - of labour. These relate especially to mechanical construction and are generally limited to finished products, in opposition to a specialisation of components, which would have to have an inter-branch character. The USSR possesses an obvious advantage in this field, being the only one in the position of a choice not to specialise, while at the same time benefiting from certain kinds of productions in which its partners are specialised. Common investments are realised for the most part in the Soviet Union, and involve huge projects, exploiting natural resources, the most important being the gas pipeline between the Urals and the

western frontier. Funds from the various participating countries are then reimbursed with products provided when the investment is realised. The Comecon countries thus benefit from supplies in energy and raw materials which they badly need, but their dependence also grows from the same fact. In addition, all completed enterprises and installations become the property of the USSR which exclusively retains control of their management. More importantly, these countries must withdraw a part of their internal capacities of investment, which are precious in a system having forms of regulation analogous to the Soviet Union - they are thus sometimes compelled to take expensive loans in hard currency to finance joint projects. Conversely, these contributions contribute to lighten the burden of the effort of Soviet modernisation and extensive development, the origins of future exchanges with the western countries; about 3 per cent of industrial investment in the USSR are thus provided by its partners in the Comecon. Socialist integration, which can only mean increased dependence towards USSR, obviously knows limits. Obstacles of bilateralism and inconvertibility are combined with nationalist resistances to economic supranationality, and with the relative attraction of economic relations with the western capitalist world which, for USSR as well as for its partners, competes with the widening of intra-community ties. The development of East-West relations has been reduced since the half of the 1970s, and socialist integration has conversely been enhanced. The importance attached by the different

socialist countries to trade with the West, manifests itself especially in the distinction between "hard" goods and "soft" goods within the Comecon. The former include fuel and raw materials, (rare in socialist markets), which are potential sources of Western currency, and the latter include outdated equipment goods and consumption goods which are not given priority. Each country seeks to preserve its hard goods for trade with the West and leave its soft goods, which do not compete in the world market, for trade within the Comecon. Bilateralism within the Comecon affects this domain equally : in the relations among the various countries, an equilibrium is sought for hard goods on the one hand and soft goods on the other. The "Gresham law" familiar to economists, requires that bad money pushed out good money - this appears to find an analogy in the socialist economies in the sense that bad products chase at the good ones : it is sometimes difficult for a Comecon partner to secure the many hard goods that it desires from a partner, particularly from the Soviet big brother.

3. Exchanges with the West

The big leap in exchanges with the western countries in the beginning of the 1970s, had the need for technological modernisation and the grain deficit, as its main impetus. Here again, imports have "pulled" exports, and the increase in the world market price of oil and raw materials has opportunely helped the Soviet Union in this domain. At the beginning of the 1980s, a third of Soviet foreign exchanges were realised with the West.

The framework of relations here also, is in general, bilateral, and consists of cooperation agreements with western partners. In 1981, fuel accounted for 15 per cent of soviet exports while major imports included machines and equipments (about 40 per cent) as well as agricultural and good products (about 25 per cent, especially grain, sugar, coffee, vegetables, fruit and meat). Here again we find a structure of exchanges that is typical of a developed industrial country which is explicable only in the specific context of the internal contradictions of the economic system in industry as well as in agriculture. Soviet resources in raw materials allows the Soviet Union to experience a smaller decline in exchanges with the capitalist world than its partners in the Comecon. Economic relations with the West, especially the USA, remain sensitive to the international political climate. But the soviet leadership knows how to exploit western competition and inconsistencies, as witnessed during the American embargo on grain supplies after Afghanistan and for the oil pipeline affair where the European countries and the USA stood opposed to each other.

Technological imports which can be analysed both as a substitute for reforms and as an index of the failure of the economic system, are in principle directed to reduce the backwardness of the country. But they did not produce a rapid diffusion of advanced methods inside the economy, for reasons that we have analysed in the context of the internal difficulties of the system as with the gap between research

and development on the one hand and industry on the other. The linkage effects of equipment imports are thus kept partially in check.

Finally, exchanges with the Third World, especially in the Middle East and in South Asia, occupy a secondary place in external relations of the USSR, in contrast to the various forms of "aid" procured by the soviet superpower in the field of training and technical assistance, especially in the military domain. During 1977-1980, the USSR was the second world exporter of heavy armaments, accounting for about 28 per cent of the global market after the USA (43 per cent and ahead of france (11 per cent); but it occupies the first place in arms deliveries to the Third World.

Limited by the absence of multilateralism and convertibility and characterised by a low efficiency of foreign exchanges, the soviet system hardly appears to be in a position to provide an alternative to the economic and monetary crisis of the international occidental system nor in proposing an attractive model for the Third World today.

V THE SOVIET MODEL OF DEVELOPMENT:

1. Extensive Growth and its limits

The decline in economic growth which became visible in the USSR from the end of the 1950s gave rise to several debates among the economists. The idea of the necessity of passing over from a model of extensive growth to a model of intensive growth appeared. This theme continued to be dominant in the seventies, revealing in the process, the structural difficulties of such a transformation. At the Twenty-Sixth Congress of the CPSU (1981), Brezhnev again affirmed that among the problems posed by the economy for the eleventh quinquennium, the most important "consisted in achieving the transformation to an essentially intensive form of development", and Tikhonov, President of the Council of Ministers, declared that "everything must be subordinated to the intensification of the economy". Extensive growth is based above all on a quantitative increase in the factors of production : the labour force and capital, while productivity gains remain relatively low. The character of intensive growth on the other hand, is based mainly upon qualitative transformations in production, accompanied by important increases in productivity.

Considered as a whole, there is no doubt about the extensive nature of growth that characterized the Stalinist epoch, if we take into account the massive increase of industrial manpower, the high rates of accumulation, correlated to a severe restriction in consumption, and the creation of new branches and new economic zones. The traditional sources of this development tended to become exhausted towards the 1960s.

Actually, the problem of productivity and its lack of dynamism appeared very early in the USSR. But it could not manifest itself very sharply in an economy where the degree of complexity and socialization was not very high - a period when big enterprises were being constructed for the first time, often copied from Western technology and when reserves in agricultural labour power seemed inexhaustible. However, internal obstacles to innovation and technological progress were already present.

As a result, the predominantly extensive character of growth and the corresponding weakness of its intensive component, appears more as a trait which became structural of the model, which tends to perpetuate itself ^{even} when economic policies are modified in their priorities, than as a strategy of development. An extensive model, implied first by the strategy of rapid industrialization corresponding to "primitive accumulation", i.e., by the voluntarist orientation of the Stalinist state, has now been transformed into an integral element of the structure of Soviet economic organization.

In general, the contradictions of the planning process and the forms of regulation through shortage, induce managing officials to an effort towards expansion, and the latter is expressed in extensive rather than intensive attitudes towards development. The expansion drive has various causes at different levels. The structure of economic and political power and the ways by which the ruling class and its many components are constituted, implies a certain identification of the responsible official (a member of the nomenklatura) with

the unit, sector, administration or region he is in charge of. The hierarchy demands of any sub-system to function "for the better" and there is, therefore, a strong pressure over each manager to ensure that the organization he controls actually "works". But in order to function properly, he must extend or seek for means to extend, as we have seen in the context of the bargaining which accompanies the formulation and implementation of the plan. The extension of power and influence acquired earlier by interest groups, is often linked to the portion of social capital controlled. The director of a small enterprise for example, does not possess the same weight in front of the ministry or local party officials and nor can he have the same facilities or wages as the director of a big enterprise. Furthermore, local and regional authorities where power has a strong client base, search for means to develop basic industries in the areas of their jurisdiction, knowing that not only jobs but non-productive investments as well (education, health, culture) will soon follow. As far as the ministries are concerned, they are as we have seen, caught in competition of a kind in which each aims to reproduce and extend its own sector. Finally, the central authorities for their part have sectoral priorities and have since a long time pressed for strong growth. To social and political causes of the expansion drive, linked to the phenomena of power, can be added, the perverse effects of the incentive system which is based on quantitative indices and is centered on the realization of the current plan creating major hurdles in innovation and diffusion of the dynamism of technological progress

in general. Finally, the price system and the passive character of money, practices such as "prevalidation" of production, the low recompensation recovered from technological improvements and the risk that this represents in the short-term, contributes to orient the directors to concentrate more upon quantitative objectives. Leaders and economists became aware in the 1960s that behaviours of the expansion drive linked to an extensive model and to regulation through shortage, if they had ensured despite everything else, a rapid industrialization of the country even, nevertheless progressively lose their efficiency in a more developed, complex and socialized economy, such as the USSR of the post-Stalinist period. Moreover, they are rendered increasingly counter-productive with the exhaustion of the sources of extensive growth.

The recurring difficulties in the field of productivity are particularly significant. The growth of labour productivity in industry (apart from measurement problems posed by official indices) declined from 6 to 8 per cent per year in the fifties to 3.4 per cent during the tenth quinqueneum (1976-1980); it reached 2.7 per cent in 1981 and 2.1 per cent in 1982. Like their Western counterparts, Soviet economists consider productivity in the USSR to be about half of the USA. Excess of manpower at the level of enterprises, especially in auxiliary services, loss of time caused by a deficient system of material supply, underutilization of capacity due to the importance of repairs or outworn machines, relatively average weak intensity of labour and irregularity of work, workers' resistance to an increase in norms and rigidity of labour organization - all these

factors prevent or contradict a rapid "intensification" of production. But there is more. The absence of independent workers' organizations, the centralized fixing of the wages fund as also the centralization of profit, suppresses the conflict between wages and profit for the individual manager. Not only has competition between enterprises under classical forms disappeared but neither does the worker/manager conflict for the sharing of wages/profit really take place. Inter-firm competition and the "class struggle in production" in the sense of conflicts of distribution within the enterprise, two fundamental causes for technical progress under traditional capitalism, are therefore rendered partially deficient here, which explains the low level of incentives prevailing among the managers to innovate. With respect to efficiency of investments, there has been a falling tendency since many years. In 1982, unfinished construction accounted for 85 per cent of annual investments, as against 65 per cent in 1965. There is a risk of this problem being aggravated during the eleventh quinquennium which anticipates a reduction of increases in investments.

The Soviet model of development, known since long for its high rates of growth, appears to have exhausted its potential. With the exception of the period following the 1965 reforms, the decline in growth has practically not ceased since the fifties. In addition, growth remains extremely irregular according to the years, branches, or sectors of the economy. The open crisis of all these last

years has led to considerable recessions in many branches as metals, cement and automobiles in 1982.

The expansion drive and the extensive behaviour of development at the different levels lead paradoxically, through the emergence of latent or open shortages, to a slackening of growth. Planning invariably tends to nurture this vicious circle. Most of the five year plans display an optimism about the future. Despite the relatively greater realism under Brezhnev as compared to the Khrushchev epoch, not to speak of the Stalinist period, such an attitude continues to prevail as shown by the growth targets in consumption of the Eleventh Plan. Alexander Smolar thus characterizes planning as a mechanism of managing conflicts which consists in postponing painful choices between divergent targets - so that by the force of things, it is only during the realization of the plan that the sacrifices are realized and often to the detriment of the same sectors. Hence, the recurring, and not inconsiderable gap, between proposed targets and actual results.

Progressive Decline in Growth:

Growth in volume of national income, annual average		

Sixth Plan	1956-1960	9.1%
Seventh Plan	1961-1965	6.5%
Eighth Plan	1966-1970	7.7%
Ninth Plan	1971-1975	5.6%
Tenth Plan	1976-1980	4.3% (Objective : 4.7%)
Eleventh Plan	1981-1985	3.5% (Objective)
		Realization 1981 : 3.2%
		1982: 2.6%
		1983: 3.1%

These figures are based on official Soviet statistics, which in general tend to overestimate growth. Thus the figure of 3.2% in 1981 is hardly credible. Western estimates are lower, but indicate a similar development in the long term.

2. Imbalances of Accumulation

Current conceptions of the "planned" or "command" economy attribute to the state a control of economic development and its orientations which does not in any way correspond to reality. The development strategy of the first five year plans implied an accelerated growth of the entire industry, a priority to heavy industry and the extraction of tribute from agriculture. From the 1930s the system began to evolve in a manner that was very different from what was envisaged. Nevertheless, the state succeeded in imposing a massive expropriation of the peasantry, the formation of a huge working class and creation of a basic industry, thanks to the extreme concentration of investments. But the disproportions that appeared during this difficult period - the collapse of agriculture, the lagging of light industries and housing, tightening of consumption, hypertrophy of heavy industry - were soon transformed into structural imbalances. Very soon, the medium term sectoral or regional objectives of the "Centre" found themselves opposed by economic as much as by bureaucratic forces, as was the case of the ministerial lobbies.

We have seen that the policies pursued under Khrushchev and later under Brezhnev had modified the conditions prevailing in agriculture as a whole vis-a-vis the rest of the economy.

However, problems remain in agriculture, affected by the heritage of twenty-five devastating years (1929-1953).

If we look at industry, we can see that the famous priority to sector A (production goods) in relation to sector B (consumption goods), was metamorphized into an "objective law", to borrow a well known expression from the political economy of socialism. During the plans, in which the priority of sector A over sector B formed an integral part of the objectives of the leadership, the relationship between the growth of the two sectors, was almost always aggravated in favour of A in actual results, as against those anticipated by the plan. When the objective of the planners went in favour of a more rapid growth of B over A, the process ended in general with the traditional priority remaining with A. Let us note that about one half of consumer goods is accounted for in industrial foodstuffs and is thus dependent on agricultural results.

The gap between the growth in the two sectors has tended to reduce since the half of the 1960s. Growth rate of B have exceeded those of A between 1968 and 1970, without this having been anticipated. The 1971-1975 plan envisaged a higher increase for Sector B, but it was the inverse that occurred. The Tenth Plan aimed at a more rapid growth of A, which was realized, but beyond the figure anticipated initially. The new Eleventh Plan (1981-1985) has the development of sector B as its priority but the odds are heavily weighted against maintaining the priority. The failure of provisions relating

to the development of consumption is therefore recurrent.

The defacto priority given to sector A, as an inherent trait of the Soviet model of development, seems confirmed a contrario, by the Hungarian example where the tendency has reversed since the 1960s. This was also the only country where a global reform of the economic mechanism (suppression of macro-economic planning, of centralization of material supply, etc.) was set in motion.

The debates among Russian Marxists at the turn of the century (Tugan-Baronovski, Lenin, Bukharin) had advanced the hypothesis of a kind of self-centered development of the sector producing the means of production. The Stalinist model in some respects, is the material realization of this hypothesis and its heritage still weighs heavily on the economy today. The outlet for sector A is above all ... itself. The consumption goods sector remains consequently under-equipped, "labour-intensive", and has a productivity that is clearly lower than the global average. After a certain degree of development, the efficiency of growth can only decline, to the extent where sector A in the USSR corresponds to heavy industry in large measure (metallurgy, chemicals, mechanical and construction materials) in which the relation between capital and labour employed, i.e., capital intensity, is high and growing.

Growth of Sectors A and B :

Relation between the rates of growth of Sector A and Sector B.
A number higher than 1 indicates a more rapid growth of A,

while lower than 1 indicates a more rapid growth of B.

Five Year Plans	Planned	Obtained
1928-1932	1.63	2.42
1933-1937	0.79	1.29
1937-1940 ^a	1.37	1.52
1950-1955	1.18	1.16
1956-1960	1.13	1.32
1961-1965	1.27 ^b	1.50
1966-1970	1.11	1.01
1971-1975	0.96	1.21
1976-1980	1.17	1.24
1981-1985	0.96	

a - Plan interrupted by the war

b - 1959-1965 Plan

Source : A. Scmlar: La planification comme processus d'apprentissage; le cas soviétique; the last two plans from official Soviet statistics.

Technical progress is generally concentrated in Sector A, but without extending to sector B. Further, "mixed" branches (including both A and B) with a less higher capital coefficient but strong technical progress, do not expand sufficiently and remain relatively underdeveloped, whereas they played an essential role in the Fordian growth of the western type : cars, electronics, plastics, precision instruments ... In some branches we thus observe a development that is intensive in certain respects, but in others,

extensive forms continue to be predominant. The former branches do not drive the latter and this relative disarticulation of sectors A and B is expressed by a tendency towards "autarkic" growth, of the production of the means of production to produce means of production. In such a model, consumption objectively assumes the form of a residue or shock absorber, contrary to Fordism where it constitutes a decisive link in the "virtuous circle" : growth in productivity/intensive accumulation/increase in consumption norms/increase in real wages. The increase in the standard of living in the Soviet Union consequently often lags behind the development of the economy as a whole, and limits in turn, the productivity of labour. A growth in productivity in the consumption goods sector, permitting a relative devalorization of labour-power (by decrease in the value per unit of goods produced), while making possible an extension of mass production and consumption, as in the Western Fordian model, finds itself blocked here.

The majority of Soviet industries function with a high proportion of intermediary consumption. This peculiarity depends notably on the perverse effects of the incentive system which neither stimulates the directors to economise on raw materials, fuel, equipments (or even labour power), nor motivates them to innovate. As underlined by J.C.Asselain, "the 'normal' functioning of this kind of an economy makes necessary a permanent re-absorption by the productive apparatus, of a regularly growing mass of resources (under the form of investments and intermediary consumption)", so that the minimum

level of basic investments and of employment, for a given standard of growth, is clearly much higher than in western economies. The rate of accumulation, that is to say, the relation between investment and national income, is traditionally very high. In addition, practices of "prevalidation" of production, i.e., the fact of practically assuring the enterprise that it can sell its production, practices linked to rationing of material supplies, the passive function of money and the latent shortage situation - reduce in sector A, the limits which still exist for consumer goods, when for example buyers refuse to accept certain goods due to their bad quality.

Sector A is organized in large measure in such a way where its outlet is itself and productive consumption can always continue to increase, without really encountering the limits - or impulses - of final consumption. Demand for intermediary goods tends to become independent of total demand; it grows by its own logic and adapts itself very little to existing or never needs, present at the level of household consumption.

This kind of development thus has "systemic" roots. It cannot be reduced (although these factors are by no means negligible) to the simple expression of powerful interest groups such as the ministries of heavy industry, the "steel eaters" or the military-industrial lobby.

3. Militarization

Military production depends on sector A of industry and its growing importance influences the "objective" priority of

this sector. The military-industrial complex consists not only of branches oriented principally towards production of armaments, but also includes several "civil" branches which produce equipment and machine tools to be used in the former. Towards the early 1970s, about one-third of production in industries of transformation of metals (a proportion which could reach more than one half in the 1980s), one-fifth of metallurgy, one-sixth of chemicals and fuel, were estimated to go into military production. About 15 to 20 per cent of the working population are in the military sector.

The Soviet G.N.P. (Gross National Product) is estimated to be less than a half of the USA. But the military expenditure of the two countries can be considered in absolute terms to be equivalent. Calculations give about 5 to 6 per cent of the GNP for military expenditure in the USA and 12 to 14 per cent for the USSR: the military burden is thus more than twice as heavy for the Soviet economy than the American economy.

The position of the military-industrial complex cannot permit a conclusion, as arrived by Cornelius Castoriadis, that Soviet society is a "stratocracy", where the Army constitutes "the ultimate instance of real domination", but it nevertheless reveals the influence exercised by the military within the ruling class, apart from members of the civil economic apparatus and the Party hierarchy. In addition, beyond the arms race with Western rivals, it also shows the tendency towards expansionism inherent in the Soviet superpower which, not having comparable international economic means of expansion

and domination (as its American competitor) at its disposal, must press for a hegemony that is predominantly politico-military.

The real priority of the military sector however is expressed not only under quantitative forms, as is the case with investments. It is also, and perhaps especially, qualitative which in some measure explains the partition between the industrial and military sector, which further reinforces the already underlined separation between sectors A and B. Thus, "closed" enterprises can be found principally, though not exclusively, in the armaments industry : these include units that come under state secrets, (they have neither a name or address, and are officially designated by a post box number), in which workers are paid higher wages, have better conditions of housing, holidays, etc. The technology here is relatively advanced and is diffused more rapidly; labour is highly qualified and better; finally, productivity is fairly high. These advantages are complemented by a set of counterprovisions: workers are subject to strict control (threat of a military tribunal in case of organized action) and are denied the right to freely change their jobs. Despite this, there is stiff competition to join these enterprises, which also employ the best technicians and engineers.

We have already made reference to the special methods of planning "by objectives" in military industry. To this it must be added that the quality of manufactured products for

defence is better than civilian products. A special system to control them operates in practice. A control bureau depending directly on the Army and not on the industrial ministries of defence or on the director, can be found in all enterprises producing armaments. It has the right to supervise technical norms of production, it subjects all major items (aircraft, tanks, cannons, motors ...) to quality control tests, and effects controls over mass products, as munitions. Only those articles that have positively passed these tests can be accounted for in the results of the enterprise plan. With respect to quality, there is thus a certain reduction of the chronic deficiencies of the civil sector. However, armament production is not free from the global deficiencies of economic organization.

The gap between the civil and the military in industry, explains the absence of technological "spin-offs" from the second on to the first. The negative consequences of priority in men, equipment and material supply, are felt all over civil industry and especially in consumer goods. The very organization of this sector of military production and the relative privileges benefiting those working here, (making them a basis of support to the regime), are structurally incapable of being generalized to the rest of the economy upon which militarization can exercise the weight of its burden. The roots of the contradiction of the soviet model of development thus notably lie in not only the structural priority of the production of the means of production, but

also the politico-strategic priority, within sector A, of the "production of the means of destruction" (Castoriadis).

4. The Second Economy

There are two particularly striking characteristics of the parallel economy in the USSR: its scope and importance on the one hand and the fact that it is neither easy to define or understand, on the other. Schematically, we can consider the second economy to include all the practices and behaviours that go contrary to official economic rules and legislation. The distinction between the official and parallel economy, or between the first and second economy, can be applied to all prevailing economic systems. It is an important issue of reflection in the Western countries especially since the beginning of the present crisis. The "dual economy" is thus a feature of both, the East and West. However, its causes as well as its manifestations, are essentially different. Just as in traditional capitalist economies, under-employment and fiscal fraud represents the conditions, or the main causes of the existence of a parallel economy, the socialist economies have two different, but nevertheless related factors, which play a determining role : planning and shortage. Also, just as in Western capitalist economies, the second economy is often parallel to the first, that is to say that it produces goods and services which are similar, or which would have been produced in the first economy, in the socialist economies, the second economy is not so much parallel as complementary to the first. Complementarity can

consist in either conflict or unity - it can also have beneficial or harmful effects on the system considered as a whole, but there is no doubt that it plays a central role.

Centralized planning is based upon a system of rules and orders which often superimpose and contradict one another, compelling managing officials, especially the directors, to assume compensatory postures or adopt policies that stretch the limit of legality. To be able to implement the plan, it is necessary to violate it in some measure: certain objectives (normally those accorded priority) are realized but in order that even these be realized, several others have to remain unfulfilled. The director has to take advantage of the real autonomy in the enterprise, in order to mobilize, (given the faults of planning and hierarchical control), the factors of production that are deficient, or, again, to limit the disorganizing effects of material supply or modification in planned objectives. The agreements of informal barter between enterprises, clandestine credits between production units, buying and selling of raw materials or equipments bought on the black or (semi-tolerated) grey market, hoarding reserves of manpower, tools and machines: all these illegal practices have the satisfaction of the legality of the plan as their principal objective. They are implicitly tolerated, or suppressed very lightly. Let us also note the manipulation of statistics (declaration of the implementation of the plan when actual results are much lower than those anticipated, or when the objectives have not really been

attained) and the nonimplementation of certain contractual clauses concerning delivery (date, quality, product-mix.). A not inconsiderable part of informal but semi-institutionalized relations relate to the uncertainty of material supplies; the blat, an arrangement based on a network of influences and tolkatch who are a type of travelling-representatives charged with visiting offices or units on which the enterprise depends, to "push" or pass forward urgent requests - and should the occasion arise - with the help of some money or service in exchange.

The second source of the underground economy lies in the endemic shortage which characterizes the system. Some shortages are consciously sustained by those who profit from them, but most others are a spontaneous result of the dominant mode of regulation. They create favourable conditions for, and sometimes render necessary, a host of unofficial, often illegal activities.

Within the state sector, the fraudulent diversion or embezzlement of fuel, tools, various materials or finished goods, is a mass phenomenon. Occasionally suppressed when it reaches to unmanageable proportions, as is the case with some clandestine enterprises, it is semi-tolerated by the training personnel who are often themselves a party to it; and this "theft of socialist property" condemned by law appears as legitimate to a number of citizens for whom in sharp contrast, circumvention in individual ownership is considered immoral. Corruption is very widespread (bribes "envelopes", other gifts)

other gifts) and is sustained by the bureaucratic character and the rigidity of the administrative process, as also by global prevailing shortage. With respect to speculation, defined as activity of buying and selling with the aim of making a profit, it is obviously widespread in such a situation: cars, foreign products, "rare" goods (because they are in short supply), traffic in currency, etc.

The private sector forms an important part of the second economy. Private exploitation which is officially recognized, profits from embezzlements of state property, or kolkhoz property (fodder for cattle of private peasant plots). Let us also cite the cases of wholesale-resellers who appear in the kolkhoz market. But the most important is vast unofficial private economy where dominate various forms of black labour. Sectors particularly effected include housing, tourism, clandestine production of alcohol, innumerable services (repairs, other kinds of work, tutitions for exams or competitive courses, medical care, hairdressing, etc.).

It is impossible to estimate precisely the part played by unregistered production and the redistribution of income coming from the second economy. This difficulty exists equally in the capitalist countries, irrespective of whether they are developed or not. According to a survey carried out of over 1,200 emigre families, about 8 per cent of the active population worked as black labour and thus increased their incomes by approximately 17 per cent. Other estimates of the underground economy vary between 10 to 50 per cent of the official economy.

But this sector cannot be accounted for by definition. It remains that its quantitative and qualitative importance in the economy considered as a whole and its role in the daily life of the Soviets, should not be underestimated. Let us also note that the various black markets are highly segmented and most of them have the character of a "sellers' market", caused by the shortage obtaining within.

The overlapping between the first and the second economy is narrow, the latter resulting from the contradictions of planning or those emerging from the specific context of shortage (once again this distinction is by no means absolute). In different aspects, the second economy attenuates the rigidities of the system, lubricating the grinding wheels of economic organization satisfying certain needs which the official sector cannot or does not want to respond to. This explains the implicit tolerance of the authorities vis-a-vis many of these activities and the fact that they find this preferable to carrying through real economic reforms aimed at decentralization, since this would imply dangerous democratic potentialities. But the second economy also exists as a parasite of the first one and through a vicious circle often aggravates the "systemic" contradictions of the system considered as a whole. The embezzlement of resources in the state sector or in the kolkhoz, sparing of one's labour force in official employment, to conserve the necessary time and energy for black labour, can only weaken the efficiency of production and labour productivity in the first economy.

A worker or engineer repairing cars or household equipment in the black market, fulfills a socially useful function, which the system cannot satisfy. He increases his customers welfare, even if they have to pay a high price for it. But when he works less in his official job, indeed when he steals tools and materials with the aim of realizing his tasks in the second economy, it means that another aspect of production or services that could be particularly useful from the social point of view, does suffer. But the system is unable to provide the mass of citizens with a motivation to work, through the content of work or wages, to ensure that such phenomena are reduced. In the Soviet Union, apart from those holding responsible posts, it is rare to find individuals really indentifying themselves with their work, and for the majority of the population, the latter is often a real constraint.

Acting both as a lubricant and a parasite of the official economy, the parallel sector assumes both a marginal as well as vital character vis-a-vis the system considered as a whole. It reveals in its own fashion a number of characteristic traits of the latter. Since some years, the leadership has become increasingly disturbed by the growing incapacity of the state to provide a certain number of essential goods and services to the consumer, as also by the potential dangers of chronic frustration among the latter. A more open attitude towards private initiative has already become evident in the encouragement of private peasant plots, contained in the

decrees passed in 1977 and 1981. Some voices can also be heard in the press or in the academic world to allow greater latitude towards private activities, something which the 1977 Constitution allows in small-scale occupations, handicrafts, agriculture, and services, on the condition that these are based exclusively on the personal labour of citizens and their families. The other socialist countries (GDR, Hungary) are mentioned as an example in this respect by showing that these activities do not as any way circumvent the principles of socialism. If such an opening were allowed to be generalized, it would possible imply a reduction in existing fiscal dissuasion and would result in integrating a part of the second economy onto the first; it would certainly improve living conditions of a good section of the population. But the members of the nomenklatura are not well disposed to private activities, since what they see here is a world of anarchy and disturbing spontaneity: they prefer a priori the disorganization resulting from the domination and planning of the apparatus.

THE COLOURED TYPOLOGY OF KATSENELINBOIGEN

The soviet emigre economist Aron Katsenelinboigen has provided a classification of markets and planning in the economy of the USSR, which illustrates both the complexity of the latter and the interdependence between the first and second economy as also the relative imprecision of their respective frontiers.

Coloured Markets

1. Legal Markets

Red - Prices established centrally

Pink - Participants in transactions have some freedom to alter prices

White - Participants set prices.

2. Semi-legal Markets

Grey - Transactions are illegal but are tolerated by the authorities.

3. Illegal Markets

Brown - Exchanges are illegal but penalties inflicted are less severe than criminal prosecution.

Black - Penalty is criminal prosecution.

Coloured Planning (Vertical relations)

Red Planning : a feasible plan legally formulated and implemented.

White Planning: unworkable plan, legally formulated and implemented (arbitrary modifications of the plan during the period) or feasible plans in which exceeding on targets is required. These first two types do not lead to penal or administrative sanctions.

Grey Planning : Workable or unworkable plan, but in which formulation or implementation result in certain illegalities officially tolerated (tolkatch, blat, barter, employment of unregistered hands, minor statistical manipulations).

Brown Planning : important falsification of information

Black Planning : corruption of higher administrative echelons

Coloured plans and markets overlap and complement one another. The scope and extent of grey markets and planning, bordering on legality and illegality, is particularly vast.

Three Types of Markets

Katsenelinboigen distinguishes the following categories, the relative importance of which, according to him will change with the level of economic development (growth of 1., decline of 2. and 3.):

1. Universal Markets, especially for consumer goods : red and pink markets, black markets for prohibited items but for which there exists a demand (drugs, ...)
2. Soviet planning markets, that is to say resulting from the system and its deficiencies (over taut plans, shortage, unreliability of material supply) : grey markets in the means of production, black markets in stolen consumer goods or in which supply is insufficient.
3. Low level of development markets, white and grey markets in consumer goods, black markets linked to shortages caused by the low level of development.

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MATRIX OF HORIZONTAL INTERACTIONS IN THE SOVIET ECONOMY
(in Katsenelinboigen typology)

Producer	User		
	State Enterprises	Collectives (kolkhoz, production cooperatives in light industry)	Households
State Enterprises	<ul style="list-style-type: none"> - Rationing: centralised system of material allocation - <u>Red Market</u>: primitive form: selling of second-hand items - <u>Grey Market</u>: buying of supplies 	<ul style="list-style-type: none"> - <u>Rationing</u>: Centralised system of allocation - <u>Brown Market</u>: buying of missing spare parts from state enterprises 	<ul style="list-style-type: none"> - <u>Rationing</u>: certain food products - <u>Free goods and services</u>: education, health - <u>Red Market</u>: (major form) - <u>Pink Market</u>: reselling of goods bought from "commission stores" - <u>Brown Market</u>: under the counter sales in state stores - <u>Black Market</u>
Collectives	<ul style="list-style-type: none"> - <u>Rationing</u>: purchases from kolkhoz through centralised allocation - <u>White Market</u>: buying of food stuffs from kolkhoz by cooperative stores - <u>Brown Market</u>: buying of supplies by unauthorised means - <u>Black Market</u>: Ibid. 	<ul style="list-style-type: none"> - <u>White Market</u>: (limited) 	<ul style="list-style-type: none"> - <u>White Market</u>: kolkhoz market limited sales from kolkhoz

Producer

User

State Enterprises

Collectives (kolkhoz, production
cooperatives in light industry)

Households

Households

LABOUR MARKET

- Rationing: central
allocation of the
labour force; armed
forces; labour camps

- Red Market: (dominant)

- Grey Market: over-classifi-
cation of manpower by
directors

- Black Market: Illegal
payments, or fictitious
workers whose wages are
pocketed by the officials
of the enterprise

- Rationing: cases of kolkhoz
members without passports
(this no longer exists)

- White to light Grey Markets:
buying of group services (3
to 5 persons) by the kolkhoz;
"Chabachniki"

- White Market: Kolkhoz
market, individual
sales of produce from
private plots

- Grey Market: dachas,
construction work,
repairs in consumer
goods (cars), tuitions,
private doctors

- Black Market: major part
of the second economy
(sale of stolen socialist
property, illegal produc-
tion and sale of consumer
goods).

VI. ECONOMICS OF SHORTAGE:

Shortage phenomena are a central feature of Soviet economic organisation. In effect, they arise under different modalities - on the labour market, on the market of consumption goods and on the market of means of production. As early as the 1920s, economists as Kritsman, Novozhilov and Bukharin emphasised an opposition between tendencies towards overproduction characteristic of capitalist economies, and tendencies toward shortage visible in socialist economies. Since different countries have organised their economies on the soviet model, shortage has been confirmed as a structural trait of these systems. In his book Economics of Shortage, the Hungarian, János Kornai, emphasises that just as under-employment and under-utilisation of resources constitute central features in capitalist systems, shortage represents the main problem for socialist economies. The remarks that follow, in attempting to provide elements of synthesis in the context of the different ideas outlined in the present work, have been inspired in some measure by the analysis advanced by this economist.

Shortage can be schematically defined as a situation where the demand of a given commodity exceeds supply. It is in essence a relative state; shortage and poverty must not be confused. The former can be compatible with a high level of production and development. On the other hand, shortage has different degrees of intensity, according to the importance of the discrepancy between effective demand and

supply.

We can observe shortages in all economic systems. The specificity of the soviet-type system is both their generalised and chronic character. Although they openly arise in the sphere of consumption, their origin lies in the particular conditions of production. If we define equilibrium in general as the normal state of a system, which is reproduced through its immanent regularities, (as opposed to the neo-classical vision where equilibrium signifies equality of supply and demand upon all markets), it is permissible to speak of a shortage equilibrium for an economy as the U.S.S.R., just as we speak of under-employment equilibrium in the Keynaian analysis of capitalism. According to this opinion, shortage is not so much an index of economic crisis but the expression of a specific mode of regulation. A genuine crisis such as that prevailing in the USSR, manifests itself by different phenomena, (halt of growth, or sectoral recessions, fall in efficiency of investments, stagnation of productivity ...), among which a general increase in the intensity of shortages is the most important. Thus, a distinction must be made between shortage as a form of economic regulation, that is to say, as a permanent trait of the normal functioning of the system, and the "shortage crises" (C. Bettelheim) that are sharp, open and temporary expressions of the profound dysfunctioning of the system.

The soviet economic system represents an ensemble of structural forms or institutions, and behaviors of different

agents of production and reproduction. Among the structures, we find the state ownership of capital, the formally centralised character of decision-making and economic planning, multi-level hierarchical organisation and control, central determination of prices and state centralisation/redistribution of a considerable part of profits, the secondary role of money, a generalised system of wage-labour, and other forms that we have already considered. With respect to behaviors, we have been able to observe their logic and their conflicts between various levels of the hierarchical organisation : the Centre, economic administrations, enterprises and workers.

The essential factor lies between the second and third level of the organisation of the economy. Aiming for a certain autonomy, the sectoral ministries seek to reproduce and extend their industrial empires. These are huge bureaucratic interest-groups whose power partly depends on the importance of social capital they control and the volume of production in the branch. Their logic of expansion and relative autonomy engenders a sort of monopoly competition vis-a-vis the Center, and a hunger for capital (under the form of budgetary allocations). With respect to the enterprises under their authority, their behavior is ambivalent, both severe during the bargaining process in the fixing of plan targets that they seek to "overstrain", as also patronising and paternalistic towards current demands for credits or material supply, and especially in the case of temporary or even permanent difficulties, (enterprises with a planned deficit): whence the absence

bankruptcy. Consequently, we observe both a certain complicity of a ministry and its enterprises, through extensive development attitudes resulting in competition with other branches, and a conflict centered around the "tautness" of the plan.

The objectives of a soviet manager, which influence his behavior, are many - the same as a western manager. To the latter, the profit rate represents the main criterion (though not exclusively) for management. The director in the USSR seeks above all to fulfil the major indices of the plan, besides objectives of social peace, better revenues and the maximisation of harmony, in management, which often boil down to the first objective i.e., plan fulfilment. This difference in the aims of soviet and western managers express the organisational differences in the economic apparatus and has repercussions on the rationality of managing officials. The soviet manager seeks to loosen the tension of the plan which the higher level imposes on him, either directly from bargaining with him or indirectly in collecting various reserves. He thus seeks to protect the enterprise he represents from a constricting and uncertain environment and assure himself of peaceful and regular conditions of functioning. Considering the diverse external pressures that he is subject to, he is led to search for expansion or quantitative growth. To him, the increase in investment is his most prized means to achieve it, all the more so because he is not limited in this domain by monetary factors known to the

western investor. For the enterprise, capital is almost free, prices have an influence that is hardly significant and it is often easy to obtain short-term credits. We understand why effective demand always exceeds real capacities of investment. Thus arise at the level of enterprise, according to an expression of Kornai, the expansion drive and the investment hunger, which reinforce identical tendencies of the ministries for reasons of their own. The enterprises "pump" or suck various resources, according to vertical and horizontal links, giving rise to an almost insatiable demand, which finally bumps against physical bottlenecks and is seldom restrained by monetary factors.

The dominant character of the economy therefore lies in being "resource-constrained" differing from a capitalist system that is normally "demand constrained". Conjointly, markets have an asymmetrical structure of "seller's markets" and not "buyer's markets", since the balance of forces is in favour of supply. Shortage allows the seller to declare: "Take the commodity as it is or leave it". Searching for a partner to exchange, waiting, queueing, possibly effecting a forced substitution of the desired product: the burden of all these activities, which are costly, weighs on the buyer - in contrast to a buyers' market where it is the seller's lot. Kornai characterises this system as a "suction economy" where the almost insatiable demand of enterprises effects a permanent siphoning of resources not only at the level of production goods but also indirectly at the level of consumer goods.

Suction is characteristic of a situation where the demanders (or buyers, Tr.) in some ways, pull the suppliers (or sellers, Tr.) behind them, while in a pressure economy, it is the buyers who push the sellers before them. There is therefore a co-relation between suction, resource constrained economy, and the sellers' market - just as in the traditional capitalist system, pressure is linked to a demand-constrained economy and the structure of a buyers market.

The economics of shortage is constituted by a totality of different shortages, which forms a system. On the labour market, the directors, taking into account the compromise existing with the workers on the low intensity of average work and on turnover, seek to gather reserves of manpower to ward off fluctuations of activity caused by deficiencies in material supply. On the market of equipment goods and raw materials, enterprises and ministries express their respective hunger for investments and stocks, giving rise to a permanent pumping of resources. With regard to consumer goods, their production is hardly stimulated by demand and in general remains inadequate, being structurally sacrificed in the prevailing model of accumulation. Demand therefore tends to chronically exceed supply, for the labour force, the means of production and consumer goods. These various shortages interact and reinforce themselves mutually.

Finally, shortage as a characteristic and global feature, becomes normal and permeates life. It governs the various behaviors which in their turn reproduce shortage, thus creating

a compulsive vicious circle. It is as a result of the above for example, that the protective behavior of the heads of enterprises becomes both, the effects and the causes of shortage on the labour market and the means of production.

Shortage is not only a complex and differentiated phenomenon of relative and variable intensity. It also coexists along with considerable waste. As observed by G. Markus, there is indeed a vicious circle of shortage and waste. Macro-economic shortage is often nothing but the other side of micro-economic surplus: over-employment of the labour force, unutilised material or equipment stocks, partially employed production capacity (within existing enterprises or in new but incomplete public works). This seemingly paradoxical phenomenon is less related to the means of consumption but even in this domain there exist many excess stocks of products that cannot be disposed either due to quality or suitability, or still due to deficiencies in the commercial or transport system. Shortage cannot be reduced to relative want of goods and services: it also has a spatial or temporal dimension.

Let us recall that western capitalist economies also produce their own forms of waste whose effects are not inconsiderable. Today, it is enough to mention the consequences of mass unemployment in the developed and underdeveloped countries. The various economic systems of today are therefore distinguished by the forms of waste they give rise to, that are linked to particular forms of regulation and crisis. This does not only mean the inefficient

utilisation of resources, considered from a strictly economic point of view, but also and more importantly, the social and human costs of mechanisms from which some large minorities profit - but which none can control.

CONCLUSION:

Wage labour, a production and exchange of commodities, form the basis of soviet economic organisation. If we admit a definition of capitalism as a system of commodity production and wage labour, the soviet economic system represents a specific form of capitalism. The historical process of its constitution has implied particularly original, but by no means less brutal, ways as compared to the more classical forms that we observe in the western countries or in the Third World. The functioning and reproduction of the economic system, born from the Stalinist revolution-from-above and which still today characterises soviet society, presents striking characteristics that we discover under more or less modified forms in most of the other "socialist economies" - Yugoslavia being a singular exception. The soviet economy represents a new historical and original form of the system of commodity production and wage labour. It is irreducible to other known forms and is in no way "convergent" with them.

The system contains profound conflicts of interest, between the rulers and the ruled and among the ruled - this class which somehow designates itself through the nomenklatura. Social contradictions are acute but deprived of institutional forms to express themselves and are embalmed in the rigid carcass of a political system based on the domination of a single party apparatus. Since the last twenty years, the economy has been marked by a dynamic of petrification, which

stands in contrast to its external expansionist tendencies. The hierarchical structure of economic power, wage labour, production and exchange of commodities, forms a contradictory totality of institutions and economic relations which interact in a complex fashion and determine the evolution of production, distribution and the modalities of regulation "through shortage".

The reality of the soviet economic system is very far removed from the apologetic image given to it by theories of "real socialism". It is obviously interesting to understand it better and delve deeper into its analysis. First, to understand the logic and effective contradictions of a model wrongly depicted by many of its defenders as well as its critics. Next to stimulate comparative reflection on different economic systems, especially those based on commodity and wage-labour forms. Finally perhaps to imagine, guarding against possible utopian tendencies, new forms of economic and social organisation, that would be both possible and feasible, where the majority of men would find positive reasons to work and live.

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